

IMPACTS OF SLOW ONSET CHANGES TO CLIMATE ON SMALL BUSINESSES IN NEW SOUTH WALES

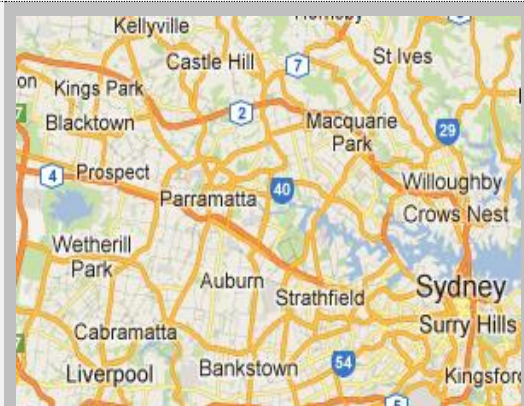
KEY MESSAGES

- Businesses can be indirectly affected by climate change in many ways such as disruptions to supply chains, changing consumer demand or increased prices.
- Small businesses often do not see the need to plan further than 12 months ahead.
- SMEs benefit from targeted training to deal with sustainability issues and business security.
- Water and energy efficiency measures can build some resilience to extreme weather

SETTING THE CONTEXT: REGION AND SECTORS

Parramatta Region

Parramatta, sometimes described as the 'second CBD' of Sydney, lies on the Parramatta River in Central Western Sydney. Parramatta acts as an economic centre for the Greater Western Sydney region. Ninety-three percent of businesses in the Parramatta region employ less than 5 staff, across a diverse range of sectors.



Parramatta region
Central Western Sydney

Five businesses were interviewed for this case study, three small businesses (<20 staff) and two medium sized businesses (20 – 200 staff).

In addition to these businesses, a representative from the Nursery and Garden Industry of NSW & ACT (NGINA) was also interviewed. The NGINA represents production nurseries (plant producers), allied traders (suppliers of potting mix, fertilisers, pots, labels etc.) and garden centre businesses.

Table 1: case study SMEs by sector, staff and years of operation

Business Name	Industry or sector	Staff	Years established
Scuba Warehouse / Geo Divers	Retail and Tourism	10	25
Bergs Hobbies	Retail	5	53
Dale Glass Industries	Manufacturing	16	31
Coleman Greig Lawyers	Law	85	75+
Sydney Markets	Wholesale and Retail Food	70	37 (at Flemington)

CLIMATE CHANGE AND EXTREME WEATHER EVENTS

In comparison to other regions that have experienced catastrophic events such as bushfires and cyclones, the effects of climate change and extreme weather events have been relatively mild in the Western Sydney region. The region suffers from occasional flooding of the Parramatta River and summer heat waves. The frequency and duration of heat waves is projected to increase in coming decades. The Parramatta region currently averages 13 days above 40 degrees Celsius; this is projected to increase to 21 days by 2030 and 49 days by 2070 (Parramatta City Council, 2010).

The Parramatta region currently averages 13 days above 40 degrees Celsius; this is projected to increase to 21 days by 2030 and 49 days by 2070 (Parramatta City Council, 2010).

IMPACTS OF EXTREME WEATHER ON SMALL BUSINESS

None of the individual businesses interviewed in this study had been seriously impacted by the direct impacts of extreme weather; however, the NGINA reported that retail nurseries were occasionally affected by hailstorms. The hail was reported to cause severe damage to plant stock stored outside and also had an indirect impact through increased insurance premiums for businesses affected on multiple occasions.

Some SMEs in Parramatta have experienced indirect impacts of extreme weather through supply chains that spread into rural and regional areas that are vulnerable to extreme weather events.



For example, cyclone Yasi forced a number of banana wholesalers at Sydney Markets to shut down for many months, and the Market operators made the decision to defer their rents until the banana trade recovered. Similarly, flood conditions cause fruit and vegetable stock to become waterlogged and rot much more rapidly. The flooding that affected Queensland during late 2010 and early 2011 led to a 25% increase in waste at Sydney Markets.

Scuba Warehouse, a business that organizes diving trips, reported that diving conditions could be affected by bushfires. Ash from fires can be washed into the river system and reduces visibility for diving groups when it reaches the ocean.

IMPACTS OF SLOW ONSET CLIMATE CHANGE

Most of the businesses interviewed did not feel that gradual climate changes, such as rising temperatures or increased rainfall, would have a detrimental effect on their business. Some of these businesses have already had to develop adaptive strategies to deal with seasonal climate variability. For example Dale Glass Industries have developed innovative modifications to their manufacturing process to deal with fluctuations in the ambient temperature and humidity. Whilst these innovations were designed to deal with seasonal variation they will also ease the process of adapting to future climate variability.

Slow onset climate change is likely to affect nurseries and garden centres as their plant stock is susceptible to hot weather. Larger retailers reduce their risk by only stocking plants on consignment but the smaller retailers are not in a financially strong enough position to negotiate such arrangements with suppliers. Water restrictions limit the ability of retailers to provide cooling water in summer, and to overcome this some retailers have invested in rainwater tanks; however, not all retailers have been able to afford these investments.

Rising temperatures also increase the risk to plants posed by disease and pest outbreaks.

SUSTAINABILITY AND CLIMATE ADAPTION: ENSURING CONTINUITY

Extreme weather events and changing climatic conditions can result in a greater focus on environmental issues, for example water issues and water efficiency becomes a more prominent concern in drought periods.

UNDERSTANDING THE ADAPTIVE CAPACITY OF SMES TO CLIMATE CHANGE AND VARIABILITY

CASE STUDY: IMPACTS OF SLOW ONSET CHANGES TO CLIMATE ON SMALL BUSINESSES IN NEW SOUTH WALES



This increased focus on environmental issues can affect SMEs in a number of ways; it may alter the demand for their products; it may provide new business opportunities and it may affect their ability to attract staff.

The impact of changing demand for products can be clearly seen in the nursery and garden store industry. During drought periods there is increased demand for raintanks and water efficient technologies. Additionally, the types of plants sold have also shifted:

“...the general perception of consumers is that natives are more water efficient, so the shift away from exotic plants in favour of natives, certainly saw...an increase in sales”.

INCREASING BUSINESS RESILIENCE THROUGH EFFICIENCY INITIATIVES

Many of the SMEs interviewed are undertaking programs to improve their water, energy or waste efficiency. These programs are not driven by a conscious decision to adapt to changing climatic conditions, but allow these businesses to be better prepared in dealing with future climate challenges. These programs are also increasing resilience to both direct impacts of extreme weather and indirect impacts of slow onset climate change.

Efficiency measures increase business resilience to extreme weather by limiting the amount of water or energy the business requires in an extreme event. This not only has significant financial benefits at these times but also provides some insurance against the possibility of breakdowns in the energy or water networks.

Many businesses in the nursery industry have invested in rainwater tanks and water efficiency measures to provide a backup system for plant cooling in heat wave conditions.

Additionally, businesses that have invested in efficiency measures will have greater resilience to deal with other business stresses such as rising costs of water/energy/waste services. The savings from efficiency measures can be substantial; Sydney Markets estimates that it has already saved \$12,000 through the implementation of rainwater tanks and water efficiency measures.

UNDERSTANDING THE ADAPTIVE CAPACITY OF SMES TO CLIMATE CHANGE AND VARIABILITY



Not all the businesses interviewed were able to undertake the types of sustainability measures that they felt would be useful.

Some nursery businesses struggle to raise enough capital to invest in water efficiency, or hail protection, and face increased vulnerability as a result. Other businesses share large premises, and face significant challenges to introducing measure that can improve their resilience. For example, Bergs Hobbies is a small retailer that operates from a shared building that is facing energy capacity constraints; however the influence of a single storeowner on the energy efficiency of the whole building is limited.

CLIMATE RISKS: CAPACITY NEEDS OF SMALL BUSINESS SECTOR

The Sydney Markets, which had developed a flood response plan, were the only business to have engaged in specific planning for risk from extreme weather and climate change.

Business planning in general was relatively minimal, especially in the smaller businesses.

Dale Glass Industries saw this as a positive as the lack of commitment to any particular plan enabled the business to be flexible and seize options as they appeared.

Many of the interviewees felt that additional assistance from government would enable greater ability to engage with climate issues.

Training programs that provided practical skills and advice were particularly valued by small businesses. An example of a successful program is Sustainability Advantage, a program run by the NSW Government and implemented in partnership with local councils, both Coleman Greig Lawyers and Sydney Markets had been involved in this program.

The Sustainability Advantage program provides businesses with an initial framework for implementing sustainability measures, and ongoing advice and support. Both businesses reported positive outcomes from their experience with the Sustainability Advantage program.



ACKNOWLEDGEMENTS:

Researchers would like to thank Coleman Greig Lawyers, Sydney Markets, Bergs Hobbies, Scuba Warehouse, Dale Glass Industries and the Nursery and Garden Industry of NSW & ACT for their time in contributing to this case study.

This work was carried out with financial support from the Australian Government (Department of Climate Change and Energy Efficiency) and the National Climate Change Adaptation Research Facility. The views expressed herein are not necessarily the views of the Commonwealth or NCCARF, and neither the Commonwealth nor NCCARF accept responsibility for information or advice contained herein. The role of NCCARF is to lead the research community in a national interdisciplinary effort to generate the information needed by decision-makers in government, business and in vulnerable sectors and communities to manage the risk of climate change impacts.

© UTS (Institute for Sustainable Futures) 2013

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the copyright holder.

SMALL BUSINESS AND CYCLONES IN NORTH EAST QUEENSLAND

KEY MESSAGES

- Previous experiences and learning outcomes need to be widely communicated.
- Local skills and services available for support need to be recognised.
- Longer-term psychological stress should be acknowledged and supported.
- Local disaster recovery strategies that include economic considerations are important.
- Insurance documentation and claiming processes should be simplified to encourage the uptake of insurance.

SETTING THE CONTEXT: REGION AND SECTORS

Cassowary Region

The Cassowary region, in Far North Queensland (Qld), was affected by both cyclone Larry in 2006 and cyclone Yasi in 2011. This case study draws on the experiences of five Small to Medium Enterprises (SMEs) in dealing with the impacts of these extreme weather events. It illustrates the capacity and support needs of the SME sector in the region to adapt and become more resilient to climate extremes and variability.

Far North Queensland has been identified as one of the key 'hot spots' in Australia where the impacts of climate change and extreme weather events are likely to be significant. Small businesses account for over 90% of the total number of businesses operating in the Cassowary region, with tourism and primary industries being the key economic drivers in the region.



Area: 4,700Km²
Population: 30,992

Main townships:
Innisfail, Tully, Mission Beach,
Cardwell
Total no. businesses: 3,500

Table 1: case study SMEs by sector, staff and years of operation

Business Name	Industry or sector	Staff	Years established
Paronella Park	Tourism	38	19
Coral Sea Kayaking	Tourism	5	14
Castaways Resort	Tourism	30	26
The Tinnie Shack	Marine repairing and retail	7	12
Mission Beach Interiors	Manufacturing of soft furnishing and interior design consultation	1 full-time, 5 part-time	23

THE IMPACTS

The impacts that extreme weather events, such as cyclone Larry and cyclone Yasi, can cause to businesses include not only damage to the business infrastructure, but also loss of income from the inability to carry-on day-to-day operations. Frequent road closures and power cuts experienced during these events curtail employee access the business location, access to food, fuel and business supplies, as well as communication via phone or internet. Impeded access to natural parks and heritage reserves, as well as damage to biodiversity and natural beauty, can also affect tourism businesses that rely on these assets.

Alternatively, some sectors may experience a spike in business, as was the case for Mission Beach Interiors, a manufacturer of soft furnishing and interior design consultation. This SME saw the demand for its services increase after the cyclones as a result of infrastructure damage. The impact on the business was an overload of work, which was challenging to manage.

Factors that contributed to loss of business income included delays in the process of public infrastructure repair, the time needed for biodiversity to restore back to its previous state, the process of insurance claims, and decreasing demand for services or products offered.

The table below provides an estimate of the negative financial impact of the cyclones for some of the case study SMEs.

Table 2: case study SMEs and financial impact of recent cyclonic events

SME	Event	Financial impact
Paronella Park	Larry	Damages and loss of income worth approx. \$500,000-600,000 in the first year
Coral Sea Kayaking	Larry	Reduced income by approx. 80-85% in the first year
	Yasi	Reduced income by approx. 50% in the first year
The Tinnie Shack	Larry	Loss of income worth approx. \$200,000 in the first year
	Yasi	Loss of income worth approx. \$350,000 in the first year

The costs listed here do not reflect the psychological effects of post-traumatic stress experienced by business owners and staff. The impact of these effects on the business operation should not be underestimated, and the following statements provide a sense of the psychological impact of these events.



“I suppose the emotional side of that has to come into play. Because overall, that is the most important thing. I mean, you can rebuild a shop, you can put new stock back in but on the emotional level (...) that is something that I haven't dealt with. I haven't had time or space or maybe the tools to be able to get that out because I do know that there's a lot of that emotional scarring (...)”

“The difficulty of the emotional cost, the psychological effect of post-traumatic stress is something that is misunderstood and underestimated. The resources on dealing with the post-traumatic side of the event are (...) almost abandoned by the time they start to become a problem.”

For some businesses the financial impact may also relate to the costs of providing emergency response assistance to staff and the broader community; inherent risks are also attached to taking on this responsibility.

“Being a large business in a small town had an inherent responsibility for people that are ill prepared (...) We ended up with 50 people to look after through the cyclone – provided shelter in the basement of one of the buildings, an underground car park (...) It meant we needed to be very organised in the way that the things were run, because with a big group of people, great potential risks and you have an inherent responsibility.”

MEASURES TO SUPPORT SMES: EXTERNAL ORGANISATIONS

Immediately after cyclone Yasi, the Mission Beach Tourist Association, a peak body organisation, started producing and distributing twice daily, information leaflets on resources available within the community that could be shared.

The Commonwealth Government also provided post-disaster financial assistance for SMEs affected by the cyclones. The table below shows what type of support was accessed by the case study SMEs. As it shows, not all SMEs were able to access the government funding available. In addition, some of the SMEs were not able to claim the full allocation of these support programs. For example, Coral Sea Kayaking and Paronella Park were only able to claim a very limited amount of their cleaning and restoration efforts after cyclone Yasi.

Table 3: measures of support accessed by case study SMEs

Cyclone Event	Support available for SMEs	Case study SMEs
Larry, 2006	Grants of up to \$25,000 for expenditures on business advice services (e.g. accounting, marketing)	Coral Sea Kayaking The Tinnie Shack
	Grant of \$25,000 for cleaning activities (given to all ABN holders)	Paronella Park
	Queensland Rural Adjustment Authority low interest loan	Paronella Park
	Wage assistance for up to 13 weeks	Paronella Park
Yasi, 2011	Grants of up to \$25,000 for SMEs for expenditures of costs associated with cleaning and restoration activities	Coral Sea Kayaking Paronella Park
	Queensland Rural Adjustment Authority low interest loan	-
	Wage assistance for up to 26 weeks	Paronella Park The Tinnie Shack Mission Beach Interiors

MEASURES ADOPTED BY SMALL BUSINESSES

The experience of cyclone Larry, in 2006, prompted some of the case study SMEs to adopt strategies to better prepare for similar events in the future. These strategies assisted the SMEs to reduce the impacts of cyclone Yasi, five years later. Such was the situation for Paronella Park. During cyclone Larry, Paronella Park did not know how the Government would respond and did not have the confidence to react quickly. During cyclone Yasi, this SME had a good sense of the likely government response and decided to clean up immediately. They were able to move much faster, since they had the necessary equipment whilst their staff had been trained appropriately. The following statement illustrates how the business was able to keep their losses to a minimum during the second cyclone event:

“In Larry we told everyone we were closed- that had negative impact for months. In Yasi, didn’t use the word closed, instead said we’re fine, we’re cleaning up and kept running business.”

Strategies adopted by the different case study SMEs after the cyclones, included business management strategies to address business cash flow issues during the recovery phase, and preparedness measures, ranging from technological and infrastructure solutions to policy and procedural changes. Table 4 provides an outline of these changes.

Table 4: strategies adopted by case study SMEs

Type of Strategy	Measures
Recovery business management strategies	<ul style="list-style-type: none"> Continuing business operation despite infrastructure and natural heritage damage by marketing recovery process of natural heritage from disasters as tourist attraction (e.g. offering visitors a 2 year pass so that visitors could come back to see the progress in the recovery) Included a caravan park in the ticket price (to attract caravan market which was low) Informing supplier of delays in payment due to cyclone impacts to better manage cash-flow Developing a new business plan and marketing strategy with assistance from a company (service paid by government grant in the value of \$25,000 after cyclone Larry)
Preparedness policy and procedural changes	<ul style="list-style-type: none"> Developing procedures for different stages of the disaster (pre-disaster, when disaster is announced, emergency stage (when disaster is imminent), and recovery) Staff training on disaster procedures developed as well as what to expect and how to behave in the event of a disaster Staff training on the operation of machinery and heavy equipment used during clean-up and recovery stage Implementing new policy of charging for repair quotations and demanding the payment before executing quotation service Becoming more familiar with insurance cover and sending updates of stocks and photos of insured assets on a regular basis to insurer Changing to a bank that offered more flexibility in timing of loan repayment
Preparedness technological and infrastructure-based solutions	<ul style="list-style-type: none"> Cyclone proofing of buildings and infrastructure Upgrading, supplementing and/or diversifying power supply Investing in machinery and heavy equipment (e.g. chain saws)



Most of the case study SMEs highlighted local community relationships and networks as important elements in their recovery.

For example, in the case of Paronella Park, trust relationships developed throughout time with their suppliers and bank were particularly important in negotiating delays in payment.

KEY CHALLENGES

Some challenges to overcoming the impacts of the cyclones experienced by the case study SMEs included:

- Lack of information about the types of financial recovery support available for SMEs or how and when this would be delivered;
- Difficulty in accessing government funding due to complexity of the application process and eligibility requirements and/or not being eligible to apply;
- Difficulty in accessing government funding due to lack of time to search for financial recovery support and apply for this during the recovery phase;
- Lack of confidence to react and adopt a proactive approach to recovery due to emotional stress and/or uncertainty on ability to repay a loan to fix damages;
- Uncertainty on future viability of business due to high-dependence on the region's natural assets which were significantly damaged;
- Lack of experience with the process of insurance claims and limited understanding of the policy cover and clauses;
- Poor clarity of conditions of low interest bank loans and rise of interest rates in the long-term;
- Lack of time, resources and tools to address psychological effect of post-traumatic stress from experiencing the cyclones.

Other challenges related to the organisations on which businesses and the broader community relied during the emergency response and recovery phases. These included:

- Uncoordinated delivery of emergency response and recovery support by government and non-government organisations, and consequent redundancy of efforts and lack of clarity on the roles and responsibilities of each organisation;
- Delays in accessing volunteering help available due to Council being under resourced to facilitate and direct volunteering help;
- Complexity and lengthiness of insurance claims assessments.



BUSINESS CONTINUITY UNDER FUTURE CLIMATE RISKS

This case study specifically highlights the importance of the following:

- Experiential learning is important and businesses that have not experienced extreme weather events need to be informed on the processes of responding and recovering from impacts.
- Businesses need support in understanding insurance in order to avoid underinsurance surprises. More transparency is needed from insurance companies and banks. Insurance documents to be written in laypersons' language.
- Local support networks, and trust relationships, developed over time with stakeholders play an important part in businesses recovery.
- More clarity for businesses and community in general as to who is who, and who does what in regard to CCA and disaster recovery assistance.
- Better coordination between local and external organisations providing recovery assistance is needed.
- Recognition and better co-ordinated use of local groups and skills in recovery response is needed.
- More recognition of psychological impacts of cyclones and the importance of providing mental health support in the longer-term when impacts come to the surface is needed.

ACKNOWLEDGEMENTS:

Researchers would like to thank the business owners of the case study SMEs and Shanal Basnayake from the Cassowary Coast Regional Council for their time in contributing to this case study.

This work was carried out with financial support from the Australian Government (Department of Climate Change and Energy Efficiency) and the National Climate Change Adaptation Research Facility. The views expressed herein are not necessarily the views of the Commonwealth or NCCARF, and neither the Commonwealth nor NCCARF accept responsibility for information or advice contained herein. The role of NCCARF is to lead the research community in a national interdisciplinary effort to generate the information needed by decision-makers in government, business and in vulnerable sectors and communities to manage the risk of climate change impacts.

© UTS (Institute for Sustainable Futures) 2013

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the copyright holder.

SMALL BUSINESSES AND DROUGHT IN SOUTH WEST WESTERN AUSTRALIA

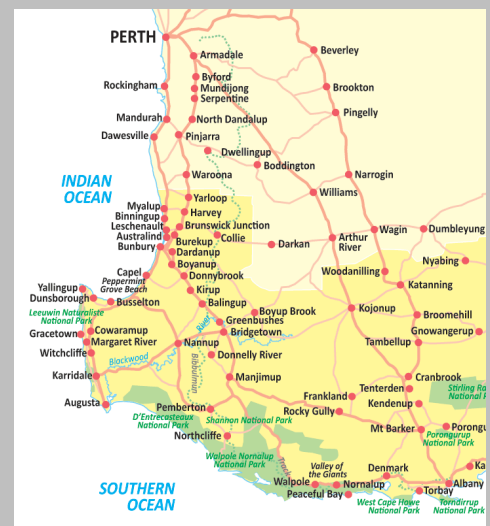
KEY MESSAGES

- Business advice helped reduce the impacts of subsequent drought.
- Funding for strategic advice is best sought prior to a crisis.
- Diversification can increase business resilience to shocks.
- Local support networks contribute to business resilience.
- Streamlined bureaucracy is key to ensuring participation by all those affected.

SETTING THE CONTEXT: REGION AND SECTORS

South West Region

In 2010, and 2011, the southwest region of Western Australia (WA) was affected by drought, with much of the region experiencing its driest weather on record. In periods of drought, farming tends to be the first sector affected since it is directly dependent on weather. However, as farming is one of the key industries and economic drivers in the region, businesses that depend on farmers for much of their clientele, also suffer economically. A combination of farmers reducing their spending, and a lower influx of seasonal farm workers, reduces local business income.



South West Region
Western Australia

This leads to reductions in staff, who are then no longer able to spend in the local area, further reducing economic activity in the area. In response to these two droughts, the State Government provided financial assistance to non-farming small businesses. This assistance was provided under the Dry Season Assistance Scheme in 2010, and the Small Business Grant in 2011, and was administered by the WA Small Business Development Corporation (SBDC). This case study draws on the experience of the SBDC in delivering these programs as well as selection of four businesses who received funding under the 2011 Small Business Grant Scheme.

Table 1: case study SMEs by sector, staff and years of operation

Business Name	Industry or sector	Staff	Years established
Corrigin pharmacy (A) (note: has 2 other)	Retail pharmacy	6 full-time	13
Hyden IGA (B)	Retail	2 full-time, 2 Part-time, 3 casual	15
Wagin Spreading Service (C)	Spreading fertilisers and Ag-chemicals retailer	1 full-time, 2 casual	22
H Rushton & Co (D)	Retail (agricultural products and machinery)	8 full-time	66

KEY CHALLENGES

The first round of funding delivered by the SBDC under the 2010 Dry Season Assistance Scheme, was a crisis management response aimed at alleviating SMEs shortage of funds to cover some of their normal business expenses. A different approach was adopted in the 2011 Small Business Grant Scheme.

This scheme had a greater emphasis in helping businesses better prepare for future dry season challenges and build resiliency over the long-term, by encouraging strategic thinking and planning.

The grant provided a subsidy of up to \$1500 (plus GST) to help eligible small businesses cover the cost of a professional service provider to identify areas of the business that could be improved, and develop strategies aimed at increasing the resilience of the business to future dry seasons.

For example, business management services provided under this subsidy scheme to the case study SMEs included:

- In-depth analysis of business expenses and income per department and/or identification of opportunities to reduce expenses and/or generate either better margins; and
- Development of marketing strategy and schedule.

All of the case study SMEs considered that the business advice they received helped them in reducing the impacts of the drought.



“Putting these into practice definitely helped, and if we didn't we would have gone backwards at a lot greater rate, maybe like 10 or 15 per cent of the turnover.”

“I guess you need to get someone to make you do more work than you normally tend to do(...) it was extremely valuable because I hadn't made the time to have a look at that kind of aspect of my business, and then to see it bold for those things.”

As a result of these services the case study SMEs were able to better prioritize their expenses and implement measures or invest in solutions that increase their resilience to shocks in the long-term. For example, H Rushton & Co invested in solar panels and was able to reduce its energy bills by more than half. In addition to this, H Rushton & Co is planning to start a special account to put aside money to build a financial buffer to account for any unforeseen climate impacts.

“They worked on the theory they knew what their business needed and they didn't want to be restricted in what it [the subsidy] could be used for.”

Another example is Corrigin Pharmacy, who streamlined its staffing arrangements allowing more flexibility in responding to work load. From a business resilience perspective, this type of approach is more beneficial in the long term as it encourages behavior change in the way businesses are operated. However, compared to the 2010 round of funding, it was received with some initial resistance by businesses.

In a moment of crisis businesses have tended to look to fix their immediate problems and shortage of funds. Therefore a key challenge to SBDC was to communicate the benefits of adopting a strategic and long-term view to the business at that moment in time.

Another key challenge to SBDC was addressing the needs of businesses that had an interest in diversifying risks by broadening their marketing area through advertising, and therefore requested the subsidy include a broader range of services. To ensure quality and legitimacy of the process, SBDC established that service providers had to be qualified registered professionals with an ABN.



However, there were difficulties in identifying website design and/or marketing professionals that complied with these requirements. Therefore, the subsidy was restricted to four types of service providers: management consultants, accountants, financial planners, and legal practitioners.

A key success of the SBDC program was keeping bureaucracy to a minimum to avoid bureaucratic bottlenecks. Beneficiaries stated that it was easy for them to apply for the grants. The development of bureaucratic guidelines for similar grants would ensure the same experience for other grant beneficiaries.

In small communities, retail businesses often provide some form of counseling to farmers as part of customer service. Whilst formal assistance is sometimes available, those affected may not necessarily recognise that they need help. In these situations, it could be considered necessary to provide basic training for local business operators and staff to recognise the signs and direct people to professional support.

ENSURING BUSINESS CONTINUITY UNDER FUTURE CLIMATE RISKS

Resistance from businesses to the strategic advice approach taken in the second round of funding administered by the SBDC highlights that raising awareness of the importance of business planning and strategic thinking in building resilience is needed. On the other hand, although generally more beneficial in the long term, this type of approach may be more suited to non-crisis periods.

“I was concerned during the set up phase that if we didn't concentrate and focus and get our main core business right (...) the whole thing could go off rail by trying to diversify when our main core business wasn't as strong as it could be (...) now I think diversifying business if something was there we might look at it. We're not actively looking at anything at the moment.

When in the middle of a crisis, there is a sense of emergency and businesses are desperate to fix their immediate pains, and so it may not be a good time to be offering funding for strategic advice.

Diversification is often recommended as a key measure to increase business resilience to shocks, and includes:

1. Diversification of products or services
2. Widening the range of targeted customers
3. Extension of market area (geographically)

However, for regional and isolated businesses the opportunity to diversify maybe limited. Undertaking the first two options within the local area might be difficult. So what they might really need is a focus on the third option – advertising their services to a broader geographic area.

Local support networks are also key factors that contribute to businesses resilience. All of the case study SMEs highlighted local community relationships and business networks as important elements in their recovery from the drought.

For example, for Corrigin Pharmacy, local community events (e.g. street parties and community walks) were particularly important in providing moral support during the drought, and for Wagin Spreading Service, business network groups have been important in providing peer learning opportunities and access to information that offer the business competitive advantage.

“Funding to hold some community events (e.g. end of year street party, community walk) to boost morale of the whole town and the customers and the farmers who are actually really struggling in complete disarray (...) just to have the time to get together with your friends, where you might just sort of go, I don't feel very good, I won't go out. Whereas if it's a whole community event, your kids will want to go and there'll be pressure, which is good, pressure to attend and then once you're there you have a lovely time and get to talk to other people and realise that, you know, life's not so bad actually and we're all sort of in the same situation, but it's always going to be okay.”

This highlights the role of local government agencies and community groups/associations have in building business resilience to climate extremes.



ACKNOWLEDGEMENTS:

Researchers would like to thank the business owners of the case study SMEs and Mike O'Donnell from the WA SBDC for their time in contributing to this case study.

This work was carried out with financial support from the Australian Government (Department of Climate Change and Energy Efficiency) and the National Climate Change Adaptation Research Facility. The views expressed herein are not necessarily the views of the Commonwealth or NCCARF, and neither the Commonwealth nor NCCARF accept responsibility for information or advice contained herein. The role of NCCARF is to lead the research community in a national interdisciplinary effort to generate the information needed by decision-makers in government, business and in vulnerable sectors and communities to manage the risk of climate change impacts.

© UTS (Institute for Sustainable Futures) 2013

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the copyright holder.

SMALL BUSINESSES AND BUSHFIRES IN VICTORIA

KEY MESSAGES

- Business networks play a vital role in building social capital and assist in economic recovery processes.
- Diversification of markets can build business resilience to future climatic risks.
- Long-term funding is necessary for business recovery after extreme weather events
- Criteria to access grants needs to be flexible.

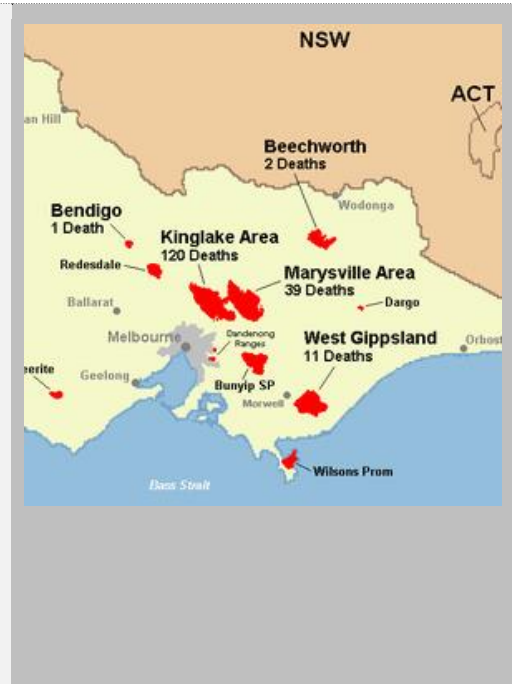
SETTING THE CONTEXT: REGION AND SECTORS

Kinglake and Marysville Regions

This case study focusses on six small to medium enterprises (SMEs) located in the mountain areas of Kinglake and Marysville in central Victoria.

Kinglake is approximately 55km from Melbourne whilst Marysville is 120km away and both located within the Murrindindi Shire Council area.

The areas consist of forest, farmland, national park and townships, which can be classified as rural in nature. Tourism is a key sector in both towns with Marysville being within close proximity to the Lake Mountain ski resort, which is one of the most frequented resorts in Australia.



The small business sectors in both towns are diverse ranging from hospitality to trades and services. The population of the two towns often increases during the snow season. During the summer periods, tourists often visit to experience the natural beauty of the area and take advantage of the outdoor recreational activities such as mountain bike riding. Many businesses service and cater for this influx, which occurs mainly on weekends. The area also had a large logging and timber industry that has declined in recent years. Both towns were devastated by the 2009 bushfires, in which more than 90% of properties were destroyed and a number of lives lost. Table 1 describes key characteristics of the six businesses included in this study.

Table 1: case study SMEs by sector, staff and years of operation

Business Name	Industry or sector	Staff	Years established with present owner
Black Spurr Inn	Accommodation and restaurant	26	7
Pat's Hairdressing	Service provider	1	11
Kinglake Ranges Wilderness Camp	Education based tourism and accommodation	33	7
Kinglake Chinese Medicine	Health	2	4
Marysville Caravan and Holiday Park	Accommodation	4	3
Lake Mountain Resort	Alpine Resort	17 (permanent) Additional in winter	42

All of the businesses were active prior to the fires; however, the current owners of Marysville Caravan and Holiday Park took over the business when their previous business was lost in the fires (Scenic Bed and Breakfast Motel).

Key values of these businesses include looking after their customer base, being part of their community, being proud of their products and providing value for money services. Their reputation and the value of networking with fellow businesses is also viewed as being important.

HISTORICAL WEATHER EVENTS: IMPACTS ON SMALL BUSINESSES

The 2009 bushfires destroyed approximately 352,000 hectares of land in less than 12 hours. Forty percent of Murrindindi Shire was burnt, and the direct impacts were threefold; loss of property/infrastructure, loss of life in many communities, and loss of economic structure due to displacement of large parts of the community.

In Murrindindi Shire, 95 people lost their lives, 75 commercial premises were lost and many more damaged. Twenty-six community/government facilities were damaged or destroyed, nearly 14000 homes were lost, and 98% of Kinglake National Park was significantly impacted.

The fires directly affected most of the businesses in this study. For example, Lake Mountain Resort lost all infrastructures apart from a single visitor centre.

In some cases, business owners and their staff were required to deal with fires damaging or destroying their homes and businesses simultaneously.

Natural environment tourism based businesses found it hard to attract business due to the devastation of surrounding vegetation and trees. Other businesses were indirectly impacted when the fires caused a power surge (fire storm) to go through their buildings. For example, the Black Spurr Inn experienced a power surge that caused their computers, compressors and point of sale systems to explode. Other indirect impacts included disruptions to supply chains, due the fact that many of the local suppliers were operating with reduced staff numbers. Additional challenges came from the decision, by the Victorian State Government, to contract large parts of the rebuilding work through external organisations, limiting the employment opportunities available to local tradespeople.

“We found that our suppliers - because we're the only business left - wouldn't come to us, because it wasn't economically viable for them. So, we had to travel to get our supplies. It's only recently with other businesses opening that they [the suppliers] are starting to come back to the region, and giving us options. For that reason, the cost of our supplies rose. So, as a surviving business, it has been extremely difficult.”

“It's a huge percentage of time just to recreate the glue that makes a business operate; that's taken for granted when it's up and running. So there's a lot of [components] to a small business – the sales for sure, the physical re-building, there's the financial stress side of it-no income for a period of time and then there's the neurons, the invisible stuff that actually makes organisations work. If you lose a lot of your staff which we lost some-then you got another really key element of your business.”

The psychological trauma of the bushfires on the small businesses should not be underestimated. The emotional stress meant that many of the small businesses found it psychologically difficult to access and deal with government assistance or other support mechanisms (e.g., insurance).

This is still the case for some of the victims of the fire.

“We ourselves were most probably difficult to deal with. It wasn’t we were trying to be difficult. It’s just we were affected by stress and whatever else you want to say. In many ways our minds were ‘burned’ and our emotions were all over the place. I believe, even now, people are still affected by the fires.”

In addition to trying to recover from the bushfire impacts, some businesses have had to deal with other climate related stresses as well, specifically changes in snow cover. The snow season is tending to become shorter and unpredictable which is impacting on visitor numbers during the peak season. The lack of It also has downstream impacts on other small businesses dependent on this industry (e.g. hospitality based providers).

Factors that contributed to loss of business income included delays in the process of public infrastructure repair, the time needed for biodiversity to restore back to its previous state, the process of insurance claims, and decreasing demand for services or products offered.

ENSURING BUSINESS CONTINUITY: PAST RESPONSES, NEW STRATEGIES

Of the various coping strategies adopted by the small businesses, the following were consistently reported across the six case studies:

- Claiming insurance,
- Connecting with existing local business networks (e.g., Lions Club, Mystic Mountain Tourism Association, Kinglake Ranges Small Business Network) to share information and advocate for business recovery support
- Accessing Rural Finance grants of up to \$25,000 (there were several tiers of grants) to purchase items for businesses that were completely destroyed
- Linking up with the Business Support Team, coordinated by Council’s Business Recovery Officer with Small Business Mentoring Service, Rural Financial Counseling Services personnel; who assisted in psychological support and helped in accessing grants and provided business advice in order for businesses to start-up again

Comments by businesses interviewed illustrate the scale of the impact and the importance of existing and new networks in rebuilding capacity.

“After the fires is it’s like being 18 years all over again - you virtually have got to start building your life.”

A common thread through the six small businesses was the strong beliefs in their own ability to recover and determination to ensure business continuity.

“The support of all those groups [i.e., existing local business networks] was immediate and strong and that’s all about relationships. They’re not things that you can create immediately after an incident, they are things that had to be in place before hand.”

“The only thing I wanted to do was get back into Marysville and get my salon up and going again. I thought, I’ve been beaten down in the past by different things that have happened. For my own peace of mind and my own determination more than anything....I didn’t want anything to stop me from doing what I wanted to do.”

A key network that helped small businesses organise themselves during the recovery phase, was the Economic Leadership Group (ELG). This group was formed upon the recommendation to develop an Economic Recovery Strategy, and was composed of small business owners, resourced by both the local council and the Victorian Bushfire Reconstruction and Recovery Authority (VBRRA).

This strategy helped by giving small businesses ‘one voice’ when dealing with government agencies and other stakeholders. This network was also useful in helping these businesses to build strong relationships (social capital) with key stakeholders such as Tourism Victoria, DSE, and VBRRA. These links have been sustained to date, and continue to be useful to long-term resilience building of these small businesses.

A key reason the group worked so well was that it had an independent Chair (Victorian State Manager for CPA Australia) from outside the area and who was not directly affected by the events.

Various long-term strategies and measures have been adopted by the small businesses to help them adapt to future climate impacts. Many of these can be categorized as those internal to the operation of the small business and those that have been supported by external stakeholders such as government and private sector. These are included in table 2.

Table 2: internal and externally developed strategies and measures adopted by case study SMEs

Strategy	Measures
Internal to business	<ul style="list-style-type: none"> • Developing or updating business plans to incorporate bushfire risks and emergency management planning. • Investing in infrastructure: Water tankers/trailers, generators, petrol driven pumps • Staff training on evacuation procedures • Changes to employment contracts; employer has the right to cancel a shift if bushfire threat is 'high' • Increasing insurance cover • Diversifying business markets to attract a new customer base • Investing in new technology to account for changes to snow cover • Using off-site computer back-up systems such as cloud storage • Preventing over vegetation of premises
External stakeholder supported strategies	<ul style="list-style-type: none"> • Murrindindi legacy project –Restoring Your Business Community - how to guide for local government practitioners to support economic recovery/ensure business continuity. Local Government building stronger relationship with local businesses • Tourists willing to visit the area again, specifically to support business recovery • Industry Associations and other business networks acting as conduits to influence business recovery policy (e.g., making recommendations to operators on both safety and process side of business) • New conference centre in Maryville to be established that will create jobs and also draw in visitors to the town • Kinglake Small Business Network and Catholic Care developed a wellness voucher system which provided community members \$50 vouchers to access allied health services (e.g., acupuncture, physiotherapy) which has stimulated the economy

A common theme was the significance of diversifying their markets to not only help with economic recovery but to reduce risks to future climatic impacts. For example, the Lake Mountain Resort is now focused on being a year round operation by offering activity based products in the off-season to attract tourists such as (mini golf, dune buggies, flying foxes). Kinglake Ranges Wilderness Camp has introduced products that are more off-site based such as Indigenous programmes to get young people into the surrounding bush land.

The Chinese Medicine Centre is providing other alternate healing practices such as kinesiology and physiotherapy, whilst Black Spurr Inn is marketing catering services and promoting the venue for events such as weddings.

“We’ve made specific changes to our product strategy, so we got some that are not facilities-based anymore, that are either journey or off-site based, which specifically we did with that [bushfire risks] in mind. You know all our eggs aren’t in one basket.”

“Obviously most of our income is derived over that snow season period, so we’ve been working a lot around trying to go from being a three-four month a year operation, to being a year-round operation, which will hopefully generate far more income right throughout the year and make us far more consistent, and certainly not be reliant on government as we sometimes are at the moment.”

The recent experiences proved to be a key catalyst for the development of business plans that account for bushfire risks, which integrate strategies to reduce vulnerability prior to events, as well as during and after events.

“We would never [again] take the approach of it won’t happen to us. For example, we’ve implemented a disaster policy and tightened up what works and what doesn’t. We’ve fitted a 100-KPA generator because we had to go three weeks without power which was a mammoth cost to us.”

An important finding through this case study was that many of the businesses did not have formal disaster policies despite being located in a physically vulnerable location, whilst others did not have formal business plans prior to the fires.

ENSURING BUSINESS CONTINUITY: KEY CHALLENGES

Several challenges were faced immediately after the event and during the recovery period. Most of the businesses highlighted that limited funding was available to assist small businesses recover - the focus was mainly on the community recovery.

Most of the money raised through donations could not be given to small businesses or local business network due to current tax laws.

Only a limited number of grants were available for businesses that were destroyed (e.g., cleanup and restoration grants, investment business grants). Moreover, many of the businesses emphasized the difficulties in accessing these grants due to the inflexible and rigid criteria. An additional challenge was that those who were indirectly affected by the fires could not access these grants. For example, if a business was partially damaged, and had some ability to continue trading, then it were excluded from accessing the grants. The paperwork was reportedly “overwhelming”, as most of the businesses were emotionally stressed, dealing with insurance claims, and getting basic infrastructure working again.

“It was just all too difficult. Because of the bureaucracy that was attached to it [the grant] -just made it extremely difficult for the people that were dealing with trauma and weren’t in the head space to do it.”

The length of time that many of the support mechanisms were available during the recovery phase (e.g., business mentoring service) was too short. It was acknowledged that business support is needed from the start but different levels of support are required for long-term recovery, particularly after three years, post-fires. It is from the three- to five-year mark that small businesses are able to move on from survival mode and commence focusing on business continuity planning, particularly if they had no continuity plan previous to the event.

Other challenges highlighted included:

- unjust nature of commercial leases (i.e., being charged rent when unable to trade but cannot claim insurance)
- lack of tourists/customers visiting the region due to being more risk averse
- loss of staff and the difficulties in recruiting staff when many had moved out of the towns.
- duplication of government support mechanisms and unqualified personal providing businesses advice
- surviving businesses are unable to re-finance for a low-interest loan due to rigid criteria
- lack of long-term psychological support for small businesses

“We didn’t lose [everything in the fire] - we’re losing everything on a drip feed, and we don’t have any choices.”

EXTREME WEATHER AND CLIMATE RISKS: CAPACITY NEEDS

An undercurrent through the six interviews was the need for long-term support to ensure business recovery and build resilience to future climate extremes. This support needs improvement, both in terms of how it is structured, and how it is coordinated between various government and non-government agencies. This is required to ensure that it meets the needs of small businesses and opens up choices.

There is also a great need for the banking and finance sector to recognise these long-term recovery periods (often sales cycles take a very long time to rebound) and include support mechanisms to support business recovery/continuity.

Greater financial resources were nominated as being useful for small business in recovering from extreme weather events. This does not have to be in the form of “handouts” or donations, but as tax breaks, low-interest loans (e.g. patient finance), and other innovative ways to stimulate the local economy and assist in business recovery.

The experience of the case study small businesses highlighted the limited availability of grants to assist in long-term business recovery; many of them focused on immediate disaster response phase. As pointed out earlier, without small businesses, there is no community. The small businesses emphasized that the issue needs to be acknowledged at all levels of government and integrated into existing climate adaptation and disaster response planning.

The need for a formal taskforce, or a coordinating body, to facilitate economic recovery during future disaster recovery phases was also nominated as being of assistance. Particularly where it is composed of personnel with knowledge and understanding of the needs of small businesses. The type of initiative is seen as helping to reduce duplication of government support mechanisms and ensuring a smoother path towards business recovery.

Representatives from different levels of government should be included in the Taskforce alongside non-government and community representatives. It should be driven from the ground-up rather than a state-government led initiative, with members having experience in previous disaster recovery initiatives.

Much of the focus during the bushfire recovery phase had been on community recovery whilst business recovery had gained limited attention. A framework should also be in place to guide the set-up and activation of the Taskforce. This Taskforce should have the legitimacy to apply for funding and draw on other resources to support business recovery.

The integration of adaptation into business continuity planning and policy frameworks was identified as a key capacity gap. At present there is limited attention to adaptation within the small business community, and adaptation is missing from disaster recovery initiatives.

Many of the small businesses interviewed stressed that adaptation is progressive and should be integrated with sustainability initiatives. Adaptation was seen as a process in overcoming uncertainty in business continuity by continuously working towards reducing business vulnerability to climate and other related risks.

“It’s all about adaptability, because you can’t predict something that you don’t know is going to happen. These things need to be on the regular agenda and talked about.”

ACKNOWLEDGEMENTS:

Researchers would like to thank representatives from Kinglake Chinese Medicine, Kinglake Ranges Wilderness Camp, Balck Spurr Inn, Pat’s Hairdressing, Lake Mountain Resort and Marysville Caravan and Holiday Park for their time in contributing to this case study. Sincere thanks are also due to Sandra Slatter and Sally MacDonald, Independent Consultants who were engaged by Murrindindi Shire Council to provide business recovery in the designated area.

This work was carried out with financial support from the Australian Government (Department of Climate Change and Energy Efficiency) and the National Climate Change Adaptation Research Facility. The views expressed herein are not necessarily the views of the Commonwealth or NCCARF, and neither the Commonwealth nor NCCARF accept responsibility for information or advice contained herein. The role of NCCARF is to lead the research community in a national interdisciplinary effort to generate the information needed by decision-makers in government, business and in vulnerable sectors and communities to manage the risk of climate change impacts.

© UTS (Institute for Sustainable Futures) 2013

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the copyright holder.



SMALL BUSINESS ADVISORS AND EXTREME WEATHER EVENTS IN VICTORIA

KEY MESSAGES

- Most businesses had no disaster recovery plans in place prior to the events.
- Re-establishing businesses required support for 3 or more years.
- Secondary or indirect impacts were significant and often overlooked
- Psychological impacts of events were also significant and largely overlooked.
- Support can sometimes have unintended negative consequences.

SETTING THE CONTEXT: REGION AND SECTORS

Drought and Extreme Weather in rural and semi-rural Victoria

While drought conditions develop at a slower rate than other extreme weather events, increased costs and loss of income can occur, with similar potential for triggering trauma and depression. At the end of almost a decade of drought, the mountain areas of Kinglake-Marysville and Myrtleford/Dederang experienced severe bushfires, while the Charlton/Mildura and Echuca/Rochester areas were affected by floods which affected hundreds of small businesses.



Total no. businesses: 1400

The majority of businesses were in the “micro” business sector¹, generating income within and around the affected regions. Most businesses (85%) had revenues of less than \$200k per annum, and operated within key sectors of tourism & hospitality, retail, trades and service (including plumbers, electricians, hospitals, pharmacies etc.). Others businesses serviced agricultural industries. This case study highlights key lessons learned by a group of four state-funded Business Advisors offering direct mentoring/coaching /financial counselling services to more than 1200 small businesses affected by these extreme weather events.

¹ A “micro” business is defined as having an average gross income of between \$200k-\$300k and having less than ten employees.



PAST CLIMATE AND EXTREME WEATHER: IMPACTS ON SMALL BUSINESS

Irrespective of the business sector affected by the extreme weather events, most small businesses confronted similar challenges. However, those businesses with higher turnovers often had sophisticated systems and advanced backup procedures for their data and records, and this enabled a speedier recovery. This also enabled them to work better on business re-establishment once they had sufficiently recovered from the psychological/emotional impacts.

Bushfires: In 2009, an unprecedented hot day (46 degrees) with high strength northerly winds that had been preceded by ongoing extreme drought – wind strength (including that created by the fire event) created fire spotting up to 20km in front of the main fire event. The fires destroyed approximately 352,000 hectares of land in less than 12 hours. The direct impacts were threefold; loss of property/infrastructure, loss of life in many communities and loss of economic structure due to many of the residents of the communities being displaced. After the fires, the economic activity for many months was low as many businesses were destroyed completely or impacted through the loss of customers and orders and many lost their computer systems and data records. Indirect impacts included loss of traditional business for suppliers to the affected areas, townships being closed for several weeks/months for cleanup and psychological impacts on the community members that numbed individuals and slowed the recovery process. Those remaining in the community had very little in the way of disposable income to support the local businesses.

Floods: In late 2010, in much of Central and Northern Victoria, frequent heavy rains created minor flooding and saturated the soils. This resulted in high levels of run-off which filled up the catchments, causing February 2011 flood event (Charlton in Victoria was flooded in September and November 2010 and then again in February 2011). The direct and indirect impacts on small businesses were similar to the bushfire but with some differences:- significantly less loss of life, having to wait for everything to 'dry out' before recovery could start, large clean up issues relating to disposal of silt and sodden belongings (unlike fire where everything is burnt and only ash remained)

Drought: From 2000-2010 the long-term drought had a more gradual impact over time on small businesses supplying farmers since the farmers gradually reduced their spending on non-essential items. Loss of income due to reduced yields of crops of all types and reduced income from the sale of stock (i.e., animals), frequently led to increased debt amongst farmers and the businesses servicing them. Stock numbers were reduced during drought, with the result of high capital costs through loans to restock following the drought. Those who chose to breed up rather than purchase additional stock experienced extended periods of lower than normal income. The gradual economic recovery of the agricultural sector had a direct impact on the financial viability of local subsidiary businesses.

ENSURING BUSINESS CONTINUITY: PAST RESPONSES AND STRATEGIES

The Business Advisors found that none of the approximately 1200 small business owners who were assisted had a disaster recovery plan in place prior to the event.

Bushfires: In most cases the 'Aussie' spirit of "*get on with it*" seemed to be prevalent. However, there were many small businesses who were both physically and emotionally unable to do this. For those small businesses who did 'get on with it', many suffered illness, exhaustion and other issues like family breakdown as their 'recovery work' came to an end. Sadly, some businesses owners did not cope and took their own lives even as late as 3 years after the main event.

The introduction of business recovery officers, business mentors, and Rural Financial Counselors immediately after the event was of great value in re-establishing businesses after the event. However, the real benefits from these initiatives only became evident at the 9-12 month mark after the event when people started to get their personal circumstances organised and contemplate about re-establishment of their businesses. Three years after the event, many businesses were just getting to the stage of moving forward.

However, many of those businesses are still coping with the aftermath and only a small majority have taken advantage of new opportunities (e.g., diversifying into other areas) and developed strategies to deal with potential future events to ensure business continuity.

Murrindindi Shire Council is currently undertaking the Murrindindi legacy project –Restoring Your Business Community ; a how to guide for local government practitioners to support business recovery and business continuity after extreme weather events.

Flood (2011) – The presence of emotional stresses seemed to be less severe, however the coping strategies were similar to that of the fires in terms of 'getting on with it' relating to cleanup. The return to business-as-usual was swifter than the fires which may be due to critical infrastructure still being in place.

Drought: Similar to the flood experience, infrastructure was still in place but many small businesses experienced a reduction in both staff and income levels which led to extra workload and pressure on owners and employees alike.

In the absence of long-range (3-6 month) weather forecasting, decisions were made at the last minute due to the hope the rainfall would improve in the near future, instead of planning for reduced rainfall.

Previously many farmers had developed strategies to cope with drought, such as increasing their water reserves, carrying fodder reserves and with a plan to reduce certain types of stock in a particular sequence depending on the length and severity of the drought.

Farmers were required to remain optimistic to avoid giving up. Similar experiences were shared by those businesses who service them, many of whom diversified into other areas, such as some local real estate firms sold stock feed and clothing products, alternatively others reduced services, products etc., to cope with the drought period.

ENSURING BUSINESS CONTINUITY: KEY CHALLENGES

A key but unintended impact on the economic recovery of businesses, in all these cases, was loss of trade caused by the volume of donated goods and services distributed to affected areas.

Specifically, when communities received donated goods, local businesses had no ability to sell to their local communities during the recovery and restoration periods.

A key positive learning from this experience was the use of the voucher system (\$50 in value) for redemption from businesses in the affected area, or surrounding areas, as part of the 'planned' economic recovery process.

This system also assisted in overcoming some of the indirect financial impacts on surrounding towns, which were not directly affected. When the Victorian Department of Human Services, through their Bushfire Recovery Wellness Voucher program, also provided complimentary treatment through eligible treatment providers. In the case of the Murrindindi Shire every effort was made to ensure that local alternate therapists were used.

The psychosocial impacts were great with many individuals affected by fire who were still recovering three years after the event but this was less so for those affected by flood. Many small businesses are still in need of psychological support.

In general, many businesses experienced the bureaucratic 'red tap' and obstacles around obtaining grant funds to assist with clean up, restoration and rebuilding. The large volume of paperwork required to access grants was a barrier for many small businesses that were also dealing with the psychological trauma of the bushfires.

Key obstacles faced by small businesses in relation to the bushfire impacts included:

- Larger business outside of the area were contracted to undertake clean up, restoration and rebuilding which impacted on local trades and services
- Planning regulation, and bureaucratic processes (large volumes of paperwork needed to be completed to access recovery funds) impacted and slowed down the rebuilding of small business within devastated communities
- Greater need for access to counselling services and ongoing education about the impacts and management of trauma in particular post-traumatic stress disorder.
- Increased cost to small businesses due to the new building regulations for fire prone areas - Bushfire Affected Levy BAL, a levy put in place by the Victorian Government to ensure that the right building measures were in place to ensure higher levels of bushfire protection. The BAL takes into consideration a number of factors including the Fire Danger Index, the slope of land, types of surrounding vegetation and its proximity to any building.

It is difficult to quantify the total loss to businesses in terms of economic impacts after the events. However, in a town like Healesville situated on the edge of the fire zone that was virtually shut for 6 weeks after the fire event, the indirect impacts from the fires were significant. All businesses had their revenues reduced to 30% of normal trading (i.e., up to 5 years) for the period despite the fact their costs had not reduced. Additionally, many of these businesses relied on trade from affected areas, for example a butcher who supplied meat to Marysville lost 80% of their business as a direct result of the fire.

EXTREME WEATHER AND CLIMATE RISKS: CAPACITY NEEDS

Businesses cannot control climate extremes and variability but they can undertake risk analysis, and develop risk minimisation/elimination strategies, so they are better prepared.

In supporting business continuity, particularly outside the large metropolitan areas, greater recognition is needed that small businesses are the major employer and lifeblood of the smaller local economies. Greater emphasis and focus is required on getting businesses in these communities up and running as quickly as possible, and therefore it is imperative that they develop business community plans.

A fast tracking system is required to help small businesses access recovery grants and ensure there is support for small businesses in completing forms/applications. For example, CentreLink were quick to place their staff in the bushfire-affected communities to streamline the process.

Whilst it is important to take appropriate steps to mitigate the impact of extreme weather events programs should be put in place to assist business to be climate ready. Lessons learned from these past events should be documented and shared and relevant policies should be developed to ensure assistance is at hand to help businesses recommence operations as soon as realistically possible.

Resources relevant to business needs, such as training and tools for business owners to assess and plan for risk, the book 'Are U Ready...surviving small business disaster', and support for Industry associations in creating awareness are needed.

Moreover, business owners need to accept the potentiality of climate related disasters and the place a higher priority on the associated risk to their businesses. This is required to ensure that it meets the needs of small businesses and opens up choices.

ACKNOWLEDGEMENTS:

The researchers would like to thank Sandra Slatter – Consultant specialising in the field of business continuity planning for small businesses in the context of disaster risk reduction & Emeritus member (Small Business Mentoring Service), Anthony Turner and Bruce Hall (Small Business Mentoring Service), and Ken Slatter (Rural Financial Counselling Service) for their time in contributing to this case study. All worked ‘on the ground’ supporting small business during extreme weather events discussed in the case study. Sandra and Anthony are authors of the book titled “Are U Ready – surviving small business disaster.”

This work was carried out with financial support from the Australian Government (Department of Climate Change and Energy Efficiency) and the National Climate Change Adaptation Research Facility. The views expressed herein are not necessarily the views of the Commonwealth or NCCARF, and neither the Commonwealth nor NCCARF accept responsibility for information or advice contained herein. The role of NCCARF is to lead the research community in a national interdisciplinary effort to generate the information needed by decision-makers in government, business and in vulnerable sectors and communities to manage the risk of climate change impacts.

© UTS (Institute for Sustainable Futures) 2013

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from the copyright holder.