

# **AN OVERVIEW**

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Adaptation at Scale in Semi-Arid Regions

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In West Africa, ASSAR works in the semi-arid and dry sub-humid parts of Ghana and Mali areas that are increasingly exposed to climatic extremes of droughts, floods and heavy rainfall. These changing conditions impact different people in different ways. For all living here, figuring out how to adapt to these uncertain circumstances is a challenging task that requires input from many different groups.

# **KEY POINTS**

- In the Transformative Scenario Planning (TSP) process in Ghana, a diverse set of stakeholders deliberated the factors that could trigger a positive impact on the agricultural system in the Upper West Region.
- We identified water access and political commitment as the main drivers of agriculture and food security, and used these drivers to build four scenarios for the future.
- We then used the scenarios to develop "Vision 2035" a shared view of how food and agriculture can be improved — and identified key actions that need to be implemented to achieve this vision.
- Ultimately, we learnt that by building relationships, working collaboratively, and developing cross-sectoral understanding, we can devise and implement adaptation plans that can transform agricultural systems and improve regional food security.

## Transformative Scenario Planning in Ghana

In the Upper West Region of Ghana, there are pressing challenges for agriculture and food security. These include: climate variability; land tenure issues; constrained access to credit, water, farm inputs, markets and storage; and the lack of political commitment.

To bring fresh thinking on how to tackle these challenges, we turned to TSP, a process developed by Reos Partners that brings together stakeholders from diverse and often conflicting perspectives and transforms their thinking around complex issues. In so doing, TSP helps people to imagine the ways that the future can be changed, and to identify the leverage points that can facilitate this change.

The focus of TSP is the development, dissemination and use of a set of four scenarios (structured narratives or stories) about what is possible. These scenarios provide a shared framework and language for strategic conversations within and across stakeholder groups about the situation they are part of, and what actions they can, must, and will take to address it. TSP thereby offers a way for social systems to get unstuck and to move forward.

Working with a diverse group of relevant stakeholders over two workshops in the second half of 2016, we used TSP to imagine what might happen to agriculture and food security in the Upper West Region from now until the year 2035.

Here we provide an overview of our full TSP process.

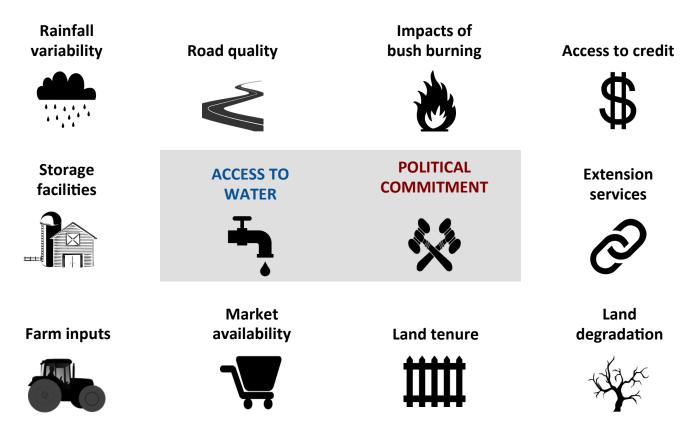
## Convening a team across the whole system

TSP workshops aim to construct a safe space where people can talk openly and honestly about complex issues in order to think differently about ways of working together. Our workshops brought together 27 stakeholders from the Upper West region (Wa, Lawra and Nandom) and were made up of: community groups (including representatives from farmer, youth, input dealer and women's groups); government (including regional agriculture and water research institutions, district level authorities and extension workers); traditional authorities; researchers; civil society; police and fire services; private, financial, and transport sectors; and the media.



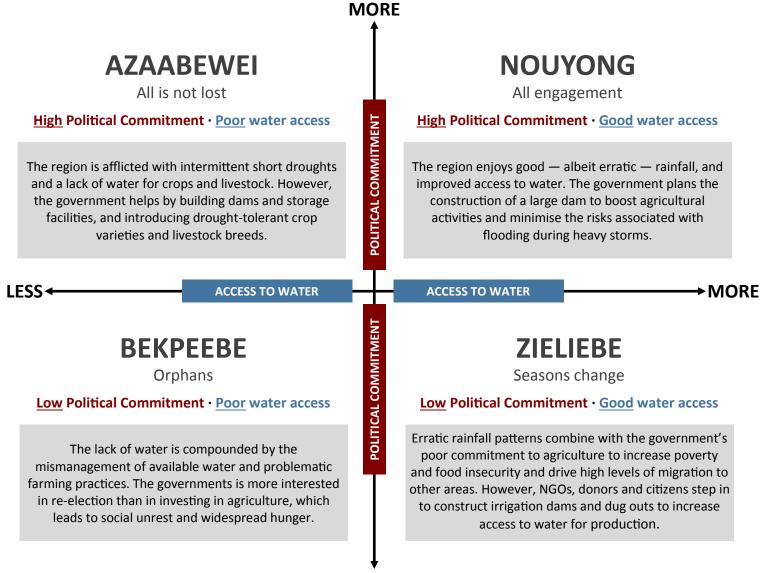
# Identifying the main drivers of food and agricultural security

During the first TSP workshop (June 2016), we explored climatic and non-climatic challenges in the Upper West Region and collectively built stories of what the future (up to the year 2035) of agriculture and food security could look like. The participants identified many factors that could influence the development of agricultural activities (*see below*); however, they considered **access to water** and **political commitment** as the two key driving forces that are impacting, and will continue to impact, agriculture and food.



## Constructing stories about what could happen

The two key driving forces were used as building blocks to develop four possible future scenarios for the Upper West Region until 2035. The scenarios were built in an interactive, iterative way, and involved the use of drawings, the formulation of newspaper headlines, small group work and plenary feedback. With locally-relevant names, the scenarios focused on various levels of political commitment (high versus low) and access to water (poor versus good). They also considered the role of likely internal and external influencing factors — such as oil production, road network construction and conflicts.



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# **VISION 2035**

During the second TSP workshop (November 2016), participants used these scenarios to develop a shared vision for the future and to delve deeper into what can and must be done to ensure regional food and agriculture security. Through the visioning exercises, the group prioritised major shared themes to create 'Vision 2035', and identified key actions that need to be implemented to achieve this vision.



The construction of climate-smart water infrastructure that harnesses water for farming activities will increase agricultural productivity, and drive sustainability in food access and livelihoods. People's health will improve due to the increased access to food, and this in turn will boost productivity even more. The functional agricultural system will create employment, thereby reducing crime rates among unemployed youth and leading to a more secure society.

**Secure Society** 

**Good Health** 

Improved Education System

# **Acting to Transform the System**

To move towards Vision 2035, participants were encouraged to think critically about their own roles, as well as their collective role as a group. They split themselves up according to the **action areas** that they are most interested in helping to carry forward, and compiled preliminary ideas for **concrete actions** that could be instrumental to this process. ASSAR's Ghana team is now working with these groups to find the best means of putting these ideas into action.

#### **Disaster risk management**

develop early warning systems; develop and enforce bylaws for bush burning and tree cutting; establish rewards for best practice; sensitise and educate; train disaster management volunteer groups; encourage risk management activities

# Sustainable food and livelihood empowerment

increase access to improved seeds; develop water harvesting methods; subsidise farm inputs, tools and equipment; encourage organic farming; improve livestock production and market linkages; agro-processing (e.g. shea and groundnut oil)

#### Ecosystem management

encourage tree planting; encourage farmer-managed natural regeneration and woodlots; develop an anti-bushfire campaign; improve agronomic practices; enforce bylaws; preserve sacred groves; develop capacity of wildlife officers and community members

#### Climate-smart water management

plan integrated water-resource management for the Black Volta Basin (that considers the Upper West Region); prioritise areas that need urgent intervention and management; develop guidelines for climate-smart water infrastructure (dams, dugouts, wells, boreholes)

#### Improved market system

communicate market dynamics and pricing to more people; create a support system for traders and producers; improve market structure and security; use radio broadcasts to give farmers advice on pricing, planting and rainfall; improve road networks and transportation (especially to villages); improve product quality to compete with international imports

#### **Disseminate Vision 2035**

mobilise resources; select regional focal points; communicate and publicise Vision 2035; collect contributions and feedback



# **ABOUT ASSAR**

ASSAR uses insights from multiple-scale, interdisciplinary work to improve the understanding of the barriers, enablers and limits to effective, sustained and widespread climate change adaptation out to the 2030s. Working in seven countries in Africa and South Asia, ASSAR's regional teams research socio-ecological dynamics relating to livelihood transitions, and the access, use and management of land and water. One of four consortia under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), ASSAR generates new knowledge of climate change hotspots to influence policy and practice and to change the way researchers and practitioners interact.

For more information: ASSAR: <u>www.assaradapt.org</u> or email Adelina Mensah <u>(ammensah@cariaa.net)</u> TSP: <u>www.reospartners.com</u>



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