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Climate change adaptation in Burkina Faso: Aid dependency and obstacles to political participation

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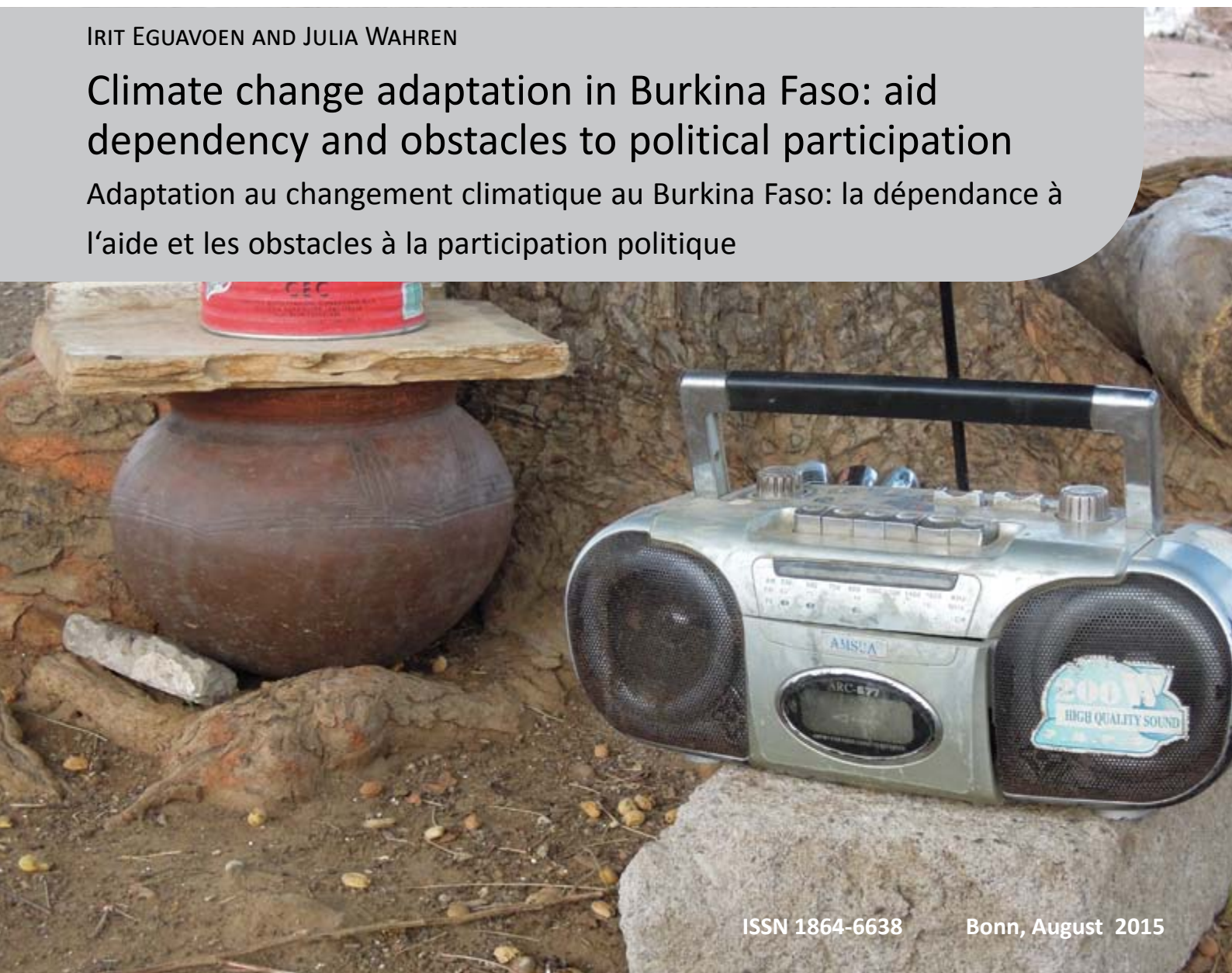


Working Paper 140

IRIT EGUAVOEN AND JULIA WAHREN

Climate change adaptation in Burkina Faso: aid dependency and obstacles to political participation

Adaptation au changement climatique au Burkina Faso: la dépendance à l'aide et les obstacles à la participation politique



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**Climate change adaptation in Burkina Faso:
aid dependency and obstacles to
political participation**

**Adaptation au changement climatique au Burkina Faso:
la dépendance à l'aide et les obstacles à la
participation politique**

Irit Eguavoen & Julia Wahren

Abstract

This study analyses the climate change discourses and political dynamics in south-western Burkina Faso from three empirical entry points: (a) the production of the National Adaptation Programmes of Action; (b) climate change discourses in the loba province; and (c) the role of the public media. Climate change is not a popular discourse in Burkina Faso and seems limited to the national and international levels. Farmers in the loba province have experienced environmental degradation and changes in precipitation patterns but have not linked these to climate change, except for extreme events. Local discourses mostly focus on deforestation and express disappointment in the degree of support that the government and non-governmental organizations (NGOs) offer to producers of food crops. External support is characterized by a good knowledge base of climate change among government officials and NGO staff but also insufficient funds, a lack of coordination, shifting donor interest in development themes and little responsiveness to farmers' concerns and needs, leading to a lack of political interest. Farmers' low levels of understanding of elections, voting power and political accountability have resulted in little political representation of their interests. Climate change and adaptation options are disseminated via radio, drama groups, mobile cinema and trainings. These participatory formats allow top-down information flow and opportunities for farmers to publicly discuss their views, concerns and questions beyond climate change. The popularity of these formats show that farmers are eager to communicate, become informed and get active in environmental change and resources management.

Keywords: West Africa, National Adaptation Programmes of Action, NAPA, development, politics, media

Résumé

Cette étude analyse les discours sur le changement climatique et les dynamiques politiques dans le sud-ouest du Burkina Faso selon trois perspectives empiriques: (a) la production du Programme d'Action National d'Adaptation (PANA); (b) les discours sur le changement climatique dans la province du loba ; et (c) le rôle des médias. Le changement climatique n'est pas un sujet en vogue au Burkina Faso et semble se limiter aux sphères nationales et internationales. Dans la province du loba, les agriculteurs subissent les dégradations environnementales et observent un changement des précipitations, mais, à l'exception des phénomènes extrêmes, ils ne font pas le lien avec le changement climatique. Localement, les débats portent principalement sur la déforestation et sur le manque de support de la part du gouvernement et des organisations non-gouvernementales (ONG) apporté aux agriculteurs. L'aide extérieure est caractérisée par une bonne connaissance des fondements du changement climatique au sein des fonctionnaires et du personnel des ONG, mais aussi par des financements insuffisants, des défauts dans la coordination, des inconsistances chez les financeurs dans les thématiques du développement, une réactivité limitée aux besoins et aux intérêts des agriculteurs, tout cela conduisant à un désintéressement pour la politique. La compréhension limitée des agriculteurs des élections, du pouvoir législatif et de la responsabilité des politiques se traduit par une faible représentation politique de leurs intérêts. Le thème du changement climatique et les options possible pour y faire face sont communiqués par la radio, par des groupes de théâtre, par du cinéma mobile et par des formations. Ces initiatives participatives autorisent une transmission de l'information du sommet à la base et ouvrent aux agriculteurs des opportunités pour partager publiquement leurs points de vue, leurs soucis et interrogations sur le changement climatique. La popularité de ces participations montre que les fermiers sont prêts à communiquer, à s'informer, et à être proactif sur les changements environnementaux et la gestion des ressources.

Keywords: Afrique de l'Ouest, Programme d'Action National d'Adaptation, PANA, développement, politique, médias

1 Climate change adaptation in a development context

The work of the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, negotiations through the Conferences of the Parties (COPs) and increasing donor engagement have contributed to the evolution of political arenas for climate change adaptation (CCA) in West Africa. Programs, mechanisms, expert groups and policy documents regulate the flow of funds and knowledge to support adaptive capacity. Some scholars, however, debate whether adaptation is yet another field of development activity that follows typical trajectories of North-South cooperation and might suffer the systemic and functional drawbacks of this pattern. Scholars also question whether African politics have been adequately considered in adaptation planning (Ireland 2012, Lockwood 2013, Weisser et al. 2013).

Cross-scale analysis of the political dynamics of the National Adaptation Programmes of Action (NAPA) and Nationally Appropriate Mitigation Action (NAMA) planning processes in Africa is still rare. Research on the national scale has concentrated on the major industrialized players in the COPs, which are Annex I parties to the Kyoto protocol with mitigation targets, as well as on the BASIC countries¹ (Harrison and McIntosh Sundstrom 2010, Held et al. 2013).

The political dynamics of states which fall outside these categories, especially Non-Annex I parties, are less documented. Held et al. (2013: 2f.), in their introduction to 'Climate governance in the developing world', note that « most developing countries, especially the least developed states, are still unprepared for, if not uninterested in, climate change ». Climate and development issues are closely intertwined in politics. The development context of countries where adaptation to climatic variability is generally prioritized over CO₂ mitigation poses specific challenges to policy planning and implementation. Studies have indicated that policy approaches and their outcomes differ considerably across Africa (see Weisser et al. 2013 for a comparison of Ethiopia, Ruanda and Uganda).

UNFCCC guidelines for the NAPA policy process suggest that a procedural blueprint can be smoothly translated into national policy documents in a diverse range of states regardless of governance and administrative structures. In most countries in the Global South, international actors closely assist domestic experts and politicians with ever new planning toolkits throughout the process. However, « [f]or technical assistance to be effective, governments have to be really interested in adopting and applying it to public policy. ... There is some evidence to suggest that, with a few exceptions, this demand is not present » in many African states (Lockwood 2013: 652). A review revealed that « levels of "ownership" by most country governments are low, with donors pushing the issue in many cases » (Lockwood 2013: 660).

African states receive financial aid for NAPA planning through diverse, interrelated funding instruments. Proving available co-funding from either domestic or international sources to the UNFCCC Secretariat is a precondition for entering Global Environmental Facility (GEF) funding streams. Public participation in the NAPA planning process is a written rule (COP 6, decision 28; article 6aⁱⁱⁱ of the UNFCCC), and key guidelines include the application of multidisciplinary approaches. Both requirements (public participation, multidisciplinary planning) are boundary concepts as various actors might interpret them differently.

Lockwood states (2013: 647) that « what is striking about much research and donor practice is how little thinking there has been about the political context of this [CCA] in sub-Saharan Africa, which is all the more surprising in view of what is already known about politics and governance in Africa. ... [B]y failing to acknowledge the constraints of the political and governance context, much thinking about adaptation policy in Africa is unrealistic, and much donor activity is likely to have little effect ». Lockwood mainly refers to classic studies of African politics since the 1990s (e.g. Bayart 1993, Bayart

¹ Brazil, South Africa, India, China

et al. 1999, Chabal and Daloz 1999) which stressed the importance of patronage and clientelism in neo-patrimonial states and local politics. Studies on aid economies in Africa have illustrated that North–South cooperation is a highly political but at the same time depoliticized field (Olivier de Sardan 2005, Ferguson 2003). Recently, the academic discussion has turned from studies of corruption to ethnographies of public service delivery in West Africa (Bierschenk and Olivier de Sardan 2014).

The conceptualization of CCA travels across time, levels and agents who appropriate and attach meaning to it (Weisser et al. 2013). These agents might then operationalize and translate the idea of adaptation into practices that serve their interests and aims. Thus, there is no single idea of adaptation but many context-specific concepts held by various individuals and groups. Despite the notions and connotations that CCA might bear in practice, adaptation as understood by the UNFCCC and most of the donor community (Schipper 2009) is circulated and promoted as a guideline for action. However, « [s]ubstantial efforts are needed to get the idea [of adaptation] across and make it travel, and to engage different actors from multiple sites along the trajectory » (Weisser et al. 2013: 113). These efforts to translate the idea of CCA and to implement CCA projects require a complex group exercise involving national and international experts and policy makers with diverse interests. Often, the process depends on foreign funds. Studies suggest that politicians tend to avoid the political economy of planning and to purposefully make documents appear to be domestic responses to the UNFCCC in order to provide them with political legitimacy (see Zink 2013 for Vietnam).

We theoretically identified a number of political aspects (Figure 1) of CCA planning and implementation which can be studied empirically.

Figure 1: Political aspects of CCA planning and implementation

1. Degree of dependency on global funds and international aid
2. Degree of rule setting by external actors, incentives and pressure from international agencies and donors, dependency on foreign data, and international expertise and assistance in adaptation planning (e.g. UNFCCC guidelines, toolboxes, manuals, technical assistance)
3. Degree of procedures and constraints determined by national administrative prerequisites (e.g. institutional architecture, number of cabinets, departmental silos, competition between ministries)
4. Degree of mobilization, alliance building and authorization and legitimization of participants in the planning process (e.g. creation of political arenas, inclusion and exclusion of actors, political patronage, neo-patrimonialism, informality, communication networks)
5. Structure and maintenance of political arenas (e.g. meetings, knowledge exchange, funding streams, administrative procedures, leadership, decision-making rules)
6. Political agenda-setting processes at the national scale (e.g. awareness raising, capacity building, priority setting for adaptation measures, selection of intervention sites)
7. Possible creation of meta-codes and slippery spaces to gloss over different understandings and interests²

² For meta-codes see Rottenburg (2009). Slippery spaces: « sustain actor-networks that span one local context to another, at the same time that they enable the coexistence of fundamentally different projects and ideas

8. Degree of reframing and relabeling of older problems and concepts to suggest new solutions and secure new funding streams
9. Rewards from the national or internal system (e.g. employment, rent-seeking, political prestige) and the international or external system (e.g. foreign money, national political standing, bargaining power)
10. Degree of involvement of the affected population in political decision-making processes for CCA (e.g. public education, mechanism for and practices of knowledge sharing and lobby work)

Weisser et al. (2013) showed that the CCA concept and CCA funding opportunities can serve as strong incentives for adaptation planning. This possibility is especially relevant to African nations where poor governance, corruption, client networks, weak state capacities, rent-seeking, winner-takes-all dynamics, aid dependency and anti-developmental regimes have been identified as significant characteristics of politics (Allen 1995, Bayart 1993, Bayart et al. 1999, Chabal and Daloz 1999, Lockwood 2013). French-speaking West African states follow specific political and administrative systems, rules and mechanisms (Grüntjen 2011). Where these mechanisms dominate, « large increase[s] in climate finance may have a perverse effect, sustaining political systems that undermine the capacity of the states to build adaptive capacity » (Lockwood 2013: 648). « [I]ncreasing amounts of climate finance may encourage what looks like ownership, but is in fact rent-seeking » (Lockwood 2013: 660).

NGOs and the media play essential roles in shaping adaptive capacity, political representation and spaces for articulation. They function as powerful actors that translate and evaluate information, and the public relies on the media to make sense of climate change, governance and decision-making (O'Neill et al. 2013: 413). NGOs can use the media, for instance, to share farmers' opinions and to raise awareness among farmers to initiate changes in their behavior (Brunnengräber 2011: 25). Thus, the media open up opportunities to link farmers' local realities and experiences to climate science, policy and government at the national level (O'Neill et al. 2013: 413). Media can translate scientific jargon to the language of the population, and engaging farmers in two-way communication about climate change acknowledges their knowledge of the phenomenon and provides room for political participation.

The paper explores some political aspects of CCA mentioned in Figure 1, with a special focus on Burkina Faso from three empirical entry points: (a) the production of the NAPA; (b) climate change discourse in the Ioba province; and (c) the role of the public media. These entry points allow presenting a literature review and original findings on the processes of CCA translation and implementation and the degree of political participation by the rural population.

packaged within the same label. In fact, the absence of consistency [...] makes possible the preservation of the actor-network » (Zink 2013: 19-20).

2 Research design

For a master's thesis, the second author conducted three months of field research from October 2012 to January 2013 in south-western Burkina Faso, especially around Dano, the capital of the Ioba province. Participant observation, information discussions and semi-structured interviews with 89 respondents (see Figure 2 and appendix) were conducted in Dano, Dissin, Diebougou, Bobo-Dioulasso, Ouagadougou and Ouahigoya. Some respondents held or had held traditional or political offices, such as *chéf de terre* (custodian of the land) and mayor, or acted as leaders of party chapters or local associations.

Figure 2: Interview partners

Category	Working as/for	Number of respondents
Media	Journalists (e.g. radio, newspaper), film-makers	10
NGOs	Dreyer Foundation, CISV, VARENA ASSO, Association des Conteurs du Terroir, SNV, RECOPA, FADEV-SO, FENOP, CEF, FNGN, CPF ³	12
North–South cooperation	FAO, PABSO III, PCZLD/PATTEC, BKF/012-PAGREN, PRO DEV-BURKINA, PDA, PROGREF ⁴	6
Government	DPAHRH/Ioba, DPASSN/Ioba, DPECV/Ioba, DPRA/Ioba, DPAHRH/Bougouriba, , SPCONEDD/PANA ⁵	8
Party politicians	UPR, CDN, UPC ⁶	5
Local associations	APER, ATB, ATST/API, Association Manivelle, ATSI, Téon Malo, AGRAACE ⁷	23
Other farmers		22
Other	People with knowledge of villages who do not fit into	3

³ CISV (*Comunita Impegno Servizio Volontariato*), VARENA ASSO (*Association pour la valorisation des ressources naturelles par l'autopromotion*), SNV Netherlands Development Organisation, RECOPA (*Réseau de Communication sur le Pastoralisme*), FADEV-SO (*La Fédération des Associations pour le Développement et l'Epanouissement de la Femme du Sud Ouest*), FENOP (*Fédération Nationale des Organisations Paysannes*), CEF (*Conseil à l'Exploitation Familiale*), FNGN (*Fédération Nationale des Groupements Naam*), CPF (*Confédération Paysanne du Faso*).

⁴ FAO (Food and Agriculture Organization), PABSO III (*Programme d'Aménagement de Bas-Fonds dans le Sud-Ouest et al Sissili*), PCZLD/PATTEC (*Le Projet de Création de Zones durablement libérée de la mouche tsétsé et des trypanosomiase du Burkina Faso/ Pan African Tsetse and Trypanosomiasis Eradication Campaign*), BKF/012-PAGREN (*Le Projet d'Appui à la Gestion Participative des Ressources Naturelles dans la Région des Hauts Bassins*), PRO DEV-BURKINA, PDA(*Programme Développement de Agriculture*), PROGREF (*Projet de Gestion des Ressources Forestières dans les Régions Sud-Ouest, Centre- Est et Est*)

⁵ DPAHRH (*Direction Provinciale de l'Agriculture, de l'Hydraulique et des Ressources Halieutiques*), DPASSN (*La Direction Provincial de l'Action Sociale et de la Solidarité Nationale*), DPECV (*Direction Provinciale de l'Environnement et du Cadre de Vie*), DPRA (*Direction Provinciale des Ressources Animales*), MEDD (*Ministère de l'Environnement et du Développement Durable*)

⁶ UPR (*Union pour la République*), CDN (*Convention Démocratique Nationale*), UPC (*Union pour le Progrès et le Changement*)

⁷ APER (*Association pour la Protection de l'Environnement et la Reforestation*), ATB (*Association Toupour Bonyen*), ATST/API (*Association Tébiir So-Ti-Touora pour l'Autopromotion du Producteur Rural du Ioba*), ATSI (*Association Troupe Soleil du Ioba*), AGRAACE (*Association Groupe de Recherche d'Appui et d'Action en Education*)

respondents	other categories, research assistants	
Total number of respondents		89

Relevant documents and media were collected. In addition to the interview guidelines, a standardized questionnaire for consensus analysis was developed for farmers. Experts were interviewed using an adjusted interview guideline. A former journalist (who translated among English, French and Dagara) also acted as cultural brokers by assisting in interviews. Interviewees' responses were audio recorded, transcribed or summarized.

Study site

The landscape and structure of the population in the loba province (Figure 3) are the results of in-migration from other parts of the country, the implementation of development projects and the opening up of new resources. Economic agricultural potential has been attributed to south-western Burkina Faso since the 1970s, and the region has attracted development projects and migrants, especially after the eradication of river blindness along the Bougouriba River, a tributary to the Black Volta. South-west of Dano, peasants were resettled in river valleys and equipped with farmland, infrastructure and agricultural means of production during the 1970s. This intervention positioned the newcomers of the *Aménagement des Vallées de Volta* scheme in much better conditions than other farmers in the region (Werthmann 2009, Oberhofer 2008).

Figure 3: Basic geographic and social coordinates of the loba province

Climatic zone: North Sudanian Rainy season from April/May until October Mean annual precipitation: 800–1,000 mm Wettest months: August and September Hottest months: March–April, up to 40 °C Coldest months: November–January, up to 25–28°C Population: 14,000 people, 57 persons/km ² Administrative structure: Nine <i>départements</i> , 2 municipalities and 136 villages Provincial capital: Dano

In the 1980s, the *Programme National des Gestion des Terroirs* (PNGT), funded by the World Bank and other donors, was implemented in the region. The program focused on land rights and natural resources management, including the construction of soil conservation and water-harvesting facilities. loba traditionally is a production site for export cotton, but during the 1990s, gold was discovered in two villages 10–20 km from Dano. Consequently, local markets and settlements were relocated, and the sources of local incomes and the prices of local agricultural products changed. Local authorities around the mines and adherent towns changed relative to villages not affected by the discovery of gold (Werthmann 2009). Thus, intraregional socio-economic and political dynamics have contributed to land use changes and adaptation. Gold extraction which releases methane is growing, and since 2010, gold has replaced cotton as the region's major export (UNDP RISØ 2013).⁸

⁸ The CO₂ emission reduction potential from gold extraction in Burkina Faso counts ca. 100,000 tCO₂e, which rank 7 out of 14 possible areas of CO₂ reduction. The largest reduction potential has afforestation/ reforestation with 96,726,520 tCO₂e (UNEP RISØ 2013).

3 NAPA production under the UNFCCC in Burkina Faso

CCA policy making and implementation have been well documented in Burkina Faso compared to other West African countries. The research by Kalame et al. (2011) on the NAPA⁹ process is, to our knowledge, the only country-wide study of its kind realized in West Africa. Brockhaus and Kambire (2009) and Brockhaus et al. (2012) studied CCA governance in the wider context of political decentralization.

External actors and regional initiative

Mamadou Honadia, who has been the permanent secretary of the central body governing CCA (the National Council for Sustainable Development) since 2009 and the chair of the Adaptation Fund Board (AFB)¹⁰ since 2014, suggested in an interview with public media why mitigation has not been a political priority in many West African countries: « Africa needs, in my view, to organize itself to develop regional programs and take charge of its destiny because the international cooperation on climate change seems to have changed objectives and does not respect historical and current obligations ... We are in a process where feelings don't count. Developing countries will not react until developed countries play their part in technical and financial terms in order to allow developing countries to maintain a certain level of development ». ¹¹ Honadia's statement emphasizes the interdependency of commitments by Annex I and non-Annex I countries in CO₂ mitigation and development.

The UNFCCC secretariat's website compliments Burkina Faso: 'Burkina Faso's experience shows that well-established institutional arrangements to deal with climate change issues in the country can greatly facilitate NAPA preparation and implementation and foster early strategic thinking for the consideration of medium- and long-term adaptation options' (UNFCCC 2014). Diverse agents (individuals and organizations) had been involved in NAPA planning. For Burkina Faso to enter funding streams, international donors had to declare their readiness to participate in NAPA planning and implementation (Kalame et al. 2011). Most such donors could demonstrate a long history of North-South cooperation with the country. ¹²

Diverse actors established and maintained the political CCA arena and, thus, public participation in the planning and implantation process: « [a]t the national level, the emergence of a more network-like governance is observable, but at the time of the research in 2009 most new actors in the adaptation arena are international actors negotiating with an established set of formalized governmental state actors. ... The NAPA was unknown at the subnational and local levels » (Brockhaus et al. 2012: 227). The UNFCCC requirement for public participation was fulfilled without necessarily giving a greater voice to domestic civil society or the affected population.

Providing an example of Honadia's vision of regional climate programs in West Africa, Burkina Faso has participated in the West African Science Service Center on Climate Change and Adapted Land Use (WASCAL) since 2010. In 2013, WASCAL received legal status as regional international organization from the Economic Community Of West African States (ECOWAS) (WASCAL 2015), and Ouagadougou

⁹ French: *PANA Programme d' Action National d' Adaptation à la variabilité et aux changements climatiques*

¹⁰ AFB was established by the UN under the Kyoto Protocol to allow developing countries to directly apply for adaptation funds (without channeling funds through international organizations). The Fund receives revenues from the Clean Development Mechanism as well as aid from donors (e.g. from Sweden and Brussel Capital Region in 2013.)

¹¹ January 28th 2014, interview at lefaso.net, own translation.

¹² European Commission, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), SDC Swiss Development Corporation (SDC), Japanese Development Agency (JICA) and Luxembourg (via the embassy) (Kamale et al. 2011: 539).

has hosted the Climate Service Center for the West African region. Laurent Sédого, a former Burkinabe minister of the environment and of agriculture, fisheries and water resources, became WASCAL's first executive director. The initial funds, however, came from Germany. Thus, this West African initiative also started through foreign-funded academic cooperation.

National administrative prerequisites

In a 2007–2009 comparative study of Mali and Burkina Faso, Brockhaus et al. (2012) interviewed decision makers, experts and journalists at the national and sub-national levels and analyzed media reports on climate change, though not many were yet published. According to Brockhaus et al. (2012), there was very little awareness of NAPA through 2009 when the countries were preoccupied with the implementation of the decentralization policy. In Burkina Faso (as in Mali), decentralization affected strategic CCA responses because of the increased involvement of civil society. Networks for knowledge sharing were changed, and responsibilities and roles were redefined or reinterpreted (Brockhaus et al. 2012).

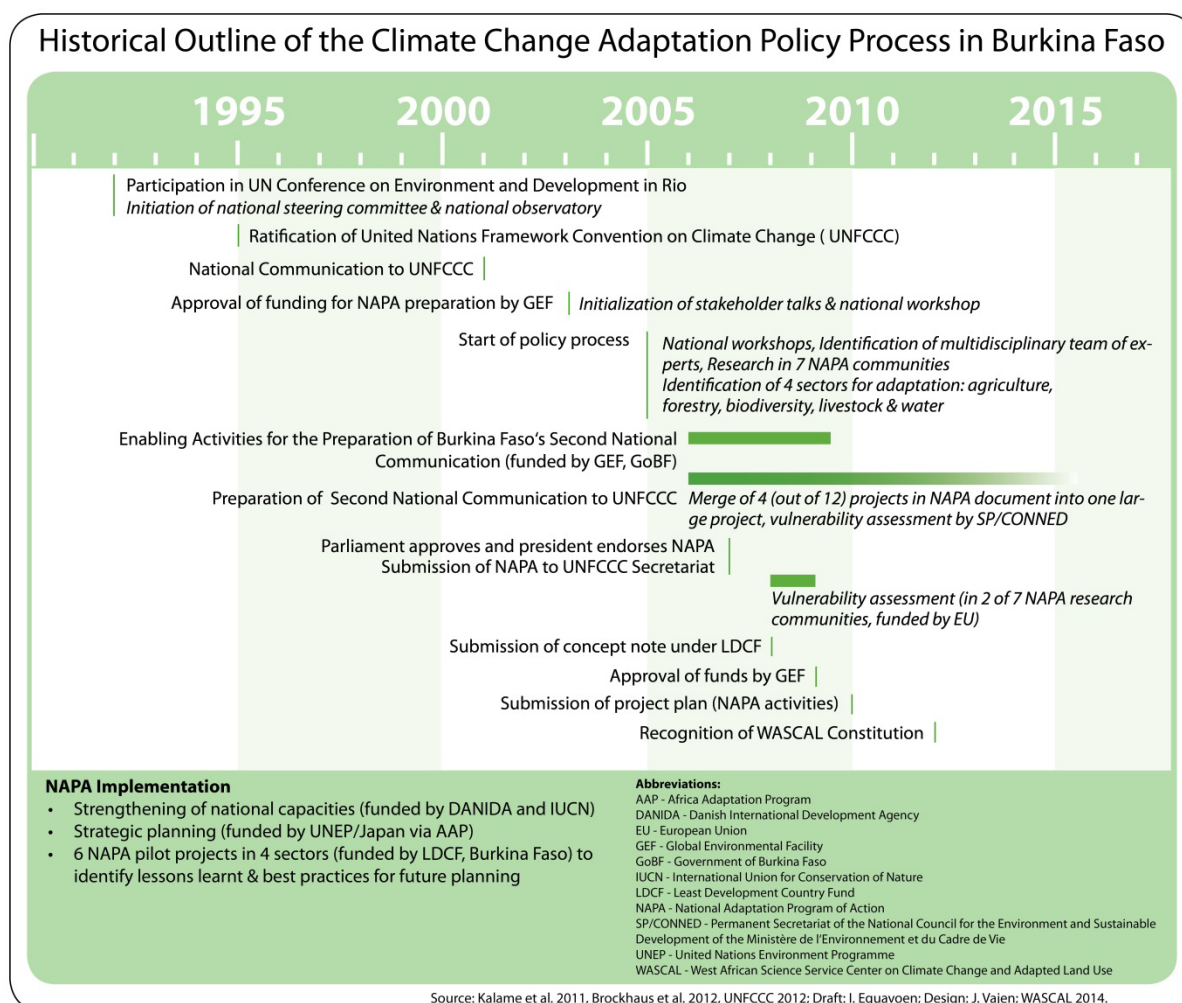
Decentralization, which started in Burkina Faso in 1995, had another side-effect: the 2001–2004 reform of administrative borders within the country. The baseline NAPA data gathered in 2004 cannot be compared directly to current data (Kalame et al. 2011, GoBF/UNDP 2006) because they refer to different geographical and social units, leading to scale mismatches.

After a reordering exercise, 29 ministries have operated at the national level since 2007. A high number of cabinet positions is typical in many African states. Larger silo structures lead to higher complexity and competition among administrative units and can hinder communication and coordination among agencies working on climate change issues across sectors (Lockwood 2013: 662).

Creation, structuring and maintenance of the political CCA arena

After the Rio Conferences when Burkinabe decision makers were first formally exposed to the idea of climate change, a national steering committee and national observatory were established. Later, there was much overlap of experts, professional relations and work attitudes between activities to fulfill the Rio Conventions and to the UNFCCC framework.

Figure 4: Historical outline of the climate-change-adaptation policy process in Burkina Faso



Burkina Faso's government ratified the UNFCCC in Kyoto and became a Non-Annex I party to the convention in 1995. In 2001, a Burkinabe expert group¹³ wrote the first National Communication to the UNFCCC based on a 1996 paper by the *Groupe Intergouvernemental d' Experts sur L' Evolution du Climat* (GoBF/UNEP 2006). With approval of funding, the GEF opened the door for NAPA preparations in Burkina Faso to officially begin in 2005.

The leading national institution in the NAPA process was the National Ministry of Environment, which had the most bargaining power and climate change expertise in the CCA arena at this point in time. Within this ministry, the National Council for the Environment and Sustainable Development with its permanent Secretary (SP/CONNED) served as the office in charge of NAPA activities. « Coordination was inconsistent », and within seven years (2005–2011), three different UNFCCC Focal Points, each with their own supporting staff, were appointed one after the other by the government, which made continuity in work difficult (Kalame et al. 2011: 546). Since 2009, there has been more stability in personnel. Generally, a 2009 report identified the « rotation of staff and changing institutional arrangements » and the « lack of coordination and knowledge exchange ... between government Ministries, and between NGOs, research institutes and the government' as the 'main institutional barriers to effective action in climate change in Burkina Faso » (weADAPT 2011).

Scientists from several national research institutes were prominently involved in the planning process. At the start of the NAPA planning process, the perception of climate change was dominated

¹³ This was the inter-ministerial council for the implementation of actions under the UNFCCC (CIMAC), which « ceased to exist when ministries were reorganized » and « finance ran out » (weADAPT 2011).

by the view that « climate change [is] an environmental issue that should be addressed strictly in environmental terms by institutions directly involved in the management of natural resources and environmental services » (Kalame et al. 2011: 541). Consequently, experts from natural sciences were consulted and exchanged knowledge across disciplines. The increased risk to health was not considered in early planning. Thus, the UNFCCC criterion of a multidisciplinary approach was fulfilled, but not all relevant disciplines were included from the start of the planning exercise.

The NAPA drafting and implementation involved field research and vulnerability assessments in seven NAPA pilot communities in order to inform political decisions. The seven sites were distributed across the country's three climatic zones. Based on these pilot studies, the government set four adaptation priorities: (1) agriculture; (2) forestry; (3) biodiversity; and (4) livestock and water. The Burkinabe government released the NAPA document (GoBF 2006) and submitted it to the UNFCCC in 2007.

The public, however, seemed to have been unaware of the ongoing policy process and the NAPA document. Media coverage was rather low, leading Brockhaus et al. (2012: 225) to conclude that « [t]he absence of media coverage of adaptation seems to reflect the degree of society's lack of awareness of the issue and confirms assumptions that adaptation is not part of the public discourse but rather is perceived as a locally specific problem – that is, adaptation not as a political and societal responsibility but as a private or “club” (community, village, district) problem ».

Political agenda setting at the national scale versus local priorities

Kalame et al. (2011) interviewed about 70 per cent of the researchers involved in the NAPA planning exercise, including SP/CONNED staff, independent consultants, donors and members of the NAPA pilot communities. Their findings reveal a path dependency in the vulnerability assessments: « NAPA researchers visited communities with a “prescription” for four sectors [set by the government] for which they wanted to gather more information. Communities likely provided the information that the researchers wanted to hear » and generally were not very interested in joining the meetings (Kalame et al. 2011: 541f.). The repetition of the exercise in NAPA communities by researchers with slightly different methods identified other local priorities, especially the construction of small reservoirs (Kalame et al. 2011: 543).

Brockhaus et al. (2012) found little evidence of awareness among the public of its role in the participatory policy-making exercise: « [e]ven in NAPA project sites in Burkina Faso, we found that although at least two technical agencies were aware of the NAPA program, nobody knew about vulnerability assessments. ... [I]nformants explained that the first NAPA projects implemented at the local level had involved no vulnerability assessment; local communities perceived them as “business as usual afforestation projects” without further reference to climate change or adaptation » (227). Despite participation in NAPA planning, very little local knowledge about the relevance and need for NAPA had been developed, while path dependency hindered knowledge transfer from local respondents to the planning team. These problems should be viewed within the context of North–South cooperation in which local communities are frequently invited to participate (join community meetings) in development projects which come, go and lead to project fatigue among the population.

According to Brockhaus et al. (2012), the power of discourse should not be underestimated. The techno-fix discourse (thinking of climate change as an environmental challenge that can be fixed with adequate technical solutions) had severe effects on the activity levels of both government and civil society actors (Brockhaus et al. 2012). The latter were described as paralyzed by the discourse, which contributed to the mismatch in government planning and adaptation requirements at the local level (Brockhaus et al. 2012).

Aid for planning exercises and reward systems

CCA can be organized like a development project at the local and regional levels (Nielsen et al. 2012). This description holds true as the UNFCCC framework for participatory planning for the climate funds resembles forms of development aid. The updating and revision of the first National Communication to draft the Second National Communication was projected as a three- to four-year planning exercise. SP/CONNED implemented the project « Enabling Activities for the Preparation of Burkina Faso's Second National Communication to the UNFCCC » at a total cost of approximately US\$456,000. This cost was shared by GEF (US\$405,000) and the national government, which contributed around US\$51,000 for six staff salaries and operational costs (GoBF/UNEP 2006)¹⁴. The process started in 2006 with a self-evaluation and a workshop at which the first revisions were presented to seven (of 29) national ministries, two research institutes, the mayors of Bobo-Dioulasso and Ouagadougou, one Burkinabe environmental NGO and the Burkinabe chapter of an international environmental NGO. Industry was represented by seven companies with branches in Ougadougou, Bobo-Dioulasso and Banfora, while the third sector was represented by health centers, banks and hotels.

According to the GEF budget, more than half of the money was allocated for local consultants (US\$208,000), and more than a quarter to contractual services from individuals (US\$45,800) and companies (US\$17,000). Thus, funds were mostly spent on employment of experts within the country. In addition, US\$21,000 was paid to international consultants. After the finalization of the planning exercise, no Second National Communication to the UNFCCC had been delivered, as of July 2015, some years after the planning project was completed.¹⁵

Aid dependency in NAPA implementation

With a very low CO₂ emission rate of 0.07 t/capita (weADAPT 2011), Burkina Faso has clearly focused its political agenda on adaptation, instead of mitigation. A 2009 report by the Swedish International Development Agency (Sida) discusses the country's potential and limitations to attracting foreign funds. Proving institutional capacity is seen as crucial bottleneck:

« [I]n reality Burkina Faso has very little capacity or comparative advantage internationally to attract CDM [Clean Development Mechanism] projects. ... [T]here is a large amount of funding for adaptation currently being pledged both by donors and increasingly private foundations, and if Burkina Faso can demonstrate institutional capacity for adaptation it will be in a strong position to attract this funding » (weADAPT 2011).

In an evaluation of adaptation priorities set by African countries under the Africa Adaptation Programme, Kumamoto and Mills (2012) analyzed global and international CCA funding instruments (e.g. Least Developed Country Fund (LDCF), Special Climate Change Fund, Adaptation Fund, and GEF Trust Fund) and several regional programs (e.g. ClimDev, Climate Change Adaptation in Africa). A complete, comprehensive overview over these international funds and programs is not easily accessible. The Africa Adaptation Programme (AAP), for example, is funded by Japan but also « supported by UNDP in partnership with UN Industrial Development Organization, UN Children Fund and the World Food Programme » (Kumamoto and Mills 2012: 267). It has a volume of total US\$92.1 million and aims to assist 20 African countries, including Burkina Faso, to which it has given approximately US\$3 million. Research on how and why these conglomerates of donors come into being, sustain themselves and interact with their partners is scarce.

¹⁴ Other numbers on the web page: total 420,000 USD with 410,000 USD by GEF (UNFCCC 2014)

¹⁵ http://unfccc.int/national_reports/non-annex_i_natcom/submitted_natcom/items/653.php (Assessed 23rd July 2015).

Reviewing the priority list from the AAP, Burkina Faso seems atypical. Most of the other 19 countries have clearly prioritized so-called soft measures, including building of institutions, awareness, knowledge, policy, planning and empowerment. The government of Burkina Faso, in contrast, has prioritized so-called hard measures related to agriculture, infrastructure and natural resources (Kumamoto and Mills 2012). Building and strengthening a knowledge base about CCA, however, also forms a crucial part of NAPA implementation in Burkina Faso, although it does not rank among the country's top four priority areas.

This difference might result from the funding structure for implementation of the NAPA in Burkina Faso, which consists of three components: (a) strategic planning (under AAP); (b) national capacity building; and (c) adaptation in the pilot communities (see Figure 4, lower left corner). Kumamoto and Mills (2012) evaluated only one of the three CCA components, but their study hinted that countries strategically select from the available funding mechanisms in order to finance different NAPA components.¹⁶

Two of the three NAPA components in Burkina Faso remain fully funded by international donors (strengthening of national capacities by DANIDA and IUCN and strategic planning by UNDP and Japan via the AAP.)¹⁷ The third aim to strengthen adaptation capacities and reduce vulnerability to climate change in Burkina Faso was planned at a total cost of US\$23.4 million. For implementation at six PANA pilot sites, the country received US\$3.3 million from the LDCF and contributed approximately 450 million CFA (approximately US\$751,200 during time of publication) of domestic funds (UNFCCC 2014).

Clearly, donor dependency in the CCA planning process has persisted and even increased during the CCA implementation process, although donors might have changed over the process. This dependency plays out at the interface between the government, civil society and aid recipients.

¹⁶ « countries chose to capitalize on the AAP to prioritize soft interventions while using other initiatives, such as the Climate Investment Fund's Pilot Programme for Climate Resilience, to focus on hard interventions » (Kumamoto and Mills 2012: 271)

¹⁷ DANIDA (Danish International Development Agency), IUCN (International Union for Conservation of Nature)

4 Processes of CCA translation and implementation in Ioba

Local understanding of climate change

Although CCA expertise has certainly increased compared to the time of earlier studies, climate change is still not a popular discourse in Burkina Faso and remains limited to the national and international levels. *Changement climatique* was not often heard during field work, although farmers had observed changes in the rainfall patterns, including the quantity and variability of precipitation and the onset and end of the rainy season which affects local land use and land cover changes:

« Yes, cutting trees leads to higher temperatures because trees will always produce fresh air and shade for us. »

« It is also the reason why it does not rain so much anymore. There is no more shade, and the soil is getting dry, and the heat of the sun is able to reach everywhere. »

« Already, just the fire can heat the place, can make the place hot, so I can easily say that bushfires can lead to higher temperatures. »

« There were always leaves from the trees, and together with the rain, we had some kind of fertilizers. The trees also stopped the rain from going down the river, but now there is erosion and wind that transfer leaves and nutrients down to the river. »¹⁸

Changes in tree cover played an important role in farmers' observations and were related to higher temperatures, stronger winds, lower soil fertility and wild animal distinction (Figure 5).

Figure 5: Observed environmental changes by farmers (> 35 years old, n= 36) in Dano

Season	Fixed rainy season in the past; uncertainty about the onset and end of the rainy season in the present
	Shift of the onset of the rainy season to later in the year
	Shorter rainy season in general, but long period of rain this year (2012)
	Lack of match between old seeds and rainy season calendar
Rainfall	Disruption of the farming calendar by erratic rainfall
	More rain in the past; less rain in the present, except for this year [2012]
	Excessive rainfall
	House collapses because of heavy rainfall
Temperature	Hotter sun
	Very hot in the olden days, with shade from trees; hotter in the present as a result of cutting trees
	Cold weather at the onset of the dry season in the past; now, both hot and cold
Wind	More (violent) wind
Drought	Droughts in the past; no longer as severe
	Two-week droughts in the past; longer in the present
	Definition of drought as no rain for up to one month during rainy season
Soil fertility	Fertile soil in the past; loss of soil fertility in the present
	Good harvests from smaller fields in the past; bad harvests from larger fields in the present

¹⁸ Quotations by the farmers Mr. A.G. Somé, Mr. L.W. Somé and Mr. B. Somé, Mr. E. Dabiré translated interview transcriptions, 2012.

	Use of organic fertilizer in the past; need for additional chemical fertilizer in the present
Tree cover	Decrease in the density of trees compared to woods in the olden days
	Fewer big trees
	Responsibility of women for abusive woodcutting
Other observations	Burning of bushes only for hunting purposes these days
	Drying up of lakes and rivers
	Disappearance of wild animals and clearing of the forest

Source: Consensus analysis, 2012. Responses are listed without consideration of their rank and frequency.

The local language has no term for ‘climate change’. The Dagara description *zié lièb* (literally ‘turn upside down’) contains a strong connotation of social change, as local participants explain:

« It is because our ancestors did not have to deal with changes in the climate. That’s why we, the Dagara people, also don’t have an accurate word for the climate change phenomenon. It just did not exist or was not of their concern. »¹⁹

« If you translate “climate change”, it has a double meaning. It means a change in generation, so they [farmers] talk about how the younger generation doesn’t listen to the older generation anymore, and it means “climate change”. So for me as a researcher, the translation to [rural people] was already a problem. »²⁰

Other studies in the loba province resulted in similar findings (Callo-Concha 2015). In loba, one respondent shared local interpretation of flooding events: local people thought that one river had moved from its riverbed to another to greet the other river or to express condolences for the deaths of the children of the river (the river spirits).²¹

The local understanding of climatic or environmental change was more holistic than the scientific understanding of the term. As in northern parts of Ghana (Eguavoen 2013), local concepts of change included notions of the environment (including human-made infrastructure) and notions of social and social-spiritual relations. Other studies support these findings. In African languages, there commonly is no term to distinguish ‘climate’ from ‘weather’ (Brou et al. 2005, Shaffer and Naiene 2011, Sheridan 2012). Therefore, future investigations require careful consideration of local meanings. In addition to the political making, the cultural and social coproduction of climate change is the result of a process of sense-making (Roncoli et al. 2009, Jones et al. 2011). Interviews and observations show that the idea of *changement climatique* does not make much sense in the local context. The idea connects realities across time, space and scales that most respondents experience as unconnected.

A number of on-going agricultural activities could be labelled CCA, although most farmers, local authorities and NGO staff in loba did not refer to *changement climatique*. Most respondents linked their observations of rainfall change to local practices of wood cutting and bush burning. Only a very few related them to global environmental change. Even when respondents had some knowledge of global warming, they did not always clearly see how this knowledge could be linked to realities in Burkina Faso which has no big industries. This tendency was observed both among farmers and among urban residents who had much better access to media:

« People became aware of it [climate change] and maybe reduced the topic to one event; that was the flood of 2009. There was a major flood here in Ouagadougou and people said, “Okay, that is due to climate change. We have never seen a rainfall like

¹⁹ Mr. I. Somé (old farmer), translated interview transcription, 2012.

²⁰ Mrs. J. Wahren, interview transcription, 2013.

²¹ Mr. J. Somé, farmer and custodian of the land in Dano. Interview, 2012.

that, so the climate is changing”. The year after we had a drought, so that was quite contradictory, but at least it opened a lot of people’s eyes who were skeptical about climate change, and at least it brought the topic to the table in the public discourse. »²²

During the consensus analysis, many farmers could not say whether they believed that other countries also faced climate problems. They felt unable to say whether processes overseas are responsible for the observed changes in rainfall and temperature in Burkina Faso. Farmers said that they knew very little about places beyond their home region. Many responses were explicit in this regard.

We thus are not discussing merely a knowledge gap about the causal relations behind global warming and its global impact which could be tackled with public education programs. Though connected to the global economy in diverse ways (e.g. Freidberg 2003, Werthmann 2009), most farmers do not experience being part of a global public. This is one reason, we believe, that this problem of global scale is not perceived as global but is broken down to the regional and local levels that respondents experience and can easily make sense of. The global narrative of climate change and the idea of CCA are slowly gaining ground in the country, while the old deforestation/afforestation narrative remains strong, even dominant, resulting in a number of adaptation measures in forestry and the reduced use of wood for cooking and other purposes (see, for example, Figure 6). Participants well understood the relevance of trees, but as one farmer summarized the situation, « understanding the message is not the problem, but there is no alternative. ... Living today and living tomorrow. It is today. And there is no alternative because people are poor »²³.

Figure 6: Adaptation measure: Roofing a house without wood in Dano²⁴



²² Mr. Vink, filmmaker and founder of *Ciné Droit Libre* film festival, interview transcription 2013.

²³ Mr. I. Porgo, representative of CPF, interview transcription, 2013.

²⁴ Farm house by Mrs. A. Tabiré, interview 2012. The owner had participated in a training on house building without wood. Photograph by Wahren

Farmers' expectations, expert knowledge and political resignation

Some respondents called for political action and better public education programs:

« Climate change is a question for the entire world. Therefore, we are all involved, and the government works to sensitize the population to the abusive cutting of trees. This is also a political question. Everybody observes the degradation of the environment. »²⁵

« Climate change is also a question of how would you choose the words to express the problem and what the problem really is. You would need to make it clear to people who are not always intellectually minded. You should not be speaking about a hole in the ozone layer because it doesn't say anything to a farmer in Dano. »²⁶

Farmers in rural communities of the loba province do not seem to link environmental changes to global warming, except for extreme events (droughts and floods). Local discourses mainly consider local responsibility for land degradation and express disappointment in the degree of support that the government and NGOs offer to producers of food crops (in comparison to cotton producers). The CCA measures most frequently mentioned by farmers were improved seeds, synthetic fertilizers and techniques to increase soil fertility. From the standpoint of farmers, the application of these measures depends on external support because small land-holders said they were not affordable.

In 2013, regional and local actors delivering agricultural support to farmers, such as government officials and NGO staff, had a good knowledge base of climate change and CCA. Many had participated in NAPA planning workshops or CCA training. The creation of the CCA arena led to capacity building among professional and development experts, but the translation of this knowledge into practice was limited due to insufficient funds, a lack of coordination and shifting donor interest in development themes. These discourses of expectation and limited funding have long persisted in the loba province²⁷.

From farmers' perspective, neither government offices nor NGOs have shown great responsiveness to their concerns, resulting in a lack of political interest among farmers. General project fatigue dominates farmers' interactions with governments and NGOs. The local understanding of elections, voting power and political accountability has resulted in a situation in which local interests enjoy little political representation and farmers engage in little political participation.

« If you say nothing is changing, why do people continue to vote for the party in power? Because the majority of citizens are [personally] attached to the party in power. And moreover, the party in power has more means than the other parties. And they use these means to attract the population which is mainly poor. A simple present can attract them. »²⁸

Climate change communication and the role of the media

Science knowledge about climate change and adaptation options in loba is distributed mostly via radio and interactive communication platforms, such as drama groups, mobile cinema and trainings (Figure 7). These formats allow top-down information flow and offer opportunities for farmers to publicly discuss their views, concerns and questions. Information about farmers' concerns, however, did not flow bottom-up. The popularity of and vivid participation in these events illustrate that farmers are eager to communicate, become informed and get active in environmental change and natural resources management.

²⁵ Mr. A.N. Somé, farmers and CDN politician, 2012.

²⁶ Mr. G. Vink, interview, 2013

²⁷ Mr. G. Vink, interview, 2013; Mr. P. Kinda, interview, 2013.

²⁸ Mr. A.N. Somé, farmer and CDN politician, 2012.

Figure 7: Sources of information and communication channels mentioned by farmers (n= 36)

Media	Used as source of information (percentage)	Used as communication channel (percentage)
Radio	87.8	92.9
Television	21.9	38.6
Newspapers	26.8	29.8
Posters	19.5	54.4
Journals	07.3	19.3
Internet	12.2	15.8
Cinema/film screening	51.2	73.7
Theatre	53.7	84.2
Workshops	53.7	71.9
Farmers' organizations/community meetings	56.1	75.4
Religious meetings	53.7	64.9
Other people	65.9	78.9
NGOs	51.2	-
Politicians, government offices	63.4	-
Traditional events	-	40.4

Local radio stations have been shown to be effective means of public communication because of illiteracy and the low distribution of newspapers in rural areas. Not all farmers listen to radio, but it seems to be the best means of knowledge dissemination. Around Ouahigouya, farmers can also broadcast their radio messages on *La Voix du Paysan* [Engl. *Voice of the Farmer*]. *Radio Manivelle*, founded in 2000 by a private initiative in Dano, has worked to build awareness of climate change and inform listeners about CCA measures. The scope of thematic coverage extends to all kinds of developmental topics. Development and empowerment were main drivers of the establishment of the station: « [t]he motivation was to sensitize for and promote development, meaning to wake up the conscience of the population so that they take it in their hands. [What's your target audience?] The youth, farmers and herders.²⁹ *Manivelle* means "together we turn to the route of development" ». ³⁰

Government authorities and NGOs suggest programs and provide radio stations with CDs with programs and messages to be broadcasted. This can be an effective communication channel for knowledge distribution if researchers can translate their relevant findings into brief, comprehensive, entertaining radio programs. Radio programs which include interactive games into which listeners can call are extremely popular. Broadcasts and discussions related to climate change mostly focus on tree-cutting, bushfires and unpredictable rain and weather forecasts, which strengthens the perception of global warming as a local problem which can be tackled with local solutions. The government radio station RTB₂ operates around Bobo-Dioulasso and broadcasts in French about regional issues, including CCA. Finding information and audio material for broadcast is not easy, as the head of the station states:

« We are looking for specialists who try to explain farmers the meaning of climate change, how one has to behave in the face of climate change, which method should be adopted to fight against it, to gives examples to farmers which prove that climate

²⁹ Mr. B. Ouaboue, translated interview transcription, 2012.

³⁰ Mr. R. Bama, translated interview transcription, 2012.

change is real like the disappearance of trees, the changes in the seasons. Thus, one needs to plant trees and fight against cutting trees. »³¹

Many respondents, documents and research articles from West Africa deliver the statement or educational message that climate change is real. This discourse does not concern critical debates about human responsibility as in the United States but should be understood in the context of agenda setting: climate change is real and a serious issue that needs urgent action. Journalists see the relevance of the theme but find it difficult to access information. Therefore, some founded a professional organization called *Le Réseau des Journalistes sur les Changements Climatiques* (CIC), along with global and national policy-makers who work in the development of climate funds for adaptation and mitigation, such as UNFCCC experts. Members pointed out the interdependency of climate change and development:

« CIC was set up in April 2009 in Kaya with 26 journalists, gathering nearly every organ of the information. These 26 had received training from the expert Badolo [...] on climate change. Afterwards, the knowledge needed to be used well. We have participated in a big conference, the COP. We were accompanied by the minister of the environment and partners, such as the UNDP, in establishing a partnership. ... We started with the NAPA project where we set up focal points for sensitizing the population. There is also another partnership with COGEB [Comité de Gestion de l'Enseignement de Base]. We are working with eight local radio stations, where we have translated the project activities to different local languages. We also have a framework that has allowed us to further educate ourselves on specific topics. It must be said that there are two lines of work which are building capacity on climate change and raising awareness among the population on climate change issues. ... In 2013, we will accompany the PCD [Plan Communaux de Développement] in integrating climate change into their planning. »³²

Drama groups, such as *Association Troupe Soleil du Ioba*, come to rural communities and can inform many people simultaneously. These groups transfer information about development issues from NGOs to communities by hosting theatre plays in local languages acted by farmers. Thus, information is translated, contextualized and delivered in a way which rural communities can easily take up. These groups also offer public space for the expression of questions, opinions and concerns.³³

Figure 8: Performance of a drama group near Dano³⁴



³¹ Mr. A. Laguempedo, translated interview transcription, 2013.

³² Mrs. V. Zongo and Mrs. S. Rabo, journalists, interview, 2013.

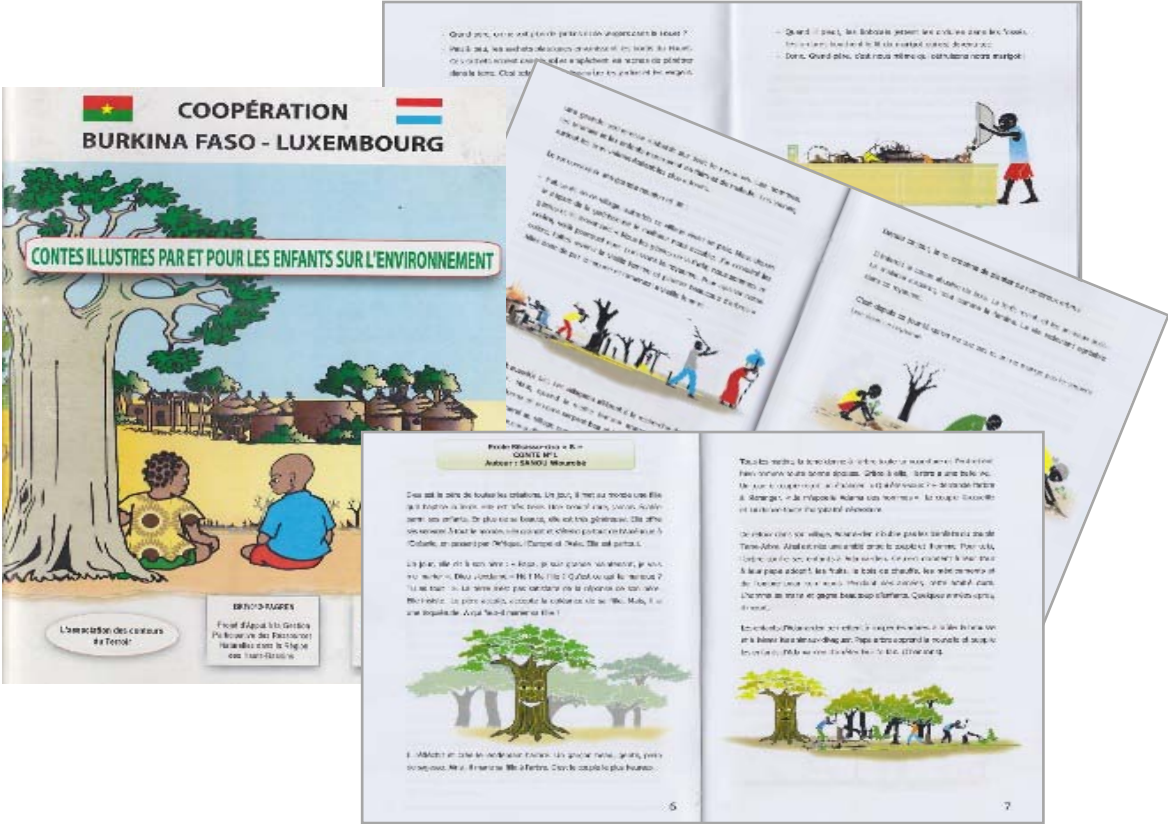
³³ Mr. J. Bamogo, journalist, interview, 2012

³⁴ Photograph by Wahren

A related communication channel is storytelling. *Association des conteurs du terroir*, which has ten members and is based in Bobo-Dioulasso, encourages primary schoolchildren to create stories based on their own environmental observations and to present them in a competition. Using the best stories, the association develops educational products (e.g. TV programs, books, public storytelling events).

« In our books, we speak of it [climate change]. We speak about the abusive cutting of wood. When we work with farmers on stories, we choose a market day to go for stories for farmers. We have a jury including an educator, a technician and the schoolchildren storytellers. »³⁵

Figure 9: Material for environmental education by the *Association des conteurs du terroir*



Since decentralization starting in 2006, farmers have had more opportunities to voice their concerns and network with government officials. National Farmer’s Day is a central occasion for the public address of the government by farmers.³⁶ Mobile cinema offers a similar opportunity: stories and pictures from faraway places can be screened and their relevance to local livelihoods discussed publicly. Young people (20–25 years old), in particular, make use of this opportunity.

« [P]eople are pleased to have a visit from a film festival. ... There is already some curiosity to see simply what is going on. ... The fact that ... you consider them also to be the public and that you take time and put money in to go there and set up equipment and show a film – that is already something that pleases the people. ... Everywhere we go, we somehow involve the local authorities. ... I invite them every time. ... It is a very

³⁵ Mr. E. Dabiré, journalist interview, 2012.

³⁶ Mr. A. Laguempengo, journalist, interview, 2012.

rare occasion that people have a microphone, and they can pose a question directly to their local mayor. So sometimes the debate is not about the film, but they just take the microphone and say everything they want to – and it is okay for us; it is about freedom of expression [...] As long as you speak about the concerns of the people, it is okay, so sometimes, it takes turns that we didn't even think of. »³⁷

The main purposes of the *Ciné Droit Libre Festival* are to address local problems and to allow farmers to voice their opinions. The screened documentary '*The Man who stopped the desert*'³⁸, a story about a small-scale farmer who leads the revival of the ancient *zai* technique to recover soil quality in northern Burkina Faso, encouraged farmers to develop an interest in environmental change, its manifestations in other regions and the future of their own locality.

³⁷ Mr. G. Vink, filmmaker, interview, 2013.

³⁸ '*L'homme qui a arrêté le désert*' by Mark Dodd, 2008, 64 min.

5 Conclusion

The paper has linked political aspects of CCA across national and local levels. Analyzing empirical data from earlier studies showed that government officers and NGO staff have more awareness, knowledge and expertise of climate change than in 2009. The connection between national and regional CCA knowledge and the experience of farmers remains weak, although diverse actors mediate between them and contribute to the translation of climate change and adaptation. While top-down flows of knowledge can be successfully mediated, there is little local participation and up-flow of farmers' knowledge that could inform policy making and program planning. The long history of participatory schemes in North–South cooperation has resulted in political resignation and project fatigue among farmers.

Much of the government-led adaptations outlined in the NAPA remain theoretical as the country has not committed to investing domestic funds in CCA but has taken the position of aid recipient under the UNFCCC framework. Domestic funds have been invested in forestry, agriculture and pastoral livelihoods, supplemented by foreign funds. Thus, the UNFCCC provides a new funding framework which has not significantly changed work and policy priorities in the country.

Weak institutional and other capacities still hinder foreign investments in CCA and the flow of foreign funds into the country. Strengthening capacities is an on-going priority, while many other hard CCA measures, such as the delivery of infrastructure and the establishment of new legal frameworks, still await implementation and face uncertain funding.

Lockwood's statement (2013: 660) that there is « certainly no body of evidence ... on the delivery of programs [in sub-Saharan Africa], as opposed to the formulation of adaptation strategies » can partly be supported. UNFCCC and CCA have resulted in capacity building in Burkina Faso. A large number of small-scale CCA projects are in progress. A clear line cannot be drawn between CCA and development programs as afforestation/reforestation, agriculture and herding were already prominent areas of activity for national and regional governments, NGOs and actors in North–South cooperation.

Finally, the 2014 political protests and disempowerment of President Blaise Compaore also had consequences for regional and municipal leadership. Some political and government figures, including the mayor of Dano who had won for the opposition party in 2013, had to leave office. Many offices remained vacant for some time, so awareness of climate change and expertise in CCA gained in regional government offices might have been partly lost through staff turnover.

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Appendix

Annex 1: Consensus Analysis from Semi-Structured Interviews with Farmers ³⁹

A	Question on Climate Change	YES.	NO.
1	Have you observed changes in the weather?		
2	The changes in the weather are caused by our everyday activities. Is it true?		
3	Cutting trees leads to higher temperature. Is it true?		
4	Smoke from bush burning leads to higher temperature. Is it true?		
5	Have you heard about climate change in the media?	40	41
6	Burkina Faso is the most affected country. Is it true?		
7	Countries far away, such as USA and France, are responsible for climate change. Is it true?		
8	Countries far away, such as USA or France, also have problems with climate change. Is it true?		
9	Smoke from cars and factories lead to climate change. Is it true?		
10	Development in Burkina Faso can have a negative impact for our climate. Is it true?		
11	People in Burkina Faso can stop climate change. Is it true?		
12	More frequent floods are caused by climate change. Is it true?		
13	Drought has always been there. Is it true?	42	198
14	Bad harvest is mainly because of climate change. Is it true?		
15	Climate change brings more crop disease. Is it true?		
16	Climate change is a problem of my generation. Is it true?		
17	Will your grandchildren see more changes in the weather than yourself?		
18	After some time, the weather will be like in olden days again. Is it true?		
19	People like you and me can help to stop climate change by better managing land and water. Is it true?		
20	Climate change cannot be stopped. Is it true?		

1.1.1

³⁹ Source: Standardized questionnaire by Irit Eguavoen.

⁴⁰ If response is YES, then please, ask: On what kind of media have you heard about climate change?

And move to question on sources of information.

⁴¹ If response is NO, then please, explain: Climate change means that the weather changes in the world over a long period. This concerns the temperature, rainfall but also leads to many other outcomes.

⁴² Please ask about droughts in the past and then move to question on conflicts over access of water/land.

Annex 2: Guideline for Semi-Structured Interviews with Media Representatives

Guideline for Semi-Structured Interviews MEDIA

Date: _____ Start of Interview: _____
 Location: _____
 Number of Participants: _____ End of Interview : _____

Introduction

Hello, my name is Julia Wahren and I am in my final year at University in Germany. I came to Burkina Faso to conduct research on climate adaptation within the frame of the WASCAL program. It is a joint research program that is implemented by a network of German and West African research institutions. WASCAL focuses on adapted land use and management of land in the context of climate change, aiming to improve human livelihoods and to secure food production, provision of clean water and soil productivity among other objectives.

The purpose of this research is to examine farmers' level of awareness and analyse adaptive capacity of farmers in the face of climate change. In seeking to evolve innovative adaptive measures, it is pertinent to engage community based and non-governmental organisations as well as the media to create more awareness and enliven the climate change debate. For this reason we would like to conduct an interview with you, asking some questions on observations on climatic changes and on your work in the region

NAME MEDIA	
Name of Participant(s)	
Position/Responsibility	
Gender Age	<input type="checkbox"/> M <input type="checkbox"/> F ____ <input type="checkbox"/> under 16 <input type="checkbox"/> 16 – 55 <input type="checkbox"/> over 55

Permission

This interview is completely voluntary and you may choose to respond to any and all questions as you wish. If you have any questions or concerns, feel free to raise them at any time during the interview. With your permission we would like to record this interview on audio tape so that we can use it for reference while proceeding with this study. In addition, we would like your permission to include your name or other identifying information in all final reports, publications, and/or presentations resulting from this research, otherwise you have also the option of anonymity, depending on what specifically you will agree.

I agree to participate and (please check):

____ I consent to have my interview audio-taped.

____ I agree to allow my name or other identifying information to be included in publications resulting from this research.

Your input is very valuable to this research and we thank you very much to participate!

 Participant's Name (*Please Print*) Participant's Signature Date

(A) Question about Media

1. Why did you choose the name « _____ » (for the radio station or newspaper?)
2. On which level do you operate:
 - (a) International
 - National
 - Regional (regions de Burkina Faso)
 - Provincial
 - Ville
 - Locale
 - Distribution: South-West
3. Who are your main listeners or readers? How many listeners/readers do you have?
4. What type of programmes do you broadcast or what type of news do you cover?
Probe:
 - (a) What are popular programmes?
 - (b) What are popular topics? What topics are mainly discussed?
 - (c) Who and how do you decide what topic will be discussed in which programme?
5. How does your radio station or newspaper relate to governmental policies?
Is your radio station/newspaper influenced or restricted by the government?
6. What is your radio's or newspaper's relation to farmers?
Probe:
 - (a) Do farmers belong to one of the main groups of listeners/readers?
 - (b) Are farmers addressed by the news, stories, programmes on the radio/ in the newspaper?
 - (c) Quels sont les principaux sujets concernant les agriculteurs? (What are the main topics related to farmers?)
7. Does your radio station or newspaper have programmes or reports related to climate change or environmental protection?
IF YES:
 - (a) What kind of information about climate or environmental changes are presented?
 - (b) What kind of information about climate or environmental changes do you think would be helpful for farmers?For example:
 - Weather forecasts
 - Alerts on extreme weather
 - Practical information on soil degradation, reforestation etc.
 - Life experience stories
 - Other:IF NOT:
 - (a) Why not? Do you believe it is relevant to have such programmes?
 - (b) Are there initiatives in place or planned to link your activities with environmental/climate related programmes?
 - (c) In your opinion, is it desirable to link your activities with environmental programmes
If yes, in which areas do you believe it is important to operate? And with who?

If not, please explain why?

(B) Questions on Communication, Government, NGOs and Media

1. What possibilities do farmers have to express their opinions, interests and concerns politically?

Probe

(a) What role does the media play in strengthening community voices and providing accessible space to share critical information?

Govt Media NGO

(b) What role does the media play in the country in general

(c) How do you see the situation of freedom of speech and press in Burkina Faso?

2. Do you know of any government department or agencies that is doing work on climate change or related issues of climate change?

Probe:

In your opinion, is the government doing enough to help farmers and their communities to adapt and prepare for climate change?

IF YES: Can you please explain, how the government is helping farmers and their communities?

IF NO: Why do you think the government is not doing enough?

3. Do you know of NGOs or CBOs that are working on climate change or related issues on climate change?

Probe:

(a) Are NGOs or CBOs, in your estimation, doing enough to help farmers and their communities to adapt and prepare for climate change?

IF YES: Can you please explain, how they are helping farmers and their communities?

IF NO: Why do you think NGOs or CBOs are not doing enough?

(b) In your opinion, how do you evaluate landscape of NGOs and their activities in Burkina Faso?

(c) What role do NGOs play in strengthening community voices and providing accessible space to share critical information?

4. What do you bear in mind, when hearing that adaptation to climate change is a question of democracy?

5. What do you think about the results of the elections?

Probe:

(a) The leading party *CDP* stands for “Congrès pour la démocratie et le progrès”, what kind of progress have you been able to observe since 1987 in Dano and surrounding areas? And in the country?

(b) How do you evaluate the unrest that has spread across Burkina Faso in 2011?

(c) In 2007, the turnout at the legislative election was 56, 43 %. Please tell me, what efforts have been made by the media to motivate people to participate in voting at elections?

6. Do you work together with community radios?

Probe:

(a) Is the community radio, in your estimation, a good way to raise awareness about climate change among farmers or do you suggest a better way to communicate with farmers?

(b) What other channels of communication come into your mind to share information with farmers? => no: next question

7. What are communication channels mainly used to reach farmers?

Communication Channels	YES.	NO.
Mass Media		
○ Radio		
○ TV		
○ Newspapers		
Advertisement		
○ Posters		
○ Radio		
○ TV		
Magazines		
Internet		
Movie theater (films)		
Theater (plays)		
Workshops		
Farmers co-operatives		
Community meetings		
Religious meetings		
Interpersonal channels eg. community leaders, family and friends, extension workers		
Traditional community events, e.g. famiy meetings, funeral, weddings		
Others:		

Probe:

IF YES, how do farmers use those channels, i.e. do farmers participate actively, express their interests and communicate their issues in programmes or at meetings?

(C) Questions on Climate Change and Sources of Information (South-West)

1. How long have you lived here? Please tell me what changes in the environment and climate you have observed within the past years? What do you understand under the concept of climate change?

Probe:

- How does the climate influence daily life in the region?

(a) What changes in the environment have you observed in the last couple of years?

(b) Have you observed changes in:

- Rainfall: _____
- Rainy season: _____
- Temperature: _____
- Wind: _____
- Floods / Droughts: _____
- Agro-pastoral livelihood (crops and animals): _____

- Access to Water: _____
- Access to Land: _____

(c) Have you observed conflicts over access to water or land among farmers and other residents or non-residents in the area?

2. In your opinion, how do farmers perceive climate change and how do farmers react upon it? Have you noticed adaptive strategies that have been adopted by farmers to cushion the negative effects of climate change?

Probe:

For example:

- Changes in planting dates
- Changes in harvesting dates
- Changes in the timing of land preparation activities
- Multiple cropping (planting of many crops in the same piece of land)
- Mixed farming (crop and animal production)
- Expansion of cultivated land
- Move to different site
- Prayers for Gods intervention (spiritual approach)
- Other: _____

3. Do the following sources of information offer information on climate change to farmers?

Communication Channels	YES.	NO.
Mass Media		
o Radio		
o TV		
o Newspapers		
Advertisement		
o Posters		
o Radio		
o TV		
Magazines		
Internet		
Movie theater (films)		
Theater (plays)		
Workshops		
Farmers co-operatives		
Community meetings		
Religious meetings		
Interpersonal channels eg. community leaders, family and friends, extension workers		
Traditional community events, e.g. famiy meetings, funeral, weddings		

Others: _____

Probe:

- What kind of information about climate or environmental changes are normally presented?
- (a) What kind of information about climate or environmental changes do you think would be helpful for farmers? For example:
 - Weather forecasts
 - Alerts on extreme weather
 - Practical information on soil degradation, reforestation etc.
 - Life experience stories
 - Other:

4. Have you observed conflicts over access to water or land among farmers and other residents or non-residents in the area?)

At the end of the Interview:

- o Is there anything else you would like to say or ask about the research?

1. Thank you very much. Is it fine with you, if WASCAL and I contact you for further questions? IF YES, I would like to ask you to fill out this contact sheet for me?

Name	
Address	
Telephone	
E-Mail	
Other means of communication	

Authors' biographies

Irit Eguavoen (Dr Phil. in Social Anthropology) works as senior researcher at the Center for Development Research, University of Bonn for the West African Science Service Center for Climate Change and Adapted Land Use (WASCAL). Her publications use a legal anthropology, environmental history and political ecology perspective and focus on water development in East and West Africa, as well as on local perceptions and politics in the context of climate change adaptation.

Julia Wahren (MA International Relations) conducted three months of field research in Burkina Faso for her master thesis, focusing on local empowerment through public communication and political participation in the context of climate change adaptation. She pursues her interest in climate change adaptation by working for the Programme Office of the International Climate Initiative (IKI) which supports the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) in Berlin.

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