

INTEGRATED DROUGHT MANAGEMENT PROGRAMME IN WEST AFRICA (IDMP WAF)



ANALYSIS OF PLANS, STRATEGIES AND SYNTHESIS OF REVIEWS OF INITIATIVES IN THE FIELD OF DROUGHT: CASES OF BURKINA FASO, MALI AND NIGER

ACKNOWLEDGMENTS

This report has been prepared as part of the Integrated Drought Management Programme in West Africa (IDMP / WAF), a regional component of the global Integrated Drought Management Programme, a joint initiative of the Global Water Partnership (GWP) and the World Meteorological Organization (WMO).

The Regional Water Partnership for West Africa thanks all those who contributed to the data collection for its development. We are particularly grateful to the Country Water Partnerships of Burkina Faso, Mali and Niger and their partners at the national level for their contribution to the collection of information included in this report.

CONTENTS

ACKNOWLEDGMENTS	2
CONTENTS	3
LIST OF MAPS	4
LIST OF GRAPHS	4
ACRONYMS AND ABBREVIATIONS	5
INTRODUCTION OF GWP AND WMO	6
SUMMARY	7
I. BACKGROUND	8
II. INTRODUCTION	9
1. Geographic data on Burkina Faso	9
2. Geographic data on Mali	9
3. Geographic data on Niger	10
III. POLICY AND STRATEGY DOCUMENTS IN THE FIELD OF DROUGHT	11
1. Burkina Faso	11
a. National commitments	11
b. NAPA	12
c. NAP	12
2. Mali	12
a. NAPA	12
b. National Policy for the Protection of the Environment (PNPE)	13
c. National Policy on Climate Change	13
d. National Climate Change Strategy – Mali	13
e. UNCCD	14
3. Niger	14
a. <i>National Environmental Plan for Sustainable Development</i>	14
b. <i>Convention on Biological Diversity</i>	14
c. <i>National Adaptation Programme of Action to Climate Change (NAPA)</i>	14
d. <i>National Action Plan to Combat Desertification and Natural Resource Management (PAN / CD-GRN)</i>	15
e. <i>Development of the Strategic Framework for Sustainable Land Management (SF-SLM) in Niger and its Investment Plan 2015-2029</i>	15
IV. SYNTHESIS OF THE REVIEWS OF INITIATIVES IN THE FIELD OF DROUGHT	16
1. Case of Burkina Faso	16
2. Case of Mali	16
3. Case of Niger.....	17
V. DISCUSSION AND ANALYSIS	18
VI. CONCLUSION	19
VII. REFERENCES	19

LIST OF MAPS

Map N° 1: Map of the Sahel and zones of increased drought (source Millenium Ecosystem Assessment)	9
MAP N° 2 : AGRO-ECOLOGICAL ZONES OF BURKINA FASO (source www.fao.org).....	9
Map N° 3: map of the agro-ecological zones of Mali, 2007: Source Direction Nationale Météorologie	10
MAP N° 4 : MAP OF AGRO-ECOLOGICAL ZONES OF NIGER.....	10
Map N° 5: countries targeted by PROGISAO	11

LIST OF GRAPHS

Graph 1: Wet years-dry years alternation.....	11
Graph 2: NAPA Projects in Burkina Faso.....	12
Graph 3: Initiatives in Burkina Faso: Orientation of efforts per area of action.....	16
Graph 4 : Distribution of the initiatives in the area of drought in Mali.....	16
Graph 5: Distribution of drought related initiatives in Niger.....	17

ACRONYMS AND ABBREVIATIONS

AEDD Mali	:	Agency of Environment and Sustainable Development of Mali
CC	:	Climate Change
UNFCCC	:	United Nations Framework Convention for Climate Change
CNEDD	:	National Council of Environment for a Sustainable Development of Niger
CSLP	:	Strategic Framework for Poverty Reduction
SLM	:	Sustainable Land Management
GWPWA	:	Global Water Partnership / West Africa
GWP	:	Global Water Partnership
CD	:	Combating Desertification
IDMP	:	Integrated Drought Management Programme
CWP	:	Country Water Partnership
PROGISAO	:	Project of Integrated Drought Management in West Africa
NGO	:	Non-Governmental Organization
PAGIRE	:	National Action Plan for Integrated Water Resources Management
NAP	:	National Adaptation Plan
NAPA	:	National Adaptation Programme of Action
PANLCD/GDRN	:	National Action Plan for Combating Desertification and Sustainable Management of Natural Resources
PNCC	:	National Policy on Climate Change
PNEDD	:	National Environmental Plan for Sustainable Development
RGPH	:	Geographic Grouping of Human Population
SNPA/CVC	:	National Strategy and Action Plan on Climate Change and Variability
SPCONEDD	:	Permanent Secretariat of the National Committee for the Environment and Sustainable Development
WMO	:	World Meteorological Organization

INTRODUCTION OF GWP AND WMO

The Global Water Partnership (GWP) was established in 1996 to establish regional water partnerships (including West Africa), which are now 13 worldwide. Nearly three thousand (3,000) partners voluntarily participate in the GWP exchange platform.

Global Water Partnership West Africa (GWP / WA) is made up of member organizations of the GWP at the regional level and in the various countries of West Africa. It is a network of institutions meant to catalyse public action in the field of water and related sectors for a better impact. It was set up in 2002 as a network of West African regional partners.

The GWP vision is for a water secure world.

The GWP Mission is to advance governance and management of water resources for sustainable and equitable development by providing knowledge and building capacity to improve water management at all levels (global, regional, national and local). Assistance to countries to articulate water resources planning and operations at different spatial levels: transboundary, regional, basin, national and local, to make actions logical and sustainable.

To date, there are in West Africa thirteen (13) Country Water Partnerships (CWPs) including those of Burkina Faso, Mali and Niger.

www.gwpao.org

The World Meteorological Organization (WMO) is the authoritative United Nations agency for all aspects of the state and behaviour of the Earth's atmosphere, its interaction with the oceans and the resulting climate as well as the resulting distribution of water resources.

WMO has 191 Member States and Territories (as of 01 January 2013). It has succeeded the International Meteorological Organization (IMO), which was established in 1873. Established in 1950, WMO became in 1951 a United Nations agency specialized in meteorology (weather and climate), operational hydrology and related geophysical sciences.

As weather, climate and water cycle ignore national boundaries, effective international cooperation on a global scale is essential to ensure the development of meteorology and operational hydrology and take advantage of their applications. WMO provides the framework for such international cooperation.

Integrated drought management is an essential component of disaster risk reduction programs and climate change adaptation strategies, including management of land and water resources. It brings together the needs of different stakeholders affected by drought.

WMO assists member countries in designing drought monitoring and early warning systems and contributes to a better understanding of the consequences of climate variability and change for agriculture. It also teaches them how to take advantage of meteorological and climatological data and products to assess the consequences of climate variability and climate change.

www.wmo.in



SUMMARY

This report has been prepared as part of the Integrated Drought Management Programme in West Africa (IDMP WAF) launched on 28 and 29 January 2015 in Ouagadougou. This project is the West African component of a joint programme at the World Meteorological Organization (WMO) and the West Africa Water Partnership. IDMP WAF has been developed to improve the monitoring and prevention of one of the greatest natural hazards in the world. It will focus in particular on the sharing of scientific information, knowledge and best practices to advise policy makers and managers.

That is why **reviews of ongoing initiatives** in drought in Mali, Niger and Burkina Faso have been prepared. These reviews highlighted a wide range of fields of action: agriculture, livestock, food security, water resources management, natural resource management, resilience to climate shocks and other disasters. The choice of country interventions in the above mentioned areas could be explained by the high rate of rural population dependent on agriculture that is highly vulnerable to the effects of climate change. There is also a weakness in the areas of data collection and a need for capacity building as current policies place more emphasis on prevention and conservation than on restoration. As for the level of intervention, it is either at local, regional, national or transboundary level with the involvement of all categories of actors, namely traditional, religious, municipal authorities, beneficiaries (populations), devolved and central technical departments, researchers sometimes for knowledge management and Technical and Financial Partners (TFPs). These various actors encounter several difficulties that can be summarized by shortcomings in terms of technical supervision, means of communication, information on new technologies, research programs at training and research institutions, project monitoring and evaluation; poor management of production revenues at the level of village communities, weak coordination and synergies around actions, insecurity in certain areas of intervention, and the lack of a continuous funding mechanism at the level of the Technical and Financial Partners.

Thus, **the summary analysis of existing national plans and / or strategies in the field of drought and climate change** focused on Burkina Faso, Mali and Niger, targeted countries that are part of the Sahel strip, one of the most affected zone in West Africa and the world. This area is marked by a degradation of natural ecosystems from year to year and exacerbated by the

effects of climate change coupled with the growing population whose needs are steadily increasing and diverse. Climate change and drought have then become a major national concern for each country. The analysis highlighted the specific actions planned for the drought component in the various national plans and strategies of Burkina Faso, Mali and Niger and considering the disparities in these documents.

This analysis has specifically focused on the case of Burkina Faso on the three fights, namely against the abusive felling of timber, animal wandering and bush fires; the national commitments (8,000 villages, 8,000 forests and one school a grove); the National Water Policy, the Poverty Reduction Strategy Paper, the Action Program for Integrated Water Resources Management (PANGIRE); The National Partnership Program for Sustainable Land Management (CPP), the National Adaptation Programmes of Action to Climate Change (NAPA), and the National Adaptation Plan to Climate Change (NAP). The NAP, which is the latest one, takes into account all sectors exposed to Climate Change and is designed as an evolutionary program over the medium and long term. In the case of Mali, mention may be made of the NAPA, the National Policy for the Protection of the Environment (PNPE); the National Policy on Climate Change comprising seven guiding principles and the National Strategy on Climate Change. In Niger, the National Environment Plan for Sustainable Development, the Convention on Biological Diversity, the National Adaptation Programme of Action to Climate Change (NAPA), the National Action Plan to Combat Desertification and the Management of Natural Resources (PAN / CD-GRN) and the *Development of the Strategic Framework for Sustainable Land Management (SF-SLM) in Niger and its Investment Plan 2015-2029*, have been analysed.

The combined analysis of the respective objectives and actions of these various strategic documents and of the difficulties encountered in the implementation of initiatives in the field of drought shows the existence of a formal institutional framework for drought with the definition of clear possible actions that can be carried out in each country. However, the current challenge is to put in place innovative strategies at the national and regional levels to «pull in the same direction» - that is, to achieve timely and effective results despite limited financial resources made available.

BACKGROUND

On 13 March 2013, the World Meteorological Organization (WMO) and the Global Water Partnership (GWP) launched a joint Integrated Drought Management Programme (IDMP) to improve the monitoring and prevention of one of the greatest natural hazards in the world. There is an urgent need to develop better monitoring of drought, risk management systems and for countries to have frameworks to manage drought risks through an integrated approach. This programme aims to support countries in this effort. The IDMP focuses on monitoring and early warning systems to provide timely information to decision-makers, effective impact assessment procedures, risk management measures, prevention plans to increase adaptation capacity, and effective emergency response programs to reduce the impacts of drought. The IDMP will focus on the sharing of scientific information, knowledge and best practices to advise policy makers and managers.

In West Africa, the programme was launched at the regional level on 28 and 29 January 2015 in Ouagadougou. It is planned for 3 years from 2015 and targets Burkina Faso, Mali and Niger for demonstration projects with actions to be carried out throughout the West African sub region, notably capacity building and sharing of scientific information, knowledge and best practices. (*See Project Sheet in annex 1*).

The results of two (2) actions of IDMP WAF are presented in the following pages. They are the:

- Presentation and summary analysis of existing national plans and / or strategies in the area of drought and climate change. This analysis was carried out mainly by the participants present at the assessment meeting of IDMP WAF from 8 to 10 December 2015 held in Ouagadougou, Burkina Faso. (**See List in annex 2**).
- Summaries of the review documents of current and three-year drought initiatives in Burkina Faso, Mali and Niger.

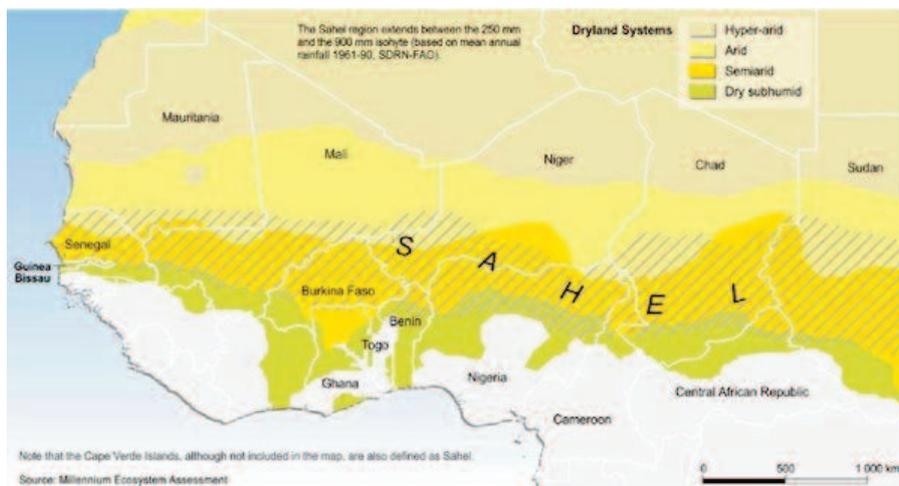
INTRODUCTION

Africa is one of the continents which is most vulnerable to climate variability and change. In West Africa (4 ° -20 ° N, 20 ° W-40 ° E), annual rainfall has decreased since the late 1960s, with a 20-40% decrease between periods 1931-1960 and 1968-1990 (Nicholson et al., 2000, Chappell and Agnew, 2004, Dai et al., 2004).

The climate in the West African Sahel is dominated by two main seasons, the rainy season over the period April-October and the dry season over November-March (Sivakumar, 1988; Sultan and Janicot, 2003). Rainfall brought by the monsoon flow within the continent occurs as rain events or thunderstorms with an average duration of less than 12 hours (Lebel and Le Barbé, 1997).

For more than twenty years, the Sahel countries of West Africa have been subjected to a severe drought, which is reflected in significant rainfall deficits with often serious consequences.

Map N° 1: Map of the Sahel and zones of increased drought (source Millenium Ecosystem Assessment)



1. Geographic data on Burkina Faso

Burkina Faso is a landlocked country with a surface area of 274,200 km² in the heart of West Africa. The climate is predominantly of Sahelian type with a wetter area in the south. The country is subdivided into three main climatic zones according to the average annual rainfall. The Sahel zone in the north (300 to 600 mm / year), the sub-Sahel (or Sudano-Sahel) zone in the centre (600-900 mm / year) and the Sudanian zone (900 to 1200 mmm / year).

A Sahel country with limited natural resources, Burkina Faso has an estimated population of about 17 mil-

lion inhabitants, more than 80% of whom live in rural areas (INSD, 2007).

Map N° 2: Agro-ecological Zones of Burkina Faso (source www.fao.org)



(source www.fao.org)

The rural population derives its means of subsistence in agrosylvo-pastoral and fishery activities and contributes 46% to the GDP (PEI, 2011).

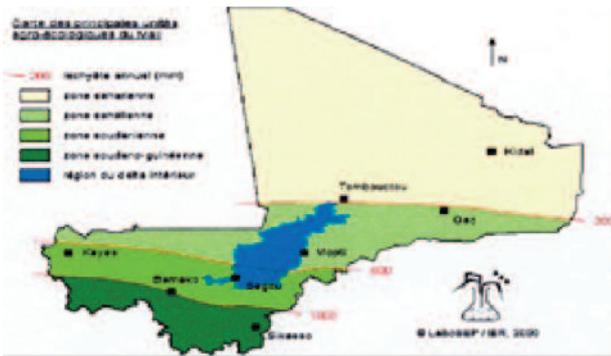
However, these activities are negatively affected by the adverse effects of drought. This has led Burkina Faso to sign and ratify various conventions in order to establish an adequate institutional framework to combat the devastating effects of drought.

2. Geographical data on Mali

Mali is a vast Sahel country landlocked in the heart of West Africa. Its population estimated at 14,500,000 inhabitants (RGPH 2009), with a growth rate of 3.6%, could be about 21.300 million inhabitants in 2020. Of the 800,000 farms in the country, about 700,000, or 86%, practice agriculture and 100,000 farms correspond to strict cattle breeders or fishermen (Source : Etude Rural Struct). The rainfall pattern of Mali, of continental intertropical type, is characterized by a **poor distribution of rain in time and space**. The country has significant surface water resources including the Niger River, Senegal River and their tributaries. The impacts of climate change on the development of the country have led the authorities

to demand that climate phenomena be considered in sustainable development plans and programs. Owing to the urgency of the situation, priority and immediate adaptation measures have been developed based on a multidisciplinary and participatory approach in a National Adaptation Programme of Action (NAPA) to climate change in 2007.

Map n ° 3: map of the agro-ecological zones of Mali, 2007: Source Direction Nationale Météorologie

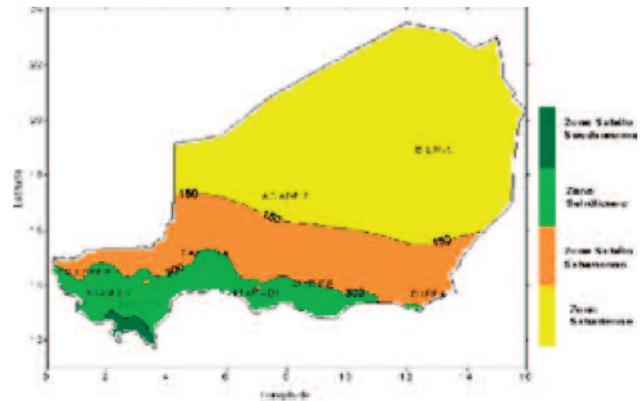


3. Geographical data on Niger

Niger is a continental country in sub-Saharan Africa that is one of the largest countries in West Africa with 1,267,000 km² and more than 17 million inhabitants in 2012, compared to 11 million in 2001. This demographic pressure increasingly reduces the arable land, in addition to the degradation of the environment and the desertification. Niger's economy depends largely on agriculture, which employs more than 80% of the workforce. With a Sudanian-type tropical climate, the country faces recurring exogenous shocks (floods, droughts, locust crises, etc.) that affect the food security of the population and undermine a national economy highly dependent on agriculture.

Over the past 40 years, the country has experienced eleven (11) severe droughts and according to the NAPA studies (2006), over 80% of the area suitable for agro-sylvo-pastoral activities (pastoral, agro-pastoral and agriculture) remain at high risk of drought.

Map n ° 4: map of the Niger agro-ecological zones



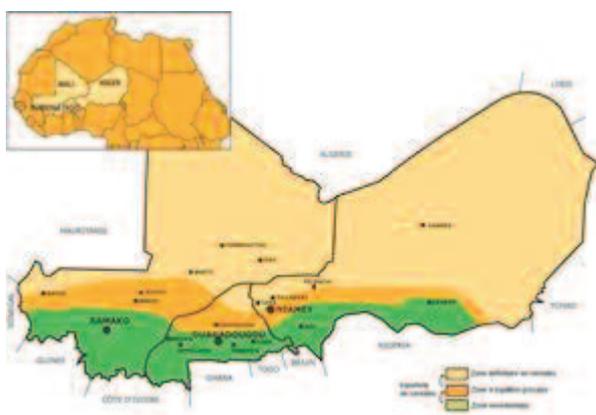
It is in this context that Niger has embarked on a momentum of reversal of trends with the support of the international community. To this end, the country has signed and ratified the various conventions and has adopted both an institutional and legal framework as well as a national agenda 21 and several programs.



POLICY AND STRATEGY DOCUMENTS IN THE FIELD OF DROUGHT

Burkina Faso, Mali and Niger, Sahel countries targeted by the project, are part of the Sahel strip, one of the most affected areas in West Africa and in the world. The analysis focuses on the specific actions planned for the drought component in the various national plans and strategies of Burkina Faso, Mali and Niger and takes into account the disparities in these documents.

Map N°. 5: countries targeted by PROGISAO



1. Burkina Faso

Burkina Faso, a country in the heart of the Sahel, is marked by a degradation of natural ecosystems from year to year and exacerbated by the effects of climate change coupled with the growing population whose needs are steadily increasing and diverse. Climate change and drought have then become a major issue of national interest. In the next graph, from 1950 to 1969 there has been a persistence of wet years; from 1970 to 1993, we note a persistence of more than 20

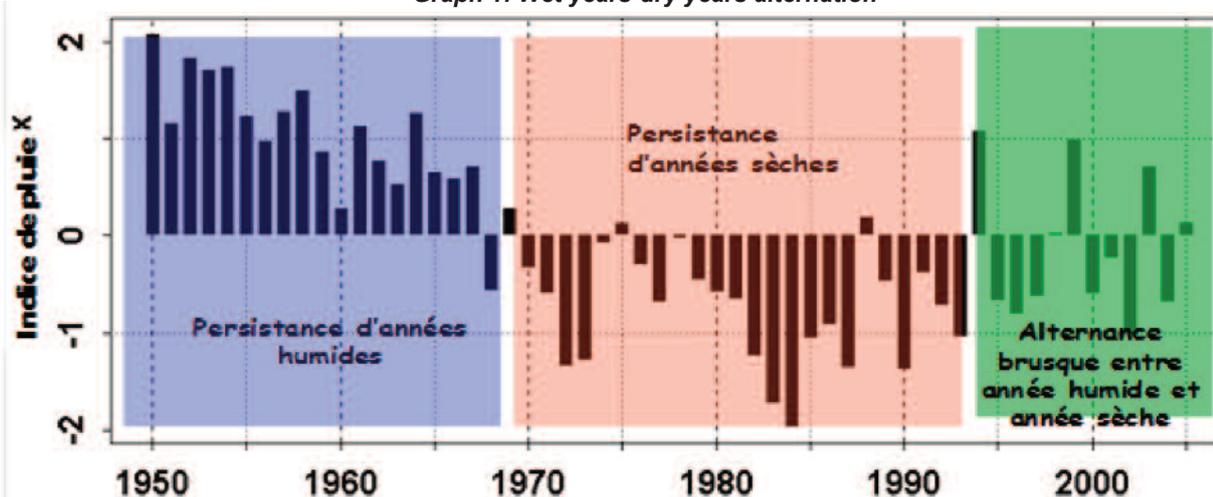
dry years. This drought did not have any equivalence in its spatial dimension because it affected the entire West African region without exception.

As of 1993, a sharp alternation between very wet years and very dry years (disturbance!) has been observed. This makes inter-annual forecasts even more difficult in the area and in Burkina Faso. Indeed, drought is the first natural disaster everywhere in Burkina Faso. Vulnerable sectors include agriculture, livestock, water resources, energy and ecosystems. For example, several commitments have been made in Burkina Faso:

a. National commitments

- February 1986: the three fights, namely against the felling of timber, animal wandering and bush fires;
- 1993: the ratification of the CC (Climate Change) Conventions in 1993 & CD (Combating Desertification)
- 1994: the national commitments (8,000 villages, 8,000 forests and one school a grove)
- 1998: Adoption of the national water policy
- 2000: Development of the Poverty Reduction Strategy Paper (2000-2010) with the PAN / CD
- 2001: The Program of Action, the PA for Integrated Water Resources Management (PAGIRE);
- 2006: The National Partnership Program for Sustainable Land Management (CPP) (2006)
- 2007: The NAPA, National Adaptation Programme of Action to Climate Change and variability (NAPA). Under NAPA, three adaptation projects have been developed and implemented within the Permanent Secretariat of the National Council for Environment and Sustainable Development (SP / CONEDD) from 2009 - 2013. The priority objectives of NAPA are to identify essential needs, ur-

Graph 1: Wet years-dry years alternation



gent and immediate activities and projects that can help communities cope with the adverse effects of climate change.

b. NAPA

Development Context

The United Nations Framework Convention on Climate Change (UNFCCC) was ratified on 02 September 1993 and the Kyoto Protocol on 31 March by Burkina Faso. The adoption of a national strategy for the combined implementation of the CC, BD and LC Conventions, the adoption of a national strategy for the implementation of the UNFCCC and the adoption of the Poverty Reduction Strategy Paper (PRSP) in 2000.

Actions of the NAPA

Twelve priority actions were selected based on the criteria for (i) reducing the severity of climate change; (ii) reduction of poverty; (iii) synergy with multilateral environmental agreements and (iv) cost-effectiveness of the action. It is about:

1. Strengthening prevention and early warning systems for food security (information, monitoring of the agro-pastoral campaign, seasonal forecasts, security stocks, etc.);
2. Forage production and food stocks, (hay, crop residues, straw, SPAI);
3. Development and rational management of natural formations, valuing of non-timber forest products (NTFPs), etc.;
4. Optimization of the use of water in irrigated crops;
5. Control of silting of ponds, water reservoirs and watercourses;
6. Securing pastoral areas and strategic pastoral areas (Low lands, bourgou growing plains, access roads to water points, etc.);
7. Promotion of CES (Conservation of Water and Soil) / DRS (Defense and restoration of Soils) techniques (zaï, anti-erosive bunds, etc.);
8. Development and management of the Oursi pond;
9. Management of wildlife and its habitat;
10. Promotion of complementary irrigation on food crops;
11. The establishment of systems and perimeters to protect against pollution of watercourses and water catchments (lakes, wells, boreholes, etc.)
12. Promotion of improved stoves, renewable energies and alternative energy equipment (pressure-cooker, M'Bora pot, solar water heaters and dryers, etc.).

The NAPA and its implementation projects remain in line with the development guidance documents. The vulnerability analysis of sectors / domains or socio-professional layers was the connecting link of any project or program to the CC and CD. However, the project development process adapts to the requirements of each partner.

c. NAP

To value the results of the various studies and the achievements of the three NAPA projects, and to implement the Durban Decision 5 / CP.17 (2011) on national climate change adaptation plans (NAPs), Burkina Faso undertook the development of its NAP in 2012. A National Adaptation Plan (NAP) was formulated in 2015, which takes into account all sectors exposed to CC. This NAP is designed as an evolving program on the medium and long term.

Graph 2: NAPA Projects in Burkina Faso

PROJET	TITRE DU PROJET	AXE D'INTERVENTION	FINANCEMENT
PANA DANIDA	 Adaptation aux changements climatiques en vue de l'amélioration de la sécurité humaine au Burkina Faso	Sensibilisation sur les CC	DANIDA : 870 000 USD PNUD : 125 000 USD
PANA FEM	 Renforcement des capacités pour l'adaptation et pour la réduction de la vulnérabilité aux changements climatiques	Test de bonnes pratiques ou de paquets technologiques d'adaptation au niveau de 6 villages pilotes	FEM: 2,9 Millions USD PNUD : 500 000 USD
PANA JAPON (TICAD IV)	 Renforcement des capacités pour une meilleure prise en compte des préoccupations liées aux changements climatiques lors de la réparation et de la mise à jour des plans, programmes et projets de développement	Capacité de planification stratégique prenant en compte ACC	GOV JPN : 2,9 Millions USD

2. Mali

For more than a decade, drought has occurred in Mali in an apparently endemic way with various forms of manifestation: late or unsettled onset of rains with an end that is sufficiently or even excessively rainy; onset that is somewhat normal and more or less rainy half-way and abruptly shortened and an increasingly marked regionalization of these manifestations whose aspects began to be no longer the same in all the regions.

a. NAPA

In Mali, the most vulnerable sectors are respectively agriculture, health, fisheries, energy, water resources, forestry, wildlife, habitat and transportation. Agriculture is heavily dependent on rainfall. It was ranked first in terms of vulnerability to climate change during the establishment of Mali NAPA. The most important identified climate risks for Mali during the identification of NAPA priority sectors are droughts, floods, strong winds, high temperature fluctuations, etc. Several frameworks and documents have been developed to better focus the actors in the development and implementation of their actions.

b. National Policy for the Protection of the Environment (PNPE)

The conservation and management of natural resources and the environment are enshrined in the Constitution of Mali, in particular article 15, which stipulates that everyone has the right to a healthy environment. The protection of the environment and the promotion of the quality of life is a duty for all and for the State».

The national policy for the protection of the environment is based on this principle, as well as on the decentralization process which will make it possible to better involve and empower actors at the grassroots level.

c. National Policy on Climate Change

Seven guiding principles guide the implementation of the PNCC. They are:

1. The principle of precaution and anticipation;
2. The principle of equity and common but differentiated responsibility;
3. The polluter-pays principle;
4. The principle of decentralization;
5. The principle of involvement / accountability;
6. The principle of transversal coherence;
7. The public-private partnership.

The overall objective of the National Policy on Climate Change in Mali is to face the challenges of climate change and ensure the sustainable development of the country. The PNCC should contribute to the fight against poverty and to sustainable development by providing appropriate solutions to the challenges of climate change so that they will not become factors limiting socio-economic development.

Specifically, it is about

- Facilitating a better consideration of climate challenges in sectoral socio-economic development policies and strategies and guiding the interventions of public, private and civil society actors for the sustainable development in the context of climate change;
- Increasing the resilience of ecological systems, production systems and social systems to the impacts of climate change through the integration of adaptation measures in the most vulnerable sectors;
- Contributing to the global effort to stabilize concentrations of greenhouse gas emissions in the atmosphere, including by promoting clean and sustainable projects
- Promoting national research and technology transfer related to climate change;
- Building national capacities on climate change

Eight Policy Directions:

- The establishment of an anticipatory and organized governance of Climate Change;

- Promoting the integration of CC into Sectoral Policies and Strategies and in Development Planning at the national level;
- Promoting actions to adapt to the impacts of CC;
- Reduction and management of risks and natural disasters;
- Promotion of greenhouse gas mitigation actions;
- Promoting research for the development, extension and transfer of appropriate technologies;
- Capacity building in the area of CC;
- Promotion of International and Sub-regional Cooperation.

Ten sectoral orientations in the field of rural development: agriculture, water resources, forests; in the field of infrastructure: energy, transportation, town and country planning; in the field of the living environment: health, sanitation and in the field of industry and mining.

The definition of an institutional framework involving the various sectoral departments through the National Climate Change Committee, with the AEDD serving as its Secretariat.

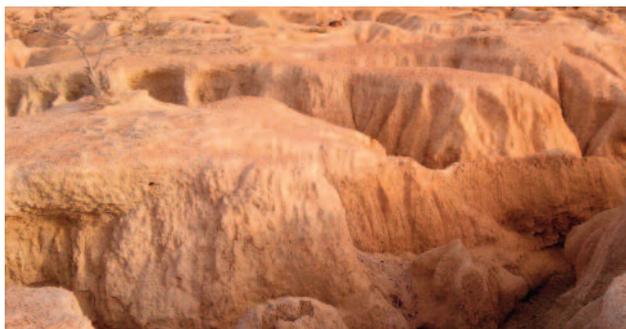
The definition of a financing strategy that integrates the contribution of: the national budget and local authorities, the international financial mechanisms on CC, the contribution of bilateral and multilateral donors, civil society, the private sector and the involvement of banking and financial institutions of the locality.

The operational modalities for this National Policy on Climate Change are specified in the national strategy and the related action plan.

d. Mali National Climate Change Strategy

This strategy is based on 8 strategic focus areas including:

- The adoption and operationalization of the National Institutional Framework for Climate Change (CINCC);
- Organizing and promoting access to funding for climate change;
- Enhancing national capacities and research on Climate Change;
- Strengthening information and awareness on Climate Change;
- Strengthening the monitoring of Mali's climate;
- Encouragement to take Climate Change into account at the level of sectoral policies;
- Encouragement to take Climate Change into account at the territorial level;
- Encouraging the private sector to participate in the national effort on Climate Change.



- 148 actions have been proposed according to these eight strategic axes identified, the implementation of which is planned from 2012 to 2017 with the following distribution of the actions: 40% are adaptation measures, 20% are mitigation actions, 18% are CC governance actions and 16% are capacity building actions.

e. UNCCD

The objective of the UNCCD is to combat desertification and mitigate the effects of drought and / or desertification especially in Africa in countries that are severely affected. In each country, there is a UNCCD focal point and a scientific correspondent.

The UNCCD differs from the other conventions in that it results from an express request from the developing countries, particularly those of Africa. To meet these international commitments and to resolve the increasingly acute environmental problems, the Government of Mali has decided to jointly develop a National Environmental Action Plan (NAPE) that takes into account all environmental problems and National Action Programs for the implementation of the United Nations Convention to Combat Desertification (UNCCD).

3. Niger

Niger signed and ratified the United Nations Conventions on Climate Change and Biological Diversity on 11 June 1992 and 25 July 1995 respectively. The Convention on Combating Desertification was signed and ratified respectively on 14 October 1994 and on 19 January 1996.

These Conventions are placed under the supervision of the SE / CNEDD, which is its Institutional Focal Point. Niger has an institutional and legal framework as well as a National Plan for Environment for Sustainable Development (PNDD) in 1996, an operational component of the Global Agenda 21.

a. National Environmental Plan for Sustainable Development

The National Environmental Plan for Sustainable Development, national agenda 21, was drawn up in 1998 and adopted by the Government by Decree No. 2000-114 (A) / PRN / PM of 21 April 2000.

The goal of the PNEDD is to broaden development options and sustain them for future generations. Its aim is to create favourable conditions for improving food security, finding solutions to the domestic energy crisis, improving health conditions and economic development of the population.

The PNEDD consists of six (6) major programs:

- The National Program of Action to Combat Desertification and Natural Resource Management (PAN / CD / GRN).
- The Management of Biological Diversity Program;
- The Climate Change and Variability Program;
- The Water and Sustainable Development Program;
- The Urban Environment and Living Environment Program;
- The Energy and Sustainable Development Program.

Thus, upon the recommendation of the secretariats of the Conventions, the State Parties were invited to develop national strategic reference documents for the implementation of these conventions.

b. Convention on Biological Diversity

Niger developed its 1st Strategy in 1998 and proceeded with its adoption in 2000. In 2012, upon the recommendation of COP 11, Niger undertook the revision of its National Strategy and Action Plan on Biological Diversity (SNPA / DB) to address cross-cutting issues such as gender, local communities, climate change, alien species, communication and resource mobilization.

To face the many challenges and give new impetus to the management of biodiversity in Niger, a prospective vision has been defined, as follows: «By 2035, Niger citizens, aware of the roles and issues of biological diversity, value, conserve, restore and use it in a sustainable way in order to help guarantee to all a better life in equity».

This vision represents national ambition in the face of threats, continued degradation and loss of biological diversity in line with the vision of the CBD Strategic Plan 2011-2020 and the Economic and Social Development Plan (PDES) 2012-2015, a national reference framework for all interventions in economic and social development.

c. National Adaptation Programme of Action to Climate Change (NAPA)

Niger has developed, validated and adopted the National Strategy and Action Plan for Climate Change and Variability (SNPA / CVC). It also developed the National Action Program for Adaptation to Climate Change (NAPA) in 2006. The objective of NAPA is to help mitigate the adverse effects of climate change on the most vulnerable populations, in view of ensuring sustainable development and to fight against poverty in Niger.

- ° The NAPA process allowed obtaining the following results:
- ° The identification of the sectors, communities and areas most vulnerable to climate variability and change;
- ° The identification of adaptation measures and priority needs of sectors, communities and areas most vulnerable to climate variability and change;
- ° The identification of fourteen (14) adaptation options, namely:
 1. The introduction of forage species into pastoral areas;
 2. Promoting livestock feed banks;
 3. The rehabilitation of basins for the cultivation of irrigated crops;
 4. The diversification and intensification of irrigated crops;
 5. The promotion of peri-urban gardening and livestock farming;
 6. The promotion of income-generating activities (IGA) and the development of mutual associations;
 7. The control of water;
 8. The production and dissemination of agro-meteorological information;
 9. The establishment of cereal banks;
 10. Contribution to the fight against climate-sensitive diseases;
 11. The development of CES (*Conservation of Water and Soil*) / DRS (*Defense and restoration of Soils*) actions for agricultural, forestry and pastoral purposes;
 12. the popularization of animal and plant species best suited to climatic conditions;
 13. the protection of the banks and rehabilitation of silted ponds;
 14. the building of the technical, material and organizational capacities of producers

d . National Action Plan to Combat Desertification and Natural Resource Management (PAN / CD-GRN)

Following the ratification of this Convention and on the recommendation of the UNCCD in Article 9 of the Convention that the development and implementation of the NAP are the central elements of the strategy to combat desertification and mitigate the effects of drought, Niger developed the National Action Plan to Combat Desertification and Natural Resource Man-

agement (PAN / CD-GRN) in 1998 and adopted it in 2000.

The aligned PAN / CD-GRN is therefore a reference, harmonization and overall monitoring framework of sectoral programs that work in areas identified by the UNCCD as combating desertification. It restores all the efforts undertaken by ministries, projects, local and regional authorities and other actors in the fight against desertification in a coherent vision and in an integrated framework.

This vision represents the national ambition in the face of threats, continuous land degradation and loss of vegetation cover in line with the vision of the 2008-2018 Strategic Framework and the Economic and Social Development Plan (PDES) 2012-2015, a national reference framework for all interventions to combat desertification.

In the short term, the mission assigned to the PAN / CD-GRN is «to undertake concrete and effective actions to increase the resilience of ecosystems to the adverse effects of climate change and improve land management, in order to ensure the reduction of food crises by 2035».

e. Development of the Strategic Framework for Sustainable Land Management (SF-SLM) in Niger and its Investment Plan 2015-2029

The overall objective of the SF-SLM is to prioritize, plan and guide the implementation of current and future SLM investments by both the public and private sector and with all stakeholders from the local level to the national level. The specific objectives of the SF-SLM are as follows:

Create a framework for mobilizing financial resources for SLM in Niger;

Ensure the sustainability of the agricultural production base (water, land, vegetation, wildlife) by focusing on the sustainable management of ecosystems;

Increase forest production;

Build the capacity of all stakeholders;

Establish a monitoring and evaluation system and a dedicated SLM database to measure the impact of SLM and disseminate relevant information to support the amplification of SLM in Niger, at subregional and regional levels.

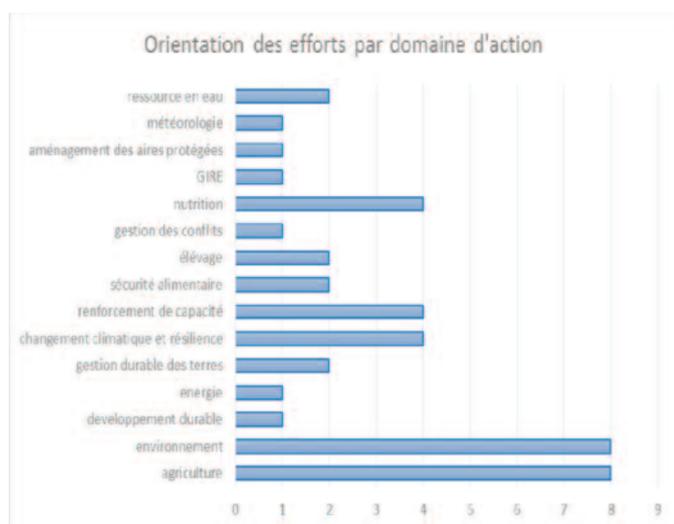
improve the synergy of interventions, avoiding duplication of actions and making judicious use of financial resources.

SYNTHESIS OF THE REVIEWS OF INITIATIVES IN THE FIELD OF DROUGHT

1. Case of Burkina Faso

The study on the review of ongoing initiatives in the field of drought in Burkina Faso carried out under IDMP WAF identified 69 initiatives with actions focusing more on capacity building, stakeholder involvement in all phases of projects and the establishment of local management structures. In terms of national coverage, the study showed that actions are more focused on prevention and conservation than on restoration. Also, the financing of all these activities is mainly granted by external funds.

Graph 3: Initiatives in Burkina Faso: Orientation of efforts per area of action



The evaluation of the relevance of the interventions made it possible to note that the main areas covered by the various projects are agriculture, water resources, livestock, environment, sustainable development, sustainable land management, hydrology, agricultural development, meteorology, climate change, nutrition, capacity building and education.

Projects and initiatives in the area of actions to control drought concern all 13 regions of Burkina Faso. However, the actions are more oriented towards 03 regions, notably the eastern, central and Mouhoun loop regions at the detriment of the regions most exposed to the drought and the vagaries of Climate Change (regions of the North and Sahel). **This reflects policies that emphasize more on prevention and conservation rather than on restoration.**

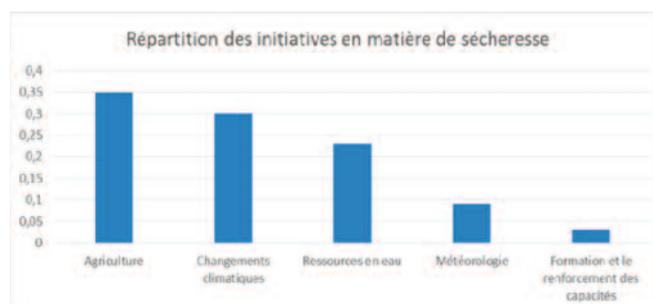
The main challenge noted is the low level of mobilization of financial resources, the absence of an appropriate policy framework for meetings between donors and implementing structures, the lack of mastery by the implementing actors of the funding mechanism and management of donors, and the low absorption rate of the financing acquired.

Several projects that already take into account the objectives of IDMP WAF have been identified. This justifies the need for a framework such as IDMP WAF combine, guide and disseminate scientific information / knowledge and best practices on integrated drought management in order to pool actions.

2. Case of Mali

The study of initiatives and projects in the field of drought in Mali made it possible to make an inventory of the structures intervening on the subject, while taking stock of the levels and sources of financing in certain cases. The study recommended the revitalization of the National Environment Council set up at the level of the Ministry of Environment, Sanitation and Sustainable Development (MEADD) and monitored by the Agency of Environment and Sustainable Development (AEDD). Thus, the study identified sixty-nine (69) projects implemented by twenty-six (26) structures. These projects were categorized as agriculture related with 34.78% (24 projects), climate change with 30.43% (21 projects), water resources with 23.19% (16 projects) meteorology with 8.70% (06 projects), training and capacity building with 2.90% (02 projects). Twenty-five (25) of the sixty-nine (69) projects identified (36.23%) had already been closed. This closure spanned over the period 2001 to 2014. The areas concerned are: agriculture with 08 projects, water resources with 07 projects, climate change with 10 projects.

Graph 4 : Distribution of the initiatives in the area of drought in Mali



The analysis of the distribution of drought related initiatives shows that the majority of projects are in the field of agriculture and water resources, which are development projects. **A weakness can be noted in the areas of data collection and capacity building. Thus, the emphasis is on curative rather than preventive components.**

The lack of financial resources to take into account the often huge needs of the populations, the short life of the projects, the socio-political and institutional crisis have led to the suspension of some funding, the lack of coordination and synergy between actors, the lack and / or inadequacy of studies on the evolution of risks at the local level, the instability of the technical staff of the State which negatively affects the sustainability of the achievements, the low rate of disbursement inherent to the procurement procedures required by the TFPs on the one hand and the State on the other hand are, among other things, the difficulties that have been mentioned.

Also at the national level, the establishment of a platform for exchanges on the issues of drought and climate change, specifying missions with coordination by CWP-MALI while drawing on the experiences of existing entities such as the Multidisciplinary Working Group on Meteorological Assistance to the Rural World (GTPA) and the National Committee on Climate Change (CNCC) are necessary.

3. Case of Niger

The study on the review of on-going initiatives in the field of drought in Niger has made it possible to give a physiography of projects and programs, actors and development partners interested in the fight against desertification, land degradation and especially drought. The approach used for this study is based on the use of the collected data, the GIS and the interviews with the various actors.

As the institutional and legislative frameworks have evolved significantly over the years, several actors have implemented or financed projects and programs dedicated to the problem of drought or to deal with its negative impacts on the living conditions of the population of Niger. Without being exhaustive, for the period 2010 to 2015 the number of projects and programs that have been implemented or are in progress amounts to forty-eight (48) and are distributed as follows: Agadez (7), Diffa (7), Dosso (7), Maradi (13), Niamey (2), Tahoua (13), Tillabery (23) and Zinder (10).

The analysis of the distribution of these various projects and programs shows a concentration of these projects in the west, south and east of the country which correspond to the areas most exposed to the adverse effects of the drought. This reflects a policy more focused on drought prevention than on

restoration. These development initiatives are mainly in the areas of food security (25%), agriculture and livestock (15%), natural resource management and biodiversity improvement (23%), the management of water resources and their use in the framework of production (2%), resilience to climate shocks and other disasters (23%), and local development (25%).

Graph 5: Distribution of drought related initiatives in Niger



The review of initiatives in Niger highlighted a multitude of actors intervening through projects and programs at the local, regional, national or cross-border levels. The complexity of the relationships between the different elements that underlie the realities of food insecurity, livestock, poverty, natural resource management and evolving strategies to combat drought has shown the limitations of isolated actions and sectoral interventions in the search for solutions to problems. That is why the whole national strategy must command: integration and harmonization of actions, coherence of interventions and cohesion among the actors, active involvement and participation of the populations, a reinforced partnership between actors, a mainstreaming of the achievements, a long-term vision and a harmonious distribution of actions. The reversal of the trend will therefore involve the mobilization of all players and financing, both internally and externally, as well as the capitalization of results through an overall sustainable system whose indicators are regularly informed.



DISCUSSION AND ANALYSIS

Studies of drought initiatives and projects have provided an overview of the structures in Burkina Faso, Mali and Niger, as well as the levels and sources of funding in some cases. However, the various actors are faced with a number of challenges, including the lack of financial resources to take into account the often enormous needs of populations; the short lifetime of the projects, the socio-political and institutional crisis leading to the suspension of some funding for Niger; Inadequate coordination and synergy between actors; The lack and / or inadequacy of studies on the evolution of risks at local level; The instability of agents of the State's technical services, which negatively affects the perpetuation of gains and the low disbursement rate inherent to the procurement procedures required by the TFPs on the one hand and the State on the other .

The predominance of projects in the areas of food security, local development, management and resilience could be explained by the high rural population that depends on agriculture and their vulnerability to the adverse effects of climate change. Also, there is a dominance of this type of action in the NAPA priorities of the targeted countries.

The level of intervention is either local, regional, national or cross-border. The implementation of these projects involves several actors, namely: customary, religious, municipal authorities, beneficiaries (populations), devolved and national technical services, researchers sometimes for knowledge management and Technical and Financial Partners (TFPs). These various actors encounter several difficulties that can be summarized by shortcomings in terms of technical

supervision, means of communication, information on new technologies, research programs at training and research institutions, project monitoring and evaluation; poor management of production revenues at the level of village communities, weak coordination and synergies around actions, insecurity in certain areas of intervention, and the absence of a continuous funding mechanism at the level of the Technical and Financial Partners.

The combined analysis of the respective objectives and actions of these different strategic documents and of the difficulties encountered in the implementation of initiatives in the field of drought shows the existence of a formal institutional framework for drought with the definition of actions that can be taken. However, the current challenge is to put in place innovative strategies at the national and regional levels to «pull in the same direction», that is, to achieve timely and effective results in spite of limited financial resources made available.

Inadequate coordination entails unnecessary costs in terms of effort and funding. The various plans, strategies and conventions encompass both socio-economic and environmental issues. In order to avoid administrative bottlenecks and unfulfilled results on the ground, there is a pressing need to have synergy between the conventions and the actions of the different actors on the ground. It can be achieved through coordination of efforts, collaborative assessments of achievements between various strategic plans, policies, programs, capacity building and monitoring of the fulfilment of the obligations.



CONCLUSION

In the light of all the foregoing, there is an array of plans, programs, policies, strategic documents, and so on. giving in principle a formal institutional framework and guidelines for the implementation of actions by national, regional and international actors. However, these different strategic documents are not sufficiently disseminated through channels that are accessible to all, and are mostly poorly known and even unknown to certain stakeholders involved in the fight against drought.

The process of formalizing and operationalizing the national and regional platforms of IDMP WAF should help to alleviate this situation and allow the different actors to effectively take into account the orientations as defined by the states in the various official documents.



REFERENCES

- **Boureima B. Conseiller Technique à l'SE/CNEDD. Stratégies Nationales et Plans d'Actions dans le domaine de la Biodiversité/Désertification/changements climatiques au Niger.** Power Point Presentation of 9 December 2016 in Ouagadougou during the assessment workshop of PROGISAO. 25 slides.
- **Boureima B. Conseiller Technique à l'SE/CNEDD, Projet PANA. Mise en œuvre des interventions prioritaires du PANA pour renforcer la résilience et la capacité d'adaptation du secteur agricole aux changements climatiques ».** Power Point Presentation of 9 December 2016 in Ouagadougou during the assessment workshop of PROGISAO. 4 slides.
- **NEYA T. Chargé de Programme au SP/CONEDD/Département Politiques Environnementales. Les stratégies nationales de gestion de sécheresse au Burkina Faso.** Power Point Presentation of 9 December 2016 in Ouagadougou during the assessment workshop of PROGISAO. 27 slides.
- **SANGHO A. Chargé d'étude à l'AEDD. Présentation de l'Agence de l'Environnement et du Développement Durable (AEDD) du Mali portant sur la stratégie de gestion de la sécheresse sur le cadre stratégique pour la croissance et la réduction de la pauvreté et les politiques nationales sur les changements climatiques et la protection de l'environnement.** Power Point Presentation of 9 December 2016 in Ouagadougou during the assessment workshop of PROGISAO. 23 slides.
- **Consultants HOUSSEINI IBRAHIM M. et MAMA-**
- DOU I. Revue des initiatives en cours dans le domaine de la sécheresse au Niger.** September 2015. 67 pages
- **Partenariat National de l'Eau du Mali. Revue des initiatives en cours dans le domaine de la sécheresse au Mali.** June 2015. 61 pages
- **Partenariat National de l'Eau du Burkina Faso. Revue des initiatives en cours dans le domaine de la sécheresse au Mali.** August 2015. 43 pages.
- **CNEDD Niger. Programme d'action national pour l'adaptation aux changements climatiques.** February 2006. 80 pages.
- **CNEDD Niger. Stratégie nationale et plan d'actions sur la diversité biologique, 2ème édition.** September 2014. 101 Pages.
- **SP/CONEDD. Programme d'action national d'adaptation à la variabilité et aux changements climatiques.** November 2007. 84 pages.
- **CNEDD Niger. Programme d'action national pour l'adaptation aux changements climatiques.** July 2006. 90 pages.
- **Ministry of Environment and Fisheries Resources of Burkina Faso. National Adaptation Plan for Climate Change (NAP) of Burkina Faso.** June 2015. 155 pages.
- **SE / CNESS Niger. National Environmental Plan for Sustainable Development.** July 1998. 114 pages.
- **Africa Adaptation Program. Proposed Draft National Policy Document on Climate Change.** July 2012. 54 pages.

FACT SHEET

IDMP
Promoting innovative practices of resilience to drought by setting up a multipurpose agroforestry park in the Komki-Ipala commune

What is it about?

Burkina Faso is a Sahel country facing massive degradation of its biodiversity due to drought. Since the 1970s, efforts have been made by the Government, NGOs and civil society to fight against the harmful effects of droughts. Despite these efforts, about 4 million Burkinabe are still exposed to drought hazards. The analysis of the review of initiatives in the field of drought control showed that in Burkina Faso, measures to control drought were primarily focused on the conservation of the available resources at the expense of restoration measures. The lack of upkeep of seedlings planted make the actions of reforestation organized every year by the institutions to be more folkloric than efficient adventure.

Therefore, new and innovative approaches have been experimented as the technique of deferred areas. This practice aims to protect highly degraded land by the implementation of activities for the conservation and restoration of the vegetation cover for the soil to revive naturally and become fertile. The pilot action of the demonstration of the setting up of a multipurpose agroforestry park will adopt this technique because it is simple to implement and effective as well. The integrated and evolutionary nature of the project will be put to the fore to allow for useful reforestation, assisted natural regeneration, protection against disasters, mitigation of natural erosion, creation of a micro climate and fodder production.

Where is the action located?

In the rural commune of KOMKI IPALA province

Why this project?

The project will contribute to the sustainable use of ecosystems to resilience of rural populations to drought include the restoration and management of vegetation cover and plant biodiversity and sharing knowledge on the project strengthening partnerships and beneficiaries.

Who are the beneficiaries?

The primary beneficiaries of the inhabitants of Komki-Ipala / the KOGOLWEOGO forest farmers-Ipala as actors for the implementation of production.



PILOT PROJECT

FACT SHEET

IDMP
Development of dry season farming site for the women in the village of KANKANTOUTI

What is it about?

For the implementation of the Integrated Drought Management Project in West Africa (IDMP / WA), pilot actions of innovative initiatives are planned for the demonstration of adaptation and resilience to the effects of climate change locally.

Like the other parts of Niger, the Department of Torodi is subject to weather conditions marked by insufficient rainfall with poor spatial and temporal distribution. The continued deterioration of the productive potential has led to declining yields of major crops, resulting in repetitive food insecurity. The consequences of the current situation marked by the rapid depletion of groundwater in the Goroubi Valley, due to drought, are severely felt by women who represent the most vulnerable layer.

Women in Kankantouti practice various activities. These are household farming, market gardening, small livestock husbandry, fattening and small businesses. Incomes generated by these activities are quite negligible compared to the enormous needs to be met (clothing, food, health, children's education, etc.). There is a real problem of poverty. To maximize returns from these activities the women's group of kankantouti was created, and adhered to the Union Potal. All group members practice market gardening. Initially, everyone was doing production on nearby farms.

Where is this initiative located?

The project will be implemented in the village of Kankantouti in the department of Torodi located in the west part of the region of Tillabéri. Torodi department covers over 6,900 km2 with a population of 189,124 inhabitants (RGP / 2012). It is bordered to the East by the Rural Commune of Guéladio (Department of Say), to the West by Burkina Faso and to the North by the Rural Commune of Gothéye.

The local economy is based on agriculture and animal husbandry which are the main activities, in addition to trade, gold mining and crafts. Unfortunately, the main areas of activity are subject to weather conditions including inadequate and the poor spatial and temporal distribution of rainfall, pests, soil poverty, water and erosion, etc.

There is a continuing decline in production potential resulting in lower yields of the main crops (millet, sorghum, maize) causing a repetitive food insecurity. Moreover, this situation is a major constraint for the development of household activities such as...



PILOT PROJECT

FACT SHEET

IDMP
Development of WSC / SPR actions for agriculture, forestry and pastoral purposes and Communication for adaptation to the effects of climate change.

What is it about?

For the implementation of the Integrated Drought Management Project in West Africa (IDMP / WA), pilot actions of innovative initiatives are planned for the demonstration of adaptation and resilience to the effects of climate change locally.

The Country Water Partnership of Mali (CWP-Mali), in collaboration with its partner Mutual Aid and Development Association (AED), a member of GWP network in...

Why this action?

The project will contribute to the adaptation to climate change through the rehabilitation of degraded areas for fighting against poverty and food insecurity of vulnerable populations. Specifically,



GWP/WA Secretariat - Ouaga 2000, Av. Charles Bila Kaboré - 05 BP 6552 Ouagadougou, Burkina Faso
Telephone: +226 25 36 18 28 + 226 25 48 31 93 - Email: gwp.westafrica@gwpao.org -- www.gwpao.org

