

Sea-Level Rise and Impacts in Africa, 2000 to 2100

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1. Summary

Africa has a large and growing coastal population, including a number of important coastal cities. With sea-level rise, flooding and inundation of coastal areas would be expected creating problems for infrastructure, transportation, agriculture and water resources within the coastal zone. However, this work shows that coastal issues in general, and sea-level rise impacts in particular are poorly understood for Africa at a continental scale. While a few countries are well studied (for instance, Egypt, particularly around the Nile delta), most are little studied. This paper examines the potential impacts of sea-level rise in Africa via a literature review and a continent-wide analysis using DIVA – which is an integrated biophysical and socio-economic impact global model. While risks are not well understood, with 320 coastal cities (with more than 100,000 people) and nearly 56 million people (2005 estimate) living in low elevation (<10-m) coastal zones, this report highlights the potential magnitude of impacts and identifies to countries which have a high absolute risk.

A review of the literature on global assessments and available national studies indicates that the continent is rapidly changing with a growing population and economy and strong trends of urbanisation. However, the continent remains poor, and is facing significant issues and potential problems associated with sea-level rise. The available global assessments on impacts of sea-level rise on deltas, wetland areas and port cities identify that Africa is highly vulnerable to sea-level rise and its consequences. However, the studies are not suitable for detailed synthesis. The review also shows that the lack of data is a major barrier for a better analysis. This includes information on present rates of sea-level rise and systematic coastal geomorphology of Africa's coast.

In the absence of a bottom up synthesis, a range of scenarios were explored in Africa using the global DIVA (Dynamic Interactive Vulnerability Assessment) model. These included four scenarios of sea level (a global rise of 0.17m to 1.26m from 1995 to 2100) which were examined in conjunction with three socio-economic scenarios describing population density and GDP (A1FI, A1B and B1) for 33 African countries and 7 island nations/territories around Africa. Impacts were determined with and without adaptation, so that the benefits and costs of protection could be considered. These adaptation measures were the construction and increase in height of flood defence dikes to manage flooding, and beach nourishment to manage erosion. Beach nourishment is based on cost-benefit analysis, while the dikes were based on a demand for safety function which is applied depending on population density. Selected impacts have been reported in the years 2000, 2025, 2030, 2050, 2075 and 2100 (see Appendices 1 and 2). Five parameters were selected for detailed study: (1) People actually flooded, (2) Cumulative forced migration, (3) Loss of wetland value, (4) Total residual damage costs, and (5) Total adaptation costs. As well as Africa as a whole, countries were ranked according to the magnitude of impacts in 2030 and 2100.

The DIVA analysis shows that whilst Africa is not the most exposed region in the world compared with east, south east and south Asia, sea-level rise still poses a significant threat. With a large and growing population in the coastal zone and a low adaptive capacity due to low national wealth and other development indicators, most African countries appear to be highly vulnerable. Without adaptation, the physical, human and financial impacts will be significant. On an African scale, for the A1B mid-range scenario (a 43-cm rise) approximately 16 million people will be flooded per year in 2100, 10 million people will be forced to migrate from 2000 to 2100, and there will be a total damage cost of US\$38 billions per year in 2100. However, when adaptation is applied, these impacts can be significantly reduced at an annual cost of US\$2.2 billion in 2100. With adaptation, the numbers of people that could be flooded are about two orders of magnitude lower at 17,000 people per year in 2100, while the number of people forced to migrate from 2000 to 2100 would only be 14,000. Similarly, residual damage cost could be reduced about one order of magnitude to US\$1.1 billion when adaptation measures are considered. However, delivering such adaptation will be more costly and difficult than the headline cost suggests as the DIVA analysis is incomplete. This reflects several factors which are not well quantified: (1) the adaptation costs are incomplete, (2) the large adaptation deficit, reflecting that Africa is poorly adapted to today's climate, and (3) the low adaptive capacity.

Considering the national results, countries can be ranked by their relative impacts and costs. These rankings provide useful insight on those countries that are most vulnerable. In absolute terms, several countries consistently appear in the top ten rankings. For people-based impacts concerning flooding and forced migration they are Mozambique, Cameroon, Tanzania, Morocco and Egypt. For economic damages they are Algeria, Egypt, Morocco, South Africa, Tunisia, Libya and Cameroon who are all estimated to have more than US\$1 billion of additional damage per year under the AIB mid-range scenario in 2100. In absolute terms, the highest adaptation costs occur in Mozambique, Guinea, Nigeria, Guinea-Bissau and South Africa.

It is also important to note that sea-level rise will not be the only factor shaping Africa's coast in the 21st Century. Other climate change impacts such as increased storminess, higher temperatures and reduced precipitation also have immediate or secondary impacts of the coast. These have not been considered in this study, but could have important effects such as more intense tropical storms hitting the coast of East Africa (Mozambique, Tanzania, Madagascar). In addition to climate change, there are many anthropogenic factors influencing the coast, such as the conversion of wetland to agriculture uses or the reduction of sediment and water fluxes to deltas, often combined with enhanced subsidence. While these factors were not considered here due to lack of data, they should be considered in future studies.

The issue of sea-level rise and Africa requires further research, including improving these analyses and more detailed studies that look at impacts and adaptation in more detail. In particular, given the importance of the Development Aid in Africa, the implications for coastal areas needs to carefully considered in the light of sea-level rise.

2. Introduction

Sea-level rise as an impact of human-induced climate change has significant implications to low-lying coastal areas and beyond. The coastal zone contains valuable ecosystems and typically has higher population densities than inland areas (Small and Nicholls, 2003; McGranahan *et al.*, 2007). Additionally it generates significant amounts of economic activity contributing to national wealth (Bijlsma *et al.*, 1996; Sachs *et al.*, 2001). In physical terms the major direct impacts of sea-level rise include inundation of low-lying areas, shoreline erosion, coastal wetland loss, saltwater intrusion, higher water tables and higher extreme water levels leading to coastal flooding (Leatherman and Nicholls, 1995). Human-induced pressures on the coastal zone (such as growing population, water abstraction, and alteration of the hydrological regime including the damming of sediments) will exacerbate the effects of sea-level rise (Nicholls *et al.*, 2007). However, due to uncertainties in future projections and a lack of systematic data, these factors cannot be fully considered in this report. Hence, the main issue addressed in this report is sea-level rise and its effects on coastal areas.

The impacts of sea-level rise have been studied less intensely in developing than developed countries. Yet poorer countries – in particular areas where there is dense population, may be worst hit by climate change as they have a lower ability to prepare, adapt and respond (Nicholls *et al.*, 2007; UN-HABITAT, 2008). The continent of Africa represents such a vulnerable region as shown in many previous assessments (e.g. Boko *et al.*, 2007). Many coastal African countries are vulnerable to sea-level rise, particularly where large growing cities with high population density are situated in the coastal zone (Nicholls *et al.*, 2008; UN-HABITAT, 2008). With most African coastal countries undergoing rapid population growth, urbanisation, coastward migration and associated socio-economic growth, countries are experiencing dramatic coastal change (e.g., Stanley and Warne, 1993; Boko *et al.*, 2007). This includes a rapid increase in exposure of people and assets to sea-level variability and long-term rise (Zinyowera *et al.*, 1998; Desanker *et al.*, 2001; Nicholls *et al.*, 2008). Local factors, such as land subsidence can worsen the situation, especially in deltaic areas (Ericson *et al.*, 2006; Syvitski *et al.*, 2009).

Compared to most other parts of the world, the potential impacts of sea-level rise have been little studied at a national and sub-national level in Africa. A few countries are well-studied (e.g. Egypt,

and particularly the Nile delta), whereas for many others there is little assessment available (e.g. Liberia, Sierra Leone, Sudan, Sao Tome & Principe). Africa has been considered in the context of global assessments such as deltas and relative sea-level rise (Ericson *et al.*, 2006), coastal flooding and wetland loss due to global sea-level rise (e.g., Nicholls, 2004) and port cities and exposure to coastal flooding (Nicholls *et al.*, 2008). These studies are reviewed later and all indicate significant issues and potential problems associated with sea-level rise.

The objective of this report is to estimate the physical and economic impacts of sea-level rise on the coastal zones around Africa. First Africa's coast is reviewed, including the potential problems of sea-level rise. This includes a number of national reviews. However, a lack of consistent data hinders any detailed synthesis, and for many coastal countries there is no data. To fill this gap an analysis of Africa with the DIVA tool has been performed. DIVA is the 'Dynamic and Interactive Vulnerability Assessment' Tool produced by the DINAS-COAST (Dynamic and Interactive Assessment of National, Regional and Global Vulnerability of Coastal Zones to Climate Change and Sea-Level Rise) project (DINAS-COAST Consortium, 2006). DIVA is an integrated impact model assessing biophysical and socio-economic impacts and adaptation options. This allows estimates of the major direct physical impacts of sea-level rise. The African analysis considers four sea-level rise scenarios and investigates the impacts compared with scenarios of no sea-level rise (due to climate change) through the 21st century. The analysis has been performed using parameters studied in detail include (1) people flooded, (2) people forced to migrate, (3) loss of coastal wetlands (expressed in monetary value), (4) damage costs and (5) adaptation costs. Results are presented and compared to previous studies. The effects of adaptation strategies are also assessed by comparing a no adaptation scenario with a cost-benefit approach to adaptation. Thus the long-term vulnerability of Africa's coastal zones can be assessed.

The structure of the report is as follows. Section 3 contains a brief description of the coastal zone around the continent and background information on sea-level rise and Africa based on available literature and national reviews for selected countries. Section 4 details the DIVA methodology and describes the cases and scenarios considered in this analysis. Results are presented in Sections 5 and discussed in Section 6. Finally, in section 7 general conclusions are drawn.

3. Background: Africa and sea-level rise

Study area

Africa has a population of 900 million people, and a land area of 30.3 million km² (2007 estimate, Times Books, 2008). It is bounded in the north by the Mediterranean Sea, the Atlantic Ocean to the west, Indian Ocean towards the central and south east of the continent, and the Red Sea to the north-east, connecting to the Mediterranean via the Suez Canal (Figure 1).



Figure 1: Coastal African countries and the surrounding island nations considered in this study.

Continental Africa comprises 48 countries of which 33 have coastlines. Additionally, seven adjacent island nations and territories are considered in this assessment, bringing the total number of nations assessed to 40 (Table 1). Coastal length is also reported according to the DIVA database (DINAS-COAST Consortium, 2006; Vafeidis *et al.*, 2008).

Table 1: The forty African coastal territories considered in this study and their coastal length.

Coastal countries	Coastal length (km)	Islands surrounding the African continent	Coastal length (km)
Algeria	1375	Cape Verde	724
Angola	1712	Comoros	340
Benin	122	Madagascar	5055
Cameroon	548	Mauritius	839
Congo	164	Reunion (France)	201
Congo, Democratic Republic of	130	Sao Tome & Principe	170
Cote d'Ivoire	1034	Seychelles	151
Djibouti	311		
Egypt	3224		
Equatorial Guinea	421		
Eritrea	1214		
Gabon	1453		
Gambia	446		
Ghana	714		
Guinea	547		
Guinea-Bissau	1227		
Kenya	584		

Liberia	559		
Libyan Arab Jamahiriya	1932		
Mauritania	222		
Morocco	1871		
Mozambique	3114		
Namibia	1520		
Nigeria	1571		
Senegal	1053		
Sierra Leone	689		
Somalia	3073		
South Africa	3079		
Sudan	631		
Tanzania, United Republic of	1390		
Togo	50		
Tunisia	1358		
Western Sahara	1032		
TOTAL LENGTH	38370		7480

The continent's coastline is estimated to be more than 38,000 km in length in the DIVA database (DINAS-COAST Consortium, 2006), and narrow low-lying coastal strips with long sandy beaches are predominant (Zinyowera et al., 1998). The coastal zone (defined as the land up to 10m above sea level) around the continent varies in width (landward) from a few 100 metres (Red Sea area and mountainous areas) to more than 100km (in the Niger and Nile deltas) (Zinyowera et al., 1998). Over long distances, its coast is unbroken by sizable inlets and, its major river mouths except the Congo, are either deltaic or blocked by sand barriers which restricts the inland penetration of marine influences. Except for Madagascar, there are no large islands that protect the mainland from direct oceanic impacts (Orme, 1999). Africa's largest drainage basins include the Congo (Democratic Republic of Congo), Nile (Central and North East Africa, discharging in Egypt), Niger (West Africa, discharging in Nigeria) and Zambezi (Central Southern Africa discharging in Mozambique) covering a drainage area of 10.27 km² (Times Books, 2008) (Table 2). Northern Africa has a Mediterranean climate with hot dry summers and warm wet winters. Towards the central part of the continent the climate is more tropical and can experience periods of heavy rainfall and dry seasons. Southern Africa experiences sub-tropical conditions.

Table 2: Selected rivers in Africa, including the major drainage basins, and those reported by Ericson *et al.* (2006) and Syvitski *et al.* (2009). The population displaced is based on projecting current trends over 50 years.

River	Delta/estuary location	Drainage basin area (10⁶ km²)	Population potentially displaced 2000 to 2050 (after Ericson et al., 2006) (thousands)
Congo	Democratic Republic of Congo	3.70	Not reported
Limpopo	Mozambique	0.42	Not reported
Moulouya	Morocco		7.5
Nile	Egypt	3.35	1,300.0
Niger	Nigeria	1.89	59
Sebou	Morocco		7.2
Senegal	Senegal/Mauritania border	0.48	23.8
Tana	Kenya		0.4
Zambezi	Mozambique	1.33	Not reported

The African coastal zone could be divided into the Mediterranean Coastal Zone (MCZ), the West and Central African Coastal Zone (WCACZ), and the East African Coastal Zone (EACZ) (Ibe and Awosika, 1991). The MCZ, though narrow, contains big cities such as Alexandria, Algiers, Banghazi,

Tripoli and Tunis. It is of high economic value due to its vital agricultural (including fishery), commercial, industrial, and recreational value. As a result, the coastal cities in the region are densely populated (Ibe and Awosika, 1991). The WCACZ (extending from Morocco to Namibia), is characterised as sandy and muddy low-lying area with beach elevation ranging from 2-3m above sea level, and it contains four major drainage basins. The EACZ (ranging from Sudan to South Africa) including coastal areas of the island states Madagascar, Mauritius, Reunion and Seychelles, is relatively smooth because of the general absence of large rivers, with a few exceptions such as the Zambezi and Limpopo, and a large part of the coast is low-lying. Due to its fast growing industrial infrastructure the EACZ is heavily populated, and it comprises an estimated 13% of the region's population due to rapid development of fishing, sea ports, tourism and other industries. The island states are characterised with areas of volcanic origin, with very narrow coastal plains, which are even almost absent in some areas (e.g. the Seychelles). However, extensive coastal plains associated with major rivers are present in Madagascar (Ibe and Awosika, 1991).

Previous studies indicate that most African coastal countries are highly vulnerable to climate change and sea-level rise, leading to increased rates of coastal erosion and flooding of low-lying coasts (Ibe and Awosika, 1991; de la Vega-Leinert *et al.*, 2000). This could endanger large areas and place significant populations at risk. The impacts of sea-level rise, which in many places such as deltas may be accentuated by local subsidence, could exacerbate existing problems through increased coastal erosion, more persistent flooding, wetland loss, increased salinisation of aquifer and groundwater, which all would impose significant impacts on African communities and economies (Ibe and Awosika, 1991; Desanker *et al.*, 2001).

Historic data on sea-level rise in Africa is fairly limited compared to other regions (Woodworth *et al.*, 2007). This hinders the assessment of coastal impacts and vulnerability, and it is important that this deficiency is addressed.

It has been estimated that over 25% of Africa's population lives within 100km of a sea coast (Singh *et al.*, 1999). The continent has around 320 coastal cities (with more than 100,000 people) and nearly 56 million people presently live in low elevation coastal zones (defined as land up to 10m above sea level). 60% of these live in coastal urban areas (UN-HABITAT, 2008), where there are high concentrations of residential, industrial, commercial, agricultural, transportation, tourist, educational and military facilities which could be affected by sea-level rise (Ibe and Awosika, 1991). Figure 2 illustrates the urban population of coastal countries in Africa (some countries with large land areas have short coastlines, for instance the Democratic Republic of Congo) including cities based in low elevation coastal zones (LECZ). Previous studies showed that with a mean global sea-level rise of only 0.38m combined with population growth scenarios, it is estimated that the average number of people around the whole of Africa which could be flooded could increase from 1 million/year (in 1990) to 70 million/year (in the 2080s) (Nicholls *et al.*, 1999). UN-HABITAT (2008) also suggests that many of the major coastal cities around the continent will be affected by rising sea levels, and the impacts could be severe due to the lack of preparedness and adaptation via adequate drainage, embankments and soft engineering to withstand extreme weather conditions. A study on impacts of storm surges in coastal areas also revealed that, about 30 million people around the African Atlantic and Indian Ocean coasts lives within a hazard zone (i.e. the potentially exposed population), out of which about 2 million people per year could potentially be flooded in the 2020s (Nicholls, 2006). Due to the occurrence of tropical storms, Nicholls (2006) identified Mozambique, Tanzania and Madagascar as being particularly vulnerable countries to increased flooding.

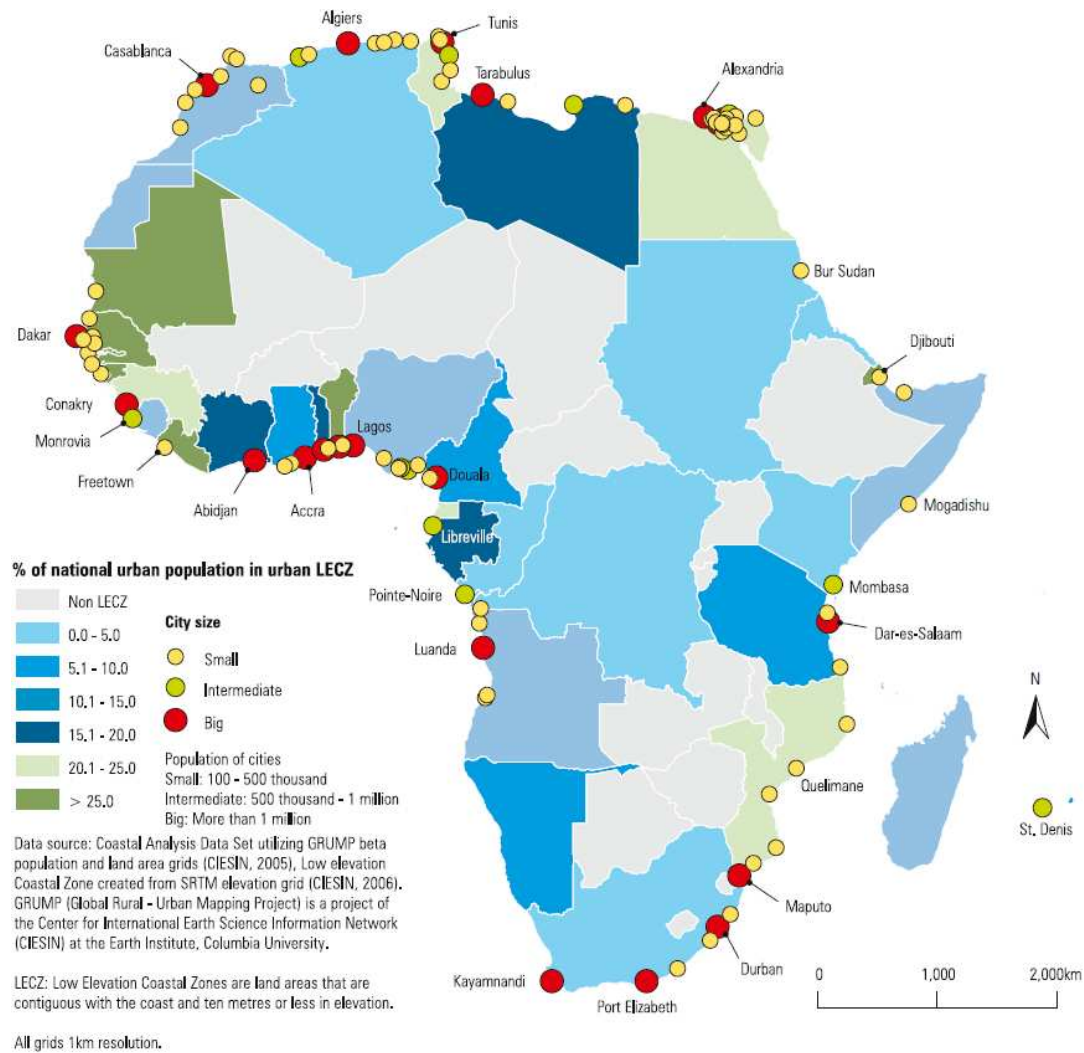


Figure 2: African cities at risk due to sea-level rise (including St. Denis in Reunion) (Taken from UN-HABITAT, 2008).

Nicholls *et al.* (2008) estimated the exposure of the world largest port cities to coastal flooding due to storm surge. Using a population criteria of one million people in 2005, they identified 136 port cities globally, of which 19 are in Africa. They have found that Africa is ranked as the third and fourth highest continent in terms of port city's population exposure (more than 2.6 million people in the coastal floodplain in 2005) and asset exposure (about US\$42 billion of assets in the floodplain in 2005), respectively. Given the low wealth and poor development of flood management in Africa, this existing exposure is of concern. Alexandria (Egypt) and Abidjan (Cote d'Ivoire) appear in the top twenty list of world port cities for high population exposure to coastal flooding in 2005. Taking high-end scenarios of socio-economic, climate and non-climate trends, in the 2070s, the total population and assets exposed in the nineteen cities grows to 13.3 million people and US\$998 billion of assets, respectively (see ranks in Table 3). Three cities contain the bulk of this exposure: Alexandria, Lagos and Abidjan. In contrast other large port cities have relatively small exposure, such as Cape Town, Tripoli and Luanda. The study also reveals that from 2005 to the 2070s, smaller cities (in terms of population and wealth) such as Mogadishu (Somalia) and Luanda (Angola) could experience a rapid increase in population and asset exposure posing significant challenges for local communities to adapt to these changes. Given that Africa is urbanising rapidly, other large port cities are likely to emerge through the 21st century, such as Mombasa, Kenya – in 2005 its population was below one million.

Dasgupta *et al.* (2009) also ranked Egypt, Mauritania, Tunisia, and Benin in the top ten most impacted countries (out of 84 developing coastal countries considered world-wide) for population potentially

displaced due to a 1m sea-level rise (considering existing condition at the time of study and assuming no defences). Ericson *et al.* (2006) considered six major African deltas and relative sea-level rise (Table 2) as part of a global study. They estimated that about 1.4 million people could be displaced by present rates of relative sea-level rise from 2000 to 2050 with the vast bulk of these people (1.3 million) being in the Nile delta. Syvitski *et al.* (2009) identified the Nile and Niger deltas as being the most threatened of the African deltas due to subsidence and human interference, with the Limpopo and Congo deltas being much less threatened.

Table 3: African port city ranking based on population and asset exposure under future socio-economic situation and the 2070s climate change (sea-level rise and more intense storms, where appropriate) and natural and human-induced subsidence (Taken from Nicholls *et al.*, 2008).

Rank	Population Ranking		Asset Ranking	
	African Port City	Exposed Population (Thousands)	African Port City	Exposed Assets (US\$ Billions)
1	Alexandria, EGYPT	4103	Alexandria, EGYPT	528.2
2	Lagos, NIGERIA	3229	Abidjan, COTE D'IVOIRE	142.0
3	Abidjan, CÔTE D'IVOIRE	3110	Lagos, NIGERIA	117.3
4	Lomé, TOGO	858	Banghazi, LIBYAN ARAB JAMAHIRIYA	48.8
5	Conakry, GUINEA	496	Lome, TOGO	42.0
6	Maputo, MOZAMBIQUE	384	Conakry, GUINEA	30.1
7	Dare-es-Salaam, TANZANIA UNI REP	351	Algiers, ALGERIA	14.4
8	Banghazi, LIBYAN ARAB JAMAHIRIYA	143	Casablanca, MOROCCO	12.1
9	Dakar, SENEGAL	131	Durban, SOUTH AFRICA	11.6
10	Mogadishu, SOMALIA	115	Maputo, MOZAMBIQUE	10.7
11	Casablanca, MOROCCO	88	Dakar, SENEGAL	7.7
12	Douala, CAMEROON	78	Cape Town, SOUTH AFRICA	6.8
13	Algiers, ALGERIA	67	Douala, CAMEROON	5.4
14	Accra, GHANA	51	Dare-es-Salaam, TANZANIA, UNI REP	5.3
15	Durban, SOUTH AFRICA	42	Rabat, MOROCCO	4.9
16	Rabat, MOROCCO	35	Accra, GHANA	4.0
17	Cape Town, SOUTH AFRICA	25	Tripoli, LIBYAN ARAB JAMAHIRIYA	3.3
18	Luanda, ANGOLA	18	Mogadishu, SOMALIA	2.1
19	Tripoli, LIBYAN ARAB JAMAHIRIYA	10	Luanda, ANGOLA	1.1
TOTAL		13332		997.73

This continent-scale review of Africa shows a continent that is changing rapidly with a growing population and economy and strong trends of urbanisation. However, the continent remains poor and for example rapidly expanding coastal cities have little of any formal flood management. Further, delta areas such as the Nile are changing rapidly due primarily to human interference. Hence, Africa's coast will look quite different in 50 years. Climate change and sea-level rise are additional problems that could cause significant impacts, especially if there is no preparation for these changes.

The lack of data on Africa's coast is especially striking and this is a major barrier to better analysis. Missing data includes information on present rates of sea-level change and coastal geomorphology through to good data on socio-economic trends. Good coastal environmental management depends on this type of information, and it should be a priority to improve collection. This suggests a need for

national and regional efforts to collect data, as well as international efforts using remote sensing techniques.

National Reviews

Based on the available literature, a brief country report about the implications of sea-level rise for Egypt, Kenya, Mauritius, Morocco, Nigeria, Senegal, and Seychelles and Tanzania, Uni Rep. is given below. These countries were selected due to the volume and quality of available literature.

Egypt

Egypt has a coastal zone of more than 3,500km long and contains 40% of the country's total population of 82 million people (Elsharkawy *et al.*, 2009). It is located in an arid to semi-arid zone with a terrain of desert plateau interrupted by the Nile valley and delta. The majority of the population live in and around the major cities of Alexandria, Port Said, Damietta, Rosetta, and Suez on the Mediterranean coast (El-Raey, 1999). A large portion of the 50 km wide coastal strip lies below 2m above mean sea level and is protected from inundation and flooding only by a 1 km to 10 km wide coastal sand belt shaped by discharges from the Rosetta and Damietta branches of the Nile River (Elsharkawy *et al.*, 2009). The sand belt, which also protects coastal lakes and lagoons, is experiencing rapid erosion associated with the construction of the Aswan high dam (Stanley, 1996; Stanley and Warne, 1998). Ericson *et al.* (2006) estimated that 1.3 million people could be displaced by 2050, just based on present trends (see Table 2). Sea-level rise will only exacerbate the problem endangering the fishing industry as one third of the country's fish catch is from these threatened lakes and lagoons (Elsharkawy *et al.*, 2009).

Previous studies on impacts of sea-level rise showed without additional adaptation inundation and erosion could result in a loss of significant proportion of the northern part of the Nile delta, with the loss of agricultural land and urban areas (without any additional adaptation) (Khafagy *et al.*, 1992; Stanley and Warne, 1993). Dasgupta *et al.* (2009) ranked Egypt as the first and second most impacted developing country (of 84 developing coastal nations) by 1m of sea-level rise in terms of potential loss of agricultural land and population displacement, respectively. With this magnitude of sea-level rise, the nation will experience an estimated 6.44% decrease in GDP resulting in the loss of 28,000 km² of agricultural land (>13% of the national total), 25,000 km² of urban area (>5% of the national total) and 24,000km² of wetland loss (>6% of the national total). Thus Egypt is highly threatened due to infrastructure and population dependent on the coast and Nile for water resources and agriculture.

Egypt's second largest city, Alexandria (see also Table 3), is subsiding at 2mm/yr and even without climate change is highly vulnerable to flooding and erosion, as 35% (700km²) of the land area is below mean sea level (El-Raey *et al.*, 1995). With a 1m sea-level rise, it is estimated that 68% (1,200km²) of its land could be inundated (Leatherman and Nicholls, 1995). The same magnitude could also force to relocate 8 million people (i.e. whole of Alexandria's population and 4 million people in the Nile delta), assuming 1990 population and no upgrade in protection levels (Broadus *et al.*, 1986; Milliman *et al.*, 1989). An OECD study report on Egypt also estimated a total loss of land, properties and revenues costing in the range of US\$30 billion for the city of Alexandria under a 0.5m sea-level rise of 'do nothing' scenario (Agrawala *et al.*, 2004). The same scenario causes a total of US\$2.9 billion loss from land and property for Rosetta city (El-Raey *et al.*, 1999; Agrawala *et al.*, 2004).

Port Said, an important industrial, trade and tourist centre containing 0.5 million people and Egypt's second largest harbour is subsiding at 5mm/yr and, sea-level rise and its potential impacts would therefore become more severe than other parts of the Nile delta (El-Raey, 1997). A 0.5m rise in sea level could result in a loss of 13% (0.05km²) industrial, 8% (0.46km²) urban area and 1.6% (21km²) beach area, and other physical and socio-economic losses in Port Said governorate, costing more than US\$2.2 billion (El-Raey *et al.*, 1999; Agrawala *et al.*, 2004).

For other coasts in Egypt on the Mediterranean and on the Red Sea, little is known about their vulnerability to sea-level rise. While these areas are not generally low-lying, any tourism and infrastructure developments may be significantly at risk from relative sea-level rise.

Kenya

Kenya has a 1,586 km coastline consisting of mangroves, coral reefs, sea grass, and rocky, sandy and muddy shores. It has a coastal population of 1.8 million people (in 1990) (country's total population, 37.5 million in 2007 (Times Book, 2008)). Tourism is a popular industry and is an important part of the economy (Oyieke, 2000). Mombasa, Kenya's second largest city (the largest being Nairobi over 500km inland) with a population of 665,000 (in 1999) is growing rapidly and has many low-lying regions in the coastal zone where, together with three other neighbouring main towns of Lamu, Malindi and Kilifi, infrastructure, tourism, aquaculture and agriculture are undertaken, making these activities vulnerable to sea-level rise. It has the largest seaport in East Africa and with its two harbours (Kilindini and Old Port) has an important role in the national and regional economy. Hence, impacts of sea-level rise are likely to be felt beyond the coastal and national boundaries (Awuor *et al.*, 2008). Areas around the Watamu and Sabaki river estuaries are reported to be the most vulnerable sites, although the low-lying areas are spread along the whole coast.

With 0.3m of sea-level rise and without adaptation, it is estimated that 17% (4,600 ha) of the Mombasa district will be submerged (Oyieke, 2000). Improved irrigation planning further inland and other land management practices could be used for flood management and reducing runoff into the ocean, which could potentially contribute to reducing the impacts of sea-level rise (Awuor *et al.*, 2008). In the Tana delta, based on present trends, about 400 people (about 7.0% of delta population) would be at risk and 5.7% of the delta area (481km²) could be lost between 2000 and 2050 (Ericson *et al.*, 2006; see Table 2). Under accelerated sea-level rise scenarios, the impacts would be greater.

Mauritius

The Republic of Mauritius is a group of 20 small islands with a total land area of 2,040km² and a population of 1.2 million (2007 estimate, Times Book, 2008). Mauritius is surrounded by coral reefs. It enjoys a maritime tropical climate and is predominantly an agricultural country, listed as one of the most densely populated agricultural islands in the world, and hence a considerable pressure on land (Ragoonaden, 1997). Sugar cane is the dominant crop covering 45% of the total land area. Light manufacturing also contributes to the economy. The coastline is approximately 200km long with a 243km² shallow lagoon area which makes it an ideal location for tourism, such as boating and snorkelling (Ragoonaden, 1997). The beach width varies from a few meters (in eastern and southern regions) to 25m (in the north-eastern regions). Mangroves are present around river mouths and estuaries around the south west region of the main island (e.g. Terre-Rouge, Riviere Noire Baie du Cap, Riviere du Rempart) or in the eastern region (e.g. Trou D'Eau, Douce, Poste La Fayette, Bras D'Eau, Roches Noires, and Poudre D'Or) where there is a fresh water source near the sea. These mangroves help protect the coast from erosion and dampen the action of waves on coastline and contribute in retaining terrigenous sediments from affecting lagoons (Appadoo, 2003). Coastal wetlands are located mainly in the northern and north-western areas and play a vital role for the coastal ecosystems providing essential habitat for many important marine lives (for example fish, shrimp, cabs, birds etc.). Together with its beautiful sandy beaches, the islands are a popular tourist location, where tourism contributes 3% of GDP. However, the coastal zone is degrading at an alarming rate, and beach erosion threatens coastal infrastructures (such as coastal roads and tourist hotels) due to many natural and anthropogenic factors associated with increased population growth, leaving the tourism industry at risk. Lack of coastal management, disorganized construction of jetties and groynes and removal of sand for construction purposes also contribute to the risks. Accelerated sea-level rise will undoubtedly worsen the problems in terms of loss of lowland through submergence, beach erosion, damage to coastal infrastructure and loss of wetlands (Ragoonaden, 1997).

With 1m of sea-level rise, it is estimated that around 26km of beaches would disappear on the west coast, also including flooding of local housing, and tourism & infrastructure facilities. Inundation will

also affect plantations and major coastal road links (Beebeejaun, 2000). In conclusion, Mauritius needs further investigation in terms of climate change impacts. In addition, it is important that coastal management is developed, and this also needs to include consideration of sea-level rise and climate change.

Morocco

Morocco's 3,500km coast crosses temperate, semi-arid and desert climatic zones. The coast in many locations is physically and socio-economically vulnerable to accelerated sea-level rise, mainly due to its low topography and high economic, touristic and ecological values. Population growth is rapid in urban coastal zones. It is projected that between 1985 and 2025, the urbanised area will increase six fold (Snoussi, 2000). Thus the coast is under pressure from housing and development, tourism, mining, and over-fishing. Low-lying land where further flooding due to sea-level rise could potentially occur are the Nador lagoon, the river Moulouya and its delta (e.g. Ericson *et al.*, 2006), and the low-lying coastal plains of Oued Nekor and Oued Laou. Flooding would also affect many coastal hotels and industries which are located behind dune complexes. With a 2m sea-level rise, 24% of the eastern coastal area could be lost including urban (30%), agriculture & vegetation (29%), marshes (7%), and beaches (7%), most of them being the low-lying lands of the Moulouya delta and some parts of the coast where the natural coastal defences (e.g. dunes) have been destroyed (Snoussi *et al.*, 2008). Culturally, climate change would threaten the historic city of Essaouira through saltwater intrusion, coastal erosion and land subsidence as further pressure is put on water resources due to rising temperatures (Snoussi, 2000). A mix of hard and soft protection measures could help overcome sea-level rise and related problems, but care needs to be taken as hard defences could lead to unexpected and unwanted adverse impacts.

Nigeria

Nigeria's coast is 850km long and comprises (from west to east) a barrier-lagoon coast (250km), a mud coast (75km), the Niger delta (440km) and a sandy coast (85km). One quarter of the population (of 100 million in 2000) live in the coastal zone (Folorunsho and Awosika, 2000). 85% of the country's industry is based in the coastal zone, chiefly in the oil and gas industry. A 1m of sea-level rise by 2100, assuming no human response, would threaten 18,000km² and 3.2 million people would be at risk from flooding, currently costing US\$18 billion (French *et al.*, 1995). These estimates are based on 1992 population. Protection by hard and soft measures would reduce this risk, but would be costly. For instance, protecting highly developed areas and oil infrastructure from a 1m sea-level rise would, alone, cost US\$600-US\$700 million. This cost, spread over 50 year (a not unreasonable time scale given sea-level rise projections, and design guidelines for hard structures anticipating future conditions), would cost 0.2-0.3% of the country's GDP. A 1m sea-level rise would make over 800 villages uninhabitable in the Niger delta, at a cost of US\$260million (French *et al.*, 1995).

Coastal erosion is already a major problem, and climate change will exacerbate this (Folorunsho and Awosika, 2000). Wetlands and mangrove swamps are extensive along the coast of the Niger delta, and can extend 50km inland and lie up to 2m above present sea level. With sea-level rise there would be the potential loss of 17,000km² of wetlands, in addition to the inundation and erosion of barrier systems along the western coast of the country (French *et al.*, 1995; Folorunsho and Awosika, 2000).

Lagos, the former capital is one of the biggest cities in the world and continues to grow rapidly (e.g. Nicholls, 1995; Nicholls *et al.*, 2008). It is expanding in low-lying coastal areas including Victoria Island where there are no detailed assessments, it is highly threatened by sea-level rise (e.g. Table 3).

Senegal

Senegal has a coast of 2,065km comprising sandy, deltaic (the Senegal delta in the north), estuarine (Saloum and Casamance estuaries) coasts and small lengths of rocky shoreline (Dennis *et al.*, 1995). The country has a tropical boreal type climate. More than half of the Senegalese population (4 million people in 1990) and most of the economic activity are within a 70km strip of the coastal zone (Dennis

et al., 1995). A preliminary study by Niang (1990) showed that with sea-level rise Senegal could experience significant risks of inundation in the delta and estuaries, and erosion along the sandy coastlines. In general, independent of the sea-level rise scenario considered, 95% of the land loss in the coastal zone (for the Saloum and Casamance estuaries and the Senegal delta) is caused by inundation (Dennis *et al.*, 1995; Zinyowera *et al.*, 1998). However, erosion could also severely affect the growing international tourism industry by damaging coastal structures and beaches. A 1m sea-level rise could inundate and erode more than 6,000km² of land, mostly wetlands (such as mangroves and spawning grounds for fish) in the Senegalese delta, and the Saloum and Casamance estuaries. Agriculture areas, major economic activities particularly in the deltaic region where rice and sugar cane is grown, would also be threatened (Dennis *et al.*, 1995).

In developed areas, accelerated erosion due to sea-level rise could cost more than US\$500-US\$700 million (12-17% of the country's GDP at 1995 values) out of which 20-30% represents tourist facilities at risk. It is also estimated that 110,000-180,000 people (1.4% to 2.3% of the 1990 population) could be displaced, the majority of which are located south of the Cap Vert Peninsula. Protection, such as sea walls and beach nourishment, would cost US\$255-US\$845 million (0.7-2.2% of the country's GDP) over a fifty year period. Beach nourishment is a favoured option, as this would help to maintain the tourist industry, which accounts for around 3% of the GDP (Dennis *et al.*, 1995).

Seychelles

The Seychelles consist of over 100 islands of granitic and coralline origin with a total land area of 455km². Corel reefs surround the granitic islands. The coral islands are rich in marine life, and due to their size and homogeneity are considered part of the coastal zone. With a population of 87,000, 90% lives on Mahé, the main island (Times Books, 2008), where the coastal zone is under pressure from housing, industrial development, and intensive agricultural practices. Tourism and fishing are the main industries, with light manufacturing and service sectors also contributing to the economy. Tourism employs 40% of the work force and provides the population with 60% of foreign currencies (Lajoie, 2000). The country's tourism industry and socio-economic development mainly depends on its environment, and hence any climate-related impacts could have a potential implication on the islands long-term prosperity and survival. Apart from tourism, sea-level rise will also impact the fishing industry. Ports and airports (built on reclaimed low ground) would also be severely affected. There would also be a serious ecological impact on coral islands (most of them being low-lying) by reducing light penetration (Lajoie, 2000), as the reef-building corals are dependent on light to survive and to maintain their biological functions. Reef ecosystems at the depth limit of coral growth would experience, as the sea level rises, diminished light conditions which will lead to their death. In addition, slow growing coral-species would also contribute for the loss for being unable to keep the growing pace up with the rising sea level (Hoegh-Guldberg, 1999).

Rising sea levels also lead to greater erosion, and hence an increase in the number of landslides on the steep hill sides of the granitic islands would be expected. Furthermore, beaches would be inundated, ground water levels would rise threatening aquifers. The salinity of swamp areas would increase affecting plant growth (Lajoie, 2000).

Tanzania, Uni Rep.

Tanzania has a coastline of 3,461km and consists of mangrove forests and swamps, coral reefs, cliffs, sand & mudflats, and tidal marshes. Approximately 25% of the total population lives along the coastline (Torell *et al.*, 2004). The coastal zone varies from 20km to 70km in width gradually rising to a plateau (Argawala *et al.*, 2003). Dar es Salaam and the islands of Zanzibar have the highest population densities that might be threatened due to climate change and sea-level rise Agriculture comprised over 45% of the nation's GDP in 2000 (World Bank, 2002) and is the most important sector of Tanzanian economy on which 80% of the population depend (Argawala *et al.*, 2003). The major crops are maize, coffee and cotton.

In Tanga, in the northeast region of the country, 3520ha of total land area is vulnerable to 0.5m of sea-level rise and 1025ha of mangroves would also be at risk. In the Bagamoyo area, seasonal swamps cover the coast with 1800ha out of the 3300ha total land area vulnerable under a 0.5m of sea-level rise. In the Mtwara region, 2780ha of mangroves would be at risk from 0.5m of sea-level rise (Mwaipopo, 2000). With a 1m sea-level rise, it is estimated that 9km² and 2,117km² land could be lost due to erosion and inundation respectively.

Very little protection has been made around Dar es Salaam. Tourist facilities – hotels and roads are partly protected from erosion by groynes and a sea-wall. The cost for building sea walls to protect important vulnerable areas of the city against a 1-m rise in sea level is estimated as US\$ 337 million. It is also predicted that on average about 400m landward retreat would occur in Dar es Sallam under a 1-m sea-level rise, and a total of 247km² land could be lost (Mwaipopo, 2000). According to the Initial National Communication of Tanania (2003), structures costing US\$82 millions in the vulnerable region of Dar es Sallam would also be at risk for a 1-m rise in sea level. However, while the country appears to be one of the African countries most at risk (see the DIVA analysis later), the literature about impacts of sea-level rise in Tanzania is very limited, indicating the need for further work.

National Reviews Synthesis

Although the nature of the problems caused by sea-level rise varies between and within regions due to a range of natural, socio-economic, institutional and cultural factors (Nicholls and Mimura, 1998), the African coastal countries reviewed here all appear to be vulnerable to sea-level rise. However, there are still insufficient national and regional studies detailing the more vulnerable nations and areas, and they have been conducted with different methodologies, so it is difficult to compare and contrast the studies. The DIVA analysis will provide a step-forward to fill this gap and provide a better and more consistent understanding about the potential risks and costs, including ranking different countries.

4. Methodology and DIVA analysis

The DIVA model

The DIVA (Dynamic Interactive Vulnerability Assessment) model is an integrated model of coastal systems that assesses biophysical and socio-economic impacts of sea-level rise and socio-economic development (DINAS-COAST Consortium, 2006; Vafeidis *et al.*, 2008; Hinkel *et al.* 2009). DIVA is based on data model that divides the world's coast into 12,148 variable length coastal segments, and associates up to 100 data values with each segment (DINAS-COAST Consortium, 2006; Vafeidis *et al.*, 2005; 2008).

DIVA downscales the sea-level rise scenarios by combining global sea-level rise scenarios due to global warming with local vertical land movement. These local components vary from segment to segment and are taken from the global model of glacial isostatic adjustment of Peltier (2000). In addition, for segments which occur at deltas, we assumed an additional 2mm/year subsidence. (Subsidence may be much greater in deltas and susceptible cities due to human agency, e.g. Nicholls (1995); Ericson *et al.* (2006); Syvitski *et al.* (2009) but this has not been considered in this analysis due to a lack of information).

The flooding of the coastal zone caused by sea-level rise and associated storm surges is assessed for both sea and river floods (the backwater effect). Taking into account the effects of dikes, flood areas for return periods from 1-in-1 to 1-in-1000 years are computed. Extreme water levels produced during storm surges are simply displaced upwards with the rising sea level, following 20th century observations of extreme sea-level rise (e.g. Zhang *et al.*, 2000; Woodworth and Blackman, 2004; Haigh *et al.*, 2008). The adaptation options considered in response to flooding are dikes, drawing on the experience of Delft Hydraulics (now Deltares), including its application in the global analysis of Hoozemans *et al.* (1993). Since there is no empirical data on actual dike heights available at a global

level, optimum dikes heights were estimated for the base year of 1995 using an analysis where based on demand for safety. Based on these dikes, land elevations and relative sea level, the frequency of flooding is estimated over time. The cost of floods is calculated as the expected value of damage caused by sea and river floods based on a damage function logistic in flood depth. In response to beach erosion, nourishment (placing of additional sand onto existing beach areas) is considered. Volumetric demand and different cost classes are applied to determine the cost. The cost classes depend on how far the sand for nourishment needs to be transported, as this is a significant determinant of such costs.

The loss and change in coastal wetlands is assessed in terms of wetland area and composition of wetland vegetation types. Wetlands respond to sea-level rise by horizontal inland migration, vertical elevation change and transitions to other wetland types (Nicholls *et al.*, 1999). Six different wetland types were considered: coastal forest, high unvegetated wetland, low unvegetated wetland, freshwater marsh, saltmarsh and mangrove (McFadden *et al.*, 2007). The costs of wetland change are calculated based on a “value transfer function” derived through a global meta-analysis of wetland valuation literature (Brander *et al.*, 2006). Wetland monetary value is determined based on a country’s GDP and population density values.

DIVA does not resolve the flood plain for Liberia, Cote D’Ivoire, Ghana, Togo and Benin as it is relatively narrow and not resolved in the 1 km DTM used in DIVA (GTOP030). (The next version of DIVA will be based on 90m elevation data from the SRTM data to address this problem).

The specific adaptation assessment options considered in this analysis are defined in Table 4. These adaptation measures focus on reducing flood risk through the construction of new and increase in height of existing flood defence dikes, and reducing beach erosion through nourishment (Note that no adaptation measures are considered for salinisation). It is assumed that adaptation measures are only applied where it is an economically optimum option based on cost-benefit analysis. For beach nourishment, a cost benefit approach is used. For flood defence, a demand for safety function is computed and applied depending on population density.

Table 4: Adaptation options considered in the DIVA analysis.

No Adaptation	No increase in flood defence dike heights from baseline. No beach nourishment.
Adaptation	Increase in flood defence dike heights. Application of beach nourishment.

Impacts are dependent on local adaptation measures. Coastal zone adaptation is relatively straightforward: seawalls can be constructed and beaches nourished to protect against flooding and erosion, rapidly reducing population and assets at risk. Protection is required in a diverse range of coastal environments, such as cities, ports, deltas and agriculture areas. Adaptation is costly and often a cost-benefit analysis is applied to spend limited resources where they are most effective (formerly where benefits exceed costs) to maximise the potential of a resource. There can be a wide variation of adaptation measures between developed and developing countries. Although adaptation may be required, financially or economically it may not always be viable. These issues are considered in more detail in relation to Africa in the Discussion.

Scenarios

Sea level rise impacts throughout the 21st century are dependent upon the sea-level scenarios, the socio-economic scenarios and the adaptation measures employed. A scenario is not a prediction, but represents a plausible future. Each sea-level rise scenario is coupled to a socio-economic scenario representing emissions and population growth, economic development or technological change (Nicholls, 2004; Carter *et al.*, 2007). The purpose of exploring a range of scenarios as analysed in this report, is to understand a range of measures of change according to plausible future conditions and known science.

This study explores four pairs of sea level and socio-economic scenarios: A1FI, A1B, B1 and 'Rahmstorf'. The A1FI, A1B, and B1 sea-level and socio-economic scenarios are based on the Special Report on Emission Scenarios (SRES) of the Intergovernmental Panel on Climate Change (Nakićenović and Swart, 2000; IMAGE Team, 2002). These illustrate different future global pathways without explicit policies to address climate change.

- The A1 world represents rapid economic growth on a global scale, with an emphasis on material assets. Social and political worlds are stable, but with a high wealth gap between countries. The population stabilises after 2050.
 - For the A1FI scenario, the world is 'fuel intensive' with a higher dependence of fossil fuels, with some new and efficient technologies. Greenhouse emission levels are high, resulting in a high rate of temperature and hence sea-level rise.
 - For the A1B scenario, there is a 'balanced' form of energy supplies with new and more efficient technologies, resulting in lower greenhouse gas emissions and a medium rate of sea level rise.
- The B1 world represents a shift from economic structures towards and service and information economy. With an emphasis on global solutions, high environmental and social consciousnesses, there is equality between countries and a stabilising population. There are resource-efficient technologies, resulting in a low rate of sea-level rise.

To explore the full range of uncertainty for sea-level rise, a high, medium and climate sensitivity is considered, representing uncertainties in atmospheric response to greenhouse forcing. Within the three SRES scenarios, a high, mid and low rise of sea level is explored for the A1FI, A1B and B1 scenarios, respectively. A further sea-level and socio-economic scenario known as 'Rahmstorf' is considered based on Rahmstorf (2007) who predicted a higher rate of sea-level rise than Meehl *et al.* (2007) based on relationships between past temperatures and sea-level rise paired with the A1B socio-economic scenario. It represents the greatest rate of sea-level rise of the four scenarios considered here.

The rate of sea-level rise is depicted in Figure 3 and Table 5. Current climatic trends also reveal a warming trend with projected mean temperature increase of 0.9°C and 2.6°C for an A1B scenario in 2030 and 2100 respectively (Note: Table 6 shows the high/medium/low temperature values for the A1FI, A1B and B1 scenarios respectively). For the no sea-level rise scenario, temperature rise is zero. Note that these sea level scenarios show a global mean value for sea-level rise. In reality, there will be regional variations.

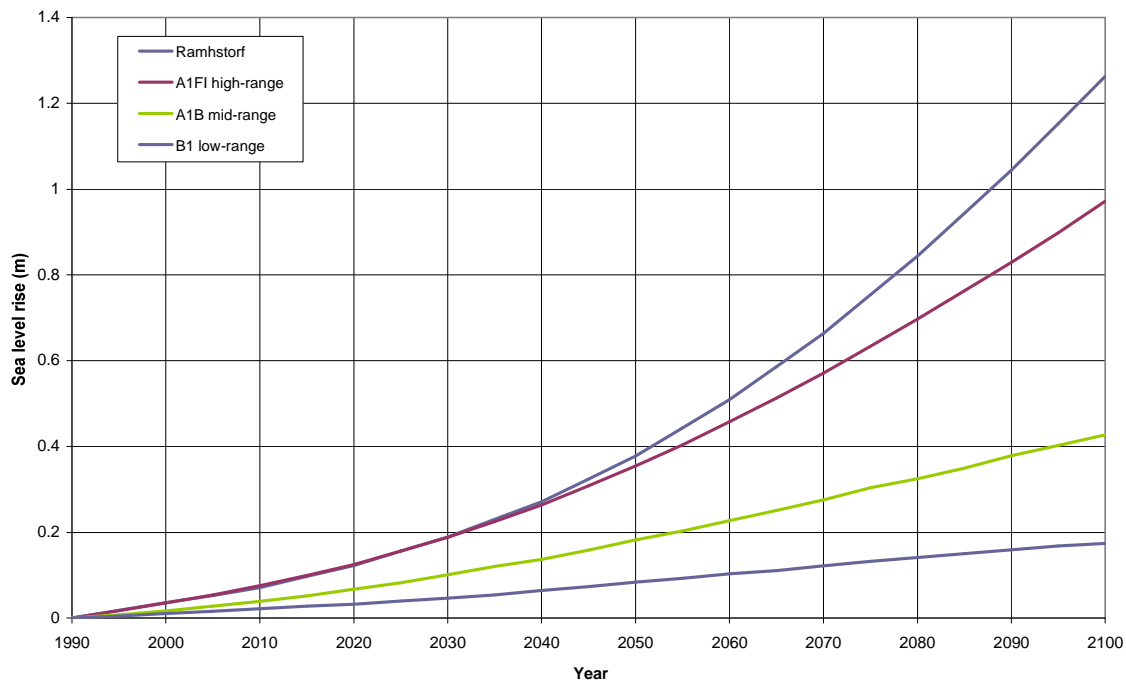


Figure 3: Sea-level rise scenarios used in this study.

Table 5: Global sea-level rise scenarios used in this study: 1990 to 2100.

	Ramhstorf (m)	A1FI high-range (m)	A1B mid-range (m)	B1 low-range (m)
1990	0.00	0.00	0.00	0.00
2000	0.04	0.04	0.02	0.01
2010	0.07	0.08	0.04	0.02
2020	0.12	0.13	0.07	0.03
2030	0.19	0.19	0.10	0.05
2040	0.27	0.26	0.14	0.06
2050	0.38	0.35	0.18	0.08
2060	0.51	0.46	0.23	0.10
2070	0.66	0.57	0.28	0.12
2080	0.84	0.70	0.32	0.14
2090	1.04	0.83	0.38	0.16
2100	1.26	0.97	0.43	0.17

Table 6: Temperature rise scenarios relative to 1990.

Scenario	Year	
	2030	2100
A1FI	1.4	6.1
A1B	0.9	2.6
B1	0.5	1.0

Cases and scenarios investigated

In this study four sea-level scenarios (A1FI, A1B, B1 and Ramhstorf) have been analysed coupled with three socio-economic scenarios describing population density and GDP (A1FI, A1B, and B1). It is assumed that socio-economic change is uniform within a country and hence coastward migration is

assumed to be zero. If coastward migration did occur, the impact would be greater than predicted here (e.g. Nicholls, 2004). Each socio-economic scenario was run for with and without sea-level rise along with modes of ‘with adaptation’ (utilising a cost-benefit analysis on dikes and beaches) and ‘no adaptation’ (where protection measures are kept at 1995 standards). Each case is described in Table 7.

Table 7: Sea-level and socio-economic scenarios and adaptation options employed in this study.

Case	Sea-level scenario	Socio-economic scenario	Adaptation options
1	Rahmstorf	A1B	With adaptation
2	Rahmstorf	A1B	No adaptation
3	A1FI high-range	A1FI	With adaptation
4	A1FI high-range	A1FI	No adaptation
5	A1B mid-range	A1B	With adaptation
6	A1B mid-range	A1B	No adaptation
7	B1 low-range	B1	With adaptation
8	B1 low-range	B1	No adaptation
9	No SLR	A1B	With adaptation
10	No SLR	A1B	No adaptation
11	No SLR	A1FI	With adaptation
12	No SLR	A1FI	No adaptation
13	No SLR	B1	With adaptation
14	No SLR	B1	No adaptation

Reported parameters

The following parameters are reported for each of the 40 African countries in Appendix 1. Values are given for 2000, 2025, 2030, 2050, 2075 and 2100. The units and definitions are included below. Note that all costs are reported in 1995 US dollars and are not discounted:

Total costs of adaptation (millions US\$/yr): The combined costs of beach, basin and wetland nourishment and the building of sea and river dikes.

Total costs of residual damage (millions US\$/yr): The combined costs of forced migration, land loss, salinisation costs, sea floods and river floods.

Land loss (submergence) (km²/yr): The change in land area below the 1 in 1 flood level, taking into account sea dikes.

Land loss (erosion) (km²/yr): The potential land loss due to direct erosion, ignoring beach nourishment.

Forced migration since 2000 (thousands people): The number of people that have to migrate from the dry land permanently lost due to erosion.

Migration (forced costs) (millions US\$/yr): Total costs of forced migration.

People actually flooded (thousands/yr): The expected number of people subject to annual flooding.

Protection level (year): Recommended protection level or return period.

Relative sea-level change (since 1995) (m): The combination of sea-level rise scenarios due to global warming combined with vertical land movements.

Salinisation costs (millions US\$/yr): Total costs of salinity intrusion.

Sea dike costs (millions US\$/yr): The total cost of building sea dikes. Maintenance and operation costs are not included.

Sea flood costs (millions US\$/yr): Total cost expected from sea floods.

Monetary value – coastal forest (millions US\$): The value of coastal forests based on population and GDP.

Monetary value – freshwater marsh (millions US\$): The value of freshwater marsh based on population and GDP.

Monetary value – high unvegetated wetland (millions US\$): The value of high unvegetated wetland based on population and GDP.

Monetary value – low unvegetated wetland (millions US\$): The value of low unvegetated wetland based on population and GDP.

Monetary value – mangrove (millions US\$): The value of high unvegetated wetland based on population and GDP.

Monetary value – saltmarsh (millions US\$): The value of saltmarsh based on population and GDP.

Total wetland monetary value (millions US\$): Total value of wetlands (coastal forest, freshwater, high unvegetated wetland, low unvegetated wetland, mangroves and saltmarsh) based on population and GDP.

Wetland nourishment costs (millions US\$/yr): Total costs of wetland nourishment based (wetland nourishment has not been applied for these DIVA runs).

Additionally, the following parameters have been reported in Appendix 2 for Tanzania and Kenya only:

Basin nourishment costs (millions US\$/year): Costs of beach nourishment for basins.

Beach nourishment costs (millions US\$/year): Costs of beach nourishment.

Coastal length (km): Length of the coastline (also see Table 1).

Land loss cost (millions US\$/year): Total costs of land loss.

Loss of flats (m²/year): Land loss due to indirect erosion.

Basin demand for nourishment (m³/year): Tidal basin demand for nourishment.

Open water area (km²): Total area of open water created by wetland loss

Potential flood plain (km²): Land area below the one in one thousand flood level, ignoring sea dikes.

People potential flooded (thousands): People living below the 1000 year surge level.

River dike cost (millions US\$/yr): The total costs of build river dikes. Maintenance and operation costs are not included.

River flood cost (millions US\$/yr): Total cost expected from sea floods.

Sand loss indirect (m³/year): Sand loss indirect on the open coast

Sand loss total (m³/year): Total sand loss due to erosion, allowing for direct and indirect erosion, and beach nourishment

Total wetland area (km²): Total wetland area (coastal forest, freshwater, high unvegetated wetland, low unvegetated wetland, mangroves and saltmarsh).

Coastal forest area (km²): Area of coastal forest

Freshwater marsh area (km²): Area of freshwater marsh.

High unvegetated wetlands area (km²): Area of high unvegetated wetlands.

Low unvegetated wetlands area (km²): Area of low unvegetated wetlands.

Mangrove area (km²): Area of mangroves.

Saltmarsh area (km²): Area of saltmarsh.

5. DIVA Results

This section presents a summary of the physical impacts and adaptation costs of the impacts of sea-level rise on Africa for four sea-level rise scenarios, in conjunction with scenarios of no sea-level rise from 2000 to 2100. Five parameters have been selected for detailed study: (1) People actually flooded, (2) Cumulative forced migration (since 2000), (3) Loss of wetland value, (4) Total residual damage costs, (5) Total adaptation costs.

Without adaptation, the physical and economic impacts of sea-level rise tend to increase with time under all sea-level rise scenarios (although in the A1 and B1 socio-economic scenarios used here the population declines after 2050 (Arnell *et al.*, 2004)). Even without climate-induced sea-level rise, there are costs for the whole of Africa – in common with the rest of the world – due to natural and locally-induced subsidence and increases in population, population density and GDP. The results indicate that adaptation measures can dramatically reduce the number of people flooded, forced migration and residual damage costs with and without sea-level rise. These parameters (in conjunction with the two adaptation options) will be discussed for the whole of Africa. Full results for all the requested parameters are displayed in Appendices 1 and 2.

Importantly, the impacts are not uniform and some countries are more at risk from rising sea levels than others, agreeing with the national assessments already reviewed. Following the ranking approach of Dasgupta *et al.* (2008), for each parameter the top ten (out of 40) countries are ranked in 2030 and 2100 for the A1B mid-range scenario, corresponding to 0.10 and 0.43m of global sea-level rise, respectively. (Note that the results for all other sea-level rise scenarios and time slices are included in the Appendix 1). Countries are ranked for the selected parameters in terms of absolute values for 2030 in Tables 8, 9 and 10 and for 2100 in Tables 13, 14 and 15. In particular, Tables 8 and 13 consider a no climate-induced sea-level rise scenario, Tables 9 and 14 consider socio-economic and climate-induced sea-level rise scenarios, and Tables 10 and 15 consider the net change due to climate-induced sea level alone. In addition, Tables 11 and 16 indicate the percentage that a no climate-induced sea-level rise scenario contributes towards total sea-level rise scenario, in 2030 and 2100, respectively. Lastly, Tables 12 and 17 indicate factors related to adaptation costs in 2030 and 2100, respectively.

As similar countries are highly ranked for each parameter regardless of adaptation option, only the results without adaptation are reported and discussed here at country level. However, the costs of adaptation will also be discussed for the whole of Africa and at country level. These costs are reported in 1995 US\$ and are not undiscounted.

Table 8: The top ten African countries for the A1B mid-range scenario without adaptation (in 2030): Socio-economic change and no climate-induced sea-level rise. (Case 10)

Rank	Parameters Considered (values shown in brackets)		
	People Actually Flooded (Thousands/year)	People Forced to Migrate since 2000 (Thousands)	Total Costs of Residual Damage (Millions US\$/year)
1	Mozambique (235.9)	Tanzania, Uni Rep (33.4)	Egypt (740.1)
2	Tanzania, Uni Rep (234.1)	Egypt (7.7)	Morocco (81.0)
3	Egypt (32.5)	Nigeria (2.0)	Cameroon (65.9)
4	Madagascar (27.4)	Madagascar (0.7)	Gabon (59.6)
5	Cameroon (19.3)	Ghana (0.3)	Tunisia (47.4)
6	Nigeria (17.3)	Somalia (0.1)	Mozambique (41.5)
7	Guinea-Bissau (11.3)	Togo & Mozambique (0.03)	Tanzania, Uni Rep (34.7)
8	Angola & Somalia (9.0)	---	Algeria (19.8)
9	---	Mauritania & Libyan Arab Jamahiriya (0.02)	Angola (19.0)
10	Kenya (8.0)	---	Senegal (11.3)
Africa Total	638.2 Thousand people per year	44.3 Thousand people since 2000	1.18 Billion US\$ per year

Table 9: The top ten African countries for the A1B mid-range scenario without adaptation (in 2030): Socio-economic and climate-induced sea-level rise. (Case 6)

Rank	Parameters Considered (values shown in brackets)		
	People Actually Flooded (Thousands/year)	People Forced to Migrate since 2000 (Thousands)	Total Costs of Residual Damage (Millions US\$/year)
1	Tanzania, Uni Rep (881.3)	Tanzania, Uni Rep (430.3)	Egypt (800.8)
2	Mozambique (818.7)	Mozambique (176.6)	Tanzania, Uni Rep (181.0)
3	Nigeria (156.9)	Nigeria (101.7)	Morocco (130.5)
4	Angola (87.2)	Somalia (41.1)	Cameroon (70.9)
5	Somalia (70.6)	Guinea-Bissau (30.0)	Gabon (67.7)
6	Guinea-Bissau (67.5)	Egypt (18.2)	Tunisia (67.4)
7	Cameroon (46.6)	Mauritania (8.9)	Mozambique (57.9)
8	Egypt (42.2)	Madagascar (5.7)	Nigeria (38.2)
9	Madagascar (36.3)	Morocco (5.5)	Somalia (35.8)
10	Kenya (28.5)	Cote d'Ivoire (4.8)	Algeria (29.0)
Africa Total	2.35 Million people per year	837.0 Thousand people since 2000	1.63 Billion US\$ per year

Table 10: The top ten African countries for the A1B mid-range scenario without adaptation (in 2030): Net change due to climate-induced sea-level rise.

Rank	Parameters Considered (values shown in brackets)			
	People Actually Flooded (Thousands/year)	People Forced to Migrate since 2000 (Thousands)	Total Costs of Residual Damage (Millions US\$/year)	Loss of Wetland Value (Millions US\$/year)
1	Tanzania, Uni Rep (647.2)	Tanzania, Uni Rep (396.9)	Tanzania, Uni Rep (146.26)	Seychelles (30.7)
2	Mozambique (582.8)	Mozambique (176.5)	Egypt (60.68)	Gabon (20.7)
3	Nigeria (139.6)	Nigeria (99.7)	Morocco (49.42)	Mauritius (18.3)
4	Angola (78.2)	Somalia (41.2)	Nigeria (34.40)	Nigeria (8.4)
5	Somalia (61.6)	Guinea-Bissau (30.0)	Somalia (34.37)	Egypt (8.2)
6	Guinea-Bissau (56.2)	Egypt (10.5)	Tunisia (19.96)	Namibia (5.8)
7	Cameroon (27.3)	Mauritania (8.9)	Mauritania (17.05)	Libyan Arab Jamahiriya (5.5)
8	Kenya (20.5)	Morocco (5.5)	Mozambique (16.40)	South Africa (4.5)
9	Morocco (14.9)	Madagascar (4.9)	Libyan Arab Jamahiriya (9.45)	Algeria (4.3)

10	Senegal (13.6)	Cote d'Ivoire (4.8)	Algeria (9.15)	Mauritania (3.4)
Africa Total	1.71 Million people per year	793 Thousand people since 2000	445.7 Million US\$ per year	123.4 Million US\$ per year

Table 11: The top ten African countries for the A1B mid-range scenario without adaptation (in 2030): Percentage of a no climate-induced sea-level rise (i.e. socio-economic change alone) scenario compared with a total (socio-economic and climate-induced) sea-level rise scenario.

Rank	Parameters Considered (Percentage shown in brackets)		
	People Actually Flooded (%)	People Forced to Migrate since 2000 (%)	Total Costs of Residual Damage (%)
1	Congo (Dem Rep), Guinea, Namibia & Sudan (100)	Egypt (42.3)	Djibouti (95.3)
2	---	Ghana (27.2)	Cameroon (93.0)
3	---	Togo (13.2)	Egypt (92.4)
4	---	Madagascar (13.1)	Seychelles (91.9)
5	Egypt (77.0)	Tanzania, Uni Rep (7.8)	Gabon (88.0)
6	Gambia (76.3)	Nigeria (2.0)	Ghana (85.5)
7	Madagascar (75.5)	Libyan Arab Jamahiriya (1.5)	Gambia (84.1)
8	Gabon (57.1)	Somalia (0.3)	Senegal (83.3)
9	Sierra Leone (54.9)	Mauritania (0.2)	Namibia (80.0)
10	Djibouti (47.4)	Mozambique (0.02)	Angola (77.9)

Table 12: The top ten African countries for the A1B mid-range scenario with the greatest adaptation costs in 2030 with adaptation: Absolute values for (a) no climate-induced sea-level rise, (b) socio-economic and climate-induced sea-level rise, (c) net change due to climate-induced sea-level rise, and (d) the relative increase when a total sea-level rise scenario compared with a no climate-induced sea-level rise scenario.

ADAPTATION COSTS				
Rank	Socio-economic Change and No Climate-induced SLR (Millions US\$/year)	Socio-economic and Climate-Induced Sea-Level Rise (SLR) (Millions US\$/year)	Net Change due to Climate-Induced Sea-Level Rise (Millions US\$/year)	Relative increase (With SLR/ No SLR)
1	Namibia (468.4)	Namibia (490.0)	Mozambique (103.1)	Guinea (10.18)
2	Mozambique (87.3)	Mozambique (190.4)	Somalia (81.8)	Togo (6.33)
3	South Africa (78.8)	Somalia (159.0)	Madagascar (79.8)	Cameroon (4.80)
4	Sudan (122.4)	South Africa (147.5)	Nigeria (71.4)	Ghana (4.49)
5	Somalia (77.2)	Madagascar (139.5)	South Africa (68.7)	Reunion (4.33)
6	Madagascar (59.7)	Nigeria (107.1)	Guinea-Bissau (60.3)	Mauritania (4.09)
7	Tunisia (47.7)	Tunisia (102.0)	Tunisia (54.3)	Sierra Leone (4.06)
8	Libyan Arab Jamahiriya (36.6)	Guinea-Bissau (90.7)	Gabon (53.9)	Seychelles (3.71)
9	Nigeria (35.7)	Sudan (85.4)	Guinea (45.9)	Cape Verde (3.02)
10	Egypt (32.3)	Gabon (85.0)	Egypt (45.0)	Nigeria (3.00)
Africa Total	1.24 Billion US\$ per year	2.32 Billion US\$ per year	1.08 Billion US\$ per year	---

Table 13: The top ten African countries for the A1B mid-range scenario without adaptation (in 2100): Socio-economic change and no climate-induced sea-level rise. (Case 10)

Rank	Parameters Considered (values shown in brackets)		
	People Actually Flooded (Thousands/year)	People Forced to Migrate since 2000 (Thousands)	Total Costs of Residual Damage (Billions US\$/year)
1	Tanzania, Uni Rep (906.6)	Tanzania, Uni Rep (506.2)	Egypt & Cameroon (2.09)
2	Mozambique (390.4)	Nigeria (126.5)	---

3	Nigeria (171.3)	Mozambique (90.7)	Morocco (1.26)
4	Egypt (127.8)	Egypt (44.2)	Tunisia (0.74)
5	Madagascar (30.0)	Mauritania (10.6)	Gabon (0.52)
6	Cameroon (21.0)	Somalia (2.4)	Mozambique (0.47)
7	Mauritania (17.0)	Madagascar (1.1)	Senegal (0.36)
8	Guinea-Bissau & Somalia (12.0)	Ghana (1.0)	Tanzania, Uni Rep (0.32)
9	---	Togo (0.1)	Algeria (0.31)
10	Angola (9.8)	Libyan Arab Jamahiriya (0.1)	Kenya (0.24)
Africa Total	<i>1.74 Million people per year</i>	<i>783 Thousand people since 2000</i>	<i>9.96 Billion US\$ per year</i>

Table 14: The top ten African countries for the A1B mid-range scenario without adaptation (in 2100): Socio-economic and climate-induced sea-level rise. (Case 6)

Rank	Parameters Considered (values shown in brackets)		
	People Actually Flooded (Millions/year)	People Forced to Migrate since 2000 (Millions)	Total Costs of Residual Damage (Billions US\$/year)
1	Mozambique (4.35)	Mozambique (2.84)	Algeria (6.55)
2	Tanzania, Uni Rep (2.08)	Cameroon (1.33)	Egypt (6.52)
3	Egypt (1.97)	Tanzania, Uni Rep (1.20)	Morocco (5.52)
4	Cameroon (1.94)	Morocco (1.19)	Cameroon (3.54)
5	Morocco (1.82)	Egypt (1.18)	South Africa (3.48)
6	Angola (0.84)	Angola (0.57)	Tunisia (3.46)
7	Senegal (0.49)	Senegal (0.33)	Libyan Arab Jamahiriya (1.76)
8	Algeria (0.44)	Algeria (0.26)	Gabon (0.93)
9	Kenya (0.28)	Nigeria (0.21)	Senegal (0.90)
10	Tunisia (0.26)	Kenya (.019)	Mozambique (0.85)
Africa Total	<i>15.73 Million people per year</i>	<i>10.15 Million people since 2000</i>	<i>37.72 Billion US\$ per year</i>

Table 15: The top ten African countries for the A1B mid-range scenario without adaptation (in 2100): Net change due to climate-induced sea-level rise.

Rank	Parameters Considered (values shown in brackets)			
	People Actually Flooded (Millions/year)	People Forced to Migrate since 2000 (Millions)	Total Costs of Residual Damage (Billions US\$/year)	Loss of Wetland Value (Billions US\$/year)
1	Mozambique (3.96)	Mozambique (2.75)	Algeria (6.24)	Seychelles (2.53)
2	Cameroon (1.92)	Cameroon (1.33)	Egypt (4.43)	Gabon (2.43)
3	Egypt (1.84)	Morocco (1.19)	Morocco (4.27)	Mauritius (1.90)
4	Morocco (1.81)	Egypt (1.14)	South Africa (3.32)	Nigeria (1.47)
5	Tanzania, Uni Rep (1.18)	Tanzania, Uni Rep (0.69)	Tunisia (2.72)	Cameron (0.40)
6	Angola (0.83)	Angola (0.57)	Libyan Arab Jamahiriya (1.60)	Mauritania (0.37)
7	Senegal (0.48)	Senegal (0.33)	Cameroon (1.46)	Benin (0.33)
8	Algeria (0.43)	Algeria (0.26)	Senegal (0.54)	Senegal (0.31)
9	Kenya (0.27)	Kenya (0.19)	Gabon (0.40)	Libyan Arab Jamahiriya (0.28)
10	Tunisia (0.26)	Tunisia (0.13)	Mozambique (0.38)	Namibia (0.26)
Africa Total	<i>13.98 Million people per year</i>	<i>9.37 Million people since 2000</i>	<i>27.76 Billion US\$ per year</i>	<i>11.50 Billion US\$ per year</i>

Table 16: The top ten African countries for the A1B mid-range scenario without adaptation (in 2100): Percentage of a no climate-induced sea-level rise scenario (i.e. socio-economic change alone) compared with a total (socio-economic and climate-induced) sea-level rise scenario.

Rank	Parameters Considered (Percentage shown in brackets)		
	People Actually Flooded (%)	People Forced to Migrate since 2000 (%)	Total Costs of Residual Damage (%)
1	Mauritania (82.9)	Mauritania (86.7)	Tanzania, Uni Rep (80.43)
2	Nigeria (81.6)	Nigeria (60.6)	Mauritania (60.01)
3	Tanzania, Uni Rep (43.5)	Tanzania, Uni Rep (42.3)	Cameroon (58.88)
4	Namibia (28.6)	Ghana (19.4)	Gabon (56.66)
5	Sudan (25.0)	Togo (8.4)	Mozambique (55.20)
6	Madagascar (21.3)	Egypt (3.7)	Madagascar (53.55)
7	Eritrea (18.8)	Somalia (3.5)	Kenya (53.54)
8	Congo, Dem Rep (14.3)	Mozambique (3.2)	Djibouti (52.31)
9	Somalia (12.2)	Madagascar (1.3)	Ghana (51.54)
10	Gabon (10.9)	Libyan Arab Jamahiriya (0.4)	Angola (51.45)

Table 17: The top ten African countries for the A1B mid-range scenario for adaptation costs in 2100: Absolute values for (a) no climate-induced sea-level rise, (b) socio-economic and climate-induced sea-level rise, (c) net change due to climate-induced sea-level rise, and (d) the relative increase of a total sea-level rise scenario compared with a no climate-induced sea-level scenario.

ADAPTATION COSTS				
Rank	Socio-economic Change and No Climate-induced SLR (Millions US\$/year)	Socio-economic and Climate-induced Sea-Level Rise (SLR) (Millions US\$/year)	Marginal Change due to Climate-induced Sea-Level alone (Millions US\$/year)	Relative increase (With SLR/ No SLR)
1	Nigeria (39.4)	Mozambique (191.0)	Mozambique (154.0)	Western Sahara (128.0)
2	Somalia (38.8)	Nigeria (164.1)	Guinea (126.0)	Guinea (53.5)
3	Mozambique (37.0)	Somalia (156.4)	Nigeria (124.7)	Cameroon (26.7)
4	Madagascar (33.4)	Madagascar (148.3)	Guinea-Bissau (122.4)	Namibia (21.5)
5	Egypt (27.8)	South Africa (139.8)	Somalia & South Africa (117.6)	Reunion (19.0)
6	South Africa (22.2)	Guinea-Bissau (137.3)	---	Sierra Leone (14.7)
7	Guinea-Bissau (14.9)	Guinea (128.4)	Madagascar (114.9)	Libyan Arab Jamahiriya (12.2)
8	Tunisia (13.9)	Tunisia (113.2)	Tunisia (99.3)	Gabon (12.1)
9	Kenya (10.7)	Egypt (104.7)	Gabon (91.8)	Angola (11.3)
10	Mauritania (10.0)	Gabon (100.1)	Cameroon (84.8)	Cape Verde (10.2)
Africa Total	326.0 Millions US\$ per year	2.23 Billions US\$ per year	1.90 Billions US\$ per year	---

People actually flooded

People actually flooded considers the average annual occurrence of coastal flooding taking into account coastal topography, population and defences, as well as sea level. Tables 8 and 13 indicate the top ten African countries for the number of people flooded for socio-economic change and no climate-induced sea-level rise under the A1B mid-range scenario, assuming no adaptation measures. In 2100, Tanzania has the highest number of people flooded per year at over 900,000 people, representing half of those in Africa as a whole. Mozambique, Nigeria and Egypt are ranked from second to fourth, collectively amounting to 690,000 people per year). Hence, these countries have high risks even before climate change impacts are considered.

Considering climate-induced sea-level rise, Mozambique is projected to have 4.35 million additional people flooded per year by 2100 (Table 14) (in 2030, it is ranked as the second most impacted country with 0.82 million people at risk of flooding every year (Table 9)). Nigeria, although it is not in the top ten most impacted countries in 2100, is projected to have 157,000 people (ranked third) flooded per year in 2030. Figure 4 illustrates the number of people flooded in Africa due to surges from 2000 to 2100 for the four sea-level scenarios. The figure indicates that up to a maximum of 20 million people per year in 2100 (up to 4 million people per year in 2030) could be flooded annually if defences are not upgraded. However, if adaptation is considered, this could be reduced dramatically by about 200 times to less than 17,000 people per year by 2100 (Figure 5). For the A1B mid-range scenario, up to 15 million additional people would be flooded per year, reducing to 0.02 million/year under adaptation, at an annual cost of US\$2.2 billion (1995 values). The additional pressure of sea-level rise contributes approximately 90% and 75% of the additional number of people flooded per year in 2100 for the whole of Africa under the Rahmstorf and A1B mid-range scenarios, respectively, if no adaptation is undertaken.

When the net climate-induced sea-level rise scenario is considered in 2100 (Table 15), Mozambique is projected to have approximately 4 million people flooded per year, being the highest impacted African country. Cameroon, Egypt, and Morocco follow in the ranking, each contributing to 13% of the total number of people flooded for the whole of African (i.e. approximately 14 million per year). Tanzania alone is projected to have 1.2 million additional people flooded per year by 2100 (in 2030 it is ranked as the first most impacted country with 0.65 million people at risk of flooding every year (Table 10)). However, this figure is comprised of 0.9 million people if sea level did not rise due to climate change, subtracted from 2 million additional people flooded if total sea-level rise is considered (see Tables 13, 14 and Appendix 1). Hence in Tanzania, a scenario of no climate sea-level rise contributes to more than 40% of the additional people flooded in comparison to a total sea-level rise scenario (Table 16).

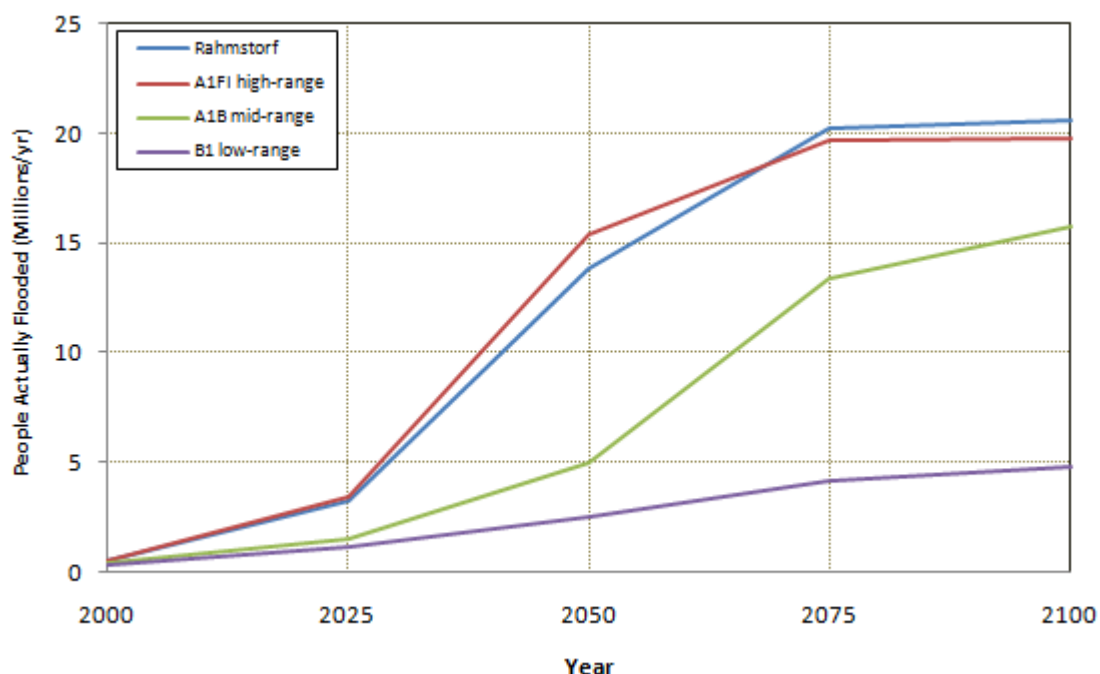


Figure 4: People actually flooded due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with no additional adaptation measures employed (cases 2, 4, 6 and 8 of Table 5).

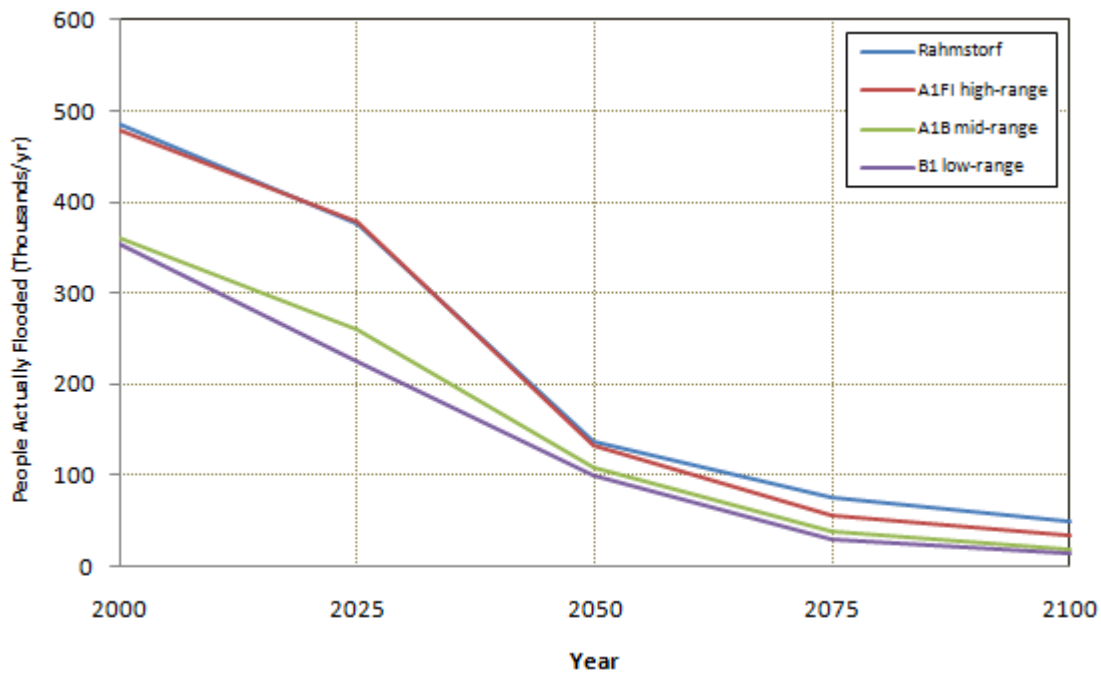


Figure 5: People actually flooded due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with adaptation measures employed (cases 1, 3, 5 and 7 of Table 5).

Cumulative Forced migration

If land is lost, then people are forced to migrate. Here we assume that people who are flooded more often than once per year, or who lose their land to erosion are forced to migrate. The number of forced migrants is often quite similar to the number of people flooded per year in the previous section, but in the case of migrants, this only happens once.

Figure 6 shows the cumulative number of people forced to migrate since 2000 due to land loss due to submergence (based on the area below the one year flooding threshold) and erosion. The declining rate of rise for the two high sea-level rise scenarios (Rahmstorf and A1FI) beyond 2050 reflects trends in population (which is declining in an A1 and B1 world). Sea levels are anticipated to rise to 1.26m by 2100 under the Rahmstorf scenario (coupled with A1B socio-economic scenario), and more than 13 million people in total would be forced to migrate if no additional adaptation measures were undertaken. Using the same A1B socio-economic scenario, but a mid-range sea-level rise scenario of 0.43m, this number would decrease to approximately 10 million people by 2100. From 2000 to 2030 over 1.6 million and 0.8 million people will be forced to migrate under Rahmstorf and A1B scenarios (both with A1B socio-economic scenarios), respectively, if no additional adaptation measures are undertaken. With adaptation, the number of people forced to migrate would be significantly reduced by more than two orders of magnitude to approximately 35,000 and 14,000 under the two scenarios respectively (Figure 7).

Table 8 and Table 13 show the cumulative number of people forced to migrate since 2000 for the A1B mid-range scenario for no climate-induced sea-level rise in 2030 and 2100. In 2100, Tanzania is the highest in Africa contributing about 65% (506,000 people) of the cumulative number of people at risk of displacement for the continent if no adaptation measures are adopted. Nigeria and Mozambique are the second and third highest impacted countries: collectively the three countries total 723,000 migrants (92% of that of the whole of Africa) (Table 13). Without climate-induced sea-level rise, the number of migrants in other countries is relatively small.

For the total sea-level rise scenario, Mozambique is projected to have the highest number in Africa (Table 14) in 2100 (ranked as the second in 2030 for more than 176,000 people forced to migrate

(Table 9)) if no adaptation measures are considered. In addition, Cameroon, Tanzania, Morocco, and Egypt are forecasted to have more than one million migrants.

For the climate-induced sea-level rise only under the A1B mid-range scenario, over 2.7 million people would be forced to migrate by 2100 (over 176,000 people by 2030 (Table 10)) in Mozambique (Table 15). This is equivalent to 29% of the Africa total, and the highest number of any African country. Cameroon, Morocco, and Egypt each contribute more than one million migrants, and collectively contributing about 40% of the African total.

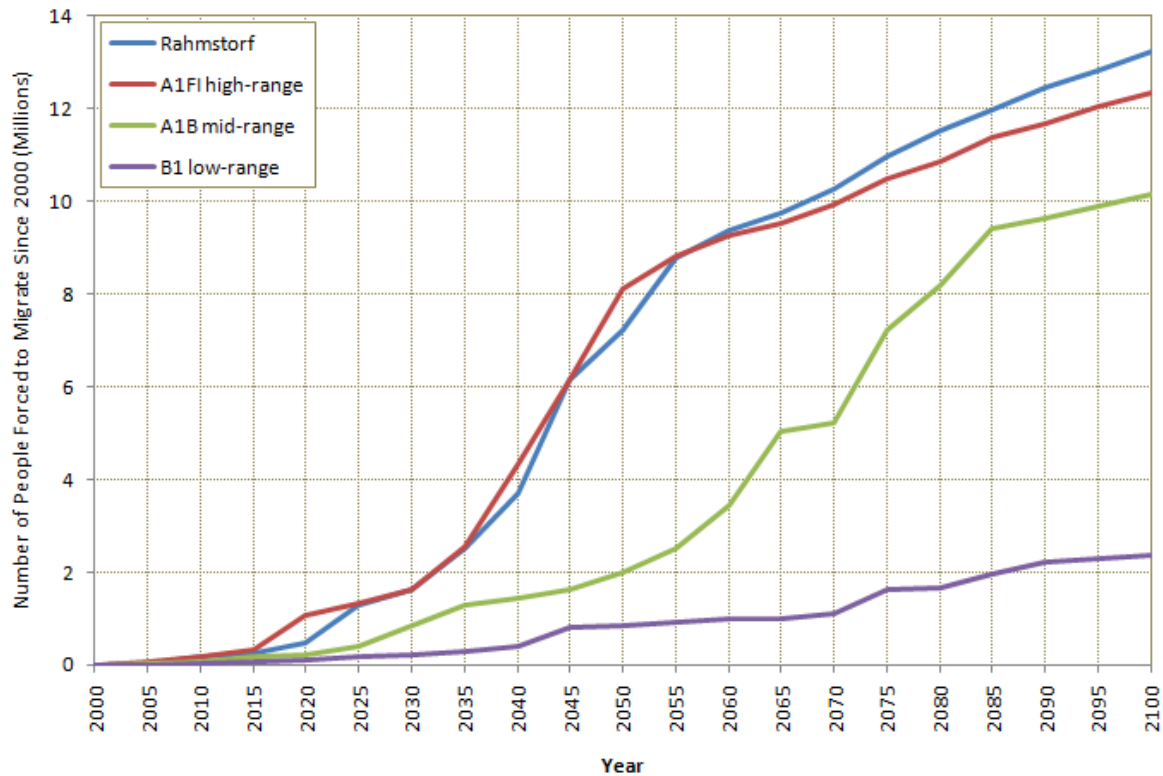


Figure 6: Cumulative forced migration due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with no additional adaptation measures employed (cases 2, 4, 6 and 8 of Table 5).

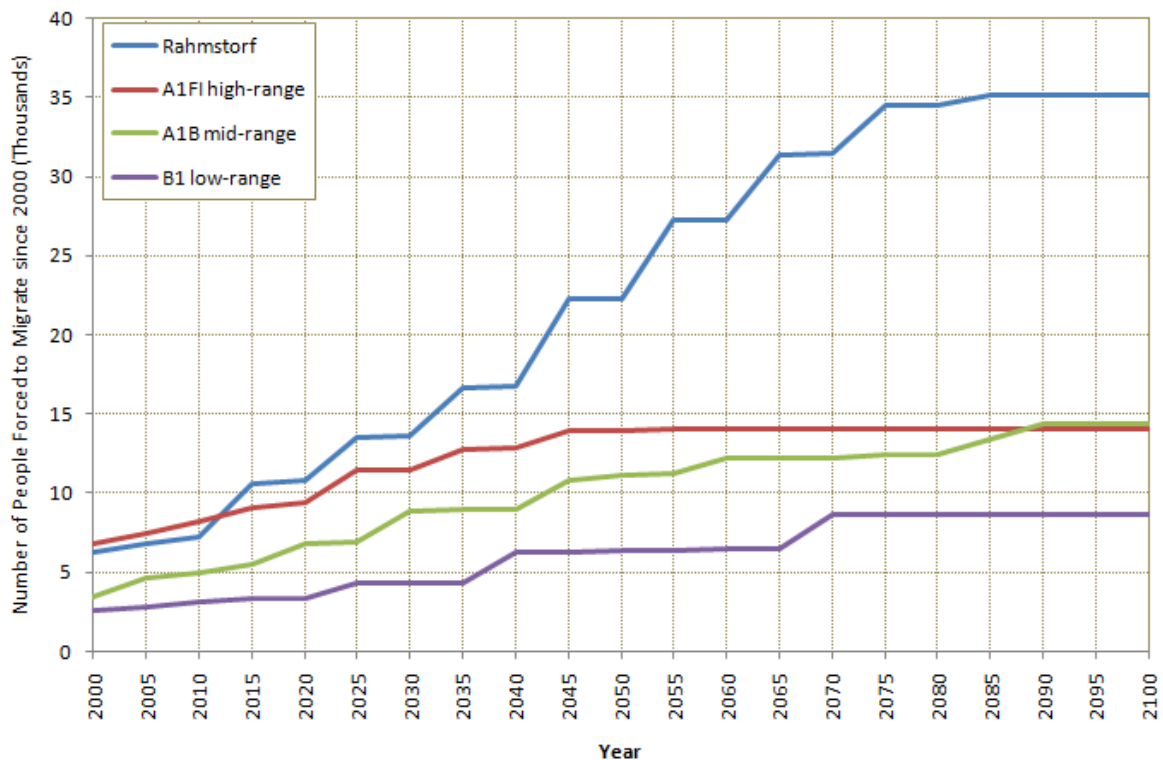


Figure 7: Cumulative forced migration due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with adaptation measures employed (cases 1, 3, 5 and 7 of Table 5).

Total residual costs

Total residual costs comprise five components: (1) forced migration, (2) land loss, (3) salinisation, (4) sea flood costs, and (5) river flood costs. In countries other than those with large coastal river/estuarine systems (e.g. Egypt), a large proportion of the costs would be caused by sea floods. The rate of increase of total residual costs in Africa as a whole increases exponentially with time, reaching approximately US\$48 billion per year (at 1995 values) in 2100 for the Rahmstorf sea-level rise scenario and US\$38 billion per year (at 1995 values) for the A1B mid-range scenario (Figure 8) if no additional adaptation measures are considered. With adaptation, this could significantly be reduced to US\$3.5 billion per year (at 1995 values for the Rahmstorf scenario) and US\$1.1 billion per year (at 1995 values for the A1B mid-range value) in 2100 (Figure 9).

For no climate-induced sea-level rise (Table 8 and Table 13), Egypt, Morocco and Cameroon takes the lead with the largest residual damage costs. In 2030, Egypt alone would experience a significant damage even without climate change costing US\$800 million per year. This represents more than 60% of the Africa total (Table 8). In 2100, This rise to US\$2 billion per year for Egypt alone.

Table 14 shows that Algeria has Africa's largest damage cost at about US\$6.6 billion per year due socio-economic and climate-induced sea-level rise with no additional adaptation (Table 14). This is followed by Egypt and Morocco with more than US\$5 billion per year damages in 2100. Hence, damages seem concentrated in North Africa.

In 2100, the sea-level rise due to climate change only (Table 15) indicates that Algeria will have the greatest residual damage cost of any African country with more than US\$6.2 billion per year (in 2030, Tanzania has the greatest cost with damages of more than US\$146 million per year (Table 10)). Algeria contributes approximately to 23% of the costs for the entire African continent in 2100, whilst Egypt and Morocco each account for more than 15% of the total cost.

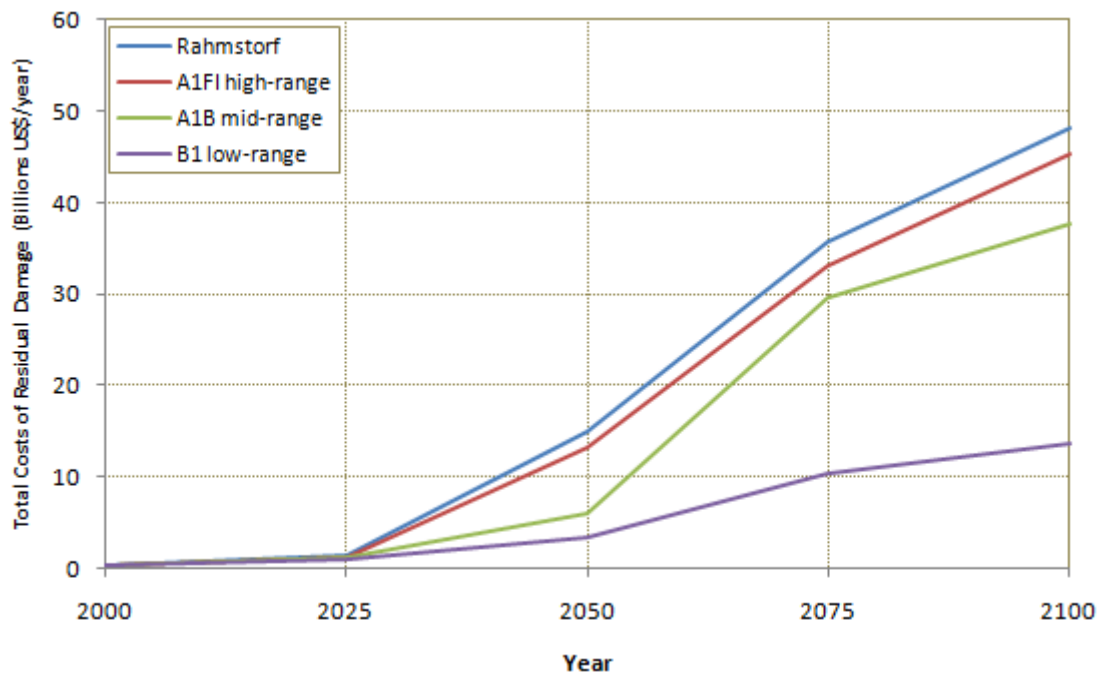


Figure 8: Total residual costs due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with no additional adaptation measures employed (cases 2, 4, 6 and 8 of Table 5).

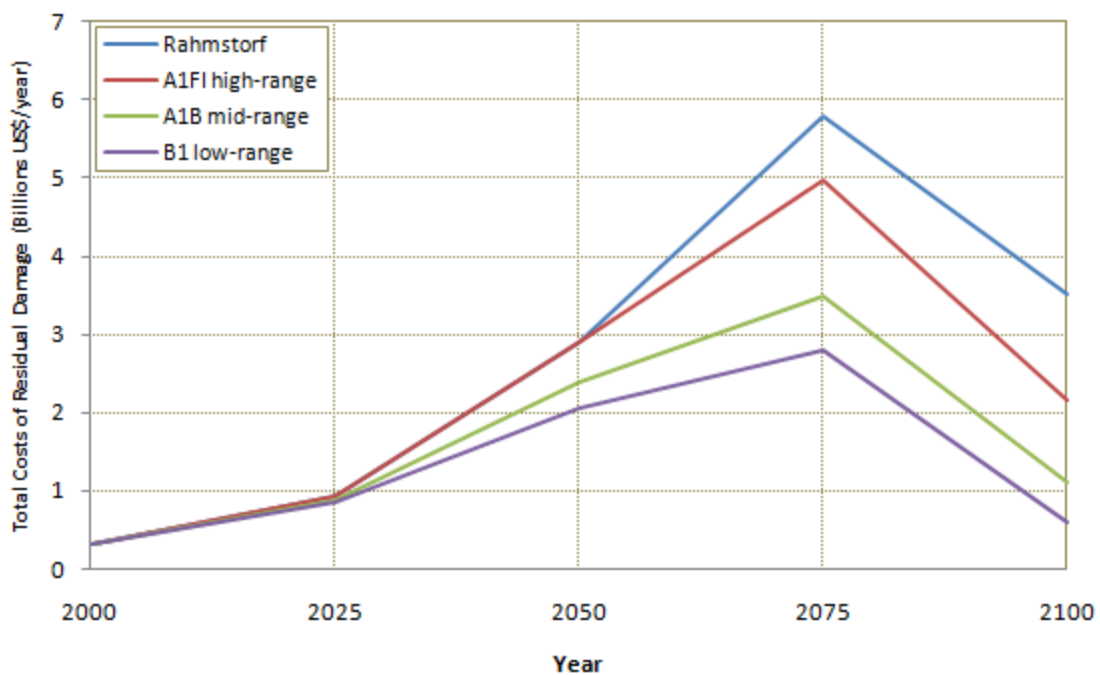


Figure 9: Total residual costs due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with adaptation measures employed (cases 1, 3, 5 and 7 of Table 5).

Loss of wetland value

As sea-level rises more rapidly, coastal wetlands will increasingly decline in area. This section expresses this loss in terms of loss of wetland monetary value which is determined within DIVA. Wetlands comprise saltmarshes, mangroves, high and low unvegetated wetlands, mangrove areas and coastal forest areas. Valuation follows the method outlined in Brander *et al.* (2006) and is a product of

the GDP, population density, locality and wetland area. Hence the unit values are dynamic with socio-economic scenario. (Note that this loss could occur due to non-climatic factors, e.g. due to direct destruction (e.g. Hoozemans *et al.*, 1993; Coleman *et al.*, 2008): this is not investigated here).

Loss of wetland monetary values increase with time for each sea-level scenario (Figure 10). Monetary values for wetlands with and without adaptation are very similar as adaptation has little effect on wetlands. Loss of wetland monetary values without adaptation due to climate change is shown in Figure 10. This reveals that the Rahmstorf sea-level rise scenario combined with the A1B socio-economic scenario has the greatest loss of wetland value by 2100 reaching approximately US\$14 billion per year.

In 2100 the Seychelles have the highest loss of wetland value (approximately US\$2.5 billions per year) when considering sea-level rise due to climatic changes only, followed by Gabon, Mauritius and Nigeria, all together with a total loss of about US\$6 million per year (Table 15). In 2030, the loss accounts more than US\$30, US\$20 and US\$18 millions per year for the Seychelles, Gabon and Mauritius, respectively. Nigeria and Egypt each would lose more than US\$8 million wetland value every year (Table 10).

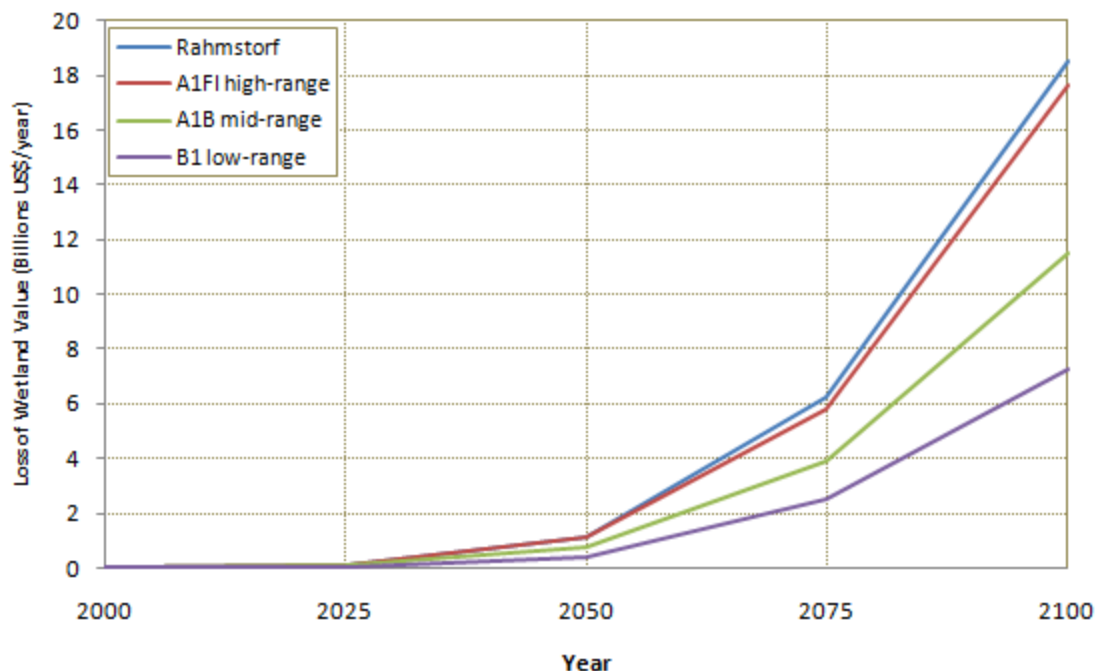


Figure 10: Loss of wetland value due to climate change from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied with no additional adaptation measures employed (cases 2, 4, 6 and 8 of Table 5).

Total adaptation costs

In this analysis, total adaptation costs comprise beach nourishment and sea dike & river dike costs. They have been applied based on benefit-cost or demand for safety criteria. With total sea-level rise, adaptation costs increase linearly with time (Figure 11). Using the Rahmstorf scenario in 2100, adaptation would cost US\$7.7 billion per year, and for an A1B mid-range sea-level scenario approximately US\$2.2 billion per year. Hence they are much less than the residual damage costs already discussed.

Without climate-induced sea-level rise, adaptation costs are low (Table 17). In 2100 for no climate-induced sea-level rise, Nigeria has the highest adaptation cost at US\$39 million per year. Somalia, Mozambique, Madagascar and Egypt are among others listed as relatively with high adaptation costs even without climate change (Table 17).

Under the total sea-level rise scenario, the greatest costs of adaptation are in Mozambique, where in 2100, adaptation costs are estimated at US\$154 million per year (US\$103 million per year in 2030 (Table 12)), approximately 8% of the total for Africa (Table 17). Other countries are Nigeria, Somalia, Madagascar and South Africa, in the top five following Mozambique, and contribute to over 27% of the cost for Africa as a whole. Egypt is ranked ninth with adaptation costs at US\$104 million per year for the total sea-level rise scenario. The top ten countries take 62% of Africa's total cost of adaptation (Table 17).

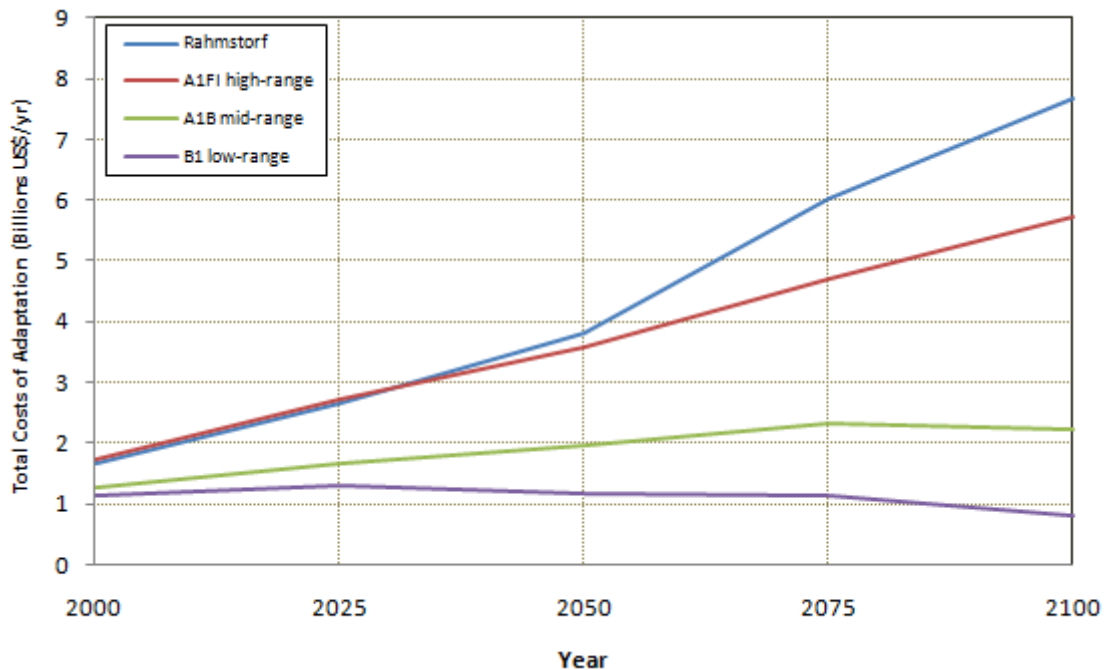


Figure 11: Total costs of adaptation due sea-level rise from 2000 to 2100 in Africa as a whole for the four sea-level scenarios studied employing a cost-benefit approach (cases 1, 3, 5 and 7 of Table 5).

Results also shows that the physical and economic impacts can significantly be reduced if standard protection measures of adaptation (nourishment and dike construction) are employed where cost-benefit approach suggests it is the optimum response. Figure 4 and 5 shows that the number of people threatened with displacement by flooding and coastal erosion is significantly reduced when adaptation measures are employed. For instance, in 2100 for A1B mid-range scenario, without adaptation a significant population (16 million/year) could be flooded. However, when adaptation measures are considered, it drops to 17 thousands/year. Similarly, the cumulative number of people forced to migrate and residual damage costs are drastically reduced (from 10 million to 14,000 and from US\$38 billion to US\$1.1 billion, respectively) when adaptation is considered.

Several studies have looked at the global estimates of protection costs, such as the UNFCCC (2007) assessment and the very recent World Bank (2009) assessment. The coastal assessment used the DIVA model in both cases and the major approach was the construction of dikes and beach nourishment. The costs reported in this study are higher than those reported by the UNFCCC (2007) and Nicholls (2007) due to several factors. These include (1) sea-level rise scenarios, which tended to be smaller in the UNFCCC study, (2) timescales, as the UNFCCC study stopped in 2030 when these estimates continue to 2100; (3) improvements and updates to the DIVA algorithms which have (realistically) raised costs since the UNFCCC study was completed. The costs reported here are comparable with those of the World Bank (2009) study as they used similar sea-level rise and socio-economic scenarios for the future. However, there are still differences as follows: (1) the World Bank costs stop in 2050, while the costs here continue to 2100; (2) the World Bank study includes defence maintenance and port infrastructure upgrade, which are not a DIVA output, and hence have not been included in this analysis of Africa.

6. Discussion

This assessment has considered the potential impacts of sea-level rise on Africa, including regional and national reviews and an application of the DIVA model. The regional and national reviews suggest that impacts could be serious but they are hard to synthesize due to the limited number of studies and their lack of comparability. Hence, the DIVA results provide the most consistent perspective on what sea-level rise might mean for Africa over the 21st Century. Both the continental scale and the national rankings provide important insight into the scale of the problem that Africa's coastal areas might face under accelerated sea-level rise due to global warming.

The results shown in Figures 4 to 11 demonstrate that the higher the rate of sea-level rise, the worse the impact. They also show that the socio-economic scenarios are important in determining impacts as already demonstrated in earlier research by Nicholls (2004). The falling population after 2050 under the A1/B1 scenario means that in this assessment, the impacts grow less rapidly from 2050 onwards than they might. Alternative population scenarios such as the A2 scenario, or a scenario of net coastward migration (as is widely reported at the current time) would see much larger population impacts than reported here. Hence, the impacts presented here are illustrative and do not claim to bracket the scale of impacts that are possible in the worst case.

As a continent, Africa appears highly vulnerable to sea-level rise. For the A1B mid-range scenario by 2100 (a 43-cm rise scenario) if there is no upgrade of defences there will be significant *additional* impacts: 14 million people per year are at risk of flooding, nearly 10 million people are at risk of being displaced over the century from 2000 to 2100 and a residual damage of nearly US\$38 billion per year. If we adapt via beach nourishment and higher dikes, these damages can be greatly reduced and most importantly, forced population displacement is nearly entirely avoided. The incremental adaptation costs for Africa are estimated at nearly US\$2 billion per year in 2100.

Hence while Africa is highly vulnerable to sea-level rise, there are adaptation options that are available. It is important to note that the adaptation will not avoid all impacts, and there will be need to be other investment such as port upgrade, measures to counter salinisation if possible, and extensive river dikes in the coastally-influenced reaches of rivers. Additionally, this infrastructure will require maintenance which has not been costed here. Lastly, there is the issue of the adaptation deficit (Parry et al., 2009) in which many countries, especially poorer countries, are poorly adapted to today's climate, let alone a changing climate. This implies that more investment will be required to meet the adaptation needs of today before we start to think about future challenges. The adaptation deficit in Africa (or elsewhere) has not been assessed in any detail (Parry et al., 2009), but based on the national assessments presented here it is large, and there is limited formal coastal adaptation in most of Africa. The analysis of coastal port cities by Nicholls et al (2008) highlighted concerns about flood exposure and its management in African port cities. Hence the US\$2 billion per year is clearly a minimum adaptation cost. Further impediments to adaptation exist due to the low adaptive capacity in Africa, and even if sufficient funds for adaptation suddenly appeared, the weakness in other capacities would impede the implementation of adaptation. Hence, coastal adaptation and development need to be closely linked and this is likely to be true across all climate change issues.

Considering the relative ranking of countries in absolute terms, several countries consistently appear in the top ten rankings for people-based impacts, including Mozambique, Cameroon, Tanzania, Morocco and Egypt. For economic damages Algeria, Egypt, Morocco, South Africa, Tunisia, Libya and Cameroon all rank highly with more than US\$1 billion of additional damage per year under the A1B mid-range scenario. In absolute terms, the highest adaptation costs occur in Mozambique, Guinea, Nigeria, Guinea-Bissau and South Africa. Hence high impact costs and adaptation costs are not automatically correlated.

Comparison with the countries in the literature review is difficult. Results for some parameters are of the same order of magnitude with previous study estimates (for example residual damage for Nigeria, see French *et al.*, 1995), while others show significant differences (e.g. for land loss in Senegal, DIVA underestimates it compared with Dennis *et al.*, 1995). However, this is likely to be due to the

difference in defining coasts and wetland area. In DIVA, adaptation costs are estimated based on a optimum methods where resources are used where they are most effective. Other studies may have used different methods to calculate levels of protection or different baselines, which may explain the difference in costs. More assessment at the country level is required to enhance our understanding at this important scale of action.

Coastal protection to sea-level rise is often a costly, but a straightforward way to overcome the adverse impacts of climate change. In some countries (for instance Mozambique, Nigeria) high impacts result in high adaptation costs. For other countries, for example Egypt, Tanzania, Morocco, have high impacts but a lower adaptation cost according to the relative ranking in Table 17. Thus adaptation may be a greater benefit to the latter countries rather than the former.

At a country level, relative change (Table 16) is a good indicator of sea-level impacts. For instance, the country of Djibouti has worldwide the tenth largest urban population as a percentage of the country's total population (52%) located in the low elevation (<10m) coastal zone (UN-HABITAT, 2008). As it is a small country with a population of 833,000 in 2007 (Times Books, 2008) and a coastline length of 311km, it does not appear often in the top ten rankings in Tables 13 to 17, yet on a country and a regional level within the country, impacts may be high. Similar issues could apply to Liberia and Senegal which rank eighth and ninth respectively for the percentage of the total population living in a low elevation coastal zone (UN_HABITAT, 2008). Equally, Congo and the Seychelles move up significantly in the rankings to the top ten when impacts are considered in proportion to coastal length.

This study has assumed a uniform rate of sea-level rise to estimate impacts. In reality, sea-level rise will not be globally uniform as it is dependent on temperature variations, mixing, patterns of thermal expansion and gravitational effects (Mitrovica *et al.*, 2001; Meehl *et al.*, 2007). For instance, the Mediterranean has experienced a lower rate of sea-level rise in comparison to the global average over the second half of the 20th Century (Tsimplis and Baker, 2000). Hence whilst impacts on Mediterranean countries may be severe (as they frequently rank highly in the country lists in Tables 13 to 17), the impacts will take longer to emerge if the rate of sea-level rise continues to be slower through the 21st Century.

As well as global problems, present problems and the local context also needs to be considered. Cameroon, Mauritania, Nigeria and Tanzania are countries, which on average are experiencing relatively high rates of subsidence, and even without climate change they would experience slow relative sea-level rise due to these non-climatic processes and hence increased flooding and damage cost through time. Additionally, local man-induced subsidence may increase rates of relative sea-level rise, especially in the deltaic areas (Becker *et al.*, 2002; Ericson *et al.*, 2006; Garcia *et al.*, 2007; Syvitski *et al.*, 2009). These issues have been apparent in south, south-east and east Asia through the 20th Century, but are less apparent in Africa to date, apart from a few deltas such as the Nile, and have not investigated here. However, the resulting challenges can be large and certainly exacerbate the problems and costs of responding to sea-level rise. Other aspects of climate change will also influence the coast. These have not been considered in this study, but could have important effects such as more intense tropical storms hitting the coast of East Africa (Mozambique, Tanzania, Madagascar) (Nicholls, 2006). Additionally, higher temperatures and lower precipitation would tend to reduce river levels affecting river discharge and water availability that has unforeseen impacts for agriculture, fisheries and industry. Changes and intensification to farming practices also mean that wetlands are at risk as they are converted to agriculture and industrial use, reducing a natural form of coastal defence. For example, in the Zambezi River delta which discharges into the ocean in Mozambique, Coleman *et al.* (2008) calculated a 25km² annual loss of the delta plain due to agriculture and reclamation between 1986 and 2000. These losses are far more significant than wetland loss caused by sea-level rise, and if they continue, only limited coastal wetlands may survive to be impacted by sea-level rise.

These results are only a beginning and much further work is required to better understand the implications of sea-level rise for Africa in broad sense. The DIVA results can be improved by improving the spatial resolution of the underlying data and adding more information of adaptation,

etc. To get more local detail, more national and sub-national assessments are required. These can also address the issue of adaptation, especially considering the appropriate adaptations in a local context. Lastly, the linkages between adaptation and development need more exploration.

7. Conclusions

This regional study of the impacts of sea-level rise has provided a quantitative assessment for the whole of Africa in terms of assessing the potential impacts and costs involved with sea-level rise. The general benefits of realistic adaptation measures (by looking at two protection options) are also considered. It provides the next step with up-to-date and consistent information across all African countries to fill the knowledge gap concerning the limited previous national studies available for the continent. Little is known about the potential impacts of sea-level rise on Africa on both continental and county scale.

The study results reveal that whilst Africa is not the most exposed region in the world compared with east, south east and south Asia, sea level rise still poses a significant risk. With a large and growing population in the coastal zone and a low ability to adapt because of low national wealth and adaptive capacity, most countries around the continent appear to be highly vulnerable. Without adaptation, physical, human and financial impacts will be significant. On a continental scale for the A1B mid-range scenario in 2100 (43-cm rise) approximately 16 million people will be flooded per year, 10 million people will be forced to migrate from 2000 to 2100, and there will be a total damage cost of US\$38 billions per year. However, if realistic adaptation measures (in terms of beach nourishment and dike construction) are employed, all these impacts can significantly be reduced at an annual cost of US\$2.2 billion in 2100. With adaptation, the numbers of people that could be flooded can be significantly reduced by about two orders of magnitude to 17,000 people per year, and the number of people forced to migrate from 2000 to 2100 could also significantly be reduced to 14,000. Similarly, residual damage cost could be reduced about one order of magnitude to US\$1.1 billion when adaptation measures are considered. However, delivering such adaptation may be more costly and difficult than the headline cost suggests. This reflects several factors which are not well quantified: (1) the adaptation costs are incomplete, (2) the large adaptation deficit in Africa, and (3) a lack of adaptive capacity.

Considering the national results, the relative ranking of countries provide some useful insight on those countries that are most vulnerable. In absolute terms, several countries consistently appear in the top ten rankings. For people-based impacts concerning flooding and forced migration they are Mozambique, Cameroon, Tanzania, Morocco and Egypt. For economic damages they are Algeria, Egypt, Morocco, South Africa, Tunisia, Libya and Cameroon who are all estimated to have more than US\$1 billion of additional damage per year under the A1B mid-range scenario in 2100. In absolute terms, the highest adaptation costs occur in Mozambique, Guinea, Nigeria, Guinea-Bissau and South Africa.

The issue of sea-level rise and Africa requires further attention, including improving these analyses and more detailed studies that look at impacts and adaptation in more detail. In particular, the development agenda in coastal areas needs to carefully consider sea-level rise.

8. References

1. Agrawala, S., Moehner, A., El Raey, M., Conway, D., van Aalst, M., Hagenstad, M. and Smith, J., 2004. Development and Climate Change in Egypt: Focus on Coastal Resources and the Nile (OECD study). COM/ENV/EPOC/DCD/DAC(2004)1/FINAL.
2. Argawala, S., Moehner, A., Hemp, A., van Aalst, M., Hitz, S., Smith, J., Meena, H., Mwakifwamba, S.M., Hyera, T. and Mwaipopo, O.U., 2003. Development and Climate Change in Tanzania: Focus on Mount Kilimanjaro (OECD study). COM/ENV/EPOC/DCD/DAC(2003)5/FINAL.
3. Appadoo, C., 2003. Status of Mangroves in Mauritius. *Journal of Coastal Development*, 7(1): 1-4.
4. Arnell, N.W., Livermore, M.J.L., Kovats, S., Levy, P.E., Nicholls, R., Parry, M.L. and Gaffin, S.R., 2004. Climate and Socioeconomic Scenarios for Climate Change Impacts Assessments: Characterising the SRES Storylines. *Global Environmental Change*, 14(1):3-20.
5. Awuor, C.B., Orindi, V.A. and Adwera, A.O., 2008. Climate change and coastal cities: the case of Mombasa, Kenya. *Environment and Urbanisation*, 20(1): 231-242.
6. Becker, M., Zerbini, S., Baker, T., Burki, B., Galanis, J., Garate, J., Georgiev, I., Kahle, H.G., Kotzev, V., Lobazov, V., Marson, I., Negusini, M., Richter, B., Veis, G. and Yuzefovich, P., 2002. Assessment of height variations by GPS at Mediterranean and Black Sea coast tide gauges from the SELF project. *Global and Planetary Change*, 34(1-2): 5-35.
7. Beebeejaun, M., 2000. Implications of accelerated sea-level rise (ASLR) for Mauritius. In: A.C. de la Vega-Leinert, R.J. Nicholls, A. Nasser Hassan and M. El-Raey (Editors), *Proceedings of the SURVAS Expert Workshop on "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR)"*, Cairo, Egypt, pp. 57-58.
8. Bijlsma, L., Ehler, C.N., Klein, R.J.T., Kulshrestha, S.M., McLean, R.F., Mimura, N., Nicholls, R.J., Nurse, L.A., Pérez Nieto, H., Stakhiv, E.Z., Turner, R.K. and Warrick, R.A. (1996). Coastal zones and small islands. In: R.T. Watson, M.C. Zinyowera and R.H. Moss (eds), *Climate Change 1995-Impacts, Adaptations and Mitigation of Climate Change: Scientific-Technical Analyses, Contribution of Working Group II to the Second Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge, pp. 289–324.
9. Boko, M., Niang, I., Nyong, A., Vogel, C., Githeko, A., Medany, M., Osman-Elasha, B., Tabo, R., Yanda, P., 2007. Africa. In: M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (Editors), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contributions of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge UK, 433-467.
10. Brander, L.M., Florax, R.J.G.M. and Vermaat, J.E., 2006. The empirics of wetland valuation: A comprehensive summary and a meta-analysis of the literature. *Environmental and Resources Economics*, 33(2): 223-250.
11. Broadus, J., Milliman, S., Edwards, D., Aubrey, D.G. and Bable, F., 1986. Rising sea level and damming of rivers: possible effects in Egypt and Bangladesh. In: J.G. Titus (Editor), *Effects of Changes in Stratospheric Ozone and Global Climate*, U.S. Environmental Protection Agency and UNEP, Washington, DC, USA, Volume 4: pp. 165-189.
12. Carter, T.R., Jones, R.N., Lu, X., Bhadwal, S., Conde, C., Mearns, L.O., O'Neill, B.C., Rounsevell, M.D.A. and Zurek, M.B., 2007. New Assessment Methods and the Characterisation of Future Conditions. In: M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E.

- Hanson (Editors), *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contributions of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge UK, 133-171.
13. Coleman, J.M., Huh, O.K. and Braud, D., 2008. Wetland loss in world deltas. *Journal of Coastal Research*, 24(1A): 1-14.
 14. Dasgupta, S., Laplante, B., Meinsner, C., Wheeler, D. and Yan, J., 2009. The impacts of sea level rise on developing countries: A comparative analysis. *Climate Change*, 93(3-4): 379-388.
 15. de la Vega-Leinert, A.C., Nicholls, R.J., Nasser Hassan, A. and El-Raey, M. 2000. Proceedings of SURVAS expert workshop on: "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR). National Authority on Remote Sensing and Space Sciences (NARSS), Egypt. 104pp. <http://www.survas.mdx.ac.uk>
 16. Dennis, K.C., Niang-Diop, I. and Nicholls, R.J., 1995. Sea-level rise and Senegal: Potential impacts and consequences. *Journal of Coastal Research*, Special Issue 14: 243-261.
 17. Desanker, P., Magadza, C., Allali, A., Basalirwa, C., Boko, M., Dieudonne, G., Downing, T.E., Dube, P.O., Githeko, A., Githendu, M., Gonzalez, P., Gwary, D., Jallow, B., Nwafor, J., Scholles, R., Amani, A., Bationo, A., Buttefield, R., Chafil, R., Feddema, J., Hilmi, K., Mailu, G.M., Midgley, G., Ngara, T., Nicholson, S., Olago, D., Orlando, B., Semazzi, F., Uganai, L. and Washington, R., 2001. Africa. In: McCarthy, J.J., Canziani, O.F., Leary, N.A., Dokken, D.J. and White, K.S., 2001 (Editors), *Climate Change: Impacts, Adaptation, and Vulnerability, Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press: Cambridge, UK, 1032pp.
 18. DINAS-COAST Consortium, 2006. DIVA 1.5.5. Postdam Institute for Climate Impact Research, Postdam, Germany, CD-ROM. Available at <http://www.pik-postdam.de/diva>
 19. El-Raey, M., 1997. Vulnerability assessment of the coastal zone of the Nile delta of Egypt to the impacts of sea level rise. *Ocean and Coastal Management*, 37 (1): 29-40.
 20. El-Raey, M., 1999. 'Egypt: Coastal zone development and climate change: Impact of climate change on Egypt'. <http://www.ess.co.at/GAIA/CASES/EGY/impact.html> (Accessed September 2009).
 21. El-Raey, M., Frihy, O., Nasr, S., Desouki, S. and Dewidar, K., 1999. Vulnerability assessment of sea level rise over Port Said Governorate, Egypt. *Environmental Monitoring and Assessment*, 56(2): 113-128.
 22. El-Raey, M., Nasr, S., Frihy, O., Desouki, S. and Dewidar, K., 1995. Potential impacts of accelerated sea-level rise on Alexandria Governorate, Egypt. *Journal of Coastal Research*. Special Issue 14: 190-204.
 23. Elsharkawy, H., Rashed, H. and Rashed, I., 2009. Climate Change: The Impacts of Sea Level Rise on Egypt, 45th ISOCARP Congress, 1-11.
 24. Ericson, J.P., Vörösmarty, C.J., Dingman, S.L., Ward, L.G. and Meybeck, M., 2006. Effective sea-level rise and deltas: Causes of change and human dimension implications. *Global and Planetary Change*, 50: 63-82.
 25. Folorunsho, R. and Awosika, L., 2000. Implications of accelerated sea-level rise (ASLR) for Nigeria. In: A.C. de la Vega-Leinert, R.J. Nicholls, A. Nasser Hassan and M. El-Raey (Editors), *Proceedings of the SURVAS Expert Workshop on "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR)"*, Cairo, Egypt, pp. 41-47.
 26. French, G.T., Awosika, L.F. and Ibe, C.E., 1995. Sea-level rise and Nigeria: Potential Impacts

- and Consequences. *Journal of Coastal Research*, Special Issue 14: 224-242.
27. Garcia, D., Vigo, I., Chao, B.F. and Martinez, M.C., 2007. Vertical crustal motion along the Mediterranean and Black Sea coast derived from ocean altimetry and tide gauge data. *Pure and Applied Geophysics*, 164(4): 851-863.
 28. Haigh, I.D., Nicholls, R.J. and Wells, N.C., 2008. Twentieth-century changes in extreme still sea-level in the English Channel. Proceedings of the 29th International Conference on Coastal Engineering, Hamburg, Germany. 10.1142/9789814277426_0100.
 29. Hinkel, J., Nicholls, R.J., Vafeidis, A.T., Tol, R.S.J. and Avagianou, T., 2009. Assessing risk of and adaptation to sea-level rise in the EU27: an application of DIVA. A *Mitigation and Adaptation Strategies for Global Change*, in review.
 30. Hoegh-Guldberg, O., 1999. Climate change, coral bleaching and the future of the world's coral reefs. *Marine Freshwater Research*, 50: 839-866.
 31. Hoozemans, F.M.J., Marchand, M. & Pennekamp, H.A., 1993. Sea level rise: A global vulnerability assessment-Vulnerability assessments for population, coastal wetlands and rice production on a global scale. 2nd revised ed., Delft Hydraulics and Rijkswaterstaat, Delft and the Hague, The Netherlands, 184pp.
 32. Ibe, A.C. and Awosika, L.F., 1991. Sea level rise impact on African coastal zones. In: S.H. Omide and C. Juma (Editors), *A change in the weather: African perspectives on climate change*, African Centre for Technology Studies, Nairobi, Kenya, pp 105-112.
 33. IMAGE Team, 2002: IMAGE 2.2. <http://www.mnp.nl/en/themasites/image/index.html> (Accessed August 2009).
 34. Khafagy, A.A., Hulsbergen, C.H. and Baarse, G., 1992. Assessment of the vulnerability of Egypt to sea level rise. In: J. O'Callahan (Editor), Proceedings of the IPCC Workshop on "Global Climate Change and the Rising Challenge of the Sea", Margarita Island, Venezuela. National Oceanic and Atmospheric Administration, Silver Spring, MD, USA.
 35. Lajoie, R.F., 2000. Implications of accelerated sea-level rise (ASLR) for Seychelles. In: A.C. de la Vega-Leinert, R.J. Nicholls, A. Nasser Hassan and M. El-Raey (Editors), *Proceedings of the SURVAS Expert Workshop on "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR)"*, Cairo, Egypt, pp. 59-60.
 36. Leatherman, S.P. and Nicholls, R.J., 1995. Accelerated sea-level rise and developing countries: An Overview. *Journal of Coastal Research*, Special Issue 14: 1-14.
 37. Mandelbrot, B.B., 1982. The fractal geometry of nature. W.H. Freeman, San Fransisco.
 38. McFadden, L., Nicholls, R.J., Vafeidis, A. & Tol, R.S.J., 2007. A methodology for modelling coastal space for global assessment. *Journal of Coastal Research*, 23(4), 911-920.
 39. McGranahan, G., Balk, D. and Anderson, B., 2007. The rising tide: assessing the risks of climate change and human settlements in low elevation coastal zones: *Environment and Urbanization*. 19(1): 17-37.
 40. Meehl, G.A. et al., 2007. Global Climate Projections. In: S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tiger and H.L. Miller (Editors), *Climate Change 2007: The Physical Science Basis. Contributions of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
 41. Milliman, J., Broadhaus, J. and Gable, F., 1989. Environmental and economic implications of

- rising sea level and subsiding deltas, the Nile and Bengal examples. *AMBIO*, 18: 340-345.
42. Mitrovica, J.X., Tamisiea, M.E., Davis, J.L. and Milne, G.A., 2001. Recent mass balance of polar ice sheets inferred from patterns of global sea-level change. *Nature*, 409(6823): 1026-1029.
 43. Mwaipopo, O.U., 2000. Implications of accelerated sea-level rise (ASLR) and climate change for Tanzania. In: A.C. de la Vega-Leinert, R.J. Nicholls, A. Nasser Hassan and M. El-Raey (Editors), *Proceedings of the SURVAS Expert Workshop on "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR)"*, Cairo, Egypt, pp. 53-54.
 44. Nakićenović, N. and R. Swart (Editors), 2000: Emissions Scenarios. Special Report of Working Group III of the Intergovernmental Panel on Climate Change. Cambridge University Press: Cambridge, UK.
 45. Niang, I., 1990. Responses to the impacts of greenhouse induced sea level rise on Senegal. In: J.G. Titus, (Editor), *Changing Climate and the Coast*. U.S. Environmental Protection Agency, Washington DC, USA, Volume 2: pp. 67-87.
 46. Nicholls, R.J., 1995. Coastal megacities and climate change. *Geojournal*, 37(3): 369-379.
 47. Nicholls, R.J., 2004. Coastal flooding and wetland loss in the 21st century: Changes under the SRES climate and socio-economic scenarios. *Global Environmental Change*, 14(1): 69-86.
 48. Nicholls, R.J., 2006. Storm Surges in Coastal Areas. In: M. Arnold, R.S. Chen, U. Deichmann, M. Dilley, A.L. Lerner-Lam, R.E. Pullen and Z. Trohanis (eds), *Natural Disaster Hotspots, Case Studies, The World Bank Hazard Management Unit, Disaster Risk Management Series No. 6*, Washington, D.C., USA, The World Bank, 79-108.
 49. Nicholls, R.J., 2007. *Adaptation options for coastal areas and infrastructure: An analysis for 2030*. Report to the United Nations Framework Convention on Climate Change, Bonn, 33pp.
 50. Nicholls, R.J., Hanson, S., Herweijer, C., Patmore, N., Hallegatte, S., Corfee-Morlot, J., Chateau, J. and Muir-Wood, R., 2008. Ranking Port Cities with High Exposure and Vulnerability to Climate Extremes: Exposure Estimates. OECD Environment Working Papers, No. 1, OECD publishing, doi: 10.1787/011766488208.
 51. Nicholls, R.J., Hoozemans, F.M.J. and Marchand, M., 1999. Increasing flood risk and wetland losses due to global sea-level rise: regional and global analysis. *Global Environmental Change*, 9: 69-87.
 52. Nicholls, R.J. and Mimura, N., 1998. Regional issues raised by sea-level rise and their policy implications. *Climate Research*, 11(1): 5-18.
 53. Nicholls, R.J., Wong, P.P., Burkett, V., Woodroffe, C.D., Hay, J., 2008. Climate change and coastal vulnerability assessment: scenarios for integrated assessment. *Sustainability Science*, 3(1): 89-102
 54. Nicholls, R.J., Wong, P.P., Burkett, V.R., Codignotto, J.O., Hay, J.E., McLean, R.F., Ragoonaden, S. and Woodroffe, C.D. 2007. Coastal systems and low-lying areas. *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden, and C.E. Hanson, (Eds), Cambridge University Press, Cambridge, UK, pp. 315-356.
 55. Orme, A.R., 1999. Coastal Environments. In: W.M. Adams, A.S. Goudie and A.R. Orme (Editors), *The Physical Geography of Africa*. Oxford University Press, Oxford.
 56. Oyieke, H., 2000. Implications of accelerated sea-level rise (ASLR) for Kenya. In: A.C. de la

- Vega-Leinert, R.J. Nicholls, A. Nasser Hassan and M. El-Raey (Editors), *Proceedings of the SURVAS Expert Workshop on "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR)"*, Cairo, Egypt, pp. 55.
57. Parry, M., Arnell, N., Berry, P., Dodman, D., Fankhauser, S., Hope, C., Kovats, S., Nicholls, R., Satterthwaite, D., Tiffin, R. and Wheeler, T., 2009. *Assessing the Costs of Adaptation to Climate Change: A Review of the UNFCCC and Other Recent Estimates*, International Institute for Environment and Development and Grantham Institute for Climate Change, London, pp. 111.
 58. Payet, R.A., 2007. *Impacts of Climate Change on Tourism in Seychells and Comoros: A Final Report Submitted to Assessments of Impacts and Adaptations to Climate Change (AIACC), Project No. SIS90*, The International START Secretariat, Washington, DC, 20009 USA, pp. 89.
 59. Peltier, W.R., 2000. Global glacial isostatic adjustment. In: B.C. Douglas, M.S. Kearney and S.P. Leatherman (Editors), *Sea-Level Rise: History and Consequences*, Academic Press, Sa Diego, CA, USA, 65-95.
 60. Ragoonaden, S., 1997. Impacts of sea-level rise on Mauritius. *Journal of Coastal Research*, Special Issue 24: 205-223.
 61. Rahmstorf, S., 2007. A Semi-Empirical Approach to Projecting Future Sea-Level Rise. *Science*, 315: 368-370.
 62. Sachs, J.D., Mellinger, A.D. and Gallup, J.L., 2001. The Geography of Poverty and Wealth. *Scientific America*, 284(3): 70-75.
 63. Singh, A., Dieye, A., Finco, M., Chenoweth, M.S., Fosnight, E.A. and Allotey, A., 1999. Early Warning of Selected Emerging Environmental Issues in Africa: Change and Correlation from a Geographic Perspective. United Nations Environment Programme, Nairobi, Kenya.
 64. Small, C. and Nicholls, R.J., 2003. A Global Analysis of Human Settlement in Coastal Zones. *Journal of Coastal Research*, 19(3): 584-599.
 65. Snoussi, M., 2000. Implications of accelerated sea-level rise (ASLR) for Morocco. In: A.C. de la Vega-Leinert, R.J. Nicholls, A. Nasser Hassan and M. El-Raey (Editors), *Proceedings of the SURVAS Expert Workshop on "African Vulnerability and Adaptation to Impacts of Accelerated Sea-Level Rise (ASLR)"*, Cairo, Egypt, pp. 22-24.
 66. Snoussi, M., Ouchani, T. and Niazi, S., 2008. Vulnerability assessment of the impact of sea-level rise and flooding on the Moroccan coast: The case of the Mediterranean eastern zone. *Estuarine, Coastal and Shelf Science*, 77(2): 206-213.
 67. Stanley, D.J., 1996. Nile Delta: extreme case of sediment entrapment. *Journal of Marine Geology*, 129: 189-195.
 68. Stanley, D.J. and Warne, A.G., 1993. Nile Delta: recent geological evolution and human impact. *Science*, 260: 628-634.
 69. Stanley, D.J. and Warne, A.G., 1998. Nile Delta in its destructive phase. *Journal of Coastal Research*, 14: 794-825.
 70. Syvitski, J.P.M., Kettner, A.J., Overeem, I., Hutton, E.W.H., Hannon, M.T., Brakenridge, G.R., Day, J., Vörösmarty, C., Saito, Y., Giosan, L. and Nicholls, R.J., 2009. Sinking deltas due to human activities. *Nature Geoscience*, Vol.2, DOI:10.1038/NGEO629.
 71. Times Books, 2008. *The Times Reference Atlas of the World*. Collins Bartholomew Ltd, London.

72. Torell, E.C., Amoral, M., Bayrer, T.G., Daffa, J., Luhikula, G. and Hale, L.Z., 2004. Building enabling conditions for integrated coastal management at the national scale in Tanzania. *Ocean and Coastal Management*, 47:339-359.
73. Tsimplis, M.N. and Baker, T.F., 2000. Sea level drop in the Mediterranean Sea: An indicator of deep water salinity and temperature changes? *Geophys. Res. Lett.*, 27(12):1731-1734.
74. UNFCCC, 2007. *Investment and Financial Flows to Address Climate Change*. Climate Change Secretariat: Bonn, Germany.
75. United Republic of Tanzania, 2003. *Initial Communication under the United Nations Framework Convention on Climate Change (UNFCCC)*, Dar es Sallam, available on-line: <http://unfccc.int/resource/docs/natc/tanncl.pdf>.
76. UN-HABITAT, 2008. State of the World's Cities 2008/2009 - Harmonious Cities, UN-HABITAT (United Nations Human Settlement Programme), Nairobi, Kenya. Available from: <http://www.unhabitat.org/pmss/getPage.asp?page=bookView&book=2562> (Accessed August 2009).
77. Vafeidis, A.T., Boot, G., Cox, J., Maatens, R., McFadden, L., Nicholls, R.J., Spencer, T., and Tol, R.S.J., 2005. The DIVA Database Documentation. - on DIVA CD and www.dinas-coast.net.
78. Vafeidis, A.T., Nicholls, R.J., McFadden, L., Tol, R.S.J., Hinkel, J., Spencer, T., Grashoff, P.S., Boot, G. & Klein, R.J.T., 2008. A new global coastal database for impact and vulnerability analysis to sea-level rise. *Journal of Coastal Research*, 24: 917-924.
79. Woodworth, P.L., Aman, A. and Aarup, T., 2007. Sea level monitoring in Africa. *African Journal of Marine Science*. 29(3): 321-330.
80. Woodworth, P.L. and Blackman, D.L., 2004. Evidence for systematic changes in extreme high waters since the mid-1970's. *Journal of Climate*. 17: 1190-1197.
81. World Bank, 2002. World Bank Development Indicators. On CD Rom. World Bank, Washington, DC.
82. World Bank, 2009. The economics of adaptation to climate change. World Bank, Washington DC.
83. Zhang, K., Douglas, B.C. and Leatherman, S.P., 2000. Twentieth-century storm activity along the US east coast. *Journal of Climate*. 13(10): 1748-1761.
84. Zinyowera, M.C., Jallow, B.P., Maya, R.S., Okoth-Ogendo, H.W.O., Awosika, L.F., Diop, E.S., Downing, T.E., El-Raey, M., Le Sueur, D., Magadza, C.H.D., Toure, S., Vogel, C., Edroma, E.L., Joubert, A., Marume, W., Unganai, S.L. and Yates, D., 1998. Africa. In: Watson, R.T., Zinyowera, M.C. and Moss, R.H. (Editors), *The Regional Impacts of Climate Change: An Assessment of Vulnerability, A Special Report of IPCC Working Group II*, Cambridge University Press: Cambridge, UK, 517pp.

9. Appendix 1. National results for all cases

Tables for the requested parameters for the scenarios described in Table 7 are listed below for the timesteps of 2000, 2025, 2030, 2050, 2075 and 2100 (Table A-1 to Table A-84).

Table A-1. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, with adaptation

Table A-2. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, with adaptation

Table A-3. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, with adaptation

Table A-4. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, with adaptation

Table A-5. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, with adaptation

Table A-6. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, with adaptation

Table A-7. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, without adaptation

Table A-8. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, without adaptation

Table A-9. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, without adaptation

Table A-10. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, without adaptation

Table A-11. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, without adaptation

Table A-12. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, without adaptation

Table A-13. Case 3: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2000, with adaptation

Table A-14. Case 3: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2025, with adaptation

Table A-15. Case 3: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2030, with adaptation

Table A-16. Case 3: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2050, with adaptation

Table A-17. Case 3: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2075, with adaptation

Table A-18. Case 3: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2100, with adaptation

Table A-19. Case 4: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2000, without adaptation

Table A-20. Case 4: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2025, without adaptation

Table A-21. Case 4: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2030, without adaptation

Table A-22. Case 4: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2050, without adaptation

Table A-23. Case 4: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2075, without adaptation

Table A-24. Case 4: Results by country, for the A1FI high-range SLR and A1FI socio-economic scenario for 2100, without adaptation

Table A-25. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, with adaptation

Table A-26. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, with adaptation

Table A-27. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, with adaptation

Table A-28. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, with adaptation

Table A-29. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, with adaptation

Table A-30. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, with adaptation

Table A-31. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, without adaptation

Table A-32. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, without adaptation

Table A-33. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, without adaptation

Table A-34. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, without adaptation

Table A-35. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, without adaptation

Table A-36. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, without adaptation

Table A-37. Case 7: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2000, with adaptation

Table A-38. Case 7: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2025, with adaptation

Table A-39. Case 7: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2030, with adaptation

Table A-40. Case 7: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2050, with adaptation

Table A-41. Case 7: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2075, with adaptation

Table A-42. Case 7: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2100, with adaptation

Table A-43. Case 8: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2000, without adaptation

Table A-44. Case 8: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2025, without adaptation

Table A-45. Case 8: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2030, without adaptation

Table A-46. Case 8: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2050, without adaptation

Table A-47. Case 8: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2075, without adaptation

Table A-48. Case 8: Results by country, for the B1 low-range SLR and B1 socio-economic scenario for 2100, without adaptation

Table A-49. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2000, with adaptation

Table A-50. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2025, with adaptation

Table A-51. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2030, with adaptation

Table A-52. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2050, with adaptation

Table A-53. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2075, with adaptation

Table A-54. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2100, with adaptation

Table A-55. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2000, without adaptation

Table A-56. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2025, without adaptation

Table A-57. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2030, without adaptation

Table A-58. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2050, without adaptation

Table A-59. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2075, without adaptation

Table A-60. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2100, without adaptation

Table A-61. Case 11: Results by country, for No SLR and A1FI socio-economic scenario for 2000, with adaptation

Table A-62. Case 11: Results by country, for No SLR and A1FI socio-economic scenario for 2025, with adaptation

Table A-63. Case 11: Results by country, for No SLR and A1FI socio-economic scenario for 2030, with adaptation

Table A-64. Case 11: Results by country, for No SLR and A1FI socio-economic scenario for 2050, with adaptation

Table A-65. Case 11: Results by country, for No SLR and A1FI socio-economic scenario for 2075, with adaptation

Table A-66. Case 11: Results by country, for No SLR and A1FI socio-economic scenario for 2200, with adaptation

Table A-67. Case 12: Results by country, for No SLR and A1FI socio-economic scenario for 2000, without adaptation

Table A-68. Case 12: Results by country, for No SLR and A1FI socio-economic scenario for 2025, without adaptation

Table A-69. Case 12: Results by country, for No SLR and A1FI socio-economic scenario for 2030, without adaptation

Table A-70. Case 12: Results by country, for No SLR and A1FI socio-economic scenario for 2050, without adaptation

Table A-71. Case 12: Results by country, for No SLR and A1FI socio-economic scenario for 2075, without adaptation

Table A-72. Case 12: Results by country, for No SLR and A1FI socio-economic scenario for 2100, without adaptation

Table A-73. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2000, with adaptation

Table A-74. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2025, with adaptation

Table A-75. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2030, with adaptation

Table A-76. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2050, with adaptation

Table A-77. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2075, with adaptation

Table A-78. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2100, with adaptation

Table A-79. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2000, without adaptation

Table A-80. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2025, without adaptation

Table A-81. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2030, without adaptation

Table A-82. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2050, without adaptation

Table A-83. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2075, without adaptation

Table A-84. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2100, without adaptation

10. Appendix 2. Detailed results for Kenya and Tanzania

Tables for all output parameters for Kenya and Tanzania, Uni. Rep. (Table B-1 to Table B-84) are presented below.

Table B-1. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, with adaptation

Table B-2. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, with adaptation

Table B-3. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, with adaptation

Table B-4. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, with adaptation

Table B-5. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, with adaptation

Table B-6. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, with adaptation

Table B-7. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, without adaptation

Table B-8. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, without adaptation

Table B-9. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, without adaptation

Table B-10. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, without adaptation

Table B-11. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, without adaptation

Table B-12. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, without adaptation

Table B-13. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2000, with adaptation

Table B-14. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2025, with adaptation

Table B-15. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2030, with adaptation

Table B-16. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2050, with adaptation

Table B-17. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2075, with adaptation

Table B-18. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2100, with adaptation

Table B-19. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2000, without adaptation

Table B-20. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2025, without adaptation

Table B-21. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2030, without adaptation

Table B-22. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2050, without adaptation

Table B-23. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2075, without adaptation

Table B-24. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2100, without adaptation

Table B-25. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, with adaptation

Table B-26. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, with adaptation

Table B-27. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, with adaptation

Table B-28. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, with adaptation

Table B-29. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, with adaptation

Table B-30. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, with adaptation

Table B-31. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, without adaptation

Table B-32. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, without adaptation

Table B-33. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, without adaptation

Table B-34. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, without adaptation

Table B-35. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, without adaptation

Table B-36. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, without adaptation

Table B-37. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2000, with adaptation

Table B-38. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2025, with adaptation

Table B-39. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2030, with adaptation

Table B-40. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2050, with adaptation

Table B-41. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2075, with adaptation

Table B-42. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2100, with adaptation

Table B-43. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2000, without adaptation

Table B-44. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2025, without adaptation

Table B-45. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2030, without adaptation

Table B-46. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2050, without adaptation

Table B-47. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2075, without adaptation

Table B-48. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2100, without adaptation

Table B-49. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2000, with adaptation

Table B-50. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2025, with adaptation

Table B-51. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2030, with adaptation

Table B-52. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2050, with adaptation

Table B-53. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2075, with adaptation

Table B-54. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2100, with adaptation

Table B-55. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2000, without adaptation

Table B-56. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2025, without adaptation

Table B-57. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2030, without adaptation

Table B-58. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2050, without adaptation

Table B-59. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2075, without adaptation

Table B-60. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2100, without adaptation

Table B-61. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2000, with adaptation

Table B-62. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2025, with adaptation

Table B-63. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2030, with adaptation

Table B-64. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2050, with adaptation

Table B-65. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2075, with adaptation

Table B-66. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2200, with adaptation

Table B-67. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2000, without adaptation

Table B-68. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2025, without adaptation

Table B-69. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2030, without adaptation

Table B-70. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2050, without adaptation

Table B-71. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2075, without adaptation

Table B-72. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2100, without adaptation

Table B-73. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2000, with adaptation

Table B-74. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2025, with adaptation

Table B-75. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2030, with adaptation

Table B-76. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2050, with adaptation

Table B-77. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2075, with adaptation

Table B-78. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2100, with adaptation

Table B-79. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2000, without adaptation

Table B-80. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2025, without adaptation

Table B-81. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2030, without adaptation

Table B-82. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2050, without adaptation

Table B-83. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2075, without adaptation

Table B-84. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2100, without adaptation

Table A-1. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	10.5	3.2	0	0.00	1.7	138	0.017	0.0	10.5	3.2	0.42	0.0	0	2.0	0.0	0.2	2.6	0
Angola	54.7	4.5	0	0.00	5.2	8	0.016	2.2	54.2	2.3	0.23	0.0	0	2.5	0.5	0.0	3.2	0
Benin	3.1	0.0	0	0.04	0.0	23	0.017	0.0	0.0	0.0	0.00	0.0	0	4.0	0.0	0.5	4.5	0
Cameroon	8.2	8.5	0	0.02	10.4	18	0.017	0.0	5.9	8.5	1.38	0.0	0	5.8	2.7	0.0	9.9	0
Cape Verde	11.0	0.3	0	0.07	0.3	52	0.017	0.0	7.0	0.2	0.00	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	4.9	0.1	0	0.03	0.3	15	0.016	0.0	3.1	0.1	0.00	0.0	0	0.0	0.0	0.0	0.1	0
Congo	5.2	0.7	0	0.05	0.7	37	0.016	0.0	3.6	0.6	0.00	0.0	0	0.0	0.2	0.0	0.3	0
Congo, Dem Rep	1.4	0.0	0	0.00	0.1	4	0.016	0.0	1.4	0.0	0.02	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	20.6	0.4	0	0.34	0.0	42	0.017	0.0	0.0	0.0	0.13	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	2.9	0.5	0	0.00	0.5	11	0.016	0.0	2.9	0.5	0.00	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	37.9	236.3	0	0.61	19.0	29	0.021	221.2	17.2	13.0	0.06	0.0	0	7.7	0.1	0.2	8.0	0
Equatorial Guinea	4.2	0.0	0	0.05	0.0	8	0.017	0.0	0.0	0.0	0.10	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	21.9	0.0	0	0.05	0.8	3	0.017	0.0	20.2	0.0	0.00	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	90.0	19.6	0	0.48	2.3	31	0.016	18.1	67.0	1.0	0.87	0.6	0	25.2	4.7	0.0	31.4	0
Gambia	6.3	0.2	0	0.00	3.2	13	0.017	0.0	5.9	0.2	0.02	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	14.8	0.8	0	0.23	0.0	23	0.021	0.7	0.0	0.0	0.00	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	13.9	0.1	0	0.12	0.5	9	0.017	0.0	4.2	0.1	0.00	0.0	0	0.5	1.4	0.0	2.0	0
Guinea-Bissau	46.8	0.3	0	0.31	6.1	3	0.017	0.0	26.1	0.3	0.00	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	22.8	0.8	0	0.19	5.7	7	0.016	0.0	14.1	0.8	0.13	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	9.6	0.0	0	0.16	0.0	15	0.017	0.0	0.0	0.0	0.06	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	47.2	2.0	0	0.36	0.4	120	0.019	0.0	36.5	1.5	0.00	0.0	0	3.4	0.0	0.5	4.0	0
Madagascar	285.7	0.3	0	0.73	14.4	4	0.017	0.0	231.2	0.3	0.00	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	23.7	0.1	0	0.23	1.0	4	0.020	0.0	7.5	0.1	0.00	0.0	0	3.6	0.0	0.1	3.7	0
Mauritius	1.6	0.1	0	0.02	0.0	296	0.016	0.0	0.0	0.0	0.00	0.0	0	11.5	0.0	0.0	11.5	0
Morocco	37.5	12.7	0	0.21	2.9	60	0.016	0.0	25.8	11.7	0.15	0.0	0	1.8	0.0	0.0	2.0	0
Mozambique	252.7	11.8	0	0.91	275.2	2	0.016	6.4	199.1	5.2	0.33	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	9.1	0.0	0	0.15	0.1	3	0.016	0.0	4.1	0.0	0.00	0.0	0	8.7	0.0	0.0	8.7	0
Nigeria	67.8	0.8	0	0.76	9.3	17	0.024	0.0	12.4	0.4	0.02	0.0	0	28.1	4.9	0.5	33.4	0
Reunion	2.1	0.1	0	0.02	0.0	195	0.016	0.0	1.1	0.0	0.00	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	1.4	0.0	0	0.02	0.0	15	0.016	0.0	0.0	0.0	0.00	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	24.9	1.5	0	0.15	5.2	25	0.017	0.0	14.5	1.5	0.00	0.0	0	3.8	0.9	0.0	4.7	0
Seychelles	1.8	1.2	0	0.01	0.0	231	0.016	0.0	0.8	1.1	0.00	0.0	0	22.8	0.1	0.0	22.9	0
Sierra Leone	18.7	0.1	0	0.15	2.5	6	0.017	0.0	9.4	0.1	0.01	0.0	0	0.1	0.3	0.0	0.4	0
Somalia	319.3	0.2	0	0.58	5.5	3	0.018	0.0	293.1	0.2	0.07	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	92.0	1.8	0	0.11	0.2	104	0.016	0.0	79.6	1.8	1.39	0.0	0	6.2	0.7	0.2	8.5	0
Sudan	4.1	0.0	0	0.00	0.1	5	0.017	0.0	4.1	0.0	0.00	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	28.0	3.2	0	0.23	101.0	4	0.018	0.0	14.2	3.2	0.00	0.0	0	0.5	0.1	0.0	0.6	0
Togo	1.7	0.0	0	0.02	0.0	24	0.023	0.0	0.0	0.0	0.00	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	51.9	7.3	0	0.28	1.3	119	0.019	0.0	42.7	7.1	0.11	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	16.3	0.0	0	0.21	0.0	0	0.017	0.0	3.4	0.0	0.00	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1678.2	319.6	0	7.9	475.9	38*	0.017**	248.6	1222.8	64.9	5.5	0.6	0	147.9	19.6	2.9	176.9	0

Table A-2. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	22.4	14.1	0.0	0.00	0.6	476	0.13	0.0	22.4	14.1	1.5	0.0	0	4.9	0.0	0.6	7.0	0
Angola	44.9	15.2	0.0	0.01	7.8	24	0.13	4.8	36.2	10.4	0.7	0.0	0	7.5	1.5	0.0	9.8	0
Benin	6.0	0.0	0.0	0.01	0.0	83	0.13	0.0	0.0	0.0	0.0	0.0	0	16.2	0.1	2.0	18.3	0
Cameroon	41.3	46.1	0.0	0.03	16.8	71	0.13	0.0	15.2	46.1	5.8	0.0	0	24.6	11.1	0.0	41.4	0
Cape Verde	24.2	1.1	0.0	0.02	0.2	195	0.13	0.0	16.	1.1	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Comoros	11.8	0.5	0.0	0.01	0.3	53	0.13	0.0	8.1	0.4	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Congo	12.8	3.8	0.0	0.02	1.3	139	0.13	0.0	9.7	3.7	0.0	0.0	0	0.3	1.0	0.0	1.3	0
Congo, Dem Rep	3.8	0.0	0.0	0.00	0.2	16	0.13	0.0	3.8	0.0	0.1	0.0	0	0.8	0.2	0.0	1.1	0
Cote d'Ivoire	39.5	0.6	0.0	0.09	0.0	153	0.13	0.0	0.0	0.0	0.6	0.0	0	4.5	4.0	0.7	9.8	0
Djibouti	6.1	2.7	0.0	0.00	0.8	44	0.13	0.0	6.1	2.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	143.0	616.7	0.4	0.11	4.1	100	0.15	562.9	86.9	52.0	0.2	0.0	0	20.6	0.3	0.7	21.9	0
Equatorial Guinea	7.9	0.0	0.0	0.01	0.0	35	0.13	0.0	0.0	0.0	0.4	0.0	0	1.9	0.3	0.0	2.6	0
Eritrea	22.2	0.1	0.0	0.01	0.6	13	0.13	0.0	18.9	0.1	0.0	0.0	0	0.3	0.0	0.0	0.4	0
Gabon	118.4	50.6	0.0	0.15	0.4	148	0.13	45.7	67.6	4.2	3.6	2.5	0	99.3	19.3	0.1	124.9	0
Gambia	22.5	1.0	0.0	0.01	1.1	49	0.13	0.0	15.9	1.0	0.1	0.0	0	5.7	1.6	0.1	7.5	0
Ghana	24.6	1.9	0.0	0.04	0.0	80	0.16	1.9	0.0	0.0	0.0	0.0	0	2.4	1.5	1.2	5.1	0
Guinea	71.8	0.2	0.0	0.09	0.1	38	0.13	0.0	10.6	0.2	0.0	0.0	0	3.3	5.9	0.0	9.2	0
Guinea-Bissau	125.5	1.8	0.0	0.12	9.5	13	0.13	0.0	65.4	1.8	0.0	0.0	0	1.4	2.1	0.1	3.6	0
Kenya	56.0	4.5	0.0	0.05	3.9	32	0.13	0.0	39.2	4.4	0.6	0.0	0	3.6	1.1	0.0	5.3	0
Liberia	18.3	0.0	0.0	0.04	0.0	56	0.13	0.0	0.0	0.0	0.2	0.0	0	1.6	0.8	0.0	2.6	0
Libyan Arab Jamahiriya	118.3	9.0	7.6	0.09	0.7	444	0.14	0.0	94.9	8.2	0.0	0.0	0	10.3	0.0	1.7	12.0	0
Madagascar	204.7	1.5	0.0	0.17	4.4	18	0.13	0.0	109.8	1.5	0.0	0.0	0	0.7	0.6	0.0	1.2	0
Mauritania	59.6	0.3	0.0	0.07	0.2	18	0.15	0.0	16.0	0.3	0.0	0.0	0	13.7	0.0	0.3	14.1	0
Mauritius	3.0	0.2	0.0	0.00	0.0	1141	0.13	0.0	0.0	0.0	0.0	0.0	0	45.1	0.0	0.0	45.1	0
Morocco	77.4	57.4	0.0	0.06	2.2	218	0.13	0.0	54.7	56.1	0.6	0.0	0	6.1	0.0	0.2	6.9	0
Mozambique	276.6	32.7	0.0	0.29	150.5	6.2	0.13	14.4	164.3	18.1	1.1	0.0	0	5.1	0.3	0.0	6.5	0
Namibia	110.7	0.0	1.8	0.04	0.2	11	0.13	0.0	100.5	0.0	0.0	0.0	0	25.1	0.0	0.0	25.1	0
Nigeria	144.6	2.4	0.0	0.16	2.0	61	0.18	0.0	26.7	1.8	0.1	0.0	0	105.5	19.8	1.8	127.2	0
Reunion	4.2	0.2	0.0	0.01	0.0	582	0.13	0.0	2.1	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	2.6	0.0	0.0	0.00	0.0	56	0.13	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	67.2	6.7	0.0	0.06	2.4	91	0.13	0.0	40.1	6.7	0.0	0.0	0	15.3	3.6	0.0	18.8	0
Seychelles	3.9	0.1	0.0	0.00	0.0	1141	0.13	0.0	1.8	0.0	0.0	0.0	0	113.0	0.4	0.0	113.4	0
Sierra Leone	55.3	0.3	0.0	0.07	1.5	23	0.13	0.0	23.7	0.3	0.0	0.0	0	0.6	1.2	0.1	1.9	0
Somalia	213.9	1.1	0.0	0.12	7.6	13	0.14	0.0	168.2	1.0	0.3	0.0	0	1.8	0.1	0.0	2.3	0
South Africa	209.2	8.0	0.2	0.04	0.2	311	0.13	0.0	178.0	7.8	4.4	0.0	0	18.1	2.1	0.7	25.3	0
Sudan	71.3	0.0	0.6	0.00	0.1	21	0.13	0.0	71.3	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	61.4	13.4	0.0	0.06	155.3	12	0.14	0.0	35.3	13.4	0.0	0.0	0	1.5	0.5	0.0	1.9	0
Togo	2.8	0.0	0.0	0.00	0.0	85	0.17	0.0	0.0	0.0	0.0	0.0	0	2.8	0.0	0.4	3.2	0
Tunisia	125.5	34.2	0.0	0.08	0.7	425	0.14	0.0	91.6	33.9	0.4	0.0	0	4.4	0.0	0.3	5.1	0
Western Sahara	32.4	0.0	0.0	0.06	0.0	0	0.13	0.0	7.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	2667.6	928.6	10.7	2.2	375.7	137*	0.14**	629.7	1608.8	291.6	20.7	2.5	0	568.8	79.8	11.0	682.9	0

Table A-3. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	22.6	20.5	0.0	0.00	0.7	629	0.17	0.0	22.6	20.5	2.0	0.0	0	5.8	0.0	0.7	8.6	0
Angola	47.2	20.2	0.0	0.01	8.3	32	0.16	5.7	36.3	14.5	1.0	0.0	0	9.7	1.9	0.0	12.7	0
Benin	6.0	0.0	0.0	-0.01	0.0	113	0.17	0.0	0.0	0.0	0.0	0.0	0	22.4	0.2	2.8	25.3	0
Cameroon	48.0	45.8	0.0	0.03	4.7	98	0.16	0.0	15.4	45.8	8.2	0.0	0	34.8	15.6	0.0	58.5	0
Cape Verde	24.3	1.6	0.0	-0.01	0.2	268	0.16	0.0	16.8	1.6	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Comoros	11.8	0.6	0.0	-0.01	0.3	73	0.16	0.0	8.2	0.6	0.0	0.0	0	0.2	0.2	0.0	0.5	0
Congo	12.9	5.5	0.0	-0.01	1.4	192	0.16	0.0	9.8	5.5	0.0	0.0	0	0.6	1.4	0.0	2.0	0
Congo, Dem Rep	3.8	0.0	0.0	0.00	0.0	23	0.16	0.0	3.8	0.0	0.1	0.0	0	1.1	0.2	0.0	1.5	0
Cote d'Ivoire	39.5	0.0	0.0	-0.06	0.0	211	0.16	0.0	0.0	0.0	0.8	0.0	0	6.6	5.7	1.0	14.1	0
Djibouti	6.1	2.6	0.0	0.00	0.2	62	0.16	0.0	6.1	2.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	104.8	763.0	0.4	-0.08	4.6	133	0.19	686.9	45.7	75.6	0.3	0.0	0	23.9	0.4	0.9	25.6	0
Equatorial Guinea	7.9	0.0	0.0	-0.01	0.0	49	0.16	0.0	0.0	0.0	0.6	0.0	0	2.6	0.4	0.0	3.5	0
Eritrea	23.0	0.1	0.0	-0.01	0.5	19	0.16	0.0	19.7	0.1	0.0	0.0	0	0.5	0.1	0.0	0.5	0
Gabon	120.5	62.1	0.0	-0.07	0.2	211	0.16	56.2	67.6	5.9	5.1	3.5	0	138.2	27.2	0.2	174.2	0
Gambia	24.5	1.5	0.0	0.01	1.2	68	0.16	0.0	16.1	1.5	0.1	0.0	0	7.9	2.3	0.2	10.5	0
Ghana	24.6	2.3	0.0	-0.04	0.0	110	0.19	2.3	0.0	0.0	0.0	0.0	0	3.6	2.1	1.6	7.3	0
Guinea	83.5	0.3	0.0	0.04	0.1	53	0.16	0.0	10.6	0.3	0.0	0.0	0	5.1	8.3	0.0	13.4	0
Guinea-Bissau	132.5	2.6	0.0	-0.02	7.9	19	0.16	0.0	66.4	2.6	0.0	0.0	0	2.1	3.0	0.1	5.2	0
Kenya	56.4	6.4	0.0	-0.04	2.9	46	0.16	0.0	39.6	6.4	0.8	0.0	0	5.1	1.6	0.0	7.6	0
Liberia	18.3	0.0	0.0	-0.03	0.0	77	0.16	0.0	0.0	0.0	0.3	0.0	0	2.3	1.1	0.0	3.7	0
Libyan Arab Jamahiriya	95.4	7.6	0.0	-0.06	0.2	592	0.18	0.0	71.4	7.6	0.0	0.0	0	12.9	0.0	2.2	15.1	0
Madagascar	205.2	2.2	0.0	-0.13	4.6	26	0.16	0.0	110.3	2.2	0.0	0.0	0	0.9	0.8	0.0	1.7	0
Mauritania	63.4	0.4	0.0	-0.03	0.2	25	0.19	0.0	16.0	0.4	0.0	0.0	0	19.0	0.1	0.4	19.5	0
Mauritius	3.0	0.0	0.0	0.00	0.0	1584	0.16	0.0	0.0	0.0	0.0	0.0	0	60.9	0.0	0.0	60.9	0
Morocco	77.8	77.7	0.0	-0.04	1.9	291	0.16	0.0	55.0	77.8	0.8	0.0	0	8.0	0.0	0.2	9.1	0
Mozambique	281.1	42.3	0.0	-0.15	150.7	8	0.16	17.3	166.5	25.0	1.5	0.0	0	6.7	0.4	0.0	8.6	0
Namibia	510.2	0.1	1.8	-0.03	0.2	14	0.16	0.0	499.8	0.1	0.0	0.0	0	32.3	0.0	0.0	32.3	0
Nigeria	151.1	2.8	0.0	-0.08	2.1	83	0.21	0.0	26.9	2.7	0.1	0.0	0	144.5	27.6	2.5	174.8	0
Reunion	4.2	0.2	0.0	0.00	0.0	742	0.16	0.0	2.1	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	2.6	0.0	0.0	0.00	0.0	78	0.16	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	69.8	9.4	0.0	-0.01	2.0	126	0.16	0.0	40.6	9.4	0.0	0.0	0	21.3	5.0	0.0	26.4	0
Seychelles	3.9	0.0	0.0	0.00	0.0	1615	0.16	0.0	1.7	0.0	0.0	0.0	0	155.0	0.6	0.0	155.6	0
Sierra Leone	59.5	0.5	0.0	0.00	1.4	33	0.16	0.0	23.9	0.4	0.0	0.0	0	0.9	1.7	0.1	2.7	0
Somalia	214.6	1.2	0.0	-0.10	1.8	18	0.17	0.0	168.9	1.2	0.5	0.0	0	2.6	0.2	0.0	3.2	0
South Africa	212.5	11.2	0.2	-0.01	0.2	411	0.16	0.0	179.3	11.0	5.9	0.0	0	23.6	2.9	0.9	33.2	0
Sudan	90.3	0.0	0.7	0.00	0.1	29	0.17	0.0	90.3	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	62.0	15.6	0.0	-0.04	63.4	16	0.17	0.0	35.9	15.6	0.0	0.0	0	1.9	0.6	0.0	2.6	0
Togo	2.8	0.0	0.0	0.00	0.0	115	0.21	0.0	0.0	0.0	0.0	0.0	0	3.9	0.0	0.6	4.4	0
Tunisia	129.3	48.3	0.0	-0.03	0.8	565	0.18	0.0	92.3	48.2	0.6	0.0	0	5.5	0.0	0.3	6.4	0
Western Sahara	35.3	0.0	0.0	-0.04	0.0	1	0.16	0.0	10.7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	3092.2	1154.6	3.1	-1.06	262.8	186*	0.17**	768.4	1976.3	385.4	28.7	3.5	0	773.0	111.9	14.7	932.1	0

Table A-4. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	31.9	55.4	0.0	0.00	0.6	1797	0.35	0.0	31.9	60.5	3.7	0.0	0	5.3	0.0	0.0	9.0	0
Angola	70.8	49.8	0.0	0.01	1.2	94	0.34	11.0	48.8	31.1	3.0	0.0	0	25.6	5.6	0.0	34.1	0
Benin	9.9	0.4	0.0	-0.01	0.0	381	0.35	0.0	0.0	0.0	0.0	0.0	0	76.7	0.6	9.8	87.2	0
Cameroon	86.6	179.8	0.0	0.03	2.4	345	0.35	0.0	20.6	169.4	30.3	0.0	0	128.1	56.9	0.0	215.2	0
Cape Verde	35.8	8.1	0.0	-0.02	0.1	898	0.35	0.0	23.4	7.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	17.7	2.9	0.0	-0.01	0.4	256	0.34	0.0	11.6	2.6	0.0	0.0	0	0.5	0.7	0.0	1.2	0
Congo	18.5	15.9	0.0	-0.01	0.2	656	0.34	0.0	13.3	14.9	0.0	0.0	0	4.0	4.8	0.0	8.8	0
Congo, Dem Rep	5.0	0.0	0.0	0.00	0.0	79	0.34	0.0	5.0	0.0	0.5	0.0	0	3.5	0.9	0.0	4.9	0
Cote d'Ivoire	66.0	6.3	0.0	-0.09	0.0	711	0.35	0.0	0.0	0.0	2.9	0.0	0	29.3	20.4	3.5	56.1	0
Djibouti	8.2	10.8	0.0	0.00	0.1	223	0.34	0.0	8.2	10.2	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	147.2	1831.8	0.0	-0.13	5.7	386	0.39	1484.5	56.9	319.6	0.8	0.0	0	37.5	1.3	2.1	41.7	0
Equatorial Guinea	13.2	0.0	0.0	-0.01	0.0	175	0.35	0.0	0.0	0.0	2.1	0.0	0	8.6	1.4	0.1	12.2	0
Eritrea	30.0	0.4	0.0	-0.01	0.2	71	0.35	0.0	24.7	0.4	0.0	0.0	0	1.7	0.2	0.0	1.9	0
Gabon	179.3	150.2	0.0	-0.10	0.1	786	0.34	123.8	87.3	16.5	18.8	11.4	0	460.8	99.5	1.4	591.9	0
Gambia	39.2	6.4	0.0	0.01	1.0	235	0.35	0.0	21.5	6.0	0.4	0.0	0	27.9	8.4	0.6	37.2	0
Ghana	38.0	5.8	0.0	-0.05	0.0	370	0.40	5.3	0.0	0.0	0.0	0.0	0	16.3	7.6	5.5	29.5	0
Guinea	148.4	1.5	0.0	0.03	0.1	192	0.35	0.0	13.8	1.3	0.0	0.0	0	26.1	30.2	0	56.4	0
Guinea-Bissau	206.7	10.7	0.0	-0.04	2.5	69	0.35	0.0	85.8	9.9	0.1	0.0	0	10.1	10.9	0.4	21.6	0
Kenya	79.5	22.2	0.0	-0.05	1.2	174	0.34	0.0	49.7	20.2	3.4	0.0	0	19.9	6.4	0.0	29.8	0
Liberia	30.6	0.4	0.0	-0.04	0.0	262	0.35	0.0	0.0	0.0	1.2	0.0	0	8.4	3.8	0.0	13.4	0
Libyan Arab Jamahiriya	124.1	12.5	0.0	-0.09	0.0	1729	0.37	0.0	86.7	1.9	0.0	0.0	0	4.7	0.0	4.5	9.2	0
Madagascar	296.0	10.6	0.0	-0.17	3.4	97	0.35	0.0	143.2	10.0	0.0	0.0	0	3.8	3.2	0.0	7.0	0
Mauritania	119.4	2.1	0.0	-0.04	0.3	92	0.39	0.0	37.2	1.9	0.0	0.0	0	62.0	0.2	1.5	63.7	0
Mauritius	10.4	2.2	0.0	0.00	0.0	5564	0.34	0.0	5.4	0.0	0.0	0.0	0	190.5	0.0	0.0	190.5	0
Morocco	113.3	303.2	0.0	-0.05	2.2	864	0.34	0.0	74.7	287.1	2.7	0.0	0	19.2	0.0	0.7	22.6	0
Mozambique	407.0	120.2	0.0	-0.20	81.6	24	0.34	34.9	212.1	80.6	4.5	0.0	0	19.1	1.2	0.0	24.8	0
Namibia	97.0	0.3	1.9	-0.04	0.2	45	0.34	0.0	78.3	0.2	0.0	0.0	0	82.1	0.0	0.0	82.1	0
Nigeria	232.9	17.8	0.0	-0.13	2.8	281	0.43	0.0	35.6	12.3	0.3	0.0	0	483.8	99.7	8.7	592.5	0
Reunion	6.5	1.0	0.0	0.00	0.0	1768	0.34	0.0	3.1	0.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	4.4	0.0	0.0	0.00	0.0	267	0.34	0.0	0.0	0.0	0.0	0.0	0	0.5	0.0	0.0	0.5	0
Senegal	105.0	40.0	0.0	-0.02	1.3	432	0.35	0.0	53.7	37.6	0.0	0.0	0	73.3	18.4	0.0	91.9	0
Seychelles	5.5	1.0	0.0	0.00	0.0	4470	0.34	0.0	1.9	0.0	0.0	0.0	0	443.2	2.1	0.0	445.2	0
Sierra Leone	97.2	2.4	0.0	-0.01	0.9	114	0.35	0.0	32.0	2.1	0.2	0.0	0	5.6	5.8	0.4	12.0	0
Somalia	295.2	6.4	0.0	-0.13	1.2	69	0.36	0.0	222.4	5.2	1.8	0.0	0	8.9	0.7	0.0	11.4	0
South Africa	301.9	20.7	0.1	-0.02	0.1	1173	0.34	0.0	235.7	22.3	17.2	0.0	0	61.5	8.4	2.4	89.5	0
Sudan	22.0	0.0	0.0	0.00	0.0	108	0.35	0.0	22.0	0.0	0.0	0.0	0	0.9	1.1	0.0	2.0	0
Tanzania, Uni Rep	91.7	51.1	0.0	-0.06	26.6	45	0.36	0.0	47.2	48.9	0.1	0.0	0	5.9	1.9	0.0	7.8	0
Togo	4.5	0.1	0.0	0.00	0.0	385	0.42	0.0	0.0	0.0	0.0	0.0	0	13.0	0.0	2.0	15.0	0
Tunisia	171.0	63.0	0.0	-0.07	0.4	1663	0.37	0.0	116.0	59.0	1.6	0.0	0	8.9	0.0	0.8	11.4	0
Western Sahara	44.3	0.0	0.0	-0.05	0.0	2	0.35	0.0	3.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	3811.8	3013.7	2.0	-1.57	136.8	577*	0.35**	1659.5	1913.1	1239.9	95.6	11.4	0	2377.2	402.3	44.4	2931.3	0

Table A-5. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	47.3	154.5	0.0	0.00	0.5	3797	0.73	0.0	47.3	154.5	5.9	0.0	0	2.3	0.0	0.0	8.2	0
Angola	111.1	93.0	0.0	0.00	1.3	233	0.71	0.0	71.1	93.0	7.1	0.0	0	39.3	12.7	0.0	59.2	0
Benin	16.7	0.8	0.0	0.01	0.0	1188	0.74	0.0	0.0	0.0	0.0	0.0	0	208.6	1.9	29.2	239.7	0
Cameroon	152.6	619.7	0.0	0.01	2.3	1118	0.72	0.0	29.2	619.3	99.3	0.0	0	404.3	182.5	0.0	686.2	0
Cape Verde	55.9	33.7	0.0	0.02	0.1	2712	0.72	0.0	35.0	33.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	27.7	6.6	0.0	0.01	0.1	846	0.71	0.0	17.4	6.2	0.0	0.0	0	0.3	1.3	0.0	1.6	0
Congo	28.2	61.0	0.0	0.01	0.2	2070	0.71	0.0	19.4	60.6	0.0	0.0	0	9.4	14.3	0.0	23.7	0
Congo, Dem Rep	7.2	0.3	0.0	0.00	0.1	252	0.71	0.0	7.2	0.3	1.4	0.0	0	6.7	2.6	0.0	10.7	0
Cote d'Ivoire	111.5	12.5	0.0	0.09	0.0	2190	0.72	0.0	0.0	0.0	9.4	0.0	0	119.4	65.0	10.3	204.0	0
Djibouti	11.9	39.2	0.0	0.00	0.1	736	0.72	0.0	11.9	39.2	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Egypt	231.9	3334.9	0.0	0.03	2.1	833	0.78	2944.4	81.4	381.1	1.3	0.0	0	26.5	2.8	2.5	33.1	0
Equatorial Guinea	22.3	0.1	0.0	0.01	0.0	556	0.72	0.0	0.0	0.0	7.2	0.0	0	24.6	4.8	0.2	36.7	0
Eritrea	45.4	2.0	0.0	0.01	0.2	236	0.72	0.0	35.4	2.0	0.0	0.0	0	4.1	0.7	0.0	4.8	0
Gabon	284.3	342.5	0.0	0.14	0.1	2320	0.71	269	122.8	58.2	61.5	30.3	0	1318.4	323.4	7.7	1741.2	0
Gambia	65.5	20.5	0.0	0.01	0.2	753	0.72	0	30.5	20.5	1.3	0.0	0	84.9	27.3	1.7	115.2	0
Ghana	61.2	12.5	0.0	0.04	0.0	1144	0.79	11.9	0.0	0.0	0.0	0.0	0	68.5	23.6	15.9	108.0	0
Guinea	250.1	3.3	0.0	0.02	0.0	639	0.72	0.0	19.1	3.2	0.0	0.0	0	123.0	96.3	0.0	219.3	0
Guinea-Bissau	336.2	34.7	0.0	0.09	1.6	231	0.72	0.0	120.6	34.0	0.2	0.0	0	46.4	35.5	1.3	83.3	0
Kenya	136.1	71.5	0.0	0.05	0.4	614	0.71	0.0	66.6	69.9	12.5	0.0	0	68.6	23.6	0.0	104.7	0
Liberia	51.5	0.7	0.0	0.04	0.0	806	0.73	0.0	0.0	0.0	3.9	0.0	0	27.3	12.1	0.0	43.3	0
Libyan Arab Jamahiriya	170.9	13.0	0.0	0.05	0.0	3471	0.75	0.0	111.9	6.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	468.1	31.8	0.0	0.16	0.7	332	0.72	0.0	199.7	31.2	0.0	0.0	0	14.3	11.6	0.0	25.9	0
Mauritania	200.9	5.6	0.0	0.05	0.1	297	0.77	0.0	60.3	5.5	0.0	0.0	0	169.6	0.7	4.5	174.8	0
Mauritius	15.9	4.6	0.1	0.00	0.0	7941	0.71	0.0	7.3	0.0	0.0	0.0	0	427.8	0.0	0.0	427.8	0
Morocco	181.8	183.3	0.0	0.06	0.7	1923	0.71	0.0	104.0	168.0	6.4	0.0	0	33.8	0.0	1.4	41.6	0
Mozambique	622.3	261.9	0.0	0.26	36.3	63	0.71	68.2	288.9	191.9	12.2	0.0	0	43.8	3.1	0.0	59.2	0
Namibia	151.1	0.7	1.3	0.04	0.2	113	0.70	0.0	99.1	0.7	0.0	0.0	0	132.3	0.0	0.0	132.3	0
Nigeria	363.7	52.7	0.0	0.08	1.7	878	0.84	0.0	50.3	44.6	1.0	0.0	0	1303.7	303.4	24.8	1632.9	0
Reunion	13.3	2.2	0.0	0.01	0.0	3074	0.71	0.0	4.6	2.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	7.4	0.1	0.0	0.00	0.0	847	0.71	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.0	0.7	0
Senegal	169.6	146.3	0.0	0.04	0.8	1373	0.72	0.0	75.3	145.7	0.1	0.0	0	222.3	59.4	0.0	281.8	0
Seychelles	9.0	1.5	0.0	0.00	0.0	4470	0.71	0.0	3.0	0.0	0.0	0.0	0	781.5	5.7	0.0	787.3	0
Sierra Leone	160.0	11.0	0.0	0.04	1.1	366	0.72	0.0	46.2	10.9	0.5	0.0	0	14.8	17.4	0.9	33.6	0
Somalia	436.7	23.8	0.0	0.11	1.3	240	0.74	0.0	317.0	22.2	6.4	0.0	0	24.4	2.3	0.0	33.1	0
South Africa	476.1	26.0	0.1	0.03	0.1	2910	0.70	0.0	354.2	24.6	41.2	0.0	0	124.4	20.9	5.4	191.8	0
Sudan	30.4	0.2	0.0	0.00	0.0	360	0.73	0.0	30.4	0.2	0.0	0.0	0	2.4	3.4	0.0	5.8	0
Tanzania, Uni Rep	167.1	136.4	0.0	0.06	23.7	117	0.73	0.0	66.3	136.2	0.2	0.0	0	15.2	5.1	0.0	20.4	0
Togo	7.3	0.1	0.0	0.00	0.0	1187	0.85	0.0	0.0	0.0	0.0	0.0	0	32.7	0.0	5.6	38.3	0
Tunisia	246.7	43.8	0.0	0.03	0.2	3648	0.75	0.0	147.4	41.1	2.6	0.0	0	4.6	0.0	1.0	8.2	0
Western Sahara	83.0	0.0	0.1	0.06	0.0	5	0.72	0.0	4.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	6035.9	5789.0	1.5	1.67	76.2	1295*	0.73**	3293.5	2685.6	2406.6	281.6	30.3	0	5931.1	1263.6	112.4	7618.7	0

Table A-6. Case 1: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	56.3	274.5	0.0	0.00	0.4	5796	1.24	0.0	56.3	274.5	6.3	0.0	0	0.7	0.0	0.0	7.0	0
Angola	143.2	170.8	0.0	-0.02	1.2	375	1.21	0.0	84.9	170.9	10.4	0.0	0	32.1	17.9	0.0	60.5	0
Benin	20.5	0.0	0.0	-0.02	0.0	2564	1.25	0.0	0.0	0.0	0.0	0.0	0	349.1	3.9	53.8	406.8	0
Cameroon	220.2	592.7	0.0	-0.03	1.0	2462	1.23	0.0	34.0	592.7	215.3	0.0	0	840.0	384.8	0.0	1440.2	0
Cape Verde	72.6	78.9	0.0	-0.04	0.1	5586	1.22	0.0	41.5	79.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	39.7	13.0	0.0	-0.02	0.0	1940	1.21	0.0	20.7	13.1	0.0	0.0	0	0.1	1.6	0.0	1.7	0
Congo	33.7	154.0	0.0	-0.03	0.2	4483	1.21	0.0	22.9	154.0	0.0	0.0	0	8.6	26.4	0.0	35.0	0
Congo, Dem Rep	8.4	0.7	0.0	0.00	0.0	546	1.21	0.0	8.4	0.7	2.7	0.0	0	6.2	4.9	0.0	13.7	0
Cote d'Ivoire	136.8	-0.2	0.0	-0.20	0.0	4423	1.23	0.0	0.0	0.0	19.5	0.0	0	290.4	132.2	18.5	460.7	0
Djibouti	13.9	7.4	0.0	0.00	0.0	1616	1.22	0.0	13.9	7.4	0.0	0.0	0	0.5	0.3	0.0	0.8	0
Egypt	282.0	68.5	0.0	-0.31	0.7	1305	1.31	0.0	94.0	68.9	1.5	0.0	0	12.4	3.8	2.0	19.7	0
Equatorial Guinea	27.3	0.0	0.0	-0.03	0.0	1171	1.22	0.0	0.0	0.0	15.9	0.0	0	46.7	10.7	0.4	73.7	0
Eritrea	52.6	6.3	0.0	-0.03	0.1	501	1.23	0.0	40.4	6.3	0.0	0.0	0	5.9	1.5	0.0	7.4	0
Gabon	359.2	593.7	0.0	-0.29	0.0	4202	1.21	464.4	140.2	129.5	133.9	53.3	0	2562.2	700.8	21.9	3472.1	0
Gambia	91.8	38.5	0.0	-0.01	0.1	1654	1.23	0.0	35.6	38.5	2.8	0.0	0	172.6	58.7	3.3	237.3	0
Ghana	74.0	21.4	0.0	-0.10	0.0	2451	1.32	21.5	0.0	0.0	0.0	0.0	0	165.8	47.8	28.8	242.4	0
Guinea	337.3	7.7	0.0	-0.16	0.0	1437	1.23	0.0	22.0	7.7	0.0	0.0	0	326.4	197.7	0.0	524.1	0
Guinea-Bissau	450.8	75.4	0.0	-0.21	0.7	517	1.22	0.0	139.1	75.5	0.4	0.0	0	122.1	76.0	2.5	201.0	0
Kenya	192.1	53.8	0.0	-0.11	0.1	1459	1.21	0.0	75.8	53.9	28.3	0.0	0	145.2	53.1	0.0	226.6	0
Liberia	63.2	0.0	0.0	-0.09	0.0	1680	1.24	0.0	0.0	0.0	8.2	0.0	0	57.3	24.7	0.0	90.1	0
Libyan Arab Jamahiriya	198.7	13.6	0.0	-0.22	0.0	4471	1.27	0.0	127.5	13.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	577.5	85.1	0.0	-0.39	0.7	750	1.23	0.0	234.7	85.2	0.0	0.0	0	37.9	26.5	0.0	64.4	0
Mauritania	257.3	22.7	0.0	-0.14	0.1	608	1.30	0.0	69.0	22.7	0.0	0.0	0	309.5	1.5	9.0	320.0	0
Mauritius	19.5	2.8	0.1	-0.01	0.0	7941	1.21	0.0	9.0	2.9	0.0	0.0	0	551.0	0.0	0.0	551.0	0
Morocco	249.1	186.0	0.0	-0.13	0.5	3108	1.22	0.0	123.2	186.3	10.5	0.0	0	42.2	0.0	2.1	54.8	0
Mozambique	752.0	419.7	0.0	-0.57	21.8	109	1.21	105.7	328.9	314.0	20.6	0.0	0	56.0	5.1	0.0	81.7	0
Namibia	168.9	1.7	1.6	-0.09	0.2	172	1.20	0.0	105.1	1.7	0.0	0.0	0	105.0	0.0	0.0	105.0	0
Nigeria	467.9	117.6	0.0	-0.41	1.5	1909	1.39	0.0	73.6	118.0	1.8	0.0	0	2340.9	606.6	44.8	2994.1	0
Reunion	16.3	3.4	0.0	-0.01	0.0	4336	1.21	0.0	5.6	3.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	9.0	0.0	0.0	-0.01	0.0	1843	1.22	0.0	0.0	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Senegal	216.0	175.3	0.0	-0.11	0.4	2996	1.23	0.0	90.0	175.4	0.3	0.0	0	450.0	126.9	0.0	577.1	0
Seychelles	11.9	0.0	0.0	-0.01	0.0	4470	1.21	0.0	3.6	0.0	0.0	0.0	0	858.3	10.8	0.0	869.1	0
Sierra Leone	208.7	25.7	0.0	-0.13	0.6	796	1.22	0.0	54.0	25.8	0.9	0.0	0	19.1	32.4	1.4	53.8	0
Somalia	563.2	39.2	0.0	-0.29	0.2	537	1.25	0.0	373.3	39.3	14.8	0.0	0	43.7	5.3	0.0	63.7	0
South Africa	570.9	18.1	0.1	-0.08	0.0	4595	1.20	0.0	408.0	18.2	62.2	0.0	0	168.4	34.0	7.8	272.4	0
Sudan	34.7	0.7	0.0	0.00	0.0	802	1.23	0.0	34.7	0.7	0.0	0.0	0	2.7	6.6	0.0	9.3	0
Tanzania, Uni Rep	229.2	231.7	0.0	-0.13	19.1	204	1.24	0.0	76.8	231.7	0.3	0.0	0	24.2	8.3	0.0	32.8	0
Togo	8.9	0.0	0.0	-0.01	0.0	2545	1.41	0.0	0.0	0.0	0.0	0.0	0	56.1	0.0	10.3	66.4	0
Tunisia	320.2	12.5	0.0	-0.18	0.1	5749	1.27	0.0	170.8	12.6	2.5	0.0	0	1.4	0.0	0.7	4.6	0
Western Sahara	106.6	0.0	0.1	-0.13	0.0	7	1.22	0.0	5.6	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	7662.1	3513.2	1.9	-4.75	49.8	2109*	1.24**	591.6	3123.1	2924.4	559.1	53.3	0	10211.3	2610.8	207.3	13641.6	0

Table A-7. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	3.2	0	0.00	1.7	93	0.017	0.0	0	3.2	0.4	0.0	0	2.0	0.0	0.2	2.6	0
Angola	0	4.5	0	0.00	5.2	5	0.016	2.2	0	2.3	0.2	0.0	0	2.5	0.5	0.0	3.2	0
Benin	0	0.0	0	0.04	0.0	17	0.017	0.0	0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.5	0
Cameroon	0	8.5	0	0.02	10.4	14	0.017	0.0	0	8.5	1.4	0.0	0	5.8	2.7	0.0	9.9	0
Cape Verde	0	0.3	0	0.07	0.3	35	0.017	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0	0.1	0	0.03	0.3	10	0.016	0.0	0	0.1	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Congo	0	0.7	0	0.05	0.7	27	0.016	0.0	0	0.6	0.0	0.0	0	0.0	0.2	0.0	0.3	0
Congo, Dem Rep	0	0.0	0	0.00	0.1	3	0.016	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0	0.4	0	0.34	0.0	30	0.017	0.0	0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0	0.5	0	0.00	0.5	8	0.016	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	236.4	0	0.61	19.0	20	0.021	221.2	0	13.0	0.1	0.0	0	7.7	0.1	0.2	8.0	0
Equatorial Guinea	0	0.0	0	0.05	0.0	5	0.017	0.0	0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	0	0.0	0	0.05	0.8	2	0.017	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	0	19.6	0	0.48	2.3	22	0.016	18.1	0	1.0	0.9	0.6	0	25.2	4.7	0.0	31.4	0
Gambia	0	0.2	0	0.00	3.2	10	0.017	0.0	0	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	0	0.8	0	0.23	0.0	15	0.021	0.7	0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	0	0.1	0	0.12	0.5	7	0.017	0.0	0	0.1	0.0	0.0	0	0.5	1.4	0.0	2.0	0
Guinea-Bissau	0	0.3	0	0.31	6.1	2	0.017	0.0	0	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	0	0.8	0	0.19	5.7	6	0.016	0.0	0	0.8	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0	0.0	0	0.16	0.0	10	0.017	0.0	0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	0	2.0	0	0.36	0.4	85	0.019	0.0	0	1.5	0.0	0.0	0	3.4	0.0	0.5	4.0	0
Madagascar	0	0.3	0	0.73	14.4	3	0.017	0.0	0	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	0	0.1	0	0.23	1.0	2	0.020	0.0	0	0.1	0.0	0.0	0	3.6	0.0	0.1	3.7	0
Mauritius	0	0.1	0	0.02	0.0	206	0.016	0.0	0	0.0	0.0	0.0	0	11.5	0.0	0.0	11.5	0
Morocco	0	12.7	0	0.21	2.9	42	0.016	0.0	0	11.7	0.2	0.0	0	1.8	0.0	0.0	2.0	0
Mozambique	0	11.8	0	0.91	275.2	1	0.016	6.4	0	5.2	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	0	0.0	0	0.15	0.1	2	0.016	0.0	0	0.0	0.0	0.0	0	8.7	0.0	0.0	8.7	0
Nigeria	0	0.8	0	0.76	9.3	11	0.024	0.0	0	0.4	0.0	0.0	0	28.1	4.9	0.4	33.4	0
Reunion	0	0.1	0	0.02	0.0	123	0.016	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0	0.02	0.0	10	0.016	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	0	1.5	0	0.15	5.2	18	0.017	0.0	0	1.5	0.0	0.0	0	3.8	0.9	0.0	4.7	0
Seychelles	0	1.2	0	0.01	0.0	159	0.016	0.0	0	1.1	0.0	0.0	0	22.8	0.1	0.0	22.9	0
Sierra Leone	0	0.1	0	0.15	2.5	4	0.017	0.0	0	0.1	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Somalia	0	0.2	0	0.58	5.5	1	0.018	0.0	0	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	0	1.8	0	0.11	0.2	80	0.016	0.0	0	1.8	1.4	0.0	0	6.2	0.7	0.2	8.5	0
Sudan	0	0.0	0	0.00	0.1	4	0.017	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	0	3.2	0	0.23	101.0	3	0.018	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Togo	0	0.0	0	0.02	0.0	16	0.023	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	0	7.3	0	0.28	1.3	87	0.019	0.0	0	7.1	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	0	0.0	0	0.21	0.0	0	0.017	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	319.7	0	7.9	475.9	27*	0.017**	248.6	0	64.9	5.5	0.6	0	147.9	19.6	2.8	176.9	0

Table A-8. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	22.9	0.0	0.0	13.7	13	0.13	0.0	0	22.9	1.5	0.0	0	4.9	0.0	0.6	7.0	0
Angola	0	19.1	9.6	0.1	78.3	0	0.13	4.8	0	13.8	0.7	0.0	0	7.5	1.5	0.0	9.8	0
Benin	0	0.3	0.0	0.1	0.0	2	0.13	0.0	0	0.0	0.0	0.0	0	16.2	0.1	2.0	18.3	0
Cameroon	0	62.0	0.4	0.2	168.0	2	0.13	0.0	0	61.8	5.8	0.0	0	24.6	11.1	0.0	41.4	0
Cape Verde	0	2.3	0.5	0.1	5.7	3	0.13	0.0	0	2.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Comoros	0	7.1	7.7	0.1	11.5	0	0.13	0.0	0	0.6	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Congo	0	5.1	0.0	0.1	13.0	4	0.13	0.0	0	4.9	0.0	0.0	0	0.3	1.0	0.0	1.3	0
Congo, Dem Rep	0	0.0	0.3	0.0	0.4	0	0.13	0.0	0	0.0	0.1	0.0	0	0.8	0.2	0.0	1.1	0
Cote d'Ivoire	0	4.5	0.0	0.7	0.0	4	0.13	0.0	0	0.0	0.6	0.0	0	4.5	4.1	0.7	9.8	0
Djibouti	0	3.6	0.2	0.0	8.1	1	0.13	0.0	0	3.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	665.9	1.2	1.3	82.4	5	0.15	562.9	0	80.0	0.2	0.0	0	20.6	0.3	0.7	21.9	0
Equatorial Guinea	0	0.0	0.0	0.1	0.0	0	0.13	0.0	0	0.0	0.4	0.0	0	1.9	0.3	0.0	2.6	0
Eritrea	0	0.5	10.2	0.1	4.2	0	0.13	0.0	0	0.1	0.0	0.0	0	0.3	0.0	0.0	0.4	0
Gabon	0	56.5	0.4	1.0	4.0	3	0.13	45.7	0	5.5	3.6	2.5	0	99.3	19.3	0.1	124.9	0
Gambia	0	1.2	0.0	0.1	8.5	2	0.13	0.0	0	1.2	0.1	0.0	0	5.7	1.6	0.1	7.5	0
Ghana	0	2.3	0.0	0.4	0.0	1	0.16	1.9	0	0.0	0.0	0.0	0	2.4	1.5	1.2	5.1	0
Guinea	0	8.0	54.7	0.6	8.1	0	0.13	0.0	0	0.3	0.0	0.0	0	3.3	5.9	0.0	9.2	0
Guinea-Bissau	0	8.0	47.1	0.8	77.8	0	0.13	0.0	0	2.3	0.0	0.0	0	1.4	2.1	0.1	3.7	0
Kenya	0	14.2	91.5	0.4	37.3	1	0.13	0.0	0	5.8	0.6	0.0	0	3.6	1.1	0.0	5.3	0
Liberia	0	0.3	0.0	0.3	0.0	1	0.13	0.0	0	0.0	0.2	0.0	0	1.6	0.8	0.0	2.6	0
Libyan Arab Jamahiriya	0	17.5	9.3	0.8	2.2	20	0.14	0.0	0	12.3	0.0	0.0	0	10.3	0.0	1.7	12.0	0
Madagascar	0	6.6	25.1	1.3	43.7	0	0.13	0.0	0	1.9	0.0	0.0	0	0.7	0.6	0.0	1.2	0
Mauritania	0	12.3	41.3	0.5	14.4	0	0.15	0.0	0	0.5	0.0	0.0	0	13.7	0.0	0.3	14.1	0
Mauritius	0	1.5	0.0	0.0	0.0	19	0.13	0.0	0	0.0	0.0	0.0	0	45.1	0.0	0.0	45.1	0
Morocco	0	98.8	0.2	0.4	27.7	8	0.13	0.0	0	90.1	0.6	0.0	0	6.1	0.0	0.2	6.9	0
Mozambique	0	51.1	199.1	1.9	845.4	0	0.13	14.4	0	22.9	1.1	0.0	0	5.1	0.3	0.0	6.5	0
Namibia	0	0.1	1.8	0.3	0.2	0	0.13	0.0	0	0.1	0.0	0.0	0	25.1	0.0	0.0	25.1	0
Nigeria	0	8.3	1.8	1.6	148.2	1	0.18	0.0	0	2.9	0.1	0.0	0	105.5	19.8	1.8	127.2	0
Reunion	0	0.6	0.0	0.0	0.1	11	0.13	0.0	0	0.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0.0	0.0	0.0	0	0.13	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	11.5	0.0	0.4	48.5	3	0.13	0.0	0	11.2	0.0	0.0	0	15.3	3.6	0.0	18.8	0
Seychelles	0	12.2	0.0	0.0	0.2	25	0.13	0.0	0	11.3	0.0	0.0	0	113.0	0.4	0.0	113.4	0
Sierra Leone	0	8.4	55.2	0.5	26.7	0	0.13	0.0	0	0.4	0.0	0.0	0	0.6	1.2	0.1	1.9	0
Somalia	0	2.3	4.7	1.0	67.6	0	0.14	0.0	0	1.2	0.3	0.0	0	1.8	0.1	0.0	2.3	0
South Africa	0	12.6	0.4	0.3	1.7	18	0.12	0.0	0	11.3	4.4	0.0	0	18.1	2.1	0.7	25.3	0
Sudan	0	0.0	0.8	0.0	0.1	1	0.13	0.0	0	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	0	276.3	560.0	0.4	1442.8	0	0.14	0.0	0	16.3	0.0	0.0	0	1.5	0.5	0.0	1.9	0
Togo	0	0.1	0.0	0.0	0.0	1	0.17	0.0	0	0.0	0.0	0.0	0	2.8	0.0	0.4	3.2	0
Tunisia	0	55.5	0.0	0.7	7.6	24	0.14	0.0	0	53.0	0.4	0.0	0	4.4	0.0	0.3	5.1	0
Western Sahara	0	0.0	0.0	0.4	0.0	0	0.13	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1459.7	1123.4	17.0	3198.1	5*	0.13**	629.7	0	440.8	20.7	2.5	0	568.8	79.9	11.0	683.0	0

Table A-9. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	35.9	0.0	0.0	30.0	8	0.17	0.0	0	35.9	2.0	0.0	0	5.8	0.0	0.7	8.6	0
Angola	0	32.7	46.8	0.1	90.1	0	0.16	5.7	0	19.4	1.0	0.0	0	9.8	1.9	0.0	12.7	0
Benin	0	0.4	0.0	0.1	0.0	1	0.17	0.0	0	0.0	0.0	0.0	0	22.4	0.2	2.8	25.3	0
Cameroon	0	114.0	132.7	0.2	194.2	1	0.16	0.0	0	90.1	8.2	0.0	0	34.8	15.6	0.0	58.5	0
Cape Verde	0	20.3	34.9	0.1	11.7	1	0.16	0.0	0	3.1	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Comoros	0	16.5	5.5	0.1	27.9	0	0.16	0.0	0	1.0	0.0	0.0	0	0.2	0.2	0.0	0.5	0
Congo	0	7.5	0.0	0.1	13.7	2	0.16	0.0	0	7.3	0.0	0.0	0	0.6	1.4	0.0	2.0	0
Congo, Dem Rep	0	0.0	0.3	0.0	0.6	0	0.16	0.0	0	0.0	0.1	0.0	0	1.1	0.2	0.0	1.5	0
Cote d'Ivoire	0	6.5	0.0	0.7	0.0	2	0.16	0.0	0	0.0	0.8	0.0	0	6.6	5.7	1.0	14.1	0
Djibouti	0	5.3	0.2	0.0	8.8	1	0.16	0.0	0	5.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	843.6	2.9	1.4	132.2	3	0.19	686.9	0	121.0	0.3	0.0	0	23.9	0.4	0.9	25.6	0
Equatorial Guinea	0	0.0	0.0	0.1	0.0	0	0.16	0.0	0	0.0	0.6	0.0	0	2.6	0.4	0.0	3.5	0
Eritrea	0	0.2	2.4	0.1	4.7	0	0.16	0.0	0	0.1	0.0	0.0	0	0.5	0.1	0.0	0.5	0
Gabon	0	287.2	789.0	1.0	21.1	2	0.16	56.2	0	9.4	5.1	3.5	0	138.2	27.2	0.2	174.2	0
Gambia	0	27.7	84.9	0.1	37.7	1	0.16	0.0	0	2.1	0.1	0.0	0	7.9	2.3	0.2	10.5	0
Ghana	0	3.0	0.0	0.4	0.0	0	0.19	2.3	0	0.0	0.0	0.0	0	3.6	2.1	1.6	7.3	0
Guinea	0	0.9	0.4	0.7	8.7	0	0.16	0.0	0	0.5	0.0	0.0	0	5.1	8.3	0.0	13.4	0
Guinea-Bissau	0	38.9	29.6	0.8	137.7	0	0.16	0.0	0	3.6	0.0	0.0	0	2.1	3.0	0.1	5.2	0
Kenya	0	57.6	103.1	0.4	85.7	1	0.16	0.0	0	9.0	0.8	0.0	0	5.1	1.6	0.0	7.6	0
Liberia	0	0.4	0.0	0.3	0.0	0	0.16	0.0	0	0.0	0.3	0.0	0	2.3	1.1	0.0	3.7	0
Libyan Arab Jamahiriya	0	25.0	9.3	0.8	2.4	14	0.18	0.0	0	17.9	0.0	0.0	0	12.9	0.0	2.2	15.1	0
Madagascar	0	32.3	80.9	1.3	87.0	0	0.16	0.0	0	3.1	0.0	0.0	0	0.9	0.8	0.0	1.7	0
Mauritania	0	1.1	0.7	0.5	15.6	0	0.19	0.0	0	0.7	0.0	0.0	0	19.0	0.1	0.4	19.5	0
Mauritius	0	2.2	0.0	0.0	0.0	10	0.16	0.0	0	0.0	0.0	0.0	0	60.9	0.0	0.0	60.9	0
Morocco	0	144.9	7.5	0.4	43.0	5	0.16	0.0	0	130.6	0.8	0.0	0	8.0	0.0	0.2	9.1	0
Mozambique	0	84.5	217.7	2.0	1056.1	0	0.16	17.3	0	32.1	1.5	0.0	0	6.7	0.4	0.0	8.6	0
Namibia	0	0.1	1.8	0.3	0.3	0	0.16	0.0	0	0.1	0.0	0.0	0	32.3	0.0	0.0	32.3	0
Nigeria	0	12.5	2.1	1.7	161.6	0	0.21	0.0	0	4.3	0.1	0.0	0	144.5	27.6	2.5	174.8	0
Reunion	0	0.9	0.0	0.0	0.5	6	0.16	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0.0	0.0	0.0	0	0.16	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	75.2	100.4	0.4	91.3	2	0.16	0.0	0	17.1	0.0	0.0	0	21.3	5.0	0.0	26.4	0
Seychelles	0	17.8	0.0	0.0	0.3	14	0.16	0.0	0	16.6	0.0	0.0	0	155.0	0.6	0.0	155.6	0
Sierra Leone	0	1.3	3.4	0.5	29.8	0	0.16	0.0	0	0.7	0.0	0.0	0	0.9	1.7	0.1	2.7	0
Somalia	0	5.6	5.5	1.0	77.1	0	0.17	0.0	0	1.9	0.5	0.0	0	2.6	0.2	0.0	3.2	0
South Africa	0	19.8	0.3	0.3	2.7	12	0.16	0.0	0	17.7	5.9	0.0	0	23.6	2.9	0.9	33.2	0
Sudan	0	0.0	0.7	0.0	0.1	0	0.17	0.0	0	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	0	42.5	118.5	0.4	1608.4	0	0.17	0.0	0	22.7	0.0	0.0	0	1.9	0.6	0.0	2.6	0
Togo	0	0.1	0.0	0.0	0.0	1	0.21	0.0	0	0.0	0.0	0.0	0	3.9	0.0	0.6	4.4	0
Tunisia	0	80.4	0.0	0.8	12.4	17	0.18	0.0	0	76.8	0.6	0.0	0	5.5	0.0	0.3	6.4	0
Western Sahara	0	0.0	0.0	0.4	0.0	0	0.16	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	2044.9	1781.6	17.5	3993.4	3*	0.17**	768.4	0	650.7	28.7	3.5	0	773.1	111.9	14.7	918.0	0

Table A-10. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	866.2	1259.2	0.0	316.8	0	0.35	0.0	0	180.5	3.7	0.0	0	5.3	0.0	0.0	9.0	0
Angola	0	107.5	101.5	0.2	914.8	0	0.34	11.0	0	79.8	2.9	0.0	0	25.6	5.6	0.0	34.1	0
Benin	0	3.2	2.7	0.1	0.0	0	0.35	0.0	0	0.0	0.0	0.0	0	76.7	0.6	9.8	87.2	0
Cameroon	0	1580.1	7003.9	0.5	2132.7	0	0.35	0.0	0	441.9	30.3	0.0	0	128.1	56.9	0.0	215.2	0
Cape Verde	0	50.5	44.1	0.2	58.0	0	0.35	0.0	0	17.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	0	6.4	5.9	0.1	33.7	0	0.34	0.0	0	4.3	0.0	0.0	0	0.5	0.7	0.0	1.2	0
Congo	0	59.8	54.5	0.2	147.6	0	0.34	0.0	0	38.0	0.0	0.0	0	4.0	4.8	0.0	8.8	0
Congo, Dem Rep	0	0.3	0.3	0.0	1.3	0	0.34	0.0	0	0.1	0.5	0.0	0	3.5	0.9	0.0	4.9	0
Cote d'Ivoire	0	51.8	43.4	1.1	0.0	0	0.35	0.0	0	0.0	2.9	0.0	0	29.3	20.4	3.5	56.1	0
Djibouti	0	244.5	31.7	0.0	92.9	0	0.34	0.0	0	26.8	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	5925.9	2637.4	2.0	995.1	1	0.39	1484.5	0	608.1	0.8	0.0	0	37.8	1.4	2.1	42.0	0
Equatorial Guinea	0	0.3	0.2	0.2	0.0	0	0.35	0.0	0	0.0	2.1	0.0	0	8.6	1.4	0.1	12.2	0
Eritrea	0	1.3	1.1	0.2	6.9	0	0.35	0.0	0	0.5	0.0	0.0	0	1.7	0.2	0.0	1.9	0
Gabon	0	240.2	220.2	1.8	26.0	0	0.34	123.8	0	40.0	18.8	11.4	0	460.8	99.5	1.4	591.9	0
Gambia	0	71.9	34.3	0.1	76.0	0	0.35	0.0	0	10.6	0.4	0.0	0	27.9	8.4	0.6	37.2	0
Ghana	0	9.8	9.1	0.6	0.0	0	0.40	5.3	0	0.0	0.0	0.0	0	16.3	7.6	5.5	29.5	0
Guinea	0	5.4	4.9	1.3	10.8	0	0.35	0.0	0	2.1	0.0	0.0	0	26.1	30.2	0.0	56.4	0
Guinea-Bissau	0	29.9	26.9	1.5	179.8	0	0.35	0.0	0	15.9	0.1	0.0	0	10.1	10.9	0.4	21.6	0
Kenya	0	313.3	113.3	0.6	306.4	0	0.34	0.0	0	45.7	3.4	0.0	0	19.9	6.4	0.0	29.8	0
Liberia	0	3.2	2.7	0.5	0.0	0	0.35	0.0	0	0.0	1.2	0.0	0	8.4	3.8	0.0	13.4	0
Libyan Arab Jamahiriya	0	321.7	140.1	1.3	17.7	2	0.37	0.0	0	93.8	0.0	0.0	0	4.7	0.0	4.5	9.2	0
Madagascar	0	29.1	33.9	2.1	151.0	0	0.35	0.0	0	15.2	0.0	0.0	0	3.8	3.2	0.0	7.0	0
Mauritania	0	7.2	5.7	0.9	21.0	0	0.39	0.0	0	3.1	0.0	0.0	0	62.0	0.2	1.5	63.7	0
Mauritius	0	18.3	15.3	0.1	0.0	0	0.34	0.0	0	0.0	0.0	0.0	0	190.5	0.0	0.0	190.5	0
Morocco	0	11393.4	775.4	0.7	434.7	0	0.34	0.0	0	635.0	2.7	0.0	0	19.2	0.0	0.7	22.6	0
Mozambique	0	708.9	187.4	3.4	4706.3	0	0.34	34.9	0	125.8	4.5	0.0	0	19.1	1.2	0.0	24.8	0
Namibia	0	1.3	0.8	0.5	0.8	0	0.34	0.0	0	0.3	0.0	0.0	0	83.6	0.0	0.0	83.6	0
Nigeria	0	89.1	78.3	2.6	212.4	0	0.43	0.0	0	19.7	0.3	0.0	0	483.8	99.7	8.7	592.5	0
Reunion	0	6.8	6.1	0.1	4.6	0	0.34	0.0	0	1.9	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.3	0.2	0.1	0.0	0	0.34	0.0	0	0.0	0.0	0.0	0	0.5	0.0	0.0	0.5	0
Senegal	0	180.9	148.5	0.7	521.6	0	0.35	0.0	0	88.8	0.0	0.0	0	73.4	18.4	0.0	91.9	0
Seychelles	0	1797.4	90.9	0.1	2.8	1	0.34	0.0	0	83.6	0.0	0.0	0	443.2	2.1	0.0	445.2	0
Sierra Leone	0	10.4	9.1	0.9	44.8	0	0.35	0.0	0	3.3	0.2	0.0	0	5.6	5.8	0.4	12.0	0
Somalia	0	20.3	17.9	1.6	105.5	0	0.36	0.0	0	8.7	1.8	0.0	0	8.9	0.7	0.0	11.4	0
South Africa	0	1140.2	625.4	0.5	47.7	1	0.34	0.0	0	87.5	17.2	0.0	0	61.5	8.4	2.4	89.5	0
Sudan	0	0.2	0.2	0.0	0.3	0	0.35	0.0	0	0.0	0.0	0.0	0	0.9	1.1	0.0	2.0	0
Tanzania, Uni Rep	0	163.9	107.7	0.7	2140.9	0	0.36	0.0	0	78.3	0.1	0.0	0	5.9	1.9	0.0	7.8	0
Togo	0	0.9	0.8	0.1	0.0	0	0.42	0.0	0	0.0	0.0	0.0	0	13.0	0.0	2.0	15.0	0
Tunisia	0	1353.3	1031.8	1.2	135.5	3	0.37	0.0	0	348.8	1.6	0.0	0	8.9	0.0	0.8	11.4	0
Western Sahara	0	0.0	0.0	0.7	0.0	0	0.35	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	26815.1	14872.7	29.5	13846.4	0*	0.35**	1659.5	0	3105.7	95.5	11.4	0	2379.1	402.5	44.4	2933.1	0

Table A-11. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	1775.0	1775.0	0.0	612.4	0	0.73	0.0	0	690.9	5.9	0.0	0	2.3	0.0	0.0	8.2	0
Angola	0	291.2	291.2	0.3	995.7	0	0.71	0.0	0	241.0	7.1	0.0	0	39.3	12.7	0.0	59.2	0
Benin	0	16.1	16.1	0.2	0.0	0	0.74	0.0	0	0.0	0.0	0.0	0	208.6	1.9	29.2	239.7	0
Cameroon	0	1725.8	1725.8	0.9	2259.1	0	0.72	0.0	0	1636.1	99.3	0.0	0	404.3	182.5	0.0	686.2	0
Cape Verde	0	215.7	215.7	0.4	77.4	0	0.72	0.0	0	85.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	0	25.3	25.3	0.2	36.1	0	0.71	0.0	0	15.8	0.0	0.0	0	0.3	1.3	0.0	1.6	0
Congo	0	256.5	256.5	0.3	171.3	0	0.71	0.0	0	156.8	0.0	0.0	0	9.4	14.3	0.0	23.7	0
Congo, Dem Rep	0	1.6	1.6	0.0	2.6	0	0.71	0.0	0	0.4	1.4	0.0	0	6.7	2.6	0.0	10.7	0
Cote d'Ivoire	0	259.7	259.7	1.8	0.0	0	0.72	0.0	0	0.0	9.4	0.0	0	119.4	65.0	10.3	204.0	0
Djibouti	0	134.0	134.0	0.0	103.2	0	0.72	0.0	0	103.3	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Egypt	0	17029.4	17029.4	3.0	2953.7	0	0.78	2944.4	0	2418.3	1.3	0.0	0	31.1	3.0	2.5	37.9	0
Equatorial Guinea	0	1.4	1.4	0.3	0.0	0	0.72	0.0	0	0.0	7.2	0.0	0	24.6	4.8	0.2	36.7	0
Eritrea	0	11.2	11.2	0.3	11.5	0	0.72	0.0	0	3.2	0.0	0.0	0	4.1	0.7	0.0	4.8	0
Gabon	0	774.5	774.5	3.1	29.8	0	0.71	269.1	0	156.3	61.5	30.3	0	1318.4	323.4	7.7	1741.2	0
Gambia	0	113.4	113.4	0.2	126.5	0	0.72	0.0	0	51.6	1.3	0.0	0	84.9	27.3	1.7	115.2	0
Ghana	0	34.3	34.3	1.0	0.0	0	0.79	11.9	0	0.0	0.0	0.0	0	68.5	23.6	15.9	108.0	0
Guinea	0	25.4	25.4	2.3	12.4	0	0.72	0.0	0	8.4	0.0	0.0	0	123.0	96.3	0.0	219.3	0
Guinea-Bissau	0	137.2	137.2	2.7	222.8	0	0.72	0.0	0	67.7	0.2	0.0	0	46.4	35.5	1.3	83.3	0
Kenya	0	259.1	259.1	1.0	338.3	0	0.71	0.0	0	184.4	13.5	0.0	0	68.6	23.6	0.0	104.7	0
Liberia	0	16.2	16.2	0.8	0.0	0	0.73	0.0	0	0.0	3.9	0.0	0	27.3	12.1	0.0	43.3	0
Libyan Arab Jamahiriya	0	3321.0	3321.0	2.0	124.7	0	0.75	0.0	0	367.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	0	143.0	143.0	3.6	189.2	0	0.72	0.0	0	69.5	0.0	0.0	0	14.3	11.6	0.0	25.9	0
Mauritania	0	28.5	28.5	1.5	25.8	0	0.77	0.0	0	13.6	0.0	0.0	0	169.6	0.7	4.5	174.8	0
Mauritius	0	108.7	108.7	0.1	0.1	0	0.71	0.0	0	0.7	0.0	0.0	0	427.8	0.0	0.0	427.8	0
Morocco	0	3512.0	3512.0	1.2	2113.8	0	0.71	0.0	0	2144.6	6.4	0.0	0	33.8	0.0	1.4	41.6	0
Mozambique	0	781.9	781.9	5.8	5437.3	0	0.71	68.2	0	378.2	12.2	0.0	0	43.8	3.1	0.0	59.2	0
Namibia	0	3.4	3.4	0.9	1.1	0	0.70	0.0	0	1.3	0.0	0.0	0	155.9	0.0	0.0	155.9	0
Nigeria	0	428.9	428.9	4.2	267.3	0	0.84	0.0	0	87.3	1.0	0.0	0	1303.7	303.4	24.8	1632.9	0
Reunion	0	18.7	18.7	0.1	5.6	0	0.71	0.0	0	5.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	1.4	1.4	0.1	0.0	0	0.71	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.0	0.7	0
Senegal	0	654.2	654.2	1.3	619.1	0	0.72	0.0	0	374.8	0.1	0.0	0	222.3	59.4	0.0	281.8	0
Seychelles	0	364.5	364.5	0.1	25.5	0	0.71	0.0	0	299.3	0.0	0.0	0	781.5	5.7	0.0	787.3	0
Sierra Leone	0	52.2	52.2	1.6	67.8	0	0.72	0.0	0	17.0	0.5	0.0	0	14.8	17.4	0.9	33.6	0
Somalia	0	96.5	96.5	2.7	124.2	0	0.74	0.0	0	37.9	6.4	0.0	0	24.4	2.3	0.0	33.1	0
South Africa	0	947.9	947.9	0.9	194.1	0	0.70	0.0	0	381.7	41.2	0.0	0	124.4	20.9	5.4	191.8	0
Sudan	0	1.4	1.4	0.0	0.8	0	0.73	0.0	0	0.3	0.0	0.0	0	2.4	3.4	0.0	5.9	0
Tanzania, Uni Rep	0	264.3	264.3	1.2	2451.7	0	0.73	0.0	0	230.6	0.2	0.0	0	15.2	5.1	0.0	20.4	0
Togo	0	4.5	4.5	0.1	0.0	0	0.85	0.0	0	0.0	0.0	0.0	0	32.7	0.0	5.6	38.3	0
Tunisia	0	1767.9	1767.9	1.8	597.6	0	0.75	0.0	0	1226.6	2.6	0.0	0	4.6	0.0	1.0	8.2	0
Western Sahara	0	0.0	0.0	1.1	0.0	0	0.72	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	35604.0	35604.0	49.1	20198.5	0*	0.73**	3293.6	0	11456.1	282.6	30.3	0	5959.3	1263.8	112.4	7647.2	0

Table A-12. Case 2: Results by country, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	3259.8	5.2	0.0	761.6	0	1.24	0.0	0	1590.1	6.3	0.0	0	0.7	0.0	0.0	7.0	0
Angola	0	566.0	9.8	0.5	903.4	0	1.21	0.0	0	447.1	10.4	0.0	0	32.1	17.9	0.0	60.5	0
Benin	0	43.3	0.0	0.3	0.0	0	1.25	0.0	0	0.0	0.0	0.0	0	349.1	3.9	53.8	406.8	0
Cameroon	0	3997.2	1.8	1.3	1977.5	0	1.23	0.0	0	3741.8	215.3	0.0	0	840.1	384.8	0.0	1440.2	0
Cape Verde	0	275.0	0.8	0.5	69.2	0	1.22	0.0	0	209.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	0	56.9	0.0	0.2	31.3	0	1.21	0.0	0	35.6	0.0	0.0	0	0.1	1.6	0.0	1.7	0
Congo	0	662.3	5.7	0.4	166.7	0	1.21	0.0	0	404.9	0.0	0.0	0	8.6	26.4	0.0	35.0	0
Congo, Dem Rep	0	6.0	1.3	0.0	3.9	0	1.21	0.0	0	1.7	2.7	0.0	0	6.2	4.9	0.0	13.7	0
Cote d'Ivoire	0	698.9	0.0	2.2	0.0	0	1.23	0.0	0	0.0	19.5	0.0	0	290.4	132.2	18.5	460.7	0
Djibouti	0	273.5	2.6	0.0	93.6	0	1.22	0.0	0	243.3	0.0	0.0	0	0.5	0.3	0.0	0.8	0
Egypt	0	14568.5	57.4	3.5	3835.2	0	1.31	0.0	0	5733.1	1.5	0.0	0	22.9	4.5	2.0	30.8	0
Equatorial Guinea	0	3.7	0.0	0.3	0.0	0	1.22	0.0	0	0.0	15.9	0.0	0	46.7	10.7	0.4	73.7	0
Eritrea	0	39.3	16.6	0.3	17.0	0	1.23	0.0	0	12.5	0.0	0.0	0	5.9	1.5	0.0	7.4	0
Gabon	0	1809.4	10.9	4.1	27.4	0	1.21	464.4	0	379.0	133.9	53.3	0	2562.2	700.8	21.9	3472.1	0
Gambia	0	313.4	9.8	0.4	137.0	0	1.23	0.0	0	146.4	2.8	0.0	0	172.6	58.7	3.3	237.3	0
Ghana	0	86.5	0.0	1.1	0.0	0	1.32	21.4	0	0.0	0.0	0.0	0	165.8	47.8	28.8	242.4	0
Guinea	0	69.8	1.5	3.1	11.8	0	1.23	0.0	0	20.6	0.0	0.0	0	326.4	197.7	0.0	524.1	0
Guinea-Bissau	0	361.8	17.6	3.6	231.3	0	1.22	0.0	0	180.7	0.4	0.0	0	122.1	76.0	2.5	201.0	0
Kenya	0	665.8	4.2	1.3	311.2	0	1.21	0.0	0	457.3	28.3	0.0	0	145.2	53.1	0.0	226.6	0
Liberia	0	43.5	0.0	1.0	0.0	0	1.24	0.0	0	0.0	8.2	0.0	0	57.3	24.7	0.0	90.0	0
Libyan Arab Jamahiriya	0	1494.0	11.1	2.4	134.0	0	1.27	0.0	0	774.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	0	399.9	37.7	4.3	198.3	0	1.23	0.0	0	196.3	0.0	0.0	0	37.8	26.5	0.0	64.4	0
Mauritania	0	274.9	8.6	2.0	36.7	0	1.30	0.0	0	52.8	0.0	0.0	0	309.5	1.5	9.0	320.0	0
Mauritius	0	311.8	0.1	0.1	0.5	0	1.21	0.0	0	7.2	0.0	0.0	0	551.0	0.0	0.0	551.0	0
Morocco	0	6660.9	6.4	1.4	2131.7	0	1.22	0.0	0	4142.2	10.5	0.0	0	42.2	0.0	2.1	54.8	0
Mozambique	0	1164.2	91.4	7.4	5134.6	0	1.21	105.7	0	704.4	20.6	0.0	0	56.0	5.1	0.0	81.7	0
Namibia	0	7.4	6.1	1.0	1.3	0	1.2	0.0	0	3.0	0.0	0.0	0	171.7	0.0	0.0	171.7	0
Nigeria	0	1180.0	8.7	5.2	282.7	0	1.39	0.0	0	243.5	1.8	0.0	0	2340.9	606.6	44.8	2994.1	0
Reunion	0	23.2	0.1	0.1	5.3	0	1.21	0.0	0	8.9	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	3.8	0.0	0.1	0.0	0	1.22	0.0	0	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Senegal	0	1770.2	14.9	1.7	621.2	0	1.23	0.0	0	999.4	0.3	0.0	0	450.0	126.9	0.0	577.1	0
Seychelles	0	690.1	0.0	0.1	20.2	0	1.21	0.0	0	587.6	0.0	0.0	0	858.3	10.8	0.0	869.1	0
Sierra Leone	0	142.9	18.3	2.0	81.7	0	1.22	0.0	0	52.9	0.9	0.0	0	19.1	32.4	1.4	53.8	0
Somalia	0	262.0	16.7	3.2	122.2	0	1.25	0.0	0	101.5	14.8	0.0	0	43.7	5.3	0.0	63.7	0
South Africa	0	1965.3	9.9	1.1	218.5	0	1.20	0.0	0	866.8	62.2	0.0	0	168.4	34.0	7.8	272.4	0
Sudan	0	4.4	2.8	0.0	1.3	0	1.23	0.0	0	1.5	0.0	0.0	0	3.0	6.7	0.0	9.7	0
Tanzania, Uni Rep	0	477.5	14.1	1.5	2192.6	0	1.24	0.0	0	409.9	0.3	0.0	0	24.2	8.3	0.0	32.8	0
Togo	0	12.1	0.0	0.1	0.0	0	1.41	0.0	0	0.0	0.0	0.0	0	56.1	0.0	10.3	66.4	0
Tunisia	0	3461.4	9.2	2.1	821.7	0	1.27	0.0	0	2462.9	2.5	0.0	0	1.4	0.0	0.7	4.6	0
Western Sahara	0	0.0	0.1	1.4	0.0	0	1.22	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	48106.8	401.4	61.3	20582.6	0*	1.24**	591.5	0	25218.2	559.1	53.3	0	10288.8	2611.6	207.3	13719.7	0

Table A-13. Case 3: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	11.4	3.3	0	0.00	1.9	138	0.019	0.0	11.4	3.3	0.4	0.0	0	2.0	0.0	0.19	2.6	0
Angola	55.2	4.5	0	0.00	5.2	8	0.017	2.2	54.6	2.3	0.2	0.0	0	2.5	0.5	0.00	3.2	0
Benin	3.4	0.0	0	0.04	0.0	23	0.019	0.0	0.0	0.0	0.0	0.0	0	4.0	0.0	0.49	4.5	0
Cameroon	8.8	8.5	0	0.02	10.4	18	0.018	0.0	6.3	8.5	1.4	0.0	0	5.8	2.7	0.00	9.9	0
Cape Verde	11.7	0.3	0	0.08	0.3	52	0.018	0.0	7.5	0.2	0.0	0.0	0	0.1	0.0	0.00	0.1	0
Comoros	5.0	0.1	0	0.03	0.3	15	0.016	0.0	3.1	0.1	0.0	0.0	0	0.0	0.0	0.00	0.1	0
Congo	5.6	0.7	0	0.06	0.7	37	0.018	0.0	3.9	0.6	0.0	0.0	0	0.0	0.2	0.00	0.3	0
Congo, Dem Rep	1.5	0.0	0	0.00	0.1	4	0.017	0.0	1.5	0.0	0.0	0.0	0	0.2	0.0	0.00	0.3	0
Cote d'Ivoire	22.4	0.5	0	0.37	0.0	42	0.018	0.0	0.0	0.0	0.1	0.0	0	0.9	1.0	0.17	2.2	0
Djibouti	3.0	0.5	0	0.00	0.5	11	0.017	0.0	3.0	0.5	0.0	0.0	0	0.0	0.0	0.00	0.0	0
Egypt	41.0	236.8	0	0.67	19.0	29	0.023	221.5	18.0	13.0	0.1	0.0	0	7.6	0.1	0.22	8.0	0
Equatorial Guinea	4.5	0.0	0	0.06	0.0	8	0.018	0.0	0.0	0.0	0.1	0.0	0	0.5	0.1	0.00	0.7	0
Eritrea	22.2	0.0	0	0.05	0.8	3	0.018	0.0	20.4	0.0	0.0	0.0	0	0.1	0.0	0.00	0.1	0
Gabon	94.0	19.7	0	0.52	2.2	31	0.018	18.1	68.9	1.0	0.9	0.6	0	25.2	4.7	0.00	31.4	0
Gambia	6.7	0.2	0	0.00	3.4	13	0.018	0.0	6.3	0.2	0.0	0.0	0	1.4	0.4	0.03	1.8	0
Ghana	15.8	0.8	0	0.24	0.0	23	0.023	0.7	0.0	0.0	0.0	0.0	0	0.5	0.4	0.29	1.1	0
Guinea	14.9	0.1	0	0.13	0.5	9	0.018	0.0	4.4	0.1	0.0	0.0	0	0.5	1.4	0.00	2.0	0
Guinea-Bissau	50.0	0.3	0	0.33	6.1	3	0.018	0.0	27.6	0.3	0.0	0.0	0	0.3	0.5	0.02	0.8	0
Kenya	24.4	0.8	0	0.20	5.7	7	0.017	0.0	15.0	0.8	0.1	0.0	0	0.8	0.2	0.00	1.2	0
Liberia	10.4	0.0	0	0.17	0.0	15	0.018	0.0	0.0	0.0	0.1	0.0	0	0.4	0.2	0.00	0.6	0
Libyan Arab Jamahiriya	50.9	2.1	0	0.41	0.4	120	0.021	0.0	38.8	1.5	0.0	0.0	0	3.3	0.0	0.50	3.8	0
Madagascar	285.0	0.3	0	0.72	14.4	4	0.017	0.0	231.1	0.3	0.0	0.0	0	0.1	0.1	0.00	0.3	0
Mauritania	25.3	0.1	0	0.25	1.0	4	0.022	0.0	7.9	0.1	0.0	0.0	0	3.6	0.0	0.08	3.7	0
Mauritius	1.6	0.1	0	0.02	0.0	296	0.016	0.0	0.0	0.0	0.0	0.0	0	11.5	0.0	0.00	11.5	0
Morocco	41.1	12.9	0	0.24	3.0	60	0.018	0.0	27.9	11.8	0.2	0.0	0	1.8	0.0	0.04	2.0	0
Mozambique	251.5	11.8	0	0.90	275.2	2	0.016	6.4	198.7	5.2	0.3	0.0	0	1.7	0.1	0.00	2.1	0
Namibia	8.9	0.0	0	0.15	0.1	3	0.015	0.0	4.0	0.0	0.0	0.0	0	8.7	0.0	0.00	8.7	0
Nigeria	71.9	0.9	0	0.80	9.3	17	0.026	0.0	13.1	0.4	0.0	0.0	0	28.1	4.9	0.45	33.4	0
Reunion	2.2	0.1	0	0.02	0.0	195	0.017	0.0	1.1	0.0	0.0	0.0	0	0.0	0.0	0.00	0.0	0
Sao Tome & Principe	1.5	0.0	0	0.02	0.0	15	0.018	0.0	0.0	0.0	0.0	0.0	0	0.1	0.0	0.00	0.1	0
Senegal	26.7	1.6	0	0.17	5.2	25	0.018	0.0	15.4	1.5	0.0	0.0	0	3.8	0.9	0.00	4.7	0
Seychelles	2.0	1.2	0	0.02	0.0	231	0.017	0.0	0.8	1.1	0.0	0.0	0	22.8	0.1	0.00	22.9	0
Sierra Leone	20.2	0.1	0	0.17	2.5	6	0.018	0.0	10.0	0.1	0.0	0.0	0	0.1	0.3	0.02	0.4	0
Somalia	323.6	0.2	0	0.62	5.5	3	0.019	0.0	295.8	0.2	0.1	0.0	0	0.4	0.0	0.00	0.5	0
South Africa	89.2	1.8	0	0.11	0.2	104	0.015	0.0	77.3	1.8	1.4	0.0	0	6.2	0.7	0.21	8.5	0
Sudan	4.2	0.0	0	0.00	0.0	5	0.018	0.0	4.2	0.0	0.0	0.0	0	0.0	0.0	0.00	0.0	0
Tanzania, Uni Rep	29.4	3.2	0	0.24	104.4	4	0.019	0.0	14.9	3.2	0.0	0.0	0	0.5	0.1	0.00	0.6	0
Togo	1.8	0.0	0	0.02	0.0	24	0.024	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.10	0.8	0
Tunisia	55.7	7.3	0	0.31	1.3	118	0.021	0.0	45.4	7.1	0.1	0.0	0	1.5	0.0	0.08	1.6	0
Western Sahara	17.5	0.0	0	0.23	0.0	0	0.018	0.0	3.4	0.0	0.0	0.0	0	0.0	0.0	0.00	0.0	0
TOTAL for Africa	1722.1	320.7	0	8.39	479.6	38*	0.018**	248.9	1241.7	65.2	5.5	0.6	0	147.7	19.6	2.89	176.5	0

Table A-14. Case 3: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	23.4	14.4	0.0	0.00	0.6	471	0.151	0.0	23.4	14.4	1.5	0.0	0	4.4	0.0	0.5	6.5	0
Angola	45.8	15.2	0.0	0.01	7.8	24	0.135	4.8	36.2	10.4	0.7	0.0	0	7.5	1.5	0.0	9.8	0
Benin	6.2	0.0	0.0	0.01	0.0	82	0.148	0.0	0.0	0.0	0.0	0.0	0	16.0	0.1	2.0	18.1	0
Cameroon	44.8	46.2	0.0	0.03	16.8	71	0.147	0.0	15.7	46.1	5.8	0.0	0	24.6	11.0	0.0	41.5	0
Cape Verde	24.9	1.2	0.0	0.01	0.2	194	0.144	0.0	17.1	1.1	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Comoros	11.5	0.4	0.0	0.01	0.3	53	0.131	0.0	8.0	0.4	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Congo	13.3	3.8	0.0	0.01	1.3	138	0.142	0.0	10.0	3.8	0.0	0.0	0	0.3	1.0	0.0	1.3	0
Congo, Dem Rep	3.9	0.0	0.0	0.00	0.2	16	0.140	0.0	3.9	0.0	0.1	0.0	0	0.8	0.2	0.0	1.1	0
Cote d'Ivoire	41.3	0.5	0.0	0.07	0.0	152	0.144	0.0	0.0	0.0	0.6	0.0	0	4.5	4.0	0.7	9.8	0
Djibouti	6.2	2.7	0.0	0.00	0.8	44	0.140	0.0	6.2	2.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	157.9	624.1	0.5	0.08	4.2	99	0.174	569.5	97.1	53.1	0.2	0.0	0	20.3	0.3	0.7	21.6	0
Equatorial Guinea	8.3	0.0	0.0	0.01	0.0	35	0.145	0.0	0.0	0.0	0.4	0.0	0	1.8	0.3	0.0	2.5	0
Eritrea	22.3	0.1	0.0	0.01	0.7	13	0.142	0.0	19.0	0.1	0.0	0.0	0	0.3	0.0	0.0	0.4	0
Gabon	123.3	50.6	0.0	0.12	0.4	148	0.143	45.9	69.4	4.2	3.6	2.5	0	99.3	19.3	0.1	124.9	0
Gambia	23.6	1.0	0.0	0.01	1.1	49	0.144	0.0	16.2	1.0	0.1	0.0	0	5.7	1.6	0.1	7.5	0
Ghana	25.5	1.9	0.0	0.03	0.0	80	0.173	1.9	0.0	0.0	0.0	0.0	0	2.5	1.4	1.2	5.1	0
Guinea	77.8	0.2	0.0	0.08	0.1	38	0.144	0.0	10.8	0.2	0.0	0.0	0	3.4	5.9	0.0	9.3	0
Guinea-Bissau	130.7	1.8	0.0	0.09	9.5	13	0.143	0.0	66.7	1.8	0.0	0.0	0	1.4	2.1	0.1	3.6	0
Kenya	57.5	4.4	0.0	0.04	3.9	32	0.141	0.0	40.0	4.4	0.6	0.0	0	3.6	1.1	0.0	5.3	0
Liberia	19.2	0.0	0.0	0.03	0.0	55	0.146	0.0	0.0	0.0	0.2	0.0	0	1.6	0.8	0.0	2.6	0
Libyan Arab Jamahiriya	125.0	9.1	8.3	0.07	0.7	438	0.164	0.0	99.5	8.4	0.0	0.0	0	9.2	0.0	1.6	10.8	0
Madagascar	197.9	1.5	0.0	0.11	4.4	18	0.135	0.0	107.3	1.5	0.0	0.0	0	0.7	0.6	0.0	1.2	0
Mauritania	62.6	0.3	0.0	0.05	0.2	18	0.166	0.0	16.4	0.3	0.0	0.0	0	13.7	0.0	0.3	14.1	0
Mauritius	2.9	0.1	0.0	0.00	0.0	1138	0.131	0.0	0.0	0.0	0.0	0.0	0	45.1	0.0	0.0	45.1	0
Morocco	81.9	57.5	0.0	0.05	2.3	216	0.147	0.0	57.3	56.5	0.6	0.0	0	6.1	0.0	0.2	6.9	0
Mozambique	267.4	32.7	0.0	0.20	150.5	6	0.128	14.4	160.2	18.1	1.1	0.0	0	5.0	0.3	0.0	6.3	0
Namibia	109.8	0.0	1.7	0.03	0.2	11	0.125	0.0	100.2	0.0	0.0	0.0	0	25.1	0.0	0.0	25.1	0
Nigeria	151.1	2.3	0.0	0.12	2.0	60	0.190	0.0	27.3	1.9	0.1	0.0	0	104.0	19.6	1.8	125.4	0
Reunion	4.1	0.2	0.0	0.00	0.0	580	0.133	0.0	2.1	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	2.7	0.0	0.0	0.00	0.0	56	0.144	0.0	0.0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	69.6	6.8	0.0	0.05	2.4	91	0.144	0.0	40.9	6.7	0.0	0.0	0	15.3	3.6	0.0	18.8	0
Seychelles	4.0	0.1	0.0	0.00	0.0	1136	0.139	0.0	1.8	0.0	0.0	0.0	0	113.0	0.4	0.0	113.4	0
Sierra Leone	58.4	0.4	0.0	0.06	3.4	23	0.144	0.0	24.3	0.3	0.0	0.0	0	0.6	1.2	0.1	1.9	0
Somalia	217.5	1.1	0.0	0.09	7.7	13	0.151	0.0	170.4	1.0	0.3	0.0	0	1.8	0.1	0.0	2.3	0
South Africa	199.2	7.9	0.2	0.03	0.2	312	0.123	0.0	169.9	7.8	4.4	0.0	0	18.1	2.1	0.7	25.3	0
Sudan	71.7	0.0	0.7	0.00	0.1	21	0.145	0.0	71.7	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	62.2	13.4	0.0	0.04	155.4	12	0.147	0.0	35.7	13.4	0.0	0.0	0	1.4	0.5	0.0	1.9	0
Togo	3.0	0.0	0.0	0.00	0.0	84	0.185	0.0	0.0	0.0	0.0	0.0	0	2.7	0.0	0.4	3.1	0
Tunisia	131.7	34.4	0.0	0.06	0.7	421	0.161	0.0	94.8	34.2	0.4	0.0	0	4.0	0.0	0.2	4.7	0
Western Sahara	33.6	0.0	0.1	0.04	0.0	0	0.146	0.0	7.9	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	2723.7	936.5	11.4	1.65	378.1	137*	0.147**	636.5	1627.4	294.2	20.7	2.5	0	564.4	79.4	10.7	678.1	0

Table A-15. Case 3: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	23.7	20.9	0.0	0.000	0.7	621	0.19	0.0	23.7	20.9	2.0	0.0	0	5.2	0.0	0.7	7.9	0
Angola	48.4	20.3	0.0	0.011	8.3	32	0.17	5.7	36.5	14.6	1.0	0.0	0	9.7	1.9	0.0	12.7	0
Benin	6.3	0.0	0.0	-0.007	0.0	112	0.18	0.0	0.0	0.0	0.0	0.0	0	22.1	0.2	2.7	25	0
Cameroon	51.8	45.9	0.0	0.028	4.7	98	0.18	0.0	15.9	45.8	8.2	0.0	0	34.9	15.5	0.0	58.6	0
Cape Verde	25.1	1.7	0.0	-0.013	0.2	266	0.18	0.0	17.3	1.7	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Comoros	11.7	0.6	0.0	-0.006	0.3	73	0.16	0.0	8.1	0.6	0.0	0.0	0	0.2	0.2	0.0	0.5	0
Congo	13.4	5.6	0.0	-0.010	1.4	190	0.17	0.0	10.1	5.6	0.0	0.0	0	0.6	1.4	0.0	2.0	0
Congo, Dem Rep	3.9	0.0	0.0	0.000	0.2	23	0.17	0.0	3.9	0.0	0.1	0.0	0	1.1	0.2	0.0	1.5	0
Cote d'Ivoire	41.7	0.0	0.0	-0.062	0.0	209	0.18	0.0	0.0	0.0	0.8	0.0	0	6.7	5.6	1.0	14.1	0
Djibouti	6.2	2.6	0.0	0.000	0.2	62	0.17	0.0	6.2	2.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	111.8	774.0	0.5	-0.087	4.6	131	0.21	696.1	47.9	77.4	0.3	0.0	0	23.6	0.4	0.9	25.2	0
Equatorial Guinea	8.4	0.0	0.0	-0.010	0.0	49	0.18	0.0	0.0	0.0	0.6	0.0	0	2.5	0.4	0.0	3.5	0
Eritrea	23.2	0.1	0.0	-0.009	0.5	19	0.18	0.0	19.9	0.1	0.0	0.0	0	0.5	0.1	0.0	0.5	0
Gabon	126.2	62.4	0.0	-0.070	0.2	210	0.18	56.5	69.8	5.9	5.1	3.5	0	138.2	27.2	0.2	174.2	0
Gambia	25.7	1.5	0.0	0.008	1.2	67	0.18	0.0	16.5	1.5	0.1	0.0	0	7.9	2.3	0.2	10.5	0
Ghana	25.7	2.4	0.0	-0.037	0.0	109	0.21	2.3	0.0	0.0	0.0	0.0	0	3.7	2.0	1.6	7.4	0
Guinea	89.7	0.3	0.0	0.040	0.1	53	0.18	0.0	10.9	0.3	0.0	0.0	0	5.3	8.3	0.0	13.6	0
Guinea-Bissau	138.4	2.6	0.0	-0.019	7.9	19	0.18	0.0	68.0	2.6	0.0	0.0	0	2.1	3.0	0.1	5.2	0
Kenya	58.2	6.4	0.0	-0.034	2.9	46	0.17	0.0	40.5	6.4	0.8	0.0	0	5.1	1.6	0.0	7.6	0
Liberia	19.3	0.0	0.0	-0.029	0.0	76	0.18	0.0	0.0	0.0	0.3	0.0	0	2.3	1.1	0.0	3.6	0
Libyan Arab Jamahiriya	101.3	7.7	0.0	-0.061	0.2	583	0.20	0.0	75.1	7.7	0.0	0.0	0	11.5	0.0	2.0	13.6	0
Madagascar	199.6	2.2	0.0	-0.115	4.6	26	0.17	0.0	108.3	2.2	0.0	0.0	0	1.0	0.8	0.0	1.8	0
Mauritania	66.7	0.4	0.0	-0.025	0.2	25	0.20	0.0	16.5	0.4	0.0	0.0	0	19.0	0.1	0.4	19.5	0
Mauritius	3.0	0.0	0.0	-0.003	0.0	1580	0.16	0.0	0.0	0.0	0.0	0.0	0	60.9	0.0	0.0	60.9	0
Morocco	82.7	78.3	0.0	-0.041	1.9	288	0.18	0.0	57.9	78.4	0.8	0.0	0	7.9	0.0	0.2	9.0	0
Mozambique	273.3	42.3	0.0	-0.126	150.7	8	0.16	17.3	163.1	25.0	1.4	0.0	0	6.6	0.4	0.0	8.4	0
Namibia	509.1	0.1	1.7	-0.025	0.2	14	0.15	0.0	499.3	0.1	0.0	0.0	0	32.3	0.0	0.0	32.3	0
Nigeria	158.4	2.8	0.0	-0.077	2.1	83	0.23	0.0	27.7	2.7	0.1	0.0	0	142.4	27.4	2.5	172.4	0
Reunion	4.1	0.2	0.0	-0.003	0.0	740	0.16	0.0	2.1	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	2.8	0.0	0.0	-0.003	0.0	77	0.18	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	72.5	9.9	0.0	-0.012	2.5	125	0.18	0.0	41.6	9.9	0.0	0.0	0	21.3	5.0	0.0	26.4	0
Seychelles	4.0	0.0	0.0	-0.003	0.0	1607	0.17	0.0	1.8	0.0	0.0	0.0	0	155.0	0.6	0.0	155.6	0
Sierra Leone	63.0	0.5	0.0	0.001	1.4	32	0.18	0.0	24.6	0.5	0.0	0.0	0	1.0	1.6	0.1	2.8	0
Somalia	219.3	1.2	0.0	-0.097	1.8	18	0.18	0.0	171.9	1.2	0.5	0.0	0	2.6	0.2	0.0	3.2	0
South Africa	203.4	11.1	0.2	-0.011	0.2	411	0.15	0.0	172.1	11.0	5.9	0.0	0	23.6	2.9	0.9	33.2	0
Sudan	91.0	0.0	0.7	0.000	0.1	29	0.18	0.0	91.0	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	63.3	16.4	0.0	-0.040	89.8	16	0.18	0.0	36.5	16.4	0.0	0.0	0	1.9	0.6	0.0	2.6	0
Togo	3.0	0.0	0.0	-0.004	0.0	115	0.23	0.0	0.0	0.0	0.0	0.0	0	3.7	0.0	0.6	4.3	0
Tunisia	135.8	48.6	0.0	-0.039	0.8	560	0.20	0.0	95.9	48.6	0.6	0.0	0	5.0	0.0	0.3	5.9	0
Western Sahara	36.8	0.0	0.0	-0.039	0.0	1	0.18	0.0	10.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	3151.9	1168.9	3.1	-1.029	289.9	184*	0.18**	777.9	1991.4	390.4	28.6	3.5	0	768.0	111.3	14.4	926.4	0

Table A-16. Case 3: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	30.9	55.9	0.0	0.000	0.6	1781	0.37	0.0	30.9	61.3	3.4	0.0	0	3.9	0.0	0.0	7.3	0
Angola	67.4	37.0	0.0	0.007	1.2	94	0.34	0.0	45.0	31.2	2.9	0.0	0	25.6	5.6	0.0	34.1	0
Benin	9.3	0.0	0.0	-0.006	0.0	380	0.36	0.0	0.0	0.0	0.0	0.0	0	75.7	0.6	9.7	86.0	0
Cameroon	87.7	177.0	0.0	0.021	2.4	344	0.36	0.0	19.7	169.5	30.8	0.0	0	132.4	57.9	0.0	221.1	0
Cape Verde	33.8	7.8	0.0	-0.011	0.1	895	0.35	0.0	22.2	7.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	15.8	2.7	0.0	-0.005	0.3	257	0.32	0.0	10.5	2.6	0.0	0.0	0	0.5	0.7	0.0	1.2	0
Congo	17.7	15.7	0.0	-0.009	0.2	654	0.35	0.0	12.7	14.9	0.0	0.0	0	4.0	4.8	0.0	8.8	0
Congo, Dem Rep	4.8	0.0	0.0	0.000	0.0	79	0.35	0.0	4.8	0.0	0.5	0.0	0	3.5	0.9	0.0	4.9	0
Cote d'Ivoire	62.0	0.5	0.0	-0.054	0.0	708	0.36	0.0	0.0	0.0	2.9	0.0	0	29.4	20.4	3.5	56.1	0
Djibouti	7.7	10.7	0.0	0.000	0.1	223	0.34	0.0	7.7	10.2	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	147.0	1851.4	0.0	-0.112	5.7	381	0.41	1507.0	56.1	327.9	0.8	0.0	0	35.9	1.3	2.0	40.0	0
Equatorial Guinea	12.5	0.0	0.0	-0.008	0.0	174	0.36	0.0	0.0	0.0	2.1	0.0	0	8.7	1.4	0.1	12.3	0
Eritrea	28.1	0.4	0.0	-0.008	0.2	71	0.35	0.0	23.2	0.4	0.0	0.0	0	1.7	0.2	0.0	1.9	0
Gabon	172.5	144.1	0.0	-0.060	0.1	784	0.35	124.2	83.7	16.5	19.1	12.2	0	488.8	101.7	1.2	623.0	0
Gambia	38.6	6.3	0.0	0.006	1.0	234	0.35	0.0	20.4	6.0	0.4	0.0	0	29.0	8.6	0.6	38.6	0
Ghana	36.1	5.4	0.0	-0.033	0.0	369	0.41	5.3	0.0	0.0	0.0	0.0	0	16.6	7.4	5.5	29.5	0
Guinea	147.9	1.4	0.0	0.014	0.1	191	0.36	0.0	13.2	1.3	0.0	0.0	0	26.6	30.2	0.0	56.7	0
Guinea-Bissau	199.3	10.5	0.0	-0.021	2.5	69	0.35	0.0	81.7	9.9	0.1	0.0	0	9.5	11.2	0.5	21.3	0
Kenya	75.5	20.3	0.0	-0.030	1.2	173	0.35	0.0	47.7	20.2	3.4	0.0	0	19.8	6.4	0.0	29.6	0
Liberia	28.7	0.0	0.0	-0.025	0.0	261	0.36	0.0	0.0	0.0	1.2	0.0	0	8.3	3.8	0.0	13.3	0
Libyan Arab Jamahiriya	123.1	7.7	0.0	-0.068	0.0	1705	0.40	0.0	85.9	2.0	0.0	0.0	0	2.3	0.0	3.4	5.7	0
Madagascar	261.6	9.6	0.0	-0.103	3.3	98	0.33	0.0	129.7	9.8	0.0	0.0	0	3.9	3.2	0.0	7.0	0
Mauritania	115.5	2.0	0.0	-0.027	0.3	92	0.39	0.0	35.6	1.9	0.0	0.0	0	65.8	0.2	1.6	67.6	0
Mauritius	9.3	0.2	0.0	-0.003	0.0	5598	0.33	0.0	4.9	0.0	0.0	0.0	0	190.5	0.0	0.0	190.6	0
Morocco	110.4	295.7	0.0	-0.036	2.2	858	0.36	0.0	72.9	289.2	2.8	0.0	0	20.4	0.0	0.7	23.9	0
Mozambique	360.3	118.3	0.0	-0.115	77.2	24	0.32	34.6	192.1	80.0	4.5	0.0	0	18.6	1.2	0.0	24.3	0
Namibia	86.1	0.2	1.6	-0.022	0.2	45	0.31	0.0	70.3	0.2	0.0	0.0	0	82.1	0.0	0.0	82.1	0
Nigeria	225.6	13.3	0.0	-0.097	2.8	280	0.44	0.0	34.2	12.4	0.3	0.0	0	476.8	98.8	8.6	584.5	0
Reunion	5.8	0.8	0.0	-0.003	0.0	1780	0.33	0.0	2.8	0.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	4.1	0.0	0.0	-0.003	0.0	266	0.36	0.0	0.0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Senegal	100.5	38.0	0.0	-0.014	1.3	431	0.36	0.0	51.1	37.7	0.0	0.0	0	76.7	18.8	0.0	95.6	0
Seychelles	5.1	0.2	0.0	-0.002	0.0	4470	0.34	0.0	1.8	0.0	0.0	0.0	0	443.2	2.1	0.0	445.2	0
Sierra Leone	95.0	2.3	0.0	-0.007	0.9	114	0.35	0.0	30.5	2.2	0.2	0.0	0	5.8	5.8	0.4	12.1	0
Somalia	277.4	5.6	0.0	-0.086	1.2	69	0.36	0.0	209.4	5.2	1.8	0.0	0	9.5	0.7	0.0	12.1	0
South Africa	263.3	16.5	0.1	-0.011	0.1	1185	0.31	0.0	206.4	8.4	17.3	0.0	0	64.7	8.6	2.5	93.2	0
Sudan	20.8	0.0	0.0	0.000	0.0	108	0.36	0.0	20.8	0.0	0.0	0.0	0	0.9	1.1	0.0	2.0	0
Tanzania, Uni Rep	85.2	49.7	0.0	-0.035	26.1	45	0.36	0.0	44.4	48.8	0.1	0.0	0	5.8	1.9	0.0	7.8	0
Togo	4.2	0.0	0.0	-0.003	0.0	384	0.43	0.0	0.0	0.0	0.0	0.0	0	12.4	0.0	1.9	14.4	0
Tunisia	168.6	53.2	0.0	-0.057	0.3	1652	0.39	0.0	113.6	52.7	1.6	0.0	0	7.1	0.0	0.7	9.3	0
Western Sahara	41.8	0.0	0.0	-0.034	0.0	2	0.36	0.0	3.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	3587.0	2960.9	1.7	-1.060	131.6	576*	0.36**	1671.1	1789.2	1230.8	96.2	12.2	0	2406.8	405.6	42.9	2963.6	0

Table A-17. Case 3: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	37.2	70.2	0.0	0.000	0.3	3871	0.68	0.0	37.2	70.2	5.4	0.0	0	1.7	0.0	0.0	7.1	0
Angola	90.1	91.1	0.0	-0.004	1.1	238	0.62	0.0	53.2	91.1	7.6	0.0	0	53.6	13.5	0.0	74.6	0
Benin	12.6	0.0	0.0	-0.004	0.0	1211	0.67	0.0	0.0	0.0	0.0	0.0	0	219.8	2.0	30.4	252.2	0
Cameroon	137.5	616.8	0.0	-0.005	2.3	1133	0.66	0.0	23.0	616.7	101.6	0.0	0	422.8	187.6	0.0	712.0	0
Cape Verde	42.6	32.1	0.0	-0.007	0.1	2785	0.65	0.0	27.0	32.1	0.0	0.0	0	0.0	0	0.0	0.0	0
Comoros	20.0	5.8	0.0	-0.003	0.0	862	0.6	0.0	12.8	5.8	0.0	0.0	0	0.3	1.3	0.0	1.6	0
Congo	21.9	59.4	0.0	-0.005	0.2	2107	0.65	0.0	15.2	59.4	0.0	0.0	0	15.3	15.1	0.0	30.4	0
Congo, Dem Rep	5.6	0.3	0.0	0.000	0.1	257	0.64	0.0	5.6	0.3	1.5	0.0	0	8.8	2.8	0.0	13.0	0
Cote d'Ivoire	83.7	0.0	0.0	-0.033	0.0	2237	0.66	0.0	0.0	0.0	9.6	0.0	0	116.9	67.1	10.8	204.5	0
Djibouti	9.1	38.7	0.0	0.000	0.1	748	0.64	0.0	9.1	38.7	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Egypt	194.8	2955.2	0.0	-0.115	0.6	839	0.74	2922.6	66.0	32.7	1.3	0.0	0	29.6	2.9	2.4	36.2	0
Equatorial Guinea	16.8	0.0	0.0	-0.005	0.0	566	0.66	0.0	0.0	0.0	7.3	0.0	0	25.6	4.9	0.2	38.0	0
Eritrea	34.8	1.7	0.0	-0.005	0.1	243	0.64	0.0	27.5	1.7	0.0	0.0	0	5.0	0.8	0.0	5.8	0
Gabon	225.4	319.0	0.0	-0.043	0.0	2351	0.65	264.9	96.5	54.2	63.+	32.5	0	1386.5	331.9	7.3	1821.2	0
Gambia	55.9	19.7	0.0	0.000	0.2	766	0.65	0.0	23.9	19.7	1.3	0.0	0	87.8	28.0	1.7	118.9	0
Ghana	47.1	11.7	0.0	-0.022	0.0	1167	0.73	11.7	0.0	0.0	0.0	0.0	0	67.7	23.5	16.7	107.9	0
Guinea	220.1	3.1	0.0	-0.045	0.0	646	0.65	0.0	15.1	3.1	0.0	0.0	0	118.4	99.1	0.0	217.6	0
Guinea-Bissau	273.8	31.3	0.0	-0.035	1.2	233	0.65	0.0	94.8	31.3	0.2	0.0	0	45.2	36.3	1.3	83.0	0
Kenya	105.1	69.3	0.0	-0.018	0.4	620	0.64	0.0	53.2	69.3	12.5	0.0	0	70.1	23.7	0.0	106.3	0
Liberia	38.7	0.0	0.0	-0.015	0.0	825	0.66	0.0	0.0	0.0	4.0	0.0	0	27.6	12.5	0.0	44.1	0
Libyan Arab Jamahiriya	139.3	6.1	0.0	-0.061	0.0	3507	0.72	0.0	91.1	6.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	336.4	29.7	0.0	-0.058	0.7	342	0.61	0.0	148.6	29.7	0.0	0.0	0	14.9	11.7	0.0	26.7	0
Mauritania	156.7	5.2	0.0	-0.029	0.1	303	0.71	0.0	40.6	5.2	0.0	0.0	0	179.8	0.7	4.7	185.2	0
Mauritius	11.2	0.0	0.0	-0.001	0.0	7941	0.60	0.0	5.2	0.0	0.0	0.0	0	524.3	0.0	0.0	524.3	0
Morocco	150.9	118.6	0.0	-0.022	0.6	1946	0.67	0.0	82.6	118.7	6.5	0.0	0	35.8	0.0	1.5	43.8	0
Mozambique	445.8	232.1	0.0	-0.074	23.5	64	0.59	65.6	211.1	166.4	12.2	0.0	0	44.5	3.2	0.0	59.8	0
Namibia	106.3	0.7	0.9	-0.011	0.2	117	0.58	0.0	70.8	0.7	0.0	0.0	0	166.3	0.0	0.0	166.3	0
Nigeria	298.4	32.6	0.0	-0.116	0.3	893	0.78	0.0	40.2	32.7	1.0	0.0	0	1336.2	307.8	26.0	1671.0	0
Reunion	9.5	1.9	0.0	-0.002	0.0	3203	0.61	0.0	3.3	1.9	0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	5.5	0.0	0.0	-0.002	0.0	861	0.65	0.0	0.0	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Senegal	134.7	62.9	0.0	-0.020	0.4	1398	0.66	0.0	59.1	62.9	0.1	0.0	0	231.1	61.0	0.0	292.2	0
Seychelles	6.7	0.0	0.0	-0.001	0.0	4470	0.64	0.0	2.2	0.0	0.0	0.0	0	894.5	5.9	0.0	900.4	0
Sierra Leone	133.7	7.7	0.0	-0.027	0.5	373	0.65	0.0	36.2	7.7	0.5	0.0	0	21.6	18.2	1.0	41.3	0
Somalia	337.6	15.0	0.0	-0.056	0.3	244	0.67	0.0	245.3	15.0	6.5	0.0	0	26.0	2.4	0.0	35.0	0
South Africa	340.5	5.7	0.1	-0.009	0.0	3020	0.57	0.0	251.2	5.7	43.8	0.0	0	139.7	21.8	5.9	211.2	0
Sudan	23.6	0.2	0.0	0.000	0.0	369	0.65	0.0	23.6	0.2	0.0	0.0	0	4.6	3.7	0.0	8.2	0
Tanzania, Uni Rep	130.3	130.8	0.0	-0.020	21.7	119	0.66	0.0	51.2	130.8	0.2	0.0	0	15.3	5.1	0.0	20.6	0
Togo	5.6	0.0	0.0	-0.002	0.0	1211	0.78	0.0	0.0	0.0	0.0	0.0	0	32.5	0.0	5.5	38.0	0
Tunisia	206.7	9.2	0.0	-0.062	0.1	3703	0.71	0.0	119.2	9.2	2.4	0.0	0	3.6	0.0	0.9	6.8	0
Western Sahara	62.6	0.0	0.0	-0.021	0.0	5	0.66	0.0	3.7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	4714.8	4983.5	1.1	-0.958	55.1	1318*	0.66**	3264.8	2045.3	1719.0	225.5	32.5	0	6374.2	1294.7	116.3	8106.1	0

Table A-18. Case 3: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	42.2	0.0	0.0	0.000	0.09	6132	1.06	0.0	42.2	0.0	5.7	0.0	0	0.5	0.0	0.0	6.2	0
Angola	110.6	163.3	0.0	-0.018	1.00	397	0.97	0.0	60.1	163.3	11.6	0.0	0	49.8	19.1	0.0	80.5	0
Benin	14.8	0.0	0.0	-0.004	0.00	2706	1.04	0.0	0.0	0.0	0.0	0.0	0	367.2	4.0	56.0	427.3	0
Cameroon	200.9	150.4	0.0	-0.041	0.40	2564	1.03	0.0	25.5	150.4	220.3	0.0	0	869.2	395.7	0.0	1485.2	0
Cape Verde	55.9	14.6	0.0	-0.008	0.02	5912	1.01	0.0	30.3	14.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	27.4	12.9	0.0	-0.004	0.03	2023	0.94	0.0	14.5	12.9	0.0	0.0	0	0.1	1.6	0.0	1.7	0
Congo	24.9	0.0	0.0	-0.006	0.02	4710	1.01	0.0	17.0	0.0	0.0	0.0	0	14.0	28.0	0.0	42.0	0
Congo, Dem Rep	6.2	0.6	0.0	0.000	0.01	574	1.00	0.0	6.2	0.6	2.8	0.0	0	8.2	5.2	0.0	16.1	0
Cote d'Ivoire	98.6	0.0	0.0	-0.037	0.00	4625	1.02	0.0	0.0	0.0	20.1	0.0	0	292.1	136.5	19.5	468.3	0
Djibouti	10.1	0.9	0.0	0.000	0.01	1685	0.99	0.0	10.1	0.9	0.0	0.0	0	0.5	0.3	0.0	0.8	0
Egypt	225.7	59.9	0.0	-0.128	0.65	1355	1.14	0.0	72.2	60.0	1.5	0.0	0	14.9	4.1	1.9	22.3	0
Equatorial Guinea	19.8	0.0	0.0	-0.006	0.00	1230	1.02	0.0	0.0	0.0	16.2	0.0	0	48.5	10.9	0.4	76.0	0
Eritrea	38.3	4.8	0.0	-0.006	0.06	536	0.99	0.0	29.7	4.8	0.0	0.0	0	7.0	1.6	0.0	8.6	0
Gabon	270.4	567.3	0.0	-0.071	0.03	4321	1.01	441.6	103.8	125.7	137.4	57.1	0	2684.1	719.0	21.5	3619.2	0
Gambia	73.4	35.2	0.0	-0.009	0.12	1732	1.01	0.0	26.5	35.2	2.8	0.0	0	178.3	60.1	3.4	244.6	0
Ghana	54.7	20.2	0.0	-0.025	0.00	2585	1.12	20.2	0.0	0.0	0.0	0.0	0	166.1	47.7	30.1	243.9	0
Guinea	280.6	7.4	0.0	-0.119	0.01	1483	1.02	0.0	16.5	7.4	0.0	0.0	0	325.0	203.3	0.0	528.3	0
Guinea-Bissau	344.9	65.3	0.0	-0.083	0.38	533	1.01	0.0	103.8	65.4	0.4	0.0	0	121.5	77.9	2.6	202.4	0
Kenya	140.7	44.0	0.0	-0.021	0.12	1504	1.00	0.0	57.3	44.0	30.4	0.0	0	163.1	57.3	0.0	250.9	0
Liberia	45.6	0.0	0.0	-0.017	0.00	1783	1.03	0.0	0.0	0.0	8.3	0.0	0	58.4	25.4	0.0	92.1	0
Libyan Arab Jamahiriya	153.7	11.2	0.0	-0.068	0.03	4552	1.11	0.0	97.6	11.2	0.0	0.0	0	0.0	0.0	0.0	0	0
Madagascar	402.2	72.3	0.0	-0.083	0.45	797	0.95	0.0	165.5	72.3	0.0	0.0	0	37.0	28.5	0.0	65.5	0
Mauritania	201.4	13.5	0.0	-0.050	0.04	638	1.09	0.0	51.9	13.5	0.0	0.0	0	328.0	1.6	9.4	339.0	0
Mauritius	13.2	0.0	0.1	-0.002	0.00	7941	0.94	0.0	6.1	0.0	0.0	0.0	0	773.3	0.0	0.0	773.3	0
Morocco	186.5	94.5	0.0	-0.023	0.35	3239	1.04	0.0	93.1	94.6	10.7	0.0	0	44.7	0.0	2.2	57.6	0
Mozambique	516.0	383.5	0.0	-0.141	17.20	114	0.92	96.7	230.2	286.6	21.7	0.0	0	69.2	5.5	0.0	96.4	0
Namibia	108.3	1.4	1.1	-0.018	0.18	185	0.91	0.0	66.2	1.4	0.0	0.0	0	171.9	0.0	0.0	171.9	0
Nigeria	376.5	85.5	0.0	-0.171	0.33	2001	1.18	0.0	56.1	85.6	1.9	0.0	0	2395.1	615.2	46.9	3059.1	0
Reunion	11.1	3.1	0.0	-0.002	0.01	4720	0.94	0.0	3.9	3.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	6.5	0.0	0.0	-0.002	0.00	1933	1.02	0.0	0.0	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Senegal	162.3	82.8	0.0	-0.041	0.23	3121	1.02	0.0	67.0	82.8	0.3	0.0	0	467.6	130.1	0.0	598.0	0
Seychelles	8.5	0.0	0.0	-0.002	0.00	4470	0.99	0.0	2.6	0.0	0.0	0.0	0	982.0	11.1	0.0	993.1	0
Sierra Leone	166.6	18.3	0.0	-0.064	0.11	833	1.02	0.0	40.2	18.4	1.0	0.0	0	25.6	33.9	1.5	62.0	0
Somalia	411.9	36.9	0.0	-0.064	0.17	561	1.03	0.0	274.2	36.9	15.1	0.0	0	46.6	5.4	0.0	67.0	0
South Africa	386.5	2.3	0.1	-0.023	0.03	4852	0.89	0.0	271.4	2.4	71.3	0.0	0	194.3	35.5	8.8	309.9	0
Sudan	25.4	0.6	0.0	0.000	0.03	851	1.01	0.0	25.4	0.6	0.0	0.0	0	4.8	7.2	0.0	12.0	0
Tanzania, Uni Rep	163.7	197.3	0.0	-0.025	12.40	211	1.02	0.0	56.2	197.3	0.3	0.0	0	26.5	9.0	0.0	35.7	0
Togo	6.5	0.0	0.0	-0.002	0.00	2686	1.19	0.0	0.0	0.0	0.0	0.0	0	55.7	0.0	10.2	65.9	0
Tunisia	254.1	-0.1	0.0	-0.074	0.09	6016	1.09	0.0	131.0	0.0	2.3	0.0	0	1.2	0.0	0.7	4.0	0
Western Sahara	77.2	0.0	0.0	-0.023	0.00	7	1.02	0.0	4.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	5723.8	2149.8	1.3	-1.481	34.6	2199*	1.02**	558.5	2258.4	1592.0	582.1	57.1	0	10992.6	2680.7	215.1	14527.4	0

Table A-19. Case 4: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	3.3	0	0.00	1.9	90	0.019	0.0	0	3.3	0.4	0.0	0	2.0	0.0	0.19	2.6	0
Angola	0	4.5	0	0.00	5.2	5	0.017	2.2	0	2.3	0.2	0.0	0	2.5	0.5	0.00	3.2	0
Benin	0	0.0	0	0.04	0.0	17	0.019	0.0	0	0.0	0.0	0.0	0	4.0	0.0	0.49	4.5	0
Cameroon	0	8.5	0	0.02	10.4	13	0.018	0.0	0	8.5	1.4	0.0	0	5.8	2.7	0.00	9.9	0
Cape Verde	0	0.3	0	0.08	0.3	34	0.018	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.00	0.1	0
Comoros	0	0.1	0	0.03	0.3	10	0.016	0.0	0	0.1	0.0	0.0	0	0.0	0.0	0.00	0.1	0
Congo	0	0.7	0	0.06	0.7	27	0.018	0.0	0	0.6	0.0	0.0	0	0.0	0.2	0.00	0.3	0
Congo, Dem Rep	0	0.0	0	0.00	0.1	3	0.017	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.00	0.3	0
Cote d'Ivoire	0	0.5	0	0.37	0.0	29	0.018	0.0	0	0.0	0.1	0.0	0	0.9	1.0	0.17	2.2	0
Djibouti	0	0.5	0	0.00	0.5	8	0.017	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.00	0.0	0
Egypt	0	236.9	0	0.67	19.0	20	0.023	221.5	0	13.0	0.1	0.0	0	7.6	0.1	0.22	8.0	0
Equatorial Guinea	0	0.0	0	0.06	0.0	5	0.018	0.0	0	0.0	0.1	0.0	0	0.5	0.1	0.00	0.7	0
Eritrea	0	0.0	0	0.05	0.8	2	0.018	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.00	0.1	0
Gabon	0	19.7	0	0.52	2.2	21	0.018	18.1	0	1.0	0.9	0.6	0	25.2	4.7	0.00	31.4	0
Gambia	0	0.2	0	0.00	3.4	10	0.018	0.0	0	0.2	0.0	0.0	0	1.4	0.4	0.03	1.8	0
Ghana	0	0.8	0	0.24	0.0	15	0.023	0.7	0	0.0	0.0	0.0	0	0.5	0.4	0.29	1.1	0
Guinea	0	0.1	0	0.13	0.5	7	0.018	0.0	0	0.1	0.0	0.0	0	0.5	1.4	0.00	2.0	0
Guinea-Bissau	0	0.3	0	0.33	6.1	2	0.018	0.0	0	0.3	0.0	0.0	0	0.3	0.5	0.02	0.8	0
Kenya	0	0.8	0	0.20	5.7	6	0.017	0.0	0	0.8	0.1	0.0	0	0.8	0.2	0.00	1.2	0
Liberia	0	0.0	0	0.17	0.0	10	0.018	0.0	0	0.0	0.1	0.0	0	0.4	0.2	0.00	0.6	0
Libyan Arab Jamahiriya	0	2.1	0	0.41	0.4	83	0.021	0.0	0	1.5	0.0	0.0	0	3.3	0.0	0.50	3.8	0
Madagascar	0	0.3	0	0.72	14.4	3	0.017	0.0	0	0.3	0.0	0.0	0	0.1	0.1	0.00	0.3	0
Mauritania	0	0.1	0	0.25	1.0	2	0.022	0.0	0	0.1	0.0	0.0	0	3.6	0.0	0.08	3.7	0
Mauritius	0	0.1	0	0.02	0.0	205	0.016	0.0	0	0.0	0.0	0.0	0	11.5	0.0	0.00	11.5	0
Morocco	0	12.9	0	0.24	3.0	41	0.018	0.0	0	11.8	0.2	0.0	0	1.8	0.0	0.04	2.0	0
Mozambique	0	11.8	0	0.90	275.2	1	0.016	6.4	0	5.2	0.3	0.0	0	1.7	0.1	0.00	2.1	0
Namibia	0	0.0	0	0.15	0.1	2	0.015	0.0	0	0.0	0.0	0.0	0	8.7	0.0	0.00	8.7	0
Nigeria	0	0.9	0	0.80	9.3	11	0.026	0.0	0	0.4	0.0	0.0	0	28.1	4.9	0.45	33.4	0
Reunion	0	0.1	0	0.02	0.0	123	0.017	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.00	0.0	0
Sao Tome & Principe	0	0.0	0	0.02	0.0	10	0.018	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.00	0.1	0
Senegal	0	1.6	0	0.17	5.2	18	0.018	0.0	0	1.5	0.0	0.0	0	3.8	0.9	0.00	4.7	0
Seychelles	0	1.2	0	0.02	0.0	156	0.017	0.0	0	1.1	0.0	0.0	0	22.8	0.1	0.00	22.9	0
Sierra Leone	0	0.1	0	0.17	2.5	4	0.018	0.0	0	0.1	0.0	0.0	0	0.1	0.3	0.02	0.4	0
Somalia	0	0.2	0	0.62	5.5	1	0.019	0.0	0	0.2	0.1	0.0	0	0.4	0.0	0.00	0.5	0
South Africa	0	1.8	0	0.11	0.2	81	0.015	0.0	0	1.8	1.4	0.0	0	6.2	0.7	0.21	8.5	0
Sudan	0	0.0	0	0.00	0.0	4	0.018	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.00	0.0	0
Tanzania, Uni Rep	0	3.2	0	0.24	104.4	3	0.019	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.00	0.6	0
Togo	0	0.0	0	0.02	0.0	16	0.024	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.10	0.8	0
Tunisia	0	7.3	0	0.31	1.3	86	0.021	0.0	0	7.1	0.1	0.0	0	1.5	0.0	0.08	1.6	0
Western Sahara	0	0.0	0	0.23	0.0	0	0.018	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.00	0.0	0
TOTAL for Africa	0	320.9	0	8.39	479.6	27*	0.018**	248.9	0	65.2	5.5	0.6	0	147.7	19.6	2.89	176.5	0

Table A-20. Case 4: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	24.4	0.0	0.00	21.7	10	0.15	0.0	0	24.4	1.5	0.0	0	4.4	0.0	0.5	6.5	0
Angola	0	19.1	5.3	0.08	77.0	0	0.14	4.8	0	13.9	0.7	0.0	0	7.5	1.5	0.0	9.8	0
Benin	0	0.3	0.0	0.08	0.0	2	0.15	0.0	0	0.0	0.0	0.0	0	16.0	0.1	2.0	18.1	0
Cameroon	0	62.1	0.4	0.21	168.0	2	0.15	0.0	0	61.9	5.8	0.0	0	24.6	11.0	0.0	41.5	0
Cape Verde	0	2.3	0.5	0.14	5.7	2	0.14	0.0	0	2.0	0.0	0.0	0	0.3	0.0	0.0	0.2	0
Comoros	0	17.7	13.2	0.06	26.0	0	0.13	0.0	0	0.7	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Congo	0	5.2	0.0	0.11	12.9	3	0.14	0.0	0	5.0	0.0	0.0	0	0.3	1.0	0.0	1.3	0
Congo, Dem Rep	0	0.0	0.3	0.00	0.5	0	0.14	0.0	0	0.0	0.1	0.0	0	0.8	0.2	0.0	1.1	0
Cote d'Ivoire	0	4.7	0.0	0.68	0.0	3	0.14	0.0	0	0.0	0.6	0.0	0	4.5	4.0	0.7	9.8	0
Djibouti	0	3.7	0.2	0.00	8.1	1	0.14	0.0	0	3.6	0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	677.6	1.3	1.42	104.3	4	0.17	569.5	0	83.2	0.2	0.0	0	20.3	0.3	0.7	21.6	0
Equatorial Guinea	0	0.0	0.0	0.10	0.0	0	0.14	0.0	0	0.0	0.4	0.0	0	1.8	0.3	0.0	2.5	0
Eritrea	0	0.3	7.1	0.10	4.3	0	0.14	0.0	0	0.1	0.0	0.0	0	0.3	0.0	0.0	0.4	0
Gabon	0	57.0	0.4	1.07	4.0	3	0.14	45.9	0	5.6	3.6	2.5	0	99.3	19.3	0.1	124.9	0
Gambia	0	7.8	38.2	0.05	19.2	1	0.14	0.0	0	1.4	0.1	0.0	0	5.7	1.6	0.1	7.5	0
Ghana	0	2.3	0.0	0.39	0.0	1	0.17	1.9	0	0.0	0.0	0.0	0	2.5	1.4	1.2	5.1	0
Guinea	0	8.1	54.9	0.66	8.1	0	0.14	0.0	0	0.3	0.0	0.0	0	3.4	5.9	0.0	9.3	0
Guinea-Bissau	0	26.7	43.3	0.83	118.1	0	0.14	0.0	0	2.4	0.0	0.0	0	1.4	2.1	0.1	3.6	0
Kenya	0	23.4	14.6	0.38	59.6	1	0.14	0.0	0	6.0	0.6	0.0	0	3.6	1.1	0.0	5.3	0
Liberia	0	0.3	0.0	0.31	0.0	1	0.15	0.0	0	0.0	0.2	0.0	0	1.6	0.8	0.0	2.6	0
Libyan Arab Jamahiriya	0	18.3	10.2	0.88	2.2	16	0.16	0.0	0	12.7	0.0	0.0	0	9.2	0.0	1.6	10.8	0
Madagascar	0	6.6	24.9	1.26	43.7	0	0.14	0.0	0	1.9	0.0	0.0	0	0.7	0.6	0.0	1.2	0
Mauritania	0	0.8	0.8	0.54	14.4	0	0.17	0.0	0	0.5	0.0	0.0	0	13.7	0.0	0.3	14.1	0
Mauritius	0	1.4	0.0	0.03	0.0	17	0.13	0.0	0	0.0	0.0	0.0	0	45.1	0.0	0.0	45.1	0
Morocco	0	103.2	7.5	0.45	36.2	6	0.15	0.0	0	92.1	0.6	0.0	0	6.1	0.0	0.2	6.9	0
Mozambique	0	57.0	208.0	1.83	879.1	0	0.13	14.4	0	22.9	1.1	0.0	0	5.0	0.3	0.0	6.3	0
Namibia	0	0.1	1.7	0.28	0.2	0	0.13	0.0	0	0.1	0.0	0.0	0	25.1	0.0	0.0	25.1	0
Nigeria	0	8.7	2.4	1.66	149.3	0	0.19	0.0	0	2.9	0.1	0.0	0	104.0	19.6	1.8	125.4	0
Reunion	0	0.6	0.0	0.04	0.5	10	0.13	0.0	0	0.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0.0	0.03	0.0	0	0.14	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	11.6	0.0	0.41	48.8	3	0.14	0.0	0	11.3	0.0	0.0	0	15.3	3.6	0.0	18.8	0
Seychelles	0	12.2	0.0	0.03	0.2	19	0.14	0.0	0	11.4	0.0	0.0	0	113.0	0.4	0.0	113.4	0
Sierra Leone	0	8.3	55.3	0.48	27.2	0	0.14	0.0	0	0.4	0.0	0.0	0	0.6	1.2	0.1	1.9	0
Somalia	0	3.0	5.9	1.05	69.3	0	0.15	0.0	0	1.3	0.3	0.0	0	1.8	0.1	0.0	2.3	0
South Africa	0	12.5	0.4	0.25	1.6	18	0.12	0.0	0	11.3	4.4	0.0	0	18.1	2.1	0.7	25.3	0
Sudan	0	0.0	0.7	0.00	0.1	0	0.15	0.0	0	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	0	35.8	121.1	0.43	1462.5	0	0.15	0.0	0	16.3	0.0	0.0	0	1.4	0.5	0.0	1.9	0
Togo	0	0.1	0.0	0.04	0.0	1	0.18	0.0	0	0.0	0.0	0.0	0	2.7	0.0	0.4	3.1	0
Tunisia	0	56.7	0.0	0.78	9.4	20	0.16	0.0	0	54.0	0.4	0.0	0	4.0	0.0	0.3	4.7	0
Western Sahara	0	0.0	0.1	0.42	0.0	0	0.15	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0
TOTAL for Africa	0	1280.0	618.4	17.56	3382.2	4*	0.15**	636.5	0	450.0	20.7	2.5	0	564.6	79.4	10.8	678.2	0

Table A-21. Case 4: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	37.5	0.0	0.00	35.1	6	0.19	0.0	0	37.5	2.0	0.0	0	5.2	0.0	0.7	7.9	0
Angola	0	32.8	47.0	0.10	90.2	0	0.17	5.7	0	19.5	1.0	0.0	0	9.7	1.9	0.0	12.7	0
Benin	0	0.4	0.0	0.08	0.0	1	0.18	0.0	0	0.0	0.0	0.0	0	22.1	0.2	2.8	25.0	0
Cameroon	0	229.0	224.0	0.25	262.5	1	0.18	0.0	0	91.0	8.2	0.0	0	34.9	15.5	0.0	58.6	0
Cape Verde	0	20.6	35.4	0.14	11.9	1	0.18	0.0	0	3.2	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Comoros	0	1.3	0.0	0.06	27.9	0	0.16	0.0	0	1.0	0.0	0.0	0	0.2	0.2	0.0	0.5	0
Congo	0	7.6	0.0	0.11	13.6	2	0.17	0.0	0	7.4	0.0	0.0	0	0.6	1.4	0.0	2.0	0
Congo, Dem Rep	0	0.0	0.3	0.00	0.6	0	0.17	0.0	0	0.0	0.1	0.0	0	1.1	0.2	0.0	1.5	0
Cote d'Ivoire	0	6.9	0.0	0.68	0.0	2	0.18	0.0	0	0.0	0.8	0.0	0	6.7	5.6	1.0	14.1	0
Djibouti	0	5.3	0.2	0.00	8.8	1	0.17	0.0	0	5.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	893.6	47.2	1.48	149.7	3	0.21	696.1	0	124.8	0.3	0.0	0	23.6	0.4	0.9	25.2	0
Equatorial Guinea	0	0.0	0.0	0.11	0.0	0	0.18	0.0	0	0.0	0.6	0.0	0	2.5	0.4	0.0	3.5	0
Eritrea	0	0.2	2.4	0.10	4.7	0	0.18	0.0	0	0.1	0.0	0.0	0	0.5	0.1	0.0	0.5	0
Gabon	0	288.2	790.3	1.10	21.1	1	0.18	56.5	0	9.4	5.1	3.5	0	138.2	27.2	0.2	174.2	0
Gambia	0	19.4	49.7	0.06	38.9	0	0.18	0.0	0	2.1	0.1	0.0	0	7.9	2.3	0.2	10.5	0
Ghana	0	3.0	0.0	0.40	0.0	0	0.21	2.3	0	0.0	0.0	0.0	0	3.7	2.0	1.6	7.4	0
Guinea	0	0.9	0.4	0.77	8.8	0	0.18	0.0	0	0.5	0.0	0.0	0	5.3	8.3	0.0	13.6	0
Guinea-Bissau	0	11.7	27.0	0.89	138.7	0	0.18	0.0	0	3.6	0.0	0.0	0	2.1	3.0	0.1	5.2	0
Kenya	0	32.8	89.7	0.38	85.9	1	0.17	0.0	0	9.0	0.8	0.0	0	5.1	1.6	0.0	7.6	0
Liberia	0	0.4	0.0	0.32	0.0	0	0.18	0.0	0	0.0	0.3	0.0	0	2.3	1.1	0.0	3.6	0
Libyan Arab Jamahiriya	0	34.5	36.6	0.91	3.1	11	0.20	0.0	0	18.5	0.0	0.0	0	11.5	0.0	2.0	13.6	0
Madagascar	0	32.3	80.7	1.27	87.0	0	0.17	0.0	0	3.1	0.0	0.0	0	1.0	0.8	0.0	1.8	0
Mauritania	0	1.1	0.7	0.57	15.7	0	0.20	0.0	0	0.7	0.0	0.0	0	19.0	0.1	0.4	19.5	0
Mauritius	0	2.1	0.0	0.03	0.0	9	0.16	0.0	0	0.0	0.0	0.0	0	60.9	0.0	0.0	60.9	0
Morocco	0	146.4	0.2	0.45	47.8	3	0.18	0.0	0	133.0	0.8	0.0	0	7.9	0.0	0.2	9.0	0
Mozambique	0	76.2	206.5	1.89	1056.0	0	0.16	17.3	0	32.1	1.4	0.0	0	6.6	0.4	0.0	8.4	0
Namibia	0	0.1	1.7	0.28	0.3	0	0.15	0.0	0	0.1	0.0	0.0	0	32.3	0.0	0.0	32.3	0
Nigeria	0	12.8	1.7	1.75	162.5	0	0.23	0.0	0	4.4	0.1	0.0	0	142.4	27.4	2.5	172.4	0
Reunion	0	0.9	0.0	0.04	0.5	5	0.16	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0.0	0.03	0.0	0	0.18	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	77.9	107.8	0.44	93.3	2	0.18	0.0	0	17.3	0.0	0.0	0	21.3	5.0	0.0	26.4	0
Seychelles	0	18.0	0.0	0.03	0.3	11	0.17	0.0	0	16.7	0.0	0.0	0	155.0	0.6	0.0	155.6	0
Sierra Leone	0	1.3	3.4	0.53	30.4	0	0.18	0.0	0	0.7	0.0	0.0	0	1.0	1.6	0.1	2.8	0
Somalia	0	4.7	4.5	1.06	77.4	0	0.18	0.0	0	1.9	0.5	0.0	0	2.6	0.2	0.0	3.2	0
South Africa	0	19.7	0.4	0.27	2.7	13	0.15	0.0	0	17.6	5.9	0.0	0	23.6	2.9	0.9	33.2	0
Sudan	0	0.0	0.7	0.00	0.2	0	0.18	0.0	0	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	0	39.4	69.9	0.44	1619.5	0	0.18	0.0	0	22.8	0.0	0.0	0	1.9	0.6	0.0	2.6	0
Togo	0	0.1	0.0	0.04	0.0	0	0.23	0.0	0	0.0	0.0	0.0	0	3.7	0.0	0.6	4.3	0
Tunisia	0	81.9	0.0	0.82	13.8	14	0.20	0.0	0	78.0	0.6	0.0	0	5.0	0.0	0.3	5.9	0
Western Sahara	0	0.0	0.0	0.43	0.0	0	0.18	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	2141.2	1828.5	18.31	4108.9	3*	0.18**	777.9	0	661.7	28.6	3.5	0	768.0	111.3	14.5	926.4	0

Table A-22. Case 4: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2050, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	857.8	13.7	0.00	321.4	0.2	0.37	0.0	0	183.5	3.4	0.0	0	3.9	0.0	0.0	7.3	0
Angola	0	98.0	3.7	0.18	915.3	0.0	0.34	0.0	0	79.9	2.9	0.0	0	25.6	5.6	0.0	34.1	0
Benin	0	2.7	0.0	0.12	0.0	0.0	0.36	0.0	0	0.0	0.0	0.0	0	75.7	0.6	9.7	86.0	0
Cameroon	0	714.9	125.7	0.48	2133.0	0.0	0.36	0.0	0	442.3	30.8	0.0	0	132.4	57.9	0.0	221.1	0
Cape Verde	0	45.5	3.8	0.21	58.3	0.0	0.35	0.0	0	17.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	0	6.0	0.0	0.09	33.7	0.0	0.32	0.0	0	4.2	0.0	0.0	0	0.5	0.7	0.0	1.2	0
Congo	0	56.8	2.7	0.16	148.1	0.0	0.35	0.0	0	38.1	0.0	0.0	0	4.0	4.8	0.0	8.8	0
Congo, Dem Rep	0	0.3	0.4	0.00	1.3	0.0	0.35	0.0	0	0.1	0.5	0.0	0	3.5	0.9	0.0	4.9	0
Cote d'Ivoire	0	43.5	0.0	1.02	0.0	0.1	0.36	0.0	0	0.0	2.9	0.0	0	29.4	20.4	3.5	56.1	0
Djibouti	0	243.7	0.5	0.00	92.9	0.0	0.34	0.0	0	26.8	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	5088.4	80.9	2.00	1195.4	0.4	0.41	1507.0	0	635.7	0.8	0.0	0	36.3	1.3	2.0	40.3	0
Equatorial Guinea	0	0.2	0.0	0.16	0.0	0.0	0.36	0.0	0	0.0	2.1	0.0	0	8.7	1.4	0.1	12.3	0
Eritrea	0	1.2	4.1	0.14	6.8	0.0	0.35	0.0	0	0.5	0.0	0.0	0	1.8	0.2	0.0	1.9	0
Gabon	0	225.8	4.3	1.72	26.1	0.1	0.35	124.2	0	40.1	19.1	12.2	0	488.8	101.7	1.2	623.0	0
Gambia	0	35.0	8.4	0.12	94.3	0.0	0.35	0.0	0	11.0	0.4	0.0	0	29.0	8.6	0.6	38.6	0
Ghana	0	9.3	0.0	0.56	0.0	0.0	0.41	5.3	0	0.0	0.0	0.0	0	16.6	7.4	5.5	29.5	0
Guinea	0	5.2	0.6	1.30	10.9	0.0	0.36	0.0	0	2.1	0.0	0.0	0	26.6	30.2	0.0	56.7	0
Guinea-Bissau	0	27.9	7.9	1.45	180.3	0.0	0.35	0.0	0	16.0	0.1	0.0	0	9.6	11.2	0.5	21.3	0
Kenya	0	311.9	19.5	0.57	306.7	0.0	0.35	0.0	0	45.8	3.4	0.0	0	19.8	6.4	0.0	29.6	0
Liberia	0	2.7	0.0	0.47	0.0	0.0	0.36	0.0	0	0.0	1.2	0.0	0	8.3	3.8	0.0	13.3	0
Libyan Arab Jamahiriya	0	337.6	25.0	1.28	22.4	1.2	0.40	0.0	0	97.3	0.0	0.0	0	2.3	0.0	3.4	5.7	0
Madagascar	0	25.2	15.6	1.84	149.5	0.0	0.33	0.0	0	15.1	0.0	0.0	0	3.9	3.2	0.0	7.0	0
Mauritania	0	5.9	2.0	0.87	21.1	0.0	0.39	0.0	0	3.1	0.0	0.0	0	65.8	0.2	1.6	67.6	0
Mauritius	0	14.5	0.0	0.05	0.0	0.0	0.33	0.0	0	0.0	0.0	0.0	0	190.5	0.0	0.0	190.5	0
Morocco	0	1727.8	80.4	0.67	1764.9	0.1	0.36	0.0	0	744.1	2.8	0.0	0	20.4	0.0	0.7	23.9	0
Mozambique	0	699.8	38.8	2.91	4691.0	0.0	0.32	34.6	0	125.2	4.5	0.0	0	18.6	1.2	0.0	24.3	0
Namibia	0	1.9	4.2	0.43	0.8	0.0	0.31	0.0	0	0.3	0.0	0.0	0	83.6	0.0	0.0	83.6	0
Nigeria	0	81.1	4.1	2.55	213.4	0.0	0.44	0.0	0	19.8	0.3	0.0	0	476.8	98.8	8.6	584.5	0
Reunion	0	5.7	0.1	0.06	4.6	0.0	0.33	0.0	0	1.9	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.2	0.0	0.05	0.0	0.0	0.36	0.0	0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Senegal	0	154.4	8.9	0.71	522.8	0.0	0.36	0.0	0	89.1	0.0	0.0	0	76.7	18.8	0.0	95.6	0
Seychelles	0	1796.0	0.0	0.04	2.8	0.5	0.34	0.0	0	83.7	0.0	0.0	0	443.2	2.1	0.0	445.2	0
Sierra Leone	0	9.4	9.1	0.88	45.2	0.0	0.35	0.0	0	3.3	0.2	0.0	0	5.8	5.8	0.4	12.1	0
Somalia	0	18.5	6.8	1.52	105.7	0.0	0.36	0.0	0	8.7	1.8	0.0	0	9.5	0.7	0.0	12.1	0
South Africa	0	443.4	48.6	0.43	34.2	1.4	0.31	0.0	0	83.7	17.4	0.0	0	64.7	8.6	2.5	93.2	0
Sudan	0	0.2	1.1	0.00	0.3	0.0	0.36	0.0	0	0.0	0.0	0.0	0	0.9	1.1	0.0	2.0	0
Tanzania, Uni Rep	0	162.5	12.6	0.65	2141.1	0.0	0.36	0.0	0	78.3	0.1	0.0	0	5.8	1.9	0.0	7.8	0
Togo	0	0.8	0.0	0.05	0.0	0.0	0.43	0.0	0	0.0	0.0	0.0	0	12.4	0.0	1.9	14.4	0
Tunisia	0	1370.7	71.6	1.16	157.2	2.2	0.39	0.0	0	354.7	1.6	0.0	0	7.1	0.0	0.7	9.3	0
Western Sahara	0	0.0	0.1	0.64	0.0	0.0	0.36	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	14632.5	605.4	27.54	15401.5	0.3*	0.36**	1671.1	0	3252.4	96.3	12.2	0	2408.9	405.6	42.9	2965.3	0

Table A-23. Case 4: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	2107.3	13.2	0.0	592.2	0	0.68	0.0	0	665.6	5.4	0.0	0	1.7	0.0	0.0	7.1	0
Angola	0	274.9	5.0	0.3	989.5	0	0.62	0.0	0	237.6	7.6	0.0	0	53.6	13.5	0.0	74.6	0
Benin	0	12.1	0.0	0.2	0.0	0	0.67	0.0	0	0.0	0.0	0.0	0	219.8	2.0	30.4	252.2	0
Cameroon	0	1697.3	1.0	0.8	2256.2	0	0.66	0.0	0	1627.4	101.6	0.0	0	422.8	187.6	0.0	712.0	0
Cape Verde	0	198.1	4.5	0.3	75.7	0	0.65	0.0	0	82.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	0	22.4	0.0	0.1	35.9	0	0.60	0.0	0	15.6	0.0	0.0	0	0.3	1.3	0.0	1.6	0
Congo	0	228.5	3.7	0.2	168.8	0	0.65	0.0	0	153.4	0.0	0.0	0	15.3	15.1	0.0	30.4	0
Congo, Dem Rep	0	1.3	0.6	0.0	2.3	0	0.64	0.0	0	0.4	1.5	0.0	0	8.8	2.8	0.0	13.0	0
Cote d'Ivoire	0	194.9	0.0	1.4	0.0	0	0.66	0.0	0	0.0	9.6	0.0	0	116.9	67.1	10.8	204.5	0
Djibouti	0	124.1	1.7	0.0	102.0	0	0.64	0.0	0	101.7	0.0	0.0	0	0.2	0.2	0.0	0.3	0
Egypt	0	15348.4	124.8	2.5	2866.7	0	0.74	2923.6	0	2376.1	1.3	0.0	0	32.3	3.1	2.4	39.2	0
Equatorial Guinea	0	1.0	0.0	0.2	0.0	0	0.66	0.0	0	0.0	7.3	0.0	0	25.6	4.9	0.2	38.0	0
Eritrea	0	8.6	9.5	0.2	10.2	0	0.64	0.0	0	2.9	0.0	0.0	0	5.0	0.8	0.0	5.8	0
Gabon	0	685.3	6.0	2.5	29.6	0	0.65	264.9	0	154.4	63.0	32.5	0	1386.5	331.9	7.3	1821.2	0
Gambia	0	100.6	8.6	0.2	122.3	0	0.65	0.0	0	49.6	1.3	0.0	0	87.8	28.0	1.7	118.9	0
Ghana	0	29.4	0.0	0.7	0.0	0	0.73	11.7	0	0.0	0.0	0.0	0	67.7	23.5	16.7	107.9	0
Guinea	0	22.6	0.9	2.0	12.2	0	0.65	0.0	0	8.2	0.0	0.0	0	118.4	99.1	0.0	217.6	0
Guinea-Bissau	0	118.2	11.1	2.2	216.7	0	0.65	0.0	0	65.7	0.2	0.0	0	45.2	36.3	1.3	83.0	0
Kenya	0	239.3	3.1	0.8	335.7	0	0.64	0.0	0	182.5	13.0	0.0	0	70.1	23.7	0.0	106.3	0
Liberia	0	12.2	0.0	0.6	0.0	0	0.66	0.0	0	0.0	4.0	0.0	0	27.6	12.5	0.0	44.1	0
Libyan Arab Jamahiriya	0	3169.5	125.3	1.7	123.4	0	0.72	0.0	0	363.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	0	116.3	20.7	2.5	179.7	0	0.61	0.0	0	65.8	0.0	0.0	0	14.9	11.7	0.0	26.7	0
Mauritania	0	24.5	2.6	1.2	25.2	0	0.71	0.0	0	13.1	0.0	0.0	0	179.8	0.7	4.7	185.2	0
Mauritius	0	69.3	0.0	0.1	0.0	0	0.60	0.0	0	0.3	0.0	0.0	0	524.3	0.0	0.0	524.3	0
Morocco	0	3192.0	9.6	0.9	2097.0	0	0.67	0.0	0	2123.3	6.5	0.0	0	35.8	0.0	1.5	43.8	0
Mozambique	0	575.7	61.5	4.1	5208.2	0	0.59	65.6	0	368.1	12.0	0.0	0	44.5	3.2	0.0	59.8	0
Namibia	0	2.5	3.4	0.6	1.0	0	0.58	0.0	0	1.1	0.0	0.0	0	183.8	0.0	0.0	183.8	0
Nigeria	0	354.7	5.3	3.4	260.8	0	0.78	0.0	0	84.8	1.0	0.0	0	1336.2	307.8	26.0	1671.0	0
Reunion	0	14.5	0.2	0.1	5.4	0	0.61	0.0	0	4.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	1.1	0.0	0.1	0.0	0	0.65	0.0	0	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Senegal	0	573.2	8.6	1.0	606.2	0	0.66	0.0	0	364.4	0.1	0.0	0	231.1	61.0	0.0	292.2	0
Seychelles	0	345.6	0.0	0.1	25.5	0	0.64	0.0	0	296.7	0.0	0.0	0	894.5	5.9	0.0	900.4	0
Sierra Leone	0	42.9	12.3	1.3	64.4	0	0.65	0.0	0	16.1	0.5	0.0	0	21.6	18.2	1.0	41.3	0
Somalia	0	81.0	10.0	2.0	121.8	0	0.67	0.0	0	37.0	6.5	0.0	0	26.0	2.4	0.0	35.0	0
South Africa	0	810.6	4.7	0.6	156.4	0	0.57	0.0	0	340.0	44.0	0.0	0	139.7	21.8	5.9	211.2	0
Sudan	0	1.1	1.5	0.0	0.7	0	0.65	0.0	0	0.3	0.0	0.0	0	4.6	3.7	0.0	8.2	0
Tanzania, Uni Rep	0	254.0	10.4	0.9	2439.7	0	0.66	0.0	0	228.7	0.2	0.0	0	15.3	5.1	0.0	20.6	0
Togo	0	3.4	0.0	0.1	0.0	0	0.78	0.0	0	0.0	0.0	0.0	0	32.5	0.0	5.5	38.0	0
Tunisia	0	2108.3	9.8	1.5	592.3	0	0.71	0.0	0	1212.0	2.4	0.0	0	3.6	0.0	0.9	6.8	0
Western Sahara	0	0.0	0.1	0.9	0.0	0	0.66	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	33166.6	479.7	38.3	19723.7	0*	0.66**	3265.8	0	11243.3	289.0	32.5	0	6394.4	1294.9	116.3	8126.6	0

Table A-24. Case 4: Results by country, for the AIFI high-range SLR and AIFI socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	5238.0	21.7	0.0	708.1	0	1.06	0.0	0	1454.8	5.7	0.0	0	0.5	0.0	0.0	6.2	0
Angola	0	504.1	5.9	0.4	884.5	0	0.97	0.0	0	429.8	11.6	0.0	0	49.8	19.1	0.0	80.5	0
Benin	0	31.0	0.0	0.2	0.0	0	1.04	0.0	0	0.0	0.0	0.0	0	367.2	4.0	56.0	427.3	0
Cameroon	0	3876.2	1.3	1.2	1968.9	0	1.03	0.0	0	3684.8	220.3	0.0	0	869.2	395.7	0.0	1485.2	0
Cape Verde	0	248.4	0.6	0.3	68.5	0	1.01	0.0	0	201.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Comoros	0	49.6	0.0	0.2	31.3	0	0.94	0.0	0	35.2	0.0	0.0	0	0.1	1.6	0.0	1.7	0
Congo	0	575.3	4.3	0.3	159.6	0	1.01	0.0	0	381.1	0.0	0.0	0	14.0	28.0	0.0	42.0	0
Congo, Dem Rep	0	3.7	0.7	0.0	3.1	0	1.00	0.0	0	1.3	2.8	0.0	0	8.2	5.2	0.0	16.1	0
Cote d'Ivoire	0	503.6	0.0	1.6	0.0	0	1.02	0.0	0	0.0	20.1	0.0	0	292.1	136.5	19.5	468.3	0
Djibouti	0	295.4	2.0	0.0	92.4	0	0.99	0.0	0	237.4	0.0	0.0	0	0.5	0.3	0.0	0.8	0
Egypt	0	12476.3	43.6	2.9	3600.7	0	1.14	0.0	0	5362.4	1.5	0.0	0	24.6	4.7	1.9	32.6	0
Equatorial Guinea	0	2.6	0.0	0.3	0.0	0	1.02	0.0	0	0.0	16.2	0.0	0	48.5	10.9	0.4	76.0	0
Eritrea	0	28.9	11.7	0.2	13.6	0	0.99	0.0	0	10.1	0.0	0.0	0	7.0	1.6	0.0	8.6	0
Gabon	0	1506.3	7.5	3.1	26.7	0	1.01	441.6	0	364.5	137.4	57.1	0	2684.1	719.0	21.5	3619.2	0
Gambia	0	230.8	6.9	0.3	124.3	0	1.01	0.0	0	131.3	2.8	0.0	0	178.3	60.1	3.4	244.6	0
Ghana	0	69.5	0.0	0.9	0.0	0	1.12	20.2	0	0.0	0.0	0.0	0	166.1	47.7	30.1	243.9	0
Guinea	0	59.5	1.0	2.6	11.4	0	1.02	0.0	0	19.7	0.0	0.0	0	325.0	203.3	0.0	528.3	0
Guinea-Bissau	0	297.5	12.5	2.8	215.1	0	1.01	0.0	0	167.2	0.4	0.0	0	121.5	77.9	2.6	202.4	0
Kenya	0	593.2	3.0	0.9	303.7	0	1.00	0.0	0	443.3	30.4	0.0	0	163.1	57.3	0.0	250.9	0
Liberia	0	31.4	0.0	0.8	0.0	0	1.03	0.0	0	0.0	8.3	0.0	0	58.4	25.4	0.0	92.1	0
Libyan Arab Jamahiriya	0	1325.0	12.8	1.9	131.2	0	1.11	0.0	0	745.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Madagascar	0	312.1	24.8	2.9	178.8	0	0.95	0.0	0	175.3	0.0	0.0	0	37.1	28.5	0.0	65.5	0
Mauritania	0	82.2	4.1	1.5	27.1	0	1.09	0.0	0	39.2	0.0	0.0	0	328.0	1.6	9.4	339.0	0
Mauritius	0	210.7	0.1	0.1	0.3	0	0.94	0.0	0	4.2	0.0	0.0	0	773.3	0.0	0	773.3	0
Morocco	0	5886.5	4.8	1.1	2078.9	0	1.04	0.0	0	4001.3	10.7	0.0	0	44.7	0.0	2.2	57.6	0
Mozambique	0	945.3	59.9	5.0	4886.4	0	0.92	96.7	0	664.6	21.7	0.0	0	69.2	5.5	0.0	96.4	0
Namibia	0	5.1	4.0	0.7	1.0	0	0.91	0.0	0	2.4	0.0	0.0	0	238.2	0.0	0.0	238.2	0
Nigeria	0	929.8	6.3	4.1	263.5	0	1.18	0.0	0	224.1	1.9	0.0	0	2395.1	615.2	46.9	3059.1	0
Reunion	0	18.0	0.1	0.1	5.0	0	0.94	0.0	0	8.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	2.8	0.0	0.1	0.0	0	1.02	0.0	0	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Senegal	0	1484.1	11.1	1.3	584.6	0	1.02	0.0	0	922.7	0.3	0.0	0	467.6	130.1	0.0	598.0	0
Seychelles	0	650.9	0.0	0.1	20.1	0	0.99	0.0	0	576.6	0.0	0.0	0	982.0	11.1	0.0	993.1	0
Sierra Leone	0	113.4	13.3	1.7	72.5	0	1.02	0.0	0	46.5	1.0	0.0	0	25.6	33.9	1.5	62.0	0
Somalia	0	210.5	11.8	2.3	116.0	0	1.03	0.0	0	95.3	15.1	0.0	0	46.6	5.4	0.0	67.1	0
South Africa	0	1559.6	6.1	0.8	189.1	0	0.89	0.0	0	733.5	71.3	0.0	0	194.3	35.5	8.8	309.9	0
Sudan	0	3.2	1.8	0.0	1.0	0	1.01	0.0	0	1.1	0.0	0.0	0	5.1	7.3	0.0	12.4	0
Tanzania, Uni Rep	0	449.9	10.2	1.0	2162.3	0	1.02	0.0	0	401.2	0.3	0.0	0	26.5	9.0	0.0	35.7	0
Togo	0	8.8	0.0	0.1	0.0	0	1.19	0.0	0	0.0	0.0	0.0	0	55.7	0.0	10.2	66.0	0
Tunisia	0	4541.0	17.8	1.7	802.8	0	1.09	0.0	0	2375.0	2.3	0.0	0	1.1	0.0	0.7	4.0	0
Western Sahara	0	0.0	0.1	1.0	0.0	0	1.02	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	45360.5	311.8	46.5	19732.5	0*	1.02**	558.5	0	23940.7	582.1	57.1	0	11068.9	2681.4	215.1	14604.6	0

Table A-25. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	6.9	3.0	0	0.00	1.2	139	0.01	0.0	6.9	3.0	0.4	0.0	0	2.0	0.0	0.2	2.6	0
Angola	49.3	4.5	0	0.00	5.2	8	0.01	2.2	49.0	2.3	0.2	0.0	0	2.5	0.5	0.0	3.2	0
Benin	1.5	0.0	0	0.02	0.0	23	0.01	0.0	0.0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.5	0
Cameroon	4.7	8.4	0	0.01	10.4	19	0.01	0.0	3.5	8.4	1.4	0.0	0	5.9	2.7	0.0	9.9	0
Cape Verde	6.0	0.3	0	0.04	0.3	53	0.01	0.0	4.1	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	2.3	0.1	0	0.01	0.3	15	0.01	0.0	1.5	0.1	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Congo	2.7	0.7	0	0.03	0.7	38	0.01	0.0	2.0	0.6	0.0	0.0	0	0.0	0.2	0.0	0.3	0
Congo, Dem Rep	0.8	0.0	0	0.00	0.1	4	0.01	0.0	0.8	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	10.0	0.2	0	0.16	0.0	42	0.01	0.0	0.0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	1.8	0.5	0	0.00	0.5	11	0.01	0.0	1.8	0.5	0.0	0.0	0	6.7	0.0	0.0	0.0	0
Egypt	28.5	234.0	0	0.42	14.9	29	0.01	220.4	14.5	12.0	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	2.0	0.0	0	0.03	0.0	8	0.01	0.0	0.0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	18.5	0.0	0	0.02	0.8	3	0.01	0.0	17.6	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	68.4	19.1	0	0.23	1.3	32	0.01	18.1	57.0	0.8	0.9	0.7	0	25.5	4.7	0.0	31.7	0
Gambia	3.6	0.2	0	0.00	3.1	13	0.01	0.0	3.4	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	9.4	0.8	0	0.15	0.0	23	0.01	0.7	0.0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	7.4	0.1	0	0.06	0.5	9	0.01	0.0	2.6	0.1	0.0	0.0	0	0.5	1.4	0.0	2.0	0
Guinea-Bissau	26.5	0.3	0	0.15	6.1	3	0.01	0.0	16.4	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	13.2	0.8	0	0.09	4.3	7	0.01	0.0	9.1	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	4.7	0.0	0	0.08	0.0	15	0.01	0.0	0.0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	35.2	1.8	0	0.21	0.4	121	0.01	0.0	29.0	1.5	0.0	0.0	0	3.4	0.0	0.5	4.0	0
Madagascar	245.3	0.3	0	0.37	14.0	4	0.01	0.0	216.3	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	13.7	0.1	0	0.12	0.1	4	0.01	0.0	5.0	0.0	0.0	0.0	0	3.6	0.0	0.1	3.7	0
Mauritius	0.7	0.1	0	0.01	0.0	298	0.01	0.0	0.0	0.0	0.0	0.0	0	11.5	0.0	0.0	11.5	0
Morocco	23.1	12.1	0	0.11	2.8	60	0.01	0.0	17.3	11.6	0.2	0.0	0	1.9	0.0	0.1	2.1	0
Mozambique	199.5	11.1	0	0.38	174.3	2	0.01	6.4	177.0	4.6	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	4.6	0.0	0	0.06	0.1	3	0.01	0.0	2.6	0.0	0.0	0.0	0	8.7	0.0	0.0	8.7	0
Nigeria	44.6	0.7	0	0.49	9.2	17	0.02	0.0	8.5	0.4	0.0	0.0	0	28.4	4.9	0.5	33.8	0
Reunion	1.1	0.1	0	0.01	0.0	197	0.01	0.0	0.6	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0.7	0.0	0	0.01	0.0	15	0.01	0.0	0.0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	13.5	1.5	0	0.07	2.9	25	0.01	0.0	8.4	1.5	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	1.0	1.1	0	0.01	0.0	232	0.01	0.0	0.5	1.1	0.0	0.0	0	22.8	0.1	0.0	22.9	0
Sierra Leone	10.2	0.1	0	0.07	2.4	6	0.01	0.0	5.6	0.1	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Somalia	286.7	0.2	0	0.34	5.0	3	0.01	0.0	271.5	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	53.1	1.8	0	0.04	0.2	104	0.01	0.0	48.3	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	2.9	0.0	0	0.00	0.0	5	0.01	0.0	2.9	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	15.3	3.2	0	0.11	99.0	4	0.01	0.0	8.7	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Togo	1.0	0.0	0	0.01	0.0	24	0.01	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	36.8	7.1	0	0.16	1.1	119	0.01	0.0	31.6	6.9	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	9.8	0.0	0	0.10	0.0	0	0.01	0.0	3.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1259.6	313.9	0	4.18	361.2	39*	0.01**	247.8	1027.4	62.5	5.5	0.7	0	155.8	19.7	3.0	178.1	0

Table A-26. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	14.8	13.4	0.0	0.00	0.6	492	0.08	0.0	14.8	13.4	1.6	0.0	0	6.5	0.0	0.7	8.8	0
Angola	28.2	14.8	0.0	0.01	7.7	25	0.07	4.8	23.2	10.1	0.8	0.0	0	7.7	1.5	0.0	10.0	0
Benin	2.7	0.0	0.0	-0.01	0.0	85	0.08	0.0	0.0	0.0	0.0	0.0	0	16.4	0.1	2.0	18.6	0
Cameroon	25.9	41.5	0.0	0.02	13.0	72	0.08	0.0	10.4	41.5	5.8	0.0	0	24.6	11.1	0.0	41.5	0
Cape Verde	13.9	1.0	0.0	-0.02	0.1	202	0.07	0.0	10.5	1.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Comoros	6.3	0.4	0.0	-0.01	0.3	54	0.06	0.0	4.9	0.4	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Congo	7.8	3.6	0.0	-0.01	1.3	142	0.07	0.0	6.4	3.6	0.0	0.0	0	0.3	1.0	0.0	1.3	0
Congo, Dem Rep	2.6	0.0	0.0	0.00	0.2	17	0.07	0.0	2.6	0.0	0.1	0.0	0	0.8	0.2	0.0	1.1	0
Cote d'Ivoire	17.7	0.0	0.0	-0.08	0.0	158	0.07	0.0	0.0	0.0	0.6	0.0	0	4.4	4.1	0.7	9.8	0
Djibouti	4.0	2.7	0.0	0.00	0.8	45	0.07	0.0	4.0	2.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	111.1	600.0	0.2	-0.09	4.0	103	0.10	549.6	73.2	49.7	0.2	0.0	0	23.3	0.3	0.8	24.6	0
Equatorial Guinea	3.6	0.0	0.0	-0.01	0.0	36	0.07	0.0	0.0	0.0	0.4	0.0	0	1.9	0.3	0.0	2.6	0
Eritrea	15.1	0.0	0.0	-0.01	0.5	14	0.07	0.0	13.7	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	71.2	49.1	0.0	-0.10	0.4	151	0.07	45.0	46.8	4.1	3.6	2.6	0	100.2	19.5	0.1	126.0	0
Gambia	14.6	0.9	0.0	0.00	1.1	50	0.07	0.0	10.8	0.9	0.1	0.0	0	5.7	1.6	0.1	7.5	0
Ghana	13.5	1.9	0.0	-0.04	0.0	83	0.10	1.8	0.0	0.0	0.0	0.0	0	2.4	1.5	1.2	5.0	0
Guinea	42.2	0.2	0.0	0.01	0.1	39	0.07	0.0	7.4	0.2	0.0	0.0	0	3.2	6.0	0.0	9.1	0
Guinea-Bissau	75.6	1.7	0.0	-0.05	7.3	14	0.07	0.0	45.5	1.7	0.0	0.0	0	1.4	2.1	0.1	3.6	0
Kenya	36.2	4.2	0.0	-0.04	2.6	33	0.07	0.0	28.8	4.2	0.6	0.0	0	3.8	1.2	0.0	5.5	0
Liberia	8.3	0.0	0.0	-0.04	0.0	57	0.08	0.0	0.0	0.0	0.2	0.0	0	1.6	0.8	0.0	2.6	0
Libyan Arab Jamahiriya	88.0	5.2	3.9	-0.07	0.6	460	0.09	0.0	75.0	5.1	0.0	0.0	0	11.7	0.0	1.9	13.6	0
Madagascar	118.6	1.4	0.0	-0.14	4.1	19	0.07	0.0	74.8	1.4	0.0	0.0	0	0.6	0.6	0.0	1.2	0
Mauritania	34.5	0.3	0.0	-0.04	0.2	18	0.10	0.0	10.8	0.3	0.0	0.0	0	13.9	0.0	0.3	14.3	0
Mauritius	1.2	0.0	0.0	0.00	0.0	1180	0.07	0.0	0.0	0.0	0.0	0.0	0	46.7	0.0	0.0	46.7	0
Morocco	47.5	53.9	0.0	-0.05	1.7	223	0.08	0.0	37.0	54.0	0.6	0.0	0	6.4	0.0	0.2	7.2	0
Mozambique	160.9	31.9	0.0	-0.17	141.9	6	0.06	14.1	114.4	17.8	1.1	0.0	0	5.3	0.3	0.0	6.7	0
Namibia	99.6	0.0	0.7	-0.03	0.2	11	0.06	0.0	95.6	0.0	0.0	0.0	0	25.9	0.0	0.0	25.9	0
Nigeria	89.8	1.8	0.0	-0.11	1.9	62	0.12	0.0	18.7	1.8	0.1	0.0	0	112.7	20.5	1.8	135.1	0
Reunion	2.1	0.2	0.0	0.00	0.0	604	0.07	0.0	1.2	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	1.2	0.0	0.0	-0.00	0.0	58	0.07	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	41.0	6.2	0.0	-0.02	1.8	93	0.07	0.0	27.6	6.1	0.0	0.0	0	15.4	3.6	0.0	19.0	0
Seychelles	2.1	0.0	0.0	0.00	0.0	1163	0.07	0.0	1.2	0.0	0.0	0.0	0	116.4	0.4	0.0	116.8	0
Sierra Leone	32.4	0.3	0.0	-0.02	1.0	24	0.07	0.0	15.9	0.3	0.0	0.0	0	0.5	1.2	0.1	1.8	0
Somalia	137.4	1.0	0.0	-0.12	7.4	13	0.08	0.0	114.2	1.0	0.3	0.0	0	1.8	0.1	0.0	2.3	0
South Africa	128.1	7.3	0.1	-0.02	0.2	319	0.06	0.0	115.5	7.3	4.5	0.0	0	18.8	2.2	0.8	26.1	0
Sudan	67.2	0.0	0.3	0.00	0.1	21	0.08	0.0	67.2	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	35.4	11.2	0.0	-0.05	58.8	12	0.08	0.0	23.9	11.2	0.0	0.0	0	1.5	0.5	0.0	2.0	0
Togo	1.5	0.0	0.0	0.00	0.0	87	0.11	0.0	0.0	0.0	0.0	0.0	0	3.0	0.0	0.4	3.4	0
Tunisia	90.2	33.1	0.0	-0.04	0.7	435	0.09	0.0	68.4	33.0	0.4	0.0	0	5.0	0.0	0.3	5.7	0
Western Sahara	18.4	0.0	0.0	-0.05	0.0	0	0.08	0.0	7.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1663.7	889.2	5.2	-1.4	260.6	142*	0.08**	615.3	1171.6	273.1	21.0	2.6	0	591.1	81.1	11.5	707.1	0

Table A-27. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	17.2	19.1	0.0	0.00	0.6	655	0.10	0.0	17.2	19.1	2.1	0.0	0	8.2	0.0	0.9	11.2	0
Angola	32.9	19.7	0.0	0.01	8.2	33	0.09	5.7	26.7	14.1	1.0	0.0	0	10.2	2.0	0.0	13.2	0
Benin	3.6	0.0	0.0	0.01	0.0	117	0.10	0.0	0.0	0.0	0.0	0.0	0	23.1	0.2	2.8	26.1	0
Cameroon	31.2	45.4	0.0	0.02	4.6	100	0.10	0.0	12.0	45.4	8.2	0.0	0	34.7	15.7	0.0	58.6	0
Cape Verde	16.9	1.4	0.0	0.02	0.1	280	0.09	0.0	12.4	1.4	0.0	0.0	0	0.5	0.0	0.0	0.5	0
Comoros	7.8	0.6	0.0	0.01	0.3	74	0.08	0.0	5.8	0.6	0.0	0.0	0	0.2	0.3	0.0	0.4	0
Congo	9.3	3.3	0.0	0.01	0.1	197	0.09	0.0	7.4	3.3	0.0	0.0	0	0.5	1.4	0.0	1.9	0
Congo, Dem Rep	3.0	0.0	0.0	0.00	0.0	23	0.09	0.0	3.0	0.0	0.1	0.0	0	1.1	0.2	0.0	1.5	0
Cote d'Ivoire	23.9	0.7	0.0	0.07	0.0	218	0.09	0.0	0.0	0.0	0.8	0.0	0	6.4	5.7	1.0	14.0	0
Djibouti	4.6	2.4	0.0	0.00	0.1	63	0.09	0.0	4.6	2.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	77.3	740.3	0.0	0.07	4.3	137	0.13	667.3	32.5	71.6	0.3	0.0	0	29.5	0.4	1.0	31.2	0
Equatorial Guinea	4.8	0.0	0.0	0.01	0.0	51	0.09	0.0	0.0	0.0	0.6	0.0	0	2.6	0.4	0.0	3.6	0
Eritrea	17.1	0.1	0.0	0.01	0.4	20	0.09	0.0	15.1	0.1	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Gabon	85.0	61.7	0.0	0.11	0.2	215	0.09	55.1	52.8	5.7	5.1	3.6	0	139.5	27.4	0.2	175.7	0
Gambia	17.2	1.2	0.0	0.00	0.8	69	0.09	0.0	12.4	1.2	0.1	0.0	0	8.0	2.3	0.2	10.5	0
Ghana	16.6	2.3	0.0	0.03	0.0	114	0.13	2.3	0.0	0.0	0.0	0.0	0	3.4	2.1	1.7	7.2	0
Guinea	50.9	0.3	0.0	0.05	0.1	54	0.09	0.0	8.4	0.3	0.0	0.0	0	4.7	8.4	0.0	13.2	0
Guinea-Bissau	90.7	2.5	0.0	0.08	7.4	19	0.09	0.0	52.0	2.5	0.0	0.0	0	2.1	3.0	0.1	5.2	0
Kenya	42.1	6.3	0.0	0.04	2.8	46	0.09	0.0	32.1	6.2	0.9	0.0	0	5.4	1.7	0.0	7.9	0
Liberia	11.1	0.0	0.0	0.03	0.0	80	0.09	0.0	0.0	0.0	0.3	0.0	0	2.3	1.1	0.0	3.7	0
Libyan Arab Jamahiriya	75.5	7.9	0.0	0.07	0.2	617	0.11	0.0	59.2	7.2	0.0	0.0	0	14.6	0.0	2.4	17.1	0
Madagascar	139.5	2.1	0.0	0.11	3.8	26	0.09	0.0	83.7	2.1	0.0	0.0	0	0.9	0.8	0.0	1.7	0
Mauritania	42.1	0.4	0.0	0.05	0.2	26	0.12	0.0	12.3	0.4	0.0	0.0	0	19.3	0.1	0.4	19.8	0
Mauritius	1.7	0.2	0.0	0.00	0.0	1650	0.08	0.0	0.0	0.0	0.0	0.0	0	65.4	0.0	0.0	65.4	0
Morocco	56.8	77.2	0.0	0.05	1.8	299	0.09	0.0	42.6	75.8	0.9	0.0	0	8.5	0.0	0.2	9.6	0
Mozambique	190.4	41.6	0.0	0.19	146.6	8	0.08	16.8	128.5	24.6	1.5	0.0	0	7.0	0.4	0.0	9.0	0
Namibia	490.0	0.1	1.0	0.03	0.2	15	0.08	0.0	484.5	0.1	0	0.0	0	34.2	0.0	0.0	34.2	0
Nigeria	107.1	3.2	0.0	0.10	2.1	85	0.15	0.0	21.2	2.6	0.1	0.0	0	154.7	28.8	2.6	186.1	0
Reunion	2.6	0.2	0.0	0.00	0.0	776	0.08	0.0	1.5	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	1.6	0.0	0.0	0.00	0.0	80	0.09	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	48.9	8.9	0.0	0.04	1.8	129	0.09	0.0	31.7	8.8	0.0	0.0	0	21.5	5.1	0.0	26.5	0
Seychelles	2.6	0.1	0.0	0.00	0.0	1653	0.09	0.0	1.3	0.0	0.0	0.0	0	164.6	0.6	0.0	165.2	0
Sierra Leone	39.4	0.4	0.0	0.04	0.6	33	0.09	0.0	18.3	0.4	0.0	0.0	0	0.8	1.7	0.1	2.7	0
Somalia	159.0	1.3	0.0	0.09	1.7	18	0.10	0.0	129.6	1.2	0.5	0.0	0	2.6	0.2	0.0	3.2	0
South Africa	147.5	10.4	0.1	0.03	0.2	422	0.08	0.0	130.7	10.2	6.0	0.0	0	24.7	2.9	0.9	34.5	0
Sudan	85.4	0.0	0.4	0.00	0.1	30	0.10	0.0	85.4	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	43.1	14.8	0.0	0.05	38.5	16	0.10	0.0	27.7	14.8	0.0	0.0	0	2.0	0.6	0.0	2.7	0
Togo	1.9	0.0	0.0	0.00	0.0	119	0.14	0.0	0.0	0.0	0.0	0.0	0	4.1	0.0	0.6	4.7	0
Tunisia	102.0	47.0	0.0	0.06	0.8	582	0.11	0.0	76.0	46.8	0.6	0.0	0	6.2	0.0	0.4	7.2	0
Western Sahara	25.2	0.0	0.0	0.05	0.0	1	0.09	0.0	10.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	2317.7	1123.5	1.5	1.54	228.6	192*	0.10**	747.2	1638.8	369.2	29.1	3.6	0	814.4	113.9	15.5	976.5	0

Table A-28. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	18.8	19.1	0.0	0.000	0.4	1965	0.19	0.0	18.8	35.6	6.5	0.0	0	16.9	0.0	2.3	25.7	0
Angola	39.3	41.8	0.0	0.004	1.2	100	0.16	10.8	27.7	30.1	3.1	0.0	0	29.7	6.0	0.0	38.8	0
Benin	4.7	0.1	0.0	0.002	0.0	408	0.18	0.0	0.0	0.0	0.0	0.0	0	84.5	0.6	10.6	95.7	0
Cameroon	48.3	173.7	0.0	0.011	2.2	361	0.18	0.0	12.7	165.7	31.0	0.0	0	130.8	58.8	0.0	220.6	0
Cape Verde	19.2	4.7	0.0	0.003	0.1	983	0.18	0.0	13.4	6.0	0.0	0.0	0	1.1	0.0	0.0	1.1	0
Comoros	8.9	1.8	0.0	0.001	0.1	265	0.16	0.0	6.3	1.7	0.0	0.0	0	0.9	0.9	0.0	1.8	0
Congo	10.4	14.6	0.0	0.002	0.2	697	0.17	0.0	7.9	13.9	0.0	0.0	0	2.8	5.2	0.0	8.0	0
Congo, Dem Rep	3.1	0.0	0.0	0.000	0.0	84	0.17	0.0	3.1	0.0	0.5	0.0	0	4.1	0.9	0.0	5.5	0
Cote d'Ivoire	30.8	0.9	0.0	0.014	0.0	767	0.18	0.0	0.0	0.0	3.0	0.0	0	27.1	21.6	3.8	55.4	0
Djibouti	4.8	10.3	0.0	0.000	0.1	232	0.17	0.0	4.8	9.9	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	97.0	1589.7	0.0	-0.023	5.3	413	0.23	1383.6	37.9	280.4	0.9	0.0	0	69.7	1.4	2.8	74.8	0
Equatorial Guinea	6.2	0.0	0.0	0.002	0.0	186	0.18	0.0	0.0	0.0	2.2	0.0	0	9.3	1.5	0.1	13.0	0
Eritrea	18.2	0.3	0.0	0.002	0.2	77	0.18	0.0	15.8	0.3	0.0	0.0	0	1.9	0.2	0.0	2.1	0
Gabon	98.3	136.5	0.0	0.027	0.1	825	0.17	118.1	53.8	15.9	19.2	12.4	0	493.3	102.4	1.1	628.4	0
Gambia	22.4	4.5	0.0	0.003	0.4	247	0.18	0.0	13.2	4.3	0.4	0.0	0	29.2	8.6	0.6	38.8	0
Ghana	20.1	5.1	0.0	0.000	0.0	396	0.23	5.0	0.0	0.0	0.0	0.0	0	15.1	7.7	6.1	28.9	0
Guinea	78.7	1.0	0.0	0.017	0.1	198	0.18	0.0	8.8	1.3	0.0	0.0	0	22.1	31.7	0.0	53.8	0
Guinea-Bissau	112.2	8.7	0.0	0.023	1.5	71	0.18	0.0	53.6	7.8	0.1	0.0	0	9.4	11.3	0.5	21.1	0
Kenya	46.6	18.9	0.0	0.008	0.7	179	0.17	0.0	32.9	17.7	3.5	0.0	0	20.8	6.6	0.0	30.9	0
Liberia	14.3	0.0	0.0	0.006	0.0	284	0.18	0.0	0.0	0.0	1.2	0.0	0	8.8	4.0	0.0	14.0	0
Libyan Arab Jamahiriya	78.8	2.2	0.0	0.002	0.0	1892	0.21	0.0	57.9	1.6	0.0	0.0	0	32.4	0.0	6.4	38.8	0
Madagascar	156.0	8.4	0.0	0.013	1.5	103	0.17	0.0	86.4	7.8	0.0	0.0	0	3.9	3.3	0.0	7.2	0
Mauritania	55.7	1.4	0.0	0.008	0.0	98	0.22	0.0	12.9	1.1	0.0	0.0	0	66.6	0.2	1.6	68.4	0
Mauritius	2.2	0.3	0.0	0.000	0.0	6080	0.16	0.0	0.0	0.0	0.0	0.0	0	236.1	0.0	0.0	236.1	0
Morocco	64.6	126.7	0.0	0.009	0.6	919	0.18	0.0	46.0	51.2	2.8	0.0	0	23.7	0.0	0.7	27.2	0
Mozambique	213.6	104.5	0.0	0.042	65.4	25	0.15	32.7	131.1	77.2	4.6	0.0	0	20.3	1.2	0.0	26.1	0
Namibia	55.2	0.2	0.8	0.006	0.1	48	0.15	0.0	47.5	0.2	0.0	0.0	0	98.4	0.0	0.0	98.4	0
Nigeria	135.6	9.4	0.0	-0.004	2.3	297	0.26	0.0	22.8	11.1	0.3	0.0	0	527.3	104.4	9.4	641.5	0
Reunion	3.1	0.3	0.0	0.001	0.0	19456	0.16	0.0	1.6	0.6	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	2.1	0.0	0.0	0.001	0.0	283	0.18	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.0	0.7	0
Senegal	58.2	21.0	0.0	0.010	0.6	457	0.18	0.0	33.6	32.0	0.0	0.0	0	77.3	19.0	0.0	96.3	0
Seychelles	2.5	0.2	0.0	0.001	0.0	4470	0.17	0.0	0.7	0.0	0.0	0.0	0	538.3	2.1	0.0	540.4	0
Sierra Leone	52.7	1.9	0.0	0.014	0.8	120	0.18	0.0	19.4	1.8	0.2	0.0	0	4.2	6.3	0.4	11.1	0
Somalia	171.3	5.2	0.0	0.007	1.1	73	0.19	0.0	134.9	4.8	1.8	0.0	0	9.6	0.7	0.0	12.2	0
South Africa	159.4	4.7	0.2	0.008	0.1	1249	0.15	0.0	131.5	6.7	18.3	0.0	0	69.6	8.8	2.6	99.4	0
Sudan	13.7	0.0	0.0	0.000	0.0	115	0.18	0.0	13.7	0.0	0.0	0.0	0	0.7	1.2	0.0	1.8	0
Tanzania, Uni Rep	49.0	48.5	0.0	0.008	22.3	47	0.18	0.0	28.8	46.4	0.1	0.0	0	6.1	2.0	0.0	8.1	0
Togo	2.3	0.0	0.0	0.000	0.0	413	0.24	0.0	0.0	0.0	0.0	0.0	0	13.6	0.0	2.1	15.7	0
Tunisia	114.0	22.7	0.0	-0.001	0.2	1778	0.20	0.0	78.4	14.1	1.8	0.0	0	14.7	0.0	1.0	17.6	0
Western Sahara	21.3	0.0	0.0	0.000	0.0	2	0.18	0.0	2.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1954.2	2389.3	1.0	0.227	107.6	697*	0.18**	1550.2	1160.0	847.4	101.5	12.4	0	2721.1	418.7	52.1	3305.6	0

Table A-29. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	17.8	0.0	0.0	0.000	0.1	4558	0.32	0.0	17.8	0.0	13.8	0.0	0	19.4	0.0	3.7	36.9	0
Angola	45.3	85.2	0.0	-0.002	1.1	265	0.28	0.0	26.5	85.2	8.4	0.0	0	74.6	15.8	0.0	98.8	0
Benin	5.5	0.1	0.0	0.001	0.0	1370	0.31	0.0	0.0	0.0	0.0	0.0	0	274.9	2.2	35.8	312.9	0
Cameroon	70.1	104.6	0.0	-0.004	0.6	1238	0.31	0.0	12.3	104.6	108.4	0.0	0	455.4	204.0	0.0	767.8	0
Cape Verde	20.4	1.3	0.0	0.002	0.0	3262	0.30	0.0	13.6	1.3	0.0	0.0	0	1.5	0.0	0.0	1.5	0
Comoros	9.5	5.6	0.0	0.001	0.0	916	0.27	0.0	6.4	5.6	0.0	0.0	0	4.1	2.6	0.0	6.6	0
Congo	10.8	0.1	0.0	0.002	0.0	2360	0.30	0.0	7.9	0.0	0.0	0.0	0	14.4	17.8	0.0	32.3	0
Congo, Dem Rep	3.0	0.1	0.0	0.000	0.0	285	0.29	0.0	3.0	0.1	1.7	0.0	0	12.8	3.2	0.0	17.6	0
Cote d'Ivoire	36.1	1.6	0.0	0.012	0.0	2567	0.30	0.0	0.0	0.0	10.5	0.0	0	108.2	75.1	12.7	206.6	0
Djibouti	4.7	0.3	0.0	0.000	0.0	807	0.29	0.0	4.7	0.3	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Egypt	107.6	2504.4	0.0	-0.048	0.4	959	0.38	2496.5	32.7	7.9	2.0	0.0	0	92.6	3.3	4.9	102.8	0
Equatorial Guinea	7.3	0.0	0.0	0.002	0.0	634	0.31	0.0	0.0	0.0	7.7	0.0	0	30.5	5.1	0.2	43.5	0
Eritrea	18.0	1.0	0.0	0.001	0.1	277	0.30	0.0	14.8	1.0	0.0	0.0	0	6.4	0.8	0.0	7.2	0
Gabon	108.3	293.3	0.0	0.016	0.0	2563	0.30	240.6	50.8	50.7	67.3	39.1	0	1602.6	355.9	5.8	2070.6	0
Gambia	28.1	10.3	0.0	-0.001	0.1	843	0.30	0.0	12.8	10.3	1.4	0.0	0	97.8	30.1	1.9	131.2	0
Ghana	22.8	10.4	0.0	-0.001	0.0	1321	0.38	10.4	0.0	0.0	0.0	0.0	0	62.3	26.0	20.3	108.7	0
Guinea	109.6	2.9	0.0	-0.019	0.0	687	0.30	0.0	8.3	2.9	0.0	0.0	0	98.0	110.3	0.0	208.3	0
Guinea-Bissau	133.4	23.1	0.0	0.002	0.5	247	0.30	0.0	52.0	23.1	0.2	0.0	0	40.3	39.1	1.5	81.1	0
Kenya	49.6	20.2	0.0	0.007	0.1	659	0.29	0.0	30.6	20.1	12.9	0.0	0	73.4	24.4	0.0	110.8	0
Liberia	16.8	0.1	0.0	0.005	0.0	950	0.31	0.0	0.0	0.0	4.4	0.0	0	30.7	14.1	0.0	49.1	0
Libyan Arab Jamahiriya	72.3	3.7	0.0	-0.011	0.0	4036	0.35	0.0	47.9	3.3	0.0	0.0	0	34.9	0.0	10.8	45.6	0
Madagascar	164.1	24.5	0.0	0.009	0.5	374	0.28	0.0	81.9	24.5	0.0	0.0	0	16.4	12.1	0.0	28.5	0
Mauritania	79.3	4.2	0.0	-0.002	0.0	337	0.36	0.0	22.8	4.2	0.0	0.0	0	211.1	0.7	5.3	217.2	0
Mauritius	2.6	0.7	0.0	0.001	0.0	7941	0.27	0.0	0.0	0.0	0.0	0.0	0	776.4	0.0	0.0	776.4	0
Morocco	64.1	6.9	0.0	0.008	0.2	2189	0.31	0.0	41.5	5.0	6.9	0.0	0	48.4	0.0	1.7	57.0	0
Mozambique	217.3	214.2	0.0	0.022	21.0	68	0.27	59.0	117.0	155.0	12.5	0.0	0	48.6	3.3	0.0	64.3	0
Namibia	45.7	0.5	0.9	0.005	0.2	131	0.26	0.0	35.6	0.5	0.0	0.0	0	239.0	0.0	0.0	239.0	0
Nigeria	160.5	28.1	0.0	-0.038	0.3	994	0.42	0.0	22.7	27.5	1.2	0.0	0	1651.1	349.1	31.5	2032.9	0
Reunion	4.2	0.0	0.0	0.001	0.0	3729	0.28	0.0	1.6	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	2.4	0.0	0.0	0.001	0.0	959	0.30	0.0	0.0	0.0	0.0	0.0	0	1.6	0.0	0.0	1.6	0
Senegal	66.2	30.0	0.0	0.000	0.2	1553	0.30	0.0	32.2	30.0	0.1	0.0	0	257.3	65.7	0.0	323.1	0
Seychelles	2.9	0.0	0.0	0.000	0.0	4470	0.29	0.0	1.0	0.0	0.0	0.0	0	1340.5	6.4	0.0	1346.8	0
Sierra Leone	66.6	4.7	0.0	-0.003	0.1	411	0.30	0.0	19.1	4.7	0.6	0.0	0	20.5	21.5	1.3	43.9	0
Somalia	173.1	12.9	0.0	0.004	0.2	266	0.32	0.0	131.3	12.7	6.9	0.0	0	31.8	2.6	0.0	41.3	0
South Africa	161.8	0.7	0.0	0.003	0.0	3317	0.25	0.0	122.2	0.7	49.0	0.0	0	170.9	23.5	6.8	250.1	0
Sudan	12.8	0.1	0.0	0.000	0.0	413	0.31	0.0	12.8	0.1	0.0	0.0	0	3.5	4.2	0.0	7.7	0
Tanzania, Uni Rep	59.1	103.5	0.0	0.007	11.5	126	0.31	0.0	27.3	103.5	0.2	0.0	0	16.0	5.2	0.0	21.4	0
Togo	2.6	0.0	0.0	0.000	0.0	1373	0.41	0.0	0.0	0.0	0.0	0.0	0	40.6	0.0	6.6	47.2	0
Tunisia	115.9	0.0	0.0	-0.019	0.1	4202	0.35	0.0	65.5	0.0	4.0	0.0	0	21.6	0.0	1.8	27.4	0
Western Sahara	26.5	0.0	0.0	0.007	0.0	5	0.30	0.0	1.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	2311.9	3499.0	1.0	-0.029	37.3	1465*	0.31**	2806.5	1078.4	684.6	320.1	39.1	0	8030.3	1424.3	152.6	9966.1	0

Table A-30. Case 5: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	16.1	0.0	0.0	0.00	0.07	7676	0.46	0.0	16.1	0.0	20.3	0.0	0	15.7	0.0	4.3	40.3	0
Angola	46.5	2.8	0.0	-0.01	0.11	467	0.40	0.0	21.7	2.8	14.9	0.0	0	119.0	27.2	0.0	161.1	0
Benin	4.9	0.0	0.0	0.00	0.00	3245	0.44	0.0	0.0	0.0	0.0	0.0	0	590.1	5.1	80.3	675.5	0
Cameroon	88.1	0.2	0.0	-0.03	0.20	2932	0.44	0.0	10.6	0.2	251.4	0.0	0	1051.5	469.6	0.0	1772.4	0
Cape Verde	17.3	0.8	0.0	-0.01	0.01	6993	0.43	0.0	11.2	0.8	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Comoros	8.3	1.4	0.0	0.00	0.01	2226	0.39	0.0	5.6	1.4	0.0	0.0	0	9.6	5.1	0.0	14.7	0
Congo	9.4	0.0	0.0	0.00	0.02	5579	0.42	0.0	6.8	0.0	0.0	0.0	0	42.9	40.4	0.0	83.3	0
Congo, Dem Rep	2.6	0.3	0.0	0.00	0.00	670	0.42	0.0	2.6	0.3	3.9	0.0	0	26.8	7.2	0.0	37.9	0
Cote d'Ivoire	32.3	0.0	0.0	-0.03	0.00	5404	0.43	0.0	0.0	0.0	24.6	0.0	0	281.4	173.5	28.2	507.7	0
Djibouti	3.9	0.6	0.0	0.00	0.01	1892	0.42	0.0	3.9	0.6	0.0	0.0	0	0.4	0.4	0.0	0.8	0
Egypt	104.7	0.1	0.0	-0.11	0.40	1637	0.54	0.0	29.4	0.2	2.8	0.0	0	91.4	5.4	5.9	105.5	0
Equatorial Guinea	6.5	0.0	0.0	-0.01	0.00	1455	0.44	0.0	0.0	0.0	18.2	0.0	0	66.4	12.0	0.5	97.1	0
Eritrea	15.7	2.5	0.0	0.00	0.02	650	0.43	0.0	12.9	2.5	0.0	0.0	0	13.9	2.0	0.0	15.9	0
Gabon	100.1	390.2	0.0	-0.06	0.01	4742	0.43	378.3	39.6	11.9	156.5	82.1	0	3483.0	823.7	17.5	4562.9	0
Gambia	32.1	20.4	0.0	-0.01	0.09	2001	0.43	0.0	11.0	20.4	3.2	0.0	0	217.8	69.5	4.3	294.8	0
Ghana	20.9	16.7	0.0	-0.02	0.00	3099	0.53	16.7	0.0	0.0	0.0	0.0	0	163.1	57.7	45.1	265.9	0
Guinea	128.4	6.5	0.0	-0.08	0.01	1634	0.43	0.0	7.0	6.5	0.0	0.0	0	273.6	254.2	0.0	527.9	0
Guinea-Bissau	137.3	31.4	0.0	-0.06	0.15	584	0.43	0.0	44.0	31.4	0.4	0.0	0	109.5	90.1	3.4	203.3	0
Kenya	49.4	14.5	0.0	-0.02	0.06	1651	0.42	0.0	25.8	14.5	31.3	0.0	0	170.6	59.1	0.0	261.0	0
Liberia	15.0	0.0	0.0	-0.01	0.00	2191	0.44	0.0	0.0	0.0	10.2	0.0	0	71.8	32.5	0.0	114.5	0
Libyan Arab Jamahiriya	59.8	5.1	0.0	-0.06	0.03	4982	0.50	0.0	36.8	5.1	0.0	0.0	0	26.2	0.0	12.5	38.6	0
Madagascar	148.3	34.6	0.0	-0.06	0.16	914	0.41	0.0	69.2	34.7	0.0	0.0	0	43.2	29.4	0.0	72.6	0
Mauritania	80.6	0.2	0.0	-0.04	0.00	749	0.51	0.0	19.1	0.2	0.0	0.0	0	445.7	1.7	11.9	459.3	0
Mauritius	4.3	0.0	0.0	-0.00	0.00	7941	0.39	0.0	2.0	0.0	0.0	0.0	0	1619.0	0.0	0.0	1619.0	0
Morocco	62.2	0.7	0.0	-0.02	0.20	3841	0.44	0.0	35.8	0.8	12.1	0.0	0	71.6	0.0	2.8	86.5	0
Mozambique	191.0	330.4	0.0	-0.10	11.96	124	0.38	81.4	95.5	248.8	22.2	0.0	0	75.5	5.7	0.1	103.5	0
Namibia	27.9	0.5	0.7	-0.01	0.13	218	0.37	0.0	14.6	0.5	0.0	0.0	0	368.1	0.0	0.0	368.1	0
Nigeria	164.1	59.6	0.0	-0.13	0.23	2344	0.59	0.0	20.3	59.7	2.7	0.0	0	3463.1	776.5	69.9	4312.1	0
Reunion	3.8	0.0	0.0	-0.00	0.00	5882	0.40	0.0	1.4	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	2.1	0.0	0.0	-0.00	0.0	2273	0.43	0.0	0.0	0.0	0.0	0.0	0	2.3	0.0	0.0	2.3	0
Senegal	63.2	0.0	0.0	-0.03	0.06	3525	0.43	0.0	27.3	0.0	0.3	0.0	0	572.3	151.0	0.0	723.8	0
Seychelles	2.6	0.0	0.0	0.00	0.00	4470	0.41	0.0	0.9	0.0	0.0	0.0	0	2375.7	13.4	0.0	2389.1	0
Sierra Leone	72.2	11.7	0.0	-0.04	0.09	965	0.43	0.0	16.4	11.7	1.4	0.0	0	59.0	48.8	2.9	112.0	0
Somalia	156.4	25.9	0.0	-0.05	0.11	640	0.46	0.0	111.4	25.9	16.9	0.0	0	68.5	6.3	0.0	91.7	0
South Africa	139.8	0.1	0.0	-0.02	0.02	5403	0.37	0.0	95.2	0.2	86.3	0.0	0	276.4	41.2	11.5	415.4	0
Sudan	10.3	0.1	0.0	0.00	0.00	1009	0.44	0.0	10.3	0.1	0.0	0.0	0	10.8	10.0	0.0	20.8	0
Tanzania, Uni Rep	56.1	146.1	0.0	-0.02	3.13	232	0.44	0.0	23.0	146.1	0.3	0.0	0	27.5	9.2	0.0	37.0	0
Togo	2.4	0.0	0.0	0.00	0.00	3229	0.57	0.0	0.0	0.0	0.0	0.0	0	81.2	0.0	13.9	95.1	0
Tunisia	113.2	-0.1	0.0	-0.06	0.08	7123	0.49	0.0	55.3	0.0	6.0	0.0	0	22.4	0.0	2.3	30.7	0
Western Sahara	25.6	0.0	0.0	-0.02	0.00	8	0.44	0.0	1.5	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	2225.4	1103.1	0.8	-1.12	17.37	2519*	0.44**	476.4	884.2	627.2	685.9	82.1	0	16408.4	3227.9	317.3	20721.5	0

Table A-31. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	3.0	0	0.00	1.2	108	0.009	0.0	0	3.0	0.4	0.0	0	2.0	0.0	0.2	2.6	0
Angola	0	4.5	0	0.00	5.2	6	0.008	2.2	0	2.3	0.2	0.0	0	2.5	0.5	0.0	3.2	0
Benin	0	0.0	0	0.02	0.0	20	0.009	0.0	0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.5	0
Cameroon	0	8.4	0	0.01	10.4	16	0.009	0.0	0	8.4	1.4	0.0	0	5.9	2.7	0.0	9.9	0
Cape Verde	0	0.3	0	0.04	0.3	42	0.008	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0	0.1	0	0.01	0.3	12	0.007	0.0	0	0.1	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Congo	0	0.7	0	0.03	0.7	32	0.008	0.0	0	0.6	0.0	0.0	0	0.0	0.2	0.0	0.3	0
Congo, Dem Rep	0	0.0	0	0.00	0.1	4	0.007	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0	0.2	0	0.16	0.0	35	0.008	0.0	0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0	0.5	0	0.00	0.5	9	0.008	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	234.1	0	0.42	14.9	22	0.013	220.4	0	12.0	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	0	0.0	0	0.03	0.0	7	0.008	0.0	0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	0	0.0	0	0.02	0.8	2	0.008	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	0	19.1	0	0.23	1.3	25	0.008	18.1	0	0.8	0.9	0.7	0	25.5	4.7	0.0	31.7	0
Gambia	0	0.2	0	0.00	3.1	11	0.008	0.0	0	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	0	0.8	0	0.15	0.0	18	0.013	0.7	0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	0	0.1	0	0.06	0.5	8	0.008	0.0	0	0.1	0.0	0.0	0	0.5	1.4	0.0	2.0	0
Guinea-Bissau	0	0.3	0	0.15	6.1	3	0.008	0.0	0	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	0	0.8	0	0.09	4.3	6	0.008	0.0	0	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0	0.0	0	0.08	0.0	12	0.008	0.0	0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	0	1.8	0	0.21	0.4	94	0.011	0.0	0	1.5	0.0	0.0	0	3.4	0	0.5	4.0	0
Madagascar	0	0.3	0	0.37	14.0	3	0.008	0.0	0	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	0	0.1	0	0.12	0.1	3	0.012	0.0	0	0.0	0.0	0.0	0	3.6	0.0	0.1	3.7	0
Mauritius	0	0.1	0	0.01	0.0	251	0.007	0.0	0	0.0	0.0	0.0	0	11.5	0	0.0	11.5	0
Morocco	0	12.1	0	0.11	2.8	48	0.008	0.0	0	11.6	0.2	0.0	0	1.9	0	0.1	2.1	0
Mozambique	0	11.1	0	0.38	174.3	2	0.007	6.4	0	4.6	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	0	0.0	0	0.06	0.1	2	0.006	0.0	0	0.0	0.0	0.0	0	8.7	0	0.0	8.7	0
Nigeria	0	0.7	0	0.49	9.2	13	0.016	0.0	0	0.4	0.0	0.0	0	28.4	4.9	0.5	33.8	0
Reunion	0	0.1	0	0.01	0.0	150	0.007	0.0	0	0.0	0.0	0.0	0	0.0	0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0	0.01	0.0	12	0.008	0.0	0	0.0	0.0	0.0	0	0.1	0	0.0	0.1	0
Senegal	0	1.5	0	0.08	2.9	21	0.008	0.0	0	1.5	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	0	1.1	0	0.01	0.0	184	0.007	0.0	0	1.1	0.0	0.0	0	22.8	0.1	0.0	22.9	0
Sierra Leone	0	0.1	0	0.07	2.4	5	0.008	0.0	0	0.1	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Somalia	0	0.2	0	0.34	5.0	2	0.010	0.0	0	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	0	1.8	0	0.04	0.2	91	0.006	0.0	0	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	0	0.0	0	0.00	0.0	4	0.009	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	0	3.2	0	0.11	99.0	3	0.010	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Togo	0	0.0	0	0.01	0.0	19	0.014	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	0	7.1	0	0.16	1.2	96	0.010	0.0	0	6.9	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	0	0.0	0	0.10	0.0	0	0.008	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	314.0	0	4.19	361.3	31*	0.009**	247.8	0	62.5	5.5	0.7	0	149.1	19.7	3.0	178.1	0

Table A-32. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	18.7	0.0	0.00	3.9	33	0.08	0.0	0	18.7	1.6	0.0	0	6.5	0.0	0.7	8.8	0
Angola	0	15.4	19.8	0.04	10.6	2	0.07	4.8	0	10.1	0.8	0.0	0	7.7	1.5	0.0	10.0	0
Benin	0	0.1	0.0	0.03	0.0	6	0.08	0.0	0	0.0	0.0	0.0	0	16.4	0.1	2.0	18.6	0
Cameroon	0	48.0	0.0	0.11	38.5	6	0.08	0.0	0	47.9	5.8	0.0	0	24.6	11.1	0.0	41.5	0
Cape Verde	0	1.6	0.0	0.06	1.4	10	0.07	0.0	0	1.5	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Comoros	0	0.6	0.0	0.03	2.7	4	0.06	0.0	0	0.6	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Congo	0	3.7	0.0	0.05	1.3	10	0.07	0.0	0	3.6	0.0	0.0	0	0.3	1.0	0.0	1.3	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	1	0.07	0.0	0	0.0	0.1	0.0	0	0.8	0.2	0.0	1.1	0
Cote d'Ivoire	0	2.0	0.0	0.29	0.0	11	0.07	0.0	0	0.0	0.6	0.0	0	4.4	4.1	0.7	9.8	0
Djibouti	0	3.0	6.1	0.00	1.3	3	0.07	0.0	0	2.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	640.1	0.6	0.86	38.3	7	0.10	549.6	0	73.4	0.2	0.0	0	23.3	0.3	0.8	24.6	0
Equatorial Guinea	0	0.0	0.0	0.04	0.0	2	0.07	0.0	0	0.0	0.4	0.0	0	1.9	0.3	0.0	2.6	0
Eritrea	0	0.1	0.8	0.04	2.3	1	0.07	0.0	0	0.1	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	0	52.8	0.2	0.47	3.9	9	0.07	45.0	0	5.4	3.6	2.6	0	100.2	19.5	0.1	126.0	0
Gambia	0	1.1	0.0	0.03	7.0	4	0.07	0.0	0	1.1	0.1	0.0	0	5.7	1.6	0.1	7.5	0
Ghana	0	2.1	0.0	0.21	0.0	4	0.10	1.8	0	0.0	0.0	0.0	0	2.4	1.5	1.2	5.0	0
Guinea	0	0.4	0.0	0.34	0.9	3	0.07	0.0	0	0.3	0.0	0.0	0	3.2	6.0	0.0	9.1	0
Guinea-Bissau	0	12.4	158.1	0.38	59.5	1	0.07	0.0	0	2.1	0.0	0.0	0	1.4	2.1	0.1	3.6	0
Kenya	0	4.9	0.0	0.16	9.9	3	0.07	0.0	0	4.7	0.6	0.0	0	3.8	1.2	0.0	5.5	0
Liberia	0	0.1	0.0	0.14	.0	4	0.08	0.0	0	0.0	0.2	0.0	0	1.6	0.8	0.0	2.6	0
Libyan Arab Jamahiriya	0	12.5	4.7	0.45	1.6	7	0.09	0.0	0	9.9	0.0	0.0	0	11.7	0.0	1.9	13.6	0
Madagascar	0	3.5	26.7	0.59	32.0	1	0.07	0.0	0	1.8	0.0	0.0	0	0.6	0.6	0.0	1.2	0
Mauritania	0	0.4	0.0	0.27	1.7	0	0.10	0.0	0	0.4	0.0	0.0	0	13.9	0.0	0.3	14.3	0
Mauritius	0	0.6	0.0	0.01	0.0	71	0.07	0.0	0	0.0	0.0	0.0	0	46.7	0.0	0.0	46.7	0
Morocco	0	91.1	9.6	0.19	16.4	17	0.08	0.0	0	86.5	0.6	0.0	0	6.4	0.0	0.2	7.2	0
Mozambique	0	46.3	129.7	0.78	725.7	1	0.06	14.1	0	22.5	1.1	0.0	0	5.3	0.3	0.0	6.7	0
Namibia	0	0.0	0.7	0.12	0.2	1	0.06	0.0	0	0.0	0.0	0.0	0	25.9	0.0	0.0	25.9	0
Nigeria	0	59.7	131.3	0.95	110.8	2	0.12	0.0	0	2.7	0.1	0.0	0	112.7	20.5	1.8	135.1	0
Reunion	0	0.4	0.0	0.02	0.1	42	0.07	0.0	0	0.3	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.01	0.0	3	0.07	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	9.0	0.0	0.19	14.0	8	0.07	0.0	0	8.8	0.0	0.0	0	15.4	3.6	0.0	19.0	0
Seychelles	0	7.2	0.0	0.01	0.0	64	0.07	0.0	0	6.9	0.0	0.0	0	116.4	0.4	0.0	116.8	0
Sierra Leone	0	1.1	9.7	0.23	5.9	2	0.07	0.0	0	0.3	0.0	0.0	0	0.5	1.2	0.1	1.8	0
Somalia	0	2.2	4.6	0.51	15.7	0	0.08	0.0	0	1.1	0.3	0.0	0	1.8	0.1	0.0	2.3	0
South Africa	0	8.9	0.1	0.11	0.5	44	0.06	0.0	0	8.4	4.5	0.0	0	18.8	2.2	0.7	26.1	0
Sudan	0	0.0	0.3	0.00	0.1	2	0.08	0.0	0	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	0	27.6	106.8	0.19	353.0	1	0.08	0.0	0	14.2	0.0	0.0	0	1.5	0.5	0.0	2.0	0
Togo	0	0.0	0.0	0.02	0.0	4	0.11	0.0	0	0.0	0.0	0.0	0	3.0	0.0	0.4	3.4	0
Tunisia	0	43.5	0.0	0.42	4.6	42	0.09	0.0	0	42.1	0.4	0.0	0	5.0	0.0	0.3	5.7	0
Western Sahara	0	0.0	0.0	0.18	0.0	0	0.07	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1121.3	609.8	8.53	1464.0	10*	0.08**	615.3	0	378.1	21	2.6	0	591.1	81.1	11.4	707.1	0

Table A-33. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	28.9	0.0	0.00	5.3	23	0.10	0.0	0	28.9	2.2	0.0	0	8.2	0.0	0.9	11.2	0
Angola	0	24.4	1.0	0.05	87.2	1	0.08	5.7	0	18.7	1.0	0.0	0	10.2	2.0	0.0	13.2	0
Benin	0	0.2	0.0	0.05	0.0	5	0.10	0.0	0	0.0	0.0	0.0	0	23.1	0.2	2.8	26.1	0
Cameroon	0	70.9	3.9	0.14	46.6	4	0.10	0.0	0	70.4	8.2	0.0	0	34.7	15.7	0.0	58.6	0
Cape Verde	0	3.9	14.6	0.08	2.1	6	0.09	0.0	0	2.3	0.0	0.0	0	0.5	0.0	0.0	0.5	0
Comoros	0	1.0	0.0	0.03	2.9	2	0.08	0.0	0	0.8	0.0	0.0	0	0.2	0.3	0.0	0.4	0
Congo	0	7.1	0.0	0.06	14.3	7	0.09	0.0	0	7.0	0.0	0.0	0	0.5	1.4	0.0	1.9	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	1	0.09	0.0	0	0.0	0.1	0.0	0	1.1	0.2	0.0	1.5	0
Cote d'Ivoire	0	3.9	0.0	0.39	0.0	8	0.09	0.0	0	0.0	0.8	0.0	0	6.4	5.7	1.0	14.0	0
Djibouti	0	4.0	0.1	0.00	1.9	2	0.09	0.0	0	4.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	800.8	0.8	1.02	42.2	6	0.13	667.3	0	106.2	0.3	0.0	0	29.5	0.4	1.0	31.2	0
Equatorial Guinea	0	0.0	0.0	0.06	0.0	0	0.09	0.0	0	0.0	0.6	0.0	0	2.6	0.4	0.0	3.6	0
Eritrea	0	0.6	8.5	0.06	3.4	0	0.09	0.0	0	0.1	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Gabon	0	67.7	0.2	0.63	4.2	6	0.09	55.1	0	7.9	5.1	3.6	0	139.5	27.4	0.2	175.7	0
Gambia	0	1.7	0.0	0.03	7.6	3	0.09	0.0	0	1.6	0.1	0.0	0	8.0	2.3	0.2	10.5	0
Ghana	0	2.7	0.0	0.26	0.0	3	0.13	2.3	0	0.0	0.0	0.0	0	3.4	2.1	1.7	7.2	0
Guinea	0	0.6	0.0	0.42	1.0	2	0.09	0.0	0	0.4	0.0	0.0	0	4.7	8.4	0.0	13.2	0
Guinea-Bissau	0	5.7	20.5	0.50	67.5	0	0.09	0.0	0	3.1	0.0	0.0	0	2.1	3.0	0.1	5.2	0
Kenya	0	8.8	0.0	0.22	28.5	2	0.09	0.0	0	8.4	0.9	0.0	0	5.4	1.7	0.0	7.9	0
Liberia	0	0.3	0.0	0.18	0.0	3	0.09	0.0	0	0.0	0.3	0.0	0	2.3	1.1	0.0	3.7	0
Libyan Arab Jamahiriya	0	19.5	6.2	0.56	1.8	28	0.11	0.0	0	14.8	0.0	0.0	0	14.6	0.0	2.4	17.1	0
Madagascar	0	4.3	12.0	0.76	36.3	1	0.09	0.0	0	2.7	0.0	0.0	0	0.9	0.8	0.0	1.7	0
Mauritania	0	17.6	40.8	0.34	15.2	0	0.12	0.0	0	0.6	0.0	0.0	0	19.3	0.1	0.4	19.8	0
Mauritius	0	1.2	0.0	0.02	0.0	49	0.08	0.0	0	0.0	0.0	0.0	0	65.4	0.0	0.0	65.4	0
Morocco	0	130.5	2.3	0.26	19.6	13	0.09	0.0	0	122.6	0.9	0.0	0	8.5	0.0	0.2	9.6	0
Mozambique	0	57.9	105.4	1.05	818.7	0	0.08	16.8	0	31.2	1.5	0.0	0	7.0	0.4	0.0	8.9	0
Namibia	0	0.1	1.0	0.16	0.2	1	0.08	0.0	0	0.1	0.0	0.0	0	34.2	0.0	0.0	34.2	0
Nigeria	0	38.2	36.9	1.15	156.9	1	0.15	0.0	0	4.2	0.1	0.0	0	154.7	28.8	2.6	186.1	0
Reunion	0	0.6	0.0	0.02	0.1	28	0.08	0.0	0	0.3	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.02	0.0	2	0.09	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	13.5	0.0	0.25	18.8	6	0.09	0.0	0	13.3	0.0	0.0	0	21.5	5.0	0.0	26.5	0
Seychelles	0	10.9	0.0	0.02	0.0	47	0.09	0.0	0	10.1	0.0	0.0	0	164.6	0.6	0.0	165.2	0
Sierra Leone	0	1.6	11.2	0.30	8.2	1	0.09	0.0	0	0.5	0.1	0.0	0	0.8	1.7	0.1	2.6	0
Somalia	0	35.8	334.1	0.65	70.6	0	0.10	0.0	0	1.8	0.5	0.0	0	2.6	0.2	0.0	3.2	0
South Africa	0	16.1	8.7	0.14	1.3	35	0.08	0.0	0	14.5	6.0	0.0	0	24.7	2.9	0.9	34.5	0
Sudan	0	0.0	0.4	0.00	0.1	1	0.10	0.0	0	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	0	181.0	164.8	0.25	881.3	1	0.10	0.0	0	20.8	0.0	0.0	0	2.0	0.6	0.0	2.7	0
Togo	0	0.1	0.0	0.02	0.0	3	0.13	0.0	0	0.0	0.0	0.0	0	4.1	0.0	0.6	4.7	0
Tunisia	0	67.4	0.0	0.52	6.5	33	0.11	0.0	0	64.9	0.6	0.0	0	6.2	0.0	0.4	7.2	0
Western Sahara	0	0.0	0.0	0.25	0.0	0	0.09	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1629.4	773.2	10.92	2350.5	8*	0.10**	747.2	0	562.4	29.3	3.6	0	814.4	113.8	15.5	976.3	0

Table A-34. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	133.0	0.0	0.00	41.8	6	0.19	0.0	0	131.8	6.5	0.0	0	16.9	0.0	2.3	25.7	0
Angola	0	85.7	10.5	0.09	107.6	0	0.16	10.8	0	64.4	3.1	0.0	0	29.7	6.0	0.0	38.8	0
Benin	0	1.2	0.0	0.06	0.0	1	0.18	0.0	0	0.0	0.0	0.0	0	84.5	0.6	10.6	95.7	0
Cameroon	0	855.7	91.3	0.25	312.2	1	0.18	0.0	0	364.9	31.0	0.0	0	130.8	58.8	0.0	220.6	0
Cape Verde	0	152.6	24.1	0.11	14.2	1	0.18	0.0	0	12.8	0.0	0.0	0	1.1	0.0	0.0	1.1	0
Comoros	0	37.2	0.0	0.05	33.3	0	0.16	0.0	0	4.2	0.0	0.0	0	0.9	0.9	0.0	1.8	0
Congo	0	31.8	0.0	0.08	16.1	2	0.17	0.0	0	29.7	0.0	0.0	0	2.8	5.2	0.0	8.0	0
Congo, Dem Rep	0	0.1	0.2	0.00	0.7	0	0.17	0.0	0	0.0	0.5	0.0	0	4.1	0.9	0.0	5.5	0
Cote d'Ivoire	0	18.4	0.0	0.50	0.0	2	0.18	0.0	0	0.0	3.0	0.0	0	27.1	21.6	3.8	55.4	0
Djibouti	0	54.0	0.2	0.00	10.4	1	0.17	0.0	0	21.5	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	3775.7	109.2	1.28	291.4	2	0.23	1383.6	0	481.1	0.9	0.0	0	69.9	1.4	2.8	75.0	0
Equatorial Guinea	0	0.1	0.0	0.08	0.0	0	0.18	0.0	0	0.0	2.2	0.0	0	9.3	1.4	0.1	13.0	0
Eritrea	0	0.7	1.8	0.07	5.6	0	0.18	0.0	0	0.4	0.0	0.0	0	1.9	0.2	0.0	2.1	0
Gabon	0	497.1	2.1	0.85	25.0	1	0.17	118.1	0	37.7	19.2	12.4	0	493.3	102.4	1.1	628.4	0
Gambia	0	41.2	49.0	0.06	46.3	0	0.18	0.0	0	8.6	0.4	0.0	0	29.2	8.7	0.6	38.8	0
Ghana	0	7.1	0.0	0.31	0.0	0	0.23	5.0	0	0.0	0.0	0.0	0	15.1	7.7	6.1	28.9	0
Guinea	0	3.6	0.3	0.67	10.4	0	0.18	0.0	0	2.0	0.0	0.0	0	22.1	31.7	0.0	53.8	0
Guinea-Bissau	0	60.7	25.7	0.73	165.3	0	0.18	0.0	0	14.6	0.1	0.0	0	9.4	11.3	0.5	21.1	0
Kenya	0	101.3	14.4	0.28	101.6	0	0.17	0.0	0	38.2	3.5	0.0	0	20.8	6.6	0.0	30.9	0
Liberia	0	1.1	0.0	0.23	0.0	0	0.18	0.0	0	0.0	1.2	0.0	0	8.8	4.0	0.0	14.0	0
Libyan Arab Jamahiriya	0	93.5	35.1	0.73	3.7	9	0.21	0.0	0	64.9	0.0	0.0	0	32.4	0.0	6.4	38.8	0
Madagascar	0	51.6	70.7	0.96	99.1	0	0.17	0.0	0	13.2	0.0	0.0	0	3.8	3.3	0.0	7.2	0
Mauritania	0	4.1	0.6	0.46	19.1	0	0.22	0.0	0	2.8	0.0	0.0	0	66.6	0.2	1.6	68.4	0
Mauritius	0	6.0	0.0	0.02	0.0	9	0.16	0.0	0	0.0	0.0	0.0	0	236.1	0.0	0.0	236.1	0
Morocco	0	595.2	0.1	0.33	56.8	4	0.18	0.0	0	466.4	2.8	0.0	0	23.7	0.0	0.7	27.2	0
Mozambique	0	243.0	210.4	1.42	1260.4	0	0.15	32.7	0	105.9	4.6	0.0	0	20.3	1.2	0.0	26.1	0
Namibia	0	0.3	1.2	0.21	0.3	0	0.15	0.0	0	0.3	0.0	0.0	0	99.3	0.0	0.0	99.3	0
Nigeria	0	45.3	1.4	1.50	195.9	0	0.26	0.0	0	17.8	0.3	0.0	0	527.3	104.4	9.4	641.5	0
Reunion	0	2.0	0.0	0.03	0.6	5	0.16	0.0	0	1.3	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.1	0.0	0.03	0.0	0	0.18	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.0	0.7	0
Senegal	0	74.8	107.7	0.35	111.1	2	0.18	0.0	0	69.4	0.0	0.0	0	77.3	19.0	0.0	96.3	0
Seychelles	0	65.1	0.0	0.02	0.3	12	0.17	0.0	0	60.7	0.0	0.0	0	538.3	2.1	0.0	540.4	0
Sierra Leone	0	4.7	2.4	0.45	36.2	0	0.18	0.0	0	2.7	0.2	0.0	0	4.2	6.3	0.4	11.1	0
Somalia	0	25.0	3.4	0.81	92.0	0	0.19	0.0	0	8.0	1.8	0.0	0	9.7	0.7	0.0	12.2	0
South Africa	0	64.9	0.3	0.21	2.9	14	0.15	0.0	0	57.6	18.3	0.0	0	69.7	8.8	2.6	99.4	0
Sudan	0	0.0	0.5	0.00	0.2	0	0.18	0.0	0	0.0	0.0	0.0	0	0.7	1.2	0.0	1.8	0
Tanzania, Uni Rep	0	88.4	68.2	0.32	1931.7	0	0.18	0.0	0	75.4	0.1	0.0	0	6.1	2.0	0.0	8.1	0
Togo	0	0.4	0.0	0.03	0.0	0	0.24	0.0	0	0.0	0.0	0.0	0	13.6	0.0	2.1	15.7	0
Tunisia	0	293.8	0.0	0.68	17.2	13	0.20	0.0	0	275.2	1.8	0.0	0	14.7	0.0	1.0	17.6	0
Western Sahara	0	0.0	0.0	0.32	0.0	0	0.18	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	7516.2	831.0	14.58	5009.4	3*	0.18**	1550.2	0	2433.5	101.5	12.4	0	2722.3	418.7	52.1	3306.7	0

Table A-35. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	3471.0	68.2	0.0	322.0	0.4	0.32	0.0	0	449.5	13.8	0.0	0	19.4	0.0	3.7	36.9	0
Angola	0	236.0	2.1	0.2	958.4	0.0	0.28	0.0	0	220.1	8.4	0.0	0	74.6	15.8	0.0	98.8	0
Benin	0	5.2	0.0	0.1	0.0	0.0	0.31	0.0	0	0.0	0.0	0.0	0	274.9	2.2	35.8	312.9	0
Cameroon	0	3942.8	120.6	0.4	1075.5	0.0	0.31	0.0	0	1417.0	108.4	0.0	0	455.4	204.0	0.0	767.8	0
Cape Verde	0	112.0	2.2	0.1	58.8	0.0	0.30	0.0	0	60.4	0.0	0.0	0	1.5	0.0	0.0	1.5	0
Comoros	0	18.2	0.0	0.1	35.3	0.0	0.27	0.0	0	15.1	0.0	0.0	0	4.1	2.6	0.0	6.6	0
Congo	0	165.8	1.6	0.1	153.5	0.0	0.30	0.0	0	133.5	0.0	0.0	0	14.4	17.8	0.0	32.3	0
Congo, Dem Rep	0	0.6	0.3	0.0	1.2	0.0	0.29	0.0	0	0.2	1.7	0.0	0	12.8	3.2	0.0	17.6	0
Cote d'Ivoire	0	83.7	0.0	0.6	0.0	0.1	0.30	0.0	0	0.0	10.5	0.0	0	108.2	75.1	12.7	206.6	0
Djibouti	0	2155.5	18.8	0.0	97.0	0.0	0.29	0.0	0	94.7	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Egypt	0	8824.4	74.9	1.5	1288.5	0.4	0.38	2496.5	0	1646.1	2.0	0.0	0	94.1	3.4	4.9	104.4	0
Equatorial Guinea	0	0.4	0.0	0.1	0.0	0.0	0.31	0.0	0	0.0	7.7	0.0	0	30.5	5.1	0.2	43.5	0
Eritrea	0	3.0	2.1	0.1	6.8	0.0	0.30	0.0	0	1.9	0.0	0.0	0	6.4	0.8	0.0	7.2	0
Gabon	0	494.4	2.5	1.1	27.1	0.3	0.30	240.6	0	140.9	67.3	39.0	0	1602.6	355.9	5.9	2070.6	0
Gambia	0	127.0	4.7	0.1	72.4	0.0	0.30	0.0	0	36.1	1.4	0.0	0	97.8	30.1	1.9	131.2	0
Ghana	0	19.2	0.0	0.4	0.0	0.0	0.38	10.4	0	0.0	0.0	0.0	0	62.3	26.0	20.3	108.8	0
Guinea	0	14.4	0.4	1.0	11.3	0.0	0.30	0.0	0	7.6	0.0	0.0	0	98.0	110.3	0.0	208.3	0
Guinea-Bissau	0	77.2	4.6	1.0	185.2	0.0	0.30	0.0	0	55.7	0.2	0.0	0	40.3	39.1	1.5	81.1	0
Kenya	0	2785.6	12.4	0.3	302.0	0.2	0.29	0.0	0	168.4	12.9	0.0	0	73.4	24.4	0.0	110.8	0
Liberia	0	5.2	0.0	0.3	0.0	0.0	0.31	0.0	0	0.0	4.4	0.0	0	30.7	14.1	0.0	49.1	0
Libyan Arab Jamahiriya	0	295.7	10.7	0.8	14.7	1.9	0.35	0.0	0	222.8	0.0	0.0	0	34.9	0.0	10.8	45.6	0
Madagascar	0	73.7	8.4	1.1	150.1	0.0	0.28	0.0	0	55.4	0.0	0.0	0	16.4	12.1	0.0	28.5	0
Mauritania	0	16.6	1.2	0.6	22.1	0.0	0.36	0.0	0	11.0	0.0	0.0	0	211.1	0.7	5.3	217.2	0
Mauritius	0	29.3	0.0	0.0	0.0	0.0	0.27	0.0	0	0.0	0.0	0.0	0	776.4	0.0	0.0	776.4	0
Morocco	0	3058.2	34.7	0.4	461.1	0.3	0.31	0.0	0	1622.9	6.9	0.0	0	48.4	0.0	1.7	57.0	0
Mozambique	0	3971.1	53.5	1.7	4879.4	0.0	0.27	59.0	0	345.4	12.5	0.0	0	48.5	3.3	0.0	64.3	0
Namibia	0	1.1	1.5	0.2	0.6	0.0	0.26	0.0	0	0.8	0.0	0.0	0	252.2	0.0	0.0	252.2	0
Nigeria	0	202.0	2.7	1.8	223.8	0.0	0.42	0.0	0	70.5	1.2	0.0	0	1651.1	349.1	31.5	2032.9	0
Reunion	0	7.6	0.1	0.0	4.2	0.0	0.28	0.0	0	3.5	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.5	0.0	0.0	0.0	0.0	0.30	0.0	0	0.0	0.0	0.0	0	1.6	0.0	0.0	1.6	0
Senegal	0	446.5	3.6	0.5	537.3	0.1	0.30	0.0	0	310.8	0.1	0.0	0	257.3	65.7	0.0	323.1	0
Seychelles	0	246.3	0.0	0.0	2.6	1.3	0.29	0.0	0	234.4	0.0	0.0	0	1340.5	6.4	0.0	1346.8	0
Sierra Leone	0	23.1	5.3	0.6	44.7	0.0	0.30	0.0	0	11.2	0.6	0.0	0	20.5	21.5	1.3	43.9	0
Somalia	0	50.9	3.7	0.9	108.8	0.0	0.32	0.0	0	32.3	6.9	0.0	0	31.8	2.6	0.0	41.3	0
South Africa	0	269.1	10.6	0.3	18.9	3.2	0.25	0.0	0	217.2	49.0	0.0	0	170.9	23.5	6.8	250.1	0
Sudan	0	0.5	0.6	0.0	0.3	0.0	0.31	0.0	0	0.1	0.0	0.0	0	3.5	4.2	0.0	7.7	0
Tanzania, Uni Rep	0	225.9	5.1	0.4	2219.6	0.0	0.31	0.0	0	216.8	0.2	0.0	0	16.0	5.2	0.0	21.4	0
Togo	0	1.6	0.0	0.0	0.0	0.0	0.41	0.0	0	0.0	0.0	0.0	0	40.6	0.0	6.6	47.2	0
Tunisia	0	2151.8	30.2	0.8	91.0	3.4	0.35	0.0	0	831.9	4.0	0.0	0	21.6	0.0	1.8	27.4	0
Western Sahara	0	0.0	0.0	0.4	0.0	0.0	0.31	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	33612.9	487.4	18.0	13374.2	0.5*	0.31**	2806.5	0	8634.3	320.1	39.0	0	8044.9	1424.4	152.7	9981.0	0

Table A-36. Case 6: Results by country, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	6546.6	7.1	0.0	435.4	0.1	0.46	0.0	0	916.7	20.3	0.0	0	15.7	0.0	4.3	40.3	0
Angola	0	406.8	1.9	0.2	839.6	0.0	0.40	0.0	0	382.7	14.9	0.0	0	119.0	27.2	0.0	161.1	0
Benin	0	10.2	0.0	0.1	0.0	0.0	0.44	0.0	0	0.0	0.0	0.0	0	590.1	5.1	80.3	675.5	0
Cameroon	0	3541.1	0.2	0.6	1937.7	0.0	0.44	0.0	0	3489.1	251.4	0.0	0	1051.5	469.6	0.0	1772.4	0
Cape Verde	0	253.3	2.0	0.1	56.6	0.0	0.43	0.0	0	151.7	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Comoros	0	39.4	0.0	0.1	30.8	0.0	0.39	0.0	0	33.6	0.0	0.0	0	9.6	5.1	0.0	14.7	0
Congo	0	372.3	1.4	0.1	137.7	0.0	0.42	0.0	0	309.0	0.0	0.0	0	42.9	40.4	0.0	83.3	0
Congo, Dem Rep	0	1.3	0.2	0.0	1.4	0.0	0.42	0.0	0	0.6	3.9	0.0	0	26.8	7.2	0.0	37.9	0
Cote d'Ivoire	0	163.2	0.0	0.5	0.0	0.0	0.43	0.0	0	0.0	24.6	0.0	0	281.4	173.5	28.2	507.7	0
Djibouti	0	232.0	0.3	0.0	85.5	0.0	0.42	0.0	0	213.6	0.0	0.0	0	0.4	0.4	0.0	0.8	0
Egypt	0	6518.5	19.4	1.4	1970.3	0.1	0.54	0.0	0	3482.5	2.8	0.0	0	96.0	5.9	5.9	110.6	0
Equatorial Guinea	0	0.8	0.0	0.1	0.0	0.0	0.44	0.0	0	0.0	18.2	0.0	0	66.4	12.0	0.5	97.1	0
Eritrea	0	7.6	2.4	0.1	6.9	0.0	0.43	0.0	0	5.1	0.0	0.0	0	13.9	2.0	0.0	15.9	0
Gabon	0	925.5	2.2	1.1	23.8	0.1	0.43	378.3	0	318.1	156.5	82.1	0	3483.0	823.7	17.5	4562.9	0
Gambia	0	142.9	4.0	0.1	91.6	0.0	0.43	0.0	0	92.6	3.2	0.0	0	217.8	69.5	4.3	294.8	0
Ghana	0	36.5	0.0	0.3	0.0	0.0	0.53	16.7	0	0.0	0.0	0.0	0	163.1	57.7	45.1	265.9	0
Guinea	0	33.7	0.3	1.2	10.1	0.0	0.43	0.0	0	17.2	0.0	0.0	0	273.6	254.2	0.0	527.9	0
Guinea-Bissau	0	174.6	4.2	1.1	170.2	0.0	0.43	0.0	0	130.2	0.4	0.0	0	109.5	90.1	3.4	203.3	0
Kenya	0	449.7	1.4	0.3	279.6	0.0	0.42	0.0	0	399.2	31.3	0.0	0	170.6	59.1	0.0	261.0	0
Liberia	0	10.2	0.0	0.2	0.0	0.0	0.44	0.0	0	0.0	10.2	0.0	0	71.8	32.5	0.0	114.5	0
Libyan Arab Jamahiriya	0	1756.8	16.1	0.8	39.4	0.3	0.50	0.0	0	477.6	0.0	0.0	0	26.2	0.0	12.5	38.6	0
Madagascar	0	179.3	8.0	1.0	140.6	0.0	0.41	0.0	0	135.6	0.0	0.0	0	43.2	29.4	0.0	72.6	0
Mauritania	0	37.7	1.1	0.6	20.5	0.0	0.51	0.0	0	26.3	0.0	0.0	0	445.7	1.7	11.9	459.3	0
Mauritius	0	60.3	0.0	0.0	0.0	0.0	0.39	0.0	0	0.1	0.0	0.0	0	1619.0	0.0	0.0	1619.0	0
Morocco	0	5524.3	14.5	0.4	1820.2	0.0	0.44	0.0	0	3388.3	12.1	0.0	0	71.6	0.0	2.8	86.5	0
Mozambique	0	849.6	24.7	1.7	4347.9	0.0	0.38	81.4	0	597.3	22.2	0.0	0	75.5	5.7	0.1	103.5	0
Namibia	0	2.5	1.6	0.2	0.7	0.0	0.37	0.0	0	1.6	0.0	0.0	0	420.9	0.0	0.0	420.9	0
Nigeria	0	453.3	2.5	1.9	209.8	0.0	0.59	0.0	0	170.6	2.7	0.0	0	3463.1	776.5	69.9	4312.1	0
Reunion	0	11.4	0.1	0.0	3.9	0.0	0.40	0.0	0	5.8	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.9	0.0	0.0	0.0	0.0	0.43	0.0	0	0.0	0.0	0.0	0	2.3	0.0	0.0	2.3	0
Senegal	0	901.6	3.1	0.5	488.5	0.0	0.43	0.0	0	725.6	0.3	0.0	0	572.3	151.2	0.0	723.8	0
Seychelles	0	569.4	0.0	0.0	19.7	0.0	0.41	0.0	0	534.1	0.0	0.0	0	2375.7	13.4	0.0	2389.1	0
Sierra Leone	0	52.9	4.8	0.7	45.0	0.0	0.43	0.0	0	28.5	1.4	0.0	0	59.0	48.8	2.9	112.0	0
Somalia	0	117.1	3.6	0.8	98.1	0.0	0.46	0.0	0	77.8	16.9	0.0	0	68.5	6.3	0.0	91.7	0
South Africa	0	3475.7	7.7	0.3	68.9	0.6	0.37	0.0	0	439.3	86.3	0.0	0	276.4	41.2	11.5	415.4	0
Sudan	0	1.1	0.6	0.0	0.4	0.0	0.44	0.0	0	0.4	0.0	0.0	0	10.7	10.1	0.0	20.8	0
Tanzania, Uni Rep	0	395.2	4.6	0.3	2082.8	0.0	0.44	0.0	0	377.3	0.3	0.0	0	27.5	9.2	0.0	37.0	0
Togo	0	3.1	0.0	0.0	0.0	0.0	0.57	0.0	0	0.0	0.0	0.0	0	81.2	0.0	13.9	95.1	0
Tunisia	0	3459.7	73.3	0.8	263.9	0.7	0.49	0.0	0	1798.1	6.0	0.0	0	22.4	0.0	2.3	30.7	0
Western Sahara	0	0.0	0.0	0.3	0.0	0.0	0.44	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0
TOTAL for Africa	0	37718.1	213.5	17.9	15727.5	0.1*	0.44**	476.4	0	18726.3	685.9	82.1	0	16465.7	3228.7	317.3	20779.4	0

Table A-37. Case 7: Results by country, for the B1 low-range and B1 socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	5.7	2.9	0	0.00	1.2	139	0.006	0.0	5.7	2.9	0.4	0.0	0	2.1	0.0	0.2	2.7	0
Angola	47.7	4.5	0	0.00	5.2	8	0.005	2.2	47.6	2.3	0.2	0.0	0	2.6	0.5	0.0	3.3	0
Benin	1.1	0.0	0	0.01	0.0	23	0.006	0.0	0.0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.5	0
Cameroon	3.6	8.4	0	0.01	10.4	19	0.006	0.0	2.8	8.4	1.4	0.0	0	5.9	2.7	0.0	9.9	0
Cape Verde	4.5	0.3	0	0.02	0.3	53	0.006	0.0	3.2	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	1.5	0.1	0	0.01	0.3	15	0.004	0.0	1.0	0.1	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Congo	2.0	0.6	0	0.02	0.8	38	0.005	0.0	1.5	0.6	0.0	0.0	0	0.0	0.2	0.0	0.3	0
Congo, Dem Rep	0.7	0.0	0	0.00	0.1	4	0.005	0.0	0.7	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	6.7	0.1	0	0.11	0.0	42	0.005	0.0	0.0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	1.5	0.5	0	0.00	0.5	11	0.005	0.0	1.5	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	25.2	233.5	0	0.35	14.8	29	0.010	220.0	13.6	12.0	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	1.4	0.0	0	0.02	0.0	8	0.006	0.0	0.0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	17.5	0.0	0	0.02	0.8	3	0.006	0.0	16.9	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	61.8	19.0	0	0.16	1.3	32	0.005	18.1	53.9	0.8	0.9	0.7	0	25.5	4.7	0.0	31.7	0
Gambia	2.8	0.2	0	0.00	3.1	13	0.005	0.0	2.7	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	7.8	0.8	0	0.12	0.0	23	0.010	0.7	0.0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	5.4	0.1	0	0.04	0.5	9	0.006	0.0	2.2	0.1	0.0	0.0	0	0.5	1.4	0.0	2.0	0
Guinea-Bissau	20.3	0.3	0	0.10	6.1	3	0.005	0.0	13.5	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	10.2	0.8	0	0.06	4.3	7	0.005	0.0	7.6	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	3.2	0.0	0	0.05	0.0	15	0.006	0.0	0.0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	31.1	1.7	0	0.16	0.4	121	0.008	0.0	26.5	1.4	0.0	0.0	0	3.5	0.0	0.5	4.0	0
Madagascar	235.1	0.3	0	0.27	14.0	4	0.005	0.0	212.6	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	10.7	0.1	0	0.09	0.1	4	0.009	0.0	4.2	0.0	0.0	0.0	0	3.6	0.0	0.1	3.7	0
Mauritius	0.4	0.0	0	0.00	0.0	299	0.005	0.0	0.0	0.0	0.0	0.0	0	11.7	0.0	0.0	11.7	0
Morocco	18.4	12.0	0	0.07	2.8	61	0.005	0.0	14.5	11.6	0.2	0.0	0	1.9	0.0	0.1	2.1	0
Mozambique	186.1	11.1	0	0.24	169.8	2	0.004	6.4	171.5	4.6	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	3.5	0.0	0	0.04	0.1	3	0.004	0.0	2.2	0.0	0.0	0.0	0	8.8	0.0	0.0	8.8	0
Nigeria	37.4	0.6	0	0.41	6.5	17	0.013	0.0	7.4	0.4	0.0	0.0	0	28.4	4.9	0.5	33.8	0
Reunion	0.8	0.1	0	0.01	0.0	197	0.005	0.0	0.5	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0.5	0.0	0	0.01	0.0	15	0.005	0.0	0.0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	10.0	1.5	0	0.05	2.8	25	0.005	0.0	6.6	1.4	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	0.7	1.1	0	0.00	0.0	232	0.005	0.0	0.4	1.1	0.0	0.0	0	23.1	0.1	0.0	23.2	0
Sierra Leone	7.6	0.1	0	0.05	2.4	6	0.006	0.0	4.4	0.1	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Somalia	277.4	0.2	0	0.27	5.0	3	0.007	0.0	265.4	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	43.7	1.7	0	0.03	0.1	104	0.004	0.0	40.8	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	2.6	0.0	0	0.00	0.1	5	0.006	0.0	2.6	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	11.6	3.2	0	0.08	98.8	4	0.006	0.0	7.1	3.2	0.0	0.0	0	0.5	0.2	0.0	0.6	0
Togo	0.8	0.0	0	0.01	0.0	24	0.011	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	31.8	7.0	0	0.12	1.1	119	0.008	0.0	27.9	6.9	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	7.7	0.0	0	0.07	0.0	0	0.006	0.0	3.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1148.5	312.6	0	3.08	353.7	39*	0.006**	247.4	972.4	62.3	5.5	0.7	0	150.0	19.8	3.0	178.9	0

Table A-38. Case 7: Results by country, for the B1 low-range and B1 socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	11.3	12.7	0.0	0.00	0.6	502	0.035	0.0	11.3	12.7	1.7	0.0	0	7.5	0.0	0.7	10.0	0
Angola	20.5	15.3	0.0	0.00	7.7	27	0.026	4.9	18.6	10.4	0.8	0.0	0	8.7	1.6	0.0	11.2	0
Benin	1.3	0.0	0.0	0.00	0.0	91	0.032	0.0	0.0	0.0	0.0	0.0	0	17.8	0.1	2.2	20.1	0
Cameroon	15.2	32.9	0.0	0.01	4.3	77	0.032	0.0	8.5	32.9	6.3	0.0	0	26.7	12.1	0.0	45.1	0
Cape Verde	9.7	1.0	0.0	0.01	0.1	220	0.031	0.0	8.1	1.0	0.0	0.0	0	0.5	0.0	0.0	0.5	0
Comoros	4.4	0.5	0.0	0.00	0.3	57	0.024	0.0	3.7	0.4	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Congo	5.7	3.7	0.0	0.01	1.3	153	0.028	0.0	5.1	3.7	0.0	0.0	0	0.1	1.1	0.0	1.2	0
Congo, Dem Rep	2.1	0.0	0.0	0.00	0.0	18	0.027	0.0	2.1	0.0	0.1	0.0	0	0.9	0.2	0.0	1.2	0
Cote d'Ivoire	8.1	0.3	0.0	0.04	0.0	171	0.030	0.0	0.0	0.0	0.6	0.0	0	4.5	4.4	0.8	10.2	0
Djibouti	3.2	1.7	0.0	0.00	0.1	48	0.029	0.0	3.2	1.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	90.1	583.4	0.1	0.04	3.8	105	0.056	535.3	64.4	47.3	0.2	0.0	0	27.4	0.3	0.8	28.7	0
Equatorial Guinea	1.7	0.0	0.0	0.01	0.0	39	0.031	0.0	0.0	0.0	0.4	0.0	0	2.1	0.3	0.0	2.9	0
Eritrea	12.6	0.0	0.0	0.01	0.5	15	0.032	0.0	11.9	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	50.4	50.2	0.0	0.06	0.2	162	0.029	45.8	38.9	4.1	3.9	2.9	0	113.2	21.2	0.1	141.3	0
Gambia	10.4	0.9	0.0	0.00	0.9	53	0.030	0.0	8.9	0.9	0.1	0.0	0	6.3	1.8	0.1	8.3	0
Ghana	8.6	1.9	0.0	0.01	0.0	89	0.058	1.9	0.0	0.0	0.0	0.0	0	2.4	1.6	1.3	5.3	0
Guinea	20.7	0.2	0.0	0.02	0.1	41	0.031	0.0	6.3	0.2	0.0	0.0	0	3.0	6.5	0.0	9.5	0
Guinea-Bissau	51.4	1.8	0.0	0.04	7.1	14	0.030	0.0	38.3	1.7	0.0	0.0	0	1.3	2.3	0.1	3.7	0
Kenya	28.4	4.4	0.0	0.02	2.7	35	0.027	0.0	25.2	4.4	0.6	0.0	0	4.0	1.2	0.0	5.9	0
Liberia	3.8	0.0	0.0	0.02	0.0	62	0.031	0.0	0.0	0.0	0.3	0.0	0	1.8	0.8	0.0	2.8	0
Libyan Arab Jamahiriya	71.7	5.2	2.1	0.04	0.5	470	0.046	0.0	64.7	4.9	0.0	0.0	0	12.9	0.0	2.0	15.0	0
Madagascar	88.1	1.5	0.0	0.06	3.5	20	0.030	0.0	63.5	1.5	0.0	0.0	0	0.7	0.6	0.0	1.3	0
Mauritania	21.5	0.3	0.0	0.02	0.2	19	0.052	0.0	8.8	0.3	0.0	0.0	0	15.9	0.0	0.4	16.3	0
Mauritius	0.5	0.1	0.0	0.00	0.0	1279	0.025	0.0	0.0	0.0	0.0	0.0	0	54.8	0.0	0.0	54.8	0
Morocco	33.6	53.2	0.0	0.03	1.7	225	0.030	0.0	28.8	52.7	0.6	0.0	0	7.2	0.0	0.2	8.0	0
Mozambique	120.6	33.0	0.0	0.10	138.5	7	0.024	14.3	100.1	18.7	1.2	0.0	0	5.7	0.3	0.0	7.1	0
Namibia	100.4	0.0	0.3	0.02	0.2	12	0.022	0.0	98.7	0.0	0.0	0.0	0	30.0	0.0	0.0	30.0	0
Nigeria	62.3	2.0	0.0	0.05	1.8	67	0.075	0.0	15.6	1.8	0.1	0.0	0	120.4	21.8	2.0	144.3	0
Reunion	1.3	0.2	0.0	0.00	0.0	620	0.026	0.0	0.9	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.6	0.0	0.0	0.00	0.0	62	0.030	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	29.1	6.2	0.0	0.02	1.6	100	0.030	0.0	23.1	6.2	0.0	0.0	0	17.1	3.9	0.0	21.0	0
Seychelles	1.3	0.0	0.0	0.00	0.0	1002	0.027	0.0	0.9	0.0	0.0	0.0	0	105.7	0.4	0.0	106.1	0
Sierra Leone	20.1	0.3	0.0	0.02	0.5	26	0.031	0.0	12.9	0.3	0.0	0.0	0	0.4	1.3	0.1	1.9	0
Somalia	107.7	0.9	0.0	0.04	1.6	14	0.039	0.0	94.2	0.8	0.3	0.0	0	2.1	0.1	0.0	2.6	0
South Africa	102.0	7.5	0.0	0.01	0.2	342	0.021	0.0	97.1	7.4	4.9	0.0	0	21.2	2.4	0.7	29.2	0
Sudan	69.4	0.0	0.1	0.00	0.1	23	0.034	0.0	69.4	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	25.4	11.4	0.0	0.02	43.2	13	0.035	0.0	20.0	11.4	0.0	0.0	0	1.6	0.5	0.0	2.1	0
Togo	0.9	0.0	0.0	0.00	0.0	94	0.063	0.0	0.0	0.0	0.0	0.0	0	3.2	0.0	0.5	3.6	0
Tunisia	69.6	32.1	0.0	0.03	0.7	441	0.044	0.0	57.9	32.0	0.5	0.0	0	5.5	0.0	0.3	6.2	0
Western Sahara	12.1	0.0	0.0	0.02	0.0	0	0.032	0.0	6.9	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1297.8	864.9	2.7	0.78	224.0	148*	0.034**	602.2	1018.0	259.8	22.6	2.9	0	633.5	87.2	12.3	758.7	0

Table A-39. Case 7: Results by country, for the B1 low-range and B1 socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	11.0	13.8	0.0	0.00	0.5	668	0.041	0.0	11.0	13.8	2.3	0.0	0	10.0	0.0	1.0	13.2	0
Angola	20.3	15.0	0.0	0.00	1.1	36	0.031	5.8	17.9	9.2	1.1	0.0	0	11.8	2.2	0.0	15.0	0
Benin	1.2	0.0	0.0	0.00	0.0	127	0.038	0.0	0.0	0.0	0.0	0.0	0	25.2	0.2	3.1	28.4	0
Cameroon	16.5	48.1	0.0	0.01	4.6	109	0.039	0.0	8.5	48.1	9.0	0.0	0	38.3	17.2	0.0	64.5	0
Cape Verde	9.4	1.4	0.0	0.00	0.1	309	0.038	0.0	7.9	1.4	0.0	0.0	0	0.7	0.0	0.0	0.7	0
Comoros	4.3	0.7	0.0	0.00	0.3	80	0.029	0.0	3.7	0.7	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Congo	5.6	3.4	0.0	0.00	0.1	214	0.034	0.0	5.0	3.4	0.0	0.0	0	0.3	1.6	0.0	1.8	0
Congo, Dem Rep	2.1	0.0	0.0	0.00	0.0	25	0.033	0.0	2.1	0.0	0.1	0.0	0	1.3	0.3	0.0	1.7	0
Cote d'Ivoire	7.5	0.0	0.0	-0.02	0.0	239	0.036	0.0	0.0	0.0	0.9	0.0	0	6.6	6.3	1.1	14.8	0
Djibouti	3.1	2.5	0.0	0.00	0.1	68	0.034	0.0	3.1	2.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	49.8	709.8	0.0	-0.04	4.0	139	0.067	642.9	22.8	66.5	0.3	0.0	0	35.8	0.4	1.1	37.6	0
Equatorial Guinea	1.6	0.0	0.0	0.00	0.0	55	0.037	0.0	0.0	0.0	0.6	0.0	0	3.0	0.4	0.0	4.0	0
Eritrea	12.3	0.1	0.0	0.00	0.3	21	0.039	0.0	11.6	0.1	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Gabon	49.1	62.1	0.0	-0.03	0.2	234	0.035	56.1	37.8	6.0	5.6	4.1	0	160.8	30.2	0.1	200.8	0
Gambia	10.7	1.2	0.0	0.00	0.8	75	0.036	0.0	8.7	1.2	0.1	0.0	0	9.0	2.5	0.2	11.8	0
Ghana	8.3	2.3	0.0	-0.02	0.0	124	0.069	2.3	0.0	0.0	0.0	0.0	0	3.6	2.3	1.8	7.6	0
Guinea	22.8	0.3	0.0	0.00	0.1	58	0.037	0.0	6.2	0.3	0.0	0.0	0	4.6	9.2	0.0	13.7	0
Guinea-Bissau	51.8	2.3	0.0	-0.01	3.9	21	0.036	0.0	38.0	2.3	0.0	0.0	0	1.9	3.3	0.1	5.4	0
Kenya	27.8	6.6	0.0	-0.01	2.8	50	0.033	0.0	24.7	6.6	0.9	0.0	0	5.8	1.8	0.0	8.5	0
Liberia	3.6	0.0	0.0	-0.01	0.0	88	0.037	0.0	0.0	0.0	0.4	0.0	0	2.5	1.2	0.0	4.0	0
Libyan Arab Jamahiriya	50.9	5.1	0.0	-0.02	0.2	632	0.054	0.0	43.9	5.1	0.0	0.0	0	16.8	0.0	2.7	19.5	0
Madagascar	85.5	2.2	0.0	-0.05	3.7	29	0.036	0.0	62.1	2.2	0.0	0.0	0	1.0	0.9	0.0	1.9	0
Mauritania	21.9	0.4	0.0	-0.01	0.2	28	0.062	0.0	8.5	0.4	0.0	0.0	0	22.5	0.1	0.5	23.0	0
Mauritius	0.5	0.0	0.0	0.00	0.0	1812	0.030	0.0	0.0	0.0	0.0	0.0	0	77.2	0.0	0.0	77.2	0
Morocco	32.4	73.1	0.0	-0.02	1.8	301	0.036	0.0	27.9	73.1	0.9	0.0	0	9.6	0.0	0.2	10.7	0
Mozambique	118.2	42.6	0.0	-0.05	119.1	9	0.029	17.1	98.8	25.4	1.6	0.0	0	7.6	0.4	0.0	9.6	0
Namibia	507.1	0.1	0.3	-0.01	0.2	16	0.027	0.0	505.5	0.1	0.0	0.0	0	40.5	0.0	0.0	40.5	0
Nigeria	63.4	2.7	0.0	-0.05	2.0	93	0.089	0.0	15.5	2.7	0.1	0.0	0	169.0	31.0	2.8	202.9	0
Reunion	1.2	0.2	0.0	0.00	0.0	796	0.032	0.0	0.9	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.5	0.0	0.0	0.00	0.0	87	0.036	0.0	0.0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	29.0	8.7	0.0	-0.01	1.4	140	0.037	0.0	22.9	8.7	0.0	0.0	0	24.4	5.6	0.0	29.9	0
Seychelles	1.2	0.0	0.0	0.00	0.0	1403	0.032	0.0	0.9	0.0	0.0	0.0	0	146.6	0.5	0.0	147.1	0
Sierra Leone	20.5	0.4	0.0	0.00	0.6	36	0.037	0.0	12.7	0.4	0.1	0.0	0	0.7	1.8	0.1	2.7	0
Somalia	104.8	1.2	0.0	-0.04	1.3	20	0.047	0.0	92.0	1.2	0.5	0.0	0	3.0	0.2	0.0	3.7	0
South Africa	99.6	8.3	0.0	0.00	0.2	458	0.025	0.0	94.7	8.3	6.6	0.0	0	28.5	3.2	1.0	39.3	0
Sudan	83.9	0.0	0.1	0.00	0.1	33	0.040	0.0	83.9	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	24.9	15.5	0.0	-0.02	35.9	17	0.042	0.0	19.9	15.5	0.0	0.0	0	2.2	0.7	0.0	2.9	0
Togo	0.9	0.0	0.0	0.00	0.0	130	0.075	0.0	0.0	0.0	0.0	0.0	0	4.4	0.0	0.6	5.1	0
Tunisia	69.4	44.7	0.0	-0.01	0.8	588	0.052	0.0	56.5	44.7	0.6	0.0	0	7.4	0.0	0.4	8.4	0
Western Sahara	14.2	0.0	0.0	-0.01	0.0	1	0.038	0.0	9.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1648.8	1074.8	0.4	-0.43	186.4	202*	0.041**	724.2	1365.0	350.2	31.7	4.1	0	883.7	124.2	16.8	1059.7	0

Table A-40. Case 7: Results by country, for the B1 low-range and B1 socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	11.1	10.6	15.4	0.00	0.2	1847	0.079	0.0	11.1	15.4	6.5	0.0	0	24.5	0.0	2.5	33.6	0
Angola	21.1	34.3	39.0	0.00	1.0	103	0.062	10.6	16.4	28.5	3.2	0.0	0	32.0	6.2	0.0	41.3	0
Benin	1.8	0.0	0.0	0.00	0.0	423	0.074	0.0	0.0	0.0	0.0	0.0	0	85.7	0.6	10.7	97.1	0
Cameroon	23.3	172.1	163.2	0.00	2.2	369	0.075	0.0	8.1	163.2	32.0	0.0	0	135.3	60.9	0.0	228.2	0
Cape Verde	10.1	2.7	3.2	0.00	0.1	1038	0.073	0.0	7.9	3.2	0.0	0.0	0	1.9	0.0	0.0	1.9	0
Comoros	4.6	1.6	1.5	0.00	0.0	268	0.059	0.0	3.7	1.5	0.0	0.0	0	0.6	1.0	0.0	1.6	0
Congo	5.8	13.8	13.1	0.00	0.2	721	0.067	0.0	4.8	13.1	0.0	0.0	0	2.2	5.4	0.0	7.5	0
Congo, Dem Rep	2.0	0.0	0.0	0.00	0.0	86	0.065	0.0	2.0	0.0	0.5	0.0	0	4.3	0.9	0.0	5.7	0
Cote d'Ivoire	11.8	0.0	0.2	0.01	0.0	802	0.070	0.0	0.0	0.0	3.0	0.0	0	26.0	21.8	3.8	54.7	0
Djibouti	2.9	10.1	9.6	0.00	0.1	237	0.067	0.0	2.9	9.6	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	58.8	1398.2	1404.2	-0.03	3.9	384	0.120	1229.7	21.8	174.6	0.8	0.0	0	80.7	1.2	2.9	85.7	0
Equatorial Guinea	2.4	0.0	0.0	0.00	0.0	192	0.072	0.0	0.0	0.0	2.2	0.0	0	10.0	1.5	0.1	13.8	0
Eritrea	11.4	0.3	0.3	0.00	0.1	80	0.074	0.0	10.4	0.3	0.0	0.0	0	1.9	0.2	0.0	2.2	0
Gabon	51.9	131.1	129.5	0.01	0.1	845	0.069	114.1	34.2	15.2	20.0	14.1	0	551.5	107.1	0.6	693.3	0
Gambia	12.2	3.8	3.5	0.00	0.2	253	0.071	0.0	8.5	3.5	0.4	0.0	0	31.4	9.0	0.6	41.4	0
Ghana	10.5	4.9	4.8	0.00	0.0	412	0.123	4.8	0.0	0.0	0.0	0.0	0	14.3	8.0	6.2	28.4	0
Guinea	34.8	1.0	1.2	0.01	0.1	200	0.071	0.0	5.8	1.2	0.0	0.0	0	20.4	32.1	0.0	52.5	0
Guinea-Bissau	58.3	7.6	7.4	0.01	1.5	72	0.071	0.0	34.9	7.4	0.1	0.0	0	7.7	11.7	0.5	20.0	0
Kenya	28.0	17.5	17.2	0.00	0.7	181	0.066	0.0	22.8	17.2	3.5	0.0	0	21.8	6.8	0.0	32.1	0
Liberia	5.5	0.0	0.0	0.00	0.0	297	0.073	0.0	0.0	0.0	1.2	0.0	0	8.8	4.1	0.0	14.1	0
Libyan Arab Jamahiriya	48.1	1.1	1.1	0.00	0.0	1788	0.100	0.0	38.0	1.1	0.0	0.0	0	41.3	0.0	7.0	48.3	0
Madagascar	89.7	6.9	7.2	0.00	1.1	105	0.070	0.0	57.8	7.1	0.0	0.0	0	3.8	3.3	0.0	7.1	0
Mauritania	28.7	1.1	1.0	0.00	0.0	101	0.111	0.0	8.1	1.0	0.0	0.0	0	76.1	0.2	1.8	78.0	0
Mauritius	0.8	0.0	0.2	0.00	0.0	6366	0.060	0.0	0.0	0.0	0.0	0.0	0	259.0	0.0	0.0	259.0	0
Morocco	34.6	30.6	41.8	0.00	0.6	847	0.072	0.0	27.4	41.5	2.6	0.0	0	25.9	0.0	0.7	29.2	0
Mozambique	119.8	98.0	106.9	0.02	62.9	25	0.058	31.5	88.9	75.3	4.6	0.0	0	21.6	1.3	0.0	27.5	0
Namibia	35.4	0.2	0.2	0.00	0.1	50	0.054	0.0	32.6	0.2	0.0	0.0	0	110.1	0.0	0.0	110.0	0
Nigeria	79.5	8.0	6.7	-0.02	0.3	307	0.154	0.0	15.4	6.6	0.3	0.0	0	564.3	108.1	9.6	682.3	0
Reunion	1.4	0.0	0.0	0.00	0.0	1822	0.063	0.0	0.9	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.8	0.0	0.0	0.00	0.0	292	0.071	0.0	0.0	0.0	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Senegal	31.7	19.8	12.7	0.00	0.3	471	0.071	0.0	21.9	12.7	0.0	0.0	0	84.2	19.8	0.0	104.1	0
Seychelles	1.4	0.0	0.0	0.00	0.0	4470	0.065	0.0	0.8	0.0	0.0	0.0	0	451.9	1.7	0.0	453.6	0
Sierra Leone	25.7	1.5	1.5	0.01	0.7	124	0.071	0.0	12.1	1.5	0.2	0.0	0	3.8	6.4	0.4	10.8	0
Somalia	103.5	4.8	4.6	0.00	1.0	74	0.087	0.0	86.4	4.6	1.9	0.0	0	11.0	0.8	0.0	13.7	0
South Africa	93.1	3.4	2.5	0.00	0.0	1280	0.052	0.0	83.1	2.4	19.0	0.0	0	79.0	9.3	2.9	110.1	0
Sudan	9.1	0.0	0.0	0.00	0.0	119	0.077	0.0	9.1	0.0	0.0	0.0	0	0.6	1.2	0.0	1.8	0
Tanzania, Uni Rep	26.3	47.9	45.6	0.00	22.2	47	0.080	0.0	18.3	45.6	0.1	0.0	0	6.3	2.0	0.0	8.3	0
Togo	1.1	0.0	0.0	0.00	0.0	430	0.133	0.0	0.0	0.0	0.0	0.0	0	14.8	0.0	2.2	17.0	0
Tunisia	71.9	14.2	11.5	0.00	0.1	1642	0.096	0.0	52.6	11.5	1.7	0.0	0	18.2	0.0	1.1	21.0	0
Western Sahara	8.7	0.0	0.0	0.00	0.0	2	0.073	0.0	1.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1179.6	2046.9	2056.8	0.02	99.7	614*	0.078**	1390.7	749.9	664.8	103.8	14.1	0	2833.9	432.7	53.6	3438.0	0

Table A-41. Case 7: Results by country, for the B1 low-range and B1 socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	7.9	0.0	0.0	0.00	0.06	3781	0.130	0.0	7.9	0.0	13.0	0.0	0	41.1	0.0	4.5	58.7	0
Angola	21.6	84.9	84.9	0.00	1.03	296	0.104	0.0	14.2	84.9	9.0	0.0	0	84.1	17.2	0.0	110.3	0
Benin	1.9	0.0	0.0	0.00	0.00	1544	0.122	0.0	0.0	0.0	0.0	0.0	0	300.8	2.4	38.7	341.9	0
Cameroon	31.3	41.3	41.3	0.00	0.36	1363	0.123	0.0	7.4	41.3	120.0	0.0	0	503.1	226.3	0.0	849.3	0
Cape Verde	9.7	0.3	0.3	-0.01	0.01	3776	0.120	0.0	7.3	0.3	0.0	0.0	0	5.2	0.0	0.0	5.2	0
Comoros	4.5	5.7	5.7	0.00	0.04	991	0.098	0.0	3.4	5.7	0.0	0.0	0	3.3	3.5	0.0	6.8	0
Congo	5.4	0.0	0.0	0.00	0.02	2643	0.112	0.0	4.5	0.0	0.0	0.0	0	13.1	19.5	0.0	32.6	0
Congo, Dem Rep	1.8	0.1	0.1	0.00	0.00	317	0.109	0.0	1.8	0.1	1.8	0.0	0	14.5	3.4	0.0	19.8	0
Cote d'Ivoire	12.6	0.0	0.0	-0.03	0.00	2925	0.116	0.0	0.0	0.0	11.3	0.0	0	110.5	80.8	13.8	216.4	0
Djibouti	2.6	0.2	0.2	0.00	0.01	880	0.112	0.0	2.6	0.2	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Egypt	59.4	1966.0	1966.0	-0.08	0.39	778	0.188	1960.8	14.7	5.3	1.6	0.0	0	110.4	2.6	4.9	119.5	0
Equatorial Guinea	2.6	0.0	0.0	0.00	0.00	709	0.119	0.0	0.0	0.0	8.4	0.0	0	35.0	5.7	0.3	49.3	0
Eritrea	10.5	0.8	0.8	0.00	0.02	315	0.121	0.0	9.3	0.8	0.0	0.0	0	7.0	0.9	0.0	7.9	0
Gabon	50.6	239.0	239.0	-0.04	0.01	2813	0.115	233.5	29.5	5.4	75.2	48.8	0	1935.9	399.5	4.0	2463.5	0
Gambia	13.8	7.3	7.3	0.00	0.11	932	0.117	0.0	7.7	7.3	1.5	0.0	0	112.8	33.6	2.3	150.2	0
Ghana	10.9	9.9	9.9	-0.02	0.00	1490	0.192	10.0	0.0	0.0	0.0	0.0	0	61.8	29.6	22.1	113.5	0
Guinea	45.5	2.9	2.9	-0.02	0.01	744	0.118	0.0	5.2	2.9	0.0	0.0	0	95.9	119.1	0.0	215.1	0
Guinea-Bissau	62.9	20.4	20.4	-0.03	0.25	267	0.117	0.0	32.2	20.4	0.2	0.0	0	35.6	43.7	1.8	81.3	0
Kenya	26.8	20.2	20.2	-0.02	0.14	712	0.109	0.0	20.3	20.2	14.3	0.0	0	86.2	27.3	0.0	127.8	0
Liberia	5.9	0.0	0.0	-0.01	0.00	1086	0.120	0.0	0.0	0.0	4.6	0.0	0	32.9	15.1	0.0	52.6	0
Libyan Arab Jamahiriya	35.1	2.0	2.0	-0.04	0.03	3481	0.160	0.0	23.8	2.0	0.0	0.0	0	69.6	0.0	12.2	81.9	0
Madagascar	85.9	22.1	22.1	-0.06	0.35	413	0.114	0.0	51.7	22.1	0.0	0.0	0	15.5	13.4	0.0	28.9	0
Mauritania	33.0	4.0	4.0	-0.02	0.03	376	0.175	0.0	7.4	4.0	0.0	0.0	0	263.0	0.8	6.4	270.2	0
Mauritius	0.9	0.0	0.0	0.00	0.00	7941	0.101	0.0	0.0	0.0	0.0	0.0	0	898.7	0.0	0.0	898.7	0
Morocco	26.4	3.0	3.0	-0.02	0.21	1758	0.119	0.0	18.7	3.1	5.4	0.0	0	47.8	0.0	1.4	54.7	0
Mozambique	110.6	213.2	213.2	-0.08	20.0	73	0.097	57.0	76.2	156.2	13.6	0.0	0	60.5	3.7	0.0	77.7	0
Namibia	23.0	0.4	0.4	-0.01	0.12	145	0.092	0.0	19.7	0.4	0.0	0.0	0	286.3	0.0	0.0	286.3	0
Nigeria	88.1	26.0	26.0	-0.09	0.28	1109	0.238	0.0	14.6	26.0	1.3	0.0	0	1992.3	399.0	34.2	2426.8	0
Reunion	1.2	0.0	0.0	0.00	0.00	3144	0.104	0.0	0.6	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Sao Tome & Principe	0.8	0.0	0.0	0.00	0.00	1070	0.117	0.0	0.0	0.0	0.0	0.0	0	2.9	0.0	0.0	2.9	0
Senegal	32.4	17.6	17.6	-0.01	0.16	1729	0.118	0.0	19.8	17.6	0.1	0.0	0	301.6	73.7	0.0	375.4	0
Seychelles	1.0	0.0	0.0	0.00	0.00	4470	0.108	0.0	0.3	0.0	0.0	0.0	0	1194.1	5.2	0.0	1199.3	0
Sierra Leone	29.8	4.0	4.0	-0.02	0.08	456	0.118	0.0	11.2	4.0	0.7	0.0	0	19.8	23.2	1.5	45.1	0
Somalia	96.1	11.3	11.3	-0.05	0.13	293	0.141	0.0	78.2	11.3	7.7	0.0	0	41.4	3.0	0.0	52.1	0
South Africa	83.7	0.1	0.1	-0.01	0.02	3636	0.089	0.0	70.0	0.1	54.7	0.0	0	219.0	27.1	8.1	308.9	0
Sudan	7.7	0.1	0.1	0.00	0.00	463	0.126	0.0	7.7	0.1	0.0	0.0	0	3.4	4.5	0.0	7.9	0
Tanzania, Uni Rep	26.4	90.4	90.4	-0.02	4.96	136	0.130	0.0	16.5	90.4	0.2	0.0	0	18.3	5.8	0.0	24.3	0
Togo	1.2	0.0	0.0	0.00	0.00	1552	0.208	0.0	0.0	0.0	0.0	0.0	0	51.6	0.0	7.9	59.5	0
Tunisia	57.7	0.0	0.0	-0.04	0.08	3387	0.154	0.0	33.8	0.0	3.5	0.0	0	29.4	0.0	2.0	34.9	0
Western Sahara	8.8	0.0	0.0	-0.02	0.00	4	0.121	0.0	0.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1138.0	2793.0	2793.0	-0.75	28.91	1438*	0.127**	2261.3	619.0	532.0	348.1	48.8	0	9104.7	1589.8	166.1	11257.7	0

Table A-42. Case 7: Results by country, for the B1 low-range and B1 socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	4.1	0.0	0.0	0.00	0.06	5242	0.17	0.0	4.1	0.0	17.0	0.0	0	45.4	0.0	5.6	68.1	0
Angola	16.2	2.6	0.0	-0.01	0.10	534	0.14	0.0	7.0	2.6	16.1	0.0	0	139.2	30.2	0.0	185.4	0
Benin	1.0	0.0	0.0	-0.01	0.00	3756	0.16	0.0	0.0	0.0	0.0	0.0	0	655.6	5.5	87.6	748.7	0
Cameroon	34.9	0.0	0.0	-0.01	0.19	3284	0.16	0.0	4.6	0.0	286.2	0.0	0	1206.9	536.4	0.0	2029.6	0
Cape Verde	4.9	0.0	0.0	-0.01	0.01	7808	0.16	0.0	3.7	0.0	0.0	0.0	0	9.9	0.0	0.0	9.9	0
Comoros	2.6	0.0	0.0	-0.01	0.00	2435	0.13	0.0	2.1	0.0	0.0	0.0	0	9.0	8.0	0.0	17.0	0
Congo	3.3	0.0	0.0	-0.01	0.01	6401	0.15	0.0	2.8	0.0	0.0	0.0	0	39.4	44.9	0.0	84.3	0
Congo, Dem Rep	1.1	0.1	0.0	0.00	0.00	761	0.14	0.0	1.1	0.1	4.3	0.0	0	31.5	7.9	0.0	43.7	0
Cote d'Ivoire	6.4	-0.1	0.0	-0.07	0.00	6105	0.15	0.0	0.0	0.0	26.5	0.0	0	286.0	188.5	31.3	532.3	0
Djibouti	1.5	0.5	0.0	0.00	0.01	2094	0.15	0.0	1.5	0.5	0.0	0.0	0	0.2	0.5	0.0	0.7	0
Egypt	49.8	2.5	0.0	-0.14	0.36	1062	0.25	0.0	8.7	2.6	2.1	0.0	0	113.9	3.4	5.8	125.2	0
Equatorial Guinea	1.3	0.0	0.0	-0.01	0.00	1669	0.16	0.0	0.0	0.0	20.0	0.0	0	79.1	13.5	0.6	113.3	0
Eritrea	6.6	1.6	0.0	-0.01	0.02	759	0.16	0.0	5.9	1.6	0.0	0.0	0	15.5	2.2	0.0	17.7	0
Gabon	30.0	11.9	0.0	-0.11	0.00	5124	0.15	0.0	13.5	11.9	179.6	112.0	0	4496.5	952.2	11.9	5752.2	0
Gambia	12.7	0.0	0.0	0.00	0.01	2257	0.16	0.0	4.9	0.0	3.7	0.0	0	265.0	80.1	5.3	353.9	0
Ghana	7.7	15.5	0.0	-0.04	0.00	3589	0.25	15.6	0.0	0.0	0.0	0.0	0	162.6	68.7	49.6	280.9	0
Guinea	46.3	6.3	0.0	-0.05	0.01	1790	0.16	0.0	3.2	6.3	0.0	0.0	0	266.6	277.9	0.0	544.5	0
Guinea-Bissau	48.8	29.4	0.0	-0.08	0.14	637	0.15	0.0	20.1	29.4	0.5	0.0	0	94.8	104.1	4.2	203.6	0
Kenya	16.8	14.0	0.0	-0.04	0.06	1804	0.14	0.0	13.1	14.1	35.9	0.0	0	211.0	68.2	0.0	315.0	0
Liberia	3.1	0.0	0.0	-0.03	0.00	2584	0.16	0.0	0.0	0.0	10.9	0.0	0	77.1	35.0	0.0	123.0	0
Libyan Arab Jamahiriya	18.4	2.2	0.0	-0.09	0.03	4278	0.21	0.0	9.7	2.2	0.0	0.0	0	78.6	0.0	14.1	92.6	0
Madagascar	54.8	28.0	0.0	-0.13	0.10	1028	0.15	0.0	32.5	28.1	0.0	0.0	0	39.7	33.3	0.0	73.1	0
Mauritania	31.5	0.0	0.0	-0.05	0.00	854	0.23	0.0	7.5	0.0	0.0	0.0	0	601.7	2.0	14.9	618.5	0
Mauritius	0.4	0.0	0.0	0.00	0.00	7941	0.13	0.0	0.0	0.0	0.0	0.0	0	1970.8	0.0	0.0	1970.8	0
Morocco	13.4	0.3	0.0	-0.05	0.19	2468	0.16	0.0	9.3	0.4	7.5	0.0	0	61.6	0.0	2.0	71.1	0
Mozambique	63.5	319.3	0.0	-0.18	9.94	135	0.13	76.3	43.0	242.9	24.8	0.0	0	104.3	6.6	0.1	135.7	0
Namibia	4.2	0.4	0.1	-0.03	0.11	248	0.12	0.0	1.8	0.4	0.0	0.0	0	448.8	0.0	0.0	448.8	0
Nigeria	77.3	-0.1	0.0	-0.17	0.02	2669	0.31	0.0	10.6	0.0	2.9	0.0	0	4425.5	924.0	76.7	5429.1	0
Reunion	0.8	0.0	0.0	0.00	0.00	4123	0.14	0.0	0.3	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Sao Tome & Principe	0.4	0.0	0.0	0.00	0.00	2594	0.16	0.0	0.0	0.0	0.0	0.0	0	6.0	0.0	0.0	6.0	0
Senegal	22.6	0.0	0.0	-0.04	0.05	3911	0.16	0.0	12.3	0.0	0.3	0.0	0	706.7	175.2	0.0	882.2	0
Seychelles	0.5	0.0	0.0	0.00	0.00	4470	0.14	0.0	0.2	0.0	0.0	0.0	0	2238.4	11.0	0.0	2249.4	0
Sierra Leone	26.1	8.8	0.0	-0.04	0.07	1092	0.16	0.0	7.0	8.8	1.5	0.0	0	57.2	53.2	3.2	115.1	0
Somalia	60.2	23.4	0.0	-0.11	0.10	716	0.19	0.0	48.4	23.5	19.3	0.0	0	98.5	7.5	0.0	125.2	0
South Africa	44.9	0.1	0.0	-0.02	0.01	5914	0.12	0.0	32.6	0.2	97.5	0.0	0	376.9	49.1	14.3	537.9	0
Sudan	4.2	0.1	0.0	0.00	0.00	1157	0.17	0.0	4.2	0.1	0.0	0.0	0	10.5	10.9	0.0	21.3	0
Tanzania, Uni Rep	15.4	144.2	0.0	-0.04	2.34	253	0.17	0.0	9.7	144.2	0.3	0.0	0	33.0	10.5	0.0	43.8	0
Togo	0.8	0.0	0.0	0.00	0.00	3744	0.27	0.0	0.0	0.0	0.0	0.0	0	112.9	0.0	17.9	130.8	0
Tunisia	47.9	0.0	0.0	-0.08	0.08	4732	0.20	0.0	18.4	0.0	4.6	0.0	0	31.6	0.0	2.3	38.5	0
Western Sahara	5.1	0.0	0.0	-0.04	0.00	5	0.16	0.0	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	791.5	611.1	0.2	-1.71	14.02	2402*	0.17**	91.9	344.1	520.0	761.5	112.0	0	19608.1	3710.5	347.4	24539.1	0

Table A-43. Case 8: Results by country, for the B1 low-range and B1 socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	2.9	0	0.00	1.2	113	0.006	0.0	0	2.9	0.4	0.0	0	2.1	0.0	0.2	2.7	0
Angola	0	4.5	0	0.00	5.2	6	0.005	2.2	0	2.3	0.2	0.0	0	2.6	0.5	0.0	3.3	0
Benin	0	0.0	0	0.01	0.0	21	0.006	0.0	0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.5	0
Cameroon	0	8.4	0	0.01	10.4	16	0.006	0.0	0	8.4	1.4	0.0	0	5.9	2.7	0.0	9.9	0
Cape Verde	0	0.3	0	0.02	0.3	44	0.006	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0	0.1	0	0.01	0.3	13	0.004	0.0	0	0.1	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Congo	0	0.6	0	0.02	0.8	33	0.005	0.0	0	0.6	0.0	0.0	0	0.0	0.2	0.0	0.3	0
Congo, Dem Rep	0	0.0	0	0.00	0.1	4	0.005	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0	0.1	0	0.11	0.0	37	0.005	0.0	0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0	0.5	0	0.00	0.5	10	0.005	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	233.6	0	0.35	14.8	23	0.010	220.0	0	12.0	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	0	0.0	0	0.02	0.0	7	0.006	0.0	0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	0	0.0	0	0.02	0.8	2	0.006	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	0	19.0	0	0.16	1.3	26	0.005	18.1	0	0.8	0.9	0.7	0	25.5	4.7	0.0	31.7	0
Gambia	0	0.2	0	0.00	3.1	11	0.005	0.0	0	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	0	0.8	0	0.12	0.0	19	0.010	0.7	0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	0	0.1	0	0.04	0.5	8	0.006	0.0	0	0.1	0.0	0.0	0	0.5	1.4	0.0	2.0	0
Guinea-Bissau	0	0.3	0	0.10	6.1	3	0.005	0.0	0	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	0	0.8	0	0.06	4.3	7	0.005	0.0	0	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0	0.0	0	0.05	0.0	13	0.006	0.0	0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	0	1.7	0	0.16	0.4	97	0.008	0.0	0	1.4	0.0	0.0	0	3.5	0.0	0.5	4.0	0
Madagascar	0	0.3	0	0.27	14.0	3	0.005	0.0	0	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	0	0.1	0	0.09	0.1	3	0.009	0.0	0	0.0	0.0	0.0	0	3.6	0.0	0.1	3.7	0
Mauritius	0	0.0	0	0.00	0.0	264	0.005	0.0	0	0.0	0.0	0.0	0	11.7	0.0	0.0	11.7	0
Morocco	0	12.0	0	0.07	2.8	50	0.005	0.0	0	11.6	0.2	0.0	0	1.8	0.0	0.1	2.1	0
Mozambique	0	11.1	0	0.24	169.8	2	0.004	6.4	0	4.6	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	0	0.0	0	0.04	0.1	2	0.004	0.0	0	0.0	0.0	0.0	0	8.9	0.0	0.0	8.8	0
Nigeria	0	0.6	0	0.41	6.5	13	0.013	0.0	0	0.4	0.0	0.0	0	28.4	4.9	0.5	33.8	0
Reunion	0	0.1	0	0.01	0.0	158	0.005	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0	0.01	0.0	13	0.005	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	0	1.5	0	0.05	2.8	22	0.005	0.0	0	1.4	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	0	1.1	0	0.00	0.0	192	0.005	0.0	0	1.1	0.0	0.0	0	23.1	0.1	0.0	23.2	0
Sierra Leone	0	0.1	0	0.05	2.4	5	0.006	0.0	0	0.1	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Somalia	0	0.2	0	0.27	5.0	2	0.007	0.0	0	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	0	1.7	0	0.03	0.1	94	0.004	0.0	0	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	0	0.0	0	0.00	0.1	4	0.006	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	0	3.2	0	0.08	98.8	4	0.006	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Togo	0	0.0	0	0.01	0.0	20	0.011	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	0	7.0	0	0.12	1.1	98	0.008	0.0	0	6.9	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	0	0.0	0	0.07	0.0	0	0.006	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	312.7	0	3.08	353.7	33*	0.006**	247.4	0	62.3	5.5	0.7	0	150.0	19.6	3.0	178.9	0

Table A-44. Case 8: Results by country, for the B1 low-range and B1 socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	17.6	0.0	0.00	3.8	69	0.035	0.0	0	17.6	1.7	0.0	0	7.5	0.0	0.7	10.0	0
Angola	0	15.4	2.2	0.02	9.0	4	0.026	4.9	0	10.5	0.8	0.0	0	8.7	1.6	0.0	11.2	0
Benin	0	0.1	0.0	0.02	0.0	13	0.032	0.0	0	0.0	0.0	0.0	0	17.8	0.1	2.2	20.1	0
Cameroon	0	48.3	0.0	0.05	18.1	11	0.032	0.0	0	48.3	6.3	0.0	0	26.7	12	0.0	45.1	0
Cape Verde	0	1.5	0.0	0.03	0.6	25	0.031	0.0	0	1.4	0.0	0.0	0	0.5	0.0	0.0	0.5	0
Comoros	0	0.6	0.0	0.01	2.7	8	0.024	0.0	0	0.6	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Congo	0	3.7	0.0	0.02	1.3	22	0.028	0.0	0	3.7	0.0	0.0	0	0.1	1.1	0.0	1.2	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	3	0.027	0.0	0	0.0	0.1	0.0	0	0.9	0.2	0.0	1.2	0
Cote d'Ivoire	0	1.0	0.0	0.13	0.0	24	0.030	0.0	0	0.0	0.6	0.0	0	4.5	4.4	0.8	10.2	0
Djibouti	0	3.2	11.9	0.00	1.1	6	0.029	0.0	0	2.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	617.5	0.3	0.59	31.7	11	0.056	535.3	0	69.3	0.2	0.0	0	27.4	0.3	0.8	28.7	0
Equatorial Guinea	0	0.0	0.0	0.02	0.0	4	0.031	0.0	0	0.0	0.4	0.0	0	2.1	0.3	0.0	2.9	0
Eritrea	0	0.4	20.9	0.02	2.2	1	0.032	0.0	0	0.1	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	0	52.7	0.9	0.21	3.9	17	0.029	45.8	0	5.7	3.9	2.9	0	113.2	21.2	0.1	141.3	0
Gambia	0	1.1	0.0	0.01	6.0	8	0.03	0.0	0	1.1	0.1	0.0	0	6.3	1.8	0.1	8.3	0
Ghana	0	2.1	0.0	0.13	0.0	10	0.058	1.9	0	0.0	0.0	0.0	0	2.4	1.6	1.3	5.3	0
Guinea	0	0.3	0.0	0.14	0.9	5	0.031	0.0	0	0.3	0.0	0.0	0	3.0	6.4	0.0	9.5	0
Guinea-Bissau	0	2.1	0.0	0.17	15.8	2	0.030	0.0	0	2.0	0.0	0.0	0	1.3	2.3	0.1	3.7	0
Kenya	0	5.0	0.0	0.07	9.8	5	0.027	0.0	0	4.9	0.6	0.0	0	4.0	1.2	0.0	5.9	0
Liberia	0	0.1	0.0	0.06	0.0	8	0.031	0.0	0	0.0	0.3	0.0	0	1.8	0.8	0.0	2.8	0
Libyan Arab Jamahiriya	0	10.2	2.2	0.24	1.0	62	0.046	0.0	0	8.8	0.0	0.0	0	12.9	0.0	2.0	15.0	0
Madagascar	0	1.9	1.5	0.31	26.9	2	0.030	0.0	0	1.9	0.0	0.0	0	0.7	0.6	0.0	1.3	0
Mauritania	0	0.4	0.0	0.14	1.8	2	0.052	0.0	0	0.4	0.0	0.0	0	15.9	0.0	0.4	16.3	0
Mauritius	0	0.3	0.0	0.01	0.0	169	0.025	0.0	0	0.0	0.0	0.0	0	54.8	0.0	0.0	54.8	0
Morocco	0	86.2	0.0	0.09	16.1	34	0.030	0.0	0	84.4	0.6	0.0	0	7.2	0.0	0.2	8.0	0
Mozambique	0	42.4	161.7	0.33	611.5	1	0.024	14.3	0	23.4	1.2	0.0	0	5.7	0.3	0.0	7.1	0
Namibia	0	0.0	0.3	0.05	0.2	2	0.022	0.0	0	0.0	0.0	0.0	0	30.0	0.0	0.0	30.0	0
Nigeria	0	3.8	0.0	0.62	16.4	5	0.075	0.0	0	2.5	0.1	0.0	0	120.4	21.8	2.0	144.3	0
Reunion	0	0.3	0.0	0.01	0.1	99	0.026	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.01	0.0	8	0.030	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	8.9	0.0	0.08	9.1	15	0.030	0.0	0	8.8	0.0	0.0	0	17.1	3.9	0.0	21.0	0
Seychelles	0	6.0	0.0	0.01	0.0	132	0.027	0.0	0	5.9	0.0	0.0	0	105.7	0.4	0.0	106.1	0
Sierra Leone	0	0.4	0.0	0.1	4.3	3	0.031	0.0	0	0.3	0.0	0.0	0	0.4	1.3	0.1	1.9	0
Somalia	0	1.4	6.8	0.3	10.0	1	0.039	0.0	0	1.1	0.3	0.0	0	2.1	0.1	0.0	2.6	0
South Africa	0	8.1	0.0	0.04	0.3	75	0.021	0.0	0	7.8	4.9	0.0	0	21.2	2.4	0.7	29.2	0
Sudan	0	0.0	0.1	0.00	0.1	3	0.034	0.0	0	0.0	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Tanzania, Uni Rep	0	28.6	202.8	0.09	281.8	2	0.035	0.0	0	14.5	0.0	0.0	0	1.6	0.5	0.0	2.1	0
Togo	0	0.0	0.0	0.01	0.0	10	0.063	0.0	0	0.0	0.0	0.0	0	3.2	0.0	0.5	3.6	0
Tunisia	0	38.2	0.0	0.22	3.1	67	0.044	0.0	0	37.4	0.5	0.0	0	5.5	0.0	0.3	6.3	0
Western Sahara	0	0.0	0.0	0.09	0.0	0	0.032	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1009.6	411.6	4.45	1089.8	22*	0.034**	602.2	0	365.7	22.6	2.9	0	633.5	87.0	12.3	758.8	0

Table A-45. Case 8: Results by country, for the B1 low-range and B1 socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	24.7	0.0	0.00	4.0	62	0.041	0.0	0	24.7	2.3	0.0	0	10.0	0.0	1.0	13.2	0
Angola	0	20.4	0.1	0.02	9.6	4	0.031	5.8	0	14.6	1.1	0.0	0	11.8	2.2	0.0	15.0	0
Benin	0	0.1	0.0	0.02	0.0	12	0.038	0.0	0	0.0	0.0	0.0	0	25.2	0.2	3.1	28.4	0
Cameroon	0	70.7	0.0	0.06	19.4	10	0.039	0.0	0	70.6	9.0	0.0	0	38.3	17.2	0.0	64.5	0
Cape Verde	0	2.2	0.0	0.03	0.6	22	0.038	0.0	0	2.1	0.0	0.0	0	0.7	0.0	0.0	0.7	0
Comoros	0	0.9	0.0	0.01	2.9	8	0.029	0.0	0	0.9	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Congo	0	5.5	0.0	0.02	1.4	20	0.034	0.0	0	5.5	0.0	0.0	0	0.3	1.6	0.0	1.8	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	2	0.033	0.0	0	0.0	0.1	0.0	0	1.3	0.3	0.0	1.7	0
Cote d'Ivoire	0	1.3	0.0	0.12	0.0	21	0.036	0.0	0	0.0	0.9	0.0	0	6.6	6.3	1.1	14.8	0
Djibouti	0	4.1	0.0	0.00	1.1	5	0.034	0.0	0	4.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	759.8	0.3	0.60	34.1	9	0.067	642.9	0	98.0	0.3	0.0	0	35.8	0.4	1.1	37.6	0
Equatorial Guinea	0	0.0	0.0	0.02	0.0	3	0.037	0.0	0	0.0	0.6	0.0	0	3.0	0.4	0.0	4.0	0
Eritrea	0	0.1	0.4	0.02	2.4	1	0.039	0.0	0	0.1	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Gabon	0	65.9	0.1	0.20	4.2	16	0.035	56.1	0	8.3	5.6	4.1	0	160.8	30.2	0.1	200.8	0
Gambia	0	1.6	0.0	0.01	6.5	7	0.036	0.0	0	1.6	0.1	0.0	0	9.0	2.5	0.2	11.8	0
Ghana	0	2.6	0.0	0.13	0.0	8	0.069	2.3	0	0.0	0.0	0.0	0	3.6	2.3	1.8	7.6	0
Guinea	0	0.5	0.0	0.16	1.0	5	0.037	0.0	0	0.4	0.0	0.0	0	4.6	9.2	0.0	13.7	0
Guinea-Bissau	0	13.7	153.9	0.17	32.4	2	0.036	0.0	0	3.1	0.0	0.0	0	1.9	3.3	0.1	5.4	0
Kenya	0	7.4	0.0	0.07	10.5	5	0.033	0.0	0	7.3	0.9	0.0	0	5.8	1.8	0.0	8.5	0
Liberia	0	0.1	0.0	0.06	0.0	7	0.037	0.0	0	0.0	0.4	0.0	0	2.5	1.2	0.0	4.0	0
Libyan Arab Jamahiriya	0	14.3	2.1	0.24	1.1	56	0.054	0.0	0	12.4	0.0	0.0	0	16.8	0.0	2.7	19.5	0
Madagascar	0	2.9	2.0	0.30	29.0	2	0.036	0.0	0	2.8	0.0	0.0	0	1.0	0.9	0.0	1.9	0
Mauritania	0	0.6	0.0	0.14	1.9	1	0.062	0.0	0	0.6	0.0	0.0	0	22.5	0.1	0.5	23.0	0
Mauritius	0	0.4	0.0	0.01	0.0	151	0.030	0.0	0	0.0	0.0	0.0	0	77.2	0.0	0.0	77.2	0
Morocco	0	119.8	0.0	0.08	17.1	31	0.036	0.0	0	117.5	0.9	0.0	0	9.6	0.0	0.3	10.7	0
Mozambique	0	51.6	36.3	0.31	662.2	1	0.029	17.1	0	32.6	1.6	0.0	0	7.6	0.4	0.0	9.6	0
Namibia	0	0.1	0.3	0.04	0.2	2	0.027	0.0	0	0.1	0.0	0.0	0	40.5	0.0	0.0	40.5	0
Nigeria	0	5.6	0.0	0.64	17.7	4	0.089	0.0	0	3.6	0.1	0.0	0	169.0	31.0	2.8	202.9	0
Reunion	0	0.4	0.0	0.01	0.1	88	0.032	0.0	0	0.3	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.01	0.0	7	0.036	0.0	0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	0	13.0	0.0	0.08	9.8	14	0.037	0.0	0	12.9	0.0	0.0	0	24.4	5.6	0.0	29.9	0
Seychelles	0	8.5	0.0	0.00	0.0	120	0.032	0.0	0	8.4	0.0	0.0	0	146.6	0.5	0.0	147.1	0
Sierra Leone	0	0.5	0.0	0.11	4.6	3	0.037	0.0	0	0.5	0.1	0.0	0	0.7	1.8	0.1	2.7	0
Somalia	0	1.8	0.1	0.28	11.0	1	0.047	0.0	0	1.6	0.5	0.0	0	3.0	0.2	0.0	3.7	0
South Africa	0	11.9	0.0	0.04	0.4	70	0.025	0.0	0	11.5	6.6	0.0	0	28.5	3.2	1.0	39.3	0
Sudan	0	0.0	0.1	0.00	0.1	3	0.040	0.0	0	0.0	0.0	0.0	0	0.1	0.3	0.0	0.4	0
Tanzania, Uni Rep	0	20.4	1.2	0.08	302.3	2	0.042	0.0	0	20.3	0.0	0.0	0	2.2	0.7	0.0	2.9	0
Togo	0	0.0	0.0	0.01	0.0	8	0.075	0.0	0	0.0	0.0	0.0	0	4.4	0.0	0.6	5.1	0
Tunisia	0	57.2	0.0	0.23	4.7	61	0.052	0.0	0	56.1	0.6	0.0	0	7.4	0.0	0.4	8.4	0
Western Sahara	0	0.0	0.0	0.08	0.0	0	0.038	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1290.4	196.9	4.41	1192.5	20*	0.041**	724.2	0	522.4	31.7	4.1	0	883.7	124.2	16.9	1059.7	0

Table A-46. Case 8: Results by country, for the B1 low-range and B1 socio-economic scenario for 2050, without adaptation)

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	86.1	0.0	0.00	4.9	33	0.079	0.0	0	81.1	6.5	0.0	0	24.5	0.0	2.5	33.6	0
Angola	0	61.1	19.6	0.04	13.5	2	0.062	10.6	0	45.9	3.2	0.0	0	32.0	6.1	0.0	41.3	0
Benin	0	0.5	0.0	0.02	0.0	7	0.074	0.0	0	0.0	0.0	0.0	0	85.7	0.6	10.7	97.1	0
Cameroon	0	292.2	0.0	0.11	42.8	6	0.075	0.0	0	274.7	32.0	0.0	0	135.3	60.9	0.0	228.2	0
Cape Verde	0	9.7	0.0	0.04	1.7	10	0.073	0.0	0	8.8	0.0	0.0	0	1.9	0.0	0.0	1.9	0
Comoros	0	3.7	0.0	0.02	3.4	4	0.059	0.0	0	3.3	0.0	0.0	0	0.6	1.0	0.0	1.6	0
Congo	0	26.8	0.0	0.03	1.6	11	0.067	0.0	0	20.9	0.0	0.0	0	2.2	5.4	0.0	7.5	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	1	0.065	0.0	0	0.0	0.5	0.0	0	4.3	0.9	0.0	5.7	0
Cote d'Ivoire	0	7.2	0.0	0.19	0.0	12	0.070	0.0	0	0.0	3.0	0.0	0	26.0	21.8	3.8	54.7	0
Djibouti	0	17.4	0.1	0.00	1.6	3	0.067	0.0	0	15.6	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	1656.7	0.4	0.78	130.8	5	0.120	1229.7	0	354.6	0.8	0.0	0	80.9	1.3	2.9	85.9	0
Equatorial Guinea	0	0.0	0.0	0.03	0.0	2	0.072	0.0	0	0.0	2.2	0.0	0	10.0	1.5	0.1	13.8	0
Eritrea	0	0.8	0.5	0.03	3.0	1	0.074	0.0	0	0.3	0.0	0.0	0	1.9	0.2	0.0	2.2	0
Gabon	0	158.0	0.1	0.33	5.0	9	0.069	114.1	0	31.4	20.0	14.1	0	551.5	107.1	0.6	693.3	0
Gambia	0	6.8	0.0	0.03	8.9	4	0.071	0.0	0	6.4	0.4	0.0	0	31.4	9.0	0.6	41.4	0
Ghana	0	6.0	0.0	0.16	0.0	4	0.123	4.8	0	0.0	0.0	0.0	0	14.3	8.0	6.2	28.4	0
Guinea	0	2.2	0.0	0.28	1.2	3	0.071	0.0	0	1.6	0.0	0.0	0	20.4	32.1	0.0	52.5	0
Guinea-Bissau	0	13.7	155.9	0.29	76.0	1	0.071	0.0	0	12.3	0.1	0.0	0	7.7	11.7	0.5	20.0	0
Kenya	0	31.5	0.0	0.10	12.6	3	0.066	0.0	0	29.1	3.5	0.0	0	21.8	6.8	0.0	32.1	0
Liberia	0	0.4	0.0	0.09	0.0	4	0.073	0.0	0	0.0	1.2	0.0	0	8.8	4.1	0.0	14.1	0
Libyan Arab Jamahiriya	0	52.4	3.4	0.35	2.1	33	0.100	0.0	0	45.2	0.0	0.0	0	41.3	0.0	7.0	48.3	0
Madagascar	0	18.4	5.3	0.42	37.8	1	0.070	0.0	0	11.4	0.0	0.0	0	3.8	3.3	0.0	7.1	0
Mauritania	0	28.5	0.4	0.22	18.2	0	0.111	0.0	0	2.6	0.0	0.0	0	76.1	0.2	1.8	78.0	0
Mauritius	0	2.3	0.0	0.01	0.0	78	0.060	0.0	0	0.0	0.0	0.0	0	259.0	0.0	0.0	259.0	0
Morocco	0	388.8	9.6	0.13	20.8	18	0.072	0.0	0	375.2	2.6	0.0	0	25.9	0.0	0.7	29.2	0
Mozambique	0	177.7	12.8	0.52	866.2	1	0.058	31.5	0	101.5	4.6	0.0	0	21.6	1.3	0.0	27.5	0
Namibia	0	0.2	0.4	0.07	0.2	1	0.054	0.0	0	0.2	0.0	0.0	0	111.1	0.0	0.0	111.1	0
Nigeria	0	30.8	0.7	0.85	188.2	2	0.154	0.0	0	16.8	0.4	0.0	0	564.3	108.1	9.6	682.3	0
Reunion	0	1.0	0.0	0.01	0.1	45	0.063	0.0	0	0.8	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.01	0.0	3	0.071	0.0	0	0.0	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Senegal	0	54.2	0.0	0.14	17.4	8	0.071	0.0	0	51.0	0.0	0.0	0	84.2	20	0.0	104.1	0
Seychelles	0	30.7	0.0	0.01	0.0	70	0.065	0.0	0	29.1	0.0	0.0	0	451.9	1.7	0.0	453.6	0
Sierra Leone	0	4.7	9.7	0.18	7.6	2	0.071	0.0	0	2.0	0.2	0.0	0	3.8	6.4	0.4	10.8	0
Somalia	0	8.9	0.4	0.38	20.0	0	0.087	0.0	0	6.6	1.9	0.0	0	11.0	0.7	0.0	13.7	0
South Africa	0	41.0	0.1	0.07	0.6	49	0.052	0.0	0	36.9	19.0	0.0	0	79.0	9.3	2.8	110.1	0
Sudan	0	0.0	0.2	0.00	0.1	1	0.077	0.0	0	0.0	0.0	0.0	0	0.6	1.2	0.0	1.8	0
Tanzania, Uni Rep	0	278.0	52.6	0.13	1043.8	1	0.080	0.0	0	68.2	0.1	0.0	0	6.3	2.0	0.0	8.3	0
Togo	0	0.2	0.0	0.01	0.0	4	0.133	0.0	0	0.0	0.0	0.0	0	14.8	0.0	2.2	17.0	0
Tunisia	0	190.3	0.0	0.34	5.9	39	0.096	0.0	0	184.6	1.8	0.0	0	18.2	0.0	1.1	21.0	0
Western Sahara	0	0.0	0.0	0.12	0.0	0	0.073	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	3689.2	272.1	6.54	2536.2	12*	0.078**	1390.7	0	1818.1	104.0	14.1	0	2835.1	432.8	53.5	3439.3	0

Table A-47. Case 8: Results by country, for the B1 low-range and B1 socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	216.7	0.0	0.00	18.0	14	0.130	0.0	0	216.7	13.0	0.0	0	41.1	0.0	4.5	58.7	0
Angola	0	184.9	3.2	0.06	107.0	1	0.104	0.0	0	182.4	9.0	0.0	0	84.1	17.2	0.0	110.3	0
Benin	0	1.9	0.0	0.02	0.0	3	0.122	0.0	0	0.0	0.0	0.0	0	300.9	2.4	38.7	341.9	0
Cameroon	0	1146.6	0.0	0.17	108.3	3	0.123	0.0	0	1143.7	120.0	0.0	0	503.0	226.3	0.0	849.3	0
Cape Verde	0	45.2	0.2	0.04	7.6	4	0.120	0.0	0	43.4	0.0	0.0	0	5.2	0.0	0.0	5.2	0
Comoros	0	13.5	0.0	0.02	3.6	2	0.098	0.0	0	12.7	0.0	0.0	0	3.3	3.5	0.0	6.8	0
Congo	0	107.9	0.0	0.03	17.6	5	0.112	0.0	0	106.9	0.0	0.0	0	13.1	19.5	0.0	32.6	0
Congo, Dem Rep	0	0.3	0.1	0.00	0.5	0	0.109	0.0	0	0.1	1.8	0.0	0	14.5	3.4	0.0	19.8	0
Cote d'Ivoire	0	30.2	0.0	0.21	0.0	5	0.116	0.0	0	0.0	11.3	0.0	0	110.5	80.8	13.8	216.4	0
Djibouti	0	79.2	0.1	0.00	10.9	2	0.112	0.0	0	79.2	0.0	0.0	0	0.1	0.2	0.0	0.3	0
Egypt	0	3106.0	2.5	0.87	296.1	2	0.188	1960.7	0	926.9	1.6	0.0	0	111.5	2.6	4.9	120.7	0
Equatorial Guinea	0	0.2	0.0	0.03	0.0	0	0.119	0.0	0	0.0	8.4	0.0	0	35.0	5.7	0.3	49.3	0
Eritrea	0	5.8	5.4	0.03	5.6	0	0.121	0.0	0	1.6	0.0	0.0	0	7.0	0.9	0.0	7.9	0
Gabon	0	391.2	0.1	0.39	5.3	4	0.115	233.5	0	119.4	75.2	48.8	0	1935.9	399.5	4.0	2463.5	0
Gambia	0	26.5	0.0	0.04	11.4	2	0.117	0.0	0	26.1	1.5	0.0	0	112.8	33.6	2.2	150.2	0
Ghana	0	14.7	0.0	0.17	0.0	1	0.192	10.0	0	0.0	0.0	0.0	0	61.8	29.6	22.1	113.5	0
Guinea	0	8.7	0.0	0.38	1.3	1	0.118	0.0	0	6.2	0.0	0.0	0	95.9	119.1	0.0	215.1	0
Guinea-Bissau	0	157.7	40.0	0.36	104.2	0.1	0.117	0.0	0	48.9	0.2	0.0	0	35.6	43.7	1.8	81.3	0
Kenya	0	147.0	0.2	0.11	49.8	2	0.109	0.0	0	143.2	14.3	0.0	0	86.2	27.3	0.0	127.8	0
Liberia	0	1.8	0.0	0.10	0.0	1	0.120	0.0	0	0.0	4.6	0.0	0	32.9	15.1	0.0	52.6	0
Libyan Arab Jamahiriya	0	136.9	3.6	0.39	3.0	16	0.160	0.0	0	118.9	0.0	0.0	0	69.6	0.0	12.2	81.9	0
Madagascar	0	64.0	16.6	0.44	47.6	1	0.114	0.0	0	46.9	0.0	0.0	0	15.5	13.4	0.0	28.9	0
Mauritania	0	13.0	0.3	0.25	20.0	0	0.175	0.0	0	10.3	0.0	0.0	0	263.0	0.8	6.3	270.2	0
Mauritius	0	10.2	0.0	0.01	0.0	32	0.101	0.0	0	0.0	0.0	0.0	0	898.7	0.0	0.0	898.7	0
Morocco	0	879.6	0.1	0.14	34.8	9	0.119	0.0	0	852.5	5.4	0.0	0	47.8	0.0	1.4	54.7	0
Mozambique	0	366.3	9.3	0.59	1037.8	0	0.097	57.0	0	301.7	13.6	0.0	0	60.5	3.7	0.0	77.7	0
Namibia	0	0.7	0.5	0.08	0.3	1	0.092	0.0	0	0.7	0.0	0.0	0	301.1	0.0	0.0	301.1	0
Nigeria	0	121.6	1.0	0.98	205.2	1	0.238	0.0	0	66.4	1.3	0.0	0	1992.3	399.0	34.2	2426.8	0
Reunion	0	1.8	0.0	0.01	0.1	18	0.104	0.0	0	1.4	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Sao Tome & Principe	0	0.2	0.0	0.01	0.0	1	0.117	0.0	0	0.0	0.0	0.0	0	2.9	0.0	0.0	2.9	0
Senegal	0	245.2	0.0	0.17	64.8	4	0.118	0.0	0	242.7	0.1	0.0	0	301.6	73.7	0.0	375.4	0
Seychelles	0	140.7	0.0	0.01	0.3	33	0.108	0.0	0	137.1	0.0	0.0	0	1194.1	5.2	0.0	1199.3	0
Sierra Leone	0	9.9	0.5	0.24	11.6	0	0.118	0.0	0	8.2	0.7	0.0	0	19.8	23.2	1.5	45.1	0
Somalia	0	42.2	1.9	0.40	90.2	0	0.141	0.0	0	30.7	7.7	0.0	0	41.4	3.0	0.0	52.1	0
South Africa	0	153.0	0.1	0.09	2.1	30	0.089	0.0	0	144.1	54.7	0.0	0	219.0	27.1	8.1	308.9	0
Sudan	0	0.1	0.2	0.00	0.2	1	0.126	0.0	0	0.1	0.0	0.0	0	3.4	4.5	0.0	7.9	0
Tanzania, Uni Rep	0	1979.4	352.2	0.14	1867.6	0	0.130	0.0	0	215.5	0.2	0.0	0	18.3	5.8	0.0	24.3	0
Togo	0	0.6	0.0	0.02	0.0	1	0.208	0.0	0	0.0	0.0	0.0	0	51.6	0.0	7.9	59.5	0
Tunisia	0	521.6	0.0	0.41	12.0	22	0.154	0.0	0	510.0	3.5	0.0	0	29.4	0.0	2.0	34.9	0
Western Sahara	0	0.0	0.0	0.13	0.0	0	0.121	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	10372.9	437.9	7.54	4144.8	6*	0.127**	2261.2	0	5744.4	348.1	48.8	0	9120.6	1589.8	165.9	11273.7	0

Table A-48. Case 8: Results by country, for the B1 low-range and B1 socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	328.1	0.0	0.00	35.2	7	0.172	0.0	0	328.1	17.0	0.0	0	45.4	0.0	5.6	68.1	0
Angola	0	415.4	36.3	0.08	96.4	0	0.138	0.0	0	313.0	16.1	0.0	0	139.2	30.2	0.0	185.4	0
Benin	0	2.0	0.0	0.01	0.0	2	0.161	0.0	0	0.0	0.0	0.0	0	655.6	5.5	87.6	748.7	0
Cameroon	0	2959.7	0.0	0.22	210.2	1	0.162	0.0	0	2951.6	286.2	0.0	0	1206.9	536.4	0.0	2029.6	0
Cape Verde	0	103.1	0.1	0.02	8.3	1	0.158	0.0	0	100.2	0.0	0.0	0	9.9	0.0	0.0	9.9	0
Comoros	0	535.0	5.5	0.01	30.2	0	0.131	0.0	0	33.8	0.0	0.0	0	9.0	8.0	0.0	17.0	0
Congo	0	240.2	0.0	0.02	14.9	3	0.148	0.0	0	238.9	0.0	0.0	0	39.4	44.9	0.0	84.2	0
Congo, Dem Rep	0	0.4	0.0	0.00	0.6	0	0.144	0.0	0	0.3	4.3	0.0	0	31.5	7.9	0.0	43.7	0
Cote d'Ivoire	0	32.1	0.0	0.11	0.0	3	0.154	0.0	0	0.0	26.5	0.0	0	286.0	188.5	31.3	532.3	0
Djibouti	0	174.5	0.0	0.00	9.5	1	0.148	0.0	0	174.5	0.0	0.0	0	0.3	0.5	0.0	0.7	0
Egypt	0	2134.5	38.6	0.79	927.6	1	0.248	0.0	0	1482.9	2.1	0.0	0	116.2	3.6	5.8	127.7	0
Equatorial Guinea	0	0.2	0.0	0.02	0.0	0	0.158	0.0	0	0.0	20.0	0.0	0	79.1	13.5	0.6	113.3	0
Eritrea	0	4.3	0.4	0.02	5.1	0	0.161	0.0	0	3.7	0.0	0.0	0	15.5	2.2	0.0	17.7	0
Gabon	0	357.3	0.4	0.28	22.7	2	0.152	0.0	0	306.2	179.6	112.0	0	4496.5	952.2	11.9	5752.2	0
Gambia	0	512.2	39.7	0.05	37.9	1	0.155	0.0	0	68.4	3.7	0.0	0	265.0	80.1	5.3	353.9	0
Ghana	0	24.7	0.0	0.12	0.0	1	0.254	15.6	0	0.0	0.0	0.0	0	162.6	68.7	49.6	280.9	0
Guinea	0	22.4	0.1	0.40	9.5	0	0.156	0.0	0	16.6	0.0	0.0	0	266.6	277.9	0.0	544.5	0
Guinea-Bissau	0	125.3	0.8	0.32	138.3	0	0.155	0.0	0	116.1	0.5	0.0	0	94.8	104.1	4.2	203.6	0
Kenya	0	829.8	73.7	0.05	82.2	1	0.145	0.0	0	340.2	35.9	0.0	0	211.0	68.1	0.0	315.0	0
Liberia	0	1.9	0.0	0.05	0.0	1	0.159	0.0	0	0.0	10.9	0.0	0	77.1	35.0	0.0	123.0	0
Libyan Arab Jamahiriya	0	186.7	3.2	0.31	3.7	9	0.211	0.0	0	167.1	0.0	0.0	0	78.6	0.0	14.1	92.6	0
Madagascar	0	195.7	3.2	0.27	51.3	0	0.151	0.0	0	110.5	0.0	0.0	0	39.7	33.4	0.0	73.1	0
Mauritania	0	28.2	0.3	0.21	17.9	0	0.232	0.0	0	23.7	0.0	0.0	0	601.7	2.0	14.9	618.5	0
Mauritius	0	12.5	0.0	0.00	0.0	16	0.134	0.0	0	0.0	0.0	0.0	0	1970.8	0.0	0.0	1970.8	0
Morocco	0	1195.7	0.0	0.07	47.1	5	0.157	0.0	0	1178.0	7.5	0.0	0	61.6	0.0	2.0	71.1	0
Mozambique	0	595.8	5.8	0.36	993.7	0	0.128	76.3	0	512.0	24.8	0.0	0	104.3	6.6	0.1	135.7	0
Namibia	0	1.2	0.2	0.04	0.3	1	0.122	0.0	0	1.2	0.0	0.0	0	507.4	0.0	0.0	507.4	0
Nigeria	0	259.7	1.0	0.88	185.1	0	0.313	0.0	0	152.4	2.9	0.0	0	4425.5	924.0	76.7	5429.1	0
Reunion	0	2.6	0.0	0.01	0.4	9	0.138	0.0	0	2.3	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Sao Tome & Principe	0	0.1	0.0	0.01	0.0	0	0.155	0.0	0	0.0	0.0	0.0	0	6.0	0.0	0.0	6.0	0
Senegal	0	549.0	0.0	0.14	57.0	2	0.156	0.0	0	544.4	0.3	0.0	0	706.7	175.2	0.0	882.2	0
Seychelles	0	259.5	0.0	0.00	0.2	18	0.143	0.0	0	256.6	0.0	0.0	0	2238.4	11.0	0.0	2249.4	0
Sierra Leone	0	26.3	0.6	0.23	32.2	0	0.156	0.0	0	21.3	1.5	0.0	0	57.1	53.2	3.2	115.1	0
Somalia	0	79.0	0.6	0.26	80.7	0	0.186	0.0	0	71.3	19.3	0.0	0	98.5	7.5	0.0	125.2	0
South Africa	0	266.5	0.1	0.07	1.9	20	0.118	0.0	0	250.2	97.5	0.0	0	376.9	49.1	14.3	537.9	0
Sudan	0	0.2	0.1	0.00	0.2	0	0.166	0.0	0	0.2	0.0	0.0	0	10.4	10.9	0.0	21.3	0
Tanzania, Uni Rep	0	432.7	29.7	0.07	1711.1	0	0.172	0.0	0	367.6	0.3	0.0	0	33.0	10.5	0.0	43.8	0
Togo	0	0.7	0.0	0.01	0.0	1	0.274	0.0	0	0.0	0.0	0.0	0	112.9	0.0	17.9	130.8	0
Tunisia	0	722.8	0.0	0.36	17.0	13	0.203	0.0	0	710.3	4.6	0.0	0	31.6	0.0	2.3	38.5	0
Western Sahara	0	0.0	0.0	0.07	0.0	0	0.160	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	13617.8	240.5	5.94	4828.4	3*	0.168**	91.9	0	10843.6	761.5	112.0	0	19668.9	3710.7	347.4	24600.1	0

Table A-49. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	3.0	2.8	0	0.000	1.0	139	-0.001	0.0	3.0	2.8	0.4	0.0	0	2.1	0.0	0.2	2.7	0
Angola	44.7	4.5	0	-0.001	4.8	8	-0.002	2.2	44.7	2.3	0.2	0.0	0	2.6	0.5	0.0	3.3	0
Benin	0.0	0.0	0	-0.004	0.0	24	-0.002	0.0	0.0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.6	0
Cameroon	1.2	8.4	0	-0.001	10.4	19	-0.001	0.0	1.2	8.4	1.4	0.0	0	5.8	2.7	0.0	9.9	0
Cape Verde	1.2	0.2	0	-0.006	0.2	53	-0.001	0.0	1.2	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0.3	0.1	0	-0.004	0.2	15	-0.002	0.0	0.3	0.1	0.0	0.0	0	0.0	0.1	0.0	0.0	0
Congo	0.5	0.6	0	-0.006	0.7	38	-0.002	0.0	0.5	0.6	0.0	0.0	0	0	0.3	0.0	0.2	0
Congo, Dem Rep	0.3	0.0	0	0.000	0.1	4	-0.002	0.0	0.3	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0.0	0.0	0	-0.035	0.0	42	-0.002	0.0	0.0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0.9	0.5	0	0.000	0.5	11	-0.002	0.0	0.9	0.5	0.0	0.0	0	0	0.0	0.0	0.0	0
Egypt	16.2	232.2	0	0.169	14.7	29	0.002	219.2	11.0	11.9	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	0.0	0.0	0	-0.005	0.0	8	-0.001	0.0	0.0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	15.3	0.0	0	-0.003	0.7	3	-0.001	0.0	15.3	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	48.0	18.8	0	-0.051	1.3	32	-0.002	18.0	47.5	0.8	0.9	0.7	0	25.6	4.7	0.0	31.8	0
Gambia	1.1	0.2	0	0.000	3.1	13	-0.002	0.0	1.1	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	3.6	0.7	0	0.049	0.0	23	0.003	0.7	0.0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	1.2	0.1	0	-0.011	0.5	9	-0.002	0.0	1.2	0.1	0.0	0.0	0	0.5	1.4	0.0	1.9	0
Guinea-Bissau	7.3	0.3	0	-0.030	6.1	3	-0.002	0.0	7.3	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	4.6	0.7	0	-0.024	4.3	7	-0.002	0.0	4.6	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0.0	0.0	0	-0.015	0.0	15	-0.002	0.0	0.0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	19.8	1.4	0	0.011	0.4	122	0.001	0.0	19.4	1.4	0.0	0.0	0	3.6	0.0	0.5	4.1	0
Madagascar	213.9	0.3	0	0.027	14.0	4	-0.001	0.0	205.0	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	3.9	0.0	0	0.007	0.1	4	0.002	0.0	2.5	0.0	0.0	0.0	0	3.7	0.0	0.1	3.8	0
Mauritius	0.0	0.0	0	-0.002	0.0	299	-0.002	0.0	0.0	0.0	0.0	0.0	0	11.9	0.0	0.0	11.9	0
Morocco	8.8	11.6	0	-0.024	2.8	61	-0.002	0.0	8.8	11.6	0.2	0.0	0	1.9	0.0	0.1	2.1	0
Mozambique	163.2	10.7	0	-0.115	126.5	2	-0.002	6.4	161.8	4.3	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	1.6	0.0	0	-0.022	0.1	3	-0.002	0.0	1.6	0.0	0.0	0.0	0	8.8	0.0	0.0	8.8	0
Nigeria	18.9	0.4	0	0.191	1.0	17	0.006	0.0	4.3	0.3	0.0	0.0	0	28.5	4.9	0.5	33.9	0
Reunion	0.3	0.0	0	-0.002	0.0	198	-0.002	0.0	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0.0	0.0	0	-0.002	0.0	15	-0.002	0.0	0.0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	2.8	1.4	0	-0.015	2.8	25	-0.002	0.0	2.8	1.4	0.0	0.0	0	3.7	0.9	0.0	4.7	0
Seychelles	0.2	1.1	0	-0.002	0.0	232	-0.002	0.0	0.2	1.1	0.0	0.0	0	23.3	0.1	0.0	23.3	0
Sierra Leone	2.0	0.1	0	-0.014	2.4	6	-0.002	0.0	2.0	0.1	0.0	0.0	0	0.0	0.3	0.0	0.4	0
Somalia	256.2	0.2	0	0.067	4.8	3	0.000	0.0	251.7	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	28.4	1.7	0	-0.020	0.1	105	-0.002	0.0	28.4	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	1.8	0.0	0	0.000	0.0	5	-0.001	0.0	1.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	4.3	3.2	0	-0.016	98.7	4	-0.001	0.0	3.8	3.2	0.0	0.0	0	0.5	0.2	0.0	0.6	0
Togo	0.3	0.0	0	0.003	0.0	24	0.003	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	18.2	6.8	0	0.006	1.0	120	0.000	0.0	18.0	6.8	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	3.4	0.0	0	-0.019	0.0	0	-0.001	0.0	3.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	897.4	309.1	0	0.081	303.3	39*	-0.001**	246.5	855.9	61.5	5.5	0.7	0	150.4	19.9	3.0	179.4	0

Table A-50. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	8.1	12.3	0.0	0.000	0.6	518	-0.007	0.0	8.1	12.3	1.8	0.0	0	8.7	0.0	0.8	11.3	0
Angola	13.7	14.4	0.0	-0.007	7.9	26	-0.012	4.7	13.7	9.7	0.8	0.0	0	8.6	1.6	0.0	11.0	0
Benin	0	0.0	0.0	-0.004	0.0	88	-0.009	0.0	0.0	0.0	0.0	0.0	0	17.5	0.1	2.1	19.8	0
Cameroon	6.3	30.9	0.0	-0.012	4.3	74	-0.008	0.0	6.3	30.9	6.1	0.0	0	25.2	11.6	0.0	42.9	0
Cape Verde	5.5	0.9	0.0	-0.006	0.1	212	-0.008	0.0	5.5	0.9	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Comoros	2.6	0.4	0.0	-0.004	0.3	54	-0.013	0.0	2.6	0.4	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo	3.7	2.2	0.0	-0.006	0.1	146	-0.012	0.0	3.7	2.2	0.0	0.0	0	0.0	1.1	0.0	1.1	0
Congo, Dem Rep	1.6	0.0	0.0	0.000	0.0	17	-0.012	0.0	1.6	0.0	0.1	0.0	0	0.9	0.2	0.0	1.2	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	164	-0.010	0.0	0.0	0.0	0.6	0.0	0	3.8	4.3	0.8	9.4	0
Djibouti	2.4	1.6	0.0	0.000	0.1	46	-0.010	0.0	2.4	1.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	68.1	572.7	0.0	-0.011	3.6	108	0.015	526.5	55.6	45.6	0.2	0.0	0	28.3	0.3	0.9	29.7	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	37	-0.009	0.0	0.0	0.0	0.4	0.0	0	2.1	0.3	0.0	2.9	0
Eritrea	9.5	0.0	0.0	-0.003	0.4	14	-0.006	0.0	9.5	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	31.0	47.8	0.0	-0.059	0.2	154	-0.010	43.9	30.0	3.9	3.8	2.9	0	111.0	20.4	0.0	138.0	0
Gambia	6.7	0.7	0.0	-0.004	0.7	51	-0.009	0.0	6.7	0.7	0.1	0.0	0	6.1	1.7	0.1	7.9	0
Ghana	3.7	1.8	0.0	-0.011	0.0	85	0.018	1.8	0.0	0.0	0.0	0.0	0	2.1	1.5	1.3	4.9	0
Guinea	4.9	0.2	0.0	-0.043	0.1	39	-0.009	0.0	4.9	0.2	0.0	0.0	0	2.1	6.3	0.0	8.4	0
Guinea-Bissau	29.5	1.6	0.0	-0.045	7.1	14	-0.009	0.0	29.5	1.6	0.0	0.0	0	1.1	2.2	0.1	3.4	0
Kenya	20.6	4.1	0.0	-0.024	2.6	33	-0.012	0.0	20.6	4.1	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Liberia	0.0	0.0	0.0	-0.015	0.0	60	-0.010	0.0	0.0	0.0	0.2	0.0	0	1.7	0.8	0.0	2.8	0
Libyan Arab Jamahiriya	53.9	4.7	0.1	0.000	0.5	489	0.003	0.0	53.4	4.7	0.0	0.0	0	14.4	0.0	2.2	16.6	0
Madagascar	59.2	1.4	0.0	-0.069	3.4	19	-0.006	0.0	51.0	1.4	0.0	0.0	0	0.6	0.6	0.0	1.2	0
Mauritania	9.9	0.3	0.0	-0.020	0.2	19	0.012	0.0	6.5	0.3	0.0	0.0	0	15.9	0.0	0.4	16.3	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	1226	-0.012	0.0	0.0	0.0	0.0	0.0	0	57.8	0.0	0.0	57.8	0
Morocco	21.9	52.4	0.0	-0.024	1.6	231	-0.011	0.0	21.9	52.4	0.7	0.0	0	8.0	0.0	0.2	8.8	0
Mozambique	85.1	31.4	0.0	-0.163	140.4	6	-0.012	13.7	82.6	17.6	1.1	0.0	0	5.5	0.3	0.0	7.0	0
Namibia	91.8	0.0	0.0	-0.022	0.2	11	-0.014	0.0	91.8	0.0	0.0	0.0	0	29.6	0.0	0.0	29.6	0
Nigeria	34.3	1.7	0.0	-0.027	1.7	64	0.035	0.0	11.6	1.7	0.1	0.0	0	115.8	20.7	2.0	138.5	0
Reunion	0.6	0.1	0.0	-0.002	0.0	630	-0.011	0.0	0.6	0.1	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	59	-0.010	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	17.8	5.7	0.0	-0.023	1.6	96	-0.010	0.0	17.6	5.7	0.0	0.0	0	16.8	3.7	0.0	20.5	0
Seychelles	0.7	0.0	0.0	-0.002	0.0	1193	-0.012	0.0	0.7	0.0	0.0	0.0	0	134.1	0.4	0.0	134.6	0
Sierra Leone	9.6	0.2	0.0	-0.028	0.5	24	-0.009	0.0	9.6	0.2	0.0	0.0	0	0.2	1.3	0.1	1.6	0
Somalia	76.6	0.8	0.0	-0.042	1.6	13	0.000	0.0	72.1	0.8	0.3	0.0	0	2.1	0.1	0.0	2.5	0
South Africa	77.6	6.9	0.0	-0.025	0.2	326	-0.014	0.0	77.6	6.9	4.7	0.0	0	21.1	2.3	0.7	28.9	0
Sudan	63.2	0.0	0.0	0.000	0.1	22	-0.005	0.0	63.2	0.0	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Tanzania, Uni Rep	15.8	10.7	0.0	-0.027	43.1	12	-0.004	0.0	15.2	10.7	0.0	0.0	0	1.5	0.5	0.0	2.0	0
Togo	0.3	0.0	0.0	-0.001	0.0	90	0.021	0.0	0.0	0.0	0.0	0.0	0	3.0	0.0	0.4	3.4	0
Tunisia	47.0	31.6	0.0	0.000	0.7	453	0.002	0.0	46.3	31.6	0.5	0.0	0	6.2	0.0	0.3	7.0	0
Western Sahara	6.7	0.0	0.0	-0.019	0.0	0	-0.009	0.0	6.7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	889.9	839.6	0.1	-0.792	223.9	147*	-0.005**	590.6	829.1	248.4	22.1	2.9	0	657.0	83.9	12.4	778.3	0

Table A-51. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	8.2	12.4	0.0	0.000	0.4	698	-0.008	0.0	8.2	12.4	2.5	0.0	0	11.9	0.0	1.2	15.5	0
Angola	13.8	14.0	0.0	-0.009	1.0	34	-0.014	5.6	13.8	8.4	1.1	0.0	0	11.7	2.1	0.0	14.8	0
Benin	0.0	0.0	0.0	-0.004	0.0	122	-0.011	0.0	0.0	0.0	0.0	0.0	0	24.9	0.2	3.0	28.2	0
Cameroon	6.5	44.9	0.0	-0.014	4.6	103	-0.009	0.0	6.5	44.9	8.6	0.0	0	35.9	16.5	0.0	61.1	0
Cape Verde	5.6	1.2	0.0	-0.006	0.1	297	-0.010	0.0	5.6	1.2	0.0	0.0	0	0.8	0.0	0.0	0.8	0
Comoros	2.7	0.6	0.0	-0.004	0.3	76	-0.015	0.0	2.7	0.6	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo	3.8	3.1	0.0	-0.006	0.1	204	-0.014	0.0	3.8	3.1	0.0	0.0	0	0.0	1.5	0.0	1.5	0
Congo, Dem Rep	1.7	0.0	0.0	0.000	0.0	24	-0.014	0.0	1.7	0.0	0.1	0.0	0	1.3	0.3	0.0	1.7	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	229	-0.012	0.0	0.0	0.0	0.8	0.0	0	5.5	6.1	1.1	13.4	0
Djibouti	2.4	2.4	0.0	0.000	0.1	65	-0.012	0.0	2.4	2.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	32.3	697.4	0.0	-0.015	3.8	145	0.017	632.6	19.0	64.4	0.3	0.0	0	37.5	0.5	1.2	39.4	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	53	-0.010	0.0	0.0	0.0	0.6	0.0	0	3.1	0.4	0.0	4.1	0
Eritrea	9.6	0.1	0.0	-0.003	0.2	21	-0.007	0.0	9.6	0.1	0.0	0.0	0	0.6	0.1	0.0	0.6	0
Gabon	31.1	59.1	0.0	-0.061	0.2	222	-0.012	53.5	30.1	5.6	5.4	4.1	0	158.0	29.0	0.0	196.4	0
Gambia	6.8	1.1	0.0	-0.004	0.8	71	-0.011	0.0	6.8	1.1	0.1	0.0	0	8.6	2.4	0.2	11.3	0
Ghana	3.7	2.2	0.0	-0.011	0.0	119	0.021	2.2	0.0	0.0	0.0	0.0	0	3.0	2.1	1.8	6.9	0
Guinea	5.0	0.3	0.0	-0.047	0.1	55	-0.011	0.0	5.0	0.3	0.0	0.0	0	3.0	8.9	0.0	11.9	0
Guinea-Bissau	30.4	2.2	0.0	-0.047	3.8	19	-0.011	0.0	30.4	2.2	0.0	0.0	0	1.6	3.2	0.1	4.9	0
Kenya	21.0	6.1	0.0	-0.024	2.8	47	-0.014	0.0	21.0	6.1	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Liberia	0.0	0.0	0.0	-0.015	0.0	84	-0.011	0.0	0.0	0.0	0.3	0.0	0	2.4	1.1	0.0	3.9	0
Libyan Arab Jamahiriya	36.6	4.3	0.0	0.000	0.2	666	0.004	0.0	36.1	4.3	0.0	0.0	0	19.6	0.0	3.0	22.6	0
Madagascar	59.7	2.0	0.0	-0.069	3.7	27	-0.007	0.0	51.5	2.0	0.0	0.0	0	0.9	0.8	0.0	1.8	0
Mauritania	10.3	0.4	0.0	-0.021	0.2	27	0.014	0.0	6.5	0.4	0.0	0.0	0	22.6	0.1	0.5	23.2	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	1731	-0.014	0.0	0.0	0.0	0.0	0.0	0	83.7	0.0	0.0	83.7	0
Morocco	22.1	73.4	0.0	-0.024	1.8	311	-0.013	0.0	22.1	73.4	0.9	0.0	0	11.0	0.0	0.3	12.1	0
Mozambique	87.3	40.1	0.0	-0.166	118.6	9	-0.014	16.3	84.8	23.8	1.5	0.0	0	7.5	0.4	0.0	9.4	0
Namibia	468.4	0.0	0.0	-0.022	0.2	15	-0.016	0.0	468.4	0.0	0.0	0.0	0	40.0	0.0	0.0	40.0	0
Nigeria	35.7	2.5	0.0	-0.030	1.9	89	0.041	0.0	11.9	2.5	0.1	0.0	0	162.3	29.2	2.8	194.5	0
Reunion	0.6	0.2	0.0	-0.002	0.0	818	-0.012	0.0	0.6	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	83	-0.011	0.0	0.0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	18.4	7.9	0.0	-0.024	1.3	133	-0.011	0.0	18.2	7.9	0.0	0.0	0	23.8	5.3	0.0	29.2	0
Seychelles	0.7	0.0	0.0	-0.002	0.0	1705	-0.014	0.0	0.7	0.0	0.0	0.0	0	195.3	0.6	0.0	195.9	0
Sierra Leone	9.7	0.3	0.0	-0.03	0.5	34	-0.011	0.0	9.7	0.4	0.1	0.0	0	0.3	1.8	0.1	2.2	0
Somalia	77.2	1.1	0.0	-0.042	1.2	19	0.000	0.0	72.7	1.1	0.5	0.0	0	3.0	0.2	0.0	3.6	0
South Africa	78.8	7.0	0.0	-0.026	0.1	434	-0.017	0.0	78.8	7.0	6.4	0.0	0	28.6	3.1	1.0	39.0	0
Sudan	78.2	0.0	0.0	0.000	0.1	31	-0.006	0.0	78.2	0.0	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Tanzania, Uni Rep	16.4	14.6	0.0	-0.027	37.4	16	-0.004	0.0	15.9	14.6	0.0	0.0	0	2.1	0.7	0.0	2.7	0
Togo	0.3	0.0	0.0	-0.001	0.0	125	0.024	0.0	0.0	0.0	0.0	0.0	0	4.2	0.0	0.6	4.7	0
Tunisia	47.7	44.2	0.0	0.000	0.8	612	0.002	0.0	47.0	44.2	0.6	0.0	0	8.4	0.0	0.4	9.5	0
Western Sahara	9.4	0.0	0.0	-0.019	0.0	1	-0.010	0.0	9.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1242.1	1045.0	0.0	-0.819	186.3	201*	-0.006**	710.2	1179.1	334.5	30.8	4.1	0	929.1	118.9	17.3	1099.7	0

Table A-52. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	7.3	6.2	0.0	0.000	0.05	2209	-0.012	0.0	7.3	0.0	8.3	0.0	0	39.3	0.0	4.0	51.5	0
Angola	11.0	39.2	0.0	-0.013	1.00	107	-0.023	10.5	11.0	27.7	3.4	0.0	0	37.1	6.8	0.0	47.2	0
Benin	0.0	0.0	0.0	-0.004	0.00	441	-0.017	0.0	0.0	0.0	0.0	0.0	0	97.5	0.7	11.9	110.0	0
Cameroon	5.7	170.4	0.0	-0.021	2.14	381	-0.015	0.0	5.7	163.0	33.6	0.0	0	140.4	64.6	0.0	238.7	0
Cape Verde	4.8	1.6	0.0	-0.006	0.02	1097	-0.015	0.0	4.8	1.1	0.0	0.0	0	3.3	0.0	0.0	3.3	0
Comoros	2.4	1.6	0.0	-0.004	0.03	274	-0.024	0.0	2.4	1.5	0.0	0.0	0	0.0	1.2	0.0	1.2	0
Congo	3.3	13.2	0.0	-0.006	0.16	747	-0.021	0.0	3.3	12.6	0.0	0.0	0	0.0	5.9	0.0	5.9	0
Congo, Dem Rep	1.4	0.0	0.0	0.000	0.03	89	-0.022	0.0	1.4	0.0	0.5	0.0	0	5.0	1.0	0.0	6.5	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.00	838	-0.019	0.0	0.0	0.0	3.2	0.0	0	21.4	23.8	4.2	52.5	0
Djibouti	2.0	10.0	0.0	0.000	0.11	243	-0.019	0.0	2.0	9.5	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	32.2	1358.3	0.0	-0.025	2.72	458	0.027	1255.0	15.7	143.9	1.0	0.0	0	107.9	1.6	3.6	114.0	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.00	199	-0.016	0.0	0.0	0.0	2.4	0.0	0	11.9	1.6	0.1	16.0	0
Eritrea	8.1	0.2	0.0	-0.003	0.10	84	-0.011	0.0	8.1	0.2	0.0	0.0	0	2.3	0.3	0.0	2.6	0
Gabon	25.2	127.6	0.0	-0.066	0.03	871	-0.019	111.6	24.4	13.3	21.1	16.0	0	617.4	113.3	0.0	767.8	0
Gambia	6.1	3.4	0.0	-0.006	0.14	261	-0.017	0.0	6.1	3.3	0.4	0.0	0	33.7	9.4	0.7	44.2	0
Ghana	3.7	4.7	0.0	-0.011	0.00	430	0.033	4.6	0.0	0.0	0.0	0.0	0	11.8	8.0	7.2	27.0	0
Guinea	4.4	0.9	0.0	-0.062	0.01	205	-0.017	0.0	4.4	0.7	0.0	0.0	0	11.7	34.8	0.0	46.6	0
Guinea-Bissau	25.8	7.1	0.0	-0.057	1.44	73	-0.017	0.0	25.8	7.2	0.1	0.0	0	6.1	12.3	0.5	19.0	0
Kenya	18.6	17.2	0.0	-0.024	0.64	185	-0.023	0.0	18.6	16.9	3.7	0.0	0	23.2	7.0	0.0	33.9	0
Liberia	0.0	0.0	0.0	-0.015	0.00	311	-0.017	0.0	0.0	0.0	1.3	0.0	0	9.5	4.5	0.0	15.3	0
Libyan Arab Jamahiriya	29.1	0.9	0.0	-0.002	0.03	2170	0.006	0.0	28.6	1.1	0.0	0.0	0	63.7	0.0	9.9	73.6	0
Madagascar	52.9	6.6	0.0	-0.069	1.10	108	-0.011	0.0	44.7	7.0	0.0	0.0	0	3.9	3.5	0.0	7.4	0
Mauritania	10.5	1.0	0.0	-0.024	0.03	105	0.023	0.0	5.5	1.0	0.0	0.0	0	88.4	0.2	2.0	90.6	0
Mauritius	0.0	0.0	0.0	-0.002	0.00	6646	-0.021	0.0	0.0	0.0	0.0	0.0	0	348.0	0.0	0.0	348.0	0
Morocco	19.5	27.4	0.0	-0.024	0.37	993	-0.020	0.0	19.5	24.9	3.0	0.0	0	37.2	0.0	0.9	41.1	0
Mozambique	76.5	95.7	0.0	-0.178	62.40	26	-0.023	30.8	74.1	75.2	4.7	0.0	0	23.9	1.3	0.0	29.9	0
Namibia	26.2	0.2	0.0	-0.022	0.12	51	-0.025	0.0	26.2	0.1	0.0	0.0	0	127.2	0.0	0.0	127.2	0
Nigeria	38.1	6.6	0.0	-0.042	0.25	319	0.064	0.0	10.9	6.4	0.4	0.0	0	597.6	110.6	10.9	719.5	0
Reunion	0.5	0.0	0.0	-0.002	0.00	2147	-0.019	0.0	0.5	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.00	302	-0.018	0.0	0.0	0.0	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Senegal	16.4	18.9	0.0	-0.027	0.30	488	-0.018	0.0	16.2	12.3	0.0	0.0	0	93.2	20.8	0.0	114.0	0
Seychelles	0.0	0.0	0.0	-0.002	0.00	4470	-0.023	0.0	0.0	0.0	0.0	0.0	0	727.7	2.3	0.0	730.0	0
Sierra Leone	8.4	1.2	0.0	-0.038	0.60	128	-0.017	0.0	8.4	1.4	0.2	0.0	0	1.0	7.1	0.5	8.8	0
Somalia	66.1	4.7	0.0	-0.042	0.99	77	0.001	0.0	61.6	4.5	2.0	0.0	0	12.3	0.8	0.0	15.1	0
South Africa	63.8	2.0	0.0	-0.029	0.03	1314	-0.026	0.0	63.8	2.4	20.2	0.0	0	90.9	9.9	3.1	124.1	0
Sudan	6.5	0.0	0.0	0.000	0.02	124	-0.010	0.0	7.0	0.0	0.0	0.0	0	0.1	1.3	0.0	1.4	0
Tanzania, Uni Rep	14.1	47.4	0.0	-0.027	22.20	48	-0.007	0.0	13.6	45.5	0.1	0.0	0	6.6	2.1	0.0	8.7	0
Togo	0.3	0.0	0.0	-0.001	0.00	449	0.038	0.0	0.0	0.0	0.0	0.0	0	14.9	0.0	2.2	17.2	0
Tunisia	42.4	9.3	0.0	0.000	0.12	1947	0.004	0.0	41.6	9.4	2.1	0.0	0	27.3	0.0	1.4	30.9	0
Western Sahara	0.8	0.0	0.0	-0.019	0.00	2	-0.016	0.0	0.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	634.1	1983.7	0.0	-0.915	97.18	676*	-0.010**	1412.5	564.0	592.1	111.7	16.0	0	3445.0	456.8	63.1	4092.4	0

Table A-53. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	3.9	0.0	0.0	0.000	0.05	5471	-0.018	0.0	3.9	0.0	21.4	0.0	0	100.5	0.0	10.3	132.2	0
Angola	6.9	77.1	0.0	-0.018	1.00	295	-0.033	0.0	6.9	77.1	9.6	0.0	0	105.6	19.3	0.0	134.5	0
Benin	0.0	0.0	0.0	-0.004	0.00	1558	-0.025	0.0	0.0	0.0	0.0	0.0	0	360.4	2.6	44.0	407.0	0
Cameroon	4.1	5.1	0.0	-0.030	0.24	1352	-0.021	0.0	4.1	5.1	124.4	0.0	0	519.4	239.1	0.0	882.9	0
Cape Verde	3.4	0.2	0.0	-0.006	0.01	3895	-0.022	0.0	3.4	0.2	0.0	0.0	0	12.1	0.0	0.0	12.1	0
Comoros	1.8	5.4	0.0	-0.004	0.04	968	-0.035	0.0	1.8	5.4	0.0	0.0	0	0.0	4.3	0.0	4.3	0
Congo	2.4	0.0	0.0	-0.006	0.02	2645	-0.031	0.0	2.4	0.0	0.0	0.0	0	0.0	21.9	0.0	21.9	0
Congo, Dem Rep	1.1	0.0	0.0	0.000	0.00	315	-0.032	0.0	1.1	0.0	2.0	0.0	0	18.5	3.7	0.0	24.2	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.00	2969	-0.028	0.0	0.0	0.0	11.9	0.0	0	79.0	87.9	15.6	194.3	0
Djibouti	1.4	0.2	0.0	0.000	0.01	866	-0.027	0.0	1.4	0.2	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Egypt	29.0	2128.1	0.0	-0.033	0.32	1124	0.039	2125.9	8.9	2.3	2.4	0.0	0	222.5	4.1	8.3	237.3	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.00	712	-0.024	0.0	0.0	0.0	8.8	0.0	0	44.1	5.9	0.3	59.0	0
Eritrea	5.9	0.6	0.0	-0.003	0.02	321	-0.016	0.0	5.9	0.6	0.0	0.0	0	9.1	1.0	0.0	10.1	0
Gabon	16.9	223.9	0.0	-0.073	0.01	2792	-0.028	218.9	16.3	5.1	78.0	59.0	0	2283.3	419.1	0.0	2839.4	0
Gambia	4.4	5.8	0.0	-0.009	0.10	927	-0.025	0.0	4.4	5.8	1.6	0.0	0	124.7	34.8	2.5	163.5	0
Ghana	3.7	9.2	0.0	-0.011	0.00	1511	0.049	9.2	0.0	0.0	0.0	0.0	0	45.5	28.3	26.5	100.4	0
Guinea	3.2	2.6	0.0	-0.075	0.01	729	-0.025	0.0	3.2	2.7	0.0	0.0	0	43.4	128.8	0.0	172.3	0
Guinea-Bissau	19.4	18.4	0.0	-0.066	0.24	261	-0.025	0.0	19.4	18.4	0.2	0.0	0	22.5	45.5	2.0	70.3	0
Kenya	13.7	18.8	0.0	-0.024	0.13	695	-0.033	0.0	13.7	18.8	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Liberia	0.0	0.0	0.0	-0.015	0.00	1108	-0.025	0.0	0.0	0.0	4.9	0.0	0	35.2	16.5	0.0	56.6	0
Libyan Arab Jamahiriya	11.3	1.7	0.0	-0.002	0.03	4449	0.009	0.0	10.8	1.7	0.0	0.0	0	156.5	0.0	24.6	181.1	0
Madagascar	41.1	19.9	0.0	-0.069	0.34	408	-0.016	0.0	32.9	19.9	0.0	0.0	0	15.7	13.7	0.0	29.4	0
Mauritania	10.1	3.5	0.0	-0.026	0.03	377	0.033	0.0	4.0	3.5	0.0	0.0	0	326.8	0.8	7.2	334.9	0
Mauritius	0.0	0.0	0.0	-0.002	0.00	7941	-0.031	0.0	0.0	0.0	0.0	0.0	0	1365.3	0.0	0.0	1365.3	0
Morocco	10.4	0.4	0.0	-0.024	0.20	2485	-0.030	0.0	10.4	0.4	7.9	0.0	0	96.5	0.0	2.3	106.7	0
Mozambique	51.7	200.7	0.0	-0.188	19.82	71	-0.033	53.2	49.8	147.5	13.5	0.0	0	68.0	3.7	0.0	85.2	0
Namibia	10.4	0.2	0.0	-0.022	0.11	144	-0.036	0.0	10.4	0.2	0.0	0.0	0	362.2	0.0	0.0	362.2	0
Nigeria	38.8	23.2	0.0	-0.050	0.27	1117	0.093	0.0	8.9	23.2	1.4	0.0	0	2062.4	391.1	40.3	2495.2	0
Reunion	0.3	0.0	0.0	-0.002	0.00	4385	-0.028	0.0	0.3	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.00	1070	-0.026	0.0	0.0	0.0	0.0	0.0	0	4.9	0.0	0.0	4.9	0
Senegal	12.0	15.0	0.0	-0.031	0.14	1728	-0.026	0.0	11.9	15.1	0.1	0.0	0	344.6	76.8	0.0	421.5	0
Seychelles	0.0	0.0	0.0	-0.002	0.00	4470	-0.033	0.0	0.0	0.0	0.0	0.0	0	2239.8	7.0	0.0	2246.8	0
Sierra Leone	6.2	3.3	0.0	-0.046	0.08	454	-0.025	0.0	6.2	3.3	0.7	0.0	0	3.6	26.2	1.9	32.4	0
Somalia	49.9	10.0	0.0	-0.042	0.12	290	0.001	0.0	45.4	10.0	7.7	0.0	0	48.4	3.1	0.0	59.3	0
South Africa	40.3	0.1	0.0	-0.033	0.02	3593	-0.038	0.0	40.3	0.1	57.6	0.0	0	258.8	28.1	8.9	353.4	0
Sudan	4.4	0.0	0.0	0.000	0.00	466	-0.014	0.0	4.4	0.0	0.0	0.0	0	0.2	5.2	0.0	5.4	0
Tanzania, Uni Rep	10.0	85.1	0.0	-0.027	4.80	133	-0.010	0.0	9.5	85.1	0.2	0.0	0	18.9	5.9	0.0	25.0	0
Togo	0.3	0.0	0.0	-0.001	0.00	1575	0.056	0.0	0.0	0.0	0.0	0.0	0	49.3	0.0	7.6	56.9	0
Tunisia	23.8	0.0	0.0	-0.001	0.08	4866	0.006	0.0	22.5	0.0	5.4	0.0	0	66.6	0.0	3.6	75.6	0
Western Sahara	0.4	0.0	0.0	-0.019	0.00	6	-0.023	0.0	0.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	442.6	2858.6	0.0	-1.006	28.24	1631*	-0.014**	2407.2	364.9	451.7	374.2	59	0	11606.0	1652.2	205.9	13897.5	0

Table A-54. Case 9: Results by country, for No SLR and A1B socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	2.3	0.0	0.0	0.000	0.05	9342	-0.023	0.0	2.3	0.0	39.2	0.0	0	180.9	0.0	18.9	238.9	0
Angola	4.1	2.3	0.0	-0.022	0.10	542	-0.043	0.0	4.1	2.3	17.9	0.0	0	197.5	36.1	0.0	251.5	0
Benin	0.0	0.0	0.0	-0.004	0.00	3872	-0.033	0.0	0.0	0.0	0.0	0.0	0	887.4	6.3	108	1002.1	0
Cameroon	3.3	0.0	0.0	-0.037	0.19	3312	-0.028	0.0	3.2	0.0	306.4	0.0	0	1278.9	588.7	0.0	2174.0	0
Cape Verde	1.7	0.0	0.0	-0.006	0.00	8048	-0.029	0.0	1.7	0.0	0.0	0.0	0	29.9	0.0	0.0	29.9	0
Comoros	1.4	0.0	0.0	-0.004	0.00	2405	-0.045	0.0	1.4	0.0	0.0	0.0	0	0.1	10.5	0.0	10.6	0
Congo	1.9	0.0	0.0	-0.006	0.010	6530	-0.041	0.0	1.9	0.0	0.0	0.0	0	0.0	53.8	0.0	53.8	0
Congo, Dem Rep	0.9	0.1	0.0	0.000	0.00	771	-0.042	0.0	0.8	0.1	4.9	0.0	0	45.6	9.0	0.0	59.5	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.00	6277	-0.037	0.0	0.0	0.0	29.2	0.0	0	194.4	216.4	38.5	478.5	0
Djibouti	0.9	0.5	0.0	0.000	0.01	2090	-0.036	0.0	0.9	0.5	0.0	0.0	0	0.0	0.5	0.0	0.5	0
Egypt	27.8	0.0	0.0	-0.038	0.30	2017	0.052	0.0	6.3	0.1	4.0	0.0	0	329.4	7.5	13.3	354.2	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.00	1708	-0.031	0.0	0.0	0.0	21.6	0.0	0	108.5	14.4	0.7	145.3	0
Eritrea	4.3	1.2	0.0	-0.003	0.02	792	-0.021	0.0	4.3	1.2	0.0	0.0	0	23.4	2.6	0.0	25.9	0
Gabon	8.3	331.2	0.0	-0.080	0.00	5167	-0.037	331.3	7.9	0.0	192.1	145.2	0	5622.3	1032.1	0.0	6991.7	0
Gambia	3.5	0.0	0.0	-0.011	0.01	2282	-0.033	0.0	3.5	0.0	3.8	0.0	0	307.0	85.8	6.0	402.6	0
Ghana	3.7	14.2	0.0	-0.011	0.00	3720	0.064	14.2	0.0	0.0	0.0	0.0	0	116.1	66.1	65.2	247.5	0
Guinea	2.4	5.8	0.0	-0.083	0.01	1775	-0.033	0.0	2.4	5.8	0.0	0.0	0	107.0	317.2	0.0	424.2	0
Guinea-Bissau	14.9	26.5	0.0	-0.074	0.14	630	-0.033	0.0	14.9	26.5	0.5	0.0	0	55.4	112.1	4.9	173.0	0
Kenya	10.7	12.9	0.0	-0.024	0.06	1783	-0.043	0.0	10.7	12.9	37.3	0.0	0	234.9	71.2	0.0	343.4	0
Liberia	0.0	0.0	0.0	-0.015	0.00	2701	-0.033	0.0	0.0	0.0	12.1	0.0	0	86.5	40.7	0.0	139.4	0
Libyan Arab Jamahiriya	4.9	2.3	0.0	-0.002	0.01	5451	0.012	0.0	4.3	2.3	0.0	0.0	0	272.8	0.0	43.1	315.9	0
Madagascar	33.4	25.7	0.0	-0.069	0.10	1033	-0.021	0.0	25.2	25.7	0.0	0.0	0	40.9	35.1	0	76.0	0
Mauritania	10.0	0.0	0.0	-0.028	0.00	874	0.043	0.0	3.1	0.0	0.0	0.0	0	804.8	2.1	17.8	824.6	0
Mauritius	0.0	0.0	0.0	-0.002	0.00	7941	-0.041	0.0	0.0	0.0	0.0	0.0	0	3519.6	0.0	0.0	3519.6	0
Morocco	8.0	0.1	0.0	-0.024	0.18	4559	-0.039	0.0	8.0	0.2	14.5	0.0	0	177.5	0.0	4.3	196.3	0
Mozambique	37.0	298.8	0.0	-0.195	9.52	133	-0.043	70.4	35.3	228.3	25.2	0.0	0	127.2	6.9	0.1	159.4	0
Namibia	1.3	0.3	0.0	-0.022	0.10	250	-0.047	0.0	1.3	0.3	0.0	0.0	0	677.4	0.0	0.0	677.4	0
Nigeria	39.4	-0.1	0.0	-0.056	0.02	2741	0.122	0.0	7.8	0.0	3.5	0.0	0	4755.8	921.0	99.3	5779.5	0
Reunion	0.2	0.0	0.0	-0.002	0.00	7337	-0.037	0.0	0.2	0.0	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.00	2644	-0.034	0.0	0.0	0.0	0.0	0.0	0	12.0	0.0	0.0	12.0	0
Senegal	9.2	0.0	0.0	-0.033	0.05	3960	-0.034	0.0	9.0	0.0	0.3	0.0	0	848.5	189.1	0.0	1037.9	0
Seychelles	0.0	0.0	0.0	-0.002	0.00	4470	-0.043	0.0	0.0	0.0	0.0	0.0	0	4905.5	15.4	0.0	4920.9	0
Sierra Leone	4.9	7.0	0.0	-0.052	0.06	1107	-0.033	0.0	4.9	7.0	1.8	0.0	0	9.0	64.5	4.7	79.9	0
Somalia	38.8	21.4	0.0	-0.042	0.09	722	0.001	0.0	34.4	21.4	19.9	0.0	0	124.9	8.0	0.0	152.7	0
South Africa	22.2	0.1	0.0	-0.037	0.01	5919	-0.050	0.0	22.2	0.1	107.8	0.0	0	484.0	52.6	16.6	661.0	0
Sudan	2.7	0.1	0.0	0.000	0.00	1190	-0.019	0.0	2.7	0.1	0.0	0.0	0	0.6	13.3	0.0	13.9	0
Tanzania, Uni Rep	7.5	136.1	0.0	-0.027	2.27	250	-0.013	0.0	7.0	136.1	0.3	0.0	0	35.5	11.0	0.0	46.9	0
Togo	0.3	0.0	0.0	-0.001	0.00	3886	0.073	0.0	0.0	0.0	0.0	0.0	0	108.5	0.0	17.2	125.7	0
Tunisia	13.9	0.0	0.0	-0.002	0.08	7987	0.007	0.0	12.6	0.0	9.8	0.0	0	114.3	0.0	6.3	130.4	0
Western Sahara	0.2	0.0	0.0	-0.019	0.00	10	-0.030	0.0	0.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	326.0	886.5	0.0	-1.075	13.39	2858*	-0.018**	415.9	244.5	471.1	852.1	145.2	0	26824.9	3990.0	464.9	32277.4	0

Table A-55. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	2.8	0.0	0.000	1.0	125	-0.001	0.0	0	2.8	0.4	0.0	0	2.1	0.0	0.2	2.7	0
Angola	0	4.5	0.0	0.000	4.8	7	-0.002	2.2	0	2.3	0.2	0.0	0	2.6	0.5	0.0	3.3	0
Benin	0	0.0	0.0	-0.004	0.0	23	-0.002	0.0	0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.6	0
Cameroon	0	8.4	0.0	-0.001	10.4	18	-0.001	0.0	0	8.4	1.4	0.0	0	5.8	2.7	0.0	9.9	0
Cape Verde	0	0.2	0.0	-0.006	0.2	50	-0.001	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0	0.1	0.0	-0.004	0.2	14	-0.002	0.0	0	0.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Congo	0	0.6	0.0	-0.006	0.8	36	-0.002	0.0	0	0.6	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo, Dem Rep	0	0.0	0.0	0.000	0.1	4	-0.002	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0	0.0	0.0	-0.035	0.0	41	-0.002	0.0	0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0	0.5	0.0	0.000	0.5	11	-0.002	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	232.3	0.0	0.169	14.7	24	0.002	219.2	0	11.9	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	0	0.0	0.0	-0.005	0.0	8	-0.001	0.0	0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	0	0.0	0.0	-0.003	0.7	2	-0.001	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	0	18.8	0.0	-0.051	1.3	28	-0.002	18.0	0	0.8	0.9	0.7	0	25.6	4.7	0.0	31.8	0
Gambia	0	0.2	0.0	0.000	3.1	12	-0.002	0.0	0	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	0	0.7	0.0	0.049	0.0	21	0.003	0.7	0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	0	0.1	0.0	-0.011	0.5	9	-0.002	0.0	0	0.1	0.0	0.0	0	0.5	1.4	0.0	1.9	0
Guinea-Bissau	0	0.3	0.0	-0.029	6.1	3	-0.002	0.0	0	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	0	0.7	0.0	-0.024	4.3	7	-0.002	0.0	0	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0	0.0	0.0	-0.015	0.0	14	-0.002	0.0	0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	0	1.4	0.0	0.011	0.4	106	0.000	0.0	0	1.4	0.0	0.0	0	3.6	0.0	0.5	4.1	0
Madagascar	0	0.3	0.0	0.027	14.0	4	-0.001	0.0	0	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	0	0.0	0.0	0.007	0.1	3	0.002	0.0	0	0.0	0.0	0.0	0	3.7	0.0	0.1	3.8	0
Mauritius	0	0.0	0.0	-0.002	0.0	292	-0.002	0.0	0	0.0	0.0	0.0	0	11.9	0.0	0.0	11.9	0
Morocco	0	11.6	0.0	-0.024	2.8	54	-0.002	0.0	0	11.6	0.2	0.0	0	1.9	0.0	0.0	2.1	0
Mozambique	0	10.7	0.0	-0.115	126.5	2	-0.002	6.4	0	4.3	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	0	0.0	0.0	-0.022	0.1	3	-0.002	0.0	0	0.0	0.0	0.0	0	8.8	0.0	0.0	8.8	0
Nigeria	0	0.4	0.0	0.191	1.0	15	0.006	0.0	0	0.3	0.0	0.0	0	28.5	4.9	0.5	33.9	0
Reunion	0	0.0	0.0	-0.002	0.0	175	-0.002	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0.0	-0.002	0.0	15	-0.002	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	0	1.4	0.0	-0.015	2.8	24	-0.002	0.0	0	1.4	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	0	1.1	0.0	-0.002	0.0	208	-0.002	0.0	0	1.1	0.0	0.0	0	23.3	0.1	0.0	23.3	0
Sierra Leone	0	0.1	0.0	-0.014	2.4	6	-0.002	0.0	0	0.1	0.0	0.0	0	0.0	0.3	0.0	0.4	0
Somalia	0	0.2	0.0	0.067	4.8	2	0.000	0.0	0	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	0	1.7	0.0	-0.020	0.1	99	-0.002	0.0	0	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	0	0.0	0.0	0.000	0.1	4.6	0.000	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Tanzania, Uni Rep	0	3.2	0.0	-0.016	98.7	4	0.000	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Togo	0	0.0	0.0	0.003	0.0	22	0.003	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	0	6.8	0.0	0.006	1.0	106	0.000	0.0	0	6.8	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	0	0.0	0.0	-0.019	0.0	0	-0.001	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	309.2	0.0	0.083	303.5	35*	-0.001**	246.5	0	61.5	5.5	0.7	0	150.6	19.6	2.9	179.3	0

Table A-56. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	14.1	0.0	0.000	1.5	125	-0.007	0.0	0	14.1	1.8	0.0	0	8.7	0.0	0.8	11.3	0
Angola	0	14.4	0.0	-0.007	8.4	7	-0.012	4.7	0	9.7	0.8	0.0	0	8.6	1.6	0.0	11.0	0
Benin	0	0.0	0.0	-0.004	0.0	23	-0.009	0.0	0	0.0	0.0	0.0	0	17.5	0.1	2.1	19.8	0
Cameroon	0	45.4	0.0	-0.012	18.0	18	-0.008	0.0	0	45.4	6.0	0.0	0	25.2	11.6	0.0	42.9	0
Cape Verde	0	1.1	0.0	-0.006	0.4	50	-0.008	0.0	0	1.1	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Comoros	0	0.4	0.0	-0.004	0.3	14	-0.013	0.0	0	0.4	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo	0	3.4	0.0	-0.006	1.3	36	-0.012	0.0	0	3.4	0.0	0.0	0	0.0	1.1	0.0	1.1	0
Congo, Dem Rep	0	0.0	0.0	0.000	0.2	4	-0.012	0.0	0	0.0	0.1	0.0	0	0.9	0.2	0.0	1.2	0
Cote d'Ivoire	0	0.0	0.0	-0.035	0.0	41	-0.010	0.0	0	0.0	0.6	0.0	0	3.8	4.3	0.8	9.5	0
Djibouti	0	2.6	0.0	0.000	0.8	11	-0.010	0.0	0	2.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	602.1	0.0	0.279	30.4	17	0.015	526.5	0	66.8	0.2	0.0	0	28.3	0.3	0.9	29.7	0
Equatorial Guinea	0	0.0	0.0	-0.005	0.0	8	-0.009	0.0	0	0.0	0.4	0.0	0	2.1	0.3	0.0	2.9	0
Eritrea	0	0.0	0.0	-0.003	1.2	2	-0.006	0.0	0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	0	48.1	0.0	-0.059	2.3	28	-0.010	43.9	0	4.2	3.8	2.9	0	111.0	20.4	0.0	138.0	0
Gambia	0	1.0	0.0	-0.004	5.4	12	-0.009	0.0	0	1.0	0.1	0.0	0	6.1	1.7	0.1	8.0	0
Ghana	0	1.9	0.0	0.049	0.0	17	0.018	1.8	0	0.0	0.0	0.0	0	2.1	1.5	1.3	4.9	0
Guinea	0	0.3	0.0	-0.043	0.9	9	-0.009	0.0	0	0.3	0.0	0.0	0	2.1	6.3	0.0	8.4	0
Guinea-Bissau	0	1.7	0.0	-0.045	10.5	3	-0.009	0.0	0	1.7	0.0	0.0	0	1.1	2.2	0.1	3.4	0
Kenya	0	4.4	0.0	-0.024	7.4	7	-0.012	0.0	0	4.4	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Liberia	0	0.0	0.0	-0.015	0.0	14	-0.010	0.0	0	0.0	0.2	0.0	0	1.7	0.8	0.0	2.8	0
Libyan Arab Jamahiriya	0	7.2	0.1	0.017	0.6	103	0.003	0.0	0	7.2	0.0	0.0	0	14.4	0.0	2.2	16.6	0
Madagascar	0	1.7	0.5	0.027	25.6	3	-0.006	0.0	0	1.7	0.0	0.0	0	0.6	0.6	0.0	1.2	0
Mauritania	0	0.4	0.0	0.017	1.8	3	0.012	0.0	0	0.3	0.0	0.0	0	15.9	0.0	0.4	16.3	0
Mauritius	0	0.0	0.0	-0.002	0.0	292	-0.012	0.0	0	0.0	0.0	0.0	0	57.8	0.0	0.0	57.8	0
Morocco	0	57.9	0.0	-0.024	4.4	54	-0.011	0.0	0	57.9	0.7	0.0	0	8.0	0.0	0.2	8.8	0
Mozambique	0	31.9	0.0	-0.137	220.0	2	-0.012	13.7	0	18.2	1.1	0.0	0	5.5	0.3	0.0	7.0	0
Namibia	0	0.0	0.0	-0.022	0.2	3	-0.014	0.0	0	0.0	0.0	0.0	0	29.6	0.0	0.0	29.6	0
Nigeria	0	2.6	0.0	0.287	16.1	10	0.035	0.0	0	2.3	0.1	0.0	0	115.8	20.7	0.0	138.5	0
Reunion	0	0.1	0.0	-0.002	0.0	175	-0.011	0.0	0	0.1	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	-0.002	0.0	15	-0.010	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	7.8	0.0	-0.023	4.9	24	-0.010	0.0	0	7.8	0.0	0.0	0	16.8	3.7	0.0	20.5	0
Seychelles	0	6.8	0.0	-0.002	0.0	208	-0.012	0.0	0	6.8	0.0	0.0	0	134.1	0.4	0.0	134.6	0
Sierra Leone	0	0.3	0.0	-0.028	4.2	6	-0.009	0.0	0	0.3	0.0	0.0	0	0.2	1.3	0.1	1.6	0
Somalia	0	1.0	0.0	0.067	8.4	2	0.000	0.0	0	1.0	0.3	0.0	0	2.1	0.1	0.0	2.5	0
South Africa	0	7.2	0.0	-0.025	0.3	99	-0.014	0.0	0	7.2	4.7	0.0	0	21.1	2.3	0.7	28.9	0
Sudan	0	0.0	0.0	0.000	0.1	5	-0.005	0.0	0	0.0	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Tanzania, Uni Rep	0	13.5	0.0	-0.016	171.7	4	-0.004	0.0	0	13.5	0.0	0.0	0	1.5	0.5	0.0	2.0	0
Togo	0	0.0	0.0	0.003	0.0	18	0.021	0.0	0	0.0	0.0	0.0	0	3.0	0.0	0.4	3.4	0
Tunisia	0	33.8	0.0	0.011	1.6	125	0.002	0.0	0	33.8	0.5	0.0	0	6.2	0.0	0.3	7.0	0
Western Sahara	0	0.0	0.0	-0.019	0.0	7	-0.009	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	913.5	0.6	0.183	548.9	35*	-0.005**	590.6	0	313.5	22.0	2.9	0	657.0	83.9	10.4	778.5	0

Table A-57. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	19.8	0.0	0.000	1.6	125	-0.008	0.0	0	19.8	2.4	0.0	0	11.9	0.0	1.2	15.5	0
Angola	0	19.0	0.0	-0.009	9.0	7	-0.014	5.6	0	13.4	1.1	0.0	0	11.7	2.1	0.0	14.8	0
Benin	0	0.0	0.0	-0.004	0.0	23	-0.011	0.0	0	0.0	0.0	0.0	0	24.9	0.2	3.0	28.2	0
Cameroon	0	65.9	0.0	-0.014	19.3	18	-0.009	0.0	0	65.9	8.6	0.0	0	35.9	16.5	0.0	61.1	0
Cape Verde	0	1.6	0.0	-0.006	0.4	50	-0.010	0.0	0	1.6	0.0	0.0	0	0.8	0.0	0.0	0.8	0
Comoros	0	0.6	0.0	-0.004	0.3	14	-0.015	0.0	0	0.6	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo	0	5.0	0.0	-0.006	1.4	36	-0.014	0.0	0	5.0	0.0	0.0	0	0.0	1.5	0.0	1.5	0
Congo, Dem Rep	0	0.0	0.0	0.000	0.2	4	-0.014	0.0	0	0.0	0.1	0.0	0	1.3	0.3	0.0	1.7	0
Cote d'Ivoire	0	0.0	0.0	-0.035	0.0	41	-0.012	0.0	0	0.0	0.8	0.0	0	5.5	6.1	1.1	13.4	0
Djibouti	0	3.8	0.0	0.000	0.9	11	-0.012	0.0	0	3.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	740.1	0.0	0.294	32.5	15	0.017	632.6	0	94.5	0.3	0.0	0	37.5	0.5	1.2	39.4	0
Equatorial Guinea	0	0.0	0.0	-0.005	0.0	8	-0.010	0.0	0	0.0	0.6	0.0	0	3.1	0.4	0.0	4.1	0
Eritrea	0	0.1	0.0	-0.003	1.2	2	-0.007	0.0	0	0.1	0.0	0.0	0	0.6	0.1	0.0	0.6	0
Gabon	0	59.6	0.0	-0.061	2.4	28	-0.012	53.5	0	6.1	5.4	4.1	0	158.0	29.0	0.0	196.4	0
Gambia	0	1.4	0.0	-0.004	5.8	12	-0.011	0.0	0	1.4	0.1	0.0	0	8.6	2.4	0.2	11.3	0
Ghana	0	2.3	0.0	0.049	0.0	17	0.021	2.2	0	0.0	0.0	0.0	0	3.0	2.1	1.8	6.9	0
Guinea	0	0.4	0.0	-0.047	1.0	9	-0.011	0.0	0	0.4	0.0	0.0	0	3.0	8.9	0.0	11.9	0
Guinea-Bissau	0	2.5	0.0	-0.047	11.3	3	-0.011	0.0	0	2.5	0.0	0.0	0	1.6	3.2	0.1	4.9	0
Kenya	0	6.5	0.0	-0.024	8.0	7	-0.014	0.0	0	6.5	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Liberia	0	0.0	0.0	-0.015	0.0	14	-0.011	0.0	0	0.0	0.3	0.0	0	2.4	1.1	0.0	3.9	0
Libyan Arab Jamahiriya	0	10.1	0.1	0.018	0.6	102	0.004	0.0	0	10.0	0.0	0.0	0	19.6	0.0	3.0	22.6	0
Madagascar	0	2.6	0.5	0.027	27.4	3	-0.007	0.0	0	2.6	0.0	0.0	0	0.9	0.8	0.0	1.8	0
Mauritania	0	0.5	0.0	0.019	1.9	3	0.014	0.0	0	0.5	0.0	0.0	0	22.6	0.1	0.5	23.2	0
Mauritius	0	0.0	0.0	-0.002	0.0	292	-0.014	0.0	0	0.0	0.0	0.0	0	83.7	0.0	0.0	83.7	0
Morocco	0	81.0	0.0	-0.024	4.7	54	-0.013	0.0	0	81.1	0.9	0.0	0	11.0	0.0	0.3	12.1	0
Mozambique	0	41.5	0.0	-0.141	235.9	2	-0.014	16.3	0	25.2	1.5	0.0	0	7.5	0.4	0.0	9.4	0
Namibia	0	0.1	0.0	-0.022	0.2	3	-0.016	0.0	0	0.1	0.0	0.0	0	40.0	0.0	0.0	40.0	0
Nigeria	0	3.8	0.0	0.301	17.3	9	0.041	0.0	0	3.3	0.1	0.0	0	162.3	29.2	2.8	194.5	0
Reunion	0	0.2	0.0	-0.002	0.0	175	-0.012	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	-0.002	0.0	15	-0.011	0.0	0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	0	11.3	0.0	-0.024	5.2	24	-0.011	0.0	0	11.3	0.0	0.0	0	23.8	5.3	0.0	29.2	0
Seychelles	0	10.0	0.0	-0.002	0.0	208	-0.014	0.0	0	10.0	0.0	0.0	0	195.3	0.6	0.0	195.9	0
Sierra Leone	0	0.4	0.0	-0.03	4.5	6	-0.011	0.0	0	0.5	0.1	0.0	0	0.3	1.8	0.1	2.2	0
Somalia	0	1.5	0.0	0.067	9.0	2	0.000	0.0	0	1.4	0.5	0.0	0	3.0	0.2	0.0	3.6	0
South Africa	0	9.9	0.0	-0.026	0.3	99	-0.017	0.0	0	9.9	6.4	0.0	0	28.6	3.1	1.0	39.0	0
Sudan	0	0.0	0.0	0.000	0.1	5	-0.006	0.0	0	0.0	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Tanzania, Uni Rep	0	34.7	384.8	-0.016	234.1	4	-0.004	0.0	0	18.8	0.0	0.0	0	2.1	0.7	0.0	2.7	0
Togo	0	0.0	0.0	0.003	0.0	17	0.024	0.0	0	0.0	0.0	0.0	0	4.2	0.0	0.6	4.7	0
Tunisia	0	47.4	0.0	0.012	1.7	104	0.002	0.0	0	47.4	0.6	0.0	0	8.4	0.0	0.4	9.5	0
Western Sahara	0	0.0	0.0	-0.019	0.0	0	-0.010	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1183.7	385.4	0.196	638.2	34*	-0.006**	710.2	0	443.9	30.7	4.1	0	929.1	118.9	17.3	1099.7	0

Table A-58. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2050, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	70.5	0.0	0.000	1.9	125	-0.012	0.0	0	69.5	8.3	0.0	0	39.3	0.0	4.0	51.5	0
Angola	0	56.4	0.0	-0.013	10.7	7	-0.023	10.5	0	44.4	3.4	0.0	0	37.1	6.8	0.0	47.2	0
Benin	0	0.0	0.0	-0.004	0.0	23	-0.017	0.0	0	0.0	0.0	0.0	0	97.5	0.7	11.9	110.0	0
Cameroon	0	277.4	0.0	-0.021	23.0	18	-0.015	0.0	0	265.2	33.6	0.0	0	140.4	64.7	0.0	238.7	0
Cape Verde	0	6.9	0.0	-0.006	0.5	50	-0.015	0.0	0	6.6	0.0	0.0	0	3.3	0.0	0.0	3.3	0
Comoros	0	2.6	0.0	-0.004	0.3	14	-0.024	0.0	0	2.5	0.0	0.0	0	0.0	1.2	0.0	1.2	0
Congo	0	21.0	0.0	-0.006	1.7	36	-0.021	0.0	0	20.1	0.0	0.0	0	0.0	5.9	0.0	5.9	0
Congo, Dem Rep	0	0.0	0.0	0.000	0.2	4	-0.022	0.0	0	0.0	0.5	0.0	0	5.0	1.0	0.0	6.5	0
Cote d'Ivoire	0	0.0	0.0	-0.035	0.0	41	-0.019	0.0	0	0.0	3.2	0.0	0	21.4	23.8	4.2	52.5	0
Djibouti	0	16.1	0.0	0.000	1.1	11	-0.019	0.0	0	15.4	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	1661.5	0.0	0.341	40.4	12	0.027	1255.0	0	345.8	1.0	0.0	0	107.9	1.6	3.6	114.0	0
Equatorial Guinea	0	0.0	0.0	-0.005	0.0	8	-0.016	0.0	0	0.0	2.4	0.0	0	11.9	1.6	0.1	16.0	0
Eritrea	0	0.3	0.0	-0.003	1.5	2	-0.011	0.0	0	0.3	0.0	0.0	0	2.3	0.3	0.0	2.6	0
Gabon	0	138.7	0.0	-0.066	2.9	28	-0.019	111.6	0	24.5	21.1	16.0	0	617.4	113.3	0.0	767.8	0
Gambia	0	5.9	0.0	-0.006	6.9	12	-0.017	0.0	0	5.6	0.4	0.0	0	33.7	9.4	0.7	44.2	0
Ghana	0	5.2	0.0	0.049	0.0	15	0.033	4.6	0	0.0	0.0	0.0	0	11.8	8.0	7.2	27.0	0
Guinea	0	1.7	0.0	-0.062	1.2	9	-0.017	0.0	0	1.6	0.0	0.0	0	11.8	34.8	0.0	46.6	0
Guinea-Bissau	0	10.5	0.0	-0.057	13.5	3	-0.017	0.0	0	10.1	0.1	0.0	0	6.1	12.3	0.5	19.0	0
Kenya	0	29.1	0.0	-0.024	9.5	7	-0.023	0.0	0	27.7	3.7	0.0	0	23.2	7.0	0.0	33.9	0
Liberia	0	0.0	0.0	-0.015	0.0	14	-0.017	0.0	0	0.0	1.3	0.0	0	9.5	4.5	0.0	15.3	0
Libyan Arab Jamahiriya	0	36.0	0.1	0.020	0.8	99	0.006	0.0	0	35.3	0.0	0.0	0	63.7	0.0	9.9	73.6	0
Madagascar	0	11.6	0.5	0.027	32.8	3	-0.011	0.0	0	10.9	0.0	0.0	0	3.9	3.5	0.0	7.4	0
Mauritania	0	2.2	0.0	0.025	2.2	2	0.023	0.0	0	2.1	0.0	0.0	0	88.4	0.2	2.0	90.6	0
Mauritius	0	0.0	0.0	-0.002	0.0	292	-0.021	0.0	0	0.0	0.0	0.0	0	348.0	0.0	0.0	348.0	0
Morocco	0	288.6	0.0	-0.024	5.6	54	-0.020	0.0	0	284.4	3.0	0.0	0	37.2	0.0	0.9	41.1	0
Mozambique	0	118.2	2.3	-0.152	422.6	2	-0.023	30.8	0	84.0	4.7	0.0	0	23.9	1.3	0.0	29.9	0
Namibia	0	0.2	0.0	-0.022	0.2	3	-0.025	0.0	0	0.2	0.0	0.0	0	127.2	0.0	0.0	127.2	0
Nigeria	0	16.6	0.0	0.345	20.9	8	0.064	0.0	0	13.6	0.4	0.0	0	597.6	110.6	10.9	719.5	0
Reunion	0	0.5	0.0	-0.002	0.0	175	-0.019	0.0	0	0.5	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Sao Tome & Principe	0	0.0	0.0	-0.002	0.0	15	-0.018	0.0	0	0.0	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Senegal	0	47.5	0.0	-0.027	6.2	24	-0.018	0.0	0	45.4	0.0	0.0	0	93.2	20.8	0.0	114.0	0
Seychelles	0	37.2	0.0	-0.002	0.0	208	-0.023	0.0	0	36.4	0.0	0.0	0	727.7	2.3	0.0	729.9	0
Sierra Leone	0	1.9	0.0	-0.038	5.4	6	-0.017	0.0	0	1.8	0.2	0.0	0	1.0	7.1	0.5	8.8	0
Somalia	0	6.6	0.0	0.067	10.7	2	0.001	0.0	0	6.2	2.0	0.0	0	12.3	0.8	0.0	15.1	0
South Africa	0	33.9	0.0	-0.029	0.3	99	-0.026	0.0	0	32.9	20.2	0.0	0	90.9	9.9	3.1	124.1	0
Sudan	0	0.0	0.0	0.000	0.1	5	-0.010	0.0	0	0.0	0.0	0.0	0	0.1	1.3	0.0	1.4	0
Tanzania, Uni Rep	0	87.4	0.5	-0.016	346.0	3	-0.007	0.0	0	62.6	0.1	0.0	0	6.6	2.1	0.0	8.7	0
Togo	0	0.0	0.0	0.003	0.0	16	0.038	0.0	0	0.0	0.0	0.0	0	14.9	0.0	2.2	17.2	0
Tunisia	0	169.1	0.0	0.014	2.0	103	0.004	0.0	0	166.5	2.1	0.0	0	27.3	0.0	1.4	30.9	0
Western Sahara	0	0.0	0.0	-0.019	0.0	0	-0.016	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	3161.3	3.4	0.229	971.1	34*	-0.010**	1412.5	0	1622.1	111.7	16.0	0	3445.1	456.9	63.1	4092.3	0

Table A-59. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	179.3	0.0	0.000	2.1	125	-0.018	0.0	0	179.3	21.4	0.0	0	100.5	0.0	10.3	132.2	0
Angola	0	123.9	0.0	-0.018	11.3	7	-0.033	0.0	0	123.9	9.6	0.0	0	105.6	19.3	0.0	134.5	0
Benin	0	0.0	0.0	-0.004	0.0	23	-0.025	0.0	0	0.0	0.0	0.0	0	360.4	2.6	44.0	407.0	0
Cameroon	0	949.4	0.0	-0.030	24.2	18	-0.021	0.0	0	949.4	124.4	0.0	0	519.4	239.1	0.0	882.9	0
Cape Verde	0	23.5	0.0	-0.006	0.5	50	-0.022	0.0	0	23.5	0.0	0.0	0	12.1	0.0	0.0	12.1	0
Comoros	0	8.8	0.0	-0.004	0.4	14	-0.035	0.0	0	8.8	0.0	0.0	0	0.0	4.3	0.0	4.3	0
Congo	0	72.0	0.0	-0.006	1.7	36	-0.031	0.0	0	72.0	0.0	0.0	0	0.0	21.9	0.0	21.9	0
Congo, Dem Rep	0	0.1	0.0	0.000	0.2	4	-0.032	0.0	0	0.1	2.0	0.0	0	18.5	3.7	0.0	24.2	0
Cote d'Ivoire	0	0.0	0.0	-0.035	0.0	41	-0.028	0.0	0	0.0	11.9	0.0	0	79.0	87.9	15.6	194.3	0
Djibouti	0	55.3	0.0	0.000	1.1	11	-0.027	0.0	0	55.3	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Egypt	0	3226.4	0.0	0.378	50.5	9	0.039	2125.9	0	940.4	2.4	0.0	0	222.5	4.1	8.3	237.3	0
Equatorial Guinea	0	0.0	0.0	-0.005	0.0	8	-0.024	0.0	0	0.0	8.8	0.0	0	44.1	5.9	0.3	59.0	0
Eritrea	0	1.1	0.0	-0.003	1.5	2	-0.016	0.0	0	1.1	0.0	0.0	0	9.1	1.0	0.0	10.1	0
Gabon	0	306.8	0.0	-0.073	3.0	28	-0.028	218.9	0	87.8	78.0	59.0	0	2283	419.1	0.0	2839.4	0
Gambia	0	20.1	0.0	-0.009	7.3	12	-0.025	0.0	0	20.1	1.6	0.0	0	124.7	34.8	2.5	163.5	0
Ghana	0	11.1	0.0	0.049	0.0	14	0.049	9.2	0	0.0	0.0	0.0	0	45.5	28.3	26.5	100.4	0
Guinea	0	5.8	0.0	-0.075	1.2	9	-0.025	0.0	0	5.8	0.0	0.0	0	43.4	128.8	0.0	172.3	0
Guinea-Bissau	0	36.0	0.0	-0.066	14.2	3	-0.025	0.0	0	36.0	0.22	0.0	0	22.5	45.5	0.0	70.3	0
Kenya	0	104.9	0.0	-0.024	10.0	7	-0.033	0.0	0	105.0	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Liberia	0	0.0	0.0	-0.015	0.0	14	-0.025	0.0	0	0.0	4.9	0.0	0	35.2	16.5	0.0	56.6	0
Libyan Arab Jamahiriya	0	91.8	0.1	0.021	0.8	96	0.009	0.0	0	91.4	0.0	0.0	0	156.5	0.0	24.6	181.1	0
Madagascar	0	41.8	0.5	0.027	34.7	3	-0.016	0.0	0	41.4	0.0	0.0	0	15.7	13.7	0.0	29.4	0
Mauritania	0	7.7	0.0	0.032	2.3	2	0.033	0.0	0	7.7	0.0	0.0	0	326.8	0.8	7.2	334.9	0
Mauritius	0	0.0	0.0	-0.002	0.0	292	-0.031	0.0	0	0.0	0.0	0.0	0	1365.3	0.0	0.0	1365.3	0
Morocco	0	734.2	0.0	-0.024	6.0	54	-0.030	0.0	0	734.3	7.9	0.0	0	96.5	0.0	2.3	106.7	0
Mozambique	0	288.9	2.3	-0.162	447.8	2	-0.033	53.2	0	234.4	13.5	0.0	0	68.0	3.7	0.0	85.2	0
Namibia	0	0.5	0.0	-0.022	0.2	3	-0.036	0.0	0	0.5	0.0	0.0	0	362.2	0.0	0.0	362.2	0
Nigeria	0	65.6	0.0	0.380	149.0	6	0.093	0.0	0	56.8	1.4	0.0	0	2062.4	391.1	40.3	2495.2	0
Reunion	0	1.0	0.0	-0.002	0.0	175	-0.028	0.0	0	1.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Sao Tome & Principe	0	0.0	0.0	-0.002	0.0	15	-0.026	0.0	0	0.0	0.0	0.0	0	4.9	0.0	0.0	4.9	0
Senegal	0	162.6	0.0	-0.031	6.6	24	-0.026	0.0	0	162.4	0.1	0.0	0	344.6	76.8	0.0	421.5	0
Seychelles	0	102.9	0.0	-0.002	0.0	208	-0.033	0.0	0	102.9	0.0	0.0	0	2239.8	7.0	0.0	2246.8	0
Sierra Leone	0	6.5	0.0	-0.046	5.7	6	-0.025	0.0	0	6.5	0.7	0.0	0	3.6	26.2	1.9	32.4	0
Somalia	0	23.9	0.0	0.067	13.9	2	0.001	0.0	0	23.5	7.7	0.0	0	48.4	3.1	0.0	59.3	0
South Africa	0	91.6	0.0	-0.033	0.3	99	-0.038	0.0	0	91.6	57.6	0.0	0	258.8	28.1	8.9	353.4	0
Sudan	0	0.1	0.0	0.000	0.1	5	-0.014	0.0	0	0.1	0.0	0.0	0	0.2	5.2	0.0	5.4	0
Tanzania, Uni Rep	0	305.9	49.6	-0.016	422.4	3	-0.010	0.0	0	175.9	0.2	0.0	0	18.9	5.9	0.0	25.0	0
Togo	0	0.1	0.0	0.003	0.0	15	0.056	0.0	0	0.0	0.0	0.0	0	49.3	0.0	7.6	56.9	0
Tunisia	0	430.6	0.0	0.016	2.2	101	0.006	0.0	0	430.2	5.4	0.0	0	66.6	0.0	3.6	75.6	0
Western Sahara	0	0.0	0.0	-0.019	0.0	0	-0.023	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	7480.2	52.5	0.239	1221.2	33*	-0.014**	2407.2	0	4769.2	374.22	59.0	0	11605.7	1652.2	203.9	13897.5	0

Table A-60. Case 10: Results by country, for No SLR and A1B socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	307.2	0.0	0.00	1.9	125	-0.02	0.0	0	307.2	39.2	0.0	0	180.9	0.0	18.9	238.9	0
Angola	0	209.3	0.0	-0.02	9.8	7	-0.04	0.0	0	209.3	17.9	0.0	0	197.5	36.1	0.0	251.5	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.03	0.0	0	0.0	0.0	0.0	0	887.4	6.3	108.4	1002.1	0
Cameroon	0	2085.0	0.0	-0.04	21.0	18	-0.03	0.0	0	2085.1	306.4	0.0	0	1278.9	588.7	0.0	2174.0	0
Cape Verde	0	51.7	0.0	-0.01	0.4	50	-0.03	0.0	0	51.7	0.0	0.0	0	29.9	0.0	0.0	29.9	0
Comoros	0	19.4	0.0	0.00	0.3	14	-0.05	0.0	0	19.4	0.0	0.0	0	0.1	10.5	0.0	10.6	0
Congo	0	158.0	0.0	-0.01	1.5	36	-0.04	0.0	0	158.0	0.0	0.0	0	0.0	53.8	0.0	53.8	0
Congo, Dem Rep	0	0.1	0.0	0.00	0.2	4	-0.04	0.0	0	0.1	4.9	0.0	0	45.6	9.0	0.0	59.5	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.04	0.0	0	0.0	29.2	0.0	0	194.4	216.4	38.5	478.5	0
Djibouti	0	121.4	0.0	0.00	1.0	11	-0.04	0.0	0	121.4	0.9	0.0	0	0.0	0.5	0.0	0.5	0
Egypt	0	2087.7	0.0	0.40	127.8	7	0.05	0.0	0	1781.7	4.0	0.0	0	329.4	7.5	13.3	354.2	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.03	0.0	0	0.0	21.6	0.0	0	108.5	14.4	0.7	145.3	0
Eritrea	0	2.6	0.0	0.00	1.3	2	-0.02	0.0	0	2.6	0.0	0.0	0	23.4	2.6	0.0	25.9	0
Gabon	0	524.4	0.0	-0.08	2.6	28	-0.04	331.3	0	192.9	192.1	145.2	0	5622.3	1032.1	0.0	6991.7	0
Gambia	0	44.1	0.0	-0.01	6.3	12	-0.03	0.0	0	44.1	3.8	0.0	0	307.0	85.8	6.0	402.6	0
Ghana	0	18.8	0.0	0.05	0.0	14	0.06	14.2	0	0.0	0.0	0.0	0	116.1	66.1	65.2	247.5	0
Guinea	0	12.7	0.0	-0.08	1.1	9	-0.03	0.0	0	12.7	0.0	0.0	0	107.0	317.2	0.0	424.2	0
Guinea-Bissau	0	79.0	0.0	-0.07	12.0	3	-0.03	0.0	0	79.0	0.5	0.0	0	55.4	112.1	4.9	173.0	0
Kenya	0	240.8	0.0	-0.02	8.7	7	-0.04	0.0	0	240.8	37.3	0.0	0	234.9	71.2	0.0	343.4	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.03	0.0	0	0.0	12.1	0.0	0	86.5	40.7	0.0	139.4	0
Libyan Arab Jamahiriya	0	157.7	0.1	0.02	0.8	93	0.01	0.0	0	156.9	0.0	0.0	0	272.8	0.0	43.2	315.9	0
Madagascar	0	96.0	0.5	0.03	30.0	3	-0.02	0.0	0	95.2	0.0	0.0	0	40.9	35.1	0.0	76.0	0
Mauritania	0	22.6	0.2	0.04	17.0	2	0.04	0.0	0	20.4	0.0	0.0	0	804.8	2.1	17.8	824.6	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.04	0.0	0	0.0	0.0	0.0	0	3519.6	0.0	0.0	3519.6	0
Morocco	0	1257.5	0.0	-0.02	5.5	54	-0.04	0.0	0	1257.6	14.5	0.0	0	177.5	0.0	4.3	196.3	0
Mozambique	0	468.9	2.3	-0.17	390.4	2	-0.04	70.4	0	396.2	25.2	0.0	0	127.2	6.9	0.1	159.4	0
Namibia	0	0.9	0.0	-0.02	0.2	3	-0.05	0.0	0	0.9	0.0	0.0	0	677.4	0.0	0.0	677.4	0
Nigeria	0	161.1	0.3	0.40	171.3	6	0.12	0.0	0	133.1	3.5	0.0	0	4755.8	921.0	99.3	5779.5	0
Reunion	0	1.5	0.0	0.00	0.0	175	-0.04	0.0	0	1.5	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.03	0.0	0	0.0	0.0	0.0	0	12.0	0.0	0.0	12.0	0
Senegal	0	357.0	0.0	-0.03	5.7	24	-0.03	0.0	0	356.7	0.3	0.0	0	848.5	189.0	0.0	1037.9	0
Seychelles	0	191.5	0.0	0.00	0.0	208	-0.04	0.0	0	191.5	0.0	0.0	0	4905.5	15.4	0.0	4920.9	0
Sierra Leone	0	14.3	0.0	-0.05	4.9	6	-0.03	0.0	0	14.3	1.8	0.0	0	9.0	64.5	4.6	79.9	0
Somalia	0	55.0	0.0	0.07	12.0	2	0.00	0.0	0	53.9	19.9	0.0	0	124.9	8.0	0.0	152.7	0
South Africa	0	154.7	0.0	-0.04	0.3	99	-0.05	0.0	0	154.7	107.7	0.0	0	484.0	52.6	16.6	661.0	0
Sudan	0	0.1	0.0	0.00	0.1	5	-0.02	0.0	0	0.1	0.0	0.0	0	0.6	13.3	0.0	13.9	0
Tanzania, Uni Rep	0	317.9	0.6	-0.02	906.6	3	-0.01	0.0	0	315.9	0.3	0.0	0	35.5	11.0	0.0	46.9	0
Togo	0	0.2	0.0	0.00	0.0	14	0.07	0.0	0	0.0	0.0	0.0	0	108.5	0.0	17.2	125.7	0
Tunisia	0	738.1	0.0	0.02	2.0	99	0.01	0.0	0	737.4	9.8	0.0	0	114.3	0.0	6.3	130.4	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.03	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	9957.4	4.0	0.27	1742.7	33*	-0.02**	415.9	0	9192.6	852.0	145.2	0	26824.9	3989.9	465.3	32277.4	0

Table A-61. Case 11: Results by country, for No SLR and AIFI socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	3.0	2.8	0	0.000	1.0	139	-0.001	0.0	3.0	2.8	0.42	0.0	0	2.1	0.00	0.2	2.7	0
Angola	44.7	4.5	0	-0.001	4.8	8	-0.002	2.2	44.7	2.3	0.23	0.0	0	2.6	0.47	0.0	3.3	0
Benin	0.0	0.0	0	-0.004	0.0	24	-0.002	0.0	0.0	0.0	0.00	0.0	0	4.0	0.03	0.5	4.6	0
Cameroon	1.2	8.4	0	-0.001	10.4	19	-0.001	0.0	1.2	8.4	1.40	0.0	0	5.8	2.68	0.0	9.9	0
Cape Verde	1.2	0.2	0	-0.006	0.2	53	-0.001	0.0	1.2	0.2	0.00	0.0	0	0.1	0.00	0.0	0.1	0
Comoros	0.3	0.1	0	-0.004	0.2	15	-0.002	0.0	0.3	0.1	0.00	0.0	0	0.0	0.05	0.0	0.0	0
Congo	0.5	0.6	0	-0.006	0.8	38	-0.002	0.0	0.5	0.6	0.00	0.0	0	0.0	0.25	0.0	0.2	0
Congo, Dem Rep	0.3	0.0	0	0.000	0.1	4	-0.002	0.0	0.3	0.0	0.02	0.0	0	0.2	0.04	0.0	0.3	0
Cote d'Ivoire	0.0	0.0	0	-0.035	0.0	42	-0.002	0.0	0.0	0.0	0.13	0.0	0	0.9	0.99	0.2	2.2	0
Djibouti	0.9	0.5	0	0.000	0.5	11	-0.002	0.0	0.9	0.5	0.00	0.0	0	0.0	0.00	0.0	0.0	0
Egypt	16.2	232.2	0	0.169	14.7	29	0.002	219.2	11.0	11.9	0.06	0.0	0	7.9	0.08	0.2	8.3	0
Equatorial Guinea	0.0	0.0	0	-0.005	0.0	8	-0.001	0.0	0.0	0.0	0.10	0.0	0	0.5	0.07	0.0	0.7	0
Eritrea	15.3	0.0	0	-0.003	0.7	3	-0.001	0.0	15.3	0.0	0.00	0.0	0	0.1	0.01	0.0	0.1	0
Gabon	48.0	18.8	0	-0.051	1.3	32	-0.002	18.0	47.5	0.8	0.87	0.7	0	25.6	4.70	0.0	31.8	0
Gambia	1.1	0.2	0	0.000	3.1	13	-0.002	0.0	1.1	0.2	0.02	0.0	0	1.4	0.39	0.0	1.8	0
Ghana	3.6	0.7	0	0.049	0.0	23	0.003	0.7	0.0	0.0	0.00	0.0	0	0.5	0.36	0.3	1.1	0
Guinea	1.2	0.1	0	-0.011	0.5	9	-0.002	0.0	1.2	0.1	0.00	0.0	0	0.5	1.44	0.0	1.9	0
Guinea-Bissau	7.3	0.3	0	-0.029	6.1	3	-0.002	0.0	7.3	0.3	0.00	0.0	0	0.3	0.51	0.0	0.8	0
Kenya	4.6	0.7	0	-0.024	4.3	7	-0.002	0.0	4.6	0.7	0.13	0.0	0	0.8	0.24	0.0	1.2	0
Liberia	0.0	0.0	0	-0.015	0.0	15	-0.002	0.0	0.0	0.0	0.06	0.0	0	0.4	0.19	0.0	0.6	0
Libyan Arab Jamahiriya	19.8	1.4	0	0.011	0.4	122	0.000	0.0	19.4	1.4	0.00	0.0	0	3.6	0.00	0.5	4.1	0
Madagascar	213.9	0.3	0	0.027	14.0	4	-0.001	0.0	205.0	0.3	0.00	0.0	0	0.1	0.12	0.0	0.3	0
Mauritania	3.9	0.0	0	0.007	0.1	4	0.002	0.0	2.5	0.0	0.00	0.0	0	3.7	0.01	0.1	3.8	0
Mauritius	0.0	0.0	0	-0.002	0.0	299	-0.002	0.0	0.0	0.0	0.00	0.0	0	11.9	0.00	0.0	11.9	0
Morocco	8.8	11.6	0	-0.024	2.8	61	-0.002	0.0	8.8	11.6	0.15	0.0	0	1.9	0.00	0.0	2.1	0
Mozambique	163.2	10.7	0	-0.115	126.5	2	-0.002	6.4	161.8	4.3	0.33	0.0	0	1.7	0.09	0.0	2.1	0
Namibia	1.6	0.0	0	-0.022	0.1	3	-0.002	0.0	1.6	0.0	0.00	0.0	0	8.8	0.00	0.0	8.8	0
Nigeria	18.9	0.4	0	0.191	1.0	17	0.006	0.0	4.3	0.3	0.02	0.0	0	28.5	4.93	0.5	33.9	0
Reunion	0.3	0.0	0	-0.002	0.0	198	-0.002	0.0	0.3	0.0	0.00	0.0	0	0.0	0.00	0.0	0.0	0
Sao Tome & Principe	0.0	0.0	0	-0.002	0.0	15	-0.002	0.0	0.0	0.0	0.00	0.0	0	0.1	0.00	0.0	0.1	0
Senegal	2.8	1.4	0	-0.015	2.8	25	-0.002	0.0	2.8	1.4	0.00	0.0	0	3.9	0.86	0.0	4.7	0
Seychelles	0.2	1.1	0	-0.002	0.0	232	-0.002	0.0	0.2	1.1	0.00	0.0	0	23.3	0.07	0.0	23.3	0
Sierra Leone	2.0	0.1	0	-0.014	2.4	6	-0.002	0.0	2.0	0.1	0.01	0.0	0	0.0	0.29	0.0	0.4	0
Somalia	256.2	0.2	0	0.067	4.8	3	0.000	0.0	251.7	0.2	0.07	0.0	0	0.4	0.03	0.0	0.5	0
South Africa	28.4	1.7	0	-0.020	0.1	105	-0.002	0.0	28.4	1.7	1.41	0.0	0	6.3	0.69	0.2	8.6	0
Sudan	1.8	0.0	0	0.000	0.1	5	-0.001	0.0	1.8	0.0	0.00	0.0	0	0.0	0.05	0.0	0.0	0
Tanzania, Uni Rep	4.4	3.2	0	-0.016	98.7	4	-0.001	0.0	3.8	3.2	0.00	0.0	0	0.5	0.15	0.0	0.6	0
Togo	0.3	0.0	0	0.003	0.0	25	0.003	0.0	0.0	0.0	0.00	0.0	0	0.7	0.00	0.1	0.8	0
Tunisia	18.2	6.8	0	0.006	1.0	120	0.000	0.0	18.0	6.8	0.11	0.0	0	1.5	0.00	0.1	1.7	0
Western Sahara	3.4	0.0	0	-0.019	0.0	0	-0.001	0.0	3.4	0.0	0.00	0.0	0	0.0	0.00	0.0	0.0	0
TOTAL for Africa	897.5	309.1	0	0.082	303.5	39*	-0.001**	246.5	855.9	61.5	5.54	0.7	0	150.6	19.79	2.9	179.3	0

Table A-62. Case 11: Results by country, for No SLR and AIFI socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	8.1	12.3	0.0	0.000	0.6	518	-0.007	0.0	8.1	12.3	1.8	0.0	0	8.7	0.0	0.8	11.3	0
Angola	13.7	14.4	0.0	-0.007	7.9	26	-0.012	4.7	13.7	9.7	0.8	0.0	0	8.6	1.6	0.0	11.0	0
Benin	0.0	0.0	0.0	-0.004	0.0	87	-0.009	0.0	0.0	0.0	0.0	0.0	0	17.5	0.1	2.1	19.8	0
Cameroon	6.3	30.9	0.0	-0.012	4.3	74	-0.008	0.0	6.3	30.9	6.1	0.0	0	25.3	11.6	0.0	42.9	0
Cape Verde	5.5	0.9	0.0	-0.006	0.1	212	-0.008	0.0	5.5	0.9	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Comoros	2.6	0.4	0.0	-0.004	0.3	54	-0.013	0.0	2.6	0.4	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo	3.7	2.2	0.0	-0.006	0.1	146	-0.012	0.0	3.7	2.2	0.0	0.0	0	0.0	1.1	0.0	1.1	0
Congo, Dem Rep	1.6	0.0	0.0	0.000	0.0	17	-0.012	0.0	1.6	0.0	0.1	0.0	0	0.9	0.2	0.0	1.2	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	164	-0.010	0.0	0.0	0.0	0.6	0.0	0	3.8	4.3	0.8	9.4	0
Djibouti	2.4	1.6	0.0	0.000	0.1	46	-0.010	0.0	2.4	1.6	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	68.1	572.7	0.0	-0.011	3.6	108	0.015	526.5	55.6	45.6	0.2	0.0	0	28.3	0.3	0.9	29.7	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	37	-0.009	0.0	0.0	0.0	0.4	0.0	0	2.1	0.3	0.0	2.9	0
Eritrea	9.5	0.0	0.0	-0.003	0.4	14	-0.006	0.0	9.5	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	31.0	47.8	0.0	-0.059	0.2	154	-0.010	43.9	30.0	3.9	3.8	2.9	0	111.0	20.4	0.0	138.0	0
Gambia	6.7	0.7	0.0	-0.004	0.7	51	-0.009	0.0	6.7	0.7	0.1	0.0	0	6.1	1.7	0.1	7.9	0
Ghana	3.7	1.8	0.0	-0.011	0.0	86	0.018	1.8	0.0	0.0	0.0	0.0	0	2.1	1.5	1.3	4.9	0
Guinea	4.9	0.2	0.0	-0.043	0.1	39	-0.009	0.0	4.9	0.2	0.0	0.0	0	2.1	6.3	0.0	8.4	0
Guinea-Bissau	29.5	1.6	0.0	-0.045	7.0	14	-0.009	0.0	29.5	1.6	0.0	0.0	0	1.1	2.2	0.1	3.4	0
Kenya	20.6	4.1	0.0	-0.024	2.6	33	-0.012	0.0	20.6	4.1	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Liberia	0.0	0.0	0.0	-0.015	0.0	60	-0.010	0.0	0.0	0.0	0.2	0.0	0	1.7	0.8	0.0	2.8	0
Libyan Arab Jamahiriya	53.9	4.7	0.1	-0.001	0.5	489	0.003	0.0	53.4	4.7	0.0	0.0	0	14.4	0.0	2.2	16.6	0
Madagascar	59.2	1.4	0.0	-0.069	3.4	19	-0.006	0.0	51.0	1.4	0.0	0.0	0	0.6	0.6	0.0	1.2	0
Mauritania	9.9	0.3	0.0	-0.020	0.2	19	0.012	0.0	6.5	0.3	0.0	0.0	0	15.9	0.0	0.4	16.3	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	1226	-0.012	0.0	0.0	0.0	0.0	0.0	0	57.8	0.0	0.0	57.8	0
Morocco	21.9	52.4	0.0	-0.024	1.6	231	-0.011	0.0	21.9	52.4	0.7	0.0	0	8.0	0.0	0.2	8.8	0
Mozambique	85.1	31.4	0.0	-0.163	140.4	6	-0.012	13.7	82.6	17.6	1.1	0.0	0	5.5	0.3	0.0	7.0	0
Namibia	91.8	0.0	0.0	-0.022	0.2	11	-0.014	0.0	91.8	0.0	0.0	0.0	0	29.6	0.0	0.0	29.6	0
Nigeria	34.3	1.7	0.0	-0.027	1.7	64	0.035	0.0	11.6	1.7	0.1	0.0	0	115.8	20.7	2.0	138.5	0
Reunion	0.6	0.1	0.0	-0.002	0.0	630	-0.011	0.0	0.6	0.1	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	59	-0.010	0.0	0.0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	17.8	5.7	0.0	-0.023	1.6	96	-0.010	0.0	17.6	5.7	0.0	0.0	0	16.8	3.7	0.0	20.5	0
Seychelles	0.7	0.0	0.0	-0.002	0.0	1193	-0.012	0.0	0.7	0.0	0.0	0.0	0	134.1	0.4	0.0	134.6	0
Sierra Leone	9.6	0.2	0.0	-0.028	0.5	24	-0.009	0.0	9.6	0.2	0.0	0.0	0	0.2	1.3	0.1	1.6	0
Somalia	76.6	0.8	0.0	-0.042	1.6	13	0.000	0.0	72.1	0.8	0.3	0.0	0	2.0	0.1	0.0	2.5	0
South Africa	77.6	6.9	0.0	-0.025	0.2	326	-0.014	0.0	77.6	6.9	4.7	0.0	0	21.1	2.3	0.7	28.9	0
Sudan	63.2	0.0	0.0	0.000	0.1	22	-0.005	0.0	63.2	0.0	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Tanzania, Uni Rep	15.8	10.7	0.0	-0.027	43.1	12	-0.004	0.0	15.2	10.7	0.0	0.0	0	1.5	0.5	0.0	2.0	0
Togo	0.3	0.0	0.0	-0.001	0.0	90	0.021	0.0	0.0	0.0	0.0	0.0	0	3.0	0.0	0.4	3.4	0
Tunisia	46.9	31.6	0.0	0.000	0.7	453	0.002	0.0	46.3	31.6	0.5	0.0	0	6.2	0.0	0.3	7.0	0
Western Sahara	6.7	0.0	0.0	-0.019	0.0	0	-0.009	0.0	6.7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	889.8	839.6	0.1	-0.793	223.8	147*	-0.005**	590.6	829.1	248.4	22.1	2.9	0	657.0	83.9	12.4	778.3	0

Table A-63. Case 11: Results by country, for No SLR and AIFI socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	8.2	12.4	0.0	0.000	0.4	698	-0.008	0.0	8.2	12.4	2.5	0.0	0	11.9	0.0	1.2	15.5	0
Angola	13.8	14.0	0.0	-0.009	1.0	34	-0.014	5.6	13.8	8.4	1.1	0.0	0	11.7	2.1	0.0	14.8	0
Benin	0.0	0.0	0.0	-0.004	0.0	122	-0.011	0.0	0.0	0.0	0.0	0.0	0	24.9	0.2	3.0	28.2	0
Cameroon	6.5	44.9	0.0	-0.014	4.6	103	-0.009	0.0	6.5	44.9	8.6	0.0	0	35.9	16.5	0.0	61.1	0
Cape Verde	5.6	1.2	0.0	-0.006	0.1	297	-0.010	0.0	5.6	1.2	0.0	0.0	0	0.8	0.0	0.0	0.8	0
Comoros	2.7	0.6	0.0	-0.004	0.3	75	-0.015	0.0	2.7	0.6	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo	3.8	3.1	0.0	-0.006	0.1	204	-0.014	0.0	3.8	3.1	0.0	0.0	0	0.0	1.5	0.0	1.5	0
Congo, Dem Rep	1.7	0.0	0.0	0.000	0.0	24	-0.014	0.0	1.7	0.0	0.1	0.0	0	1.3	0.3	0.0	1.7	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	229	-0.012	0.0	0.0	0.0	0.8	0.0	0	5.5	6.1	1.1	13.4	0
Djibouti	2.4	2.4	0.0	0.000	0.1	64	-0.012	0.0	2.4	2.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	32.3	697.4	4.3	-0.015	3.8	145	0.017	632.6	19.0	64.4	0.3	0.0	0	37.5	0.5	1.2	39.4	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	52	-0.010	0.0	0.0	0.0	0.6	0.0	0	3.1	0.4	0.0	4.1	0
Eritrea	9.6	0.1	0.0	-0.003	0.2	20	-0.007	0.0	9.6	0.1	0.0	0.0	0	0.6	0.1	0.0	0.6	0
Gabon	31.1	59.1	0.0	-0.061	0.2	222	-0.012	53.5	30.1	5.6	5.4	4.1	0	158.0	29.0	0.0	196.4	0
Gambia	6.8	1.1	0.0	-0.004	0.8	71	-0.011	0.0	6.8	1.1	0.1	0.0	0	8.6	2.4	0.2	11.3	0
Ghana	3.7	2.2	0.0	-0.011	0.0	119	0.021	2.2	0.0	0.0	0.0	0.0	0	3.0	2.1	1.8	6.9	0
Guinea	5.0	0.3	0.0	-0.047	0.1	55	-0.011	0.0	5.0	0.3	0.0	0.0	0	3.0	8.9	0.0	11.9	0
Guinea-Bissau	30.4	2.2	0.0	-0.047	3.8	19	-0.011	0.0	30.4	2.2	0.0	0.0	0	1.6	3.2	0.1	4.9	0
Kenya	21.0	6.1	0.0	-0.024	2.8	47	-0.014	0.0	21.0	6.1	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Liberia	0.0	0.0	0.0	-0.015	0.0	84	-0.011	0.0	0.0	0.0	0.3	0.0	0	2.4	1.1	0.0	3.9	0
Libyan Arab Jamahiriya	36.6	4.3	0.3	0.001	0.2	666	0.004	0.0	36.1	4.3	0.0	0.0	0	19.6	0.0	3.0	22.6	0
Madagascar	59.7	2.0	0.5	-0.069	3.7	27	-0.007	0.0	51.5	2.0	0.0	0.0	0	0.9	0.8	0.0	1.8	0
Mauritania	10.3	0.4	0.2	-0.021	0.2	27	0.014	0.0	6.5	0.4	0.0	0.0	0	22.6	0.1	0.5	23.2	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	1731	-0.014	0.0	0.0	0.0	0.0	0.0	0	83.7	0.0	0.0	83.7	0
Morocco	22.1	73.4	0.0	-0.024	1.7	311	-0.013	0.0	22.1	73.4	0.9	0.0	0	11.0	0.0	0.3	12.1	0
Mozambique	87.3	40.1	2.3	-0.166	118.6	9	-0.014	16.3	84.8	23.8	1.5	0.0	0	7.5	0.4	0.0	9.4	0
Namibia	468.4	0.0	0.0	-0.022	0.2	15	-0.016	0.0	468.4	0.0	0.0	0.0	0	40.0	0.0	0.0	40.0	0
Nigeria	35.7	2.5	0.3	-0.030	1.9	89	0.041	0.0	11.9	2.5	0.1	0.0	0	162.3	29.2	2.8	194.5	0
Reunion	0.6	0.2	0.0	-0.002	0.0	818	-0.012	0.0	0.6	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	83	-0.011	0.0	0.0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	18.4	7.9	0.0	-0.024	1.3	133	-0.011	0.0	18.2	7.9	0.0	0.0	0	23.8	5.3	0.0	29.2	0
Seychelles	0.7	0.0	0.0	-0.002	0.0	1705	-0.014	0.0	0.7	0.0	0.0	0.0	0	195.3	0.6	0.0	195.9	0
Sierra Leone	9.7	0.4	0.0	-0.030	0.5	34	-0.011	0.0	9.7	0.4	0.1	0.0	0	0.3	1.8	0.1	2.2	0
Somalia	77.2	1.1	0.0	-0.042	1.2	19	0.000	0.0	72.7	1.1	0.5	0.0	0	3.0	0.2	0.0	3.6	0
South Africa	78.8	7.0	0.0	-0.026	0.1	434	-0.017	0.0	78.8	7.0	6.4	0.0	0	28.6	3.1	1.0	39.0	0
Sudan	78.2	0.0	0.0	0.000	0.1	31	-0.006	0.0	78.2	0.0	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Tanzania, Uni Rep	16.4	14.6	0.6	-0.027	37.4	16	-0.004	0.0	15.9	14.6	0.0	0.0	0	2.1	0.7	0.0	2.7	0
Togo	0.3	0.0	0.0	-0.001	0.0	125	0.024	0.0	0.0	0.0	0.0	0.0	0	4.2	0.0	0.6	4.7	0
Tunisia	47.6	44.2	0.1	0.000	0.8	612	0.002	0.0	47.0	44.2	0.6	0.0	0	8.4	0.0	0.4	9.5	0
Western Sahara	9.4	0.0	0.0	-0.019	0.0	1	-0.010	0.0	9.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1242.0	1045.0	8.6	-0.818	186.2	201*	-0.006**	710.2	1179.1	334.5	30.8	4.1	0	929.1	118.9	17.3	1099.7	0

Table A-64. Case 11: Results by country, for No SLR and AIFI socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	7.3	6.2	0.0	0.000	0.0	2209	-0.012	0.0	7.3	0.0	8.3	0.0	0	39.3	0.0	4.0	51.5	0
Angola	11.0	33.2	0.0	-0.013	1.0	106	-0.023	0.0	11.0	27.7	3.4	0.0	0	37.1	6.8	0.0	47.2	0
Benin	0.0	0.0	0.0	-0.004	0.0	441	-0.017	0.0	0.0	0.0	0.0	0.0	0	97.5	0.7	11.9	110.0	0
Cameroon	5.7	170.4	0.0	-0.021	2.1	381	-0.015	0.0	5.7	163.0	33.6	0.0	0	140.4	64.6	0.0	238.7	0
Cape Verde	4.8	1.6	0.0	-0.006	0.0	1097	-0.015	0.0	4.8	1.1	0.0	0.0	0	3.3	0.0	0.0	3.3	0
Comoros	2.4	1.6	0.0	-0.004	0.0	274	-0.024	0.0	24	1.5	0.0	0.0	0	0.0	1.2	0.0	1.2	0
Congo	3.3	13.2	0.0	-0.006	0.2	747	-0.021	0.0	3.3	12.6	0.0	0.0	0	0.0	5.9	0.0	5.9	0
Congo, Dem Rep	1.4	0.0	0.0	0.000	0.0	89	-0.022	0.0	1.4	0.0	0.5	0.0	0	5.0	1.0	0.0	6.5	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	838	-0.019	0.0	0.0	0.0	3.2	0.0	0	21.4	23.8	4.2	52.6	0
Djibouti	2.0	10.0	0.0	0.000	0.1	243	-0.019	0.0	2.0	9.5	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	32.2	1358.3	4.3	-0.025	2.7	458	0.027	1255.0	15.7	143.9	1.0	0.0	0	107.9	1.6	3.6	114.0	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	199	-0.016	0.0	0.0	0.0	2.4	0.0	0	11.9	1.6	0.1	16.0	0
Eritrea	8.1	0.2	0.0	-0.003	0.1	84	-0.011	0.0	8.1	0.2	0.0	0.0	0	2.3	0.3	0.0	2.6	0
Gabon	25.2	127.6	0.0	-0.066	0.0	871	-0.019	111.6	24.4	13.3	21.1	15.9	0	617.4	113.3	0.0	767.8	0
Gambia	6.1	3.4	0.0	-0.006	0.1	261	-0.017	0.0	6.1	3.3	0.4	0.0	0	33.7	9.4	0.7	44.2	0
Ghana	3.7	4.7	0.0	-0.011	0.0	430	0.033	4.6	0.0	0.0	0.0	0.0	0	11.8	8.0	7.2	27.1	0
Guinea	4.4	0.9	0.0	-0.062	0.0	205	-0.017	0.0	4.4	0.7	0.0	0.0	0	11.8	34.8	0.0	46.6	0
Guinea-Bissau	25.8	7.1	0.0	-0.057	1.4	73	-0.017	0.0	25.8	7.2	0.1	0.0	0	6.1	12.3	0.5	19.0	0
Kenya	18.6	17.2	0.0	-0.024	0.6	185	-0.023	0.0	18.6	16.9	3.7	0.0	0	23.2	7.0	0.0	34.0	0
Liberia	0.0	0.0	0.0	-0.015	0.0	311	-0.017	0.0	0.0	0.0	1.3	0.0	0	9.5	4.5	0.0	15.3	0
Libyan Arab Jamahiriya	29.1	0.9	0.3	-0.002	0.0	2170	0.006	0.0	28.6	1.1	0.0	0.0	0	63.7	0.0	9.9	73.6	0
Madagascar	52.9	6.6	0.5	-0.069	1.1	108	-0.011	0.0	44.7	7.0	0.0	0.0	0	3.9	3.5	0.0	7.4	0
Mauritania	10.5	1.0	0.2	-0.024	0.0	105	0.023	0.0	5.5	1.0	0.0	0.0	0	88.4	0.2	2.0	90.6	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	6646	-0.021	0.0	0.0	0.0	0.0	0.0	0	348.0	0.0	0.0	348.0	0
Morocco	19.5	27.4	0.0	-0.024	0.4	993	-0.020	0.0	19.5	24.9	3.0	0.0	0	37.2	0.0	0.9	41.1	0
Mozambique	76.5	95.7	2.3	-0.178	62.4	26	-0.023	30.8	74.1	75.2	4.7	0.0	0	23.9	1.3	0.0	29.9	0
Namibia	26.2	0.2	0.0	-0.022	0.1	51	-0.025	0.0	26.2	0.1	0.0	0.0	0	127.2	0.0	0.0	127.2	0
Nigeria	38.1	6.6	0.3	-0.042	0.2	319	0.064	0.0	10.9	6.4	0.4	0.0	0	597.6	110.6	10.9	719.5	0
Reunion	0.5	0.0	0.0	-0.002	0.0	2147	-0.019	0.0	0.5	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	302	-0.018	0.0	0.0	0.0	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Senegal	16.4	18.9	0.0	-0.027	0.3	488	-0.018	0.0	16.2	12.3	0.0	0.0	0	93.2	20.8	0.0	114.0	0
Seychelles	0.0	0.0	0.0	-0.002	0.0	4470	-0.023	0.0	0.0	0.0	0.0	0.0	0	727.7	2.3	0.0	729.9	0
Sierra Leone	8.4	1.2	0.0	-0.038	0.6	128	-0.017	0.0	8.4	1.4	0.2	0.0	0	1.0	7.1	0.5	8.8	0
Somalia	66.1	4.7	0.0	-0.042	1.0	77	0.001	0.0	61.6	4.5	2.0	0.0	0	12.3	0.8	0.0	15.1	0
South Africa	63.8	2.0	0.0	-0.029	0.0	1314	-0.026	0.0	63.8	2.4	20.2	0.0	0	90.9	9.9	3.1	124.1	0
Sudan	6.5	0.0	0.0	0.000	0.0	124	-0.010	0.0	6.5	0.0	0.0	0.0	0	0.1	1.3	0.0	1.4	0
Tanzania, Uni Rep	14.1	47.4	0.6	-0.027	22.2	48	-0.007	0.0	13.6	45.5	0.1	0.0	0	6.6	2.1	0.0	8.7	0
Togo	0.3	0.0	0.0	-0.001	0.0	449	0.038	0.0	0.0	0.0	0.0	0.0	0	14.9	0.0	2.2	17.2	0
Tunisia	42.4	9.3	0.1	-0.001	0.1	1947	0.004	0.0	41.6	9.4	2.1	0.0	0	27.3	0.0	1.4	30.9	0
Western Sahara	0.8	0.0	0.0	-0.019	0.0	2	-0.016	0.0	0.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	634.1	1977.7	8.6	-0.916	96.7	676*	-0.010**	1402.0	585.1	592.1	111.7	15.9	0	3445.1	456.8	63.1	4092.6	0

Table A-65. Case 11: Results by country, for No SLR and AIFI socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	3.9	0.0	0.0	0.000	0.1	5471	-0.018	0.0	3.9	0.0	21.4	0.0	0	100.5	0.0	10.3	132.2	0
Angola	6.9	77.1	0.0	-0.018	1.0	295	-0.033	0.0	6.9	77.1	9.6	0.0	0	105.6	19.3	0.0	134.5	0
Benin	0.0	0.0	0.0	-0.004	0.0	1558	-0.025	0.0	0.0	0.0	0.0	0.0	0	360.4	2.6	44.0	407.0	0
Cameroon	4.1	5.1	0.0	-0.030	0.2	1352	-0.021	0.0	4.1	5.1	124.4	0.0	0	519.4	239.1	0.0	882.9	0
Cape Verde	3.4	0.2	0.0	-0.006	0.0	3895	-0.022	0.0	3.4	0.2	0.0	0.0	0	12.1	0.0	0.0	12.1	0
Comoros	1.8	5.4	0.0	-0.004	0.0	968	-0.035	0.0	1.8	5.4	0.0	0.0	0	0.0	4.3	0.0	4.3	0
Congo	2.4	0.0	0.0	-0.006	0.0	2645	-0.031	0.0	2.4	0.0	0.0	0.0	0	0.0	21.9	0.0	21.9	0
Congo, Dem Rep	1.1	0.0	0.0	0.000	0.0	315	-0.032	0.0	1.1	0.0	2.0	0.0	0	18.5	3.7	0.0	24.2	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	2969	-0.028	0.0	0.0	0.0	11.9	0.0	0	79.0	87.9	15.6	194.3	0
Djibouti	1.4	0.2	0.0	0.000	0.0	866	-0.027	0.0	1.4	0.2	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Egypt	28.9	2128.1	4.3	-0.033	0.3	1124	0.039	2125.9	8.9	2.3	2.4	0.0	0	222.5	4.1	8.2	237.3	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	712	-0.024	0.0	0.0	0.0	8.8	0.0	0	44.1	5.9	0.3	59.0	0
Eritrea	5.9	0.6	0.0	-0.003	0.0	321	-0.016	0.0	5.9	0.6	0.0	0.0	0	9.1	1.0	0.0	10.1	0
Gabon	16.9	223.9	0.0	-0.073	0.0	2792	-0.028	218.9	16.3	5.1	78.0	59.0	0	2283.3	419.1	0.0	2839.4	0
Gambia	4.4	5.8	0.0	-0.009	0.1	927	-0.025	0.0	4.4	5.8	1.6	0.0	0	124.7	34.8	2.4	163.5	0
Ghana	3.7	9.2	0.0	-0.011	0.0	1511	0.049	9.2	0.0	0.0	0.0	0.0	0	45.5	28.3	26.5	100.4	0
Guinea	3.2	2.6	0.0	-0.075	0.0	729	-0.025	0.0	3.2	2.7	0.0	0.0	0	43.4	128.8	0.0	172.3	0
Guinea-Bissau	19.4	18.4	0.0	-0.066	0.2	261	-0.025	0.0	19.4	18.4	0.2	0.0	0	22.5	45.5	2.0	70.3	0
Kenya	13.7	18.8	0.0	-0.024	0.1	695	-0.033	0.0	13.7	18.8	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Liberia	0.0	0.0	0.0	-0.015	0.0	1108	-0.025	0.0	0.0	0.0	4.9	0.0	0	35.2	16.5	0.0	56.6	0
Libyan Arab Jamahiriya	11.3	1.7	0.3	-0.002	0.0	4449	0.009	0.0	10.8	1.7	0.0	0.0	0	156.5	0.0	24.6	181.1	0
Madagascar	41.1	19.9	0.5	-0.069	0.3	408	-0.016	0.0	32.9	19.9	0.0	0.0	0	15.7	13.7	0.0	29.4	0
Mauritania	10.1	3.5	0.2	-0.026	0.0	377	0.033	0.0	4.0	3.5	0.0	0.0	0	326.8	0.8	7.2	334.9	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	7941	-0.031	0.0	0.0	0.0	0.0	0.0	0	1365.3	0.0	0.0	1365.3	0
Morocco	10.4	0.4	0.0	-0.024	0.2	2485	-0.03	0.0	10.4	0.4	7.9	0.0	0	96.5	0.0	2.3	106.7	0
Mozambique	51.7	200.7	2.3	-0.188	19.8	71	-0.033	53.2	49.8	147.5	13.5	0.0	0	68.0	3.7	0.0	85.2	0
Namibia	10.4	0.2	0.0	-0.022	0.1	144	-0.036	0.0	10.4	0.2	0.0	0.0	0	362.2	0.0	0.0	362.2	0
Nigeria	38.8	23.2	0.3	-0.050	0.3	1117	0.093	0.0	8.9	23.2	1.4	0.0	0	2062.4	391.1	40.3	2495.2	0
Reunion	0.3	0.0	0.0	-0.002	0.0	4385	-0.028	0.0	0.3	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	1070	-0.026	0.0	0.0	0.0	0.0	0.0	0	4.9	0.0	0.0	4.9	0
Senegal	12.0	15.0	0.0	-0.031	0.1	1728	-0.026	0.0	11.9	15.1	0.1	0.0	0	344.6	76.8	0.0	421.5	0
Seychelles	0.0	0.0	0.0	-0.002	0.0	4470	-0.033	0.0	0.0	0.0	0.0	0.0	0	2239.8	7.0	0.0	2246.8	0
Sierra Leone	6.2	3.3	0.0	-0.046	0.1	454	-0.025	0.0	6.2	3.3	0.7	0.0	0	3.6	26.2	1.9	32.4	0
Somalia	49.9	10.0	0.0	-0.042	0.1	290	0.001	0.0	45.4	10.0	7.7	0.0	0	48.4	3.1	0.0	59.3	0
South Africa	40.3	0.1	0.0	-0.033	0.0	3593	-0.038	0.0	40.3	0.1	57.6	0.0	0	258.8	28.1	8.9	353.4	0
Sudan	4.4	0.0	0.0	0.000	0.0	466	-0.014	0.0	4.4	0.0	0.0	0.0	0	0.2	5.2	0.0	5.4	0
Tanzania, Uni Rep	10.0	85.1	0.6	-0.027	4.8	133	-0.010	0.0	9.5	85.1	0.2	0.0	0	18.9	5.9	0.0	25.0	0
Togo	0.3	0.0	0.0	-0.001	0.0	1575	0.056	0.0	0.0	0.0	0.0	0.0	0	49.3	0.0	7.6	56.9	0
Tunisia	23.8	0.0	0.1	-0.001	0.1	4866	0.006	0.0	22.5	0.0	5.4	0.0	0	66.6	0.0	3.6	75.6	0
Western Sahara	0.4	0.0	0.0	-0.019	0.0	6	-0.023	0.0	0.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	442.5	2858.7	8.6	-1.006	27.9	1631*	-0.014**	2407.2	364.9	451.7	374.2	59.0	0	11606.0	1652.2	205.7	13897.5	0

Table A-66. Case 11: Results by country, for No SLR and AIFI socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	2.3	0.0	0.0	0.000	0.0	9342	-0.023	0.0	2.3	0.0	39.2	0.0	0	180.9	0.0	18.9	238.9	0
Angola	4.1	2.3	0.0	-0.022	0.1	542	-0.043	0.0	4.1	2.3	17.9	0.0	0	197.5	36.1	0.0	251.5	0
Benin	0.0	0.0	0.0	-0.004	0.0	3872	-0.033	0.0	0.0	0.0	0.0	0.0	0	887.4	6.3	108.4	1002.1	0
Cameroon	3.3	0.0	0.0	-0.037	0.2	3312	-0.028	0.0	3.3	0.0	306	0.0	0	1278.9	588.7	0.0	2174.0	0
Cape Verde	1.7	0.0	0.0	-0.006	0.0	8048	-0.029	0.0	1.7	0.0	0.0	0.0	0	29.9	0.0	0.0	29.9	0
Comoros	1.4	0.0	0.0	-0.004	0.0	2405	-0.045	0.0	1.4	0.0	0.0	0.0	0	0.1	10.5	0.0	10.6	0
Congo	1.9	0.0	0.0	-0.006	0.0	6530	-0.041	0.0	1.9	0.0	0.0	0.0	0	0.0	53.8	0.0	53.8	0
Congo, Dem Rep	0.9	0.1	0.0	0.000	0.0	771	-0.042	0.0	0.9	0.1	4.9	0.0	0	45.6	9.0	0.0	59.5	0
Cote d'Ivoire	0.0	0.0	0.0	-0.035	0.0	6277	-0.037	0.0	0.0	0.0	29.2	0.0	0	194.4	216.4	38.5	478.5	0
Djibouti	0.9	0.5	0.0	0.000	0.0	2090	-0.036	0.0	0.9	0.5	0.0	0.0	0	0.0	0.5	0.0	0.5	0
Egypt	27.8	0.0	4.4	-0.038	0.3	2017	0.052	0.0	6.3	0.1	4.0	0.0	0	329.4	7.5	13.3	354.2	0
Equatorial Guinea	0.0	0.0	0.0	-0.005	0.0	1708	-0.031	0.0	0.0	0.0	21.6	0.0	0	108.5	14.4	0.7	145.3	0
Eritrea	4.3	1.2	0.0	-0.003	0.0	792	-0.021	0.0	4.3	1.2	0.0	0.0	0	23.4	2.6	0.0	25.9	0
Gabon	8.3	331.2	0.0	-0.080	0.0	5167	-0.037	331.3	8.0	0.0	192.1	145.2	0	5622.3	1032.1	0.0	6991.7	0
Gambia	3.5	0.0	0.0	-0.011	0.0	2282	-0.033	0.0	3.5	0.0	3.8	0.0	0	307.0	85.8	6.0	402.6	0
Ghana	3.7	14.2	0.0	-0.011	0.0	3720	0.064	14.2	0.0	0.0	0.0	0.0	0	116.1	66.1	65.2	247.5	0
Guinea	2.4	5.8	0.0	-0.083	0.0	1775	-0.033	0.0	2.4	5.8	0.0	0.0	0	107.0	317.2	0.0	424.2	0
Guinea-Bissau	14.9	26.5	0.0	-0.074	0.1	630	-0.033	0.0	14.9	26.5	0.5	0.0	0	55.4	112.1	4.9	173.0	0
Kenya	10.7	12.9	0.0	-0.024	0.1	1783	-0.043	0.0	10.7	12.9	37.3	0.0	0	234.9	71.2	0.0	343.4	0
Liberia	0.0	0.0	0.0	-0.015	0.0	2701	-0.033	0.0	0.0	0.0	12.1	0.0	0	86.5	40.7	0.0	139.4	0
Libyan Arab Jamahiriya	4.9	2.3	0.3	-0.002	0.0	5451	0.012	0.0	4.3	2.3	0.0	0.0	0	272.8	0.0	43.1	315.9	0
Madagascar	33.4	25.7	0.5	-0.069	0.1	1033	-0.021	0.0	25.2	25.7	0.0	0.0	0	40.9	35.1	0.0	76.0	0
Mauritania	10.0	0.0	0.2	-0.028	0.0	873	0.043	0.0	3.1	0.0	0.0	0.0	0	804.8	2.1	17.8	824.6	0
Mauritius	0.0	0.0	0.0	-0.002	0.0	7941	-0.041	0.0	0.0	0.0	0.0	0.0	0	3519.6	0.0	0.0	3519.6	0
Morocco	8.0	0.1	0.0	-0.024	0.2	4559	-0.039	0.0	8.0	0.2	14.5	0.0	0	177.5	0.0	4.3	196.3	0
Mozambique	37.0	298.8	2.3	-0.195	9.5	132	-0.043	70.4	35.3	228.3	25.2	0.0	0	127.2	6.9	0.1	159.4	0
Namibia	1.3	0.3	0.0	-0.022	0.1	250	-0.047	0.0	1.3	0.3	0.0	0.0	0	677.4	0.0	0.0	677.4	0
Nigeria	39.4	-0.1	0.3	-0.056	0.0	2741	0.122	0.0	7.8	0.0	3.5	0.0	0	4755.8	921.0	99.3	5779.5	0
Reunion	0.2	0.0	0.0	-0.002	0.0	7337	-0.037	0.0	0.2	0.0	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Sao Tome & Principe	0.0	0.0	0.0	-0.002	0.0	2644	-0.034	0.0	0.0	0.0	0.0	0.0	0	12.0	0.0	0.0	12.0	0
Senegal	9.2	0.0	0.0	-0.033	0.0	3960	-0.034	0.0	9.1	0.0	0.3	0.0	0	848.5	189.1	0.0	1037.9	0
Seychelles	0.0	0.0	0.0	-0.002	0.0	4470	-0.043	0.0	0.0	0.0	0.0	0.0	0	4905.5	15.4	0.0	4920.9	0
Sierra Leone	4.9	7.0	0.0	-0.052	0.1	1107	-0.033	0.0	4.9	7.0	1.8	0.0	0	9.0	64.5	4.7	79.9	0
Somalia	38.8	21.4	0.0	-0.042	0.1	721	0.001	0.0	34.4	21.4	19.9	0.0	0	124.9	8.0	0.0	152.7	0
South Africa	22.2	0.1	0.0	-0.037	0.0	5919	-0.050	0.0	22.2	0.1	107.8	0.0	0	484.0	52.6	16.6	661.0	0
Sudan	2.7	0.1	0.0	0.000	0.0	1190	-0.019	0.0	2.7	0.1	0.0	0.0	0	0.6	13.3	0.0	13.9	0
Tanzania, Uni Rep	7.5	136.1	0.6	-0.027	2.3	250	-0.013	0.0	7.0	136.1	0.3	0.0	0	35.5	11.0	0.0	46.9	0
Togo	0.3	0.0	0.0	-0.001	0.0	3886	0.073	0.0	0.0	0.0	0.0	0.0	0	108.5	0.0	17.2	125.7	0
Tunisia	13.9	0.0	0.1	-0.002	0.1	7987	0.007	0.0	12.6	0.0	9.8	0.0	0	114.3	0.0	6.3	130.4	0
Western Sahara	0.2	0.0	0.0	-0.019	0.0	10	-0.030	0.0	0.2	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	326.0	886.5	8.7	-1.075	13.3	2858*	-0.018**	415.9	244.9	471.1	851.7	145.2	0	26824.9	3990.0	465.3	32277.4	0

Table A-67. Case 12: Results by country, for No SLR and AIFI socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	2.8	0	0.000	1.0	125	-0.001	0.0	0	2.8	0.42	0.0	0	2.1	0.0	0.20	2.7	0
Angola	0	4.5	0	-0.001	4.8	7	-0.002	2.2	0	2.3	0.23	0.0	0	2.6	0.5	0.00	3.3	0
Benin	0	0.0	0	-0.004	0.0	23	-0.002	0.0	0	0.0	0.00	0.0	0	4.0	0.0	0.49	4.6	0
Cameroon	0	8.4	0	-0.001	10.4	18	-0.001	0.0	0	8.4	1.40	0.0	0	5.8	2.7	0.00	9.9	0
Cape Verde	0	0.2	0	-0.006	0.2	50	-0.001	0.0	0	0.2	0.00	0.0	0	0.1	0.0	0.00	0.1	0
Comoros	0	0.1	0	-0.004	0.2	14	-0.002	0.0	0	0.1	0.00	0.0	0	0.0	0.1	0.00	0.1	0
Congo	0	0.6	0	-0.006	0.7	36	-0.002	0.0	0	0.6	0.00	0.0	0	0.0	0.3	0.00	0.3	0
Congo, Dem Rep	0	0.0	0	0.000	0.1	4	-0.002	0.0	0	0.0	0.02	0.0	0	0.2	0.0	0.00	0.3	0
Cote d'Ivoire	0	0.0	0	-0.035	0.0	41	-0.002	0.0	0	0.0	0.13	0.0	0	0.9	1.0	0.18	2.2	0
Djibouti	0	0.5	0	0.000	0.5	11	-0.002	0.0	0	0.5	0.00	0.0	0	0.0	0.0	0.00	0.0	0
Egypt	0	232.3	0	0.169	14.7	24	0.002	219.2	0	11.9	0.06	0.0	0	7.9	0.1	0.22	8.3	0
Equatorial Guinea	0	0.0	0	-0.005	0.0	8	-0.001	0.0	0	0.0	0.10	0.0	0	0.5	0.1	0.00	0.7	0
Eritrea	0	0.0	0	-0.003	0.7	2	-0.001	0.0	0	0.0	0.00	0.0	0	0.1	0.0	0.00	0.1	0
Gabon	0	18.8	0	-0.051	1.3	28	-0.002	18.0	0	0.8	0.87	0.7	0	25.6	4.7	0.00	31.8	0
Gambia	0	0.2	0	0.000	3.1	12	-0.002	0.0	0	0.2	0.02	0.0	0	1.4	0.4	0.03	1.8	0
Ghana	0	0.7	0	0.049	0.0	21	0.003	0.7	0	0.0	0.00	0.0	0	0.5	0.4	0.30	1.1	0
Guinea	0	0.1	0	-0.011	0.5	9	-0.002	0.0	0	0.1	0.00	0.0	0	0.5	1.4	0.00	1.9	0
Guinea-Bissau	0	0.3	0	-0.029	6.1	3	-0.002	0.0	0	0.3	0.00	0.0	0	0.3	0.5	0.02	0.8	0
Kenya	0	0.7	0	-0.024	4.3	7	-0.002	0.0	0	0.7	0.13	0.0	0	0.8	0.2	0.00	1.2	0
Liberia	0	0.0	0	-0.015	0.0	14	-0.002	0.0	0	0.0	0.06	0.0	0	0.4	0.2	0.00	0.6	0
Libyan Arab Jamahiriya	0	1.4	0	0.011	0.4	106	0.001	0.0	0	1.4	0.00	0.0	0	3.6	0.0	0.53	4.1	0
Madagascar	0	0.3	0	0.027	14.0	4	-0.001	0.0	0	0.3	0.00	0.0	0	0.1	0.1	0.00	0.3	0
Mauritania	0	0.0	0	0.007	0.1	3	0.002	0.0	0	0.0	0.00	0.0	0	3.7	0.0	0.08	3.8	0
Mauritius	0	0.0	0	-0.002	0.0	292	-0.002	0.0	0	0.0	0.00	0.0	0	11.9	0.0	0.00	11.9	0
Morocco	0	11.6	0	-0.024	2.8	54	-0.002	0.0	0	11.6	0.15	0.0	0	1.9	0.0	0.05	2.1	0
Mozambique	0	10.7	0	-0.115	126.5	2	-0.002	6.4	0	4.3	0.33	0.0	0	1.7	0.1	0.00	2.1	0
Namibia	0	0.0	0	-0.022	0.1	3	-0.002	0.0	0	0.0	0.00	0.0	0	8.9	0.0	0.00	8.9	0
Nigeria	0	0.4	0	0.191	1.0	15	0.006	0.0	0	0.3	0.02	0.0	0	28.5	4.9	0.45	33.9	0
Reunion	0	0.0	0	-0.002	0.0	175	-0.002	0.0	0	0.0	0.00	0.0	0	0.0	0.0	0.00	0.0	0
Sao Tome & Principe	0	0.0	0	-0.002	0.0	15	-0.002	0.0	0	0.0	0	0.0	0	0.1	0.0	0.00	0.1	0
Senegal	0	1.4	0	-0.015	2.8	24	-0.002	0.0	0	1.4	0	0.0	0	3.9	0.9	0.00	4.7	0
Seychelles	0	1.1	0	-0.002	0.0	208	-0.002	0.0	0	1.1	0	0.0	0	23.3	0.1	0.00	23.3	0
Sierra Leone	0	0.1	0	-0.014	2.4	6	-0.002	0.0	0	0.1	0.01	0.0	0	0.0	0.3	0.02	0.4	0
Somalia	0	0.2	0	0.067	4.8	2	0.000	0.0	0	0.2	0.07	0.0	0	0.4	0.0	0.00	0.5	0
South Africa	0	1.7	0	-0.020	0.1	99	-0.002	0.0	0	1.7	1.41	0.0	0	6.3	0.7	0.22	8.6	0
Sudan	0	0.0	0	0.000	0.0	5	-0.001	0.0	0	0.0	0.00	0.0	0	0.0	0.0	0.00	0.1	0
Tanzania, Uni Rep	0	3.2	0	-0.016	98.7	4	-0.001	0.0	0	3.2	0.00	0.0	0	0.5	0.2	0.00	0.6	0
Togo	0	0.0	0	0.003	0.0	22	0.003	0.0	0	0.0	0.00	0.0	0	0.7	0.0	0.10	0.8	0
Tunisia	0	6.8	0	0.006	1.0	106	0.000	0.0	0	6.8	0.11	0.0	0	1.5	0.0	0.08	1.7	0
Western Sahara	0	0.0	0	-0.019	0.0	0	-0.001	0.0	0	0.0	0.00	0.0	0	0.0	0.0	0.00	0.0	0
TOTAL for Africa	0	309.2	0	0.082	303.3	35*	-0.001**	246.5	0	61.5	5.54	0.7	0	150.7	19.9	2.97	179.7	0

Table A-68. Case 12: Results by country, for No SLR and AIFI socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	14.1	0.0	0.00	1.5	125	-0.007	0.0	0	14.1	1.8	0.0	0	8.7	0.0	0.8	11.3	0
Angola	0	14.4	0.0	-0.01	8.4	7	-0.012	4.7	0	9.7	0.8	0.0	0	8.6	1.6	0.0	11.0	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.009	0.0	0	0.0	0.0	0.0	0	17.5	0.1	2.1	19.8	0
Cameroon	0	45.4	0.0	-0.01	18.0	18	-0.008	0.0	0	45.4	6.0	0.0	0	25.3	11.6	0.0	42.9	0
Cape Verde	0	1.1	0.0	-0.01	0.4	50	-0.008	0.0	0	1.1	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Comoros	0	0.4	0.0	0.00	0.3	14	-0.013	0.0	0	0.4	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo	0	3.4	0.0	-0.01	1.3	36	-0.012	0.0	0	3.4	0.0	0.0	0	0.0	1.1	0.0	1.1	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	4	-0.012	0.0	0	0.0	0.1	0.0	0	0.9	0.2	0.0	1.2	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.010	0.0	0	0.0	0.6	0.0	0	3.8	4.3	0.8	9.4	0
Djibouti	0	2.6	0.0	0.00	0.8	11	-0.010	0.0	0	2.6	0.0	0.0	0	0.0	0.0	0	0.0	0
Egypt	0	602.1	0.0	0.28	30.4	17	0.015	526.5	0	66.8	0.2	0.0	0	28.3	0.3	0.9	29.7	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.009	0.0	0	0.0	0.4	0.0	0	2.1	0.3	0.0	2.9	0
Eritrea	0	0.0	0.0	0.00	1.2	2	-0.006	0.0	0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Gabon	0	48.1	0.0	-0.06	2.3	28	-0.010	43.9	0	4.2	3.8	2.9	0	111.0	20.4	0.0	138.0	0
Gambia	0	1.0	0.0	0.00	5.4	12	-0.009	0.0	0	1.0	0.1	0.0	0	6.1	1.7	0.1	8.0	0
Ghana	0	1.9	0.0	0.05	0.0	17	0.018	1.8	0	0.0	0.0	0.0	0	2.1	1.5	1.3	4.9	0
Guinea	0	0.3	0.0	-0.04	0.9	9	-0.009	0.0	0	0.3	0.0	0.0	0	2.1	6.3	0	8.4	0
Guinea-Bissau	0	1.7	0.0	-0.04	10.5	3	-0.009	0.0	0	1.7	0.0	0.0	0	1.1	2.2	0.1	3.4	0
Kenya	0	4.4	0.0	-0.02	7.5	7	-0.012	0.0	0	4.4	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.010	0.0	0	0.0	0.2	0.0	0	1.7	0.8	0.0	2.8	0
Libyan Arab Jamahiriya	0	7.2	0.1	0.02	0.6	103	0.003	0.0	0	7.2	0.0	0.0	0	14.4	0.0	2.2	16.6	0
Madagascar	0	1.7	0.5	0.03	25.6	3	-0.006	0.0	0	1.7	0.0	0.0	0	0.6	0.6	0	1.2	0
Mauritania	0	0.4	0.0	0.02	1.8	3	0.012	0.0	0	0.3	0.0	0.0	0	15.9	0.0	0.4	16.3	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.012	0.0	0	0.0	0.0	0.0	0	57.8	0.0	0.0	57.8	0
Morocco	0	57.9	0.0	-0.02	4.4	54	-0.011	0.0	0	57.9	0.7	0.0	0	8.0	0.0	0.2	8.8	0
Mozambique	0	31.9	0.0	-0.14	220.0	2	-0.012	13.7	0	18.2	1.1	0.0	0	5.5	0.3	0.0	7.0	0
Namibia	0	0.0	0.0	-0.02	0.2	3	-0.014	0.0	0	0.0	0.0	0.0	0	29.6	0.0	0.0	29.6	0
Nigeria	0	2.6	0.0	0.29	16.1	10	0.035	0.0	0	2.3	0.1	0.0	0	115.8	20.7	2	138.5	0
Reunion	0	0.1	0.0	0.00	0.0	175	-0.011	0.0	0	0.1	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.010	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Senegal	0	7.8	0.0	-0.02	4.9	24	-0.010	0.0	0	7.8	0.0	0.0	0	16.8	3.7	0.0	20.5	0
Seychelles	0	6.8	0.0	0.00	0.0	208	-0.012	0.0	0	6.8	0.0	0.0	0	134.1	0.4	0.0	134.6	0
Sierra Leone	0	0.3	0.0	-0.03	4.2	6	-0.009	0.0	0	0.3	0.0	0.0	0	0.2	1.3	0.1	1.6	0
Somalia	0	1.0	0.0	0.07	8.4	2	0.000	0.0	0	1.0	0.3	0.0	0	2.0	0.1	0.0	2.5	0
South Africa	0	7.2	0.0	-0.02	0.3	99	-0.014	0.0	0	7.2	4.7	0.0	0	21.1	2.3	0.7	28.9	0
Sudan	0	0.0	0.0	0.00	0.1	5	-0.005	0.0	0	0.0	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Tanzania, Uni Rep	0	13.5	0.0	-0.02	171.7	4	-0.004	0.0	0	13.5	0.0	0.0	0	1.5	0.5	0.0	2.0	0
Togo	0	0.0	0.0	0.00	0.0	18	0.021	0.0	0	0.0	0.0	0.0	0	3.0	0.0	0.4	3.4	0
Tunisia	0	33.8	0.0	0.01	1.6	105	0.002	0.0	0	33.8	0.5	0.0	0	6.2	0.0	0.3	7.0	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.009	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	913.5	0.6	0.23	549.0	34*	-0.005**	590.6	0	313.5	22.0	2.9	0	657.0	83.9	12.4	778.4	0

Table A-69. Case 12: Results by country, for No SLR and AIFI socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	19.8	0.0	0.00	1.6	125	-0.008	0.0	0	19.8	2.5	0.0	0	11.9	0.0	1.2	15.5	0
Angola	0	19.0	0.0	-0.01	9.0	7	-0.014	5.6	0	13.4	1.1	0.0	0	11.7	2.1	0.0	14.8	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.011	0.0	0	0.0	0.0	0.0	0	24.9	0.2	3.0	28.2	0
Cameroon	0	65.9	0.0	-0.01	19.3	18	-0.009	0.0	0	65.9	8.6	0.0	0	35.9	16.5	0.0	61.1	0
Cape Verde	0	1.6	0.0	-0.01	0.4	50	-0.010	0.0	0	1.6	0.0	0.0	0	0.8	0.0	0.0	0.8	0
Comoros	0	0.6	0.0	0.00	0.3	14	-0.015	0.0	0	0.6	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo	0	5.0	0.0	-0.01	1.4	36	-0.014	0.0	0	5.0	0.0	0.0	0	0.0	1.5	0.0	1.5	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	4	-0.014	0.0	0	0.0	0.1	0.0	0	1.3	0.3	0.0	1.7	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.012	0.0	0	0.0	0.8	0.0	0	5.5	6.1	1.1	13.4	0
Djibouti	0	3.8	0.0	0.00	0.9	11	-0.012	0.0	0	3.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	740.1	0.0	0.29	32.5	15	0.017	632.6	0	94.5	0.3	0.0	0	37.5	0.5	1.2	39.4	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.010	0.0	0	0.0	0.6	0.0	0	3.1	0.4	0.0	4.1	0
Eritrea	0	0.1	0.0	0.00	1.2	2	-0.007	0.0	0	0.1	0.0	0.0	0	0.6	0.1	0.0	0.6	0
Gabon	0	59.6	0.0	-0.06	2.4	28	-0.012	53.5	0	6.1	5.4	4.1	0	158.0	29.0	0.0	196.4	0
Gambia	0	1.4	0.0	0.00	5.8	12	-0.011	0.0	0	1.4	0.1	0.0	0	8.6	2.4	0.2	11.3	0
Ghana	0	2.3	0.0	0.05	0.0	17	0.021	2.2	0	0.0	0.0	0.0	0	3.0	2.1	1.8	6.9	0
Guinea	0	0.4	0.0	-0.05	1.0	9	-0.011	0.0	0	0.4	0.0	0.0	0	3.0	8.9	0.0	11.9	0
Guinea-Bissau	0	2.5	0.0	-0.05	11.3	3	-0.011	0.0	0	2.5	0.0	0.0	0	1.6	3.2	0.1	4.9	0
Kenya	0	6.5	0.0	-0.02	8.0	7	-0.014	0.0	0	6.5	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.011	0.0	0	0.0	0.3	0.0	0	2.4	1.1	0.0	3.9	0
Libyan Arab Jamahiriya	0	10.1	0.1	0.02	0.6	102	0.004	0.0	0	10.0	0.0	0.0	0	19.6	0.0	3.0	22.6	0
Madagascar	0	2.6	0.5	0.03	27.4	3	-0.007	0.0	0	2.6	0.0	0.0	0	0.9	0.8	0.0	1.8	0
Mauritania	0	0.5	0.0	0.02	1.9	3	0.014	0.0	0	0.5	0.0	0.0	0	22.6	0.1	0.5	23.2	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.014	0.0	0	0.0	0.0	0.0	0	83.7	0.0	0.0	83.7	0
Morocco	0	81.0	0.0	-0.02	4.7	54	-0.013	0.0	0	81.1	0.9	0.0	0	11.0	0.0	0.3	12.1	0
Mozambique	0	41.5	0.0	-0.14	235.9	2	-0.014	16.3	0	25.2	1.5	0.0	0	7.5	0.4	0.0	9.4	0
Namibia	0	0.1	0.0	-0.02	0.2	3	-0.016	0.0	0	0.1	0.0	0.0	0	40.0	0.0	0.0	40.0	0
Nigeria	0	3.8	0.0	0.30	17.3	9	0.041	0.0	0	3.3	0.1	0.0	0	162.3	29.2	2.8	194.5	0
Reunion	0	0.2	0.0	0.00	0.0	175	-0.012	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.011	0.0	0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	0	11.3	0.0	-0.02	5.2	24	-0.011	0.0	0	11.3	0.0	0.0	0	23.8	5.3	0.0	29.2	0
Seychelles	0	10.0	0.0	0.00	0.0	208	-0.014	0.0	0	10.0	0.0	0.0	0	195.3	0.6	0.0	195.9	0
Sierra Leone	0	0.4	0.0	-0.03	4.5	6	-0.011	0.0	0	0.5	0.1	0.0	0	0.3	1.8	0.1	2.2	0
Somalia	0	1.5	0.0	0.07	9.0	2	0.000	0.0	0	1.4	0.5	0.0	0	3.0	0.2	0.0	3.6	0
South Africa	0	9.9	0.0	-0.03	0.3	99	-0.017	0.0	0	9.9	6.4	0.0	0	28.6	3.1	1.0	39.0	0
Sudan	0	0.0	0.0	0.00	0.1	5	-0.006	0.0	0	0.0	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Tanzania, Uni Rep	0	34.7	384.8	-0.02	234.1	4	-0.004	0.0	0	18.8	0.0	0.0	0	2.1	0.7	0.0	2.7	0
Togo	0	0.0	0.0	0.00	0.0	17	0.024	0.0	0	0.0	0.0	0.0	0	4.2	0.0	0.6	4.7	0
Tunisia	0	47.4	0.0	0.01	1.7	104	0.002	0.0	0	47.4	0.6	0.0	0	8.4	0.0	0.4	9.5	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.010	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1183.7	385.4	0.22	638.2	34*	-0.006**	710.2	0	443.9	30.8	4.1	0	929.1	118.9	17.3	1099.7	0

Table A-70. Case 12: Results by country, for No SLR and AIFI socio-economic scenario for 2050, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	70.5	0.0	0.00	1.9	125	-0.012	0.0	0	69.5	8.3	0.0	0	39.3	0.0	4.0	51.5	0
Angola	0	50.4	0.0	-0.01	10.7	7	-0.023	0.0	0	44.4	3.4	0.0	0	37.1	6.8	0.0	47.2	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.017	0.0	0	0.0	0.0	0.0	0	97.5	0.7	11.9	110.0	0
Cameroon	0	277.4	0.0	-0.02	23.0	18	-0.015	0.0	0	265.2	33.6	0.0	0	140.4	64.6	0.0	238.7	0
Cape Verde	0	6.9	0.0	-0.01	0.5	50	-0.015	0.0	0	6.6	0.0	0.0	0	3.3	0.0	0.0	3.3	0
Comoros	0	2.6	0.0	0.00	0.3	14	-0.024	0.0	0	2.5	0.0	0.0	0	0.0	1.2	0.0	1.1	0
Congo	0	21.0	0.0	-0.01	1.7	36	-0.021	0.0	0	20.1	0.0	0.0	0	0.0	5.9	0.0	5.9	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	4	-0.022	0.0	0	0.0	0.5	0.0	0	5.0	1.0	0.0	6.5	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.019	0.0	0	0.0	3.2	0.0	0	21.4	23.8	4.2	52.5	0
Djibouti	0	16.1	0.0	0.00	1.1	11	-0.019	0.0	0	15.4	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	1661.5	0.0	0.34	40.4	12	0.027	1255.0	0	345.8	1.0	0.0	0	107.9	1.6	3.6	114.0	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.016	0.0	0	0.0	2.4	0.0	0	11.9	1.6	0.1	16.0	0
Eritrea	0	0.3	0.0	0.00	1.5	2	-0.011	0.0	0	0.3	0.0	0.0	0	2.3	0.3	0.0	2.6	0
Gabon	0	138.7	0.0	-0.07	2.9	28	-0.019	111.6	0	24.5	21.1	15.9	0	617.4	113.3	0.0	767.8	0
Gambia	0	5.9	0.0	-0.01	6.9	12	-0.017	0.0	0	5.6	0.4	0.0	0	33.7	9.4	0.7	44.2	0
Ghana	0	5.2	0.0	0.05	0.0	15	0.033	4.6	0	0.0	0.0	0.0	0	11.8	8.0	7.2	27.0	0
Guinea	0	1.7	0.0	-0.06	1.2	9	-0.017	0.0	0	1.6	0.0	0.0	0	11.7	34.8	0.0	46.6	0
Guinea-Bissau	0	10.5	0.0	-0.06	13.5	3	-0.017	0.0	0	10.1	0.1	0.0	0	6.1	12.3	0.5	19.0	0
Kenya	0	29.1	0.0	-0.02	9.5	7	-0.023	0.0	0	27.7	3.7	0.0	0	23.2	7.0	0.0	33.9	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.017	0.0	0	0.0	1.3	0.0	0	9.5	4.5	0.0	15.3	0
Libyan Arab Jamahiriya	0	36.0	0.1	0.02	0.8	99	0.006	0.0	0	35.3	0.0	0.0	0	63.7	0.0	9.9	73.6	0
Madagascar	0	11.6	0.5	0.03	32.8	3	-0.011	0.0	0	10.9	0.0	0.0	0	3.9	3.5	0.0	7.7	0
Mauritania	0	2.2	0.0	0.03	2.2	2	0.023	0.0	0	2.1	0.0	0.0	0	88.4	0.2	2.0	90.6	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.021	0.0	0	0.0	0.0	0.0	0	348.0	0.0	0.0	348.0	0
Morocco	0	288.6	0.0	-0.02	5.6	54	-0.020	0.0	0	284.4	3.0	0.0	0	37.2	0.0	0.9	41.1	0
Mozambique	0	118.2	2.3	-0.15	422.6	2	-0.023	30.8	0	84.0	4.7	0.0	0	23.9	1.3	0.0	29.9	0
Namibia	0	0.2	0.0	-0.02	0.2	3	-0.025	0.0	0	0.2	0.0	0.0	0	127.2	0.0	0.0	127.2	0
Nigeria	0	16.6	0.0	0.35	20.9	8	0.064	0.0	0	13.6	0.4	0.0	0	597.6	110.6	10.9	719.5	0
Reunion	0	0.5	0.0	0.00	0.0	175	-0.019	0.0	0	0.5	0.0	0.0	0	0.3	0.0	0.0	0.2	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.018	0.0	0	0.0	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Senegal	0	47.5	0.0	-0.03	6.2	24	-0.018	0.0	0	45.4	0.0	0.0	0	93.2	20.8	0.0	114.0	0
Seychelles	0	37.2	0.0	0.00	0.0	208	-0.023	0.0	0	36.4	0.0	0.0	0	727.7	2.3	0.0	729.9	0
Sierra Leone	0	1.9	0.0	-0.04	5.4	6	-0.017	0.0	0	1.8	0.2	0.0	0	1.0	7.1	0.5	8.8	0
Somalia	0	6.6	0.0	0.07	10.7	2	0.001	0.0	0	6.2	2.0	0.0	0	12.3	0.8	0.0	15.1	0
South Africa	0	33.9	0.0	-0.03	0.3	99	-0.026	0.0	0	32.9	20.2	0.0	0	90.9	9.9	3.1	124.1	0
Sudan	0	0.0	0.0	0.00	0.1	5	-0.010	0.0	0	0.0	0.0	0.0	0	0.1	1.3	0.0	1.4	0
Tanzania, Uni Rep	0	87.4	0.5	-0.02	346.0	4	-0.007	0.0	0	62.6	0.1	0.0	0	6.6	2.1	0.0	8.7	0
Togo	0	0.0	0.0	0.00	0.0	16	0.038	0.0	0	0.0	0.0	0.0	0	14.9	0.0	2.2	17.2	0
Tunisia	0	169.1	0.0	0.01	2.0	103	0.004	0.0	0	166.5	2.1	0.0	0	27.3	0.0	1.4	30.9	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.016	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	3155.3	3.4	0.25	971.1	34*	-0.010**	1402.0	0	1622.1	111.7	15.9	0	3445.0	456.8	63.1	4092.1	0

Table A-71. Case 12: Results by country, for No SLR and AIFI socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	179.3	0.0	0.00	2.1	125	-0.018	0.0	0	179.3	21.4	0.0	0	100.5	0.0	10.3	132.2	0
Angola	0	123.9	0.0	-0.02	11.3	7	-0.033	0.0	0	123.9	9.6	0.0	0	105.6	19.3	0.0	134.5	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.025	0.0	0	0.0	0.0	0.0	0	360.4	2.6	44.0	407.0	0
Cameroon	0	949.4	0.0	-0.03	24.2	18	-0.021	0.0	0	949.4	124.4	0.0	0	519.4	239.1	0.0	882.9	0
Cape Verde	0	23.5	0.0	-0.01	0.5	50	-0.022	0.0	0	23.5	0.0	0.0	0	12.1	0.0	0.0	12.2	0
Comoros	0	8.8	0.0	0.00	0.4	14	-0.035	0.0	0	8.8	0.0	0.0	0	0.0	4.3	0.0	4.3	0
Congo	0	72.0	0.0	-0.01	1.8	36	-0.031	0.0	0	72.0	0.0	0.0	0	0.0	21.9	0.0	21.9	0
Congo, Dem Rep	0	0.1	0.0	0.00	0.2	4	-0.032	0.0	0	0.1	2.0	0.0	0	18.5	3.7	0.0	24.1	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.028	0.0	0	0.0	11.9	0.0	0	79.0	87.9	15.6	194.3	0
Djibouti	0	55.3	0.0	0.00	1.1	11	-0.027	0.0	0	55.3	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Egypt	0	3226.4	0.0	0.38	50.5	9	0.039	2125.9	0	940.4	2.4	0.0	0	222.5	4.1	8.3	237.3	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.024	0.0	0	0.0	8.8	0.0	0	44.1	5.9	0.3	59.0	0
Eritrea	0	1.1	0.0	0.00	1.6	2	-0.016	0.0	0	1.1	0.0	0.0	0	9.1	1.0	0.0	10.1	0
Gabon	0	306.8	0.0	-0.07	3.0	28	-0.028	218.9	0	87.8	78.0	59.0	0	2283.3	419.1	0.0	2839.4	0
Gambia	0	20.1	0.0	-0.01	7.3	12	-0.025	0.0	0	20.1	1.6	0.0	0	124.7	34.8	2.5	163.5	0
Ghana	0	11.1	0.0	0.05	0.0	14	0.049	9.2	0	0.0	0.0	0.0	0	45.5	28.3	26.5	100.4	0
Guinea	0	5.8	0.0	-0.07	1.2	9	-0.025	0.0	0	5.8	0.0	0.0	0	43.4	128.8	0.0	172.3	0
Guinea-Bissau	0	36.0	0.0	-0.07	14.2	3	-0.025	0.0	0	36.0	0.2	0.0	0	22.5	45.5	2.0	70.3	0
Kenya	0	104.9	0.0	-0.02	10.0	7	-0.033	0.0	0	105.0	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.025	0.0	0	0.0	4.9	0.0	0	35.2	16.5	0.0	56.6	0
Libyan Arab Jamahiriya	0	91.8	0.1	0.02	0.8	96	0.009	0.0	0	91.4	0.0	0.0	0	156.5	0.0	24.6	181.1	0
Madagascar	0	41.8	0.5	0.03	34.7	3	-0.016	0.0	0	41.4	0.0	0.0	0	15.7	13.7	0.0	29.4	0
Mauritania	0	7.7	0.0	0.03	2.3	2	0.033	0.0	0	7.7	0.0	0.0	0	326.8	0.8	7.2	334.9	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.031	0.0	0	0.0	0.0	0.0	0	1365.3	0.0	0.0	1365.3	0
Morocco	0	734.2	0.0	-0.02	6.0	54	-0.03	0.0	0	734.3	7.9	0.0	0	96.5	0.0	2.3	106.7	0
Mozambique	0	288.9	2.3	-0.16	447.8	2	-0.033	53.2	0	234.4	13.5	0.0	0	68.0	3.7	0.0	85.2	0
Namibia	0	0.5	0.0	-0.02	0.2	3	-0.036	0.0	0	0.5	0.0	0.0	0	362.2	0.0	0.0	362.2	0
Nigeria	0	65.6	0.0	0.38	149.0	6	0.093	0.0	0	56.8	1.4	0.0	0	2062.4	391.1	40.3	2495.2	0
Reunion	0	1.0	0.0	0.00	0.0	175	-0.028	0.0	0	1.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.026	0.0	0	0.0	0.0	0.0	0	4.9	0.0	0.0	4.9	0
Senegal	0	162.6	0.0	-0.03	6.6	24	-0.026	0.0	0	162.4	0.1	0.0	0	344.6	76.8	0.0	421.5	0
Seychelles	0	102.9	0.0	0.00	0.0	208	-0.033	0.0	0	102.9	0.0	0.0	0	2239.8	7.0	0.0	2246.8	0
Sierra Leone	0	6.5	0.0	-0.05	5.7	6	-0.025	0.0	0	6.5	0.7	0.0	0	3.6	26.2	1.9	32.4	0
Somalia	0	23.9	0.0	0.07	13.9	2	0.001	0.0	0	23.5	7.7	0.0	0	48.4	3.1	0.0	59.2	0
South Africa	0	91.6	0.0	-0.03	0.3	99	-0.038	0.0	0	91.6	57.6	0.0	0	258.8	28.1	8.9	353.4	0
Sudan	0	0.1	0.0	0.00	0.1	5	-0.014	0.0	0	0.1	0.0	0.0	0	0.2	5.2	0.0	5.4	0
Tanzania, Uni Rep	0	305.9	49.6	-0.02	422.4	3	-0.010	0.0	0	175.9	0.2	0.0	0	18.9	5.9	0.0	25.0	0
Togo	0	0.1	0.0	0.00	0.0	15	0.056	0.0	0	0.0	0.0	0.0	0	49.3	0.0	7.6	56.9	0
Tunisia	0	430.6	0.0	0.02	2.2	101	0.006	0.0	0	430.2	5.4	0.0	0	66.6	0.0	3.6	75.6	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.023	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	7480.3	52.5	0.27	1221.4	33*	-0.014**	2407.2	0	4769.2	374.2	59.0	0	11606.0	1652.2	205.9	13897.4	0

Table A-72. Case 12: Results by country, for No SLR and AIFI socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	307.2	0.0	0.00	1.9	125	-0.023	0.0	0	307.2	39.2	0.0	0	180.9	0.0	18.9	238.9	0
Angola	0	209.3	0.0	-0.02	9.8	7	-0.043	0.0	0	209.3	17.9	0.0	0	197.5	36.1	0.0	251.5	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.033	0.0	0	0.0	0.0	0.0	0	887.4	6.3	108	1002.1	0
Cameroon	0	2085.0	0.0	-0.04	21.0	18	-0.028	0.0	0	2085.1	306.4	0.0	0	1278.9	588.7	0.0	2174.0	0
Cape Verde	0	51.7	0.0	-0.01	0.5	50	-0.029	0.0	0	51.7	0.0	0.0	0	29.9	0.0	0.0	29.9	0
Comoros	0	19.4	0.0	0.00	0.3	14	-0.045	0.0	0	19.4	0.0	0.0	0	0.1	10.5	0.0	10.6	0
Congo	0	158.0	0.0	-0.01	1.5	36	-0.041	0.0	0	158.0	0.0	0.0	0	0.0	53.8	0.0	53.8	0
Congo, Dem Rep	0	0.1	0.0	0.00	0.2	4	-0.042	0.0	0	0.1	4.9	0.0	0	45.6	9.0	0.0	59.5	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.037	0.0	0	0.0	29.2	0.0	0	194.4	216.4	38.5	478.5	0
Djibouti	0	121.4	0.0	0.00	1.0	11	-0.036	0.0	0	121.4	0.0	0.0	0	0.0	0.5	0.0	0.5	0
Egypt	0	2087.7	0.0	0.40	127.8	7	0.052	0.0	0	1781.7	4.0	0.0	0	329.4	7.5	13.3	354.2	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.031	0.0	0	0.0	21.6	0.0	0	108.5	14.5	0.7	145.3	0
Eritrea	0	2.6	0.0	0.00	1.3	2	-0.021	0.0	0	2.6	0.0	0.0	0	23.4	2.6	0.0	25.9	0
Gabon	0	524.4	0.0	-0.08	2.6	28	-0.037	331.3	0	192.9	192.1	145.2	0	5622.3	1032.0	0.0	6991.7	0
Gambia	0	44.1	0.0	-0.01	6.3	12	-0.033	0.0	0	44.1	3.8	0.0	0	307.0	85.8	6.0	402.6	0
Ghana	0	18.8	0.0	0.05	0.0	14	0.064	14.2	0	0.0	0.0	0.0	0	116.1	66.2	65.2	247.5	0
Guinea	0	12.7	0.0	-0.08	1.1	9	-0.033	0.0	0	12.7	0.0	0.0	0	107.0	317.2	0.0	424.2	0
Guinea-Bissau	0	79.0	0.0	-0.07	12.3	3	-0.033	0.0	0	79.0	0.5	0.0	0	55.4	112.1	4.9	173.0	0
Kenya	0	240.8	0.0	-0.02	8.7	7	-0.043	0.0	0	240.8	37.3	0.0	0	234.9	71.2	0.0	343.4	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.033	0.0	0	0.0	12.1	0.0	0	86.5	40.7	0.0	139.4	0
Libyan Arab Jamahiriya	0	157.7	0.1	0.02	0.8	93	0.012	0.0	0	156.9	0.0	0.0	0	272.8	0.0	43.1	315.9	0
Madagascar	0	96.0	0.5	0.03	30.1	3	-0.021	0.0	0	95.2	0.0	0.0	0	40.9	35.1	0.0	76.0	0
Mauritania	0	22.6	0.2	0.04	16.6	2	0.043	0.0	0	20.4	0.0	0.0	0	804.8	2.1	17.8	824.6	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.041	0.0	0	0.0	0.0	0.0	0	3519.6	0.0	0.0	3519.6	0
Morocco	0	1257.5	0.0	-0.02	5.5	54	-0.039	0.0	0	1257.6	14.5	0.0	0	177.5	0.0	4.3	196.3	0
Mozambique	0	468.9	2.3	-0.17	390.4	2	-0.043	70.4	0	396.2	25.2	0.0	0	127.2	6.9	0.1	159.4	0
Namibia	0	0.9	0.0	-0.02	0.2	3	-0.047	0.0	0	0.9	0.0	0.0	0	677.4	0.0	0.0	677.4	0
Nigeria	0	161.1	0.3	0.40	171.3	6	0.122	0.0	0	133.1	3.5	0.0	0	4755.8	921.0	99.3	5779.5	0
Reunion	0	1.5	0.0	0.00	0.0	175	-0.037	0.0	0	1.5	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.034	0.0	0	0.0	0.0	0.0	0	12.0	0.0	0.0	12.0	0
Senegal	0	357.0	0.0	-0.03	5.7	24	-0.034	0.0	0	356.7	0.3	0.0	0	848.5	189.1	0.0	1037.9	0
Seychelles	0	191.5	0.0	0.00	0.0	208	-0.043	0.0	0	191.5	0.0	0.0	0	4905.5	15.4	0.0	4920.9	0
Sierra Leone	0	14.3	0.0	-0.05	4.9	6	-0.033	0.0	0	14.3	1.8	0.0	0	9.0	64.5	4.7	79.9	0
Somalia	0	55.0	0.0	0.07	12.1	2	0.001	0.0	0	53.9	19.9	0.0	0	124.9	8.0	0.0	152.7	0
South Africa	0	154.7	0.0	-0.04	0.3	99	-0.050	0.0	0	154.7	107.8	0.0	0	484.0	52.6	16.6	661.0	0
Sudan	0	0.1	0.0	0.00	0.1	5	-0.019	0.0	0	0.1	0.0	0.0	0	0.6	13.3	0.0	13.9	0
Tanzania, Uni Rep	0	317.9	0.6	-0.02	906.6	3	-0.013	0.0	0	315.9	0.3	0.0	0	35.5	11.0	0.0	46.9	0
Togo	0	0.2	0.0	0.00	0.0	14	0.073	0.0	0	0.0	0.0	0.0	0	108.5	0.0	17.2	125.7	0
Tunisia	0	738.1	0.0	0.02	2.0	99	0.007	0.0	0	737.4	9.8	0.0	0	114.3	0.0	6.3	130.4	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.030	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	9957.4	4.0	0.27	1742.9	33*	-0.018**	415.9	0	9192.6	852.1	145.2	0	26824.9	3990.1	464.9	32277.4	0

Table A-73. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2000, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	3.0	2.8	0	0.00	1.0	139	-0.001	0.0	3.0	2.8	0.4	0.0	0	2.1	0.0	0.2	2.7	0
Angola	44.8	4.5	0	0.00	4.8	8	-0.002	2.2	44.8	2.3	0.2	0.0	0	2.6	0.5	0.0	3.3	0
Benin	0.0	0.0	0	0.00	0.0	24	-0.002	0.0	0.0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.6	0
Cameroon	1.2	8.4	0	0.00	10.4	19	-0.001	0.0	1.2	8.4	1.4	0.0	0	5.8	2.7	0.0	9.9	0
Cape Verde	1.2	0.2	0	-0.01	0.2	53	-0.001	0.0	1.2	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0.3	0.1	0	0.00	0.2	15	-0.002	0.0	0.3	0.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Congo	0.5	0.6	0	-0.01	0.8	38	-0.002	0.0	0.5	0.6	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo, Dem Rep	0.3	0.0	0	0.00	0.1	4	-0.002	0.0	0.3	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0.0	0.0	0	-0.04	0.0	42	-0.002	0.0	0.0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0.9	0.5	0	0.00	0.5	11	-0.002	0.0	0.9	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	16.2	232.1	0	0.17	14.7	29	0.002	219.2	11.0	11.9	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	0.0	0.0	0	0.00	0.0	8	-0.001	0.0	0.0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	15.3	0.0	0	0.00	0.7	3	-0.001	0.0	15.3	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	48.0	18.8	0	-0.05	1.3	32	-0.002	18.0	47.5	0.8	0.9	0.7	0	25.6	4.7	0.0	31.8	0
Gambia	1.1	0.2	0	0.00	3.1	13	-0.002	0.0	1.1	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	3.6	0.7	0	0.05	0.0	23	0.003	0.7	0.0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	1.2	0.1	0	-0.01	0.5	9	-0.002	0.0	1.2	0.1	0.0	0.0	0	0.5	1.4	0.0	1.9	0
Guinea-Bissau	7.3	0.3	0	-0.03	6.1	3	-0.002	0.0	7.3	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	4.6	0.7	0	-0.02	4.3	7	-0.002	0.0	4.6	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0.0	0.0	0	-0.01	0.0	15	-0.002	0.0	0.0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	19.7	1.4	0	0.01	0.4	122	0.001	0.0	19.4	1.4	0.0	0.0	0	3.6	0.0	0.5	4.1	0
Madagascar	214.1	0.3	0	0.03	14.0	4	-0.001	0.0	205.2	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	3.9	0.0	0	0.01	0.1	4	0.002	0.0	2.5	0.0	0.0	0.0	0	3.7	0.0	0.1	3.8	0
Mauritius	0.0	0.0	0	0.00	0.0	299	-0.002	0.0	0.0	0.0	0.0	0.0	0	11.9	0.0	0.0	11.9	0
Morocco	8.7	11.6	0	-0.02	2.8	61	-0.002	0.0	8.7	11.6	0.2	0.0	0	1.9	0.0	0.1	2.1	0
Mozambique	163.5	10.7	0	-0.12	126.5	2	-0.002	6.4	162.2	4.3	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	1.6	0.0	0	-0.02	0.1	3	-0.002	0.0	1.6	0.0	0.0	0.0	0	8.9	0.0	0.0	8.8	0
Nigeria	18.9	0.4	0	0.19	1.0	17	0.006	0.0	4.3	0.3	0.0	0.0	0	28.5	4.9	0.5	33.9	0
Reunion	0.3	0.0	0	0.00	0.0	198	-0.002	0.0	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0.0	0.0	0	0.00	0.0	15	-0.002	0.0	0.0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	2.8	1.4	0	-0.01	2.8	25	-0.002	0.0	2.8	1.4	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	0.2	1.1	0	0.00	0.0	232	-0.002	0.0	0.2	1.1	0.0	0.0	0	23.3	0.1	0.0	23.3	0
Sierra Leone	2.0	0.1	0	-0.01	2.4	6	-0.002	0.0	2.0	0.1	0.0	0.0	0	0.0	0.3	0.0	0.4	0
Somalia	256.5	0.2	0	0.07	4.8	3	0.000	0.0	252.1	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	28.5	1.7	0	-0.02	0.1	105	-0.002	0.0	28.5	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	1.8	0.0	0	0.00	0.1	5	0.001	0.0	1.8	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Tanzania, Uni Rep	4.4	3.2	0	-0.02	98.7	4	-0.001	0.0	3.8	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0
Togo	0.3	0.0	0	0.00	0.0	24	0.003	0.0	0.0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	18.2	6.8	0	0.01	1.0	120	0.000	0.0	18.0	6.8	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	3.4	0.0	0	-0.02	0.0	0	-0.001	0.0	3.4	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	898.3	309.1	0	0.12	303.5	39*	-0.001**	246.5	857.0	61.4	5.5	0.7	0	150.7	19.6	3.0	179.3	0

Table A-74. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2025, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	8.1	12.2	0.0	0.00	0.6	514	-0.007	0.0	8.1	12.2	1.8	0.0	0	8.6	0.0	0.8	11.2	0
Angola	14.4	15.1	0.0	-0.01	7.8	27	-0.012	4.8	14.4	10.3	0.8	0.0	0	9.2	1.7	0.0	11.6	0
Benin	0.0	0.0	0.0	0.00	0.0	93	-0.009	0.0	0.0	0.0	0.0	0.0	0	18.6	0.1	2.3	21.0	0
Cameroon	6.6	32.7	0.0	-0.01	4.3	78	-0.008	0.0	6.6	32.7	6.4	0.0	0	26.8	12.3	0.0	45.5	0
Cape Verde	5.8	0.9	0.0	-0.01	0.1	225	-0.008	0.0	5.8	0.9	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Comoros	2.8	0.4	0.0	0.00	0.3	58	-0.013	0.0	2.8	0.4	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo	3.9	2.3	0.0	-0.01	0.1	155	-0.012	0.0	3.9	2.3	0.0	0.0	0	0.0	1.1	0.0	1.1	0
Congo, Dem Rep	1.7	0.0	0.0	0.00	0.0	18	-0.012	0.0	1.7	0.0	0.1	0.0	0	1.0	0.2	0.0	1.3	0
Cote d'Ivoire	0.0	0.0	0.0	-0.04	0.0	174	-0.010	0.0	0.0	0.0	0.6	0.0	0	4.1	4.5	0.8	10.0	0
Djibouti	2.5	1.7	0.0	0.00	0.1	48	-0.010	0.0	2.5	1.7	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	69.2	570.0	0.0	-0.01	3.6	107	0.015	524.2	56.7	45.2	0.2	0.0	0	28.0	0.3	0.9	29.4	0
Equatorial Guinea	0.0	0.0	0.0	0.00	0.0	39	-0.009	0.0	0.0	0.0	0.5	0.0	0	2.3	0.3	0.0	3.0	0
Eritrea	9.9	0.0	0.0	0.00	0.4	15	-0.006	0.0	9.9	0.0	0.0	0.0	0	0.4	0.0	0.0	0.5	0
Gabon	32.2	49.3	0.0	-0.06	0.2	164	-0.01	45.2	31.2	4.1	4.0	3.0	0	117.7	21.6	0.0	146.4	0
Gambia	7.0	0.8	0.0	0.00	0.7	54	-0.009	0.0	7.0	0.8	0.1	0.0	0	6.4	1.8	0.1	8.4	0
Ghana	3.7	1.9	0.0	-0.01	0.0	91	0.018	1.8	0.0	0.0	0.0	0.0	0	2.2	1.6	1.4	5.2	0
Guinea	5.1	0.2	0.0	-0.04	0.1	41	-0.009	0.0	5.1	0.2	0.0	0.0	0	2.2	6.6	0.0	8.9	0
Guinea-Bissau	30.9	1.7	0.0	-0.04	7.1	15	-0.009	0.0	30.9	1.7	0.0	0.0	0	1.2	2.3	0.1	3.6	0
Kenya	21.5	4.3	0.0	-0.02	2.6	35	-0.012	0.0	21.5	4.4	0.6	0.0	0	4.1	1.2	0.0	6.0	0
Liberia	0.0	0.0	0.0	-0.01	0.0	63	-0.010	0.0	0.0	0.0	0.3	0.0	0	1.8	0.9	0.0	2.9	0
Libyan Arab Jamahiriya	54.2	4.7	0.1	0.00	0.5	485	0.003	0.0	53.7	4.7	0.0	0.0	0	14.3	0.0	2.2	16.4	0
Madagascar	61.2	1.4	0.0	-0.07	3.4	20	-0.006	0.0	53.0	1.4	0.0	0.0	0	0.7	0.6	0.0	1.3	0
Mauritania	10.2	0.3	0.0	-0.02	0.2	20	0.012	0.0	6.8	0.3	0.0	0.0	0	16.9	0.0	0.4	17.3	0
Mauritius	0.0	0.0	0.0	0.00	0.0	1298	-0.012	0.0	0.0	0.0	0.0	0.0	0	61.3	0.0	0.0	61.3	0
Morocco	21.9	51.9	0.0	-0.02	1.6	229	-0.011	0.0	21.9	51.9	0.6	0.0	0	7.9	0.0	0.2	8.7	0
Mozambique	89.6	32.7	0.0	-0.16	136.2	7	-0.012	14.1	87.0	18.6	1.2	0.0	0	5.9	0.3	0.0	7.4	0
Namibia	97.2	0.0	0.0	-0.02	0.2	12	-0.014	0.0	97.2	0.0	0.0	0.0	0	31.4	0.0	0.0	31.4	0
Nigeria	34.7	1.8	0.0	-0.03	1.7	68	0.035	0.0	12.0	1.8	0.1	0.0	0	122.8	22.0	2.1	146.9	0
Reunion	0.6	0.1	0.0	0.00	0.0	631	-0.011	0.0	0.6	0.1	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.0	0.0	0.0	0.00	0.0	63	-0.010	0.0	0.0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	18.7	6.0	0.0	-0.02	1.6	101	-0.010	0.0	18.5	6.0	0.0	0.0	0	17.8	4.0	0.0	21.7	0
Seychelles	0.7	0.0	0.0	0.00	0.0	1011	-0.012	0.0	0.7	0.0	0.0	0.0	0	113.3	0.4	0.0	113.7	0
Sierra Leone	10.0	0.3	0.0	-0.03	0.5	26	-0.009	0.0	10.0	0.3	0.0	0.0	0	0.2	1.4	0.1	1.7	0
Somalia	79.4	0.8	0.0	-0.04	1.6	14	0.000	0.0	74.9	0.8	0.3	0.0	0	2.2	0.1	0.0	2.7	0
South Africa	81.6	7.3	0.0	-0.02	0.2	345	-0.014	0.0	81.6	7.3	5.0	0.0	0	22.4	2.4	0.8	30.6	0
Sudan	67.4	0.0	0.0	0.00	0.1	23	-0.005	0.0	67.4	0.0	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Tanzania, Uni Rep	16.6	11.2	0.0	-0.03	39.0	13	-0.004	0.0	16.1	11.2	0.0	0.0	0	1.6	0.5	0.0	2.2	0
Togo	0.3	0.0	0.0	0.00	0.0	95	0.021	0.0	0.0	0.0	0.0	0.0	0	3.2	0.0	0.5	3.6	0
Tunisia	47.0	31.3	0.0	0.00	0.7	450	0.002	0.0	46.4	31.3	0.5	0.0	0	6.1	0.0	0.3	6.9	0
Western Sahara	6.7	0.0	0.0	-0.02	0.0	0	-0.009	0.0	6.7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	923.3	843.7	0.1	-0.75	215.5	150*	-0.005**	590.1	862.6	252.9	23.1	3.0	0	663.6	88.6	13.0	791.2	0

Table A-75. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2030, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	8.0	13.2	0.0	0.00	0.5	687	-0.008	0.0	8.0	13.2	2.4	0.0	0	11.7	0.0	1.1	15.2	0
Angola	14.1	14.7	0.0	-0.01	1.0	37	-0.014	5.8	14.1	9.0	1.1	0.0	0	12.4	2.3	0.0	15.9	0
Benin	0.0	0.0	0.0	0.00	0.0	130	-0.011	0.0	0.0	0.0	0.0	0.0	0	26.6	0.2	3.3	30.1	0
Cameroon	6.7	46.9	0.0	-0.01	4.1	110	-0.009	0.0	6.7	46.9	9.2	0.0	0	38.4	17.7	0.0	65.2	0
Cape Verde	5.7	1.3	0.0	-0.01	0.1	316	-0.010	0.0	5.7	1.3	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Comoros	2.8	0.7	0.0	0.00	0.3	80	-0.015	0.0	2.8	0.7	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo	3.9	3.3	0.0	-0.01	0.1	218	-0.014	0.0	3.9	3.3	0.0	0.0	0	0.0	1.6	0.0	1.6	0
Congo, Dem Rep	1.7	0.0	0.0	0.00	0.0	26	-0.014	0.0	1.7	0.0	0.1	0.0	0	1.4	0.3	0.0	1.8	0
Cote d'Ivoire	0.0	0.0	0.0	-0.04	0.0	244	-0.012	0.0	0.0	0.0	0.9	0.0	0	5.8	6.5	1.2	14.4	0
Djibouti	2.4	2.5	0.0	0.00	0.1	69	-0.012	0.0	2.4	2.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	31.9	690.9	4.3	-0.01	3.8	143	0.017	627.1	18.6	63.4	0.3	0.0	0	36.8	0.5	1.1	38.7	0
Equatorial Guinea	0.0	0.0	0.0	0.00	0.0	56	-0.010	0.0	0.0	0.0	0.6	0.0	0	3.3	0.4	0.0	4.4	0
Eritrea	9.8	0.1	0.0	0.00	0.2	22	-0.007	0.0	9.8	0.1	0.0	0.0	0	0.6	0.1	0.0	0.7	0
Gabon	31.7	61.2	0.0	-0.06	0.2	236	-0.012	55.3	30.7	6.0	5.8	4.4	0	169.7	31.0	0.0	209.8	0
Gambia	7.0	1.1	0.0	0.00	0.7	76	-0.011	0.0	7.0	1.1	0.1	0.0	0	9.2	2.6	0.2	12.1	0
Ghana	3.7	2.3	0.0	-0.01	0.0	127	0.021	2.3	0.0	0.0	0.0	0.0	0	3.2	2.3	2.0	7.4	0
Guinea	5.1	0.3	0.0	-0.05	0.1	59	-0.011	0.0	5.1	0.3	0.0	0.0	0	3.2	9.5	0.0	12.7	0
Guinea-Bissau	31.1	2.3	0.0	-0.05	3.6	21	-0.011	0.0	31.1	2.3	0.0	0.0	0	1.7	3.4	0.1	5.2	0
Kenya	21.4	6.5	0.0	-0.02	2.8	50	-0.014	0.0	21.4	6.5	0.9	0.0	0	6.0	1.8	0.0	8.7	0
Liberia	0.0	0.0	0.0	-0.01	0.0	89	-0.011	0.0	0.0	0.0	0.4	0.0	0	2.6	1.2	0.0	4.2	0
Libyan Arab Jamahiriya	35.8	4.2	0.3	0.00	0.1	655	0.004	0.0	35.3	4.2	0.0	0.0	0	19.3	0.0	2.9	22.2	0
Madagascar	60.6	2.1	0.5	-0.07	3.7	29	-0.007	0.0	52.5	2.1	0.0	0.0	0	1.0	0.9	0.0	1.9	0
Mauritania	10.4	0.4	0.2	-0.02	0.2	28	0.014	0.0	6.6	0.4	0.0	0.0	0	24.1	0.1	0.5	24.7	0
Mauritius	0.0	0.0	0.0	0.00	0.0	1845	-0.014	0.0	0.0	0.0	0.0	0.0	0	89.4	0.0	0.0	89.4	0
Morocco	21.5	72.2	0.0	-0.02	1.8	306	-0.013	0.0	21.5	72.2	0.9	0.0	0	10.8	0.0	0.3	11.9	0
Mozambique	89.4	42.2	2.3	-0.17	118.6	9	-0.014	16.8	86.8	25.3	1.6	0.0	0	8.0	0.4	0.0	10.0	0
Namibia	499.8	0.0	0.0	-0.02	0.2	16	-0.016	0.0	499.8	0.0	0.0	0.0	0	42.7	0.0	0.0	42.7	0
Nigeria	35.8	2.7	0.3	-0.03	1.9	95	0.041	0.0	12.1	2.7	0.1	0.0	0	173.4	31.2	3.0	207.7	0
Reunion	0.6	0.2	0.0	0.00	0.0	813	-0.012	0.0	0.6	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0.0	0.0	0.0	0.00	0.0	88	-0.011	0.0	0.0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Senegal	18.8	8.3	0.0	-0.02	1.2	142	-0.011	0.0	18.6	8.3	0.0	0.0	0	25.5	5.7	0.0	31.1	0
Seychelles	0.7	0.0	0.0	0.00	0.0	1419	-0.014	0.0	0.7	0.0	0.0	0.0	0	161.8	0.5	0.0	162.3	0
Sierra Leone	9.9	0.4	0.0	-0.03	0.5	37	-0.011	0.0	9.9	0.4	0.1	0.0	0	0.3	1.9	0.1	2.4	0
Somalia	78.5	1.2	0.0	-0.04	1.2	20	0.000	0.0	74.0	1.2	0.5	0.0	0	3.2	0.2	0.0	3.9	0
South Africa	80.5	7.5	0.0	-0.03	0.1	462	-0.017	0.0	80.5	7.5	6.8	0.0	0	30.5	3.3	1.0	41.7	0
Sudan	80.7	0.0	0.0	0.00	0.1	33	-0.006	0.0	80.7	0.0	0.0	0.0	0	0.0	0.3	0.0	0.4	0
Tanzania, Uni Rep	16.8	15.4	0.6	-0.03	34.7	17	-0.004	0.0	16.3	15.4	0.0	0.0	0	2.2	0.7	0.0	2.9	0
Togo	0.3	0.0	0.0	0.00	0.0	133	0.024	0.0	0.0	0.0	0.0	0.0	0	4.4	0.0	0.6	5.1	0
Tunisia	46.4	43.5	0.1	0.00	0.8	602	0.002	0.0	45.7	43.5	0.6	0.0	0	8.3	0.0	0.4	9.3	0
Western Sahara	9.1	0.0	0.0	-0.02	0.0	1	-0.010	0.0	9.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	1282.6	1047.6	8.6	-0.79	182.7	206*	-0.006**	707.3	1219.7	340.0	32.4	4.4	0	938.9	126.9	17.8	1119.4	0

Table A-76. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2050, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	6.5	5.8	0.0	0.00	0.1	1946	-0.012	0.0	6.5	0.0	7.3	0.0	0	34.5	0.0	3.5	45.2	0
Angola	10.3	33.3	0.0	-0.01	1.0	106	-0.023	10.5	10.3	27.5	3.3	0.0	0	36.8	6.7	0.0	46.9	0
Benin	0.0	0.0	0.0	0.00	0.0	437	-0.017	0.0	0.0	0.0	0.0	0.0	0	96.7	0.7	11.8	109.2	0
Cameroon	5.4	170.5	0.0	-0.02	2.1	378	-0.015	0.0	5.4	161.8	33.4	0.0	0	139.4	64.2	0.0	236.9	0
Cape Verde	4.5	1.7	0.0	-0.01	0.0	1088	-0.015	0.0	4.5	1.1	0.0	0.0	0	3.3	0.0	0.0	3.3	0
Comoros	2.2	1.6	0.0	0.00	0.0	272	-0.024	0.0	2.2	1.5	0.0	0.0	0	0.0	1.1	0.0	1.2	0
Congo	3.1	13.2	0.0	-0.01	0.2	741	-0.021	0.0	3.1	12.5	0.0	0.0	0	0.0	5.9	0.0	5.9	0
Congo, Dem Rep	1.3	0.0	0.0	0.00	0.0	88	-0.022	0.0	1.3	0.0	0.5	0.0	0	5.0	1.0	0.0	6.5	0
Cote d'Ivoire	0.0	0.0	0.0	-0.04	0.0	832	-0.019	0.0	0.0	0.0	3.2	0.0	0	21.2	23.6	4.2	52.2	0
Djibouti	1.8	10.0	0.0	0.00	0.1	241	-0.019	0.0	1.8	9.5	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	30.8	1293.7	4.3	-0.03	3.0	403	0.027	1175.0	14.3	142.4	0.9	0.0	0	94.7	1.4	3.2	100.1	0
Equatorial Guinea	0.0	0.0	0.0	0.00	0.0	198	-0.016	0.0	0.0	0.0	2.4	0.0	0	11.8	1.6	0.1	15.8	0
Eritrea	7.6	0.2	0.0	0.00	0.1	84	-0.011	0.0	7.6	0.2	0.0	0.0	0	2.3	0.3	0.0	2.5	0
Gabon	23.8	127.7	0.0	-0.07	0.0	864	-0.019	111.2	23.0	13.2	20.9	15.8	0	612.7	112.5	0.0	761.9	0
Gambia	5.7	3.4	0.0	-0.01	0.1	259	-0.017	0.0	5.7	3.2	0.4	0.0	0	33.5	9.3	0.7	43.9	0
Ghana	3.7	4.7	0.0	-0.01	0.0	427	0.033	4.6	0.0	0.0	0.0	0.0	0	11.8	8.0	7.1	26.8	0
Guinea	4.1	0.9	0.0	-0.06	0.0	203	-0.017	0.0	4.1	0.7	0.0	0.0	0	11.7	34.6	0.0	46.2	0
Guinea-Bissau	24.2	7.1	0.0	-0.06	1.4	73	-0.017	0.0	24.2	7.1	0.1	0.0	0	6.0	12.2	0.5	18.9	0
Kenya	17.5	17.2	0.0	-0.02	0.6	184	-0.023	0.0	17.5	16.8	3.7	0.0	0	23.0	7.0	0.0	33.7	0
Liberia	0.0	0.0	0.0	-0.01	0.0	309	-0.017	0.0	0.0	0.0	1.3	0.0	0	9.4	4.4	0.0	15.2	0
Libyan Arab Jamahiriya	26.2	0.8	0.3	0.00	0.0	1911	0.006	0.0	25.7	1.0	0.0	0.0	0	55.9	0.0	8.7	64.6	0
Madagascar	50.4	6.6	0.5	-0.07	1.1	107	-0.011	0.0	42.3	6.9	0.0	0.0	0	3.9	3.5	0.0	7.4	0
Mauritania	10.2	1.0	0.2	-0.02	0.0	104	0.023	0.0	5.2	1.0	0.0	0.0	0	87.7	0.2	1.9	89.9	0
Mauritius	0.0	0.0	0.0	0.00	0.0	6596	-0.021	0.0	0.0	0.0	0.0	0.0	0	345.3	0.0	0.0	345.3	0
Morocco	17.4	25.3	0.0	-0.02	0.4	875	-0.020	0.0	17.4	27.4	2.7	0.0	0	32.6	0.0	0.8	36.1	0
Mozambique	71.0	95.9	2.3	-0.18	59.5	26	-0.023	30.7	68.7	74.5	4.7	0.0	0	23.7	1.3	0.0	29.7	0
Namibia	24.9	0.2	0.0	-0.02	0.1	51	-0.025	0.0	24.9	0.1	0.0	0.0	0	126.3	0.0	0.0	126.3	0
Nigeria	37.6	6.6	0.3	-0.04	0.3	317	0.064	0.0	10.4	6.3	0.4	0.0	0	593.1	109.7	10.8	714.0	0
Reunion	0.4	0.0	0.0	0.00	0.0	1897	-0.019	0.0	0.4	0.0	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Sao Tome & Principe	0.0	0.0	0.0	0.00	0.0	300	-0.018	0.0	0.0	0.0	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Senegal	15.4	18.9	0.0	-0.03	0.3	484	-0.018	0.0	15.2	12.2	0.0	0.0	0	92.5	20.6	0.0	113.1	0
Seychelles	0.4	0.0	0.0	0.00	0.0	4470	-0.023	0.0	0.4	0.0	0.0	0.0	0	568.2	1.8	0.0	569.9	0
Sierra Leone	7.9	1.2	0.0	-0.04	0.6	127	-0.017	0.0	7.9	1.4	0.2	0.0	0	1.0	7.0	0.5	8.7	0
Somalia	62.8	4.7	0.0	-0.04	1.0	76	0.001	0.0	58.3	4.4	1.9	0.0	0	12.3	0.8	0.0	15.0	0
South Africa	59.1	2.0	0.0	-0.03	0.0	1305	-0.026	0.0	59.1	2.3	20.1	0.0	0	90.2	9.8	3.1	123.2	0
Sudan	6.2	0.0	0.0	0.00	0.0	123	-0.010	0.0	6.2	0.0	0.0	0.0	0	0.1	1.3	0.0	1.4	0
Tanzania, Uni Rep	13.1	47.5	0.6	-0.03	22.2	48	-0.007	0.0	12.6	45.2	0.1	0.0	0	6.5	2.1	0.0	8.7	0
Togo	0.3	0.0	0.0	0.00	0.0	446	0.038	0.0	0.0	0.0	0.0	0.0	0	14.8	0.0	2.2	17.0	0
Tunisia	37.9	11.1	0.1	0.00	0.1	1715	0.004	0.0	37.1	8.3	1.9	0.0	0	24.0	0.0	1.3	27.1	0
Western Sahara	0.7	0.0	0.0	-0.02	0.0	2	-0.016	0.0	0.7	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	594.4	1912.8	8.6	-0.9	94.3	638*	-0.010**	1332.0	524.0	588.6	109.4	15.8	0	3233.4	452.7	60.4	3871.3	0

Table A-77. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2075, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	3.0	0.0	0.0	0.00	0.05	4109	-0.018	0.0	3.0	0.0	15.8	0.0	0	74.3	0.0	7.6	97.8	0
Angola	7.6	9.9	0.0	-0.02	0.22	309	-0.033	0.0	7.6	9.9	10.0	0.0	0	110.5	20.2	0.0	140.8	0
Benin	0.0	0.0	0.0	0.00	0.00	1628	-0.025	0.0	0.0	0.0	0.0	0.0	0	377.2	2.7	46.1	426.0	0
Cameroon	4.4	5.3	0.0	-0.03	0.24	1413	-0.021	0.0	4.4	5.3	130	0.0	0	543.6	250.3	0.0	924.1	0
Cape Verde	3.7	0.2	0.0	-0.01	0.01	4072	-0.022	0.0	3.7	0.3	0.0	0.0	0	12.7	0.0	0.0	12.7	0
Comoros	1.9	5.6	0.0	0.00	0.04	1012	-0.035	0.0	1.9	5.6	0.0	0.0	0	0.0	4.5	0.0	4.5	0
Congo	2.6	0.0	0.0	-0.01	0.02	2765	-0.031	0.0	2.6	0.0	0.0	0.0	0	0.0	22.8	0.0	22.9	0
Congo, Dem Rep	1.2	0.0	0.0	0.00	0.00	330	-0.032	0.0	1.2	0.0	2.1	0.0	0	19.4	3.8	0.0	25.3	0
Cote d'Ivoire	0.0	0.0	0.0	-0.04	0.00	3104	-0.028	0.0	0.0	0.0	12.4	0.0	0	82.7	92.0	16.4	203.4	0
Djibouti	1.4	0.2	0.0	0.00	0.01	906	-0.027	0.0	1.4	0.2	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Egypt	27.0	1826.5	4.3	-0.03	0.32	838	0.039	1824.8	7.2	1.7	1.8	0.0	0	164.6	3.0	6.1	175.5	0
Equatorial Guinea	0.0	0.0	0.0	0.00	0.00	744	-0.024	0.0	0.0	0.0	9.2	0.0	0	46.1	6.1	0.3	61.8	0
Eritrea	6.3	0.6	0.0	0.00	0.02	335	-0.016	0.0	6.3	0.6	0.0	0.0	0	9.5	1.0	0.0	10.5	0
Gabon	18.0	229.3	0.0	-0.07	0.01	2912	-0.028	224.0	17.5	5.3	81.6	61.7	0	2390.0	438.7	0.0	2972.1	0
Gambia	4.8	6.1	0.0	-0.01	0.10	969	-0.025	0.0	4.8	6.1	1.6	0.0	0	130.5	36.5	2.6	171.1	0
Ghana	3.7	9.5	0.0	-0.01	0.00	1580	0.049	9.5	0.0	0.0	0.0	0.0	0	47.7	30.7	27.7	105.1	0
Guinea	3.4	2.8	0.0	-0.07	0.01	762	-0.025	0.0	3.4	2.8	0.0	0.0	0	45.5	134.9	0.0	180.3	0
Guinea-Bissau	20.8	19.2	0.0	-0.07	0.24	273	-0.025	0.0	20.8	19.2	0.2	0.0	0	23.6	47.7	2.1	73.6	0
Kenya	14.6	19.6	0.0	-0.02	0.13	727	-0.033	0.0	14.6	19.6	15.1	0.0	0	95.4	28.9	0.0	139.4	0
Liberia	0.0	0.0	0.0	-0.01	0.00	1158	-0.025	0.0	0.0	0.0	5.1	0.0	0	36.8	17.3	0.0	59.3	0
Libyan Arab Jamahiriya	11.1	1.3	0.3	0.00	0.03	3793	0.009	0.0	10.5	1.3	0.0	0.0	0	115.7	0.0	18.2	133.9	0
Madagascar	43.2	20.8	0.5	-0.07	0.34	427	-0.016	0.0	35.0	20.8	0.0	0.0	0	16.4	14.3	0.0	30.7	0
Mauritania	10.3	3.7	0.2	-0.03	0.03	394	0.033	0.0	4.3	3.7	0.0	0.0	0	342.1	0.9	7.6	350.6	0
Mauritius	0.0	0.0	0.0	0.00	0.00	7941	-0.031	0.0	0.0	0.0	0.0	0.0	0	1429.1	0.0	0.0	1429.1	0
Morocco	8.0	0.3	0.0	-0.02	0.20	1852	-0.030	0.0	8.0	0.3	5.8	0.0	0	71.4	0.0	1.7	78.9	0
Mozambique	56.4	203.2	2.3	-0.19	16.10	74	-0.033	54.4	54.3	148.7	14.1	0.0	0	71.2	3.9	0.0	89.2	0
Namibia	11.4	0.2	0.0	-0.02	0.10	151	-0.036	0.0	11.4	0.2	0.0	0.0	0	379.1	0.0	0.0	379.1	0
Nigeria	39.2	24.2	0.3	-0.05	0.27	1167	0.093	0.0	9.3	24.3	1.5	0.0	0	2158.8	409.4	42	2611.9	0
Reunion	0.2	0.0	0.0	0.00	0.00	3357	-0.028	0.0	0.2	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Sao Tome & Principe	0.0	0.0	0.0	0.00	0.00	1119	-0.026	0.0	0.0	0.0	0.0	0.0	0	5.1	0.0	0.0	5.1	0
Senegal	12.8	15.7	0.0	-0.03	0.14	1806	-0.026	0.0	12.7	15.7	0.1	0.0	0	360.7	80.4	0.0	441.2	0
Seychelles	0.0	0.0	0.0	0.00	0.00	4470	-0.033	0.0	0.0	0.0	0.0	0.0	0	1790.5	5.6	0.0	1796.1	0
Sierra Leone	6.7	3.4	0.0	-0.05	0.08	475	-0.025	0.0	6.7	3.4	0.8	0.0	0	3.8	27.4	2.0	34.0	0
Somalia	52.6	10.5	0.0	-0.04	0.12	303	0.000	0.0	48.2	10.5	8.1	0.0	0	50.7	3.3	0.0	62.0	0
South Africa	43.9	0.1	0.0	-0.03	0.02	3742	-0.038	0.0	43.9	0.1	60.3	0.0	0	270.9	29.4	9.3	369.9	0
Sudan	4.7	0.0	0.0	0.00	0.00	487	-0.014	0.0	4.7	0.0	0.0	0.0	0	0.2	5.4	0.0	5.6	0
Tanzania, Uni Rep	10.9	88.8	0.6	-0.03	4.79	139	-0.010	0.0	10.3	88.8	0.2	0.0	0	19.8	6.2	0.0	26.1	0
Togo	0.3	0.0	0.0	0.00	0.00	1647	0.056	0.0	0.0	0.0	0.0	0.0	0	51.6	0.0	7.9	59.5	0
Tunisia	18.5	0.0	0.1	0.00	0.08	3626	0.006	0.0	17.3	0.0	4.0	0.0	0	49.2	0.0	2.6	55.9	0
Western Sahara	0.3	0.0	0.0	-0.02	0.00	4	-0.023	0.0	0.3	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	454.9	2506.9	8.6	-0.98	23.72	1509*	-0.014**	2112.7	377.5	394.5	379.8	61.7	0	11396.8	1727.5	200.2	13765.6	0

Table A-78. Case 13: Results by country, for No SLR and B1 socio-economic scenario for 2100, with adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	1.5	0.0	0.0	0.00	0.05	5815	-0.023	0.0	1.5	0.0	22.3	0.0	0	103.1	0.0	10.8	136.2	0
Angola	3.7	2.4	0.0	-0.02	0.10	564	-0.043	0.0	3.7	2.4	18.7	0.0	0	205.6	37.6	0.0	261.9	0
Benin	0.0	0.0	0.0	0.00	0.00	4021	-0.033	0.0	0.0	0.0	0.0	0.0	0	923.9	6.6	112.8	1043.3	0
Cameroon	3.1	0.0	0.0	-0.04	0.19	3445	-0.028	0.0	3.1	0.0	319.0	0.0	0	1331.5	612.9	0.0	2263.4	0
Cape Verde	1.5	0.0	0.0	-0.01	0.00	8159	-0.029	0.0	1.5	0.0	0.0	0.0	0	31.1	0.0	0.0	31.1	0
Comoros	1.4	0.0	0.0	0.00	0.00	2502	-0.045	0.0	1.4	0.0	0.0	0.0	0	0.1	11.0	0.0	11.1	0
Congo	1.9	0.0	0.0	-0.01	0.01	6792	-0.041	0.0	1.9	0.0	0.0	0.0	0	0.0	56.0	0.0	56.0	0
Congo, Dem Rep	0.8	0.1	0.0	0.00	0.00	801	-0.042	0.0	0.8	0.1	5.1	0.0	0	47.4	9.4	0.0	61.9	0
Cote d'Ivoire	0.0	0.0	0.0	-0.04	0.00	6474	-0.037	0.0	0.0	0.0	30.4	0.0	0	202.4	225.3	40.1	498.2	0
Djibouti	0.9	0.5	0.0	0.00	0.01	2173	-0.036	0.0	0.9	0.5	0.0	0.0	0	0.0	0.5	0.0	0.5	0
Egypt	24.8	2.3	4.4	-0.04	0.31	1166	0.052	0.0	3.6	2.3	2.3	0.0	0	187.7	4.3	7.6	201.9	0
Equatorial Guinea	0.0	0.0	0.0	0.00	0.00	1777	-0.031	0.0	0.0	0.0	22.5	0.0	0	113.0	15.0	0.7	151.2	0
Eritrea	4.1	1.1	0.0	0.00	0.01	824	-0.021	0.0	4.1	1.1	0.0	0.0	0	24.3	2.7	0.0	27.0	0
Gabon	7.7	0.0	0.0	-0.08	0.00	5299	-0.037	0.0	7.4	0.0	200.0	151.2	0	5853.5	1074.6	0.0	7279.3	0
Gambia	3.4	0.0	0.0	-0.01	0.01	2374	-0.033	0.0	3.4	0.0	4.0	0.0	0	319.6	89.3	6.3	419.2	0
Ghana	3.7	14.5	0.0	-0.01	0.00	3869	0.064	14.5	0.0	0.0	0.0	0.0	0	120.9	68.9	67.9	257.7	0
Guinea	2.3	0.0	0.0	-0.08	0.00	1846	-0.033	0.0	2.3	0.0	0.0	0.0	0	111.4	330.3	0.0	441.6	0
Guinea-Bissau	14.2	27.6	0.0	-0.07	0.14	655	-0.033	0.0	14.2	27.6	0.6	0.0	0	57.7	116.7	5.1	180.1	0
Kenya	10.2	0.0	0.0	-0.02	0.03	1854	-0.043	0.0	10.2	0.0	38.8	0.0	0	244.5	74.2	0.0	357.5	0
Liberia	0.0	0.0	0.0	-0.01	0.00	2809	-0.033	0.0	0.0	0.0	12.6	0.0	0	90.1	42.4	0.0	145.1	0
Libyan Arab Jamahiriya	2.8	1.8	0.3	0.00	0.03	4482	0.012	0.0	2.2	1.8	0.0	0.0	0	155.5	0.0	24.6	180.1	0
Madagascar	32.3	10.3	0.5	-0.07	0.05	1074	-0.021	0.0	24.1	10.3	0.0	0.0	0	42.6	36.5	0.0	79.2	0
Mauritania	9.8	0.0	0.2	-0.03	0.00	908	0.043	0.0	2.9	0.0	0.0	0.0	0	837.9	2.1	18.5	858.6	0
Mauritius	0.0	0.0	0.0	0.00	0.00	7941	-0.041	0.0	0.0	0.0	0.0	0.0	0	3664.4	0.0	0.0	3664.4	0
Morocco	3.8	0.4	0.0	-0.02	0.18	2640	-0.039	0.0	3.8	0.4	8.3	0.0	0	101.2	0.0	2.4	111.9	0
Mozambique	34.6	309.2	2.3	-0.19	9.52	138	-0.043	71.9	32.9	237.3	26.3	0.0	0	132.5	7.2	0.1	166.0	0
Namibia	1.2	0.4	0.0	-0.02	0.10	260	-0.047	0.0	1.2	0.4	0.0	0.0	0	705.3	0.0	0.0	705.3	0
Nigeria	39.2	-0.1	0.3	-0.06	0.02	2851	0.122	0.0	7.6	0.0	3.6	0.0	0	4951.4	958.9	103.3	6017.2	0
Reunion	0.1	0.0	0.0	0.00	0.00	4492	-0.037	0.0	0.1	0.0	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Sao Tome & Principe	0.0	0.0	0.0	0.00	0.00	2750	-0.034	0.0	0.0	0.0	0.0	0.0	0	12.5	0.0	0.0	12.5	0
Senegal	8.7	0.0	0.0	-0.03	0.05	4093	-0.034	0.0	8.6	0.0	0.3	0.0	0	883.4	196.8	0.0	1080.6	0
Seychelles	0.0	0.0	0.0	0.00	0.00	4470	-0.043	0.0	0.0	0.0	0.0	0.0	0	3923.1	12.3	0.0	3935.3	0
Sierra Leone	4.6	7.2	0.0	-0.05	0.06	1151	-0.033	0.0	4.6	7.2	1.9	0.0	0	9.3	67.1	4.8	83.2	0
Somalia	37.3	22.3	0.0	-0.04	0.09	750	0.001	0.0	32.9	22.3	20.7	0.0	0	130.0	8.4	0.0	159.0	0
South Africa	20.0	0.1	0.0	-0.04	0.01	6090	-0.050	0.0	20.0	0.2	112.2	0.0	0	503.9	54.8	17.3	688.1	0
Sudan	2.6	0.1	0.0	0.00	0.00	1237	-0.019	0.0	2.6	0.1	0.0	0.0	0	0.6	13.8	0.0	14.5	0
Tanzania, Uni Rep	7.1	141.3	0.6	-0.03	2.23	260	-0.013	0.0	6.6	141.3	0.3	0.0	0	37.0	11.4	0.0	48.8	0
Togo	0.3	0.0	0.0	0.00	0.00	4042	0.073	0.0	0.0	0.0	0.0	0.0	0	112.9	0.0	17.9	130.8	0
Tunisia	10.0	0.0	0.1	0.00	0.08	5160	0.007	0.0	8.6	0.0	5.6	0.0	0	65.2	0.0	3.6	74.3	0
Western Sahara	0.1	0.0	0.0	-0.02	0.00	6	-0.030	0.0	0.1	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	299.7	541.1	8.7	-1.04	13.28	2529*	-0.018**	86.4	218.8	455.1	855.5	151.2	0	26237.1	4147.0	443.8	31834.6	0

Table A-79. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2000, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	2.8	0	0.00	1.0	125	-0.001	0.0	0	2.8	0.4	0.0	0	2.1	0.0	0.2	2.7	0
Angola	0	4.5	0	0.00	4.8	7	-0.002	2.2	0	2.3	0.2	0.0	0	2.6	0.5	0.0	3.3	0
Benin	0	0.0	0	0.00	0.0	23	-0.002	0.0	0	0.0	0.0	0.0	0	4.0	0.0	0.5	4.6	0
Cameroon	0	8.4	0	0.00	10.4	18	-0.001	0.0	0	8.4	1.4	0.0	0	5.8	2.7	0.0	9.9	0
Cape Verde	0	0.2	0	-0.01	0.2	50	-0.001	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Comoros	0	0.1	0	0.00	0.2	14	-0.002	0.0	0	0.1	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Congo	0	0.6	0	-0.01	0.8	36	-0.002	0.0	0	0.6	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo, Dem Rep	0	0.0	0	0.00	0.1	4	-0.002	0.0	0	0.0	0.0	0.0	0	0.2	0.0	0.0	0.3	0
Cote d'Ivoire	0	0.0	0	-0.04	0.0	41	-0.002	0.0	0	0.0	0.1	0.0	0	0.9	1.0	0.2	2.2	0
Djibouti	0	0.5	0	0.00	0.5	11	-0.002	0.0	0	0.5	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	232.2	0	0.17	14.7	24	0.002	219.2	0	11.9	0.1	0.0	0	7.9	0.1	0.2	8.3	0
Equatorial Guinea	0	0.0	0	0.00	0.0	8	-0.001	0.0	0	0.0	0.1	0.0	0	0.5	0.1	0.0	0.7	0
Eritrea	0	0.0	0	0.00	0.7	2	-0.001	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Gabon	0	18.8	0	-0.05	1.3	28	-0.002	18.0	0	0.8	0.9	0.7	0	25.6	4.7	0.0	31.8	0
Gambia	0	0.2	0	0.00	3.1	12	-0.002	0.0	0	0.2	0.0	0.0	0	1.4	0.4	0.0	1.8	0
Ghana	0	0.7	0	0.05	0.0	21	0.003	0.2	0	0.0	0.0	0.0	0	0.5	0.4	0.3	1.1	0
Guinea	0	0.1	0	-0.01	0.5	9	-0.002	0.0	0	0.1	0.0	0.0	0	0.5	1.4	0.0	1.9	0
Guinea-Bissau	0	0.3	0	-0.03	6.1	3	-0.002	0.0	0	0.3	0.0	0.0	0	0.3	0.5	0.0	0.8	0
Kenya	0	0.7	0	-0.02	4.3	7	-0.002	0.0	0	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Liberia	0	0.0	0	-0.01	0.0	14	-0.002	0.0	0	0.0	0.1	0.0	0	0.4	0.2	0.0	0.6	0
Libyan Arab Jamahiriya	0	1.4	0	0.01	0.4	106	0.001	0.0	0	1.4	0.0	0.0	0	3.6	0.0	0.5	4.1	0
Madagascar	0	0.3	0	0.03	14	4	-0.001	0.0	0	0.3	0.0	0.0	0	0.1	0.1	0.0	0.3	0
Mauritania	0	0.0	0	0.01	0.1	3	0.002	0.0	0	0.0	0.0	0.0	0	3.7	0.0	0.1	3.8	0
Mauritius	0	0.0	0	0.00	0.0	292	-0.002	0.0	0	0.0	0.0	0.0	0	11.9	0.0	0.0	11.9	0
Morocco	0	11.6	0	-0.02	2.8	54	-0.002	0.0	0	11.6	0.2	0.0	0	1.9	0.0	0.1	2.1	0
Mozambique	0	10.7	0	-0.12	126.5	2	-0.002	6.4	0	4.3	0.3	0.0	0	1.7	0.1	0.0	2.1	0
Namibia	0	0.0	0	-0.02	0.1	3	-0.002	0.0	0	0.0	0.0	0.0	0	8.9	0.0	0.0	8.9	0
Nigeria	0	0.4	0	0.19	1.0	15	0.006	0.0	0	0.3	0.0	0.0	0	28.5	4.9	0.5	33.9	0
Reunion	0	0.0	0	0.00	0.0	175	-0.002	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sao Tome & Principe	0	0.0	0	0.00	0.0	15	-0.002	0.0	0	0.0	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Senegal	0	1.4	0	-0.01	2.8	24	-0.002	0.0	0	1.4	0.0	0.0	0	3.9	0.9	0.0	4.7	0
Seychelles	0	1.1	0	0.00	0.0	208	-0.002	0.0	0	1.1	0.0	0.0	0	23.3	0.1	0.0	23.3	0
Sierra Leone	0	0.1	0	-0.01	2.4	6	-0.002	0.0	0	0.1	0.0	0.0	0	0.0	0.3	0.0	0.4	0
Somalia	0	0.2	0	0.07	4.8	2	0.000	0.0	0	0.2	0.1	0.0	0	0.4	0.0	0.0	0.5	0
South Africa	0	1.7	0	-0.02	0.1	99	-0.002	0.0	0	1.7	1.4	0.0	0	6.3	0.7	0.2	8.6	0
Sudan	0	0.0	0	0.00	0.1	5	0.001	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.1	0
Tanzania, Uni Rep	0	3.2	0	-0.02	98.7	4	-0.001	0.0	0	3.2	0.0	0.0	0	0.5	0.2	0.0	0.6	0
Togo	0	0.0	0	0.00	0.0	22	0.003	0.0	0	0.0	0.0	0.0	0	0.7	0.0	0.1	0.8	0
Tunisia	0	6.8	0	0.01	1.0	106	0.000	0.0	0	6.8	0.1	0.0	0	1.5	0.0	0.1	1.7	0
Western Sahara	0	0.0	0	-0.02	0.0	0	-0.001	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	309.2	0	0.12	303.5	35*	-0.001**	246.0	0	61.4	5.5	0.7	0	150.7	19.9	3.0	179.7	0

Table A-80. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2025, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	14.0	0.0	0.00	1.5	125	-0.007	0.0	0	14.0	1.8	0.0	0	8.6	0.0	0.8	11.2	0
Angola	0	15.1	0.0	-0.01	8.4	7	-0.012	4.8	0	10.3	0.8	0.0	0	9.2	1.7	0.0	11.6	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.009	0.0	0	0.0	0.0	0.0	0	18.6	0.1	2.3	21.0	0
Cameroon	0	48.0	0.0	-0.01	18.0	18	-0.008	0.0	0	48.0	6.4	0.0	0	26.8	12.3	0.0	45.5	0
Cape Verde	0	1.2	0.0	-0.01	0.4	50	-0.008	0.0	0	1.2	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Comoros	0	0.4	0.0	0.00	0.3	14	-0.013	0.0	0	0.4	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Congo	0	3.6	0.0	-0.01	1.3	36	-0.012	0.0	0	3.6	0.0	0.0	0	0.0	1.1	0.0	1.1	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	4	-0.012	0.0	0	0.0	0.1	0.0	0	1.0	0.2	0.0	1.3	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.010	0.0	0	0.0	0.6	0.0	0	4.1	4.5	0.8	10.0	0
Djibouti	0	2.8	0.0	0.00	0.8	11	-0.010	0.0	0	2.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	599.2	0.0	0.28	30.4	17	0.015	524.2	0	66.3	0.2	0.0	0	28.0	0.3	0.9	29.4	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.009	0.0	0	0.0	0.5	0.0	0	2.3	0.3	0.0	3.0	0
Eritrea	0	0.0	0.0	0.00	1.2	2	-0.006	0.0	0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.5	0
Gabon	0	49.7	0.0	-0.06	2.3	28	-0.010	45.2	0	4.4	4.0	3.0	0	117.7	21.6	0.0	146.4	0
Gambia	0	1.0	0.0	0.00	5.4	12	-0.009	0.0	0	1.0	0.1	0.0	0	6.4	1.8	0.1	8.4	0
Ghana	0	1.9	0.0	0.05	0.0	17	0.018	1.8	0	0.0	0.0	0.0	0	2.2	1.6	1.4	5.2	0
Guinea	0	0.3	0.0	-0.04	0.9	9	-0.009	0.0	0	0.3	0.0	0.0	0	2.2	6.6	0.0	8.9	0
Guinea-Bissau	0	1.8	0.0	-0.04	10.5	3	-0.009	0.0	0	1.8	0.0	0.0	0	1.2	2.3	0.1	3.6	0
Kenya	0	4.6	0.0	-0.02	7.5	7	-0.012	0.0	0	4.6	0.7	0.0	0	4.1	1.2	0.0	6.0	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.010	0.0	0	0.0	0.3	0.0	0	1.8	0.9	0.0	2.9	0
Libyan Arab Jamahiriya	0	7.1	0.1	0.02	0.6	103	0.003	0.0	0	7.1	0.0	0.0	0	14.3	0.0	2.2	16.4	0
Madagascar	0	1.8	0.5	0.03	25.6	3	-0.006	0.0	0	1.8	0.0	0.0	0	0.7	0.6	0.0	1.3	0
Mauritania	0	0.4	0.0	0.02	1.8	3	0.012	0.0	0	0.4	0.0	0.0	0	16.9	0.0	0.4	17.3	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.012	0.0	0	0.0	0.0	0.0	0	61.3	0.0	0.0	61.3	0
Morocco	0	57.4	0.0	-0.02	4.4	54	-0.011	0.0	0	57.4	0.7	0.0	0	7.9	0.0	0.2	8.7	0
Mozambique	0	33.4	0.0	-0.14	220.0	2	-0.012	14.1	0	19.3	1.2	0.0	0	5.9	0.3	0.0	7.4	0
Namibia	0	0.0	0.0	-0.02	0.2	3	-0.014	0.0	0	0.0	0.0	0.0	0	31.4	0.0	0.0	31.4	0
Nigeria	0	2.8	0.0	0.29	16.1	10	0.035	0.0	0	2.4	0.1	0.0	0	122.8	22.0	2.1	146.9	0
Reunion	0	0.1	0.0	0.00	0.0	175	-0.011	0.0	0	0.1	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.010	0.0	0	0.0	0.0	0.0	0	0.3	0.0	0.0	0.3	0
Senegal	0	8.2	0.0	-0.02	4.9	24	-0.010	0.0	0	8.2	0.0	0.0	0	17.8	4.0	0.0	21.7	0
Seychelles	0	5.8	0.0	0.00	0.0	208	-0.012	0.0	0	5.8	0.0	0.0	0	113.3	0.4	0.0	113.7	0
Sierra Leone	0	0.3	0.0	-0.03	4.2	6	-0.009	0.0	0	0.3	0.0	0.0	0	0.2	1.4	0.1	1.7	0
Somalia	0	1.1	0.0	0.07	8.4	2	0.000	0.0	0	1.0	0.4	0.0	0	2.2	0.1	0.0	2.7	0
South Africa	0	7.6	0.0	-0.02	0.3	99	-0.014	0.0	0	7.6	5.0	0.0	0	22.4	2.4	0.8	30.6	0
Sudan	0	0.0	0.0	0.00	0.1	5	-0.005	0.0	0	0.0	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Tanzania, Uni Rep	0	14.3	0.0	-0.02	171.7	4	-0.004	0.0	0	14.3	0.0	0.0	0	1.6	0.5	0.0	2.2	0
Togo	0	0.0	0.0	0.00	0.0	18	0.021	0.0	0	0.0	0.0	0.0	0	3.2	0.0	0.5	3.6	0
Tunisia	0	33.6	0.0	0.01	1.6	105	0.002	0.0	0	33.6	0.5	0.0	0	6.1	0.0	0.3	6.9	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.009	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	917.8	0.6	0.23	549.0	34*	-0.005**	590.1	0	318.3	23.4	3.0	0	663.6	88.6	13.0	791.2	0

Table A-81. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2030, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	19.5	0.0	0.00	1.6	125	-0.008	0.0	0	19.5	2.4	0.0	0	11.7	0.0	1.1	15.2	0
Angola	0	20.1	0.0	-0.01	9.0	7	-0.014	5.8	0	14.3	1.1	0.0	0	12.4	2.3	0.0	15.9	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.011	0.0	0	0.0	0.0	0.0	0	26.6	0.2	3.3	30.1	0
Cameroon	0	70.2	0.0	-0.01	19.3	18	-0.009	0.0	0	70.2	9.2	0.0	0	38.4	17.7	0.0	65.2	0
Cape Verde	0	1.7	0.0	-0.01	0.4	50	-0.010	0.0	0	1.7	0.0	0.0	0	0.9	0.0	0.0	0.9	0
Comoros	0	0.7	0.0	0.00	0.3	14	-0.015	0.0	0	0.7	0.0	0.0	0	0.0	0.3	0.0	0.3	0
Congo	0	5.3	0.0	-0.01	1.4	36	-0.014	0.0	0	5.3	0.0	0.0	0	0.0	1.6	0.0	1.6	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	4	-0.014	0.0	0	0.0	0.1	0.0	0	1.4	0.3	0.0	1.8	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.012	0.0	0	0.0	0.9	0.0	0	5.8	6.5	1.2	14.4	0
Djibouti	0	4.1	0.0	0.00	0.9	11	-0.012	0.0	0	4.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Egypt	0	732.9	0.0	0.29	32.5	15	0.017	627.1	0	93.0	0.3	0.0	0	36.8	0.5	1.1	38.7	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.010	0.0	0	0.0	0.6	0.0	0	3.3	0.4	0.0	4.4	0
Eritrea	0	0.1	0.0	0.00	1.2	2	-0.007	0.0	0	0.1	0.0	0.0	0	0.6	0.1	0.0	0.7	0
Gabon	0	61.8	0.0	-0.06	2.4	28	-0.012	55.3	0	6.5	5.8	4.4	0	168.7	31.0	0.0	209.8	0
Gambia	0	1.5	0.0	0.00	5.8	12	-0.011	0.0	0	1.5	0.1	0.0	0	9.2	2.6	0.2	12.1	0
Ghana	0	2.4	0.0	0.05	0.0	17	0.021	2.3	0	0.0	0.0	0.0	0	3.2	2.3	2.0	7.4	0
Guinea	0	0.4	0.0	-0.05	1.0	9	-0.011	0.0	0	0.4	0.0	0.0	0	3.2	9.5	0.0	12.7	0
Guinea-Bissau	0	2.7	0.0	-0.05	11.3	3	-0.011	0.0	0	2.7	0.0	0.0	0	1.7	3.4	0.1	5.2	0
Kenya	0	6.9	0.0	-0.02	8.0	7	-0.014	0.0	0	6.9	0.9	0.0	0	6.0	1.8	0.0	8.7	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.011	0.0	0	0.0	0.4	0.0	0	2.6	1.2	0.0	4.2	0
Libyan Arab Jamahiriya	0	9.9	0.1	0.02	0.6	102	0.004	0.0	0	9.9	0.0	0.0	0	19.3	0.0	2.9	22.2	0
Madagascar	0	2.7	0.5	0.03	27.4	3	-0.007	0.0	0	2.7	0.0	0.0	0	1.0	0.9	0.0	1.9	0
Mauritania	0	0.5	0.0	0.02	1.9	3	0.014	0.0	0	0.5	0.0	0.0	0	24.1	0.1	0.5	24.7	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.014	0.0	0	0.0	0.0	0.0	0	89.4	0.0	0.0	89.4	0
Morocco	0	79.7	0.0	-0.02	4.7	54	-0.013	0.0	0	79.7	0.9	0.0	0	10.8	0.0	0.3	11.9	0
Mozambique	0	43.7	0.0	-0.14	235.9	2	-0.014	16.8	0	26.8	1.6	0.0	0	8.0	0.4	0.0	10	0
Namibia	0	0.1	0.0	-0.02	0.2	3	-0.016	0.0	0	0.1	0.0	0.0	0	42.7	0.0	0.0	42.7	0
Nigeria	0	4.1	0.0	0.30	17.3	9	0.041	0.0	0	3.5	0.1	0.0	0	173.4	31.2	3.0	207.7	0
Reunion	0	0.2	0.0	0.00	0.0	175	-0.012	0.0	0	0.2	0.0	0.0	0	0.1	0.0	0.0	0.1	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.011	0.0	0	0.0	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Senegal	0	12.0	0.0	-0.02	5.2	24	-0.011	0.0	0	12.0	0.0	0.0	0	25.5	5.7	0.0	31.1	0
Seychelles	0	8.3	0.0	0.00	0.0	208	-0.014	0.0	0	8.3	0.0	0.0	0	161.8	0.5	0.0	162.3	0
Sierra Leone	0	0.5	0.0	-0.03	4.5	6	-0.011	0.0	0	0.5	0.1	0.0	0	0.3	1.9	0.1	2.4	0
Somalia	0	1.6	0.0	0.07	9.0	2	0.000	0.0	0	1.5	0.5	0.0	0	3.2	0.2	0.0	3.9	0
South Africa	0	10.6	0.0	-0.03	0.3	99	-0.017	0.0	0	10.6	6.8	0.0	0	30.5	3.3	1.0	41.7	0
Sudan	0	0.0	0.0	0.00	0.1	5	-0.006	0.0	0	0.0	0.0	0.0	0	0.0	0.3	0.0	0.4	0
Tanzania, Uni Rep	0	37.0	384.8	-0.02	234.1	4	-0.004	0.0	0	20.0	0.0	0.0	0	2.2	0.7	0.0	2.9	0
Togo	0	0.0	0.0	0.00	0.0	17	0.024	0.0	0	0.0	0.0	0.0	0	4.4	0.0	0.6	5.1	0
Tunisia	0	46.6	0.0	0.01	1.7	104	0.002	0.0	0	46.6	0.6	0.0	0	8.3	0.0	0.4	9.3	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.010	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	1187.6	385.4	0.22	638.2	34*	-0.006**	707.3	0	449.8	32.4	4.4	0	937.9	126.9	17.8	1119.4	0

Table A-82. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2050, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	61.8	0.0	0.00	1.9	125	-0.012	0.0	0	61.3	7.3	0.0	0	34.5	0.0	3.5	45.2	0
Angola	0	50.5	0.0	-0.01	10.7	7	-0.023	10.5	0	44.1	3.3	0.0	0	36.8	6.7	0.0	46.9	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.017	0.0	0	0.0	0.0	0.0	0	96.7	0.7	11.8	109.2	0
Cameroon	0	277.5	0.0	-0.02	23.0	18	-0.015	0.0	0	263.3	33.4	0.0	0	139.4	64.2	0.0	236.9	0
Cape Verde	0	6.9	0.0	-0.01	0.5	50	-0.015	0.0	0	6.5	0.0	0.0	0	3.3	0.0	0.0	3.3	0
Comoros	0	2.6	0.0	0.00	0.3	14	-0.024	0.0	0	2.5	0.0	0.0	0	0.0	1.1	0.0	1.2	0
Congo	0	21.0	0.0	-0.01	1.7	36	-0.021	0.0	0	20.0	0.0	0.0	0	0.0	5.9	0.0	5.9	0
Congo, Dem Rep	0	0.0	0.0	0.00	0.2	4	-0.022	0.0	0	0.0	0.5	0.0	0	5.0	1.0	0.0	6.5	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.019	0.0	0	0.0	3.2	0.0	0	21.2	23.6	4.2	52.1	0
Djibouti	0	16.2	0.0	0.00	1.1	11	-0.019	0.0	0	15.3	0.0	0.0	0	0.0	0.1	0.0	0.1	0
Egypt	0	1528.8	0.0	0.34	40.4	12	0.027	1175.0	0	305.3	0.9	0.0	0	94.7	1.4	3.2	100.1	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.016	0.0	0	0.0	2.4	0.0	0	11.8	1.6	0.1	15.8	0
Eritrea	0	0.3	0.0	0.00	1.5	2	-0.011	0.0	0	0.3	0.0	0.0	0	2.3	0.3	0.0	2.5	0
Gabon	0	138.8	0.0	-0.07	2.9	28	-0.019	111.2	0	24.4	20.9	15.8	0	612.7	112.5	0.0	761.9	0
Gambia	0	5.9	0.0	-0.01	6.9	12	-0.017	0.0	0	5.6	0.4	0.0	0	33.5	9.3	0.7	43.9	0
Ghana	0	5.2	0.0	0.05	0.0	15	0.033	4.6	0	0.0	0.0	0.0	0	11.8	8.0	7.1	26.8	0
Guinea	0	1.7	0.0	-0.06	1.2	9	-0.017	0.0	0	1.6	0.0	0.0	0	11.7	34.6	0.0	46.2	0
Guinea-Bissau	0	10.5	0.0	-0.06	13.5	3	-0.017	0.0	0	10.0	0.1	0.0	0	6.0	12.2	0.5	18.9	0
Kenya	0	29.1	0.0	-0.02	9.5	7	-0.023	0.0	0	27.5	3.7	0.0	0	23.0	7.0	0.0	33.7	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.017	0.0	0	0.0	1.3	0.0	0	9.4	4.4	0.0	15.2	0
Libyan Arab Jamahiriya	0	31.6	0.1	0.02	0.8	99	0.006	0.0	0	31.2	0.0	0.0	0	55.9	0.0	8.7	64.6	0
Madagascar	0	11.6	0.5	0.03	32.8	3	-0.011	0.0	0	10.8	0.0	0.0	0	3.9	3.5	0.0	7.4	0
Mauritania	0	2.2	0.0	0.03	2.2	2	0.023	0.0	0	2.1	0.0	0.0	0	87.7	0.2	1.9	89.9	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.021	0.0	0	0.0	0.0	0.0	0	345.3	0.0	0.0	345.3	0
Morocco	0	253.0	0.0	-0.02	5.6	54	-0.02	0.0	0	251.2	2.7	0.0	0	32.6	0.0	0.8	36.1	0
Mozambique	0	118.3	2.3	-0.15	422.6	2	-0.023	30.7	0	83.4	4.7	0.0	0	23.7	1.3	0.0	29.7	0
Namibia	0	0.2	0.0	-0.02	0.2	3	-0.025	0.0	0	0.2	0.0	0.0	0	126.3	0.0	0.0	126.3	0
Nigeria	0	16.6	0.0	0.35	20.9	8	0.064	0.0	0	13.5	0.4	0.0	0	593.1	109.7	10.8	714.0	0
Reunion	0	0.5	0.0	0.00	0.0	175	-0.019	0.0	0	0.5	0.0	0.0	0	0.2	0.0	0.0	0.2	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.018	0.0	0	0.0	0.0	0.0	0	1.3	0.0	0.0	1.3	0
Senegal	0	47.5	0.0	-0.03	6.2	24	-0.018	0.0	0	45.0	0.0	0.0	0	92.5	20.6	0.0	113.1	0
Seychelles	0	29.5	0.0	0.00	0.0	208	-0.023	0.0	0	28.8	0.0	0.0	0	568.2	1.8	0.0	569.9	0
Sierra Leone	0	1.9	0.0	-0.04	5.4	6	-0.017	0.0	0	1.8	0.2	0.0	0	1.0	7.0	0.5	8.7	0
Somalia	0	6.6	0.0	0.07	10.7	2	0.001	0.0	0	6.1	1.9	0.0	0	12.3	0.8	0.0	15.0	0
South Africa	0	33.9	0.0	-0.03	0.3	99	-0.026	0.0	0	32.6	20.1	0.0	0	90.2	9.8	3.1	123.2	0
Sudan	0	0.0	0.0	0.00	0.1	5	-0.010	0.0	0	0.0	0.0	0.0	0	0.1	1.3	0.0	1.4	0
Tanzania, Uni Rep	0	87.7	0.5	-0.02	346.0	3	-0.007	0.0	0	62.2	0.1	0.0	0	6.5	2.1	0.0	8.7	0
Togo	0	0.0	0.0	0.00	0.0	16	0.038	0.0	0	0.0	0.0	0.0	0	14.8	0.0	2.2	17.0	0
Tunisia	0	148.2	0.0	0.01	2.0	103	0.004	0.0	0	147.0	1.9	0.0	0	24.0	0.0	1.3	27.1	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.016	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	2946.2	3.4	0.25	971.1	34*	-0.010**	1332.0	0	1504.0	109.4	15.8	0	3233.4	452.7	60.4	3871.2	0

Table A-83. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2075, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	134.4	0.0	0.00	2.1	125	-0.018	0.0	0	134.4	15.8	0.0	0	74.3	0.0	7.6	97.8	0
Angola	0	129.5	0.0	-0.02	11.3	7	-0.033	0.0	0	129.5	10.0	0.0	0	110.5	20.2	0.0	140.8	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.025	0.0	0	0.0	0.0	0.0	0	377.2	2.7	46.1	426.0	0
Cameroon	0	991.8	0.0	-0.03	24.2	18	-0.021	0.0	0	991.8	130.3	0.0	0	543.6	250.3	0.0	924.1	0
Cape Verde	0	24.6	0.0	-0.01	0.5	50	-0.022	0.0	0	24.6	0.0	0.0	0	12.7	0.0	0.0	12.7	0
Comoros	0	9.2	0.0	0.00	0.4	14	-0.035	0.0	0	9.2	0.0	0.0	0	0.0	4.5	0.0	4.5	0
Congo	0	75.2	0.0	-0.01	1.8	36	-0.031	0.0	0	75.2	0.0	0.0	0	0.0	22.9	0.0	22.9	0
Congo, Dem Rep	0	0.1	0.0	0.00	0.2	4	-0.032	0.0	0	0.1	2.1	0.0	0	19.4	3.8	0.0	25.3	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.028	0.0	0	0.0	12.4	0.0	0	82.7	92.0	16.4	203.4	0
Djibouti	0	57.7	0.0	0.00	1.1	11	-0.027	0.0	0	57.7	0.0	0.0	0	0.0	0.2	0.0	0.2	0
Egypt	0	2649.8	0.0	0.38	50.5	9	0.039	1824.8	0	705.0	1.8	0.0	0	164.6	3.0	6.1	175.5	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.024	0.0	0	0.0	9.2	0.0	0	46.1	6.1	0.3	61.8	0
Eritrea	0	1.2	0.0	0.00	1.6	2	-0.016	0.0	0	1.2	0.0	0.0	0	9.5	1.1	0.0	10.5	0
Gabon	0	315.9	0.0	-0.07	3.0	28	-0.028	224.0	0	91.8	82.6	61.7	0	2390.0	438.7	0.0	2972.1	0
Gambia	0	21.0	0.0	-0.01	7.3	12	-0.025	0.0	0	21.0	1.6	0.0	0	130.5	36.5	2.6	171.1	0
Ghana	0	11.4	0.0	0.05	0.0	14	0.049	9.5	0	0.0	0.0	0.0	0	47.7	29.7	27.7	105.1	0
Guinea	0	6.0	0.0	-0.07	1.2	9	-0.025	0.0	0	6.1	0.0	0.0	0	45.5	134.9	0.0	180.3	0
Guinea-Bissau	0	37.6	0.0	-0.07	14.2	3	-0.025	0.0	0	37.6	0.2	0.0	0	23.6	47.7	2.1	73.6	0
Kenya	0	109.6	0.0	-0.02	10.0	7	-0.033	0.0	0	109.6	15.1	0.0	0	95.4	28.9	0.0	139.4	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.025	0.0	0	0.0	5.1	0.0	0	36.8	17.3	0.0	59.3	0
Libyan Arab Jamahiriya	0	68.8	0.1	0.02	0.8	96	0.009	0.0	0	68.5	0.0	0.0	0	115.7	0.0	18.2	133.9	0
Madagascar	0	43.6	0.5	0.03	34.7	3	-0.016	0.0	0	43.3	0.0	0.0	0	16.4	14.3	0.0	30.7	0
Mauritania	0	8.1	0.0	0.03	2.3	2	0.033	0.0	0	8.0	0.0	0.0	0	342.1	0.9	7.6	350.6	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.031	0.0	0	0.0	0.0	0.0	0	1429.1	0.0	0.0	1429.1	0
Morocco	0	550.4	0.0	-0.02	6.0	54	-0.030	0.0	0	550.4	5.8	0.0	0	71.4	0.0	1.7	78.9	0
Mozambique	0	300.6	2.3	-0.16	447.8	2	-0.033	54.4	0	244.8	14.1	0.0	0	71.2	3.9	0.0	89.2	0
Namibia	0	0.6	0.0	-0.02	0.2	3	-0.036	0.0	0	0.6	0.0	0.0	0	379.1	0.0	0.0	379.1	0
Nigeria	0	68.5	0.0	0.38	149.0	6	0.093	0.0	0	59.4	1.5	0.0	0	2158.8	409.4	42.2	2611.9	0
Reunion	0	0.8	0.0	0.00	0.0	175	-0.028	0.0	0	0.8	0.0	0.0	0	0.4	0.0	0.0	0.4	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.026	0.0	0	0.0	0.0	0.0	0	5.1	0.0	0.0	5.1	0
Senegal	0	169.8	0.0	-0.03	6.6	24	-0.026	0.0	0	169.7	0.1	0.0	0	360.7	80.4	0.0	441.2	0
Seychelles	0	83.1	0.0	0.00	0.0	208	-0.033	0.0	0	83.1	0.0	0.0	0	1790.5	5.6	0.0	1796.1	0
Sierra Leone	0	6.8	0.0	-0.05	5.7	6	-0.025	0.0	0	6.8	0.8	0.0	0	3.8	27.4	2.0	34.0	0
Somalia	0	25.0	0.0	0.07	13.9	2	0.001	0.0	0	24.5	8.1	0.0	0	50.7	3.3	0.0	62.0	0
South Africa	0	95.7	0.0	-0.03	0.3	99	-0.038	0.0	0	95.7	60.3	0.0	0	270.9	29.4	9.3	369.9	0
Sudan	0	0.1	0.0	0.00	0.1	5	-0.014	0.0	0	0.1	0.0	0.0	0	0.2	5.4	0.0	5.6	0
Tanzania, Uni Rep	0	319.5	49.6	-0.02	422.4	3	-0.010	0.0	0	183.8	0.2	0.0	0	19.8	6.2	0.0	26.1	0
Togo	0	0.1	0.0	0.0	0.0	15	0.056	0.0	0	0.0	0.0	0.0	0	51.6	0.0	7.9	59.5	0
Tunisia	0	322.8	0.0	0.02	2.2	101	0.006	0.0	0	322.5	4.0	0.0	0	49.2	0.0	2.7	55.9	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.023	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	6639.2	52.5	0.27	1221.4	33*	-0.014**	2112.7	0	4256.5	381.1	61.7	0	11396.8	1726.7	200.5	13765.6	0

Table A-84. Case 14: Results by country, for No SLR and B1 socio-economic scenario for 2100, without adaptation

Locations	Parameters																	
	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Algeria	0	179.5	0.0	0.00	1.9	125	-0.023	0.0	0	179.5	22.3	0.0	0	103.1	0.0	10.8	136.2	0
Angola	0	217.5	0.0	-0.02	9.8	7	-0.043	0.0	0	217.5	18.7	0.0	0	205.7	37.6	0.0	261.9	0
Benin	0	0.0	0.0	0.00	0.0	23	-0.033	0.0	0	0.0	0.0	0.0	0	923.9	6.6	112.8	1043.3	0
Cameroon	0	2166.9	0.0	-0.04	21.0	18	-0.028	0.0	0	2166.9	319.0	0.0	0	1331.5	612.9	0.0	2263.4	0
Cape Verde	0	53.7	0.0	-0.01	0.4	50	-0.029	0.0	0	53.7	0.0	0.0	0	31.1	0.0	0.0	31.1	0
Comoros	0	20.2	0.0	0.00	0.3	14	-0.045	0.0	0	20.2	0.0	0.0	0	0.1	11.0	0.0	11.1	0
Congo	0	164.2	0.0	-0.01	1.5	36	-0.041	0.0	0	164.2	0.0	0.0	0	0.0	56.0	0.0	56.0	0
Congo, Dem Rep	0	0.1	0.0	0.00	0.2	4	-0.042	0.0	0	0.1	5.1	0.0	0	47.4	9.4	0.0	61.9	0
Cote d'Ivoire	0	0.0	0.0	-0.04	0.0	41	-0.037	0.0	0	0.0	30.4	0.0	0	202.4	225.3	40.1	498.2	0
Djibouti	0	126.1	0.0	0.00	1.0	11	-0.036	0.0	0	126.1	0.0	0.0	0	0.0	0.5	0.0	0.5	0
Egypt	0	1220.4	0.0	0.40	127.8	7	0.052	0.0	0	1041.4	2.3	0.0	0	187.7	4.3	7.6	201.9	0
Equatorial Guinea	0	0.0	0.0	0.00	0.0	8	-0.031	0.0	0	0.0	22.5	0.0	0	113.0	15.0	0.7	151.2	0
Eritrea	0	2.7	0.0	0.00	1.3	2	-0.021	0.0	0	2.7	0.0	0.0	0	24.3	2.7	0.0	27.0	0
Gabon	0	200.7	0.0	-0.08	2.6	28	-0.037	0.0	0	200.5	200.0	151.2	0	5853.5	1074.6	0.0	7279.3	0
Gambia	0	45.8	0.0	-0.01	6.3	12	-0.033	0.0	0	45.8	4.0	0.0	0	319.6	89.3	6.3	419.2	0
Ghana	0	19.3	0.0	0.05	0.0	14	0.064	14.5	0	0.0	0.0	0.0	0	120.9	68.9	67.9	257.7	0
Guinea	0	13.2	0.0	-0.08	1.1	9	-0.033	0.0	0	13.2	0.0	0.0	0	111.4	330.3	0.0	441.7	0
Guinea-Bissau	0	82.1	0.0	-0.07	12.3	3	-0.033	0.0	0	82.1	0.6	0.0	0	57.7	116.7	5.1	180.1	0
Kenya	0	250.3	0.0	-0.02	8.7	7	-0.043	0.0	0	250.3	38.8	0.0	0	244.5	74.2	0.0	357.5	0
Liberia	0	0.0	0.0	-0.01	0.0	14	-0.033	0.0	0	0.0	12.6	0.0	0	90.1	42.4	0.0	145.1	0
Libyan Arab Jamahiriya	0	92.2	0.1	0.02	0.8	93	0.012	0.0	0	91.7	0.0	0.0	0	155.5	0.0	24.6	180.1	0
Madagascar	0	99.8	0.5	0.03	30.1	3	-0.021	0.0	0	98.9	0.0	0.0	0	42.6	36.5	0.0	79.2	0
Mauritania	0	23.5	0.2	0.04	16.6	2	0.043	0.0	0	21.2	0.0	0.0	0	837.9	2.1	18.5	858.6	0
Mauritius	0	0.0	0.0	0.00	0.0	292	-0.041	0.0	0	0.0	0.0	0.0	0	3664.4	0.0	0.0	3664.4	0
Morocco	0	735.0	0.0	-0.02	5.5	54	-0.039	0.0	0	735.0	8.3	0.0	0	101.2	0.0	2.4	111.9	0
Mozambique	0	486.0	2.3	-0.17	390.4	2	-0.043	71.9	0	411.8	26.3	0.0	0	132.5	7.2	0.1	166.0	0
Namibia	0	0.9	0.0	-0.02	0.2	4	-0.047	0.0	0	0.9	0.0	0.0	0	705.3	0.0	0.0	705.3	0
Nigeria	0	167.5	0.3	0.40	171.3	6	0.122	0.0	0	138.3	3.6	0.0	0	4951.4	958.9	103.3	6017.2	0
Reunion	0	0.9	0.0	0.00	0.0	175	-0.037	0.0	0	0.9	0.0	0.0	0	0.6	0.0	0.0	0.6	0
Sao Tome & Principe	0	0.0	0.0	0.00	0.0	15	-0.034	0.0	0	0.0	0.0	0.0	0	12.5	0.0	0.0	12.5	0
Senegal	0	371.1	0.0	-0.03	5.7	24	-0.034	0.0	0	370.7	0.3	0.0	0	883.4	196.8	0.0	1080.6	0
Seychelles	0	154.7	0.0	0.00	0.0	208	-0.043	0.0	0	154.7	0.0	0.0	0	3923.1	12.3	0.0	3935.4	0
Sierra Leone	0	14.8	0.0	-0.05	4.9	6	-0.033	0.0	0	14.8	1.9	0.0	0	9.3	67.1	4.8	83.2	0
Somalia	0	57.2	0.0	0.07	12.1	2	0.001	0.0	0	56.1	20.7	0.0	0	130.0	8.4	0.0	159.0	0
South Africa	0	160.7	0.0	-0.04	0.3	99	-0.050	0.0	0	160.8	112.2	0.0	0	503.9	54.8	17.3	688.1	0
Sudan	0	0.1	0.0	0.00	0.1	5	-0.019	0.0	0	0.1	0.0	0.0	0	0.6	13.8	0.0	14.5	0
Tanzania, Uni Rep	0	330.4	0.6	-0.02	906.6	3	-0.013	0.0	0	328.3	0.3	0.0	0	37.0	11.4	0.0	48.8	0
Togo	0	0.2	0.0	0.00	0.0	14	0.073	0.0	0	0.0	0.0	0.0	0	112.9	0.0	17.9	130.8	0
Tunisia	0	431.4	0.0	0.02	2.0	99	0.007	0.0	0	431.0	5.5	0.0	0	65.2	0.0	3.6	74.3	0
Western Sahara	0	0.0	0.0	-0.02	0.0	0	-0.030	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
TOTAL for Africa	0	7889.1	4.0	0.27	1742.8	33*	-0.018**	86.4	0	7579.8	855.4	151.2	0	26237.2	4147.0	443.8	31834.8	0

Table B-1. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	22.8	0.8	0	0.2	5.7	7	0.016	0	14.1	0.8	0.125	0.0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	28.0	3.2	0	0.2	101.0	4	0.018	0	14.2	3.2	0.004	0.0	0.0	0.5	0.1	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	8.7	583.7	0.008	0	0	19.3	1250.1	142.1	0	0	0	2603920	1657.6	143.2	0	0	561.0	953.5	0
Tanzania, Uni Rep	0	13.7	1389.6	0.005	0	0	19.9	8311.1	1043.6	0	0	0	3570263	2825.3	14.8	0	0	344.3	2466.3	0

Table B-2. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	56.0	4.5	0	0.05	3.9	32	0.13	0	39.2	4.4	0.6	0.0	0.0	3.6	1.1	0	5.3	0.0
Tanzania, Uni Rep	61.3	13.4	0	0.06	155.3	12	0.14	0	35.3	13.4	0.0	0.0	0.0	1.4	0.5	0	1.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	16.8	583.7	0.006	0	0	107.2	1271.9	250.2	0.000	0	0	751906	1569.7	138.0	0	0	514.4	917.4	0
Tanzania, Uni Rep	0	26.1	1389.6	0.003	0	0	107.3	8408.0	1828.1	0.001	0	0	958503	2737.9	13.9	0	0	350.0	2374.0	0

Table B-3. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	56.4	6.4	0	-0.04	2.9	46	0.16	0	39.6	6.4	0.8	0.0	0.0	5.1	1.6	0	7.6	0.0
Tanzania, Uni Rep	62.0	15.6	0	-0.04	63.4	16	0.17	0	35.9	15.6	0.0	0.0	0.0	1.9	0.6	0	2.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	16.8	583.7	-0.005	0	0	129.9	1277.9	269.3	0.000	0	0	-505303	1547.1	136.6	0	0	502.8	907.7	0
Tanzania, Uni Rep	0	26.1	1389.6	-0.002	0	0	130.6	8434.1	1963.7	0.001	0	0	-675303	2714.7	13.7	0	0	351.2	2349.7	0

Table B-4. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	79.5	22.1	0	-0.05	1.2	174	0.34	0	49.7	15.2	3.4	0.0	0.0	19.9	6.4	0	29.8	0.0
Tanzania, Uni Rep	91.7	51.1	0	-0.06	26.6	45	0.36	0	47.2	48.9	0.1	0.0	0.0	5.9	1.9	0	7.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	29.8	583.7	-0.01	0	0	228.1	1312.8	328.3	0.000	0	0	-668575	1448.8	130.4	0	0	453.6	864.9	0
Tanzania, Uni Rep	0	44.6	1389.6	-0.01	0	0	234.0	8576.8	2371.0	0.002	0	0	-887483	2611.2	12.9	0	0	355.3	2243.0	0

Table B-5. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	136.1	71.5	0	0.05	0.4	614	0.71	0	66.6	69.9	12.5	0.0	0.0	68.6	23.6	0	104.7	0.0
Tanzania, Uni Rep	167.1	136.4	13.7	0.06	23.7	117	0.73	0	66.3	136.2	0.2	0.0	0.0	15.2	5.1	0	20.4	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	69.5	583.7	0.02	0	0	388.5	1383.4	361.0	0.000	0	0	719263	1288.4	119.8	0	0	374.9	793.7	0
Tanzania, Uni Rep	0	100.9	1389.6	0.01	0	0	417.8	8821.8	2554.4	0.003	0	0	916085	2427.4	11.8	0	0	354.9	2060.7	0

Table B-6. Case 1: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	192.1	53.8	0	-0.11	0.1	1459	1.21	0	75.8	53.9	28.3	0.0	0.0	145.2	53.1	0	226.6	0.0
Tanzania, Uni Rep	229.2	231.7	0	-0.13	19.1	204	1.24	0	76.8	231.7	0.3	0.0	0.0	24.2	8.3	0	32.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	116.3	583.7	-0.06	0	0	624.7	1476.9	330.3	0.000	0	0	-1582897	1052.2	101.5	0	0	276.5	674.3	0
Tanzania, Uni Rep	0	152.4	1389.6	-0.03	0	0	719.7	9141.4	2269.8	0.003	0	0	-2075689	2125.5	10.0	0	0	345.5	1770.0	0

Table B-7. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	0.8	0	0.2	5.7	6	0.016	0	0.0	0.8	0.1	0.0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	0.0	3.2	0	0.2	101.0	3	0.018	0	0.0	3.2	0.0	0.0	0.0	0.5	0.1	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.008	0	0	19.3	1250.1	142.1	0	0	0	2603920	1657.6	143.2	0	0	561.0	953.5	0
Tanzania, Uni Rep	0	0	1389.6	0.005	0	0	19.9	8311.1	1043.6	0	0	0	3570263	2825.3	14.8	0	0	344.2575	2466.3	0

Table B-8. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	14.2	91.5	0.4	37.3	1	0.13	0	0.0	5.8	0.6	0.0	0.0	3.6	1.1	0	5.3	0.0
Tanzania, Uni Rep	0.0	276.3	560.0	0.4	1442.8	0	0.14	0	0.0	16.3	0.0	0.0	0.0	1.4	0.5	0	1.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.04	0	0	107.2	1271.9	250.3	0	0	0	5053028	1569.7	138.0	0	0	514.4	917.4	0
Tanzania, Uni Rep	0	0	1389.6	0.02	0	0	107.3	8408.0	1828.1	0	0	0	6752993	2737.9	13.9	0	0	350.0	2374.0	0

Table B-9. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	57.6	103.1	0.4	85.7	1	0.16	0	0.0	9.0	0.8	0.0	0.0	5.1	1.6	0	7.6	0.0
Tanzania, Uni Rep	0.0	42.5	118.5	0.4	1608.4	0	0.17	0	0.0	22.7	0.0	0.0	0.0	1.9	0.6	0	2.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.05	0	0	129.9	1277.8	269.3	0	0	0	5053028	1547.1	136.6	0	0	502.8	907.7	0
Tanzania, Uni Rep	0	0	1389.6	0.02	0	0	130.6	8434.1	1963.7	0	0	0	6752990	2714.7	13.7	0	0	351.2	2349.7	0

Table B-10. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	313.3	113.3	0.6	306.4	0	0.34	0	0.0	45.7	3.4	0.0	0.0	19.9	6.4	0	29.8	0.0
Tanzania, Uni Rep	0.0	163.9	107.7	0.7	2140.9	0	0.36	0	0.0	78.3	0.1	0.0	0.0	5.9	1.9	0	7.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.2	0	0	228.1	1312.8	328.3	0	0	0	8481780	1448.8	130.4	0	0	453.6	864.9	0
Tanzania, Uni Rep	0	0	1389.6	0.1	0	0	234.0	8576.8	2371.0	0	0	0	11208814	2611.2	12.9	0	0	355.3	2243.0	0

Table B-11. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	259.1	259.1	1.0	338.3	0	0.71	0	0.0	184.4	12.5	0.0	0.0	68.6	23.6	0	104.7	0.0
Tanzania, Uni Rep	0.0	264.3	13.7	1.2	2451.7	0	0.73	0	0.0	230.6	0.2	0.0	0.0	15.2	5.1	0	20.4	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.5	0	0	388.5	1383.4	361.0	0	0	0	14359642	1288.4	119.8	0	0	374.9	793.7	0
Tanzania, Uni Rep	0	0	1389.6	0.2	0	0	417.8	8821.8	2554.4	0	0	0	18847374	2427.4	11.8	0	0	354.9	2060.7	0

Table B-12. Case 2: Results for Kenya and Tanzania, Uni Rep, for the Rahmstorf SLR and A1B socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	665.8	4.2	1.3	311.2	0	1.21	0	0.0	457.3	28.3	0.0	0.0	145.2	53.1	0	226.6	0.0
Tanzania, Uni Rep	0.0	477.5	14.1	1.5	2192.6	0	1.24	0	0.0	409.9	0.3	0.0	0.0	24.2	8.3	0	32.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.6	0	0	624.7	1476.9	330.3	0	0	0	17625116	1052.2	101.5	0	0	276.5	674.3	0
Tanzania, Uni Rep	0	0	1389.6	0.3	0	0	719.7	9141.4	2269.8	0	0	0	23091006	2125.5	10.0	0	0	345.5	1770.0	0

Table B-13. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	24.4	0.8	0	0.20	5.7	7	0.017	0.0	15.0	0.8	0.1	0	0	0.8	0.2	0.00	1.2	0
Tanzania, Uni Rep	29.4	3.2	0	0.24	104.4	4	0.019	0.0	14.9	3.2	0.0	0	0	0.5	0.1	0.00	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	9.4	583.7	0.009	0	0	19.3	1250.4	142.1	0.000	0	0	2828375	1657.6	143.2	0	0	561.0	953.5	0
Tanzania, Uni Rep	0	14.5	1389.6	0.005	0	0	19.9	8311.9	1043.6	0.001	0	0	3770933	2825.3	14.8	0	0	344.3	2466.3	0

Table B-14. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	57.5	4.4	0	0.04	3.9	32	0.141	0.0	40.0	4.4	0.6	0	0	3.6	1.1	0.0	5.3	0
Tanzania, Uni Rep	62.2	13.4	0	0.04	155.4	12	0.147	0.0	35.7	13.4	0.0	0	0	1.4	0.5	0.0	1.9	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	17.5	583.7	0.005	0	0	119.5	1274.5	250.7	0.000	0	0	559597	1557.5	137.1	0	0	508.6	911.7	0
Tanzania, Uni Rep	0	26.5	1389.6	0.002	0	0	119.1	8416.2	1829.4	0.001	0	0	691399	2726.1	13.8	0	0	350.7	2361.6	0

Table B-15. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	58.2	6.4	0	-0.034	2.9	46	0.17	0.0	40.5	6.4	0.8	0.0	0	5.1	1.6	0.0	7.6	0
Tanzania, Uni Rep	63.3	16.4	0	-0.040	89.8	16	0.18	0.0	36.5	16.4	0.0	0.0	0	1.9	0.6	0.0	2.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	17.6	583.7	-0.005	0	0	141.9	1280.8	269.8	0.000	0	0	-481829	1535.0	135.8	0	0	497.1	902.2	0
Tanzania, Uni Rep	0	26.7	1389.6	-0.002	0	0	142.3	8442.9	1965.2	0.001	0	0	-628614	2702.9	13.6	0	0	351.8	2337.5	0

Table B-16. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	75.5	20.3	0	-0.030	1.2	173	0.35	0.0	47.7	20.2	3.4	0.0	0	19.8	6.4	0.0	29.6	0
Tanzania, Uni Rep	85.2	49.7	0	-0.035	26.1	45	0.36	0.0	44.4	48.8	0.1	0.0	0	5.8	1.9	0.0	7.8	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	27.8	583.7	-0.008	0	0	239.2	1314.3	328.7	0.000	0	0	-419959	1437.8	129.5	0	0	448.6	859.6	0
Tanzania, Uni Rep	0	40.8	1389.6	-0.004	0	0	245.6	8577.2	2371.2	0.002	0	0	-552007	2599.7	12.8	0	0	355.5	2231.3	0

Table B-17. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	105.1	69.3	0	-0.018	0.4	620	0.64	0.0	53.2	69.3	12.5	0.0	0	70.1	23.7	0.0	106.3	0
Tanzania, Uni Rep	130.3	130.8	0	-0.020	21.7	119	0.66	0.0	51.2	130.8	0.2	0.0	0	15.3	5.1	0.0	20.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	51.9	583.7	-0.008	0	0	372.3	1370.8	358.3	0.000	0	0	-248662	1304.6	120.4	0	0	385.2	799.0	0
Tanzania, Uni Rep	0	79.1	1389.6	-0.003	0	0	395.9	8773.0	2542.6	0.002	0	0	-323852	2449.3	11.8	0	0	356.0	2081.5	0

Table B-18. Case 3: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2100, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	140.7	44.0	0	-0.021	0.12	1504	1.00	0.0	57.3	44.0	30.4	0.0	0	163.1	57.3	0.0	250.9	0
Tanzania, Uni Rep	163.7	197.3	0	-0.025	12.40	211	1.02	0.0	56.2	197.3	0.3	0.0	0	26.5	9.0	0.0	35.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	83.4	583.7	-0.011	0	0	495.4	1437.3	323.1	0.000	0	0	-289301	1181.5	111.4	0	0	330.3	739.8	0
Tanzania, Uni Rep	0	107.5	1389.6	-0.005	0	0	550.0	9001.9	2244.8	0.002	0	0	-398382	2295.2	10.9	0	0	352.1	1932.2	0

Table B-19. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	0.8	0	0.20	5.7	6	0.017	0.0	0	0.8	0.1	0.0	0	0.8	0.2	0.00	1.2	0
Tanzania, Uni Rep	0	3.2	0	0.24	104.4	3	0.019	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.00	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.01	0	0	19.3	1250.4	142.1	0	0	0	2828375	1657.6	143.2	0	0	561.0	953.5	0
Tanzania, Uni Rep	0	0	1389.6	0.01	0	0	19.9	8311.9	1043.6	0	0	0	3770933	2825.3	14.8	0	0	344.3	2466.3	0

Table B-20. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	23.4	14.6	0.38	59.6	1	0.14	0.0	0	6.0	0.6	0.0	0	3.6	1.1	0.0	5.3	0
Tanzania, Uni Rep	0	35.8	121.1	0.43	1462.5	0	0.15	0.0	0	16.3	0.0	0.0	0	1.4	0.5	0.0	1.9	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.04	0	0	119.5	1274.5	250.7	0	0	0	5260732	1557.5	137.1	0	0	508.6	911.7	0
Tanzania, Uni Rep	0	0	1389.6	0.02	0	0	119.1	8416.2	1829.4	0	0	0	6861102	2726.1	13.8	0	0	350.7	2361.6	0

Table B-21. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	32.8	89.7	0.38	85.9	1	0.17	0.0	0	9.0	0.8	0.0	0	5.1	1.6	0.0	7.6	0
Tanzania, Uni Rep	0	39.4	69.9	0.44	1619.5	0	0.18	0.0	0	22.8	0.0	0.0	0	1.9	0.6	0.0	2.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.06	0	0	141.9	1280.8	269.8	0	0	0	5304977	1535.0	135.8	0	0	497.1	902.2	0
Tanzania, Uni Rep	0	0	1389.6	0.02	0	0	142.3	8442.9	1965.2	0	0	0	6918599	2702.9	13.6	0	0	351.8	2337.5	0

Table B-22. Case 4: Results for Kenya and Tanzania, Uni Rep, for the A1FI high-range SLR and A1FI socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	311.9	19.5	0.57	306.7	0	0.35	0.0	0	45.8	3.4	0.0	0	19.8	6.4	0.0	29.6	0
Tanzania, Uni Rep	0	162.5	12.6	0.65	2141.1	0	0.36	0.0	0	78.3	0.1	0.0	0	5.8	1.9	0.0	7.8	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.15	0	0	239.2	1314.3	328.7	0	0	0	7926528	1437.8	129.5	0	0	448.6	859.6	0
Tanzania, Uni Rep	0	0	1389.6	0.07	0	0	245.6	8577.2	2371.2	0	0	0	10252101	2599.7	12.8	0	0	355.5	2231.3	0

Table B-23. Case 4: Results for Kenya and Tanzania, Uni Rep, for the AIFI high-range SLR and AIFI socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	239.3	3.1	0.8	335.7	0	0.64	0.0	0	182.5	13.0	0.0	0	70.1	23.7	0.0	106.3	0
Tanzania, Uni Rep	0	254.0	10.4	0.9	2439.7	0	0.66	0.0	0	228.7	0.2	0.0	0	15.3	5.1	0.0	20.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.3	0	0	372.3	1370.8	358.3	0	0	0	10718730	1304.6	120.4	0	0	385.2	799.0	0
Tanzania, Uni Rep	0	0	1389.6	0.1	0	0	395.9	8773.0	2542.6	0	0	0	13825068	2449.3	11.8	0	0	356.0	2081.5	0

Table B-24. Case 4: Results for Kenya and Tanzania, Uni Rep, for the AIFI high-range SLR and AIFI socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	593.2	3.0	0.9	303.7	0	1.00	0.0	0	443.3	30.4	0.0	0	163.1	57.3	0.0	250.9	0
Tanzania, Uni Rep	0	449.9	10.2	1.0	2162.3	0	1.02	0.0	0	401.2	0.3	0.0	0	26.5	9.0	0.0	35.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.5	0	0	495.4	1437.3	323.1	0	0	0	12635503	1181.5	111.4	0	0	330.3	739.8	0
Tanzania, Uni Rep	0	0	1389.6	0.2	0	0	550.0	9001.9	2244.8	0	0.0	0	16283152	2295.2	10.9	0	0	352.1	1932.2	0

Table B-25. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	13.2	0.8	0	0.09	4.3	7	0.01	0.0	9.1	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Tanzania, Uni Rep	15.3	3.2	0	0.11	99.0	4	0.01	0.0	8.7	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	4.1	583.7	0.004	0	0	6.9	1238.9	140.6	0	0	0	1224926	1670.1	143.9	0	0	3	958.8	0
Tanzania, Uni Rep	0	6.6	1389.6	0.002	0	0	8.8	8297.6	1042.1	0	0	0	1730157	2836.4	14.9	0	0	343.5	2478.1	0

Table B-26. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	36.2	4.2	0	-0.04	2.6	33	0.07	0.0	28.8	4.2	0.6	0.0	0.0	3.8	1.2	0.0	5.5	0.0
Tanzania, Uni Rep	35.4	11.2	0	-0.05	58.8	12	0.08	0.0	23.9	11.2	0.0	0.0	0.0	1.5	0.5	0.0	2.0	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	7.4	583.7	-0.005	0	0	41.5	1252.0	246.2	0	0	0	-592293	1635.4	142.0	0	0	548.9	944.6	0
Tanzania, Uni Rep	0	11.5	1389.6	-0.002	0	0	47.4	8357.3	1819.7	0	0	0	-764325	2797.8	14.5	0	0	349.1	2434.2	0

Table B-27. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	42.1	6.3	0	0.04	2.8	46	0.09	0.0	32.1	6.2	0.9	0.0	0.0	5.4	1.7	0.0	7.9	0.0
Tanzania, Uni Rep	43.1	14.8	0	0.05	38.5	16	0.10	0.0	27.7	14.8	0.0	0.0	0.0	2.0	0.6	0.0	2.7	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	10.0	583.7	0.006	0	0	64.3	1255.5	264.5	0.000	0	0	577006	1612.7	140.9	0	0	535.5	936.3	0
Tanzania, Uni Rep	0	15.4	1389.6	0.003	0	0	69.1	8373.7	1953.1	0.001	0	0	710730	2776.1	14.3	0	0	348.9	2412.9	0

Table B-28. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	46.6	18.9	0	0.008	0.7	179	0.17	0.0	32.9	17.7	3.5	0.0	0.0	20.8	6.6	0.0	30.9	0.0
Tanzania, Uni Rep	49.0	48.5	0	0.008	22.3	47	0.18	0.0	28.8	46.4	0.1	0.0	0.0	6.1	2.0	0.0	8.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	13.7	583.7	0.002	0	0	168.0	1271.0	318.6	0.000	0	0	112400.1	1509.0	134.4	0	0	482.5	892.1	0
Tanzania, Uni Rep	0	20.2	1389.6	0.001	0	0	170.9	8444.3	2343.2	0.001	0	0	123387.9	2674.4	13.4	0	0	355.8	2305.1	0

Table B-29. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	49.6	20.2	0	0.007	0.1	659	0.29	0.0	30.6	20.1	12.9	0.0	0.0	73.4	24.4	0	110.8	0.0
Tanzania, Uni Rep	59.1	103.5	0	0.007	11.5	126	0.31	0.0	27.3	103.5	0.2	0.0	0.0	16.0	5.2	0	21.4	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	19.1	583.7	0.003	0	0	309.6	1294.7	340.5	0.000	0	0	96518	1367.4	125.0	0	0	413.2	829.2	0
Tanzania, Uni Rep	0	31.8	1389.6	0.001	0	0	324.0	8546.8	2487.9	0.001	0	0	101984	2521.2	12.4	0	0	358.6	2150.2	0

Table B-30. Case 5: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	49.4	14.5	0	-0.02	0.06	1651	0.42	0.0	25.8	14.5	31.3	0	0.0	170.6	59.1	0	261.0	0.0
Tanzania, Uni Rep	56.1	146.1	0	-0.02	3.13	232	0.44	0.0	23.0	146.1	0.3	0	0.0	27.5	9.2	0	37.0	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	23.6	583.7	-0.008	0	0	440.2	1318.9	299.4	0.000	0	0	-231567	1236.7	115.6	0	0	353.4	767.8	0
Tanzania, Uni Rep	0	33.2	1389.6	-0.004	0	0	479.1	8641.6997	2173.2	0.001	0	0	-315262	2366.1	11.5	0	0	356.0	1998.6	0

Table B-31. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	0.8	0	0.09	4.3	6	0.008	0	0.0	0.7	0.1	0.0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	0.0	3.2	0	0.11	99.0	3	0.010	0.0	0.0	3.2	0.0	0.0	0.0	0.5	0.1	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.004	0	0	6.9	1238.9	140.6	0	0	0	1224926	1670.1	143.9	0	0	567.3	958.8	0
Tanzania, Uni Rep	0	0	1389.6	0.002	0	0	8.8	8297.6	1042.1	0	0	0	1730157	2836.4	14.9	0	0	343.5	2478.1	0

Table B-32. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	4.9	0	0.16	9.9	3	0.07	0	0.0	4.7	0.6	0.0	0.0	3.8	1.2	0	5.5	0.0
Tanzania, Uni Rep	0.0	27.6	106.8	0.19	353.0	1	0.08	0.0	0.0	14.2	0.0	0.0	0.0	1.5	0.5	0	2.0	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.02	0	0	41.5	1252.0	246.2	0	0	0	2217056	1635.4	142.0	0	0	548.9	944.6	0
Tanzania, Uni Rep	0	0	1389.6	0.01	0	0	47.4	8357.3	1819.7	0	0	0	2994194	2797.8	14.5	0	0	349.1	2434.2	0

Table B-33. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	8.8	0	0.22	28.5	2	0.09	0	0.0	8.4	0.9	0	0.0	5.4	1.7	0	7.9	0.0
Tanzania, Uni Rep	0.0	181.0	164.8	0.25	881.3	1	0.10	0.0	0.0	20.8	0.0	0	0.0	2.0	0.6	0	2.7	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.03	0	0	64.3	1255.5	264.5	0	0	0	3015768	1612.7	140.9	0	0	535.5	936.3	0
Tanzania, Uni Rep	0	0	1389.6	0.01	0	0	69.1	8373.7	1953.1	0	0	0	4004344	2776.1	14.3	0	0	348.9	2412.9	0

Table B-34. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	101.3	14.4	0.28	101.6	0	0.17	0	0.0	38.2	3.5	0	0.0	20.8	6.6	0	30.9	0.0
Tanzania, Uni Rep	0.0	88.4	68.2	0.32	1931.7	0	0.18	0.0	0.0	75.4	0.1	0	0.0	6.1	2.0	0	8.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.07	0	0	168.0	1271.0	318.6	0	0	0	3903494	1509.0	134.4	0	0	482.5	892.1	0
Tanzania, Uni Rep	0	0	1389.6	0.03	0	0	170.9	8444.3	2343.2	0	0	0	5132704	2674.4	13.4	0	0	355.8	2305.1	0

Table B-35. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	2785.6	12.4	0.3	302.0	0.2	0.29	0	0.0	168.4	12.9	0	0.0	73.4	24.4	0	110.8	0.0
Tanzania, Uni Rep	0.0	225.9	5.1	0.4	2219.6	0.0	0.31	0.0	0.0	216.8	0.2	0	0.0	16.0	5.2	0	21.4	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	583.7	0.15	0	0	309.6	1294.7	340.5	0	0	0	4588484	1367.4	125.0	0	0	413.2	829.2	0	583.7	0.15
Tanzania, Uni Rep	1389.6	0.07	0	0	324	8546.8	2487.9	0	0	0	6002648	2521.2	12.4	0	0	358.6	2150.2	0	1389.6	0.07

Table B-36. Case 6: Results for Kenya and Tanzania, Uni Rep, for the A1B mid-range SLR and A1B socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	449.7	1.4	0.3	279.6	0	0.42	0	0.0	399.2	31.3	0	0.0	170.6	59.1	0	261.0	0.0
Tanzania, Uni Rep	0.0	395.2	4.6	0.3	2082.8	0	0.44	0.0	0.0	377.3	0.3	0	0.0	27.5	9.2	0	37.0	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.15	0	0	440.2	1318.9	299.4	0	0	0	4096655	1236.7	115.6	0	0	353.4	767.8	0
Tanzania, Uni Rep	0	0	1389.6	0.07	0	0	479.1	8641.7	2173.2	0	0	0	5383728	2366.1	11.5	0	0	356.0	1998.6	0

Table B-37. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	10.2	0.8	0	0.06	4.3	7	0.005	0.0	7.6	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Tanzania, Uni Rep	11.6	3.2	0	0.08	98.8	4	0.006	0.0	7.1	3.2	0.0	0.0	0	0.5	0.2	0.0	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	2.7	583.7	0.003	0	0	6.9	1238.3	140.6	0	0	0	806771	1670.1	143.9	0	0	567.3	958.8	0
Tanzania, Uni Rep	0	4.5	1389.6	0.002	0	0	8.1	8294.77	1041.9	0	0	0	1196858	2837.1	14.9	0	0	342.8	2479.5	0

Table B-38. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	28.4	4.4	0	0.02	2.7	35	0.027	0.0	25.2	4.4	0.6	0.0	0	4.0	1.2	0.0	5.9	0
Tanzania, Uni Rep	25.4	11.4	0	0.02	43.2	13	0.035	0.0	20.0	11.4	0.0	0.0	0	1.6	0.5	0.0	2.1	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	3.3	583.7	0.003	0	0	41.5	1243.5	244.9	0.000	0	0	313869.4	1635.4	142.0	0	0	548.97	944.6	0
Tanzania, Uni Rep	0	5.4	1389.6	0.001	0	0	43.4	8324.7	1814.5	0.001	0	0	379645.9	2801.8	14.5	0	0	345.6944	2441.7	0

Table B-39. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	27.8	6.6	0	-0.01	2.8	50	0.03	0	24.7	6.6	0.93	0	0.0	5.8	1.8	0	8.5	0.0
Tanzania, Uni Rep	24.9	15.5	0	-0.02	35.9	17	0.04	0	19.9	15.5	0.02	0	0.0	2.1	0.7	0	2.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	3.0	583.7	-0.002	0	0	50.2	1244.8	262.7	0	0	0	-175040	1626.8	141.5	0	0	544.3	941.0	0
Tanzania, Uni Rep	0	5.0	1389.6	-0.001	0	0	52.3	8331.5	1945.9	0	0	0	-239281	2792.9	14.4	0	0	346.4	2432.2	0

Table B-40. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	28.0	17.5	17.2	0.004	0.7	181	0.07	0	22.8	17.2	3.5	0	0.0	21.8	6.8	0	32.1	0.0
Tanzania, Uni Rep	26.3	47.9	45.6	0.004	22.2	47	0.08	0	18.3	45.6	0.1	0	0.0	6.3	2.0	0	8.3	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	5.1	583.7	0.001	0	0	91.1	1251.1	314.5	0	0	0	58214.4	1585.9	139.0	0	0	522.9	924.0	0
Tanzania, Uni Rep	0	7.9	1389.6	0.000	0	0	96.3	8366.3	2327.3	0	0	0	57017.6	2749.0	14.0	0	0	351.2	2383.7	0

Table B-41. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	26.8	20.2	20.2	-0.02	0.1	712	0.11	0	20.3	20.2	14.3	0	0.0	86.2	27.3	0	127.8	0.0
Tanzania, Uni Rep	26.4	90.4	90.4	-0.02	5.0	136	0.13	0	16.5	224.4	0.2	0	0.0	18.3	5.8	0	24.3	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	6.5	583.7	-0.007	0	0	155.0	1259.4	332.8	0	0	0	-240667	1521.9	135.1	0	0	489.7	897.2	0
Tanzania, Uni Rep	0	10.0	1389.6	-0.003	0	0	167.7	8412.1	2458.9	0	0	0	-322799	2677.5	13.6	0	0	357.6	2306.3	0

Table B-42. Case 7: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2100, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	16.8	14.0	0	-0.04	0.1	1804	0.14	0	13.1	14.1	35.9	0	0.0	211.0	68.2	0	315.0	0.0
Tanzania, Uni Rep	15.4	144.2	0	-0.04	2.3	253	0.17	0	9.7	144.2	0.3	0	0.0	33.0	10.5	0	43.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	3.7	583.7	-0.02027	0	0	219.6	1266.2	289.4	0	0	0	-544517	1457.3	130.8	0	0	457.1	869.4	0
Tanzania, Uni Rep	0	5.8	1389.6	-0.007	0	0	242.1	8451.7	2136.3	0	0	0	-709318	2603.1	13.2	0	0	361.3	2228.6	0

Table B-43. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	0.8	0	0.1	4.3	7	0.005	0	0.0	0.7	0.125	0.0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	0.0	3.2	0	0.1	98.8	4	0.006	0	0.0	3.2	0.004	0.0	0.0	0.5	0.1	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.003	0	0	6.9	1238.3	140.6	0	0	0	806771	1670.1	143.9	0	0	567.3	958.8	0
Tanzania, Uni Rep	0	0	1389.6	0.002	0	0	8.1	8294.7	1041.9	0	0	0	1196858	2837.1	14.9	0	0	342.8	2479.5	0

Table B-44. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	5.0	0	0.1	9.8	5	0.027	0	0.0	4.9	0.64	0.0	0.0	4.0	1.2	0	5.9	0.0
Tanzania, Uni Rep	0.0	28.6	202.8	0.1	281.8	2	0.035	0	0.0	14.5	0.01	0.0	0.0	1.6	0.5	0	2.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.009	0	0	41.5	1243.5	244.9	0	0	0	985827	1635.4	142.0	0	0	548.9	944.6	0
Tanzania, Uni Rep	0	0	1389.6	0.004	0	0	43.4	8324.7	1814.5	0	0	0	1424493	2801.8	14.5	0	0	345.7	2441.7	0

Table B-45. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	7.4	0	0.1	10.5	5	0.033	0	0.0	7.3	0.93	0.0	0.0	5.8	1.8	0	8.5	0.0
Tanzania, Uni Rep	0.0	20.4	1.2	0.1	302.3	2	0.042	0	0.0	20.3	0.02	0.0	0.0	2.1	0.7	0	2.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.010	0	0	50.2	1244.8	262.7	0	0	0	909370	1626.8	141.5	0	0	544.3	941.0	0
Tanzania, Uni Rep	0	0	1389.6	0.005	0	0	52.3	8331.5	1945.9	0	0	0	1327661	2792.9	14.4	0	0	346.4	2432.2	0

Table B-46. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	31.5	0	0.1	12.6	3	0.07	0	0.0	29.1	3.5	0.0	0.0	21.8	6.8	0	32.1	0.0
Tanzania, Uni Rep	0.0	278.0	52.6	0.1	1043.8	1	0.08	0	0.0	68.2	0.1	0.0	0.0	6.3	2.0	0	8.3	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.03	0	0	91.1	1251.1	314.5	0	0	0	1457522	1585.9	139.0	0	0	522.9	924.0	0
Tanzania, Uni Rep	0	0	1389.6	0.01	0	0	96.3	8366.3	2327.3	0	0	0	2024842	2749.0	14.0	0	0	351.2	2383.7	0

Table B-47. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	147.0	0.2	0.1	49.8	2	0.11	0	0.0	143.2	14.3	0.0	0.0	86.2	27.3	0	127.8	0.0
Tanzania, Uni Rep	0.0	1979.4	352.2	0.1	1867.6	0	0.13	0	0.0	215.5	0.2	0.0	0.0	18.3	5.8	0	24.3	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.04	0	0	155.0	1259.4	332.8	0	0	0	1562134	1521.9	135.1	0	0	489.7	897.2	0
Tanzania, Uni Rep	0	0	1389.6	0.02	0	0	167.7	8412.1	2458.9	0	0	0	2158260	2677.5	13.6	0	0	357.6	2306.3	0

Table B-48. Case 8: Results for Kenya and Tanzania, Uni Rep, for the B1 low-range SLR and B1 socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	829.8	73.7	0.05	82.2	1	0.145	0	0.0	340.2	35.9	0.0	0.0	211.0	68.2	0	315.0	0.0
Tanzania, Uni Rep	0.0	432.7	29.7	0.07	1711.1	0	0.172	0	0.0	367.6	0.3	0.0	0.0	33.0	10.5	0	43.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	0.03	0	0	219.6	1266.2	289.4	0	0	0	768705	1457.3	130.8	0	0	457.1	869.4	0
Tanzania, Uni Rep	0	0	1389.6	0.01	0	0	242.1	8451.7	2136.3	0	0	0	1154977	2603.1	13.2	0	0	361.3	2228.6	0

Table B-49. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	4.6	0.7	0	-0.024	4.3	7	-0.002	0	4.6	0.7	0.13	0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	4.3	3.2	0	-0.016	98.7	4	-0.001	0.0	3.8	3.2	0.00	0	0.0	0.5	0.2	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.001	0	0	0	1231.2	139.6	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	0.000	0	0	0.6	8285.6	1041.2	0	0	0	-249014	2844.6	15.0	0	0	340.2	2489.4	0

Table B-50. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	20.6	4.1	0	-0.024	2.6	33	-0.012	0	20.6	4.1	0.6	0	0.0	3.9	1.2	0.0	5.6	0.0
Tanzania, Uni Rep	15.8	10.7	0	-0.027	43.1	12	-0.004	0.0	15.2	10.7	0.0	0	0.0	1.5	0.5	0.0	2.0	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.003	0	0	0.0	1231.2	242.5	0.0000	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.001	0	0	2.5	8296.7	1810.4	0.0005	0	0	-428437	2842.7	15.0	0	0	342.0	2485.7	0

Table B-51. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	21.0	6.1	0	-0.024	2.8	47	-0.014	0	21.0	6.1	0.9	0	0.0	5.6	1.7	0.0	8.2	0.0
Tanzania, Uni Rep	16.4	14.6	0	-0.027	37.4	16	-0.004	0.0	15.9	14.6	0.0	0	0.0	2.1	0.7	0.0	2.7	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.003	0	0	0.0	1231.2	259.9	0.0000	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.002	0	0	3.0	8298.9	1940.6	0.0005	0	0	-428437	2842.2	15.0	0	0	342.5	2484.8	0

Table B-52. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	18.6	17.2	0	-0.024	0.64	185	-0.023	0	18.6	16.9	3.7	0	0.0	23.2	7.0	0.0	33.9	0.0
Tanzania, Uni Rep	14.1	47.4	0	-0.027	22.20	48	-0.007	0.0	13.6	45.5	0.1	0	0.0	6.6	2.1	0.0	8.7	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.006	0	0	0.0	1231.2	309.9	0.0000	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.003	0	0	5.5	8307.7	2315.8	0.0004	0	0	-428437	2839.7	15.0	0	0	344.6	2480.1	0

Table B-53. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	13.7	18.8	0	-0.024	0.13	695	-0.033	0.0	13.7	18.8	14.5	0.0	0.0	91.1	27.6	0.0	133.2	0.0
Tanzania, Uni Rep	10.0	85.1	0	-0.027	4.80	133	-0.010	0.0	9.5	85.1	0.2	0.0	0.0	18.9	5.9	0.0	25.0	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.011	0	0	0.0	1231.2	326.2	0.0000	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.005	0	0	10.0	8318.8	2439.4	0.0003	0	0	-428437	2835.3	15.0	0	0	348.0	2472.3	0

Table B-54. Case 9: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2100, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	10.7	12.9	0	-0.024	0.06	1783	-0.043	0.0	10.7	12.9	37.3	0.0	0.0	234.9	71.2	0.0	343.4	0.0
Tanzania, Uni Rep	7.5	136.1	0	-0.027	2.27	250	-0.013	0.0	7.0	136.1	0.3	0.0	0.0	35.5	11.0	0.0	46.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.012	0	0	0.0	1231.2	282.4	0.0000	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.006	0	0	15.0	8329.8	2114.1	0.0002	0	0	-428437	2830.2	15.0	0	0	351.3	2464.0	0

Table B-55. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	0.7	0	-0.024	4.3	7	-0.002	0.0	0	0.7	0.1	0.0	0	0.8	0.2	0.0	1.2	0
Tanzania, Uni Rep	0	3.2	0	-0.016	98.7	4	0.000	0.0	0	3.2	0.0	0.0	0	0.5	0.1	0.0	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.001	0	0	0.0	1231.2	139.6	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.000	0	0	0.6	8285.6	1041.2	0	0	0	-249014	2844.6	15.0	0	0	340.2	2489.4	0

Table B-56. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	4.4	0	-0.024	7.4	7	-0.012	0.0	0	4.4	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Tanzania, Uni Rep	0.0	13.5	0	-0.016	171.7	4	-0.004	0.0	0	13.5	0.0	0.0	0	1.5	0.5	0.0	2.0	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.003	0	0	0.0	1231.2	242.7	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.001	0	0	2.5	8296.7	1810.4	0	0	0	-249014	2842.7	15.0	0	0	342.0	2485.7	0

Table B-57. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	6.5	0.0	-0.024	8.0	7	-0.014	0.0	0	6.5	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Tanzania, Uni Rep	0	34.7	384.8	-0.016	234.1	4	-0.004	0.0	0	18.8	0.0	0.0	0	2.1	0.7	0.0	2.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.003	0	0	0.0	1231.2	259.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.001	0	0	3.0	8298.9	1940.6	0	0	0	-249014	2842.2	15.0	0	0	342.5	2484.8	0

Table B-58. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	29.1	0.0	-0.024	9.5	7	-0.023	0.0	0	27.7	3.7	0.0	0	23.2	7.0	0.0	33.9	0
Tanzania, Uni Rep	0.0	87.4	0.5	-0.016	346.0	3	-0.007	0.0	0	62.6	0.1	0.0	0	6.6	2.1	0.0	8.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.006	0	0	0.0	1231.2	309.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.002	0	0	5.5	8307.7	2315.8	0	0	0	-249013	2839.7	15.0	0	0	344.6	2480.1	0

Table B-59. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	104.9	0.0	-0.024	10.0	7	-0.033	0.0	0	105.5	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Tanzania, Uni Rep	0	305.9	49.6	-0.016	422.4	3	-0.010	0.0	0	175.9	0.2	0.0	0	18.9	5.9	0.0	25.0	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.011	0	0	0.0	1231.2	326.2	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.003	0	0	10.0	8318.8	2439.4	0	0	0	-249014	2835.3	15.0	0	0	348.0	2472.3	0

Table B-60. Case 10: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1B socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	240.8	0.0	-0.02	8.7	7	-0.04	0.0	0	240.8	37.3	0	0	234.9	71.2	0.0	343.4	0
Tanzania, Uni Rep	0	317.9	0.6	-0.02	906.6	3	-0.01	0.0	0	315.9	0.3	0	0	35.5	11.0	0.0	46.9	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.012	0	0	0.0	1231.2	282.4	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.003	0	0	15.0	8329.8	2114.1	0	0	0	-249013	2830.2	15.0	0	0	351.3	2464.0	0

Table B-61. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	4.6	0.7	0	-0.024	4.3	7	-0.002	0.0	4.6	0.7	0.13	0.0	0	0.8	0.24	0.0	1.2	0
Tanzania, Uni Rep	4.4	3.2	0	-0.016	98.7	4	-0.001	0.0	3.8	3.2	0.00	0.0	0	0.5	0.15	0.0	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.001	0	0	0.0	1231.2	139.6	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	0.000	0	0	0.6	8285.6	1041.2	0	0	0	-249014	2844.6	15.0	0	0	340.2	2489.4	0

Table B-62. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	20.6	4.1	0	-0.024	2.6	33	-0.012	0.0	20.6	4.1	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Tanzania, Uni Rep	15.8	10.7	0	-0.027	43.1	12	-0.004	0.0	15.2	10.7	0.0	0.0	0	1.5	0.5	0.0	2.0	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.003	0	0	0.0	1231.2	242.5	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.001	0	0	2.5	8296.7	1810.4	0	0	0	-428437	2842.7	15.0	0	0	342.0	2485.7	0

Table B-63. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	21.0	6.1	0.0	-0.024	2.8	47	-0.014	0.0	21.0	6.1	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Tanzania, Uni Rep	16.4	14.6	0.6	-0.027	37.4	16	-0.004	0.0	15.9	14.6	0.0	0.0	0	2.1	0.7	0.0	2.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.004	0	0	0.0	1231.2	259.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.002	0	0	3.0	8298.9	1940.6	0	0	0	-428437	2842.2	15.0	0	0	342.5	2484.8	0

Table B-64. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	18.6	17.2	0.0	-0.024	0.6	185	-0.023	0.0	18.6	16.9	3.7	0.0	0	23.2	7.0	0.0	34.0	0
Tanzania, Uni Rep	14.1	47.4	0.6	-0.027	22.2	48	-0.007	0.0	13.6	45.5	0.1	0.0	0	6.6	2.1	0.0	8.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.006	0	0	0	1231.2	309.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.003	0	0	5.5	8307.7	2315.8	0	0	0	-428437	2839.7	15.0	0	0	344.6	2480.1	0

Table B-65. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	13.7	18.8	0.0	-0.024	0.1	695	-0.033	0.0	13.7	18.8	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Tanzania, Uni Rep	10.0	85.1	0.6	-0.027	4.8	133	-0.010	0.0	9.5	85.1	0.2	0.0	0	18.9	5.9	0.0	25.0	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.011	0	0	0.0	1231.2	326.2	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.004	0	0	10.0	8318.8	2439.4	0	0	0	-428437	2835.3	15.0	0	0	348.0	2472.3	0

Table B-66. Case 11: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2200, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	10.7	12.9	0.0	-0.024	0.1	1783	-0.043	0.0	10.7	12.9	37.3	0.0	0	234.9	71.2	0.0	343.4	0
Tanzania, Uni Rep	7.5	136.1	0.6	-0.027	2.3	250	-0.013	0.0	7.0	136.1	0.3	0.0	0	35.5	11.0	0.0	46.9	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.012	0	0	0.0	1231.2	282.4	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.005	0	0	15.0	8329.8	2114.1	0	0	0	-428437	2830.2	15	0	0	351.3	2464.0	0

Table B-67. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	0.7	0	-0.024	4.3	7	-0.002	0.0	0	0.7	0.13	0.0	0	0.8	0.2	0.00	1.2	0
Tanzania, Uni Rep	0	3.2	0	-0.016	98.7	4	-0.001	0.0	0	3.2	0.00	0.0	0	0.5	0.2	0.00	0.6	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.001	0	0	0.0	1231.2	139.6	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	0.000	0	0	0.6	8285.6	1041.2	0	0	0	-249014	2844.6	15.0	0	0	340.2	2489.4	0

Table B-68. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	4.4	0	-0.02	7.5	7	-0.012	0.0	0	4.4	0.6	0.0	0	3.9	1.2	0.0	5.6	0
Tanzania, Uni Rep	0	13.5	0	-0.02	171.7	4	-0.004	0.0	0	13.5	0.0	0.0	0	1.5	0.5	0.0	2.0	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.003	0	0	0.0	1231.2	242.5	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.001	0	0	2.5	8296.7	1810.4	0	0	0	-249014	2842.7	15.0	0	0	342.0	2485.7	0

Table B-69. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	6.5	0.0	-0.02	8.0	7	-0.014	0.0	0	6.5	0.9	0.0	0	5.6	1.7	0.0	8.2	0
Tanzania, Uni Rep	0	34.7	384.8	-0.02	234.1	4	-0.004	0.0	0	18.8	0.0	0.0	0	2.1	0.7	0.0	2.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.004	0	0	0.0	1231.2	259.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.001	0	0	3.0	8298.9	1940.6	0	0	0	-249014	2842.2	15.0	0	0	342.5	2484.8	0

Table B-70. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	29.1	0.0	-0.02	9.5	7	-0.023	0.0	0	27.7	3.7	0.0	0	23.2	7.0	0.0	33.9	0
Tanzania, Uni Rep	0	87.4	0.5	-0.02	346.0	4	-0.007	0.0	0	62.6	0.1	0.0	0	6.6	2.1	0.0	8.7	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.006	0	0	0.0	1231.2	309.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.002	0	0	5.5	8307.7	2315.8	0	0	0	-249013	2839.7	15.0	0	0	344.6	2480.1	0

Table B-71. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	104.9	0.0	-0.02	10.0	7	-0.033	0.0	0	105.0	14.5	0.0	0	91.1	27.6	0.0	133.2	0
Tanzania, Uni Rep	0	305.9	49.6	-0.02	422.4	3	-0.010	0.0	0	175.9	0.2	0.0	0	18.9	5.9	0.0	25.0	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.01085	0	0	0.0	1231.2	326.2	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.00229	0	0	10.0	8318.8	2439.4	0	0	0	-249014	2835.3	15.0	0	0	348.0	2472.3	0

Table B-72. Case 12: Results for Kenya and Tanzania, Uni Rep, for No SLR and A1FI socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0	240.8	0.0	-0.02	8.7	7	-0.043	0.0	0	240.8	37.3	0.0	0	234.9	71.2	0.0	343.4	0
Tanzania, Uni Rep	0	317.9	0.6	-0.02	906.6	3	-0.013	0.0	0	315.9	0.3	0.0	0	35.5	11.0	0.0	46.9	0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.012	0	0	0.0	1231.2	282.4	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.002	0	0	15.0	8329.8	2114.1	0	0	0	-249013	2830.2	15.0	0	0	351.3	2464.0	0

Table B-73. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2000, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	4.6	0.7	0	-0.02	4.3	7	-0.002	0	4.6	0.7	0.1	0.0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	4.4	3.2	0	-0.02	98.7	4	-0.001	0	3.8	3.2	0.0	0.0	0.0	0.5	0.1	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.001	0	0	0.0	1231.2	139.6	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.000	0	0	0.6	8285.6	1041.2	0	0	0	-249014	2844.6	15.0	0	0	340.2	2489.4	0

Table B-74. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2025, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	21.5	4.3	0	-0.02	2.6	35	-0.012	0	21.5	4.4	0.6	0.0	0.0	4.1	1.2	0	6.0	0.0
Tanzania, Uni Rep	16.6	11.2	0	-0.03	39.0	13	-0.004	0	16.1	11.2	0.0	0.0	0.0	1.6	0.5	0	2.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.003	0	0	0.0	1231.2	242.5	0	0	0	-335009	1677.0	144.768	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.001	0	0	2.5	8296.7	1810.4	0	0	0	-428437	2842.7	15.0	0	0	342.0	2485.7	0

Table B-75. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2030, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	21.4	6.5	0.0	-0.02	2.8	50	-0.014	0	21.4	6.5	0.95	0.0	0.0	6.0	1.8	0	8.7	0.0
Tanzania, Uni Rep	16.8	15.4	0.6	-0.03	34.7	17	-0.004	0	16.3	15.4	0.02	0.0	0.0	2.2	0.7	0	2.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.004	0	0	0.0	1231.2	259.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.002	0	0	3.0	8298.9	1940.6	0	0	0	-428437	2842.0	15.0	0	0	342.5	2484.8	0

Table B-76. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2050, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	17.5	17.2	0.0	-0.02	0.6	184	-0.023	0	17.5	16.8	3.7	0.0	0.0	23.0	7.0	0	33.7	0.0
Tanzania, Uni Rep	13.1	47.5	0.6	-0.03	22.2	48	-0.007	0	12.6	45.2	0.1	0.0	0.0	6.5	2.1	0	8.7	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.006	0	0	0.0	1231.2	309.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.003	0	0	5.5	8307.7	2315.8	0	0	0	-428437	2839.7	15.0	0	0	344.6	2480.1	0

Table B-77. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2075, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	14.6	19.6	0.0	-0.02	0.1	727	-0.033	0	14.6	19.6	15.1	0.0	0.0	95.4	28.9	0	139.4	0.0
Tanzania, Uni Rep	10.9	88.8	0.6	-0.03	4.8	139	-0.010	0	10.3	88.8	0.2	0.0	0.0	19.8	6.2	0	26.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.010	0	0	0.0	1231.2	326.2	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.2	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.004	0	0	10.0	8318.8	2439.4	0	0	0	-428437	2835.3	15.0	0	0	348.0	2472.3	0

Table B-78. Case 13: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2100, with adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	10.2	0.0	0.0	-0.02	0.0	1854	-0.043	0	10.2	0.0	38.8	0.0	0.0	244.5	74.2	0	357.5	0.0
Tanzania, Uni Rep	7.1	141.3	0.6	-0.03	2.2	260	-0.013	0	6.6	141.3	0.3	0.0	0.0	37.0	11.4	0	48.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0.0	583.7	-0.013	0	0	0.0	1231.2	282.4	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0.5	1389.6	-0.004	0	0	15.0	8329.8	2114.1	0	0	0	-428437	2830.2	15.0	0	0	351.3	2464.0	0

Table B-79. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2000, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	0.7	0	-0.02	4.3	7	-0.002	0	0.0	0.7	0.1	0.0	0.0	0.8	0.2	0	1.2	0.0
Tanzania, Uni Rep	0.0	3.2	0	-0.02	98.7	4	-0.001	0	0.0	3.2	0.0	0.0	0.0	0.5	0.1	0	0.6	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
	0	0	583.7	-0.001	0	0.0	1231.2	139.6	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0	0
	0	0	1389.6	-0.000	0	0.6	8285.6	1041.2	0	0	0	-249014	2844.6	15.0	0	0	340.2	2489.4	0	0

Table B-80. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2025, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	4.6	0	-0.02	7.4	7	-0.012	0	0.0	4.6	0.65	0.0	0.0	4.1	1.2	0	6.0	0.0
Tanzania, Uni Rep	0.0	14.3	0	-0.02	171.7	4	-0.004	0	0.0	14.3	0.02	0.0	0.0	1.6	0.5	0	2.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.003	0	0	0.0	1231.2	242.5	0	0	0	-335009	1677.0	144.8	0	0	569.0	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.001	0	0	2.5	8296.7	1810.4	0	0	0	-249014	2842.7	15.0	0	0	342.0	2485.7	0

Table B-81. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2030, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	6.9	0.0	-0.02	8.0	7	-0.014	0	0.0	6.9	0.95	0.0	0.0	6.0	1.8	0	8.7	0.0
Tanzania, Uni Rep	0.0	37.0	384.8	-0.02	234.1	4	-0.004	0	0.0	20.0	0.02	0.0	0.0	2.2	0.7	0	2.9	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.004	0	0	0.0	1231.2	259.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.001	0	0	3.0	8298.9	1940.6	0	0	0	-249014	2842.2	15.0	0	0	342.5	2484.8	0

Table B-82. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2050, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	29.1	0.0	-0.02	9.5	7	-0.023	0	0.0	27.5	3.7	0.0	0.0	23.0	7.0	0	33.7	0.0
Tanzania, Uni Rep	0.0	87.7	0.5	-0.02	346.0	3	-0.007	0	0.0	62.2	0.1	0.0	0.0	6.5	2.1	0	8.7	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.006	0	0	0.0	1231.2	309.9	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.002	0	0	5.5	8307.7	2315.8	0	0	0	-249013	2839.7	15.0	0	0	344.6	2480.1	0

Table B-83. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2075, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	109.6	0.0	-0.02	10.0	7	-0.033	0	0.0	109.6	15.1	0.0	0.0	95.4	28.9	0	139.4	0.0
Tanzania, Uni Rep	0.0	319.5	49.6	-0.01	422.4	3	-0.010	0	0.0	183.8	0.2	0.0	0.0	19.8	6.2	0	26.1	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.010	0	0	0.0	1231.2	326.2	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.002	0	0	10.0	8318.8	2439.4	0	0	0	-249014	2835.3	15.0	0	0	348.0	2472.3	0

Table B-84. Case 14: Results for Kenya and Tanzania, Uni Rep, for No SLR and B1 socio-economic scenario for 2100, without adaptation

Parameters																		
Locations	Total costs of adaptation (millions US\$/yr)	Total costs of residual damage (millions US\$/yr)	Land loss (submergence) (km ² /yr)	Net land loss (erosion) (km ² /yr)	People actually flooded (thousands/yr)	Protection level (* - averaged over coastal length) (year)	Relative sea-level change (since 1995) (** - average) (m)	Salinisation costs (millions US\$/yr)	Sea dike costs (millions US\$/yr)	Sea flood costs (millions US\$/yr)	Monetary value-coastal forest (millions US\$)	Monetary value-freshwater marsh (millions US\$)	Monetary value-high unvegetated wetland (millions US\$)	Monetary value-low unvegetated wetland (millions US\$)	Monetary value-mangrove (millions US\$)	Monetary value-saltmarsh (millions US\$)	Total wetland monetary value (millions US\$)	Wetland nourishment costs (millions US\$/yr)
Kenya	0.0	250.3	0.0	-0.02	8.7	7	-0.043	0	0.0	250.3	38.8	0.0	0.0	244.5	74.2	0	357.5	0.0
Tanzania, Uni Rep	0.0	330.4	0.6	-0.02	906.6	3	-0.013	0	0.0	328.3	0.3	0.0	0.0	37.0	11.4	0	48.8	0.0

Continued

Parameters																				
Location	Basin nourishment costs (millions US\$/yr)	Beach nourishment costs (millions US\$/yr)	Coastal length (km)	Land loss cost (millions US\$/yr)	Loss of flats (m ² /yr)	Basin demand for nourishment (m ³ /yr)	Open water area (km ²)	Potential flood plain (km ²)	People potential flooded (thousands)	River dike cost (millions US\$/yr)	River flood cost (millions US\$/yr)	Sand loss indirect (m ³ /yr)	Sand loss total (m ³ /yr)	Total wetland area (km ²)	Coastal forest area (km ²)	Fresh water marsh area (km ²)	High unvegetated wetlands area (km ²)	Low unvegetated wetlands area (km ²)	Mangrove area (km ²)	Saltmarsh area (km ²)
Kenya	0	0	583.7	-0.013	0	0	0.0	1231.2	282.4	0	0	0	-335009	1677.0	144.8	0	0	569.1	963.1	0
Tanzania, Uni Rep	0	0	1389.6	-0.003	0	0	15.0	8329.8	2114.1	0	0	0	-249013	2830.2	15.0	0	0	351.3	2464.0	0