

Social inclusion in the Decentralised Climate Funds process in Mali and Senegal

Near East Foundation consortium under the Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme







Author: Georges Djohy

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If you have any questions about this report or about the DCF project in general please contact the Near East Foundation: info@neareast.org or +1 315-428-8670

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Acronyms

ANICT	Agence Nationale d'Investissement des Collectivités Territoriales
ARD	Agence Régionale de Développement
BRACED	Building Resilience and Adaptation to Climate Extremes and Disasters
BRACED-X	Extension phase of BRACED programme
CBO	Community-Based Organisation
CCA	Comité Communal d'Adaptation
CCOCSAD	Comité Communal d'Orientation, Coordination et de Suivi des Actions de Développement
CDA	Comité Départemental d'Adaptation
CLA	Comité Local d'Adaptation
CLOCSAD	Comité Local d'Orientation, Coordination et de Suivi des Actions de Développement
CRA	Comité Régional d'Adaptation
CROCSAD	Comité Régional d'Orientation, Coordination et de Suivi des Actions de Développement
CSO	Civil Society Organisation
DCF	Decentralising Climate Funds
DFID	Department for International Development
FCFA	Franc de la Communauté Financière d'Afrique
GIE	Groupement d'Intérêt Economique
IED-Afrique	Innovation, Environnement et Développement en Afrique
IIED	International Institute for Environment and Development
KPI4	Key Performance Indicator 4
NEF	Near-East Foundation
PDC	Plan de Développement Communal
PNDL	Programme National de Développement Local
SM	Secrétaire Municipal
ToC	Theory of Change

Executive summary

The Decentralising Climate Funds (DCF) project is currently being implemented in Senegal and Mali to promote a decentralised mechanism for raising and managing climate funds, by strengthening the decision-making capacities of local authorities and communities. In light of its guiding principles, the project aims to improve social inclusion in decisionmaking in local governments and to help the most vulnerable groups and communities to express their needs in the face of climate change.

The DCF hypothesis is that social inclusion in decision-making further enhances community resilience equitably by addressing their priority needs. In this framework, the present study explores how the characteristics of the mechanism in both countries have allowed different local social groups to be involved in the DCF process, and how this has affected their resilience to climate change. We conducted the study through a qualitative approach that used individual interviews, group discussions and direct observations as datacollection tools. The fieldwork was spread over 10 days per country and covered actors at all levels of the DCF chain of intervention: grassroots communities, decentralised authorities, technical agents, etc.

The results reveal that the DCF process is highly inclusive in both countries. Not a single actor denied this. All the actors, through cases, examples and various testimonies, expressed their satisfaction with the consideration granted to the grassroots actors and the taking into account of their priority needs. The process also promoted mutual learning in both countries, where information, awareness-raising, and training activities led to greater awareness of the effects of climate change and the need to develop relevant resilience investment projects to raise climate funds. The activities carried out strengthened trust between actors and promoted better collaboration between local authorities, advisors and local people around common issues.

DCF processes have strengthened the decisionmaking powers of local actors and especially women. Local people feel more ownership of the ideas and leaders of locally developed projects and take more initiatives toward sustainable investment management and fundraising for further resilience projects. A ripple effect has emerged in nonbeneficiary communities that are learning and receiving advice from beneficiaries so as not to be left behind in the ongoing transformation with their neighbours. Although the concept of resilience was somewhat complicated to operationalise for them, local actors have expressed-through their cases and testimonies about their peers-the positive effects of DCF processes and investments on improving the different assets that contribute to their livelihoods. They recognised that these assets and benefits are likely to enhance their capacities to cope with climate shocks and uncertainties now and in the future.

Despite the efforts of the DCF country teams to ensure the results summarised above, some aspects of the project implementation process could be improved. Issues related to community consultation, management of the process of development, application, evaluation, screening, selection and validation of investment projects, as well as difficulties related to monitoring, and temporary and final reception of works were widely discussed in this study, and proposals are suggested in the final section of this report. To conclude, the difference between DCF and conventional development projects lies in its placing beneficiaries and local authorities at the centre of learning and decision-making processes.

1. Introduction

Climate change is a reality in the Sahel, where climatic disturbances and uncertainties, increasing from one year to the next, have a very negative impact on agricultural, pastoral and fishery production systems. This situation threatens the food security of local communities and plunges the various social strata of society into a vicious cycle of vulnerability and poverty. Women and groups with mobile livelihoods are particularly vulnerable because of their more limited access to common production resources, due to the prevailing patriarchal system, diverse stereotypes or exclusion from decision-making.



While it is widely recognised that local communities themselves, and vulnerable people, in particular, are best placed to identify and pursue the necessary actions for their adaptation and resilience to climate change, all international funding for these purposes goes through the political decision-makers and national-level actors without the grassroots people having control over the allocation or management of the funds.

The Decentralising Climate Funds (DCF) project intervenes in this context to empower and strengthen the capacity of grassroots actors to mobilise and manage funds intended to strengthen resilience to climate change. This project is a component of the United Kingdom Department for International Development's (DFID) Building Resilience and Adaptation to Climate Extremes and Disasters (BRACED) programme, and is being implemented by the Near-East Foundation (NEF) as part of a consortium that includes Innovation, Environnement et Développement en Afrique (IED-Afrique) and the International Institute for Environment and Development (IIED). The first phase of BRACED was implemented from 2015 to 2018, and the programme is now in the extension phase (BRACED-X) until June 2019.

DCF is an action research and advocacy project that aims to encourage greater decentralisation of climate funds, by strengthening the decisionmaking capacities of local authorities and communities in Mopti and Kaffrine Regions in Mali and Senegal, respectively. The aim of the project is to improve communities' resilience to climate change in three "*Cercles*" in Mali and four "*Départements*" in Senegal. The four main expected outcomes of the project are as follows:

 Devolved finance and planning mechanisms are established and functional in four *Départements* (Senegal) and three *Cercles* (Mali) to support community-prioritised investments in public goods that build climate resilience;

- Vulnerable communities in four *Départements* (Senegal) and three *Cercles* (Mali) benefit from public good investments that reflect community priorities and build resilience to climate change;
- Evidence and learning on the effectiveness of decentralised finance in improving community resilience is generated and disseminated;
- Mechanisms and processes are established for national- and international-level decision-makers to engage with locally generated evidence.

To achieve its objectives, the DCF project is based on six key principles (Bonis Charancle et al., 2018):

First, it involves the public institutions of the decentralisation chain, relying on the governance model in place. In this framework, all the methods of the project are grafted on those of the local authorities and seek to generate more innovative governance oriented towards the improvement of the decentralisation policies and management of resilience-building projects.

Second, DCF does not bring development projects to the people but instead promotes local planning that addresses the priority needs of local communities. To this end, it promotes a space where all people, whatever their backgrounds and their social conditions must have a voice. The knowledge and experience of local communities are put forward to enable them to play a decisive role in the identification and implementation of resilient investment projects.

Third, DCF promotes learning and capacity building. This aims for more inclusive planning by allowing local governments to focus their planning processes more on grassroots communities and their highest priority needs. In this context, institutional support is provided to local authorities on traditional aspects of local governance and to improve the integration of climate change into planning and decision-making processes.

Fourth, DCF focuses on public goods as a determinant of the resilience of many people. Only public goods that benefit a large number of beneficiaries are selected during the process to create both individual and collective resilience. Fifth, DCF promotes inclusivity. All actions carried out under the project must be inclusive, equitable and inspired by a good gender strategy. All people in the community, including women and marginalised groups, must be taken into account. The supporting hypothesis is that excluding these vulnerable layers of society and ignoring their specific needs will affect the resilience of the entire community.

Sixth, DCF channels climate funds through the mechanism provided by decentralisation. Without inventing new ways of setting up funding, DCF promotes a transparent, participatory and effective process entirely shaped by decentralised procedures, while strengthening the capacity of local governments to manage climate funds.

Assuming that these principles have effectively governed the implementation of the DCF in the two project beneficiary countries (Senegal and Mali), the present study aims to explore how the characteristics of the mechanism put in place have allowed different local social groups to be involved in the DCF process. Based on the fifth principle of the project, inclusivity, which can be perceived as more or less crosscutting to the whole process, the study focuses on whether and how social inclusion has differentiated DCF from other forms of participation in local planning processes; and what difference this commitment brings to the choice of funded investments and the effects on resilience to climate change in each country. In other words, we sought to better understand how the implementation of DCF in Mali and Senegal involved different social groups, and whether this social inclusion was relevant in improving their resilience to climate change. It is a study of perceptions oriented towards collecting and better understanding the views of the beneficiaries and various stakeholders involved (men and women, young people and the elderly, crop farmers and pastoralists, etc.) on the DCF inclusive model as it has been set up in both countries.

2. Methodological approach of the study

Social inclusion is a fairly complex concept that is variously interpreted in the scientific and development literature. Under the perspective of human potential, social inclusion does not always mean the same thing as when analysed under neoliberal and social justice ideologies. However, some elements are common regardless of the ideology that governs thinking and analysis, and also determine varying degrees of social inclusion: access, participation, and success (Gidley et al., 2010). Social inclusion, taken in its rather simple sense, means reaching and involving people from all backgrounds and conditions, giving them a place and offering them the opportunity to participate in community life (MACS-NB, 2006). It refers to a more or less new approach to systems of governance, decision-making and policy change that seek to remove inequities in access to assets, capabilities and opportunities: "Social inclusion is aimed at building the incentives and capacity within institutions that will enable these institutions to respond effectively and equitably to the demand of all citizens, [regardless] of social identity" (Bennet, 2002). Social inclusion opposes "social isolation" or "social exclusion", which sees some individuals or groups of individuals as unable to participate fully in the economic, social and political life of society. This reduces solidarity, increases social tensions and slows down social development.

Within the specific DCF framework, inspired by the BRACED programme, social inclusion is understood first of all in the sense of gender equality, and then in the sense of taking into account the views of vulnerable groups in the planning and decision-making. By targeting a transformational impact (i.e. a change that catalyses other changes), the project's actions are part of the production of equitable outcomes in which the views of all stakeholders are represented. In the context of participatory planning, for example, an inclusive approach will mobilise all segments of the population to identify and prioritise their relevant investments. For developing a Theory of Change (ToC), inclusion is ensured, for example, by engaging beneficiaries in conversations about the different ways in which investments affect individuals by gender, livelihood, disability, age, etc. This is also applicable for an environmental screening activity, which must take into account the knowledge and experiences of local communities to better understand and develop the properties of investments desired by vulnerable groups of people. All of these processes need to be coordinated in a powerful framework for facilitating discovery and learning¹.

From this perspective, this study explores how DCF processes succeed in reaching, motivating, mobilising and integrating various social groups²,

¹Year 1 Annual Report. NEF, IED-Afrique, IIED; Year 2 Annual Report. NEF, IED-Afrique, IIED and Year 3 Annual Report. NEF, IED-Afrique, IIED.

²The social groups targeted by DCF include men, women, young men/girls, crop farmers, pastoralists and other relevant local livelihoods as applicable, sedentary people, mobile groups, marginalised people, vulnerable older people, people with low formal education or literacy skills, low-income people, people with disabilities, sick or frail people, etc.

and ultimately enhance resilience to climate change. The approach focused on actors, processes and results, and utilised various social science tools, including literature and document review, semi-structured interviews, open-ended interviews/life histories, case studies and focusgroup discussions³. We had not predefined a sample of people to include in the study; we rather multiplied purposively the interviews as necessary until saturation was reached, i.e. a level where additional investigations no longer provided additional useful information. Although saturation was very evident in the context of Senegal, as it was acknowledged by most of the actors involved in data collection (local consultants, DCF team, assistant doctoral student, etc.), the context of insecurity in Mali was not conducive to the verification of this saturation in access to information. We did what was possible, acknowledging that we could have done much better, had working conditions been better in terms of security. Despite this potential weakness in the approach, we triangulated the sources and data in both countries to ensure diversity and reliability. The approach implemented in this study includes five major phases: (i) preparation of mission, (ii) harmonisation with local consultants, (iii) scoping with DCF country teams, (iv) data collection and feedback to DCF country teams, and (v) data analysis and reporting.

2.1 Fieldwork preparation

Mission preparation focused on literature review of DCF documents, reports and data, and discussions with the DCF teams. Through this phase, we gained a better understanding of the project, its objectives and the results already achieved. We also identified how concepts related to social inclusion were reported in project documents while considering that social inclusion as conceived could differ with dynamics on the ground (Vinck, 2012)⁴.

Faced with the diversity of actors involved in the DCF, it was necessary to develop datacollection tools to gather as much information as possible from the different stakeholders in a short space of time, in line with the qualitative and ethnographic nature of the study. Our interviews were not limited to direct beneficiaries, local authorities, advisory service officers, members of adaptation committees and heads of regional administrative services, but also extended to the heads of contracting companies and other resource persons. Two primary interview guides were developed, tested and subsequently used with flexibility to facilitate their use by the associated consultants: an interview guide for the beneficiaries and another one for the other project stakeholders (local authorities, extension officers, various committee members, etc.). We conducted open-ended interviews to support semi-structured interviews and group discussions. This allowed us not only to collect in-depth and complex information, but also to check all data collected through triangulation: information obtained during individual interviews was, for example, checked and complemented during group discussions or direct observations in the field. The principal consultant convened with local consultants and with country teams to prepare for the fieldwork and identify the relevant investments and key actors to study based on the selection criteria.

At the time of the study start, DCF had funded 123 investments during the BRACED programme (75 in Senegal and 48 in Mali). We identified six selection criteria: (i) area of activity, (ii) type of investments and representativeness, (iii) professional and/or ethnocultural diversity of the beneficiaries, (iv) the BRACED phase in which the investment was

³Village-level workshops were planned, but were not feasible in the context of Senegal, where the availability of actors was very limited at the time of data collection, and in Mali where the insecurity situation imposed efficiency and discretion. However, group discussions were conducted with a wider range of actors to supplement village workshops.

⁴ Actors are able to renegotiate approaches and translate them in the way that suits them better or meets their interests..

made⁵, (v) the location of the investment (village, commune and *Département/Cercle*), and (vi) gender (number of male and female beneficiaries) and other special characteristics (success, failure etc.). As some investments during the BRACED-X phase of the programme were still being implemented, it was decided to cover investments done prior to 2018.

We first targeted the type of investment most realised by DCF in Kaffrine: the grain bank. Among the grain banks, we selected a crop farmingoriented investment (targeting primarily farmers) in Ida Mouride Village, built during the second DCF call for proposals. Then, we sought a second investment oriented towards livestock-keeping (i.e. targeting foremost pastoralists). We selected the *livestock vaccination yard* in Ndiobene Sama Lamo Village, carried out during the first DCF call for proposals. At last, we finally looked for a third investment that targeted women and which was initiated by a local community-based organisation (CBO) supported by a local authority. Thus, we chose the *cereal-processing unit* funded in the second call and benefiting the women's Economic Interest Group (GIE)⁶ in Kathiotte Village. Table 1 summarises the diversity of investments sampled according to targets, municipalities and *Départements*.

Sampling was complicated in Mali due to precarious security conditions that limited our choices and movements, taking into consideration the accessibility to and safety in study villages. Sampling purposively eliminated in Mali areas at high risk. The commune of Sio appeared to be a relatively peaceful area, where fieldwork could be conducted without incurring risks of aggression or terrorist attacks. We systematically considered all the three investments funded by DCF in this municipality during the BRACED phase in order to reflect some diversity (Table 2): (i) the rice-farming irrigated area in the village of Kouna, (ii) the marketgardening irrigated area in the village of Karamani; and (iii) the drinking water supply network in the village of Sare-Mala.

Table 1: Sampled	l investments in	Senegal
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Investments	Direct beneficiaries	Départements	Communes	Villages
Grain bank	Crop farmers	Khoungheul	Ida Mouride	Ida Mouride
Livestock vaccination yard	Livestock-keepers	Malem Hodar	Ndiobene Sama Lamo	Ndiobene Sama Lamo
Cereal-processing unit	Women's group	Kaffrine	Kathiotte	Kathiotte

⁵ Senegal launched two calls for proposals during the BRACED phase, while Mali launched only one. Both countries are currently in the process of implementing the investments in the BRACED extension phase (BRACED-X).

⁶Groupement d'Intérêt Economique (GIE) des Femmes Transformations de Kathiotte. In the remainder of the report, we will refer to the "Kathiotte women's group" without using the full name.

Investments	Direct beneficiaries	Cercles	Communes	Villages
Rice-farming irrigated area	Rice farmers	Mopti	Sio	Kouna
Market gardening irrigated area	Vegetable growers	Mopti	Sio	Karamani
Drinking water supply network	Village population	Mopti	Sio	Sare-Mala

Table 2: Sampled investments in Mali

2.2 Data collection

Data collection was spread over 10 days in each of the two countries: 7–16 December 2018 in Senegal and 16–25 January 2019 in Mali. During this phase, major stakeholders, including local authorities, members of territorial adaptation committees, members of infrastructure management committees, local beneficiaries and other relevant actors, were approached in order to learn about their knowledge and perceptions on DCF, their involvement in DCF processes and the benefits derived towards building their resilience to climate change. A total of 78 people including 21 women (27%), and 135 people including 25 women (19%) took part in individual interviews and group discussions respectively in Senegal and Mali. Each group of actors that we could identify in the project implementation chain was prompted to give its perceptions on the project implementation process with regard to social inclusion and achieved results.

Local authorities: They are decentralised entities of the State, headed at the *Département/Cercle* level by the *Département/Cercle* council and at the commune level by the municipal council. Our main targets in these entities were the mayors and other municipal actors who play key roles in the implementation of DCF. We gave actors the opportunity to tell us more about how the DCF was set up and functioned: how they went about participatory local planning, selecting priority investments (target groups, criteria etc.), facilitating access of different groups to investments, decision-making processes and results achieved, etc. From one authority to another, we crosschecked the data to better understand how globally the intra-institutional dynamics in DCF implementation promote or hinder the engagement and the accountability of vulnerable social groups.

Adaptation committees: They are technical bodies that support local authorities and grassroots communities in designing and implementing development initiatives. The communal, *Département*, *Cercle*-based (called local in Mali) and regional adaptation committees are heterogeneous entities composed of technical services and other relevant stakeholders that discuss and deliberate on various issues within the context of the DCF.

Local management committees: They are committees made up of people mandated by the local people to manage the investments that have been made with DCF funding. The members of these committees benefited from various trainings and support by the DCF country team and local, communal and regional advisory services, to ensure sustainable management of investments.

Local beneficiary communities: They are the ultimate beneficiaries of the project. They are people who are not necessarily members of the management committees, but who benefit from the investments made in their villages. Through open and semi-structured interviews, we asked local communities and social groups to discuss their appreciation of their involvement in various stages of DCF implementation. Questions were also asked in order to explore reasons for their

perceptions. Some indicators (more qualitative) were taken into account in data collection to better delve into the degree of social inclusion in the DCF.

In Mali, most interviews could not be recorded for security reasons. In Senegal, all interviews conducted were systematically recorded with the oral consent of the informants. These records were later transcribed entirely using the F4 software, which also provides a landscape and structure for re-reading, coding, interpreting verbatim and clearing common sense. The analysis of the improvement of individual, social group and community resilience in the DCF context used a diachronic approach that compared the situations of the local people before and after DCF implementation. Resilience was considered in its basic definition as the capacity of an ecosystem, a population or a species to persist or maintain their functioning in the face of an exogenous disturbance, such as climate change. The concept of resilience as used in DCF seems somewhat complex and apparently difficult for grassroots communities to understand. First, it is based on the 3As (Adaptation, Anticipation and Absorption) of the BRACED programme, which considers that resilience results from the capacity to adapt to, anticipate and absorb climate extremes and disasters (Bahadur et al., 2015).

Second, it also relates to the methodology for reporting on the number of people whose resilience has been improved in the project context (KPI4), which considers resilience as a composite attribute that corresponds to the ability of individuals to anticipate, avoid, plan for, cope with, recover from and adapt to climate-related shocks and stresses⁷. These theoretical and conceptual aspects are still the basis of much debate within the DCF country implementing teams and the wider consortium carrying the project⁸. Although the understanding and application of the concept of resilience has improved in the DCF project over time, it should be noted that in a context of extreme poverty and vulnerability induced by several drivers, the concept has a meaning different from the purely technical or conceptual one for the local communities.

The limited timeframe of the study did not allow us to enter into discussions of the theoretical and globally abstract dimensions of resilience. We instead collected cases and testimonies for local people and groups of people to tell us stories of their lives. We sought to understand what beneficiaries perceive as positive or negative effects of the DCF processes and investments in their livelihoods, global well-being and their ability to cope with climate shocks⁹. Based on the life stories of local beneficiaries, we have developed some practical cases supporting the argument that the resilience of local communities to climate change had been improved.

Other beneficiaries and resource persons: In order to triangulate the information received from stakeholders, other people were randomly approached and interviewed in the different villages. We thus sought to better understand from individuals the effects induced by the DCF investments in their daily lives or around them. At this level, an emphasis was placed on the degree of involvement of women in decision-making bodies in the process of identifying priority needs at community level.

⁸ Ibid., 1., p.18

⁷ Methodology for reporting against KPI4 – Number of people whose resilience has been improved as a result of project support. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/328254/BRACED-KPI4methodology-June2014.pdf (accessed 10/01/2019)

⁹ Several indicators were used to explore the reasons of their perceptions: target indicators (demographic information; sex, age, ethnic groups etc.), site indicators (where; actions in poor, disadvantaged and more vulnerable areas etc.) and new capacity indicators or softoutcomes (active participation, participants' assessment of the relevance and value of interventions: do they feel more empowered? do they feel that their personal situation has improved? how do they evaluate the consultation process around the project? what do they acquire through the process? etc.).

2.3 Limitations of the study

Limitations of this study include the implementation of fieldwork by two teams of different background on the assignment. On account of the conditions of insecurity as described in media, embassies and diplomatic representations based in Mali, and the information mobilised from the NEF team in Sevare and the networks of friends in Mali, the lead consultant did not travel to Mopti. The most relevant option was therefore to rely on local consultants who know the situation well and could develop strategies to adapt more easily to the context. We tried to reduce bias by providing local consultants based in Sevare with daily backstopping through Skype and phone calls, but there may be some details missing in the data from Mali.

Another constraint is that the number of day per country was not enough to collect the kind of in-depth qualitative data needed to understand in detail social inclusion in DCF and its effects on the resilience of local communities to climate change. Although the ambition was to collect ethnographic data, the time constraint and the use of intermediaries in translation between Wolof and French (in the case of Senegal) could have led to some biases on the nature of data and interpretations made by the research team. The situation was better in Mali, where the local consultants and contact persons provided by NEF Mali speak all the local languages in Sio District, and could communicate directly with the interviewees. In both cases, triangulation played an important role in reducing misunderstandings and biases in data interpretation.

We were also faced with the unavailability of some resource persons who could give additional information on the process of social inclusion in the DCF. The mobility of people was particularly strong in a pre-electoral context in Senegal and in a period of post-presidential elections and ongoing security concerns in Mali. Although we were able to reach some informants after several phone calls and visits to their workplaces and homes, all our efforts to meet others were unsuccessful. Despite this situation in both countries, information sources were well diversified to ensure reliability of data collected from the available actors.

The local insecurity context in the Mopti region was also a constraint. We adapted our methodological approach to ensure a successful data collection. First, investments were selected based on their accessibility to and safety in study villages. Second, the interview guides were adapted and applied differently compared to Senegal, although their contents were completely identical. Local consultants were reserved about carrying out longer interviews and especially recording the interviews, as this could raise suspicions. For these reasons, the interview guides were reformatted to facilitate fairly rapid collection of information¹⁰. At last, daily debriefing sessions within the field team and virtually with the lead consultant allowed us to summarise the information collected during each day, identify contradictions, confirmations and missing information, and define the strategy (sources and methods) of collecting additional information and planning the activities of the following day. All this made it possible to check the reliability of the information used to make the various analyses presented in this report.

¹⁰ Although recording was no longer a priority, as in Senegal, the local consultants in Mali were able to record with their mobile phones some conversations as allowed by the interviewees in some favourable conditions.

3. DCF in Senegal and Mali: inclusive models for managing climate funds in Africa

Social inclusion in DCF was better understood through scrutinising the different stages of the proposed approaches in each country, and the social processes meant to ensure involvement and contribution of various vulnerable segments of society. We here present findings that interweave results from each investments through the different steps in place in Senegal and Mali.



3.1 DCF in Senegal: actors and processes

The DCF process in Senegal involves the actors and activities presented in Table 3.

Information and sensitisation of stakeholders

The DCF process begins with awareness-raising sessions, informing and sensitising actors at village, communal, Département and regional levels on the content of the project, its approach and the opportunities it offers to improve livelihoods of local communities and ensure their resilience to climate change. This activity is the starting point of social inclusion, in that it offers the opportunity for local people and decision-makers at the supra-local level to interact and get acquainted with the specificities of DCF, which gives primacy to local authorities and grassroots communities, without overlooking the support of other territorial authorities which also have an important role in supporting grassroots actors, in compliance with public standards and hierarchy. The intensive outreach period lasted about a year and a half in Senegal. Local actors interpreted this more or less long time before the setting up of funds as due to delay and difficulties in the arrival of funds from donors. This resulted in a de-motivation of many of them who no longer came to meetings, or at best sent interns because they thought there were no funds. Despite these variations in the level of

Table 3: Actors and processes of social inclusion in DCF in Senegal

	Actors	Involvement And Roles
	IED-Afrique/ DCF team	Informing and raising awareness of stakeholders on DCF: content, approach, specificities, opportunities, etc.
	CDA	Sharing information, building capacity, making proposal template available, supporting initiatives by local authorities to take advantage of the opportunities offered by DCF
	Municipality	Local planning (public consultation "community forum", participatory diagnosis, selection of priority investments)
	Departmental Adaptation Committee (CDA)	Accessing/sharing proposal outlines/template, developing proposals (various drafters involved: municipal secretaries, advisory service officers and other trained or skilled resource persons)
	CDA	Receiving applications, organising proposal preselection session
	Proposal Selection Committee	Sharing assessment criteria (training), reviewing proposals, suggesting improvement to relevant but poorly written proposals (changing title, rewording content, adding data, etc.), preselecting proposals that meet the criteria, listing fundable projects, transferring preselection results and minutes to IED-Afrique/DCF team
	IED-Afrique/ DCF team	Consulting preselection session's minutes, checking preselection results, detecting inconsistencies and abnormalities, issuing technical opinions (notice and advice) on preselected proposals (possibility of suggesting rejection of preselected proposals or acceptance of rejected proposals), returning the remarks to the selection committee for final selection decision
	Proposal Selection Committee	Reviewing the technical opinions (comments and suggestions) of DCF team, deciding on the final selection
	IED-Afrique/DCF team	Convening a regional meeting for discussing and validating proposal selection
	Regional Adaptation Session	Presenting the results of the selection process, receiving and processing possible appeals and complaints, discussing and validating the selection, deliberating on selected projects
	IED-Afrique/ DCF team	Last checking, financing selected projects
	Municipality	Implementing public procurement procedure (preparation and launching of tender notices, receipt of tenders, screening of tenders, controls, awarding of tenders), contracting with winning companies
	IED-Afrique/DCF team	Organising environmental screening and ToC development
	Contracting companies	Executing the contract and delivering the works (infrastructure, materials, equipment etc.)
	Municipality	Checking the works, accepting temporarily and finally the completed works
	CDA and DCF team	Establishing management committees, training grassroots stakeholders, monitoring the uses, building actors' capacity, providing support for sustainable use and management of infrastructures
+	Local communities	Using the infrastructures, monitoring infrastructure management, taking initiatives for optimising the uses, improving people's livelihoods and resilience to climate change

stakeholder engagement at this stage, the locally recorded dynamics ultimately helped to build over time confidence of stakeholders who took advantage of this opportunity to strengthen their knowledge of climate change and related issues.

Empowerment of actors and ownership of the process

As soon as the process is launched with the mobilised actors whose capacities are reinforced by the DCF team, there follows a certain appropriation of the process which results in the sharing of information by a Département body called the CDA (CDA). This is the real hub through which decentralised authorities and local people can easily access all the necessary information and capacity building, to better understand the DCF process, in order to make better use of it for grassroots development. The CDAs emanate from the former Département coordination and monitoring committees set up in Senegal a decade ago, as part of a ten-year programme of education and training. They are composed of representatives of all the town halls, the county councils, the prefects, the sub-prefects, umbrella community organisations, the technical services, the Regional Development Agency (ARD) of Kaffrine and a few resource persons. CDAs hold regular guarterly meetings and other special sessions convened by the prefect to discuss and promote DCF, or to generate and support local initiatives that are part of the project. For example, local communities, local authorities and various CBOs can access various information and documents, including calls for proposals and the outline for project proposals, as well as advice.

Local community planning

This activity is part of the sovereign prerogatives of local authorities in Senegal, which are of two types: the *Département* and the Commune¹¹.

In the decentralisation system in place, local authorities are responsible for the free and autonomous management of local public affairs, with the participation of all local actors and partners. Their mission is to "design, plan and implement economic, social and environmental development projects of local interest, [and to] partner, when necessary, with communitybased associative movements and groupings, for implementing projects towards economic, social and environmental development, in respect of equity and gender specificity"¹². Local authorities then represent the leading players in the development of their territories, with the responsibility of promoting the local economy, as part of strong citizen participation. Since the Commune is the local community closest to the ground, it is targeted by DCF as the entity responsible for projects and investment initiatives geared towards strengthening community resilience to climate change.

Community forum

The community forum (forum communautaire) is a planning meeting, through which local people share their difficulties, list and prioritise the investments needed for their development, and mandate the local authorities to develop projects for mobilisation of resources and realisation of infrastructure. Unlike projects from CBOs for which a simple report of a consultation between members is requested, the organisation of a community forum is a major prerequisite in the selection of projects and the granting of DCF funds¹³.

Municipal authorities and the local people in the villages of Ida Mouride and Kathiotte (those are the villages in which community forums became operational) confirmed the strong participation of the people and representatives of various social strata (men, women, young people, etc.)

¹¹ Loi n° 2013-10 du 28 décembre 2013, portant Code général des Collectivités Locales. Available at: https://www.au-senegal.com/IMG/pdf/code_general6119.pdf (accessed 20/12/2018).

¹² Ibid., Article 3.

¹³ To prevent that individual projects and initiatives of local authorities or various influential people are substituted for the priority needs and interests of grassroots communities, the community forum is required by DCF (10% in the project selection criteria), as a means of ensuring and strengthening social inclusion.

in exchange and discussion sessions that led to the choice of investments made there¹⁴. Furthermore, according to all the people we met during this study, the community forum gives consideration to people at the grassroots and makes them owners and managers of the project submitted and financed (or not) by the DCF. Although in most cases, the investments selected during these meetings are those already included in the priorities of the local/communal development plans (PDCs), also elaborated as part of a participatory process of planning and budgeting¹⁵, the renewal of community consultation, participatory diagnosis and prioritisation of investments enhanced a feeling of inclusion and increased people's trust in their roles and contributions to options and choices for local development.

Design and submission of proposals

The development of proposals is an activity that is entirely the responsibility of the project holders, including municipalities and CBOs that assume it through different actors. In some cases, community proposals are drafted by the municipal secretaries (SMs)¹⁶ if they have the skills or benefited from the training provided in this regard by DCF and its partners from Département and/or regional adaptation committees. Technical support and updates are provided to the SMs, if necessary, at the Département and/or regional level, by the members of the territorial adaptation committees, who come mainly from the advisory and development support structures in the regions: agriculture, livestock, fishery and forestry, etc. This was the case in the three study communes where the SMs benefited from the support of the various agents mentioned above to develop and improve their proposals. Even though this is not the case in our study communes, it was also revealed in the field the existence of resource persons with project development and business planning skills, who graciously provide their expertise to assist the community, contributing their time and energy for the common interest.

Assessment and preselection of proposals

The selection committee deals mainly with the review and selection of proposals eligible for DCF funding. Derived from the wider CDA, it is a small, mixed entity of experts from the different fields involved in the submitted proposals (e.g. agriculture, livestock, forestry, etc.), trained on the practices and ethics of proposal review. On the basis of collectively agreed, harmonised and validated criteria related to climate-change resilience and DCF's expectations, the selection committee members evaluate, score and rank the proposals submitted to them by the DCF team in order of merit¹⁷.

The review and preselection of projects is an important aspect of the social inclusion process in the DCF. In fact, most of the actors invited to this activity have learned and practised it only within the context of the DCF project. Our investigations revealed that this is a very exciting task that values the skills of specialists from various backgrounds who practise their art through interactions with other experts. Hot discussions, anger, smiles, disagreements and agreements that punctuate the review sessions have strengthened the mutual learning between men and women, who have become more proud in being part of the DCF process.

Learning to understand and rate proposals that fall into disciplines other than their own

¹⁴Community forums only became operational during the second call for proposal. The commune of Kathiotte benefited from other investments which required the holding of a community forum, but the investment which was the object of study in this commune (the grain-processing unit) is carried by a women's group and was therefore not subject to this requirement.

¹⁵ PDC Ndiobene Sama Lamo, 2015; PDC Ida Mouride, 2017

¹⁶Secrétaire Municipal (SM)

¹⁷ The results and minutes of the preselection sessions, in which one or more representatives of the DCF project also participate, are formally transmitted to DCF for the further selection process.

areas of expertise has strengthened the skills of DCF reviewers, who have become more multidisciplinary, with the ability to capture more holistically the issues of climate change and the resilience of different livelihoods. Proposals can go back and forth between applicants, Département experts and the IED-Afrique/ DCF team until they are improved and declared preselected. Therefore, preparing to justify to one's peers the different grades assigned to the different headings of a given proposal is perceived by the evaluators as forging their reasoning and critical thinking. This has reduced their propensity to give better ratings to proposals from their areas of activity, to the detriment of others. Consistency and objectivity are strengthened over time, in favour of a better proposal review and preselection of priority investments by communities for greater resilience to climate change.

Technical advice and selection of proposals

The DCF team issues technical opinions on the preselection, consults again the selection committee, which finally decides on the selection of the proposals to be financed. Based on inconsistencies and abnormalities found in preselection documents and various other important criteria, the DCF team makes suggestions regarding both preselected and not preselected projects¹⁸.

IED-Afrique seems to be the mandatory crossing point for ensuring impartiality, credibility and relevance of processes¹⁹. Thus, the DCF team arbitrates between the different actors, in order to guarantee a better social inclusion and realisation of the expectations from the donors

and the implementing international partners. In this context, its technical advice often passes as final decisions, which should normally be made by the selection committee. Indeed, some of the members of the selection team see it as a veto which determines whether a project will be funded or not, regardless of the decision by the review panel. For this reason, the actors consider that they play more the role of an "advisory board", than a selection committee with decision-making power. Furthermore, some local authorities and selection committee members sometimes expressed doubts about impartiality of IED-Afrique and relevance of its technical advice on preselection results and suggested that the proposal evaluation and selection body should have greater empowerment and autonomy.

Although this is not the overall perception that emerges from the exchanges with actors, the relevance of the subject suggests that we pay particular attention to it, so as not to discredit the process. It is important to give the members of the selection committee more legitimacy and power to decide autonomously on proposals to be financed, without interference by DCF team members. For instance, it would be useful to consider the evaluation of the projects of one Département by the evaluation committee of another Département, with a view to reinforcing neutrality. This option also entails risks, in a context where competition between Départements to obtain more funded projects could lead the evaluators of a Département to give lower scores to the proposals from another Département, in order to give the chance for more projects from their own Département to be selected. However, the strategy could be relevant in cases where the budgets unutilised in a Département for lack of fundable projects can be

¹⁸ The limited availability of funds is, for example, one of the criteria often mentioned to reject some proposals. Although conscious and informed of the amounts to be allocated to the various projects and the financial pool available for each *Département*, the proposal reviewers sometimes preselect more projects than necessary, or shortlist projects whose budgets far exceed the accepted budget limits.

¹⁹During the first call for proposals, the DCF team was represented at the preselection sessions to recall the rules and details necessary for an objective evaluation of the proposals. For instance, its presence was meant to ensure that investments meet the criteria of the donor, such that the investments are clearly related to climate shocks. As to reduce subjectivity and enhance the autonomy of selection committees, the DCF team and the local committees were no longer part of the selection committee during the second call for proposals.

used to give the chance for other relevant projects from other *Départements* to be funded. Without calling into question the significant improvement of the process over time, it is necessary to think of an ad hoc arbitration body for a more objective selection of the proposals to be financed.

Calls for tenders and procurement

According to the provisions of the General Code of Local Government of Senegal, the municipalities award public contracts in accordance with the legislative and regulatory provisions in force. Public procurement standards applicable to municipalities are contained in Decree 2014-1212 of 22 September 2014, amending Decree No. 2011-04 of 06 January 2011, on the public procurement code²⁰ and the Decree MFEP 2015-863 of the 22 January 2015 fixing the procedures applicable to the contracts awarded by the communes whose initial annual budget is less than 300 million FCFA²¹. With the technical support of regional structures focusing on local development, in particular the ARD, the municipalities benefiting from DCF-financed projects prepare and launch tender notices, receive tenders' bids, select the best bidders and award the contracts to successful bidders. Under DCF, beneficiary communities are sometimes included in this process to enhance transparency and credibility. This process offered municipal stakeholders a great opportunity to learn and apply the regulatory measures in force in this area. ARD's planning department plays an important role in providing local authorities with advice and technical support in keeping with disbursement, control and reporting procedures. Both men and women learn from these processes, as confirmed by the testimony about a woman in charge of the procurement commission in Ida Mouride, who is much appreciated for putting

her time and experience at the service of the community for the success of DCF's activities. Men with similar positions in Kathiotte and Ndiobene Sama Lamo have also learned a lot from their experiences with the DCF project.

Environmental screening and development of ToC

Environmental screening is one of the activities that mobilised several stakeholders, including people at the grassroots, to assess the potential impacts in relation to the DCF investments to be made in the different beneficiary villages. In fact, for all projects funded, environmental issues must be taken into account during identification and design, as well as during implementation and monitoring (DFID, 2003). This is carried out on the basis of an environmental assessment checklist. The environmental screening activity leads to decision-making on how monitoring and evaluation must be carried out throughout the project cycle, in order to strengthen the potential of the project to reduce the impacts of climate change²². This allowed technicians and experts to mobilise the information needed to make decisions on the positioning, sizing and characteristics of the structures to be built locally. Local people contributed enormously to the operation by providing useful environmental information from their knowledge and experience. By assisting experts and technicians in all stages to define the locations and boundaries of the infrastructure, the local people participated in collecting data needed for designing, monitoring and evaluating and making sustainable use of the infrastructure in the dynamic of protecting environment and reducing climate change impacts.

²⁰ The public procurement code in Senegal is available at: http://www.droit-afrique.com/upload/doc/senegal/Senegal-Code-2014-marches-publics.pdf (accessed 20/12/2018)

²¹The ministerial decree on procurement procedures applicable to the municipalities with low annual budget is available at: http://www. droit-afrique.com/upload/doc/senegal/Senegal-Arrete-2015-863-marches-publics-des-communes.pdf (accessed 20/12/2018).

²² See DFID (nd), Environmental Screening Checklist: Guidance for external users. Available at: http://jncc.defra.gov.uk/pdf/DFID_ Environmental_Screening_Checklist.pdf (accessed 27/12/2018)

The theory of change (ToC) is an explicitly documented and assessable vision of how change is thought to occur²³. It explains the process of change in relation to a project, mapping the steps and highlighting the causal links that show the different trajectories of change. By facilitating the expression of various points of view and assumptions among project planners, beneficiaries, donors, project staff, etc., it promotes consensus and motivates stakeholders to contribute to the achievement of results and positive long-term impacts (UNDG, 2017). As part of the DCF project, the ToC aims to strengthen the capacity of local authorities to set up and manage climate funds to facilitate access and participation of local communities in decision-making: "the key hypothesis underpinning the ToC for this project is that supporting local authority partners to set up and manage decentralised climate funds will allow local communities access to resources and clear decision-making power over how these funds are used" (Bonis Charancle et al., 2018). Most of the actors we met during this study described the ToC sessions as quite collaborative and festive moments where local authorities and grassroots people, through support from the project implementing staff and technical advisers, expressed their perceptions about stages and ways of change. Based on clearly defined activities, short-, medium- and long-term changes are expected around the priority investments agreed at community level. This ToC development activity clearly reveals how actors evaluate their situations, consider changes and define actions and commitments of each other to achieve this. through an inclusive partnership between different layers in society.

Realisation of investments

Once the contracts have been awarded and the funds granted by the DCF, the successful companies fulfil the contracts: purchase of materials and equipment, construction of infrastructure etc. This phase takes place under the watchful eye of many actors who are involved in the monitoring and control of the works. First, the municipalities, with support from the infrastructure department of the ARD, ensure regular technical monitoring of activities on the construction sites. The local people also play an important role in socially monitoring and controlling the works. This is recognised as one of the special dimensions of the DCF projects, which leads the people to position themselves as "gendarmes" to see if what is done on the building sites is in accordance with the characteristics of the work shared with them before the start of the works. Without being invited in the context of a technically planned monitoring, they make visits to the construction sites to discreetly observe whether the materials used, the amounts used of the inputs and the configuration of the work meet the standards initially shared.

These practices were confirmed by the head of ECCOTRA SARL company (Kaffrine) that built the grain bank for Ida Mouride. Contrary to the contracts he won and executed with other development projects, he claimed that DCF projects were more empowering to the local people, who carefully followed the building activities for the works to be of good quality and sustainable. He recalled the various warnings received by his field supervisors and himself, whenever local people noted deviant behaviour from the workers. Theft and misappropriation of materials were impossible at DCF-funded construction sites, where people constantly monitored the inflows and outflows of materials. The contractor also confirmed a valuable contribution of the local people to the environmental screening and the establishment of the building. With better knowledge on their local environmental context, the people provided useful information that contributed to better dimensioning and basing the infrastructure on suitable and secure sites.

²³ Rick Davies, cited in EVAL (Centre de ressources en évaluation). Théorie du changement. Available at: http://www.eval.fr/theorie-duchangement/ (accessed 28/12/2018)

Provisional and definitive reception of works

The final verifications constituted an important element to guarantee the sustainability of the investments. First, a temporary reception was done to confirm whether or not the successful tenderer complied with the characteristics of the works as agreed in the signed contract. This activity, which required more technical expertise, was also open to the local people, who gave their assessments and made suggestions for improving and finishing the works. When this stage was successful, a final reception of the works was organised by the municipality, which marks the delivery of the works to the communities, who then become responsible for its use and management.

Some actors, who were involved in the DCF process from the beginning, sometimes felt excluded from the monitoring as well as from the temporary and final reception of the infrastructure. For example, prefects complained during our investigations about how the DCF process was managed after the project selection phase, where they were no longer informed about anything or only learned about reception of the infrastructure through the media. The DCF team in Kaffrine justified this situation with the autonomy and responsibility of the beneficiary municipalities, which are major players in the process of inviting whomever they want to the temporary and final technical reception of structures. However, it must be acknowledged that the sharing of political benefits of these achievements by both mayors and prefects is the main issue of this exclusion. When the two actors share the same political view, the partnerships are strengthened and the invitation to an infrastructure reception meeting is not a problem. But when the two communal and Département actors are of opposite political affiliations, the non-invitation is also a political strategy. However, it is important to find a way to correct this situation; otherwise, the lack of interest on the part of the prefects will negatively affect the DCF process. Although the prefects cannot be invited to all meetings dedicated to the opening of investments to the public for various relevant reasons, including the cost associated with that, it is advisable to reinforce their involvement in periodic missions for which they are sometimes solicited to visit various villages beneficiary of investments.

Setting up the management committee

For sustainable management of the infrastructure, the DCF team and the Département technical partners support local communities in setting up management committees, while strengthening their capacity for rigorous management. The management committees are often mixed groups, made up of men and women, crop farmers and agropastoralists. They define with the local people the terms and rules of access to the infrastructure built. For example in Ida Mouride, the management committee of the grain bank, composed of 16 members (including three women) from different ethnic groups (Wolof, Sereer, Bambara and Laobe), after consultation with the local people set at 50 FCFA the monthly fee for keeping a 50-kg bag of grain in the grain bank. The management committee is also considering new projects such as warrantage (warehouse receipt system), group sales and solidarity economy initiatives to enable village inhabitants in Ida Mouride and other surrounding villages to ensure food and nutrition security in times of scarcity. In this context, an initiative of contribution of 10 kg of grain per farmer of the village, to constitute a stock of security to allow the village households to deal with shocks, and also to give the possibility to the poor to access food at lower cost during the lean season, is a project being developed by the local communities. The committee meets whenever one of its members or someone in the community is inspired with a new project idea. The DCF project has strengthened trust and confidence among local communities.

In Ndiobene Sama Lamo, the management committee of nine members (including three women) from two ethnic groups (a Fulani agropastoralist and eight Wolof agropastoralists), retained 1000 FCFA as the fee for vaccinating a herd regardless of its size and origin (local or transhumant). A nomadic pastoralist found in transit with his family and his herd in the vicinity of Ndiobene Sama Lamo, with whom we discussed in the evening of 11 December 2018 confirmed this fact. The resources mobilised are intended for maintaining the infrastructure. They may, by consensus of management committee members, be allocated to other projects of common interest for the village. The success of this investment and its great use by the local people has encouraged the management committee, which plans to initiate other projects to submit to other donors to strengthen agropastoral development in the region. In this context, an initiative towards building a fenced water trough is in the making among the committee members, who argued that the efforts for vaccinating livestock in the new vaccination yard can be inhibited in the medium and long term, by the risk of disease contamination if all local and foreign vaccinated or not vaccinated herds continue to be watered at the same local sources. Difficulties in access to livestock feeds in certain periods of the year are also being converted into an investment proposal focused on building a livestock feed bank to ease access by livestock-keepers.

It is clear that the infrastructure management bodies, given the involvement and enthusiasm of the local people, have also become powerful prospecting bodies, which initiate and mobilise local communities, in mutual trust, around new initiatives towards development and resilience

Box 1: Testimony of a woman farmer in Ida Mouride

Khady Seck is a 45-year-old married woman farmer, with eight children and two other dependents. She has grown peanuts on 1 ha of land for more than two decades, outside the common field of the household. In recent years, she has experienced difficulties in accessing seeds because of poor harvests and insecure storage conditions. She, like many farmers in the area, has to wait for the state offices responsible for distributing agricultural inputs. The delay of seed-distribution services in recent years had a very negative effect on crop production levels. Because they acquire farm inputs on credit, some farmers cannot even keep enough seeds, since they have to sell most of the crops to pay their debts. All this weakens their livelihood and often drags them into a precarious situation.

During the last crop year, Khady harvested 300 kg of peanuts from her field, selling 250 kg on the local market at 210 FCFA per kg and storing 50 kg as seed in the village grain bank built with DCF funds. The option of storing products in the grain bank has allowed her to escape recurring thefts, fires and humidity/moisture problems that usually reduced the quantity of stored seed by 15 kg on average in a 50-kg bag. Beyond these forms of insecurity in the conservation of crop harvests, Khady also spoke of an issue of discretion, which constitutes an important social factor in the local management of property. She assumed that the presence of a store filled with agricultural produce in the courtyard or bags filled with food in the room, although showing the wealth of the owner, is also a way to attract the greed of neighbours, relatives or visitors, who sometimes ask for a portion. Refusal to satisfy their desire could weaken social ties and engender enmities between people from the same social network.

For all this, the grain bank also appears as a way to be discreet and keep farm produce safely until the moment when it is needed. The *Thiatte*, locally defined as the negative effect of the bad mouth or the evil eye on the possessions of others, is the root of many evils that weaken the social bonds, if it is not managed carefully. Khady spoke about how the advent of the grain bank resolved some difficulties: *"Before we had difficulties but with the store all these difficulties have disappeared"*. The grain bank solves many sociocultural and economic problems and strengthens the social capital of beneficiaries, which is likely to have a positive impact on their resilience to climate change. to climate change. This impetus in DCF is not observed with the management committees set up by other development projects around other investments²⁴. The trend in Kaffrine is reassuring that grassroots ownership of the project has motivated the management committees not to expect anything from IED-Afrique or other local partners, but to become the architects of their own development by transforming their priority needs for adaptation and resilience to the adverse effects of climate change into concrete proposals. With the experience gained with DCF, they are now better equipped to mobilise local climate funds and to manage them effectively.

Use of infrastructure to improve resilience

Since the infrastructure built meets the priority needs of local communities, there is a great deal of enthusiasm for its use. Although we did not have access to accurate figures, over 40 farmers, one-third of whom are women, kept cereals and peanuts in the grain bank in Ida Mouride during the past cropping season. In Ndiobene Sama Lamo, the trend is similar with dozens of herders vaccinating their animals at the new vaccination yard in the last two years. With the various initiatives envisaged locally and listed above, the people participate very actively with the management committees in developing new ideas for optimal and sustainable use of the infrastructure, and for developing new investment projects which could contribute to strengthen further their resilience to climate change.

Overall, the DCF model in Senegal is fully in line with the dynamics of decentralisation and the value of subsidiarity, which encourages stronger citizen's involvement in public decision-making and project implementation in a context of multiplicity of development actors (PNDL, 2011, p.13).

Local people, as the ultimate beneficiaries of development actions and policies and holders of the legitimacy of elected representatives, thus play an important role in the mechanisms for promoting sustainable development. It is obvious on the ground that, for several years, local people have been the subject of increased accountability in all areas of economic and social activity. This empowerment is seen as a sine qua non condition for promoting sustainable and participatory social and economic development, which takes into account their specificities (history, organisation, culture) and their potentialities. Without being the instigator, DCF initiatives such as the community forum have benefited enormously from this local planning mechanism already in place, which promotes inclusive citizen engagement. This is consistent with the perceptions of the people we met, who are very appreciative of the DCF project and its approach, which values, empowers and motivates them to be proactive in exploring new avenues for resilience to climate change. Being involved in the process from the identification of priority needs through community forums, to the commissioning of the works gives them great assurance for raising and managing climate funds for the improvement of their livelihoods.

3.2 DCF in Mali: actors and processes

The DCF process in Mali involves the actors and activities presented in Table 4.

Since 2008, the institutional system has set up at the commune, *Cercle* and regional levels respectively, communal, local and regional committees for orientation, coordination and monitoring of development actions (CCOCSAD, CLOCSAD and CROCSAD)²⁵, to promote at the different territorial scales the synergy

²⁴We did not study the management committees set up by other development projects, but local people confirmed that most of these committees were not sustainable; they ended up falling into lethargy and disappeared at the end of the projects that put them in place.

²⁵ Décret N°08- 095 / P-RM DU 21 fév. 2008, portant sur la création des Comités Régionaux, Locaux et Communaux d'Orientation, de Coordination et de Suivi des Actions de Développement. Available at: http://extwprlegs1.fao.org/docs/pdf/Mli176246.pdf (accessed 07/02/19).

Table 4: Actors and processes of social inclusion in DCF in Mali

Actors	Involvement And Roles
NEF/ DCF team	Launching project; Informing, raising awareness and training actors from different levels (village, commune, <i>Cercle</i> and region)
Village authorities (Heads, deputies and councillors)	Organising community consultations (local planning sessions to identify priority investments and agree on project ideas)
Communal Adaptation Committees (CCAs)	Disseminating information; Raising awareness of communities on DCF; Encouraging local communities to submit ideas for projects that meet local priorities; Supporting local communities in developing proposals and receiving institutional support (portage institutionnel) Evaluating and preselecting proposals (coming from villages and CBOs); Receiving feedback of NEF/DCF on commune-level projects; Transmitting preselected proposals to CLA
Local Adaptation Committees (CLA)	Examining technical aspects of submitted proposals; Validating projects that must receive DCF funding; Adding proposals designed at <i>Cercle</i> level and bidding for funding
Regional Adaptation Committees (CRA)	Last checking of proposals; Validating technical components of investments at <i>Cercle</i> level; Accepting proposals for funding; Providing no-objection opinion and validating disbursement for the benefit of projects; Monitoring climate funds
Municipalities (with other relevant actors)	Selecting contractors and awarding contracts
NEF/DCF Team, CCA & CRA	Developing Theories of Change (ToCs); Monitoring supportive activities for long-term community resilience
Contracting companies (Successful applicants)	Implementing project (executing contract, realising the works)
CCA& CRA	Monitoring infrastructure building; Requesting and obtaining corrections on work in progress; Validating improvements and confirming the quality of works
NEF/DCF Team, Communal Adaptation Committee, CRA	Informing and building capacity of local communities on sustainable management of infrastructure
Village Management Committee	Enforcing the rules of access to infrastructure; Managing daily the infrastructure; Reporting to CCA, technical services, NEF and other stakeholders on management activities; Holding periodic village meetings to report on local management; Ensuring continuous interactions between beneficiaries and other actors involved in DCF implementation; Developing new ideas for efficient infrastructure management; Initiating with local people reflections on new ideas for investment projects geared towards resilience to climate change

of development actions involving various stakeholders. These structures are responsible for: (*i*) giving their opinion on development strategies or programmes and monitoring their implementation; (*ii*) ensuring coherence in the implementation of sector programmes; (*iii*) making recommendations and suggestions or proposing measures to ensure proper implementation of such programmes; (*iv*) encouraging the involvement of all actors in the process of institutional reforms; and (*v*) guiding, coordinating, monitoring and evaluating the support necessary for the implementation of local authority development programmes²⁶.

In order to fully assume their functions, these structures are composed of the politicoadministrative authorities of the different territorial coverage considered and representatives of the technical and professional structures and the various civil society organisations (CSOs), including those of women and young people. For example, the CCOCSAD is officially composed of the mayor and deputy mayors, heads of technical services (agriculture, livestock, etc.) at the commune level, communal representatives of professional chambers (agriculture, trade, commerce and industry), representatives of grassroots associations that have signed a framework agreement with the Malian Government, representatives of women's associations, representatives of CSO coordination and representatives of the youth council²⁷. At the Cercle and region level, other territorial authorities, such as governors, prefects, sub-prefects, and other technical directors, delegates, special advisers or technical agency representatives, may be added to this standard composition.

The DCF process has been grafted onto this already established mechanism, to create from these structures more specialised entities focused on adaptation and resilience to climate change. Thus, we found in the commune, *Cercle* and

region, respectively, the Communal Adaptation Committees (CCAs), the Local Adaptation Committees (CLAs) and the Regional Adaptation Committees (CRAs)²⁸. One of the most important features of DCF shared in this study is the strong involvement of local authorities, along with beneficiary communities and technical experts, in planning, financing and implementing various investment projects oriented towards resilience. Although the DCF process is really anchored in the choice by the beneficiaries, it also gives utmost importance to relations between beneficiaries, local technical experts and policymakers in raising and managing climate funds. To this end, the existing decentralised structures served as a springboard for selecting relevant investments and channelling climate resources to grassroots beneficiaries. DCF's social inclusion mechanism in Mali, closely linked to the cycle of different projects, includes the following stages and actors:

Information, raising awareness and training of stakeholders

The NEF/DCF team spent a lot of time sensitising beneficiaries on climate issues and explaining the concept of resilience, so that they could identify the investments they want in their villages (Bonis Charancle et al., 2018, p.22). In addition, the other institutional actors in the process were also informed and trained around the concepts, approaches and practicalities of the DCF, in order to enable them to play their parts for greater success of the project. The sensitisation and information were given in the framework of seminars organised by the NEF/DCF team to stimulate discussions, good interactions and partnerships between local people, decisionmakers and agricultural advisors, with the aim of encouraging them to seize the opportunities available to them to mobilise resources for investment projects geared towards resilience to climate change.

²⁶ Ibid 34.

²⁷ Ibid 34.

²⁸ In the field, some of these bodies take the name of commission, others committee. To some "Monitoring" is added to their name. However, we decided to use "adaptation committee" for all, since there is often no difference except in the name.

This step was very time-consuming and was mentioned locally as one of the major reasons for delaying the implementation of DCF in Mali, which had only one call during BRACED, unlike in Senegal where two rounds of projects were funded. Most of the stakeholders interviewed during the study testified that the awareness-raising and training sessions were many, but necessary and useful, allowing them to better understand the DCF approach, which is different from those of other projects and programmes that intervened in the area. Some of the key points of the exchanges that the interviewees recalled concerned the taking into account of climate change in the choice of investments, the primacy to the priority needs of the local people without exclusion and the targeting of the goods that can benefit everyone without exception (this is related to the notion of public goods).

Community consultation

This is the process through which local authorities (including village chiefs and their institutional partners) provide an opportunity for local people to express their needs directly, in relation to the adverse effects of climate change on them. It is also an opportunity to collectively decide on actions and investments to be undertaken to strengthen their resilience. This consultation took the form of a community assembly that carries out local planning, with a listing of priority investments. The active participation of local communities in these participatory planning and decision-making meetings allowed for a better consideration of the needs of different segments of society, including men, women, young people and the elderly. The various socioprofessional and ethnocultural groups, including farmers, agropastoralists and pastoralists, are comfortable with this stage of the process, and found in these consultations a great opportunity to express their specific and professional needs, which were debated until consensus was reached.

The arguments and counter-arguments presented by participants in the community consultations to support or reject various investment proposals

allowed the entire community at the end of the exercise to feel ownership of the idea finally retained, which was no longer only the property of the village authorities, local elites and influential people. The community consultation as presented by all our respondents favoured consensus on priority investments, even though unanimity was not often obtained; and in this case, the will of the majority imposed itself on everyone. The result of the community consultation was the selection of project ideas and priority investments that village people considered relevant to strengthen their resilience to climate uncertainties. Sometimes resource persons, because of their experience and background, dominated the proceedings and developed strong arguments to support or reject some investment proposals, but these were isolated occasions that do not support a conclusion that certain segments of the population were excluded from the process that led to the choice of priority investments at the village level. Even women were present at the village meetings and were able to express their specific needs and defend their interests, according to their own statements and the testimonies received from the men. We were also informed of cases in which this consultative process was led by the communal and *Cercle* councils, especially in the case of projects directly held by them.

Proposal development and institutional support

Ideas from village community consultations were presented in proposals, following a framework agreed within the DCF project. Proposals on priority investments at the village level were written at the village level. These proposals and discussions referred to the support from the DCF team or the CCA made up of experts in the various target areas of most of the investments envisaged: agriculture, livestock, fishery, natural resource management, etc. Based on information received from the DCF and experts, villagers developed project documents with the assistance of community leaders, local elected officials and other skilled people (village natives, close

relatives, resource persons and other people from villagers' social network, etc.). The applicant rural communities were referred to as "project holders"²⁹. To improve the content of the proposals, the proposal documents often went back and forth several times between villagers and municipal experts to produce a fairly competitive product. Once the proposal was completed, it is submitted to the municipal council, which validates it after selection and prioritisation sessions. The project documents thus validated are taken into account institutionally by the CCA to review their compliance with government policy in relation to the effects of climate change. This is what is locally known as the "institutional support"³⁰ of projects by municipal councils.

Submission and review of proposals

The project leaders submit their projects formally to the CCA. The CCA is in fact the technical arm specialised in climate change of the municipal council, which is represented by two people, mainly elected officials. As part of its mission, the CCA launches calls for proposals, receives applications and evaluates them, and preselects the investments that should benefit from DCF funding in the commune. It is a very competitive process, with 48 projects selected out of 727 applications in 2016 (Bonis Charancle et al., 2018, p.25), which mobilised many projects, the majority of which come from grassroots community organisations. Other projects sometimes emanate directly from the communes or the Cercles. The DCF team in Mali supports the CCA in preselecting the projects proposed by the communes, and the projects proposed by the Cercles are evaluated and validated at the Cercle level.

The CCA also helps the local communities to refine their content, for a good readability and to favour

their eligibility to supra-local authorities: "Many projects were submitted, but some did not meet the criteria of the DCF. There were projects that met only half of the criteria. For these projects we returned them to the promoters to include aspects such as gender, youth employment, etc."

Our informants regarded the proposal-selection workshops as an important framework for mutual learning. Local people, based on their previous experiences with local partners, were initially sceptical about the fairness and equitable scope of decisions on proposals, but said they were now more confident about the decisions of the selection committee that they credited with a great impartiality. We noted a good understanding of actors (especially at the local level) on the effects of climate change, vulnerability, gender and inclusion of women, youth and other vulnerable people in the proposal development process. Local people are well aware of the challenges of having their proposals shortlisted and finally selected as resilience-oriented investment projects. We did not have the chance to meet with unsuccessful proposal applicants, but the pleasure of having benefited from DCF funding certainly influenced the discourses of the local people in Kouna, Karamani and Sare-Mala, who strongly emphasised that the process of selecting investment projects was transparent and fair. This credibility of the CCA seen by the beneficiaries is also shared by the regional councils, which are increasingly asking for relevant projects to be included in their Social, Economic and Cultural Development Programmes (PDSEC), in order to benefit from public funding through the National Agency of Territorial Community Investment (ANICT), which is trying to make this possible for the future phases of the DCF. This is a great opportunity that could enable local communities to access more funds in the medium and long term to implement resilience investment projects.

²⁹ Porteurs de projet

³⁰ Portage institutionnel

Transmission and validation of preselected proposals

The proposals preselected by the CCAs are transmitted to the local adaptation committees (CLAs), which operate at the Cercle level, with the contribution of various stakeholders, including politico-administrative authorities, decentralised technical service officers and representatives of CSOs. The CLAs review the technical aspects of the proposals submitted to them and validate the projects that should receive DCF funding. This offered a second level where community initiatives were discussed, through a productive interaction between policymakers, technicians and civil society structures that defend the interests of the local people. The Cercle authorities and other stakeholders met during this study appreciated the richness of the debates that promoted mutual learning and gave good perspectives on gender mainstreaming, as a strategy to promote inclusion that is a principle very dear to the DCF project. CLA-validated projects were forwarded to the regional committee (CRA), which finally made some final checks and decided on the final selection of those which should benefit from the DCF financing.

Final checking and allocation of funds

Prior to any allocation of funds, the regional committee first assesses the compliance of the projects submitted with the national policies in Mali. It has the power to reject all initiatives and investment proposals that go against the public policies on local development planning³¹. The other mission of the CRA is to manage the climate funds in the framework of a partnership with the DCF project, which jointly manages through its coordinator, the secretariat of the CRA with the Regional Budget Director. During our study, the actors praised and congratulated the open-mindedness and the productive collaboration

of each other, which reinforced mutual learning and led to good performance of the model put in place.

To ensure the smooth flow of disbursement procedures and remain in line with a real and concrete decentralisation of climate funds, the DCF team considered a partnership with ANICT, which is the only technical and financial support structure of the Malian State for local authorities. This partnership allows ANICT, when it is accredited with international green funds and consequently accesses climate funds at national and international level, to channel them more easily towards local communities to support their relevant and inclusive investment projects for strengthening their resilience. In this perspective, ANICT received copies of all projects definitively admitted to DCF financing in the different Cercles. Making operational its partnership with the NEF suggests that the funds are now managed through this institution and domiciled at the public treasury at the *Cercle* level. The funds are now disbursed, following joint non-objection notices from the regional committee and the NEF. Disbursement requests are sent to the regional committee. Credibility and validation are based on cost-efficiency analysis and compliance with established conventions. After the resolution of all credibility and validation issues, disbursements are made by the Cercle treasury for the implementation of project activities.

Selection of contractors and procurement

Following the selection and approval phases, calls for tenders were issued for projects to be implemented by the municipalities, which received all bids. The selection of service providers was usually done by the municipal commission dedicated to this. However, under the DCF, the mayors decided to involve the members of the CCA(CCA) and other relevant officials

³¹ The relevance and objectivity of the debates on the various projects during the selection and validation phases at the CCA and the CLA levels, respectively, have given satisfactory results to the point where no project has ever been rejected to date at the CRA level. Some projects requiring improvements were returned to their promoters for amendments.

in this operation, with a view to enhancing the level of transparency of the process. A tenderanalysis workshop mobilised all these actors and deliberated on the best-qualified tenders, who were finally selected for the realisation of the various infrastructures. The contracts were then concluded and signed, and copies sent to all stakeholders.

Development of theories of change (ToCs)

The activity of ToC development is one of the innovations brought by the DCF to the local communities that benefit from its funding. Several interviewees in this study confirmed that it is for the first time in their lives that they are so actively involved in the implementation of a project that has given them the opportunity not only to choose their own priority investments, but also to glimpse all possible negative and positive changes over time, in order to take actions that are in the direction of a real improvement in their living conditions. The interactions on these occasions were well appreciated and confirm the inclusive process that put communities first. Through this strategy, local people were led to better understand climate change and resilience investments in line with expected changes. They became more aware of possible trajectories of environmental, socio-economic and political changes.

Realisation and monitoring of investments

Monitoring activities were carried out according to the roles and responsibilities described in the funding protocol. In general, these followup activities were primarily carried out by the regional technical services, which have the most qualified human and technical resources to verify the conformity of the achievements in the field with the characteristics agreed in the contractual documents. The DCF team and the local authorities were involved in these monitoring visits.

The various follow-up missions were possible thanks to the financial support by the DCF project, according to a pre-established monitoring strategy to assess the efficient use of the funds and the quality of the infrastructures carried out. When possible, changes were known, environmental stakes were evaluated and the infrastructure's designs were revised accordingly, the contracts were made and the successful companies started the work on the basis of cash advances. Beyond the formal site visits by communal and regional actors, the villagers benefiting from the various investments organised informally, without any funding, visits to follow the progress of work on the sites and sent alerts to local and supra-local authorities in due time. The strong involvement of local communities in identifying priority investments, and also during the other stages of the DCF process, is at the root of this empowerment. The people in Kouna, Karamani and Sare-Mala expressed their pride in visiting the investment sites to assess the progress of the work, detect any abnormalities and request corrections, as part of a social monitoring.

Use monitoring and capacity building of local management bodies

Once the investments were completed and accepted, local communities set up a management committee for overseeing infrastructure and ensuring proper management³². The management committees are generally gender-balanced, with women and young people well represented. For example, the Kouna rice-farming site's management committee is composed of 13 members, including five young people (38%) and three women (23%). The market-gardening site of Karamani is managed by a committee of 10 people, including seven

³² Management committees are also set up with support from the DCF team and other actors (municipal and regional committees and decentralised technical services of the State)

women (70%) and a young person (10%). The water supply infrastructure in Sare-Mala is managed by a committee of six members, including three women (50%). The representation and empowerment of women and youth in these local decision-making bodies, as is also the case for communal, *Cercle* and regional structures, is a very positive aspect of the DCF model in Mali.

The management committees benefit from capacity building by the DCF team and technical support structures, and oversee the application of collectively defined rules for the maintenance and sustainable management of infrastructure. The rules of access were freely defined by the community, which also provided for mobilisation of resources to maintain and ensure ownership and sustainable management of the infrastructures. For example, each beneficiary of a plot on the Kouna rice-growing site pays after



harvesting and marketing of products about 1500 FCFA for land use and water access³³. The situation is different in Karamani, where users of the market-gardening site have not defined fixed usage fees, but pay 1000 FCFA per person at irregular time intervals to ensure the maintenance of their farming site. For the drinking water supply network in Sare-Mala, a more symbolic payment was instituted for village residents and neighbouring village people who pay 5 FCFA for two buckets of water of 15–20 litres. There are also disincentives instituted to promote order, discipline and social peace in the use of these public goods. This is the case in Sare-Mala, where any person, male or female, involved in disputes at any of the water distribution terminals is fined 500 FCFA. The investment access rules were widely disseminated within the direct beneficiary and neighbouring villages, and received popular backing.

We received testimonies of the relatively good functioning of most management committees, where men and women cooperate in synergy to assume the tasks assigned to them by the community. To this end, the key role of Fatoumata Bah, a woman responsible for sanitation in the management committee of the water supply network in Sare-Mala, could be cited as an example. By ensuring compliance with the general rules of cleanliness and by supervising the managers of the five water distribution terminals attached to the infrastructure, she regularly provided the chairman of the management committee with the information necessary for decision-making, warning and sanction. She acquired a position of leadership, as was locally acknowledged and communicated during our study.

³³This fee is not fixed and changes a lot over time. The Kouna management committee has already mobilised about 275,000 FCFA through periodic contributions from members and other paying services offered to users.

Box 2: Testimony of a management committee member in Sare-Mala

Fatoumata Bah is the person responsible for sanitation in the management committee of the water supply network financed by the DCF in Sare-Mala. Her satisfaction with this investment is great, as she expressed: "I had a personal satisfaction with the arrival of the water supply. In the past, I used to walk to the river, several kilometres away from the village, to fetch water and carry the bucket of water on my head to the village. I did several rounds a day to get this water that is not even drinkable. Currently, moving, carrying buckets of water over the head for a long distance, and the consumption of unsafe water are just old memories. I also see that the population is satisfied".

Fatoumata confirmed the tedious nature of the water fetching for women and came to the conclusion that her colleagues and herself are no longer subjected to this chore definitely removed from their daily tasks, which has given way to the ease of domestic works for women, and has promoted a better health for household members. Because the local people were involved in choosing and implementing this investment, there is a strong sense of ownership by all, which also reinforced social cohesion around a common goal, which is the preservation and the durable use of the infrastructure for the happiness of all. This investment benefit is also shared with neighbouring people, who make Sare-Mala their point of transit to their farms, to take every morning in their cans and buckets drinking water of better quality. They contribute enormously to the mobilisation of funds, by complying with the requirement to pay a symbolic amount for the maintenance of the infrastructure.

Fatoumata, who oversees cleanliness around the five water access terminals, is proud of her role in mobilising the information needed for the President's decision-making on warnings and sanctions, in connection with the compliance with the rules of good practices in the field of sanitation and protection of equipment. Over time, Fatoumata has become one of the most respected local voices around this water supply network, both by terminal managers and local people who believe in the relevance of her opinions, proposals and reproaches. Now everyone in the village pays great attention to the sustainability of the investment, and the men and women who are in the management committee work in synergy, which increases their credibility with the local people that easily submits to the rules collectively established.

3.3 DCF in Senegal and Mali: strengths and weaknesses in ensuring social inclusion

3.3.1 Strengths in ensuring social inclusion

The DCF models in Senegal and Mali strongly integrate social inclusion through several frameworks for exchange, discussion and sharing that promote physical presence (often by invitation and sometimes not), participation and active contribution (through ideas and proposals or discussion of ideas and proposals by others) of different social groups throughout the process. This is the overall trend that emerges from our study, and is shared by most informants in the field. An informant from Sio (Mali) stated: *"We are really at the heart of the process and everyone is at the same level of information from project initiation to implementation"*.

The different layers of the local communities were effectively involved throughout the process. The information, sensitisation and training sessions organised by the implementing structures (IED-Afrique in Senegal and NEF in Mali) to provide stable foundations for the project were offered

to the local communities, which sent their representatives to take part in the sessions and report back to them. Some decentralised meetings were conducted at village level where communities interacted directly with other actors involved in the DCF process. People of all gender (men, women), of all ages (young people, adults, elderly) and all professional and ethnocultural groups (crop farmers, agropastoralists, pastoralists etc.) took part in these different sessions, and there is no sign that they were excluded from participating in the debates and exchanges. On the contrary, facilitation mechanisms were implemented by the DCF teams to encourage them to take the floor to express their points of view, and not to be intimidated by officials and other influential people. Several people who took part in the awarenessraising and training sessions confirmed that they shared their opinions and proposals reflecting the interests and priorities of young people, women and other vulnerable groups. Valuing local and indigenous knowledge on the issues of climate change and resilience was a strongly positive point in ensuring social inclusion in the project.

Apart from these first opportunities given by the DCF to local communities to voice their issues, actual community consultation was a central element in ensuring social inclusion in both models. The community forum is required in Senegal from the beginning of a project as an important element of eligibility for DCF financing. The way this requirement was handled during the first call for proposals probably did not work out well in ensuring good inclusion of local people in targeting their priority needs. Investments formerly included in existing local planning documents or new project ideas from only a few leaders, including mayors, were presented as investment priorities of the grassroots communities. However, these difficulties encountered during the first call were resolved over time, during the subsequent phases of the project which allowed for flexibility and improvements that reinforced social inclusion and correction of the original processes.

All those who represented DCF or CDA at various community forums confirmed the participatory, contributory and festive atmosphere in which vulnerable groups expressed and discussed their needs and proposed solutions. Several local authorities (Ida Mouride, for example) had to consult again with the local people to select investments and improve project ideas, even if in the end they resulted in the same investments previously identified in a participatory way and recorded in their communal development plan. We found by reviewing the various local planning documents of the Kaffrine's study areas that it is the same types of investments that have always been funded by various donors that are still presented in a new light as resilience investments. It might be thought that the local and communal development plans currently being implemented in the different communes in Kaffrine were all "climateproofed" and contained only "climate-sensitive" investments, which is not the case. However, it is very encouraging that local people are now able to make the link between climate change and the difficulties they suffer, which they seek to mitigate through project ideas and investment choices. The exercise has improved ownership of grassroots projects.

Another element that confirms and reinforces social inclusion in DCF in both Mali and Senegal is the process of selecting proposals that give space for technicians, specialists and experts from various backgrounds and genders to engage in constructive discussions about the form and the content of the projects, as part of a gendersensitive framework. The members of the CRA in Mali attested to this: "The gender aspect is taken into account seriously at each level of decision and implementation. The regional women's directorate is even a member of the regional committee and takes good care of this issue". This improves the consideration of the specific interests of vulnerable segments of society, including women and youth, to give them the chance to make better use of targeted investments: "Communities have left aside the traditions that say that women are not entitled to land, and have also granted land to women on the rice-farming area [of Kouna in Mali]. Just like men, women had no difficulty getting plots on this site". The allocation of part of the adaptation funds to the holding of the various multi-stakeholder and multi-sector committee

meetings and the implementation of proximity monitoring missions were key drivers of social inclusion. Indeed, they ensured regular attention of the various actors and their interests in due course and banned any exclusionist practices as soon as possible.

Activities such as ToC development, environmental screening and others gave greater responsibility to people who feel honoured, valued and more aware that they must be the architects of their own development in seeking inclusive and sustainable solutions to their difficulties with climate change. They were increasingly empowered to take initiatives in mobilising and managing climate funds. It is for these reasons that the beneficiaries have not stopped at the investments already made through the DCF funding, but were already initiating reflection groups to target other relevant investments and seek financing. Residents of villages bordering those who have benefited from DCF funding were also trying to put forward resilience investment projects to perhaps get favour from the DCF in the future. This is a very positive ripple effect for the sustainability of the project and its approach.

Social inclusion in the DCF is also enhanced by the full funding of selected projects, without DCF requiring in-kind or cash contributions from the local communities, as is the case with other development projects. Although this may seem like not aligning with the principle that local communities need to be aware of their situation and contribute to finding lasting solutions to their problem, the effect we have noted on the ground is quite the opposite. In fact, many vulnerable people who were not able to contribute to these initiatives in society, and felt publicly humiliated and disgraced by this fact, could also be excluded from the uses and benefits of certain achievements by development agencies. Here, even those who do not have the financial, human or material resources to participate in development initiatives

were excluded neither from the process nor from the benefits. This was not perceived locally as opportunism, but as a way of acknowledging and accepting differences within society, as they expressed in Senegal: *"Look at your fingers, they are not equal; so is society. Solidarity makes life easier."*

The needy people within beneficiary communities were recruited by the contractors to participate in the construction work, for which they were paid, which contributed to improvement in their living conditions, even if only on a short-term basis. For these reasons, the local communities encountered during the study assume that DCF's activities and achievements did not negatively influence traditional sociocultural norms. On the contrary, they have reinforced the values of intra-community solidarity, promoting better social cohesion within households and beneficiary villages. Intercommunity relationships between beneficiary and non-beneficiary villages have improved, to the point where the latter also enjoy the same conditions of access to the local investments and seek advice from beneficiaries to improve their project ideas and prepare their applications for future DCF calls.

The beneficiary communities perceive a difference between the DCF and other projects that intervene in their area: The introduction of the climate change topic and the articulation of ideas and investment projects around the logic of resilience were new and innovative for the local actors. This also applies to the environmental screening, ToC development and the access and use of climate data³⁴, which are innovations learned through DCF, adapted to the local contexts and used by local people to design their own climate change resilience mechanisms. The establishment of an intervention and learning framework that incorporates all categories of actors (decentralised authorities, elected officials, project and programme managers, CSOs, resource persons, etc.) interacting with each

³⁴ This activity involved institutional partnerships and collaborations between various actors involved in production, reformulation in language accessible to the local people and the dissemination of climate data (see project final evaluation report: Bonis Charancle et al., 2018)

Box 3: Testimony of a woman vegetable farmer in Karamani

Binta Arama is a woman vegetable farmer at the Karamani market-gardening site, who expressed satisfaction with the infrastructure that was built in a context where women were fetching water at more than 3 km away from the village: *"I thank everyone. Since the building of this infrastructure, my living conditions have improved. We have seen great changes in the village and even people from other villages are taking benefit from our activity. It is very difficult for women to declare their assets in public, but all the women involved in vegetable farming on the site solve their own and household's problems with the income they derive from their farming activity".*

Binta's testimony showed that the implementation of this investment has benefited the entire village population in general and women in particular. It has facilitated access to water for market gardening, through which women make meaningful contributions to the food needs of their households. Binta used her farm income for the last three crop years, to contribute nine bags of cereal to the food needs of her household, which was entirely supported by her husband: "It is because of the existence of this garden that I have been able to contribute to the family food, which I have never done before". She also reported the case of several other women in the village who used their farm income to help their husbands by bearing part of the family expenses.

Women have easier access to vegetables, which are increasingly used in household meals and improve the food and nutrition security of the household. The missing condiments for the kitchen are acquired with the income from market gardening: "No woman pays for condiments now in this village, except for salt". In case some women lack some vegetables, they easily barter with or borrow from others. Some women have bought small ruminants for fattening, while others have managed to mobilise sufficient financial capital to invest in small businesses. All these initiatives have positive impacts on household livelihoods and offer opportunities for easy support to relatives and neighbours, which - in turn - strengthens social relationships.

The development of this vegetable farming site has also positively impacted on livestock farming, by offering herders the opportunity to easily water their animals at a drinking trough connected to the main water source. Crop residues are also available on site to the animals. Loss of animals that were perishing for lack of water in dry periods or were lost in the bush in long journeys in search of watering sources, has been reduced. The livelihoods of vegetable farmers and herders have improved, and women are empowered and are now better respected in society. The vegetable farming has created a strong cohesion among the local people, strengthened the community health through a better management of waste, and increased farmers' income and food security.

other was an important factor of empowerment. Budget support strengthens the autonomy and decision-making power of grassroots actors, in contrast to the project support that makes them continuously dependent and incapable of making decisions. The design and application of several tools, mechanisms and procedures to ensure transparency, fairness and efficiency of the process (selection committee, community forums, contracts, governance documents, partnerships, special accounts for securing funds, etc.) promotes and strengthens local expertise in climate-fund management.

The division in positions and roles of the different actors (communal/Département selection committee, development of projects by communities and grassroots organisations, institutional support of grassroots organisations

by local authorities, etc.) gave birth to an important process of self- and mutual learning, and an extraordinary chain of discovery, action learning and partnership. Using a territorial approach that involves all the socio-organisational and institutional components of society (local authorities, umbrella professional organisations, grassroots community organisations, technical services, etc.), instead of a sector-specific approach, the DCF project has given Kaffrine and Mopti an exceptional impetus at the grassroots level and has promoted the empowerment of stakeholders in setting up and managing climate funds.

3.3.2 Weaknesses in ensuring social inclusion

The analysis of social inclusion in DCF models in Senegal and Mali reveals some limitations, which should be highlighted here:

The institutional sponsorship (parrainage) of CBOs set up by DCF Senegal is sometimes a major political weapon in the interactions between the various local actors. In fact, the institutional sponsorship is the moral guarantee that local authorities provide to CBOs (women's groups, youth groups, economic interest groups, and other CSOs) to support their projects with the DCF. This sponsorship option was incorporated into the DCF process in Senegal, when it was about extending the proposal application, once reserved for local governments, to grassroots organisations. As a result, local organisations wishing to submit an investment project for climate change resilience request and obtain from their municipal authorities a written document attesting to their support for the project. This reference document does not entitle local authorities to interfere in the management after these projects are selected and financed by the DCF. While in some places local authorities were reluctant to support projects of grassroots community organisations, and preferred to give priority to their own initiatives, the great weakness is that sponsorship has become a major tool of political blackmail. It was reported that some local organisations were not able to apply for the DCF call for proposals because their



communal leaders refused to deliver to them the institutional support letter. Other organisations that had the sponsorship of their communal authorities disagreed and entered into conflict with them as soon as the funding was granted.

The situation is quite worrying when the leaders of the local organisations receiving DCF funding are not of the same political affiliation, or are competing within the same political group. They challenge each other as real or potential political opponents, as part of a power play, highlighting their respective contributions to the development of the area, in order to gain a good image from the local electorate. This was the situation in Kathiotte, where the female leaders of the women's group which benefited from the DCF funding for setting up a cereal-processing unit do not get along with the municipal authorities, who deprived them of their support in implementing the project, e.g. to obtain a good location for the machines and equipment acquired and to facilitate access to electricity. This has blocked the functioning of the unit for two years. The sponsorship system, in its current configuration, creates a lot of confusion for the different actors and the DCF process, in a politically sensitive context: it needs to be rethought and reshaped to facilitate autonomy and collaboration in diversity. It appears that improvements have been made during the call of BRACED-X that was not covered by this study.

Another limitation of the DCF's approach in Senegal is in ensuring that the projects submitted by grassroots organisations are the result of the collective will of their members, just as community consultations ensure the

expression of the people's commitment to priority investments. Initially 100% of the available budgets were dedicated to local governments, but the mechanism has been improved over time, with 30% of the available funding currently being allocated to CBOs. Despite this improvement, Kathiotte's lessons should allow us to learn about social inclusion in the context of CBOs and how it could be improved. In fact, the mechanisms in place do not always ensure good social inclusion in projects through grassroots organisations. We did not feel that some CBO-led projects were actually the result of the will of all members and that the decision was collective. Although the leaders of the women's group in Kathiotte confirmed that the members of the group held a general meeting that decided on the type of project to submit to the DCF, most of

Box 4: Testimony of a woman cloth dyer in Kathiotte

Khady Diop is a 22-year-old woman who has been a member of the Kathiotte women's group for three years. She joined this group at the invitation of one of her friends, which allowed her to benefit from training in traditional clothes making, cloth dyeing, etc. Raw materials for this garment-related activity and other agro-food processing activities (rice, millet, corn, peanuts, hibiscus, tamarind, etc.) are acquired through the members' financial contributions, but the incomes generated by the activities are kept by the group leaders, who do not report to the members.

Khady considers that bad governance is very characteristic of this group, whose three main leaders (president, secretary and treasurer) never report to the members on the inflow and outflow of funds. Suspicions developed within the group and those who no longer accepted these leadership practices had resigned or were replaced by the leaders who were unhappy with their demands. The other members who did not dare to confront the leaders, however, refused to contribute a few times, which pushed the leaders to make the commitment to strengthen the accountability, which they never respect. Khady also considers that the age gap between her and the leaders of the group, some of whom may even be older than her parents, is a major factor that encourages the dominance of young ladies by the old women, who abuse them for their own benefit.

Khady heard about DCF support from her colleagues who told her about the machines, which have remained unused for two years for lack of energy. She does not feel that she is coowner of this equipment, which she assumes to be rather the property of the group leaders. The opague resource management and the sense of exploitation of members by the leaders that develop within the group pushes more and more husbands to oppose the membership and the participation of their wives in the grouping, which seems to be the figurehead of some leaders who use it as a showcase to capture external resources. Without improved governance and increased motivation of women members of the group, Khady thinks the DCF support will only benefit a fraction of people with decisionmaking power.

the members met did not know the ins and outs of this project which led to the conveyance of several machines and equipment in their village. Many of them said they only heard about it the day they were invited to attend the reception ceremony. We did not notice a good inclusion and participation of members in the management or decision-making in this organisation, which seems to be more or less the figurehead of some female leaders very influential at the local level. However, the fact that investments meet the real needs of women does not, in our view, give them an inclusive character if the process that led to their choice and acquisition was not itself inclusive. The result is that very few members in the Kathiotte women's group felt they were co-owners of the cereal-processing unit, and they attributed the property rights to the women leaders. This is not a good model of social inclusion, and this situation calls for a review of the process of granting funding to grassroots community organisations, if it is the common interest that is really targeted.

The structure, functioning and governance of grassroots organisations must be thoroughly scrutinised before the final selection decision. A background and organisational audit report could inform the DCF and the other bodies involved in the implementation of the project if the conditions of social inclusion are locally fulfilled for the grassroots community organisation, preselected on the basis of the application documents. This could be a good possibility in the long-run, once the DCF approach is owned by local authorities. In the short-term, it could be operationalised through the project selection committees which could nominate a few members to carry out short investigations on CBOs whose proposals would have been preselected, before final selection and validation of projects and allocation of funds. Otherwise, the results on the ground rarely from those granted to private entrepreneurs, since we are here also in the case of social entrepreneurs or professional brokers (Bierschenk et al., 2000) who use their grouping to mobilise resources. This does not mean that these local groups do not have positive impacts on the lives of their members and the society. On the contrary, they offer great opportunities for employment,

learning, empowerment, travel and achievements to many people who are often co-opted by the leaders. However, a special focus must now be placed not only on the types of investments solicited by grassroots community organisations, but also on the inclusiveness of their project, in order to strengthen the resilience of individual members and of the community as a whole.

The non-involvement of some authorities in the monitoring and reception of the built infrastructure is one of the factors that could harm the DCF process to some extent, because of the discontent of these actors who might no longer collaborate as in the past, if changes are not made in the mechanism in place. This situation was mentioned in Senegal. The technical monitoring system in place in this country is efficient and includes actors at three levels, namely local, communal and regional, under the coordination of the ARD, with the compiled monitoring reports available at the level of the local commission. However, we noted the actors at the Département level (various technicians and prefectural authorities) were not sufficiently taken into account in this process, even if some of them were associated with some site visits.

One of the prefects in Kaffrine region declared: "How do you imagine that the prefect convenes the meetings at the Département level until the realisation of the works, and only learns about the reception on radio? This is not normal!". Although the municipalities are the project holders, it is desirable to encourage them to associate the prefects who also play a significant role in the process. Beyond the power games and the conflictive relationship that may exist among actors, the involvement of politicoadministrative authorities at department level is however important for the sustainability of the process. Some prefects were associated with visiting missions in the beneficiary villages, but it is desirable to reinforce this option, so that they do not feel excluded from the process of monitoring and reception of infrastructure.

This same remark applies to some departmentlevel technical service agents who participated in the entire project selection process, but were

not involved in the monitoring and acceptance of the works. The reason given locally for this, as in the case of the prefects, is that the local communities independently benefit from the support of the ARD to carry out this kind of monitoring and decide who is to be invited for the technical temporary and final reception of their infrastructure. Although this justification related to the autonomy of local authorities in implementing their DCF-funded project is relevant, it is also important to notify the relevance of infrastructure monitoring by the experts who participated in its evaluation and who know better its characteristics. Supervision of the building sites by the technical services is simply a matter of allowing technicians, after selecting the projects, to monitor during the implementation phase.

For these reasons, we found very positive the model in Mali where all the relevant actors and most authorities at various levels are involved in the missions on monitoring and reception of the works.

Another limitation noted relates to the representation of categories of actors, including CBOs or grassroots populations, by their leaders. In fact, in the perspective of involving grassroots beneficiaries, the general trend in Mali as well as in Senegal was to invite some of their representatives or some opinion leaders chosen by them³⁵. This practice is not unusual and can work if there is a good mechanism for reporting and information sharing with the people being represented. But when it creates a class of privileged people who have more access to information to the detriment of the larger population, it must be corrected to facilitate good social inclusion. Although this is not the case generally, we did encounter situations where there was a lag in access to information between local leaders and the wider population about the DCF investments and activities.

These cases reveal a conflict between common discourses that convey strong community involvement and the reality that sometimes a

significant portion of the community is left behind due to lack of information. Despite the great efforts by the DCF team to reduce inequalities in access to information and decision-making, the problem does not seem to be fully resolved, even with the introduction of compulsory community forums. This is a trend inherent in the model of participatory democracy, and needs improvement through enhancing reporting and accountability. We want to share two examples of these situations to illustrate what is happening on the ground. In the village of Ida Mouride, which received the grain bank, several people did not seem to be informed or to have participated in the processes that led to setting up the infrastructure. Some actors, including members of the DCF team, justified this situation by the fact that some people were often frustrated if the choices finally made by the community in terms of investment did not correspond to their ideas or proposals during the community consultations. While acknowledging the relevance of this argument, we believe that there is also sometimes a real gap between some who might be perceived as "firstclass beneficiaries" and others who are often in a position of "second-class beneficiaries".

A transect that we organised through the village of Ida Mouride revealed that only two of the four hamlets in the village (Gokh Cissé and Gokh Bitelem Tchamen) really felt concerned by the investment, were involved in the processes that led to its construction and considered themselves co-owners of the infrastructure. The other two hamlets (Gokh Altu and Gokh Ganawe Khalle) were under-informed and considered the grain bank as an initiative of the village authority and his people (counsellors, relatives and others), while acknowledging the relevance of the infrastructure for all the inhabitants in the village. Some people even assumed that the grain bank belongs to the village chief. Others acknowledged having appointed representatives to participate in community exchanges that led to choosing the investment, but were no longer associated with

³⁵ The representation of local communities by leaders is a common practice in Mali and Senegal (see also Bonis Charancle et al., 2018, p.25).

the rest of the process. In this context, the concept of beneficiary communities could hide deep disparities at the local level, if nothing is done to change the situation.

There is also a local shift in access to information between the different villages involved in the pool of beneficiaries of DCF investments. Although the idea of associating and expanding the ownership or use of various investments with other villages surrounding the main target villages is very good and potentially very positive for social inclusion and community resilience, it remains to be improved at the current stage of the DCF process. For example, in the village of Ida Gadiaga adjacent to the Ida Mouride village, and considered co-beneficiary of the grain bank, very few people know about the DCF. The situation of insecurity in Mali did not allow us to visit other neighbouring villages to compare the trend, but it seems that the situation is better on this point

in this country, where the village authorities and the local people confirmed that they organised awareness sessions in the neighbouring villages to enable their neighbours to take advantage of their infrastructure, in compliance with the established community standards. This was the case in Sare-Mala around the local water supply network. The absence of such initiatives to disseminate information from Ida Mouride to its nearby villages has meant that information about the existence of a grain bank was limited at the level of village chiefs and local counsellors of Ida Gadiaga, or extended only to their sons who represent them at various meetings initiated under the DCF project. Another piece of evidence is that two sons of the village chief and the local counsellor in Ida Gadiaga, respectively, were integrated into the management committee of the grain bank in Ida Mouride as statutory auditors. Our questions to better understand the information dissemination



strategy received responses that the local people were not receptive to the DCF information, which is not particularly convincing.

In the village of Ida Mbayene, although the method of appointment of the village representative has remained the same (the village chief appointing his son as the village representative in the management committee of the cereal bank in Ida Mouride), the result was however different. The information dissemination mechanism set up in this village enabled a wider sharing of information, which led to the enthusiasm observed among local people to keep their crops in the bank, although it is located about three km from their village. The result was that five farmers from this village stocked their produce at Ida Mouride during the past crop year. Our study has recalled all these details to remind the need to avoid information asymmetry between a group of leaders and members of their social networks, on the one hand, and the larger community, on the other. Changing these forms of disparities through strengthening communication, monitoring the process of designating representatives and enhancing feedback mechanisms would further strengthen social inclusion and improve local community resilience.

4. Promoting resilience to climate change through DCF

Since the DCF process was participatory, the beneficiaries met during our study were unanimous in acknowledging the relevance of the projects implemented in strengthening their resilience to climate change. Whether it is the grain bank, the vaccination yard or the cereal-processing unit in Senegal or the rice-farming site, the marketgardening site or the drinking water supply network in Mali, the people were happy with their experience with DCF. Through personal cases or various testimonies about other people, beneficiaries revealed the positive effects of the DCF process and investments in their living conditions (at the individual, household and community level) and their resilience to the adverse effects of climate change. The concept of resilience in DCF, as inspired by the BRACED programme, is guite complex and confusing, even for the actors implementing the project. Through this study, we sought to find out how the beneficiaries of the various DCF projects perceive the effects of the various investments on their current situations, and how the changes make them better able to cope with future climate shocks. In most cases, local communities address only aspects that can be related to their current resilience, without great concern for what will be the long term. In this section, we present cases and testimonies, from which we summarise the main effects identified by local communities as contributing to their resilience to climate change.

4.1 Summary on the effects of DCF on resilience in Senegal

The main positive benefits mentioned by the beneficiaries of the three investments relate to strengthening the various assets that form the basis of their livelihoods. At the human capital level, the implementation of DCF has developed the capacities of beneficiaries who have become more aware of the effects of climate change and the need to develop resilient investment projects. In this respect, women's capacities were greatly strengthened, which gave them more power in society and reduced their dependence on men.

At the social capital level, solidarity within households and villages and between villages has developed strongly around the various investments. Situations that reveal harmony, good understanding and mutuality among various actors were recalled to show the effects on the improvement of social networks, which are important assets for extraversion strategies and livelihood diversification in a context of climate uncertainty. The good relationships that have emerged between the local people, authorities, technicians and resource persons (vertical connections) and the good working, friendship, exchange and sharing relations between local people (horizontal connections) are important values that contribute to resilience to various shocks.

At the physical capital level, the infrastructures put in place are themselves major assets that make life easier for users. Beyond their economic nature, they also have a very symbolic and social character, which can even be translated differently by the local people, as in the case of the vaccination yard, which has become the "prison" for straying animals. This way of using the infrastructure has helped to resolve to some extent the issues of conflict between different socioprofessional groups. Planned uses and translated uses are all part of the dynamics of local communities that always innovate in the most difficult conditions to find solutions to their problems. The reflections and

Box 5: Testimony of a woman farmer in Ndiobene Sama Lamo

Nabou Gueye is a woman farmer in her 60s with a 20-member household. She has a herd of three cows and 10 small ruminants (sheep and goats), but had great difficulty in vaccinating them because of the unavailability of veterinary officers and the lack of a good vaccination yard. She provided healthcare to her small ruminants herself, and sought the services of local shepherds and paravets to administer various vaccines and drugs to her cattle.

Nabou is very pleased with the new vaccination yard built under the DCF project, which plays two major functions in the village: it facilitates animal vaccination processes, and it plays a role in mediating conflict between farmers and herders. Facilitating vaccination operations encourages the local people to vaccinate their herds regularly to protect them from diseases and various risks, but also motivates veterinarians to make themselves available, even to travel long distances to reach the village of Ndiobene to vaccinate the local animals. Important sources of motivation for the veterinarians are the fact that they no longer have to go from house to house to encourage people to vaccinate their animals and they do not return from the vaccination session

with injuries because of the inadequacy of the previous infrastructure.

In addition, the local people have diverted the vaccination yard to other uses that reflect the imbalanced power relations that now prevail between the different socioprofessional groups. This is how the vaccination yard reduces farmer–herder conflict, according to Nabou: "Conflicts between farmers and herders will drop down, because if you catch an animal, cow, sheep or goat that has damaged your field, you immediately lock it in the yard, waiting for the herd owner to come and pay the penalty that will be inflicted on him before collecting his animal".

Nabou considers that the men, who often have larger herds, benefit more from this infrastructure than women, who often have only a few head of livestock. In all cases, its presence in the village is perceived as strengthening the economics and livelihoods of local pastoralist and agropastoralist households. This is an important contribution to the resilience of her household, which was highly dependent on remittances from children based in Senegal's large cities, such as Dakar.

new projects being developed around the grain bank in Ida Mouride and the vaccination yard in Ndiobene Sama Lamo are in line with this creativity of the local people, taking inspiration from the DCF investments.

At the financial capital level, beneficiary incomes have improved considerably, except in the case of the Kathiotte processing unit, which has not yet started operating and for which it was impossible to estimate the potential financial impact. The other two investments secure people's assets (crops and animals), reduce losses and off-selling, and facilitate the creation of savings that can be reinvested in new livelihood trajectories that secure against future climate shocks. Ultimately, socio-economic well-being is improved at the individual, household and community levels. These elements contribute immensely to resilience to climate change.

The negative effects of the DCF process and investments reported in Senegal relate to the Kathiotte cereal-processing unit, where governance conditions do not facilitate inclusive management for the benefit of all members. Although the unit is not yet operational, several beneficiaries mentioned the opacity of the management of cooperative action that did not offer members the opportunity to learn about climate change, resilience and management of climate funds. The low involvement of women members of the beneficiary group in the DCF processes, in connection with the acquisition of various machinery and equipment, did not allow improvement in human capital for mobilising and managing climate funds at the level of grassroots community organisations. Social relations have also deteriorated over time, and could become weaker if the advent of DCF investments does not bring any significant change in the lives of women members. People will be more demotivated and households and the whole community will be more in conflict, since men will increasingly oppose their women's membership and participation in collective action. Although the machines and equipment acquired constitute an important physical capital, women do not expect them to improve their individual living conditions, if nothing changes in the current governance of the grouping. Lack of access to energy and adequate space is not likely to encourage the use of the investment in the short term, although prospects may be better in the medium and long term. Their individual incomes will not improve and political conflicts between leaders will not contribute to social cohesion and manifestation of community solidarity around investments. All of this could weaken individual and collective resilience.

4.2 Summary on the effects of DCF on resilience in Mali

As in Senegal, the perceived effects of the resilience of local communities in DCF processes and investments revolve around improving the livelihood capitals at the individual, household and community levels.

The development of rice and vegetable production sites promoted better environmental management, in connection with waste management, soil fertilisation and environmental protection. This better management of local resources and consequently of natural capital has been supported by the various equipment and materials that constitute an important physical capital in a context of inaccessibility to water, aggravated by the adverse effects of climate change. The infrastructures set up in the three villages of Sio have an important symbolic character, beyond their contribution to the socio-economic transformation of local communities.

At a human capital level, local people learned a lot from the DCF process in all its phases that involved them. Local authorities and grassroots communities have learned from each other about climate change, resilience and the development of resilient and gender-sensitive investment projects. Women have been particularly empowered, with increased access to resources (land, means of production etc.). Young people also benefited from the process, gaining knowledge and motivation for agricultural entrepreneurship. The installation of water towers and other water equipment has led to a valuing of agricultural production, which makes young people interested in it. It is an important source of job creation. This has also improved the availability of local labour, through the reduction



of the rural exodus which is a major phenomenon mentioned by the informants. The massive departure of young people for risky migrations has found its solution in a more modern option of agricultural production.

Social capital has developed particularly in the various beneficiary villages. Solving the problems of access to water has fundamentally changed the relationships between spouses, who were often in conflict. Women's accusations and stereotypes from their partners have not facilitated access to water, which has become even more complicated with the adverse effects of climate change. The dwindling of water sources further reinforced the chore of women who were victims of all kinds of abuse because of their inability to respond to society's need for water, while this is traditionally regarded as their family duty.

The construction of modern water sources has brought social peace and strengthened social relations within households and the community. The various activities developed on the constructed sites strengthened the collaboration between actors from different gender and backgrounds as well as the solidarity at the

Box 6: Testimony of a male farmer in Kouna

Abdouramane Touré is a farmer operating at the Kouna rice-cropping site. He testified that the realisation of this investment allowed cultivation in all seasons, even in dry periods, where ordinary cropping practices do not produce enough food for the people of the village. Over the past three rice-growing periods (two off-season and one normal season), he has satisfactorily improved his yields and his production volume. With 0.25 ha of cultivated land, he obtained 26 80-kg bags during the rainy season and 27 bags for each of the two off-season periods. Of the 80 80-kg bags of rice produced, 30 bags were consumed within the household and 50 bags were sold at 15,000 FCFA per unit, generating 750,000 FCFA.

Abdouramane also emphasised the contribution of water control in the Kouna rice-farming area to the improvement in the living conditions of many people, including workers who serve as wage labourers in a context where farmers need more manpower to handle their increasing yields. Owners of threshing machines have increased their business and improved their income. Pastoralists have easier access to larger quantities of rice straw to feed livestock in all seasons, in a context where natural pastures are becoming poorer or increasingly inaccessible for reasons of insecurity, conflict and terrorism. The situation is very difficult in dry periods, when several animals die for lack of water and pasture. The herds fed on residues and other rice byproducts as feed supplements are producing better, which increases the income and well-being of pastoralist and agropastoralist households. Family relatives and inhabitants of neighbouring villages are also benefitting from this rice-cropping revolution by directly or indirectly accessing various rice products and byproducts (rice, residues / straw, middlings, etc.) and pecuniary support. The control of the water on the site in Kouna contributed enormously to reinforce the social relations within the community and gave a new life to the village.

The youth, able-bodied, formerly idle and living in precariousness have been able to enhance their capacity, which has greatly reduced the rural exodus in the village. Many young men have given up joining the mining sites where they are at great risk and some even lost their lives. Agricultural activity has been upgraded by the investment in this site, where 0.10 ha can produce an average of 12 bags of 80 kg of rice, which are largely sufficient to cover the food needs of an average household in the region throughout the year. A great harmony has developed between actors around rice cropping, which has become a great economic and social attraction in Kouna. community level. Recipient relationships with their non-beneficiary peers also create inter-community solidarity that is characterised by mutual learning and mutual support for access and management of future resilience investment projects. In a context of insecurity in Mopti region, this inter-community solidarity has also manifested itself in the allocation of land to internally displaced people, victims of terrorist attacks and various acts of insecurity and depredation.

Reducing conflict has created an enabling environment for production and development. Food and nutrition security has improved. Community incomes have increased, not only through the development of agricultural activity, but also the promotion of livestock and other sources of income diversification (animal fattening industry, small trade, etc.). Improved income has facilitated the realisation of social spending (health, education, marriage, etc.) that contributes to the resilience and socio-economic development of local communities. Access to drinking water remains above all one of the most important success stories that informants did not have enough words to appreciate. One farmer in Sare-Mala said: "Water is life, and life is everything. DCF has given us water. I can say that DCF has given us life, and therefore has given us everything".

4.3 Perceived effects in Senegal and Mali

The main resilience effects found in both countries are summarised in Table 5.

No.	Effects ³⁶	Senegal	Mali
1.	Learning, mutual learning and action learning	Х	Х
2.	Improvement of the living conditions and global well-being	Х	Х
3.	Improvement of social relations within and between communities	Х	Х
4.	Improvement of income and diversification of sources of income	Х	Х
5.	Empowerment of women and reduction in dependence	Х	Х
6.	Improvement of food diversity and food and nutrition security	Х	Х
7.	Promotion of human and livestock healthcare	Х	Х
8.	Better management of natural resources and project investments	Х	Х
9.	Reduction of conflicts and promotion of peace	Х	Х
10.	Infrastructure used to reduce farmer-herder conflicts and promote peaceful cooperation between actors	Х	
11.	Promotion of better quality and quantity of the seeds, crop products conserved and animals retained (improving access to market)	Х	
12.	Reduction in rural exodus		Х
13.	Job creation and entrepreneurship		Х

Table 5: Resilience effects in Senegal and Mali

³⁶ Major effects

5. Key findings and suggestions

The DCF models implemented in Senegal and Mali are very inclusive. All the actors met during this study unanimously recognised and appreciated the process of implementation of the project, which gives pride of place to the local communities, ensuring that their priority needs are taken into account in local planning processes. The two key axes of our analysis are social inclusion throughout the DCF process and its perceived effects on resilience. We have achieved the following main results:

In Senegal, the process is implemented in a highly methodical and expert way, with the involvement of a young, highly motivated and dynamic DCF team. This is what justifies the positive testimonies brought to the process by all the actors met. The decentralised entities set up to accompany the process (Département and regional adaptation committees) are useful and effective, and their capacities need to be further strengthened to make their functions more efficient. The community forum is a powerful tool for ensuring strong social inclusion and local community adherence to DCF processes. Environmental screening and development of theories of change are certainly new, but they are important innovations that empower local communities and enhance their knowledge. The enthusiasm around these activities favours learning, and that is what justifies the strong involvement of the local people in monitoring the works to ensure quality and sustainability. The capacity building of the local management committees is very positive and strongly supports the good management observed around the various investments studied and the good atmosphere of use within the community.

As in Senegal, the DCF process in Mali has been a positive and testified by all the stakeholders met in this study. The preparation phase that took a lot of time in this country, although difficult in the frame of project delivery, has finally proved positive by ensuring a stronger social inclusion. Local people have greater knowledge of the DCF process and are better able to identify resilient investment projects. Community consultations have also strengthened this state of affairs by giving local communities the opportunity to express their priority needs. The screening of proposals through several evaluation and verification stages results in the selection of projects that were highly relevant, inclusive and well-suited to resilience and adaptation to climate change policies. The other very important dynamic in the process of social inclusion in Mali lies in the proposal development by the local communities themselves, with the support of various people they solicit in their social networks. This is a great learning opportunity that allows village authorities and other local actors to solicit all the necessary support to develop and submit an investment project. Monitoring missions involve the greatest number of relevant actors and skills available without frustrations and suspicions as in Senegal. The results are the overall cohesion within the communities and the high quality of the structures built.

To conclude, we highlight specific points on which the DCF project should focus in order to maintain and improve social inclusion in their process.

Continuing awareness-raising and training activities

All information, awareness-raising and training activities were very well appreciated by local stakeholders and were important components of the success of social inclusion in the Kaffrine and Mopti region. The actors learned a lot from the process and are able to do a lot of things in mobilising, setting up and managing climate funds. Far from considering these things as definitive gains and that the actors have already mastered the various concepts and their functions for good, it could be important to further strengthen the training on the various concepts and tools in the framework of capacity building or continuous training for the update of the actors. We also suggest periodic updates in terms of awarenessraising and training, with a view to enhancing the knowledge of stakeholders at various levels of the DCF process.

Strengthening community consultation exercises

Community consultations played an important role in the social inclusion of local people in DCF. However, a continuous monitoring is needed to ensure that the ideas and projects really come from the people, not from some influential village elites. Attendance lists and minutes alone are not enough to give credence to the organisation of community forums by local authorities. Much progress has been made on how community forums should be configured to better respond to inclusiveness, which is a very important principle of the DCF project. We strongly encourage the DCF team to continue to make the necessary efforts to ensure that local communities have effectively organised the community forums, and that local people and different levels of society have really actively participated in the identification of their priority needs. In this context, we would suggest continuing sending representatives of DCF and territorial adaptation committee members to these meetings to ensure their implementation.

Building capacities for independent proposal writing

The involvement of local people in the drafting and submission of their own investment projects at the village level is a major asset noted in Mali. In Senegal, this part of the process relies heavily on *Département* technical actors, with less room for learning and improvement by the applicants themselves. This point needs to be capitalised for a better inclusion of the actors in the process. We suggest capacity building for all actors who have contributed to the writing of community projects, in order to make them a pool of local skills for the elaboration of relevant projects, eligible for larger climate funds than the ones put in place by the DCF. More specifically, in Senegal it could be appropriate to further strengthen the capacity of municipal secretaries to more or less independently develop community projects; and that of secretaries and other educated people from CBOs to develop projects coming from them. It would also be positive to identify and train at the village or communal level other people who could play the role of community relays by helping decentralised authorities and CBOs to develop relevant, inclusive, eligible and fundable resilience projects. Young people can be more involved in this activity, since they will take over all these processes in the future.

Reviewing the project evaluation and selection mechanism

In Senegal, the issue of technical advice during project selection would need to be resolved as soon as possible to give greater credibility to the selection process of investment projects submitted by decentralised authorities and grassroots organisations. The technical opinions of the DCF team must not appear as a veto to which the selection committee members must submit. Furthermore, Département advisory officers, although they are very involved in drafting projects with grassroots actors, are at the same time the technical and professional forces that the DCF team refers to for reviewing and selecting projects for funding. This could contribute to the biases identified in the field, which constitute the bone of contention between the DCF team and the selection committee members who suspect that there is sometimes favouritism and unfairness in the selection of projects.

The project evaluation and selection mechanism could be revised. First, the DCF team could increase the awareness and capacity building of selection board members and equip them with

tools and information to independently assess and decide which projects to fund and which ones will not. It may be appropriate to review the current configuration of the selection committee to make it a more credible tool for local governance of climate funds. Second, removing this activity from local actors would not contribute to the desired and encouraged learning process for the promotion of a locally anchored mechanism for setting up and managing climate funds. We also noted in our analysis the strengths and weaknesses attached to the option of cross-evaluation between Départements. Using a more independent panel of local evaluators could be an option. However, all these options must be discussed between the actors, in order to choose the solution that seems more credible and fair to all of them. The objective would be to give more decision-making power to the selection committee without interference from the DCF team.

Involving Département and national stakeholders earlier

The current system for monitoring and receiving works takes into account actors at the local, municipal and regional levels, but does not strongly include certain *Département* actors, including prefects and technicians who all play important roles in the DCF process. This is related to the adopted distribution of roles, the autonomy of local authorities in decision-making and the assistance and consulting in works management by the ARD. However, a stronger involvement of *Département* actors in Senegal could be a positive option.

It is a positive option to ensure that the technicians of the sectors concerned by the infrastructure under construction are always associated with the monitoring missions. For example, veterinarians and animal production specialists should be part of the delegation for site visits and monitoring missions that focus on vaccination yards. The mobilisation of all these experts around the projects could improve the quality of the works realised and thus reinforce their durability. This applies to both local government projects and projects from CBOs. Without being able to identify all the issues related to the situation in Kathiotte during the few days of investigation, it seemed to us that a lack of control or objectivity in the choices led to the delivery of machines and equipment depending on electricity in an area that does not have access to electrical energy. This was inappropriate and could have been avoided if all the expertise were associated with a more rational choice. An unfortunate event related to the death of a key player involved in the energy access process has further negatively affected the success of this investment. Second, it could be a good option to further involve the Département authorities in the missions of monitoring and reception of project investments. Given the political interest associated with site visits and technical reception events, the prefects would like to have a stronger involvement in these activities. While acknowledging the autonomy of local communities in the management of the process, it could be positive that the prefects be given a place, even if it is a symbolic one, especially in a context strongly influenced by politics.

Reinforcing the processes to include CBOs

The acceptance of CBOs in applying for DCF funding is one of the weaknesses found in the process during this study. While Kathiotte's case is not seen as a success, it should not be considered a general case. Other CBOs have benefited from DCF funds and have performed a lot, with satisfactory results according to testimonies received in the field. The Kathiotte women's group is perhaps an isolated case, but from which we must still learn to strengthen the management of the climate funds. Besides, the institutional sponsorship (parrainage) of CBOs by local authorities could be improved. Although its format is improved over time, it is good to reinforce the discussions with the local actors to see the possibilities of modifying the way it is applied.

First, we suggest an organisational audit before any allocation of funding to CBOs. This should not be a cumbersome and expensive study, but some slight investigations are needed to check the credibility of the information provided in the application files. This work could be done by the selection committee, which will designate a few people to look for governance data that could be used after preselection to validate shortlisted projects from CBOs. External expertise could also be used to test whether participatory and credible governance conditions are in place for a local organisation to benefit from DCF funds. Second, there could be two options for the current referral trend. It may be easier to remove the sponsorship allow CBOs direct access to DCF funding; but this option deviates from the logic of promoting a decentralised climate funding process to fall back into traditional forms of support to local organisations. Another option would be to give more power to the sponsorship, to allow local authorities to have a look at the implementation of CBO projects; as part of monitoring their activities and validating their achievements. Political rivalries would not be mastered in this case and would turn to the advantage of the local authorities. In any case, it is necessary to launch the reflection, to discuss with the actors themselves, in order to find a more conciliatory mechanism.

Consolidating understandings and framing of resilience

For the moment, the issue of resilience is not yet very well understood by people at the grassroots, in any case, not in the highly theoretical sense as it appears in the documentation on the DCF. Traditional knowledge does not necessarily align with scientific knowledge, and a mechanism must be found to reconcile the two for greater success. The effects of the DCF process and investments in resilience as evidenced by the cases and testimonies gathered reveal that social links and trust between actors have greatly strengthened. The actors learned a lot from the process and their capacities were strengthened. However, the links between project results and resilience did not seem very obvious on the ground. Training for local actors on resilience needs to be strengthened. It could also be innovative to initiate citizen debates on climate funds and resilience at individual, household and community levels. People could well discuss their situation before and after DCF and deduce the real meanings of the concepts used in the project.

Encouraging resilience champions

At last, despite the many achievements on the ground, there is no entertainment event around the project, which could encourage actors for their efforts and provide an additional source of motivation. It is commonly said that after effort comes comfort. Recognition of each other's efforts could be an additional source of motivation for greater success.

We suggest the initiative of a climate resilience day during which individual and community actors will be recognised and rewarded for their roles and their commitment to promoting resilience at various scales. It could be as innovative to initiate a Climate Resilience Award event in connection with the DCF. This will be an additional motivation for the actors in their learning process of climate fund management. Initiatives of this kind in a context of objective evaluation by independent juries could constitute a source of emulation and will reinforce the learning of the actors and the success of the DCF project. The World Bank's "Heroes of Social Inclusion" competitions could inspire this kind of event³⁷. Such events focussing on social inclusion in relation to resilience to climate change could be a great source of motivation. This could be a good way to encourage and set up a community of leaders committed to social inclusion and resilience to climate change.

³⁷ Banque Mondiale (2017). Concours « Les héros de l'inclusion sociale ». Available at: https://www.banquemondiale.org/fr/ events/2017/10/17/social-inclusion-heroes-sih-story-competition (accessed 30/03/2019)

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Photos on pages 6 and 30: credit, Sagara Korka, images of a women's focus group and of one of the DCF investments in Mali

Photo on page 14: credit, Hannah Patnaik, key informant interviews in Senegal Photos on pages 35, 39 and 41: credit, Daouda Cissé, images from one of the communities with DCF investments in Mali

Organisations



Near East Foundation (NEF)

For over 30 years, NEF has developed sustainable, community-based approaches to manage forests, fisheries, rangelands, and agricultural lands in Mali. Operating out of a principal office in Sévaré, the NEF team of approximately 40 development professionals works to implement programs that are consistently community-based, participatory, and multi-sectoral.

NEF also coordinates a national-level working group on climate adaptation and assists Mali's government in climate policy – including participating in Mali's official delegation to international climate negotiations. NEF's headquarters in Syracuse, United States, provides overall project management and governance oversight to the consortium.



Innovation, Environnement, Développement (IED Afrique)

IED Afrique is an independent not-for-profit organisation based in Senegal. The organisation builds on fifteen years of experience in francophone West Africa and works on issues related to sustainable development and citizenship in Africa by prioritising methodological and participatory innovations.

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Decentralising Climate Funds (DCF)

Decentralising Climate Funds (DCF) supports communities in Mali and Senegal to become more resilient to climate change through locally-controlled adaptation funds.

To find out more:

The project shares lessons and experiences through a variety of publications that are available online:

www.neareast.org/braced

Contact:

Yacouba Dème: ydeme@neareast.org

Ced Hesse: ced.hesse@iied.org

Bara Guèye: baragueye@iedafrique.org

Further reading:

The Decentralising Climate Funds Mechanism: Principles and operational arrangements in Mali and Senegal http://www.neareast.org/download/materials_center/DCF_Mechanism_En.pdf

Decentralisation of climate adaptation funds in Mali www.neareast.org/download/materials_center/Decentralisation-Mali.pdf

Decentralisation of climate adaptation funds in Senegal www.neareast.org/download/materials_center/Decentralisation-Senegal.pdf

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Near East Foundation, 110 W. Fayette Street, Suite 710 Syracuse, New York 13202 USA

💼 +1 315-428-8670 🖂 info@neareast.org 🛄 www.neareast.org

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