

Burkina Faso

CAPITALIZING THE DEVELOPMENT PROCESS OF THE ACTION PLAN FOR IWRM AND ITS IMPLEMENTATION



Action Plan for
IWRM

**Capitalizing the development process
of the Action Plan for IWRM
and its implementation in Burkina Faso**

WARNING

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Published by: GWP/WA, Ouagadougou, Burkina Faso



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ISBN : 978-2-9533002-0-8 - March 2009

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ABBREVIATIONS AND ACRONYMS

ABN	Niger Basin Authority
APIPAA	Association of Private Irrigation Professionals and Allied Activities
PAGIRE	Action Plan for Integrated Water Resources Management
AWA	African Water Association
BPW	Buildings and Public Works
BRAKINA	Burkina Breweries
CLB	Consumers League of Burkina
CTC	EIER-ETSHER Continuous Training Centre
DANIDA	Danish International Development Agency
DIWR	Department of Inventory on Water Resources
DOD	Documents on the Orientation of Decentralisation
ECOWAS	Economic Community of West African States
ECOWAS/WRCU	ECOWAS Water Resources Coordination Unit
EIER	Inter-State Rural Equipment Engineers School
ESB	Engineering School of Bamako
ETAB	Engineers and Technicians Association of Burkina
ETSHER	School for the Senior Water and Rural Equipment Technicians
FDA	French Development Agency
GDCOOP	General Directorate for Cooperation
GDI	General Directorate for Irrigations
GDIWR	General Directorate for Inventory on Water Resources
GDFR	General Directorate for Fishery Resources
GDH	General Directorate for Water
GDPWS	General Directorate for Potable Water Supply
GDWR	General Directorate for Water Resources
GWP	Global Water Partnership
IACWS	Inter-African Committee for Water Studies
IDPW	International Decade for Potable Water and Sanitation
IRD	Research and Development Institute (ex-ORSTOM)
IUCN	International Union for the Conservation of Nature
IVDHP	Integrated Village Dam and Health Education Project
IWRM	Integrated Water Resources Management
LCW	Local Committee on Water
LTR	Land Title Registry
MAB	The Mayors Association of Burkina
MAWFR	Ministry of Agriculture, Water and Fishery Resources
MEW	Ministry of the Environment and of Water
NCD	National Commission on the Decentralisation
NCESD	National Council for the Environment and Sustainable Development

NCWater	National Council on Water
NGO	Non Governmental Organization
NISWater	National Information System on Water
NPGG	National Programme on Good Governance
NSDI	National Statistical and Demographic Institute
NWEP	Northern Water and Environment Project
NWN	National Water Level Network
ONEA	National Water and Sanitation Office
PICFDS	Permanent Inter-States Commission for the Fight against Draught in the Sahel
PPN	Pilot Project of Nakanbé
PS/PAGIRE	Permanent Secretariat of the Action Plan for Integrated Water Resources Management
PSF-IWRM	Provisional Secretariat for the Follow-up on the IWRM Conference
PS/NCESD	Permanent Secretariat of the National Council for the Environment and Sustainable Development
PTC	Principal Technical Counsellor
PWS	Potable Water Supply
RAP-IWRM/WA	Regional Action Plan for Integrated Water Resources Management for West Africa
RCLPWS	Regional Centre for Low Cost Potable Water and Sanitation
RDAWFR	Regional Directorate of Agriculture, Water and Fishery Resources
RSP	Regional Solar Programme
SPD	Survey and Planning Department
SFFP	Strategic Framework for the Fight against Poverty
SONABEL	Electricity Company of Burkina
SPWSS II	Support Programme to the Water and Sanitation Sector, phase II
SWWR	South-West Water Resources
SWWRV	South-West Water Resources Development
TCW	Technical Commission on Water
TECOVDL	Technical Committee on the Verification of Draft Laws
UNDP	United Nations Development Project
UNEP	United Nations Environmental Programme
VBIWM	Volta Basin Improved Water Management
WAEMU	West African Economic and Monetary Union
WATAC	West African Technical Advisory Committee
WAWACO	Water Assessment IWACO
WAWP	West African Water Partnership
WCA	Water Consumers Association
WFB	Works Foreman of Bagré
WMDS	Water Management and Development Scheme
WPC	Water Point Committee

ACKNOWLEDGMENT AND THANKS

This study was achieved by Global Water Partnership West Africa (GWP-WA) in collaboration with the Directorate General of Water resources (DGRE) of Burkina Faso and the ECOWAS Centre for the Coordination of Water Resources (CCWR).

The study was carried out by a team of consultants composed of Mr. Yazon GNOUMOU (water expert, team leader), MR. Jerome THIOMBIANO (water expert) and Christian BERE (sociologist). The team worked closely with all water actors who showed a keen interest and a constant availability.

The work was done under the coordination of the Executive Secretariat of GWP West Africa through M. Dam MOGBANTE, with the personal implication of Dr. Rui SILVA, Coordinator of the CCWR and Mr. Francis BOUGAIRE, General Director of DGRE of Burkina Faso.

We would like to thank all the partners, the consultants and the stakeholders for their availability and warm collaboration.

We want to express our gratitude to all those we do not nominate here for their collaboration.

We would like to profit from this opportunity to thank the financial partners whose support has made the work possible.

Our special thanks go to the European Union and to Global Water Partnership for helping print this document.

PREFACE

This document is the fruit of a collective work done with the contribution of many people who we would like to thank.

Water is a very important issue in West African countries and particularly in Sahelian countries. It is recognized that water is essential to economic and social development and good management of the resource is a duty not only for decision makers who have an obligation of means but also and mostly for every citizen who must have good behaviors to ensure the sustainability of the resource.

To help in behavior change, reforms are necessary and planning is an important element of these reform measures. In the reflections, Integrated Water Resources Management (IWRM) came out as an approach to reach water good governance. In 2002 in Johannesburg, countries committed themselves to develop national integrated water resources management action plans.

As a pioneer, the Government of Burkina with the support of its development partners had dealt with the issue of water resources planning years before, which brings it to the foremost position of countries in the region having developed their IWRM plan adopted in 2003. Burkina IWRM Plan is being implemented since then.

Burkina Faso is recognized as a pioneer in this exercise of development and implementation of national IWRM plans which guide many other countries. This study wants to point out the efforts done in that field and to provide water sector actors with a retrospective analysis of the work done. The aim is to present the methodology, the process developed and the results achieved, in order to share the experience with countries who engaged in this way in the West African region and worldwide.

This study to capitalize the Burkina process was done in collaboration with the ECOWAS Centre for the Coordination of Water Resources (CCWR) and the Directorate General of Water Resources (DGRE) of Burkina Faso. Let's point out and commend the collaboration spirit of all water actors and partners during the study.

GWP and all its partners are convinced that the use of the IWRM approach in development programmes and plans is an asset for success. The National IWRM Plan document is not an end in itself, it is a means and consensual actions that were defined in it should be implemented for the benefit of the country.

Hama Arba Diallo

Chair GWP-WA



FOREWORD

This national report is part of a series drafted in the framework of pilot actions for the implementation of the Water Governance Programme initiated by Global Water Partnership (GWP) and funded by the European Union in seven Africa countries : three in East Africa (Kenya, Tanzania and Uganda) and four in West Africa (Benin, Burkina Faso, Ghana and Niger).

The aim of the programme is to contribute to the knowledge on the water governance at the level of these countries and to define some actions susceptible of strengthening it.

The main activities of the programme are based on:

- *the production of an assessment report on governance and the identification of activities to be implemented;*
- *the holding of a national workshop for the validation of the assessment and actions;*
- *the drafting of a final document on assessment and the detail of actions;*
- *the contribution to the organisation of a regional validation workshop.*

This report makes a status on water governance in the following domains: legal framework, organizational framework, regulatory instruments, intersectoral coordination, local authorities and other management functions. It formulates also priority actions and pilot actions whose implementation will contribute to reinforcing the water governance.

The coordination of the programme is done at global level by Mr. Frank Van Steenberg (Meta Meta) and at regional level by Mr. Alan Nicol for East Africa and by Mr. Cyriaque G. Adjinacou (MGE Conseils) for West Africa;

The drafting of national water governance assessment reports was done by a team of consultants recruited in each country. Their work was facilitated by several structures involved in various countries that helped them with relevant documentation. So, for West Africa, in Benin, Burkina Faso, Ghana and Niger, the water administration, in collaboration with the Country Water Partnership, set a multidisciplinary work group in order to technically accompany the consultants in the achievement of their task.

SUMMARY

Burkina Faso is one of the few countries in West Africa, to have made significant progress in the IWRM process, with the development and implementation of her Action Plan for the Integrated Water Resources Management (PAGIRE), in accordance with the recommendations of the World Summit on Sustainable Development in Johannesburg in 2002.

This significant achievement justifies the present study whose objective is to document the development process and the implementation of the Action Plan for IWRM of Burkina Faso so that the essential lessons learnt can contribute to the improvement of the development of the national action plans of IWRM in West Africa, and in the world.

The development process of the IWRM in Burkina Faso actually started around 1995 and was supported by a certain number of factors which include the following:

The existence of a political good-will which was essential and a strongly determinant for the good management of the IWRM development process. Such a good-will gesture has been a constant reality in Burkina Faso and even made it possible to propel IWRM process in the West African region.

The strengthening of the existing co-operation between Burkina Faso and Denmark in the water sector. Both countries agreed on the paramount importance of protecting the natural resources, particularly water whose quantitative and qualitative availability is one of the conditions for the development of Burkina Faso.

The growing awareness of the international community concerning the intercontinental environment since: Copenhagen (1991), Dublin (1992) and Rio (1992) for a sustainable management of resources has led to a consensus for a fundamental innovative approach on water resources management, namely Integrated Water Resources Management (IWRM).

The management of the IWRM development process at the national level was based on a project called “Integrated Water Resources Management Programme of Burkina Faso”. A global approach was adopted by the IWRM Programme for the management of the process using the following principal characteristics:

- Use the State administration responsible for the management of water as an institutional anchor of the IWRM development process,
- Act accordingly on several aspects - legislative and regulatory framework, institutional framework, management tools, etc
- Implement a pilot scheme to apply certain provisions of the process on a representative catchment area, in order to draw useful information and experiments from them
- Involving national executives of the project team (from the public servants and private sector) in the management process.

Three specific questions to be solved within the framework of the pilot scheme are: (i) thematic studies, (ii) concrete priorities set by the government and (iii) capacity building.

The stages of the development and implementation of the IWRM were as follows:

- Formulation of “IWRM Program”- from 1996 to 1997.
- Critical review of existing legislative and regulatory texts relating to water since the independence of the country, - from 1997 to 1998.
- Development and adoption of a new “orientation law relating to water management” integrating the principles of the IWRM - from 1999 to February 2001.
- Drafting of the document “State of the Water Resources and their management framework” - from March 1999 to May 2001.
- Implementation of the Nakanbé pilot scheme - from March 1999 to March 2003.
- Design the Action Plan for the Integrated Water Resources Management (PAGIRE) document - from June 2001 to November 2002.
- Adopting the Action Plan for IWRM by the Government - from December 2002 to May 2003.
- Creating and setting up the administrative mission (PS/PAGIRE) to coordinate the implementation of the PAGIRE - in September 2003.
- Organization of the 1st round table meeting of sponsors for the financing of the Action Plan for IWRM - in October 2003.

The Action Plan for IWRM covers the 2003-2015 periods, and is in two phases: 2003-2008 and 2009-2015 respectively. It has been structured in eight fields of specific activities which are:

- The enabling environment whose objective is to set up a political, legislative, regulatory, and financial environment, for a good application of the principles of Integrated Water Resources Management.
- The Information System on water which aims at the collection, analysis, transmission and exploitation of scientific, technical, environmental and socio-economic data and information for good water management and planning to ensure its sustainable exploitation.
- Measures which will enable agents of Government administration to be guided in the application of the laws and regulations.
- The Research/Development which will assure the improvement on the knowledge on the water resources of the country.
- Human Resources whose objective is to develop human capacity, which is a key factor of the reform process.
- Information, education, sensitization and advocacy in order to ensure the acceptance and the participation of all the stakeholders.
- *The Institutional Framework* with the objective of equipping the water sector with new institutions which will enable the various organizational levels of the territory to ensure a concerted management of the interventions in the water domain between the Government, local Communities and users.
- Emergency measures in order to alleviate situations that have an unfavourable impact on the social and economic well-being of the people and the environment.

The essential lessons that one can draw from the development process of the Action Plan for IWRM of Burkina Faso as well as its implementation are as follows:

A constant political good-will is a precondition for the control of the development process of the Action Plan for IWRM. Such a good-will gesture has been a constant reality in Burkina Faso and even made it possible to push the IWRM process forward in the West African region.

The implementation of the development process of the Action Plan for IWRM is so complex both in terms of closing the links between the components of the process, and effectively involving the various parties in the process. This situation gives the process a multidimensional reform character which requires multidisciplinary abilities and time to obtain the anticipated results.

A multidisciplinary and interdependent team, made up of a qualified staff convinced of the importance of the IWRM and having adequate means, is essential to increase the opportunities for success of the development process of the Action Plan for IWRM.

The implementation of a pilot project in a catchment area with high stakes related to water, proved to be relevant and made it possible to draw appropriate lessons for the whole country for the development of an action plan which is in conformity with realities nationwide.

The mobilization of financial resources for the implementation of the Action Plan for IWRM must be given a permanent attention throughout the process, in order to avoid shortage of financing, which may jeopardise the realization of the action plan. The strategy on the matter must be prospective.

The experience of the control of the development process of the Action Plan for IWRM in Burkina Faso enables to make the following recommendations:

The development and implementation process of the Action Plan for IWRM must come from a constant political will, an essential condition to its success.

The institutional attachment of the process must be established within the public administration in charge of water, in order to guarantee the success of the process which, by definition, is a multidimensional reform that only a Government has the capacity to lead.

The administration must guard against any bureaucratic and paternalistic attitude in the putting in place the new decentralized executives of water resources management. It must act as a catalyst, an accompanying body and a support-oriented counsellor.

The implementation of such a process requires the execution of a pilot project in a catchment area with high water-related stakes and whose relevance will make it possible to draw appropriate lessons for the rest of the country.

It is important to allow for time for the implementation of the activities of the entire process.

The continuous and innovative training and communication activities are important in order to ensure an effective training and implication of the stakeholders.

It is necessary to develop a well focused communication in order to boost the mobilization and the commitment of the users and other stakeholders of the field in the process involved.

Because of the lack of exposure of the IWRM, it is highly desirable to combine the programmes of the IWRM with investment programmes of the water sector and to underline the opportunity costs inherent in its implementation, in order to seduce the communities, policy-makers and sponsors.

I. INTRODUCTION

1.1 Context of the study

One of the results of the World Summit on Sustainable Development held in Johannesburg in 2002 was the firm commitment of the international community to develop and complete National Action Plans for the Integrated Water Resources Management (NPAGIRE) in the various countries by the year 2005. On this basis, many countries were committed to developing their National Action Programmes with technical and financial support from technical and financial partners.

In West Africa, Burkina Faso is one of the few countries to have finalized her National Action Programme. Benin, Cape Verde, Ivory Coast, Liberia, Mali, Senegal and Togo are engaged in the development process of their programme. Other West African countries are still trying to find opportunities and strategies for starting the development process of their National Action Programme on Integrated Water Resources Management.

In spite of the considerable support by the sponsors and the commitment by the beneficiary countries, many indistinguishable areas continued and many questions remained unanswered. From this point of view, the GWP produced a guiding document “*Catalysing the Change*”, which clarifies on the development of the Integrated Water Resources Management (IWRM) as well as related strategies. The capitalization of the lessons in the various countries shed more light so is the capitalization of the experience of Burkina Faso.

1.2 Aim of the study

The objective of this study is to document the development and implementation process of the Action Programme for the Integrated Water Resources Management (IWRM) of Burkina as well as the important lessons learnt, to contribute to the improvement of steps towards the development of the National Action Plan of IWRM in West Africa, and the world at large.

It is not a question of evaluating the development process and implementing the Action Plan for IWRM of Burkina Faso but rather capitalizing to draw relevant lessons from them.

Specifically, questions underlying this exercise of capitalization are:

- Interactions between the four components of the process, i.e. the development of the Action Plan for IWRM itself, capacity building, pilot activities and legislative reforms.
- Specific roles and the level of participation of the various Ministries.
- How and to what extent was the environment taken into account in the IWRM process and also at what level it was considered in the laws and in the IWRM Action Plan document?
- How and to what extent were gender issues taken into consideration in the development process and the implementation of the Action Plan for IWRM? Was the participation of women significant and how was this participation guaranteed?

- How and to what degree was the question of the cross-border Rivers taken into consideration? How are they reflected in the Action Plan for IWRM documents and its related laws? It should be noted that Burkina Faso shares all her river basins with other countries: River Niger with eight other countries, River Volta with five other countries and River Comoé with two countries.
- Specific roles and the level of participation of the non-governmental organizations, decentralized departments, private sector, local community organizations and other private organizations.
- What was the general impact of the Action Plan for IWRM process concerning capacity building?
- With a retrospective look, what are the activities that the people who conducted the process would have carried out differently? Why?
- On the field, how was the development process of the Action Plan for IWRM and the pilot activities perceived? What remains of the pilot activities? Are the lessons learnt being documented? Are these pilot activities being replicated?
- What is the strategy set up by Burkina Faso for the mobilization of funds for implementation of the Action Plan for IWRM?
- What change did the strategic process of the IWRM bring in the way Burkina Faso manages her water resources? Did a new technique in water resources management emerge from the strategic planning process of the IWRM?
- What is the general impact of the Action Plan for IWRM process on the implementation of IWRM in Burkina Faso?

1.3 Methodology of the survey

The methodology comprised six phases. They are: (i) the review of the existing text, (ii) interviews with the stakeholders of the process, (iii) the drafting of a preliminary report, (iv) production of a provisional report from the revision of the preliminary report amended by the sponsors of the study, (v) holding of a workshop for the validation of the provisional report and (vi) the drafting of the final report.

Water is a common natural resource which interests many sectors of activities and thus concerns many stakeholders. It was, however, impossible to meet the representatives of all the stakeholders involved. Efforts were made to reach the principal stakeholders who live in the pilot basin of Nakanbé as well as Ouagadougou. Similarly, interviews took place with resource persons who were involved in the past in the development process of the Action Plan for IWRM as members of the IWRM programme team or as consultants/experts. The full list of all the persons interviewed is joined.

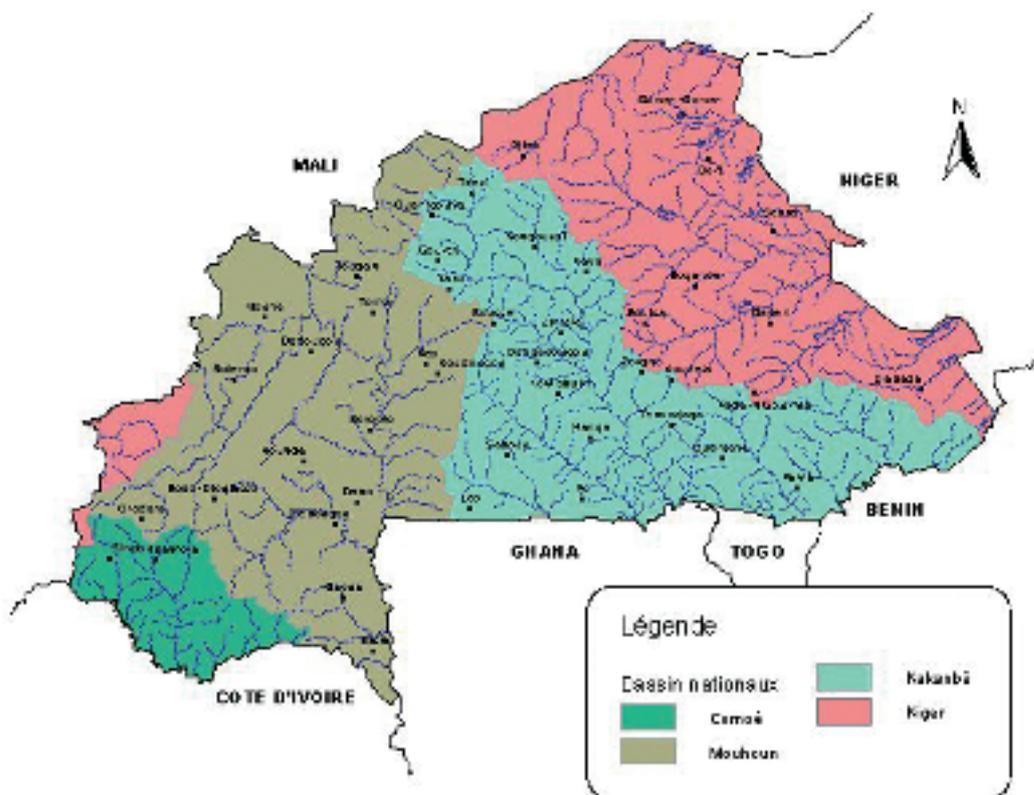
II. DEVELOPMENT PROCESS OF THE ACTION PLAN FOR IWRM OF BURKINA FASO

2.1 A brief presentation of Burkina Faso

Burkina Faso is a Sahelian and continental country in the heart of West Africa. Located within the sphere of Niger between latitudes 10° and 15° north, and between longitude 2° east, and longitude 5° 30' west. The country covers a total area of 274,200 km². She shares her boundaries with six countries: (i) Mali to the North and the North-West, (ii) Cote d'Ivoire, Ghana and Togo to the South, (iii) Benin to the South-East, and (iv) Niger to the East and the North-East.

From the hydrological point of view, Burkina Faso is seated on three international river basins which are the Comoé basin, Volta basin and that of Niger (Ref. figure n°1).

Figure 1. Burkina Faso and her river basins



On the geological level, Burkina Faso occupies the South-eastern part of the West African crater and more than 80% of her area is made up of crystalline formations of the Precambrian era.

The climate of Burkina Faso is Sudano-Sahelian; it is mainly characterized by two seasons which are the dry and wet (rainy) season. Rainfall varies between 300 to 1,200 mm from the Sahelian climate zones to the southern Sudan zones.

In the agro-ecological areas, Burkina Faso has four types of ecosystems respectively corresponding to that of the areas (i) North of the Sahel, (ii) South of the Sahel, (iii) North of the Sudan and (iv) South of the Sudan.

According to the last national head count carried out in 1996, the population of Burkina was estimated at 10,312,609 inhabitants, 15.6% of which live in the urban areas. The country has 13 administrative regions which are subdivided into 45 provinces, and composed of 350 districts.

2.2. Historical context

Historically, the initiation of the development process of the Action Plan for IWRM of Burkina around 1995 was informed by a combination of several factors of which the principal ones are:

2.2.1 Political good-will

In July 1995, a new Ministry of Environment and Water was set up, integrating two government departments previously separated, which indicated the concern of the highest authorities of the country, the execution of an inclusive approach to the management of the natural resources of the country, not forgetting water.

2.2.2 Many reflections on the problems of water

Before this period, there were many reflections on the problems of water resources management in the country. Various personnel in the water sector criticised the sectoral approach of the water resources management which until then characterized the national policy on water. It is interesting to recall that vis-à-vis the draught situation in the 70s, the Burkinabe government was engaged through various projects and programmes, in her bid to provide urgent satisfaction to the water requirements of people and livestock with support from development partners.

The water sector at the time, actually experienced a strong mobilization of donor support for the development of public drinking water services in urban, semi urban and rural areas; on the other hand, the organization of the legal, institutional and financial framework for a coherent integration and in a sustainable development prospect of activities undertaken by the various stakeholders in the sector and the strategies worked out by the Government and her partners had not been the subject for specific funding until the end of the 90s.

The period under review revealed the limits of a sector-based approach policy to water resources management (increase in the competing uses of water and pollution at the national level and the emergence of cross-border water management problems with the neighbouring countries). This is why Burkina Faso considered it necessary to go ahead with new programmes in water management based on well-defined principles at the international level, but after integrating and adjusting them to the national context in order to make them operational.

2.2.3 The International Environment

From Copenhagen and Dublin, in 1991 and 1992 respectively, the global awareness (United Nations Conference on Environment and Development of Rio de Janeiro in 1992) increased on the need for the preservation of natural resources such as water for sustainable development of humanity as a whole. For this reason, fresh water resources were the subject of a detailed atten-

tion at the time of the conference in Rio.

Many countries undertook to implement the provisions of Chapter 18 of agenda 21.

The awareness of the international community on water-related issues gradually converged at the end of the 20th century towards a consensus for a basically innovating approach of water resources management, named - Integrated Water Resources Management (IWRM).

2.2.4 Reinforcement of the co-operation between Burkina Faso and the Kingdom of Denmark in the water sector

The first significant step towards a programme of planning, mobilization and sustainable management of water resources of Burkina Faso was taken during the sixth bilateral consultations between Burkina Faso and the Kingdom of Denmark in January 1996. The two delegations agreed on the importance to protect natural resources, particularly water whose availability in both quantity and quality is a sine-qua-non for the country's development.

The second step involved identification and formulation of a programme for the improvement of human capacity in water resources management from 1996 to 1998. This period coincided with the formulation and adoption by the Government of Burkina Faso in July 1998, a new policy and strategies concerning water "Policy and strategies paper for water" adopting the principles of the IWRM.

The "Programme for Integrated Water Resources Management of Burkina Faso" was thus presented as a reform for the water sector, allowing for major provisions of the national policy on water to be operational.

2.3 Approach and organization of the process

2.3.1 Approach

The management of the development process of the Action Plan for IWRM at the national level was based on a programme called "Programme for Integrated Water Resources Management of Burkina Faso" as the starting point. Considering the development level of the country, IWRM Programme was defined with a mission to plan and support the transition process towards a new approach to water management in which the principles adopted by the country will be operationalised.

The IWRM Programme was part of a general objective which is:

"The setting up of an Integrated Water Resources Management of the country, in conformity with the national context, the guidelines set out by the Burkinabé government and respecting the principles recognized at the international level as regards sustainable management of water resources."

In the long-term, the IWRM Programme had two immediate objectives in reforming the entire water sector of Burkina Faso:

- Define (and adopt) the strategies for a transition towards IWRM, in the form of an "Action plan on water".
- Set up the basic, necessary and sufficient capacities in IWRM and the implementation of the Action plan on water.

In order to achieve these goals, the strategy adopted was to carry out corresponding analysis of

the entire country and a life-size pilot project in the Nakanbé (White Volta River) basin called “*Pilot Project of Nakanbé*”. On one hand, the pilot project aimed at applying certain provisions of the IWRM in a catchment area in order to draw useful information and experiences from them, for the overall orientation of the IWRM Programme, and on the other hand, to manage and solve the problems involved in the execution of the “*Water supply project of Ouagadougou/Projet Ziga*” by the implementation of a management programme of the aforesaid basin.

Thus the development process of the Action Plan for IWRM appeared as a “*puzzle*” which not only required its designing from the onset, to make sure that all the parts of the puzzle were at hand, but more especially to permanently ensure that all the parts of the system move consistently. The project team’s conviction was that one could not picture out only some aspects of the development process of the Action Plan for IWRM, with the risk of drawing back the consistency in the reform of the entire structural design.

Because of the absence of a preliminary experience in the country and the sub-region, this stage of the development of the project was carried out Cautiously and with flexibility to allow sufficient discussions between the executives committed to the task on one hand, and the various stakeholders in the water sector on the other, in order to guarantee the best possible formulations of the various aspects of such a complex process.

The overall approach adopted for the control of the process rested on the following principal characteristics:

To choose, as an institutional attachment for the development process of the Action Plan for IWRM, a government agency in charge of water management in the country, bearing in mind that at the end of the process there will also be a political and socio-economic reform that only the government of the country has the prerogative for the implementation.

To act on several coalitions (legislative, regulatory and institutional frameworks, and management instruments) which from the viewpoint of the team narrowly connected, on one hand, it required the existence of a permanent and effective multidisciplinary team, and on the other hand, a suitable time to obtain the consistency in the components of the process.

To set up a pilot project which would apply certain provisions of the process in a representative catchment area, in order to draw useful information and experiences from them for a general orientation all over the country, for development of an action plan which is in conformity to the realities of the country.

To Make the national executives of the project team accountable (public servants and the private sector) for the realization of the results from the process, technical assistance coming as a support through its expertise in the components, from the process in order to guarantee a national ownership.

Generally, the calendar of the process was as follows:

- Formulation of “*IWRM Programme*” from 1996 to 1997;
- Critical review of existing legislative and regulatory documents relating to water

- since the independence of the country, from 1997 to 1998;
- Official launching of the “IWRM Programme” in March 1999;
 - Development and adoption of a new orientation law on water integrating the principles of the IWRM from 1996 to February 2001;
 - Drafting the document “*Situation of Water Resources and their management framework*” from March 1999 to May 2001;
 - Implementation of the Nakanbé pilot project from March 1999 to March 2003;
 - Drafting the “Action Plan for IWRM” document from June 2001 to November 2002;
 - Process of adopting the Action Plan for IWRM by the government from December 2002 to May 2003;
 - Creating and setting up the administrative structure (PS/Action Plan for IWRM) to coordinate the implementation of the Action Plan for IWRM in September 2003;
 - Organization of the 1st round table conference of sponsors for the funding of the Action Plan for IWRM in October 2003.

2.3.2 Organization

The organization of IWRM Programme for the control of the process was strongly multidisciplinary, because of the vast field for application and the diversity of the problems to be solved. The activities corresponding to the results to be produced concerned a great number of fields (hydrology, hydrogeology, agronomy, data processing, law, administration, sociology, economy, communication techniques etc). Nevertheless, they were gathered in a limited number of great fields of expertise which constituted the action line of IWRM Programme:

- Action line N°1: Technical tools for management;
- Action line N° 2: Institutional framework, organization and human resources;
- Action line N° 3: Legislative and regulatory framework;
- Action line N° 4: Economy and finance;
- Action line N° 5: Communication/sensitization.

The Pilot Project of Nakanbé was a cross-section as compared to the five action lines. The monitoring of IWRM Programme was ensured by the following committees:

The Steering committee made up of representatives of the Ministry of Environment and Water (MEW), the Danish Embassy, the Directorate-General of Co-operation (DGCOOP) and the DGH. The Programme Management and the Principal Technical Adviser (PTA) involved as resource persons. The Steering committee ensured the follow-up of the progress of the programme like board of directors. The periodicity of the meetings of the Steering committee was quarterly, in order to review the quarterly reports.

The Consultation Committee made up of representatives of the MEA and the principal active Ministries in the sector. They are the Ministries of Finance and Economic Planning, of Agriculture, Animal Resources, Infrastructures, Housing and Town Planning and those of Health and Environment (NCESD). The composition of this committee was flexible and could more and more progress with the process. The committee aimed at the initiation of an interdepartmental collaboration with technicians, with the following objectives:

- Allow for permanent deliberations on the technical level between the Ministries

working in the water sector.

- Ensure a structural availability of information affecting the development process of the Action Plan for IWRM.
- Carry out a technical assessment of the results of the development process of the Action Plan for IWRM.

2.3.3 Execution of the components

In spite of the close connections between the components of the development process of the Action Plan for IWRM, during the execution and for the sake of effectiveness and follow-up-evaluation of the activities, we identified the following components: (i) the development of the “Action plan” itself as an end product, (ii) the development of an adequate legislative and regulatory framework, (iii) the implementation of a pilot project and (iv) capacity building.

- We recall that two major concerns were always permanent in the implementation of the development process of the Action Plan for IWRM in Burkina Faso.
- Guarantee the contributions of water resources in the reservoirs located in the Nakanbé basin, to ensure the availability of water in the Ziga dam which ensures water supply to the capital Ouagadougou. The objective was to satisfy the “*Water supply project of Ouagadougou*” as well as the other significant users (hydroelectricity and irrigation) while developing a suitable information cross-border water system between Burkina Faso and Ghana.
- Lead the IWRM process in the entire country, in accordance with the document on Policy and strategies concerning water.

Three specific questions to be solved within the framework of the Pilot Project Nakanbé are: (i) thematic studies, (ii) the concrete priorities set by government and (ii) capacity building

2.3.3.1 Thematic studies

- Study the technical outlines of the water resources management structure by basin, as stated in the “*Policy and strategy document concerning water*” and the law on water pending approval. The nature and mode of operation of the organs composed of the structure were to be specified.
- Study and characterize the principal stakeholders of the basin and propose enough executives for deliberations by the aforesaid stakeholders.
- Study the problems of the most adapted financial mechanisms capable of generating financial resources (royalties) to finance the functions of the management of the Basin, and propose the groups of stakeholders concerned as well as the royalty fees by the different users.
- Study on the field, the applicability of the six priority decrees stated by the orientation law related to water management.
- Study and test the follow-up and evaluation system of the water resource of the pilot basin of Nakanbé.
- Study and check the nature of existing pollution and its dimension.

2.3.3.2 *Concrete priorities set by the government*

It was a question of proposing and testing a management programme of the basin. As a priority, this plan was to be composed of:

- Management (management of storage basin) of big storage basins of existing dams in the basin (the Kanazoé dam, lake Dem, Ziga and Bagré dams) to primarily satisfy the requirements of potable water for the capital and other significant uses (electricity, irrigation). The setting up of a “storage management” team was to be accompanied with a regulation for the construction of new dams in the aforementioned basin.
- The provisional management structure of the basin, responsible for the aforementioned plan.
- The “*shadow Parliament on water*” of the stakeholders, the real consulting framework.
- The natural flood warning system for protection needs at the national level and in a neighbouring country like Ghana.
- The putting in place a mechanism for the collection and exchange of information in the basin, in order to facilitate discussions between Burkina Faso and Ghana on the problems of shared water.

2.3.3.3 *Capacity building*

Three principal areas guided the strategy of capacity building by the IWRM Programme. They are:

- The technical support of the Department of Inventory on Water Resources (DIWR) for the follow-up of the pilot machinery of monitoring/evaluation of the water resource in the basin.
- The technical support for the follow-up of the application of the legislation from the six priority decrees of the orientation law related to water management.
- The development and implementation of training for the target groups of the IWRM Programme, in concentric circle and progressively with the development of the IWRM in the country. This training in the broader sense also comprises the sensitization and communication of stakeholders, on-the-job training and other specific trainings. Strategically, the training of the non-immediate stakeholders was planned within the framework of the action plan to be realised on the immediate targeted stakeholders in charge of the process. Target groups concerned therefore, were:
 - Agents of the IWRM Programme
 - General Directorate of Water (GDW)
 - Involved personnel of the Ministry in charge of water
 - Major stakeholders of IWRM at the national level

Within the framework of the technical back-up of the Department of Inventory on Water Resources (DIWR) for the follow-up of the pilot system of monitoring /evaluation of the water resources in the basin, significant experiences contributed to the capacity building. They are: the optimization of the follow-up networks of water resources, designing of NISWater, modelling of Nakanbé with the MIKE Basin programme, the natural warning system on the Nakanbé Basin.

2.3.4 Results of the process

The general strategy of IWRM programme, using the thematic studies of the lesson drawn from the management programme of the pilot basin of Nakanbé, allowed:

1. Performing the inventory work of the water resources in the country

To prepare a document on the “*Situation of water resources in Burkina Faso and their management framework*”. After many preliminary actions by the project team, three regional meetings were held at the national level: the first focused on “*Analysis of the current state of follow-up and evaluation of water resources in Burkina Faso*”, the second on “*Analysis of the economic and financial situation of the water sector in Burkina Faso*”, and the last one “*Analysis of the institutional and legal framework of the water sector*”. These three meetings were attended by many stakeholders (public stakeholders, local communities, private stakeholders, NGO, research organizations etc). The observations, suggestions and recommendations by the participants at these meetings helped to finalize and validate the document on the “*Situation of water resources management in Burkina Faso*”.

2. To work out and adopt an “orientation law on water” by Parliament

The preliminary draft of the bill was prepared under the directives of a Follow-up Committee of key Ministries in the water sector. These were convened to a national workshop held on the 17th and 18th March, 1998. Several versions of the bill were successively worked out and discussed at intermediary meetings which came up with the 1999 version for scrutiny by the Technical Examination Committee of Preliminary Draft Bills (TECPDB). The observations of the TECPDB enabled the finalization of the Preliminary draft Bill on Orientation relating to Water Management and to pass it to the government for adoption in the form of a bill. On 11th October, 2000, the bill was adopted by the government of Burkina Faso and then sent to Parliament which adopted it on the 8th February, 2001.

3. To propose a programme for water management of the Nakanbé Basin

To this effect, a pilot system of water management of the Nakanbé Basin was set up. The pilot system is composed of (i) a structure for consultation between the stakeholders of the basin, (ii) the technical tools for the identification and the follow-up of water resources of the basin and (iii) a technical mechanism for the evaluation and management of the resource in the basin.

4. To work out an “Action programme for the integrated water resources management” using the following guidelines:

- Centralize the mandate of the State
- Define of the duties of other stakeholders
- Structures and management organs of the catchment areas
- Capacity building plan of stakeholders
- Strategy and terms and conditions of implementation of the plan.

2.4 Critical analysis of the process

From the presentation above, it is important for this capitalization of the various aspects which will determine the development process of the Action Plan for IWRM. Accordingly, the following aspects were critically analyzed:

1. Adopted approach to guide the process
2. Approach of the water resources management framework
3. Implication of stakeholders in the process
4. Capacity building
5. Taking into account the gender issue
6. Taking commonly shared water resources into account in the process
7. Taking the environment into account.

2.4.1 Approach used to guide the process

2.4.1.1 General strategy

Some stakeholders describe the approach used for the implementation of the process in Burkina Faso as “Top-Down” with little noticeable achievements in the field. According to this vision, the essence was the conceptualization of IWRM to the development of the PAIWRM. Instead of using such an approach, they think that the grass-root community with the IWRM problems should have been used to legislate. According to them, it was necessary to involve the population in the real situation around the problems of the resources so that they are organized, exchange ideas, meet, discuss, negotiate and decide on how to use the resources together. What will be each one’s contribution to this management? Who has to give away what? What are the priorities in the norms etc.? These are the elements which should have formed the basis of the IWRM and the corresponding legislation.

Other stakeholders think that in order to be efficient and consistent, the approach should be “Top-down”, indeed. There is a need to have a minimum global structure of the process before developing the conceptual plan. This approach is justified by the fact that reflection always comes before action. Additionally, this option comprises concrete actions such as:

- The development of the orientation bill relating to water management adopted in February 2001
- The production of an Inventory of Water Resources of the country in May 2001
- Implementation of the pilot project of the Nakanbé Basin (PPN)
- Developing consultation meetings on cross-border water resources with Ghana etc.

The overall examination of how to lead the process proves to be neither “Top-Down” nor “Bottom-Up”. Burkina Faso seems to have adopted a mixed approach. There was an important conceptualization of the management framework with consistently taking into account the experiences and the realities on the field. Indeed, the conceptualization was based on experiences on the field prior to the process (RESO project) and lessons drawn from the Pilot project of Nakanbé. Likewise, how to act in the field, if one does not know what exactly to do; especially when there is no legal basis.

2.4.1.2 *Choosing a Pilot Project*

An important and relevant issue of the approach by Burkina Faso to the development process of the PAGIRE was the implementation of the Pilot project of Nakanbé to apply certain provisions of the process on a typical catchment area, in order to extract useful information and lessons from them for the overall orientation countrywide. Thus the pilot project offered an objective for the development of the national action plan which conforms to the realities in the country. The PPN was a relevant choice even if some of these results could not be obtained.

2.4.1.3 *Strategy of funding*

As regards funding of the development process of the Action plan IWRM, Burkina Faso worked to strengthen her bilateral co-operation with one of her development partners, Danish Co-operation possibly for a long term to the benefit of the water sector. This context enabled the process to benefit from a financial and technical environment favourable to the implementation of all the activities. The total cost of the process was estimated at approximately 2.6 billion CFA Francs and the financial realization was approximately 3.5 billion CFA Francs, that is to say a variation of about 35%. Approximately 10% of this total cost is supported by the government of Burkina Faso and the rest by the Danish co-operation.

2.4.2 **Approach to the water resources management framework**

The management framework is a determinant aspect for the result of the IWRM. Thus it was imperative that the development process of the Action Plan for IWRM pays critical attention to this aspect. The water resources management framework is given as the:

1. development policies
2. legal framework
3. structures, organs or management mechanisms
4. technical framework for resource management
5. communication framework
6. economic and financial framework.

So the analysis will attempt to see how these six (6) determinant aspects were approached within the framework of the development process of the Action Plan for IWRM.

2.4.2.1 *The development policies*

A consistent management of policies within the context of the development process of the Action Plan for IWRM was to be based on a suitable procedure.

Generally, the approach to the issue of policies concerning water was relevant. On one hand, an analysis of State policies concerning water within the context and on the other, concern for cross-section policies in the formulation of the Action Plan for IWRM.

The policy analysis as regards to water highlighted the fact that it was actually in 1998 that the country prepared a document, explicitly defining the national policy that concerns water¹. This policy met the requirement of a new water management framework, based on the significant principles adopted in 1992 by the international community but adapted to the context of Burkina Faso. The new orientation of the policy embraces all the economic development sectors of the country, and mainly aims at contributing to the objectives of sustainable human development.

As for considering the cross-section policies, those related to decentralization or the environment were the subject for thorough examination. However, there was a weak consideration of the policy on the fight against poverty. The adopted approach was focused on the description of the impacts of IWRM on poverty. On one hand, the reflection should have concentrated mainly on the communication between IWRM and the Action Plan for IWRM as a sectoral policy, and the Strategic Framework for the Fight against Poverty (SFFP) on the other hand. The SFFP seems to be the policy on national development, an integral and reference of all the sectoral policies as well as the one relating to water. The analysis of the communication between IWRM and the SFFP should have concerned: (i) the planning of the implementation of the IWRM process in connection with the objectives of the SFFP; (ii) the description of the strategic force that constitutes IWRM as compared to certain objectives of the SFFP (increase in the agricultural production and employment creation) and (iii) the monitoring/evaluation mechanism of IWRM in connection with that of the SFFP.

2.4.2.2 The legal framework

The legislative and regulatory framework was regarded as a fundamental link for integrated water resources management. The objectives of IWRM programme on the matter were to come out with documents defining the management framework. Two major contributions deserve to be underlined: the option to make as a preliminary option to diagnose the legal framework and the development of a new law as regards water. We can note that:

- Comprehensiveness and precision characterized the diagnosis. A draft of inventory and study of the law documents in direct or indirect link with the water sector was set up. Nearly 250 documents in connection with water were catalogued. The analysis related to the description of the important laws on which lies water management, their nature, their sources and their level of application.
- The development process of “the orientation law relating to water management” was in all well-judged. The application of operative principles and a participative step allowed for its success and provided significant result.
- Basically, the law came to reinforce and made for the recognition the legislation on water with a consistent concern for the sociological and legal context on one hand, and the institutional framework, on the other. The state document concludes on this fact that:

The new law contributes an undeniable share to the protection and improvement of the environmental situation of water resources in the country. It lays down new regulations for the use of water, appropriate to the economic and social conditions of Burkina Faso. It provides the foundations of an effective management of water resources in the future to take up the expected challenges for a better consideration of the environment and for an increased safety of water supply to the population.

2.4.2.3 The issue of structures, organs and management

The structural analysis, organs and management mechanisms directly or indirectly related to the water sector was carried out with great attention and in a very analytical way. The quality of the diagnosis is due to the fact that the analysis distinguished two elements in an interdependence logical manner:

- structures, organs and management mechanisms
- Human resources.

The examination of the structures and organs, and the management mechanisms was very exhaustive. It related to all the categories of stakeholders, public or otherwise. The role and the contribution of each and every actor were analyzed.

The human resources analysis was carried out in terms of needs and expertise for a better promotion of the water sector. The exercise had the opportunity to have examined at the same time the issues on manpower quality, careers and motivations while considering the problems of deployment or redeployment of the personnel.

The human resources analysis has a distinction between public administration and those of the local communities. It shows that the issue of human resources is one of the major challenges for which it is necessary to tackle within the framework of the IWRM process as a whole.

For the local authorities, it came to light that the majority of them were not up to the task as a result of lack of qualified personnel to assume the responsibilities reserved for them.

2.4.2.4 The technical staff for water resources

The technical staff for water resources management should be based on the knowledge of the resource. It is a fundamental basis of IWRM. The approach to the problems was looked at from two angles:

- The control and evaluation of the water resources
- The control of other data, determining the development of the water resource.

On a very strict knowledge based on water resources management, a substantial analysis was made while emphasizing the strength and weaknesses.

Earlier in the development process of the Action Plan for IWRM, the control of the water resources confronted the persons in charge who saw the need for concrete actions within the framework of the Pilot project of Nakanbé.

Thus, it was decided to study and to test the “Control-evaluation of Water Resources” in the Nakanbé Basin. The concrete activities carried out related to the Hydrometric Network, the Groundwater monitoring Network and the Water Quality Network. The PPN enabled to fill important gaps of the control of water resources.

The control of the resource is a key aspect on which an important sensitization of the population, technicians, decision makers and sponsors is essential. Without a good knowledge of the public water resources, a great part of the nation’s wealth remains ignored, making difficult all planning and thus constituting a barrier to development. This is why its funding should not be allowed to be from external sources. Its responsibilities should be catered for by government funds.

Opportunities for external financial contributions must come only as a support. The willpower to finance resource control on the basis of the principle of “user - Pay” and “Polluters – Pay systems” constitute a good thing but for the moment is not a reality on the ground. This is why the assistance of the PPN for the installation of a transitory consistent control of the resource

was relevant and allowed for the control system testing of the resource while researching for other means for the installation of a sustainable mechanism.

2.4.2.5 Economic and financial aspect

The study of the economic and financial aspect of water resources has been done. The analyses related to: (i) general macroeconomic context of Burkina Faso, (ii) the importance of water in the economy of the country, (iii) costs of water resources management and (iv) the tax policy concerning water.

The integration of an economic and financial approach to water resources allowed for the consideration of the mechanisms and instruments which contribute to the economic and financial equilibrium of the water sector. To this effect, the deliberation was based on:

- funding of water resources management, the issue of the direct and indirect costs (environmental or occasioned).
- the introduction of financial legislative instruments concerning (I) fixing of rates, royalties or consumer levy of the resource, (II) royalties on pollution products, (III) subsidies and (iv) penalties and fines.

The economic and financial aspect approach took account of the level of poverty. For the application of “water has a cost” principle, the issue of the capacity of the consumers to pay was examined, as well as its effect on the living conditions of the people, the poverty line being estimated at approximately 82,672 CFA F per person per annum, with a poverty rate of 46,5%. However, the description of the profitability of the activities developed in the water sector is not enough to come to terms with the economic capacities of the consumers to pay a price for water. It is also necessary to consider the important vulnerability of the socio-professional categories to natural or professional hazards, on one hand, and to the economic situations, on the other.

2.4.2.6 Communication

The issue of communication was regarded as a fundamental element for the result of IWRM process. Indeed, communication is at the foundation of the awareness creation, of the change in perceptions and participation of all stakeholders involved in the process. The analysis of the communication framework related to the channels of communication: resource centres, media, conventional communication tools and new technologies in communication. The relevance of the undertaken analysis lies in the regards towards the psycho-social stakeholders to consider in the messages. There was an intensive communication activity for the propagation of IWRM; however, the adaptation of the supports to communication to the rural areas shows signs of weakness.

2.4.3. The involvement of stakeholders in the development process of the Action Plan for IWRM

The direct or indirect involvement of stakeholders concerned with a process is decisive. It basically aims, not only at enquiring about their concerns and to appreciate their capacities to contribute to the end result of the process, but especially to support their commitment and full participation. The involvement of the stakeholders must be undertaken at a convenient time and be carried out appropriately.

2.4.3.1 Stakeholders involved

It came out to light that the panel of the stakeholders involved was occupied. All the categories of stakeholders were involved in the development process of the Action Plan for IWRM. Generally, the targeting of the sort of stakeholders answers to a representative panel which corresponds to an administrative and socio-professional set up.

However, the presence of the stakeholders, particularly the consumers and the government's decentralized departments had not been encouraging (regions, provinces or geographical zones). There was the fundamental choice to use the Nakanbé basin as a pilot zone. This choice had a two-fold advantage: to be realistic vis-a-vis the IWRM programme implementation team's capabilities and to focus the surveys on a geographical area where the problems of water and land are very acute.

2.4.3.2 The modality for implication by the stakeholders

The three principal methods used to support the involvement of the various stakeholders or groups of stakeholders were:

- The communication programme
- The Pilot project of the Nakanbé Basin
- Capacity building.

In addition to these three significant methods, it is important to make mention of the realistic surveys carried out with certain groups of stakeholders, workshops on restitution and seminars.

The communication programme has shown some significant efforts through multiple meetings, workshops and seminars to inform and involve stakeholders in the development process of the Action Plan for IWRM of Burkina Faso. Numerous activities were developed on the issue and were to continue after the development process. Moreover, an important effort for popularization, information and publicity was documented.

However, with retrogression each and everyone criticized the non-adaptation of the tools and the communication technology equipments to the users, considering the fact that the people cannot read nor write or are under equipped with audio-visual equipments.

The implemented Pilot Project of Nakanbé (PPN) constituted a framework and a modality of involving the stakeholders. It was to constitute the crucible of the research-activity from which the stakeholders would test, experiment and have an insight to the IWRM. Thus, the PPN from this strategic point of view was of a great importance. This approach enabled learning of several lessons relative to:

- the method of setting up a committee for the Basin
- the efficiency of a committee for the basin (to set up a large committee for the entire basin required huge sum of money for its functioning; holding of meetings seemed to be difficult because of the schedules and the concurrent activities of each and everyone)
- the basis for the mobilization of the stakeholders (the fact that the basin of Nakanbé as a whole is a hearth of great problems as regards water was not enough to cause a basis for mobilization and consequent engagement of all the stakeholders on the entire basin; the mobilization seemed more operational on sub basins).

From the reports on the need for setting up structures and organs in limited areas and the need for having concrete reasons being able to mobilize stakeholders, the IWRM programme considered the establishment of Local Committees for Water (LCW). LCW were thus set up as neighbourhood organs to support the local management of water and a better involvement of the stakeholders on the ground of IWRM.

2.4.4 Capacity building

The IWRM Programme has from the beginning, opted for a systematic attachment to the capacity building of the head office in charge of water issues and particularly agents of IWRM. This alternative was relevant and remains so, till it reduces the technical dependence with respect to external support. By choosing an “activity-training-institutionalization”, the process gave itself all the chances to succeed and to be developed.

Nevertheless, it is to note that capacity building is still weak and not very noticeable, even within the Ministry in charge of water. As soon as we leave the water sector, the paradigm of the IWRM and the Action Plan for IWRM as a new sub-sectoral alternative are relatively ignored. It is however, advisable to note that the option had been made to develop activities for the capacity building of the stakeholders on a large scale within the framework of the Action Plan for IWRM to be elaborated.

2.4.5 Considering gender issues in the process

The final report of the IWRM Programme notes that the question of gender was taken into account. However, it appeared that the approach on the issue was based on the advancement of the woman which certainly concerns gender, but does not weaken it. Moreover, considering the fact that the process of IWRM is permanent, gender integration should not be considered only on the basis of the activities on ground, it must also be on the institutional level.

2.4.6 Considering the problems of shared water resources in the process

2.4.6.1 The position of the catchment areas of Burkina Faso

Burkina Faso shares all her principal rivers (Comoé, Mouhoun, Nakanbé and the tributaries of River Niger) with the neighbouring countries which are Benin, Ivory Coast, Ghana, Mali, Niger and Togo. The Comoé Basin is shared with Mali and the Ivory Coast; the Mouhoun Basin is shared with the Ivory Coast, Ghana and Mali; the Nakanbé Basin is shared with Benin, Ghana and Togo; the Niger Basin is shared with Benin, Cameroon, the Ivory Coast, Guinea, Mali, Niger, Nigeria and Chad.

2.4.6.2 Initiatives by Burkina Faso to take into consideration the problems related to shared rivers

Considering the international engagements by Burkina Faso and the principles of international law concerning the fair and reasonable sharing of water sources, Burkina Faso within the

framework of the IWRM processes has put across ways and means of harmonising national development programmes and to improve water resources and the anticipation to settle disputes linked to the management of shared rivers.

Thus, within the context of the IWRM process, Burkina Faso hailed the need for concrete activities within the regional set up of the cross-border water resources management. So the idea of a West African Conference on Integrated Water Resources Management came and which took place from the 3rd to 5th of March 1998 on the invitation of the Burkina Faso government supported by Denmark.

The control of engagements set by the Conference of Ouagadougou and the constant activities of Burkina Faso as far as sub-regional co-operation is concerned in the water sector led to two major experiences:

- The creation within the ECOWAS, a Water Resources Coordination Unit (WRCU) having its seat in Ouagadougou.
- Development of a Regional Action plan for Integrated Water Resources Management for West Africa (RAP-IWRM/WA) of which one of the projects is entirely devoted to the “Creation or revitalisation of the context of interaction between neighbouring countries for the management of shared rivers”.

2.4.6.3 Planned management of water sources between Burkina Faso and Ghana

The case of the Volta basin deserves a particular attention considering the difficulties with which Burkina Faso and Ghana are confronted during the dry seasons and during floods. The problem at hand is the dissemination of hydrological information between the two countries, and the timely distribution of this information to the people in order for them to take the necessary measures to confront the difficulties related to the modifications of the rate of flow of the Volta.

An important initiative within the framework of the development process of the Action Plan for IWRM was the organization in Ouagadougou from the 30th to 31st January 2002, an interactive meeting between experts from Burkina Faso and Ghana in accordance with the recommendation N°19 of the VIIIth session of the Joint commission for Burkina/Ghana co-operation. During this meeting, the creation of a framework for interaction between the two countries called “Ghana-Burkina Joint Technical Committee on Integrated Water Resources Management” whose mandate, missions, composition, regularity of meetings and organization was agreed upon.

There also is a series of initiatives which were concretized through the implementation of various projects in the Volta basin. We can refer to the GEF Project of the Volta Basin, the Hycos Project of the World Meteorological Organisation (WMO), and, the on-going project between Burkina Faso and Ghana for the Improvement of Water Governance in the Volta Basin (PAGEV). This project is carried out jointly by IUCN-BRAO and the governments of Burkina Faso and Ghana respectively, with assistance from Sida (Swedish Co-operation), the WANI/DGIS (Water and Nature Initiative) and the Global Water Partnership of West Africa (GWP/WA).

Substantial results of the strengthening of the co-operation in the cross-border management of rivers between Burkina Faso and Ghana are visible in particular with the PAGEV project. The co-operation of all the countries of the Volta basin equally advances actively with the protocol of agreement signed between the countries which are engaged for the creation of an Authority for the water catchment area of the Volta.

2.4.7 Environmental Consideration

The creation of the Ministry of Water and of the Environment (MWE) in July 1995 is a concrete demonstration of the political option of the highest authorities of Burkina Faso of merging of activities within the framework of the development of the Natural resources of the country. The existence of a single Ministry in charge of the environment and water positively contributes to the option of Burkina Faso for an Integrated Management of the Water Resources.

Thus, adoption of a process of Integrated Water Resources Management (IWRM) translated to a holistic vision of the management of water as an integral component of the natural resources. This option already constitutes in itself a consideration for the environment in water management.

In addition to this context favourable to the consideration for the environment in the management of water, one of the major assets in the development process of the Action Plan for IWRM is undoubtedly the Act N° 002-2001/AN of the 8th February 2001 relating to the law on orientation to the management of water. This Act gives an important place to the environment. In its Chapter I, Section II, are defined the instruments and framework for water management. Paragraph 2 set the limits for the 4 river basins of Burkina Faso. Chapter III, Section III, paragraphs 2 and 3 are devoted to the protection of water while section IV is entirely devoted to the protection of the aquatic ecosystems. Several laws for the implementation of the law on orientation relating to water were already adopted. It should however, be recognized that their integral implementation on ground is not yet a reality, for several reasons:

- Organisational structures recommended by the law are not all functional (LWC are insignificant and are not yet organs of the basins)
- the legislative instruments on survey and control are not operational (river guards)
- these laws are insufficiently known by the stakeholders especially at the local level.

The essential aspect is the consideration by the stakeholders of the phenomena of the environmental degradation and the necessity to find solutions to them by concrete activities and attitudes for individual, collective and national interest. Failing to take into consideration and a clear perception of the different stakes, the laws in themselves would solely not be sufficient to ensure their implementation; even if the water guard structure is put in place.

III. INTRODUCTION AND IMPLEMENTATION OF ACTION PLAN FOR IWRM IN BURKINA FASO

3.1 Introduction of Action Plan for IWRM

The Action Plan for Integrated Water Resources Management (Action Plan for IWRM), approved by decree N° 2003-220/PRES/PM/MAHF 6th May 2003”, falls under the prospect for a major reorganization of the water sector. The stakes involved are enormous and sometimes with the divergent assessment of the multitude of the stakeholders and those concerned, but could be reconciled around the question of water which is of vital importance in the case of Burkina Faso. The Action Plan for IWRM is presented as a big project of institutional innovations of which the specific activities organise for the next fifteen years, the agenda for a major reform of the water management framework of the country. Its implementation will constitute the foundation making it possible in the long term to establish a sustainable management of water resources.

The general objective of the Action Plan for IWRM is:

“To contribute to the implementation of an Integrated Water Resources Management in the country, adapted to the national context, in conformity with the rules laid down by the Burkinabe Government and respecting the principles recognized at the international level as regards sustainable and ecologically rational management of water resources”

3.1.1 Specific objectives of the Action Plan for IWRM

The specific objectives of the Action Plan for IWRM are as follows:

- To define and plan the placement of the future framework of Integrated Water Resources Management
- To identify the specific activities to this effect and to propose the necessary means for their implementation.

The Action Plan for IWRM covers the period of 2003 – 2015 in two phases, 2003 – 2008 and 2009 – 2015 respectively.

The main trends of the Action Plan for IWRM are defined as follows:

- **To reorientate the objectives of the State;**
- **To set up the National Council for Water (NCWater) as a structure at the national level towards a concerted management of water resources and incorporating the State, the local communities, the private sector and civil society in its various components;**
- **To build new management offices within the catchment area as specific districts adapted for the planning and management of water;**
- **To strengthen the capacities for intervention by the local communities, the private sector and the civil society in the water sector;**
- **To develop and strengthen human resources.**

The Action Plan for IWRM is structured in eight specific fields of activities whose realization in the first phase is spread out over the period 2003-2008. These fields of activities are:

- *Domain n°1- the enabling environment* whose objective is to set up a political, legislative, regulatory, financial, environment favourable to a good implementation of the principles of Integrated Water Resources Management.
- *Domain n°2 - the Information system* on water whose objective is the collection, treatment, dissemination and exploitation of the information data of scientific, technical, environmental and socio-economic nature, necessary for a good management of water and to a planning of its sustainable exploitation.
- *Domain n°3 - the Procedures* which will make it possible to guide the Administration personnel of the State in the implementation of the laws and payments.
- *Domain n°4 - Research/Development* which will make it possible to improve the awareness on the water resources in the country.
- *Domain n°5 - Human Resources* whose objective is human resources development hence, a key factor to the reform process.
- *Domain n°6 - information, education, sensitization and advocacy* in order to ensure the acceptance and the participation of all the stakeholders.
- *Domain n°7 - the Institutional Framework* with which the objective is to equip the water sector with new institutions which will make it possible for the various organizational levels of the country to ensure a concerted management of involvement in the water sector between the State, the local Communities and the consumers.
- *Domain n°8 - Emergency measures* in order to remedy the situations having already a significant and unfavourable impact on the socio-economic activities of the people and the environment.

3.1.2 The implementation cost of the Action Plan for IWRM and its fundings

The total cost of the projected activities for the 1st phase of the Action Plan for IWRM was estimated approximately to 13.5 billion CFA F. The budget of the 2nd phase will be estimated based on the review of the 1st phase. To mobilize the necessary financial resources, the strategy of financing for the Action Plan for IWRM aimed: (i) to mobilize national resources, (ii) use the founding projects and programmes and the significant investment programmes in the water sector to support the realization of the action plan and (iii) mobilize the external assistance for the financing of the Action Plan for IWRM, in collaboration with the development partners.

National resources must include the mobilization of financial resources from the government's budget on one hand, and on the other, the mobilizable financial resources from the usage of water; thanks to the application of the user/polluter- pay principle. The existing founding projects in the country (VREO, Bagré project, Samandéni project, Sourou development project, etc.) should systematically include, in their respective programmes and zones of activities, of the activities registered in the Action Plan for IWRM, and thus take part in effective implementation of the Action Plan for IWRM on ground. Lastly, the mobilization of the external assistance should make it possible to gradually seal the financial envelope necessary for the complete implementation of the Action Plan for IWRM.

3.1.3 Strategy for the implementation of the Action Plan for IWRM

The strategy defined for the implementation of the plan is articulated around the following key points:

- To set up a specific administration for assignments, namely the PS/ Action Plan for IWRM, whose mandate is to coordinate the implementation of the Action Plan for IWRM, by involving all the stakeholders in the water domain who would be in charge of the execution of the planned activities in the domains of the activities of the Action Plan for IWRM.

To strengthen the basic capacities of the central and decentralized departments of State as regards Integrated Water Resources Management particularly those concerning missions of grandiose nature.

- To stay put on the founding programmes in progress and, or about to start in the country (VREO programme of the European Union in the Mouhoun (Black Volta) basin and support programme of Denmark for the Nakanbé basin) for the construction of new arenas for water management as defined in the Action Plan for IWRM.

To adopt a pragmatic step in the installation of the structures for water management in the catchment areas (committees for the basin, agencies for the basin and local committees for water).

- To implement the institutional reform of the water sector by taking into account the reforms in progress in the decentralization set up.

To settle, in agreement with the development partners, certain flexibility in the implementation of the component, because of the complexity of the subjects and the stakes involved.

- To collect to the maximum the mobilizable financial resources from the development partners in order to obtain the maximum of effectiveness and especially overall consistency in the implementation of the Action Plan for IWRM.

3.2 The condition for the implementation of the Action Plan for IWRM

- In order to strengthen the Action Plan for IWRM's chances of success, the Government of Burkina Faso considered it essential to create the following structures, especially for the duration of the implementation of the Action Plan for IWRM:
- A structure for control and supervision (the Technical Committee on Water). This steering committee made up of the representatives of nine Ministries has the role of coordinating, harmonizing and approving the operational strategies, of supporting and raising the confidence of the stakeholders; in a nutshell to take care of the good implementation of the Action Plan for IWRM.
- A "set up of the mission" called Permanent Secretariat of the Action Plan for IWRM (PS/Action Plan for IWRM) whose principal task is to ensure a coordinated implementation of the Action Plan for IWRM under the auspices of its steering committee. Its occupation is not to make but make it practicable. It stays put, for the implementation of the specific activities of the various domains of the Action Plan for IWRM, on the central and decentralized administrative structures of the water and other sectors, the Local Authorities and the civil society, including the private sector.

According to the terms of the decree N°2005-388/PRES/PM/MAHRH/MFB of 19th July 2005 concerning the creation, composition, attributions, organization and operation of the permanent secretariat of the Action Plan for the Integrated Water Resources Management. The Permanent Secretariat has as obligations:

- To ensure the control and evaluation of the implementation of the Action Plan for the Integrated Water Resources Management (Action Plan for IWRM).
- To carry out any activity of information and sensitization for the consideration of the Action Plan for IWRM in the activities related to water for national programmes and projects.
- To mobilize the financial resources necessary for the implementation of the IWRM to the benefit of the implementation structures.

In terms of effectiveness in the field, the situation of the implementation of the IWRM generally arose at the beginning of the year 2006 so that it follows the principal axes of the IWRM accordingly.

3.2.1 The operation of the Permanent Secretariat of IWRM (PS/IWRM)

It is advisable to raise the effective installation of the Permanent Secretariat of the IWRM as of September 2003, as well as its administrative body which constitutes the Steering committee. However, two aspects are to be underlined: (i) the permanent secretariat has a personnel which covers only one-third of the positions stipulated in the organization and operation decree of the PS/IWRM, (ii) the PS/IWRM is no more an administration for mission and no more directly attached to the cabinet of the Minister in charge of water as initially planned, but shifted from the General Directorate of Water Resources (GDWR) since 2005.

3.2.2 The setting up of favourable environment

The legal environment experienced a significant development. Indeed as at 15th February 2006, a total of 18 texts of the orientation law on water were elaborated and adopted by the government. If we can estimate at 75% the realization rate of the implementation of the aforementioned texts, it should however be noted that these texts are the subject of little effective application on the ground for various reasons of which the absence of a water guard is essential to this effect.

3.2.3 The setting up of institutional framework

As an important institutional framework of the water resources, it is necessary to make reference to the Technical Committee on Water (TCW) and the National Council on Water (NCWater).

The TCW is a framework for interdepartmental coordination in the water sector responsible for proposing options of fundamental adjustment in water resources, while NCSWater is a framework for national interaction bringing together the stakeholders in the water sector at the national level (State, local communities, users of water) and to consult on the fundamental orientations of the policy on water, planning and regulation of water resources, and all the projects on a larger scale affecting water resources.

The TCW which was created by decree N°2004-582/PRES/PM/MAHRH/MFB of the 15th December 2004, held two ordinary sittings during the year 2005, of which the first one on the 30th April 2005 devoted to the official installation of the TCW and the adoption of these texts of operation and the second, held in August 2005, consecrated to the examination of IWRM and the National Stocktaking of the Hydraulic Works and Sanitation. Two sittings were also held in 2006.

NCSWater, created by decree N° 2002-539/PRES/PM/MAHRH of the 27th November 2002 and installed in December 2003, as a result of all the nine meetings, one of them being an extraordinary meeting. These meetings made it possible to examine and amend more than 10 draft decrees for implementation.

With regard to the other aspects of the institutional framework (water guards, organs of the basins, reorganization of the decentralized administration, support to the local communities, etc), significant advancements are still to be made.

3.2.4 The setting up of Information system on Water

Taking into consideration the provisions of the IWRM relating to the information system on water, an important development was realised with the formulation of a National Information System on Water (NISWater), however, for the implementation of this elaborated system, the advancements are still to be achieved.

3.2.5 Capacity building for local authorities, civil society and the private sector

Considering the provisions of the IWRM relating to capacity building of the local authorities, civil society and the private sector, significant efforts are still to be made. However, many

information and sensitization meetings on the NCWwater were held in favour of these target groups. This important aspect of the IWRM, remains however largely dependant on the rhythm of the development of the decentralization process whose fundamental text for operational implementation was adopted during the year 2005.

3.2.6 The development and reinforcement of human resources

Significant progress was made as regards the development and reinforcement of human resources, following the draft-agreement between the government and the Danish co-operation enabled to begin with the 2005/2006 academic year, the training of 20 high-level technicians and 15 engineers, the same number earmarked for the 2006/2007 academic year. It is also important to note the efforts carried out on the issue of women, with the training in course for eight women at the ENI of Bamako for the 2005/2006 academic year, the same number being programmed for the 2006/2007 academic year. Important progress was also made in the reinforcement of human resources of the engineering departments of the Ministry in charge of water.

3.3 Other aspects related to the implementation of the IWRM

The analyses and proposals formulated at the time of the development of the IWRM proved to be relevant. It is however also important to appreciate the adequacy of the implementation of the IWRM with certain aspects other than those which are contained there inter alia:

- Strategy for the mobilization of financial resources.
- Vast national policies.
- The national economic framework.
- The implication of the stakeholders in the implementation of the IWRM.
- Consideration for the gender issue

3.3.1 The strategy for the mobilization of financial resources for the implementation of the Action Plan for IWRM

It arose that three mechanisms were planned to this end namely: (I) mobilization of national resources, (II) contribution of the structuring programmes and significant investment plans in the water sector, to support the realization of the action plan and (III) mobilization of external assistance for the financing of the Action Plan for IWRM, through the organization of meetings with the development partners, could be reinforced by the following complementary approaches:

- to propagate aspects or activities of the Action Plan for IWRM in the various programmes or projects presented for funding to the sponsors.
- to decide on a consequential funding of the Action Plan for IWRM from the national budget.
- to show pragmatism and ability in the implementation of IWRM.

3.3.2. The implementation of the Action Plan for IWRM and significant policies

The implementation of the PAGIRE must be adequately done with significant national policies, cutting across in direct or indirect bond with the water sector. The principal policies are the pol-

icy of the fight against poverty, decentralization, the national plan of good governance, the national policy as regards the environment.

The operational bonds which must show through the framework of the implementation of the PAGIRE and the fight against poverty are on two levels:

- the optimal management of the water resources, with an aim to contributing to the sustainable improvement of the living conditions of the people.
- the data relating to the control and the evaluation of the implementation of the PAGIRE must be transferred to the Ministry of Economy and Development (MEDEV) to inform the indicators retained for placement for the Strategic Framework for the Fight Against Poverty (SFFAP).

Since the implementation of the PAGIRE, decentralization recorded notable projections. The areas are from now on really functional and the General Code of the Local Authorities adopted in December 2004 comes to replace the Orientation on Decentralization Text (ODT). The following implications are to be taken into account:

- communalization to be done all over the country (all the departments become communities).
- the installation of the municipalities become effective at the end of the first six-month period of 2006; Village Development Committees (VDC) will be set up at the a village levels.

The implementation of the Action Plan for IWRM must thus be adapted and integrate these new problems, different from those which prevailed at the time of the development of Action Plan for IWRM.

The challenges which emerge are, inter alia: the adaptation of the IWRM process to that of decentralization, because this can experience a possible acceleration or blockages.

- taking into account the communal spaces and those of the catchment areas. Certain local communities are entirely within the catchment areas and others are situated in two basins. This situation supposes two dynamics:
 - on one hand that, within the framework of the IWRM process the structures of the basins can be operational and can quickly put at the disposal of the communities installation diagrams of the basins, so that the areas or the communities can take them as the basis for the elaboration of their global development plan.
 - on the other hand, that the stakeholders in charge of the implementation of the PAGIRE accept the responsibility for the principle of inter-community (which can generate a room for interactions, negotiation and planning beyond a catchment area) if they want to achieve success in the handling of certain issues.
- The need for a synergy of activities between the structures and decentralization organs (town and regional councils) and government's decentralized technical departments and those specifically having water management (committees of basins and LCW) as a vocation.

It was necessary to take into account the National Programme for Good Governance in the implementation of the PAGIRE. The local management of water remains an indispensable condition for the result of the IWRM process. It is thus imperative to integrate the principles

and the operational mechanisms defined by the NPGG. The major challenges in terms of local management of water are:

- the capacity of the basic stakeholders to be able (I) to make choices, (II) to obtain adequate institutional or regulatory frameworks and (III) to apply the framework. From this point of view, the firm determination and engagement of the protagonists to be directed from such a point of view are noted but remain to be followed.
- the synergy between the local management of water with that of local governance in the global plan of the local communities. There is a strong interdependence between the two. The success of one strengthens the other. Particularly, the local management of water could not be permanently successful if good governance fails at the community level.

The document of national policy concerning the environment was elaborated and validated by the Ministry in charge of the environment; it is yet to be adopted by the Council of Ministers. It is of necessity that an operational articulation be put in place for success between the structures and organs charged with the implementation of the PAGIRE and those in charge of the implementation of the aforesaid policy.

3.3.3 Evolution of the national economic framework

The implementation of the PAGIRE is done within the context of massive poverty and with progressive incidence. The three profiles of poverty established in 1994, 1998 and 2003 respectively, indicate that there is an impoverishment of the population, particularly in rural areas. However, it arose that the population accept the fundamental principle of “water at a cost, except for domestic uses”, but their full adherence to this new logic will be based on the conditions and procedures of its application.

3.3.4 The implication of the stakeholders in the implementation of the PAGIRE

The implementation of the PAGIRE requires the engagement of the various categories of stakeholders targeted during the process of its development. The three principal methods are: communication, structures and organs of basins and capacity building.

In the communication programme, for the fact that the IWRM must be applied above all at the lower level, call for a strengthened communication. Thus, it is an issue of:

- developing on one hand, an institutional type of communication, on the larger scale in order to inform the decision makers and the public opinion of the beginning of the IWRM process and to inform them not only on the concept and IWRM approach but also on their places and roles within the framework of this process.
- on the other hand, to develop a communication of proximity in order to give the basis for the mobilization and the engagement of the users and other stakeholders on the ground to the committed process. In this direction, it is important that all technologies of the participative communication for the development are explored and used according to the situations.

In the implementation programme of the structures and organs of the basins, the notable projection dwells in the installation of the Local Committees for Water (LCW). The experiment drawn from the PPN having made it possible to warn itself of the operational inadequacy of the large committees on an entire basin, the LCW come as organs for sub-basins to confer a greater

implication and making responsible the local stakeholders. However, their installation is marked with insufficiencies related to aspects to be reconsidered if we want to reduce a good operational and functional attachment of the LCW. For the persons in charge, the current process is primarily intended to impel a dynamics. The place will be left for more and more local initiatives as specified in the orientation document on the LCW.

3.3.5 Considering the gender issue in the process

The question of gender is complex. Gender was not treated as such in the document of the PAGIRE. Also a corresponding study relating to the implication of Woman in the implementation of the PAGIRE was carried out in 2005. This study led to the definition of the activity sheets.

IV. IMPACTS OF THE PROCESS OF ACTION PLAN FOR IWRM

4.1 Impact on the capacity building

The impact of the IWRM Action Plan process on the capacity building is numerous. The intellectual efforts made by the project team, the executives concerned of the Ministry in charge of water as well as the many technical and design departments which were involved in the process, were consequential for most of the time it behooves to advance in the unknown and thus to innovate. Such results contributed to an unquestionable improvement of the expertise of these stakeholders.

Within the framework of the capacity building, an important training aspect was deployed during the development process of the Action Plan for IWRM and will continue in its implementation in order to take up the challenge as regards the availability of human resources. Thus more than sixty frameworks of the Ministry responsible for water took part in the training on IWRM.

The process of capacity building is slow. Broadly, the process of the IWRM positively contributed to a capacity building and made of Burkina Faso a source of expertise available for the sub-region. Also, the process of the IWRM had an impact on Burkina Faso through the broad circulation of the documents relating to the IWRM, the multiple workshops and seminars organized in the regions, and various training sessions organized on the IWRM for the various stakeholders.

4.2 Impacts on the West African IWRM process

The governments of West African countries, conscious that the problems involved in water are prejudicial to their economic and social development, conscious also that it becomes increasingly urgent to pass over to new forms of management of water as recommended in Rio, favourably accommodated the initiative of the Government of Burkina Faso to organize in Ouagadougou the regional conference on the integrated water resources management in West Africa.

The holding of this conference in Ouagadougou, from the 3rd to 5th March 1998, marked a turning point in the approaches to the management of water at the regional level. From the West African Conference on the Integrated Water Resources Management (IWRM), the Ministers in charge of water and the Heads of delegations of the West African countries solemnly adopted the “Declaration of Ouagadougou”.

This regional process under the leadership of Burkina Faso with the technical and financial assistance of Denmark, led to the two major results which are (I) the adoption by the Conference of the Heads of State and Governments of ECOWAS of the regional Action Plan of the IWRM in West Africa (RAP-IWRM/WA) and the mechanism of piloting and coordination in December 2000 in Bamako and (II) the creation of the ECOWAS Water Resources Coordinating Unit (ECOWAS/WRCU), located in Ouagadougou, Burkina Faso.

4.3 Impact on perceptions and behavioural changes

In the visionary aspect, the effect of IWRM process shows through in the speeches by the political leaders. However, at the local community level, the people or the non-institutional stakeholders, the change of vision can still not be defined. It appears that the question of water is more and more perceived by the stakeholders as a potential source of conflicts.

In the change of behaviour aspect, the effects are visible but insignificant. The acts and decisions of the various categories of stakeholders do not proceed to a full application of the principles of IWRM. But it is to recognize that their ignorance of IWRM partly explains this attitude.

4.4 Impact on water resources management

The impacts of the IWRM process in Burkina Faso are still not so visible in the water resources management. The Action Plan for IWRM is to be set up and IWRM Programme primarily worked out to release the conceptual framework and the development of the plan itself. The Committee of the Nakanbé basin as its two sub-committees downstream and upstream did not function.

At the local level, the installation of the LCW, a veritable foundation for a new vision of the water management, constitutes a hope in the decentralization of water management. For the moment few LCW were set up. Those that existed are quite recent. However, it should be recognized that some LCW that are already installed present great hopes on the basis of the following asset:

- establishment of priorities in the uses of water according to the recommendations contained in the law on orientation; giving a priority to the PWS during scarcity situations.
- responsiveness to the problems of degradation such as the sand banking, crumbling of the banks and even the issue of pollution as in the case of the Itengué Dam.
- beginning of acceptance of Community maintenance of certain aspects of the project.
- existence of an organized framework, recognized and accepted for meetings, negotiations and where any of the problems relating to the resource is situated.

The installation of NCWater as a structure at the national level for a concerted management of water in association with the State, Local Authorities, private Sector and the Civil society is undoubtedly one of the important steps of the implementation of the Action Plan for IWRM. NCWater, created by decree N^o 2002-539/PRES/PM/MAHRH on the 27th November 2002 was officially installed on Friday, 26th December 2003.

In certain fields, the Action Plan for IWRM thus produced tangible results (institutional, regulatory frameworks); in other fields the results of the Action Plan for IWRM are still not very visible taking into account its recent implementation of a significant deficit as far as communication is concerned, and the challenge for funding.

V. LESSONS - CONCLUSION - RECOMMENDATIONS

5.1 Lessons drawn from the follow-up of the process

Cardinal importance of the political good-will

The first lesson to be learnt from this experiment is that the political good-will was essential and strongly conditioned the control of the development process of the Action Plan for IWRM and leaving the implementation of the IWRM in Burkina Faso. The process in Burkina Faso unquestionably benefited from a favourable and supported political environment, having led the political authorities to be convinced that because of the particular position of the country as regards water, the involvement of the countries of the sub-region was essential which contributed to the birth of the West African Integrated Water Resources Management process.

The reluctance to change

It is necessary to acknowledge the fact that like any reform, reluctance to change mainly conditioned the control rhythm of the development process of the Action Plan for IWRM and consequently its implementation on ground. The IWRM being presented in terms of sharing of responsibilities, repositioning of the stakeholders of the water management and application of new provisions, the reluctance was observed at the following levels:

- of public administration, where the specific challenges consisted in convincing the stakeholders who are specialists in the public administration of the need for giving up the centralist vision of the water management without loss of professional prospects, quite to the contrary.
- of local authorities, recently established characterized by the ignorance of the IWRM, non mastery of their new missions as regards water and the weakness of their human and financial resources.
- of the population and the private sector, with the fear of the application of the new provisions of the reform in the water sector.

The visibility of the IWRM

The development process of the Action Plan for IWRM, which falls under the general development of the IWRM primarily, has as for conclusiveness the installation of a new framework of water resources management which guarantees the sustainable management of water. However, unlike investment plans the IWRM misses its visibility and is perceived as non-essential in the developing countries. It is thus legitimate to raise the question if it is not more systematically effective to combine the control of such a complex process with the implementation of investment plans featuring in the water domain, which solves the problem of visibility and especially makes it possible to benefit from the constant support of the political decision makers of the country and the engagement of the local stakeholders.

Problems of the placement of the principles user/payer and Pollutant/payer

The good application of these principles of IWRM is fundamental for it enables to equip the

organizations of the basins with a capital cover implementing solidarity amongst the users in the realization of their investment plans.

Studies were undertaken and draft documents elaborated but not yet adopted. This delay in the implementation of these principles in Burkina Faso is related to their complexity. Indeed, the proceeds generated by the application of these principles as public resources are also requested to feed the Treasury and the budgets of the Local Authorities. Moreover, the practical methods of determining their rates and their recovery are not as simple to establish.

The involvement of the population in the IWRM process

The effective involvement of the populations constitutes a major challenge to the implementation of IWRM, because they are characterized by illiteracy, lack of training and inaccessibility to information which are barriers to the conscious and responsible participation of the people in sustainable water resources management.

The choice for a pilot project

The implementation of a pilot project (PPN) was an appreciable basis for the collection of information, to understand the various problems and to refine the analysis within the framework of the state. Thus the Action Plan for IWRM finds its force in what it invest so much in the consideration of the experiments arising from the pilot project.

The complexity of the process

The implementation of the various components of the development process from the Action Plan for IWRM in terms revealed its complexity as well the narrow overlapping of the components of the process, as in effective terms of involvement of the various recipients of the process. This situation gives to the process the character of multi-dimensional reform requiring the competences and time to obtain the anticipated results.

5.2 Conclusion

The development process of the Action Plan for IWRM in Burkina Faso undoubtedly constitutes an experiment which is equally a source of inspiration to other countries in the sub-region as regards IWRM.

The condition of implementation of IWRM in Burkina Faso is characterized today by significant experience, particularly on the level of the design and the installation of a total architecture network of the process having in the long term to guarantee the installation of the new framework of water resources management. Indeed, the roles of the various categories of stakeholders are defined, and the legal and institutional executives (organs and mechanisms) determining management are in place. Obviously, Burkina was able to take this first essential challenge for the securing of the IWRM.

However, it is also important, if not essential, to be able to make operational all the compartments of this total architectural network of the new framework for water management, to enable the functioning of all the organs and mechanisms and especially to ensure the appropri-

ation of the experiences of the process by all the stakeholders. It is the second major challenge with which Burkina Faso is now confronted, namely the effective and sustainable preparedness of the process. The Local Committees for Water (LCW) are seen today as an opportunity to support the local management of water, while waiting for the medium-term installation of the committees of the basins and the agencies of the basins on a wider scale.

Other not less important issues are those relating to qualified human resources on one hand and on the other hand, those of the sufficient financial resources. The funds resulting from the application of the principle “user-pollutant/payer” will constitute the fundamental resources whose absence will largely hypothecate on the perpetuity of the water agencies to be set up and consequently, the viability of the new framework of integrated water resources management of the country. This essential issue challenges the capacity of Burkina to find innovating approaches enabling her to be attached to the IWRM on the ground, notwithstanding the rationality of the financial resources of the country.

5.3 Recommendations

The recommendations resulting from the analysis of the development process and the implementation of the Action Plan for IWRM in Burkina Faso are:

- **The development process and implementation of the Action Plan for IWRM must benefit from a constant demonstration of political good-will, an essential condition to its success.**
- **The institutional protection of the process must be within the public administration in charge of water, in order to guarantee an accomplishment with the process which by definition is a reform with multiple dimensions that only a State has the capacity to lead.**
- **The administration must be kept of any bureaucratic and paternalistic attitude in the installation of the new decentralized executives of water resources management. It must play a leading role of a catalyst, guide and support-council.**
- **The implementation of such a process requires the execution of a pilot project in a catchment area with important stakes related to water and whose relevance will make it possible to draw lessons applicable to the entire country and for the formulation of the Action Plan for IWRM.**

It is essential to allow for an appropriate time for the implementation of the activities of the whole process.

The continuous and innovating training and communication activities are essential while ensuring effective training and involvement of stakeholders.

To develop a communication of proximity in order to stir up the mobilization and the engagement of users and other local stakeholders committed to the process.

Due to the absence of the visibility of the IWRM, it is strongly desirable to combine the programmes of the IWRM with that of the water sector investment programmes and to obviously put in the natural opportunity costs in its implementation, in order to cause the adherence of the population, political decision makers and development partners.

APPENDICES

Bibliography

- MEE/ DGH/ GIRE, 1999:** Report on the commencement of the IWRM Programme, Final version.
- DANIDA/ MEE/ DGH/ GIRE, 2001:** Situation report on the water resources of Burkina Faso and their management framework. Final report, Burkina Faso, May 2001, 243 pages.
- MAHRH/DGIRH :** Report on the implementation of the IWRM Programme / Sectorial review - October 2002.
- MAHRH/DGIRH/PTGIRE, 2003 :** IWRM- Final report, transitory phase.
- MAHRH/DGIRH/PTGIRE, 2003:** Final evaluation report on the Pilot Project of Nakanbé (PPN).
- Kory Concept/DGIRH, 2005:** Joint diagnostic of the Bagré Dam. Interim report, Burkina Faso, MAHFR, October 2005, 46 pages.
- MAHRH 2003 :** Programme of activities for the Action Plan for IWRM (PAGIRE) - First phase (2003 – 2008), Burkina Faso, March 2003, 250 pages.
- MAHRH, 2003 :** Action Plan for the Integrated Water resources Management of Burkina Faso (PAGIRE), Burkina Faso, Imprimerie Presses Africaines, 65 pages.
- MAHRH, 2004:** The National Council on Water of Burkina Faso. Basic documents: Installation speech – Decree on attributions, composition, organisation and operation– by-laws, Burkina Faso, December 2004, 28 pages.
- MAHRH/DGIRH, 2004:** The Local Committees for Water (LCW), grass root link of the institutional framework of Integrated Water Resources Management of Burkina Faso. “*Concept Guidelines, Creation and functions*”. Burkina Faso, July 2004, 36 pages.
- MAHF/DGIRH, 2004:** Conception plan and the implementation of the National Information System on Water (NISWater). Final report, Burkina Faso, November 2004, 153 pages.
- MAHFR/ DGIWR, 2004:** Propositions to re-energise of the pilot management committee of the Nakambé basin. Burkina Faso, October 2004, 85 pages.
- MAHFR/ DGIWR, 2004:** By-laws of the dams of Burkina Faso and the institution of financial contribution in relation to water according to the orientation law concerning water management. Burkina Faso, November 2004, 61 pages.
- MAHF, 2005 :** The National Council on Water of Burkina Faso. Annual progress report 2004, Burkina Faso, March 2005, 10 pages, 10 pages of annexes.
- MAHFR/ DGIWR, 2005:** Involvement of women in the implementation of the Action Plan for the Integrated Water Resources Management (PAGIRE), Burkina Faso, May 2005, 72 pages.
- MAHFR/ DGIWR, 2005:** Compilation of legal documents on the application of the orientation law concerning water management. Burkina Faso, November 2005, 106 pages.
- MAHFR/ PADSEA II, 2005:** Contract service delivery, contract of unlimited duration for the putting in place of the local committee on (LCW) of the Korsimoro dam. MAHFR, Burkina Faso, September 2005, 4 pages.
- Ministry Of Energy & Water Development/ Water Resources Action Programme, 2003:** Report on the national water resources action programme (WRAP) consultative forum on: The proposed institutional and legal framework for the use, development and management of water resources in Zambia. 17 to 18 November 2003, Mulungushi International Conference Centre,

Lusaka. 107 pages + 15 pages of annexes.

RCS/ BF, 2005: Report on the putting in place of the LCW of the Loumbila dam – *Participatory diagnosis on the situation of water resources and their management at the Loumbila dam*, Final report, November 2005, 50 pages.

République de Côte d’Ivoire/ Ministère des Eaux et Forêts, 2003 : Integrated Water Resources Management in Côte d’Ivoire ; Assessment and prospect. République de Côte d’Ivoire, Ministère des Eaux et Forêts, Octobre 2003, 68 pages.