Does scenario planning catalyze transformational change? Evaluating a climate change policy case study in Mali

Edmond Totin

Derived from a study co-authored by James R. Butler; Amadou Sidibé; Samuel Partey; Philip K. Thornton and Ramadjita Tabo



Background

CCAFS

 Interdisciplinary research initiative of the CGIAR system to foster development of responsive institutions and policies through science-policy platforms

■ ASSAR

 Aims to better understand barriers and enablers for adaptation to climatic and nonclimatic risks in semi-arid regions

Co-design development processes for more impact, under climate change

"... provide what is needed, not what we think is useful"



Contents lists available at ScienceDirect

Futures

journal homepage: www.elsevier.com/locate/futures

Stepping into futures: Exploring the potential of interactive media participatory scenarios on social-ecological systems

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Land Use Pol

Land Use Policy 24 (2007) 546-561

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Participatory scenario construction in land use analysis: An insight into the experiences created by stakeholder involvement in the Northern Mediterranean

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A SCENARIO APPROACH TO CAPACITY PLANNING

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(Received February 1987; revisions received June, December 1988; accepted December 1988)

Production capacity has always been one of the most important strategic variables for the major automobile companies. Decisions by individual companies concerning the overall level of capacity, the type of facility (e.g., the level of flexibility), and the location of that capacity (e.g., in the United States or abroad) are discussed in great detail in the popular business press. In this paper, we describe a model developed for General Motors to aid in making decisions about capacity for four of their auto lines. The model incorporates elements of scenario planning, integer programming, and risk analysis. All the input and output is done using Lotus 1-2-3. Although the presentation is motivated by the particular application in the auto industry, the model represents a general purpose approach that is applicable to a wide variety of decisions under risk. An example in this paper uses actual data, appropriately transformed to ensure confidentiality.

Scenario Planning: A Tool for Strategic Thinking

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Reg Environ Change (2013) 13:389–398 DOI 10.1007/s10113-012-0350-1

ORIGINAL ARTICLE

A MONG THE MANY TOOLS A MANAGER CAN NARIO PLANNING STANDS OUT FOR ITS ABI possibilities in rich detail. By identifying basic can construct a series of scenarios that will help

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Participatory scenarios as a tool to link science and policy on food security under climate change in East Africa

Moushumi Chaudhury · Joost Vervoort · Patti Kristjanson · Polly Ericksen · Andrew Ainslie

Scenario Planning: a 1 Uncertain World

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ORIGINAL ARTICLE

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Participatory scenario planni in community adaptation res from Latin America

Iain Brown¹ · Julia Martin-Ortega² · Kerry W

Research Article

Scenarios for Knowledge Integration: Exploring Ecotourism Futures in Milne Bay, Papua New Guinea

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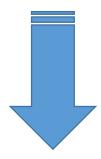
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Multi-stakeholder Scenario Planning

Encourages:

- Social learning
- New knowledge
- Innovation
- Social networks



- Coordination
- Leadership
- Action
- Adaptive capacity





CCAFS Agenda

- Phase 1: Regional exploratory scenario planning
 - Engaged West African Region stakeholders in an explorative scenario processes
 - Assess major and plausible future development pathways for food systems, environments and livelihoods in the Region
- Phase 2: Focus on downscaling of scenarios to a sub-national level
 - Downscaling the scenarios to sub-national (district) level to generate information for policy actors
 - ... mainstream climate priorities into development plans and policies
 - ... stimulate change of policy formulation processes



JIDUGU

Village avec une abondance d'eau Village of abundant water

Poor access to land · Good access to water

The village has abundant water sources, but rapid urbanisation leads to increased conflict and competition for natural resources, especially agricultural land, and a decline in agricultural production. In response people promote fishery and vegetable production, which are less land demanding. Land reform becomes a priority for the local authorities.

HÈRÈBOUGOU

Village du bonheur Village of happiness

Good access to land · Good access to water

The village enjoys a good supply of water and grazing land, and agriculture thrives with new developments and increased production. People are happy and healthy and have good food security.

LESS <

ACCESS TO AGRICULTURAL LAND

ACCESS TO AGRICULTURAL LAND

MORE

GELEYA DUGU

Village en difficultés Village of difficulties

Poor access to land · Poor access to water

The village has limited access to land and water. Land is sold at high prices, many small-scale farmers work on land they do not own, and crop farmers and livestock farmers fight over the same land. To curb the migration of youth to urban centres, local authorities try to promote work opportunities by creating conditions that enable industries and trade companies to establish businesses in the district.

ZAMBOUGOU JIKO GELEYA

Village en manque d'eau Village in need of water

Good access to land · Poor access to water

The village has access to agricultural land and rainfall is abundant. However, the high number of cotton oil factories pollutes the rivers, reducing water availability and leading to great losses for small-scale crop farmers. Short-duration and less water-demanding crop varieties are increasingly used to produce food for the growing population in the district.



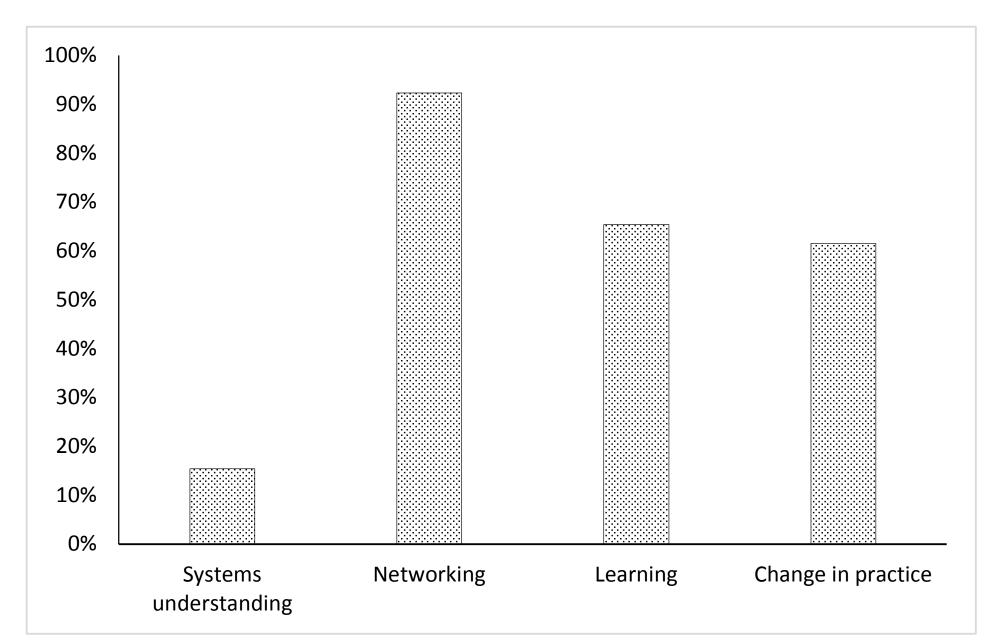
LESS

ACCESS TO WATER FOR IRRIGATION

MORE

ACCESS TO WATER FOR IRRIGATION

Outcomes





Outcomes...

- Scenario workshop was least effective at stimulating systems understanding: About 15% of respondent stressed their capacity to "see the bigger picture" of social phenomena, by making the connections between different processes
- 62% of respondents agreed that the workshop influenced their lives and stimulated changes in their practice ... adoption of new practices
- Scenario workshop created room for participants to discuss things they did not know before and challenge each other's ideas
- Networking and relationship building was the major change reported: 92% respondents agreed that the workshops helped them to create new relationships with other participants

Outcomes...

- CCAFS assumed that the scenario would result in the mainstreaming of climate strategies into development plans
 - ... little evidence of policy-related impacts
- Changes occurred at individual level, and largely incremental adaptation strategies, rather than 'transformational' changes
 - Policy change requires a long term process, ... a multi-scale actions



Key message

 Scenario planning has the potential to enable networking and learning across boundary

BUT,

- Scenario process alone may not be sufficient to stimulate transformational change
- For institutional and policy transformation to occur, a more extended learning process is required
- Need for actions to strengthen local dynamics



How does CCAFS inform ASSAR?

Acting to Transform the System

To get closer to realising Vision 2035, two workshop participants were nominated to coordinate the efforts for moving toward implementation. The immediate actions (listed below) will be informed by the research findings of ASSAR students during 2017.

		Managing rainwater and soil fertility	Improving the seed sector
	Activities	 Develop partnerships Train farmers on sustainable rainwater management Pilot new techniques 	 Diagnose the barriers to the adoption of improved seed
	Influencing	 Create awareness Strengthen interactions between national and local actors Develop farmer skills Create enabling environments 	 Inform seed policy Increase government allocation to the sector Influence effective participation of local institutions
	Outcomes	 Increased adoption of sustainable rainwater harvesting/use and soil fertility management practices Increased crop yields Increased household incomes 	 Increased use of high quality seeds Increased crop yields Increased household incomes
	Impacts	 More dry season farming opportunities Improved food security	Improved living conditions and wellbeingImproved food security



Using Transformative Scenario Planning to think critically about the future of agriculture, natural resources and food security in Koutiala, Mali

AN OVERVIEW

March 2017

www.ASSARadapt.org



Written by Amadou Sidibe, Edmond Totin, Alcade Segnon, Mary Thompson-Hall and Tali Hoffman

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 Mali, a diverse set of stakeholders deliberated the factors that could trigger a positive impact on agriculture, natural resource and food security challenges in the Koutiala district.
- We identified access to agricultural land and access to water for irrigation as the main drivers of food and agricultural security, and used these drivers to build four scenarios for the feture.
- We then used the scenarios to develop "vision 2035" a shared view of how the regional challenges can be improved — and identified key actions that could enhance rainwater management, soil fertility and access to better quality seeds.
- Ultimately, we learnt that by building relationships, working collaboratively, and developing cross-sectoral understanding, we can devise and implement adaptation plans that can transform agriculture and improve regional food security.

Transformative Scenario Planning in Mali

The district of Koutiala in Mali is facing many pressing climatic and non-climatic challenges for agriculture, natural resources and food security. These include: access to farm inputs, technology and equipment; security, regulatory policy and governance; erratic rainfall; high population growth; and the subsequent high pressure on natural resources.

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 Koutiala's agriculture, natural resources and food security from now until the year 2035.

Here we provide an overview of our full TSP process.



Thank You

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