# Partnerships for Africa's Water Development

Integrated Water Resources Management Planning Process in Benin

experiences, results and lessons learned

February 2010



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### PARTNERSHIP FOR AFRICA'S WATER DEVELOPMENT

# INTEGRATED WATER RESOURCES MANAGEMENT PLANNING PROCESS IN BENIN

Experiences, results and lessons learned

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### **ACRONYMS AND ABBREVIATIONS**

AEP	Drinking Water Supply
AFD	French Development Agency
AMCOW	African Ministers' Council On Water
СЕВ	Benin Electric Community
CIE	Inter-ministerial Water Commission
CPC-GIRE	Framework for Promotion and Coordination of IWRM
СТВ	Belgium Technical Cooperation
СТЕ	Technical Commission of Experts
CWP	Country Water Partnership
DGH	General Directorate of Hydraulics
DG-Water	General Directorate of Water
DPGE	Directorate for Planning and Management of Water
DSCRP	Strategic Document for Growth and Poverty Alleviation
ECOWAS	Economic Community Of West African States
FAE	African Water Facility
GDP	Gross Domestic Product
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit, German Agency for Technical Cooperation
GWA	Gender and Water Alliance
GWP	Global Water Partnership
GWP/WA	Regional Water Partnership for West Africa
GWPO	Global Water Partnership Organisation
IWRM	Integrated Water Resources Management
LDC	Least Developed Countries
MEE	Ministry of Energy and Water
MC	Management Committee
MDG	Millennium Development Goals
NGO	Non Governmental Organisation
PANA	National Adaptation Action Programme
PAWD	Partnership for Africa's Water Development programme
PPEA	Multiyear Programme for Support to the Water and Sanitation Sector
RJBEA	Network of Beninese Journalists on Water and Sanitation
SCRP	Strategy for Growth and Poverty Alleviation
SONEB	Benin National Water Supply Office

STPC-GIRE	Technical Permanent Secretariat for Promotion and Coordination of IWRM
TFP	Technical and Financial Partners
WRIAM	Water Resources Issues Assessment Method
WSSD	World Summit on Sustainable Development
WUA	Water Users' Associations

### FOREWORD

This report provides a synthesis of the experience, the results and the lessons learned from Integrated Water Resources Management (IWRM) planning process carried out in Benin. The report is based on findings in a study initiated by Global Water Partnership (GWPO), Regional Water Partnership for West Africa (GWP/WA) and Benin Country Water Partnership (CWP-Benin), after completion of the Partnership for Africa's Water Development programme (PAWDII, 2005-2009).

CWP-Benin would like to take this opportunity to renew its thanks to GWP, who supported the IWRM planning process in Benin and helped Benin benefit from the Partnership for Africa's Water Development programme (PAWDII). It also renews its thanks to all Benin water sector's Technical and Financial Partners (TFP), especially Netherlands, Denmark, Germany and France, who accepted to contribute technically and financially to IWRM planning process of the country.

CWP-Benin and the drafting team of this report, Albert TONOUHEWA and Cyrille ETEKA, thank all stakeholders that accepted to be interviewed during this study related to the documentation of Benin's IWRM planning process.

#### **Professor Abel Afouda**

Chair of Benin Country Water Partnership

### **EXECUTIVE SUMMARY**

In 1998, Benin's Government adopted Integrated Water Resources Management (IWRM) as a priority approach for sustainable management of its water resources. The decision was a consequence of the findings of a report on Benin's strategy for water resources management. The report, validated in February 1998, recommended the adoption of IWRM to improve water resources management in the country.

Despite important actions implemented between 1998 and 2002, the framework for water resources management in Benin was not in favour of good water governance. Following the 2002 World Summit on Sustainable Development (WSSD) resolution for , countries to develop and implement national IWRM action plans as a means to achieve the water-related Millennium Development Goals (MDGs), Benin's Government initiated a programme to develop a National IWRM plan. This was part of the Partnership for Africa's Water Development (PAWDII) programme supported by Netherlands Development Cooperation with facilitation by Global Water Partnership.

Under the leadership of Benin government, the Benin Water Partnership mobilised stakeholders from government and non-government organisations and civil society to define a road map and vision of the planning process towards better water resources management.

Following various information and sensitization workshops, and different studies, a drafting committee made up of national experts, supported by national and international consultants, was set up. Thematic workshops were organized to refine the results of water situation analysis studies. The water resources challeges were prioritised using Water Resources Issues Assessment Methodology (WRIAM) and priority was given to the main technical problems in terms of assessing, managing and using water resources at basin and national level. Weaknesses of the water resources management framework were also assessed and analysed. The content of the national IWRM action plan was developed. 54 Actions were defined for immediate and long term implementation. A draft IWRM action plan was validated by stakeholders during 6 regional workshops. The IWRM action plan was being finalised in March 2010, and once completed, will be presented for adoption to the Council of Ministers.

The main outcomes of Benin's planning process include:

- enhancement of political will for IWRM planning process
- establishment of national water law validated by all stakeholders and adopted in July 2009 by the Government,
- development of a new water law and its transmission to parliament, for review and adoption
- development of a draft national IWRM action plan
- beginning of the process of IWRM principles integration in various levels of Benin's education system. establishment and strengthening of CWP-Benin, and its positioning as a key facilitating platform for promoting, understanding and implementing of IWRM in Benin
- building capacity of various stakeholders for implementation of national IWRM action plan;

The main lessons learned from Benin's IWRM process are as follows:

a common agreement is needed on the perception and understanding of IWRM principles, IWRM planning road map and clear methodology. This need special attention and enough time for avoiding difficulties;

- any law or regulatory framework developed without appropriate involvement of civil society, which does not integrate their concerns and take into account the positive aspects of their traditional habits, has limited chances of success in implementation
- a clear and unreserved political commitment is an essential prerequisite to the success of IWRM planning process;
- the involvement of, and support from, Technical and Financial Partners in the IWRM planning process ensures some level of financial sustainability, and increases chances of implementation of the plan as soon as it is finalized, through programmes and specific financial commitments.

The recommendations resulting from the process are:

- maintain commitment from the Government and Technical and Financial Partners to the IWRM process by on-going advocacy action;
- integrate IWRM experiences and its principles in various levels of education system ;
- invest more in capacity building, training courses and specialisation of qualified staff, on IWRM and its related sub-sectors;
- establish and operationalise the new IWRM institutional framework, including monitoring and evaluation structures with sufficient means for regular assessment of the IWRM action plan's implementation.

#### 1. OVERVIEW OF THE WATER DEVELOPMENT CONTEXT

Benin belongs to the Least Developed Countries (LDC). Its economy rests on three fragile pillars, namely: subsistence farming, extensive cotton monoculture and regional trade. Despite important economic policy reforms carried out since the end of the 1980s, the characteristic of its GDP structure has hardly changed. The contribution of various sectors to the GDP is as follows: 35% at most for the primary sector, less than 15% for the secondary sector and around 50% for the tertiary sector.

The country receives an annual average of 700 mm to 1,300 mm of rainfall from North to South. Rainfall can reach 1,400 mm in the South-Eastern part. Benin is drained by a dense hydrographical network made up of seasonal flow rivers. The renewable water resources of the country are estimated at about 15 billion m<sup>3</sup> of water per year, including approximately 2 billion and 13 billion m<sup>3</sup> of groundwater and surface water respectively, unequally distributed in space and time.

Nowadays, the country is still at a stage where the catchments and water uses are not controlled and do not fall under any enforced regulation.

The country currently uses less than 3% of its renewable water resources, meaning that 97% of the resources are lost through evaporation and spring runoff. According to forecasts established in 2000 (Benin Report, Water Vision 2025), Benin only needs about 40% of its renewable water resources if it is to meet its development needs by 2025, excluded the non evaluated needs of industrial sector. These forecasts however do not take into account the impacts of climate change on water resources and the increasingly pressing needs for the populations to adapt. In addition, the chronic lack of reliable and useful water data and the current mode of GDP calculation make it almost impossible to estimate the real contribution of water to growth and economic development in Benin.

However, the irreplaceable role that water plays in the development of the country was partly taken into account in the 2007-2009 Strategic Document for Growth and Poverty Alleviation (DSCRP) as one of the priorities of the Beninese Government. It is true to say that better water resources management is key to growth and economic development in Benin.

From a political and legal perspective, the IWRM process enabled Benin to develop a national water policy validated by key stakeholders in January 2008 and adopted by the Government in July 2009. A draft water law was validated by stakeholders in April 2005 and was submitted to Parliament in July 2007, for its adoption. This new water law is the only water-specific regulation which considers the different reforms carried out in the sector in the context of decentralisation. It will compensate the obsolete 1987 water law.

From an institutional perspective, the water sector in Benin is characterised by a multiple decision-making centres, a sector-based management framework and a lack of collaboration and dialogue between stakeholders. Management is thus sector-based, fragmented and compartmentalised, with no crosssectoral coordination, therefore resulting in high economic, social and ecological costs.

#### 2. SUPPORT TO THE NATIONAL IWRM PLANNING PROCESS

The World Summit on Sustainable Development (WSSD), held in 2002 in Johannesburg (South Africa), acknowledged the key role of Integrated Water Resources Management (IWRM) approach to achieve the Millennium Development Goals (MDGs) relating to drinking water and adequate sanitation services. The, International Community called for countries to develop and implement national IWRM action plans by 2005 with support to developing countries.

Following an initiative of CWP-Benin, supported by the Beninese Government, to meet the WSSD 2005 target, the Global Water Partnership Organisation (GWPO) re-affirmed its support to the IWRM planning process in the country. The Government of Benin thus benefited, from 2005 to 2009, Partnership for Africa's Water Development programme (PAWDII), which also involved five other African countries (Eritrea, Cameroon, Cape Verde, Mozambique and Swaziland). The objective of the programme is to contribute to sustainable development and poverty alleviation in the targeted countries, through better water resources management and development by the adoption of an IWRM approach. PAWDII includes 4 interdependent components, mutually reinforcing one another:

- support to the WSSD target for the development of national IWRM plans;
- support to institutional development of existing, new and emerging partnerships;
- support to integration of water into poverty reduction strategy programmes;
- increasing the understanding of, and potential access to, a broader range of financing instruments.

The implementation strategy, through the components of the programme, places emphasis on the creation of multi-stakeholders groups at all levels, the effective involvement of stakeholders and the support to, and facilitation of, processes which make these groups fully integrated and engaged in water resources management.

Benin does not have effective and operational instruments for water resources management, according to IWRM approach. In addition, the coverage rate of hydrometric and piezometric stations networks, that benefited recent contributions from Technical and Financial Partners for their reinforcement, is still far below the required standards for an adequate monitoring of water resources.

From what precedes, the long-term problem of resources/need adequacy arises in the country, is not in terms of resource deficit, but in terms of chronic deficit in monitoring existing resources. Major challenges to be addressed are:

- to put in place sufficient qualified human resources, and to set up a system for continuous capacity building of that human resource ;
- to improve the knowledge on available water resources by organizing on-going monitoring of their qualitative and quantitative trends, both in space and time;

- to better use and develop water resources, to support national socio-economic development;
- to set up good water governance, through better coordination of the sector, relevant involvement of non governmental stakeholders, broad dialogue between them and establishment of modern management tools required for management based on hydrological bodies (basin or sub-basin, aquifer area);
- to meet, in a sustainable way, the various demands for water by taking into account availability of the resource;
- to ensure ecosystems sustainability;
- to protect against the negative impacts of water, whether they are physical (floods) or healthrelated (waterborne diseases);
- to set up a policy framework for adaptation to the impacts of variability and climate change on water resources.

To address these challenges, Benin's Government, through its Ministry of Energy and Water (MEE), initiated IWRM process supported by development partners including GWP, Netherlands, Germany and Denmark,. GWP supported in particular the process through PAWDII from 2005 to 2009.

#### 3. KEY ELEMENTS OF BENIN'S IWRM PLANNING PROCESS

While the relative length of the IWRM planning process, started in Benin at the end of the 1990s, might be regretted, they are key elements which enabled to make progress and obtain tangible results deserve special attention:

- commitment of the Beninese Government to recommendations from the international Dublin and Rio conferences (1992), resulting in Agenda 21 and the endorsement of IWRM by the international community;
- participation of the Beninese Government in the West African IWRM conference in Ouagadougou (March 1998), with the "Ouagadougou IWRM declaration" adopted by Ministers and Heads of delegations in charge of water resources management;
- participation of the Beninese Government in the development of the "West African Vision on

Water, Life and Environment for the 21<sup>st</sup> century" presented at the 2<sup>nd</sup> World Water Forum (March 2000, The Hague);

- commitment of the Beninese Government to the IWRM planning process since 1998, based on the results of the study on a national strategy for water resources management;
- establishment of CWP-Benin in 2001 and GWP's support through PAWDII launched during a national workshop chaired by the Minister in charge of water resources;
- capacity building activities (information, sensitization, communication, training) carried out by CWP-Benin, which allowed stakeholders to better understand water-related problems and IWRM principles;
- key role played by Netherlands's Embassy in Benin, which set up in 2006 a Multiyear Programme for Support to the Water and Sanitation Sector (PPEA), with a 5,242,311 € component to support IWRM development through a process managed by the General Directorate of Water and CWP-Benin;
- availability of other development partners (Denmark, Germany, France) to finance actions identified during the process, in addition to PAWDII funding;
- establishment by CWP-Benin, between 2004 and 2005, of Area Water Partnerships in the different regions of the country, to facilitate efficient and effective participation of local stakeholders in the IWRM planning process;
- development by CWP-Benin of a network of journalists on IWRM, now used as an operational mechanism for mobilizing general public and reinforcing political will for IWRM;
- planning process opened to all municipalities and key sectoral ministries;
- knowledge and credibility of CWP-Benin senior staff;
- continuous advocacy by CWP-Benin for maintaining and strengthening political will to make accelerated the process;
- existence of an operational Technical Commission of Experts (CTE) within CWP-Benin.

# 4. THE IWRM PLANNING PROCESS

Since 1998, Benin's Government has reaffirmed on several occasions its willingness to operate a transition towards IWRM approach, gradually through various reforms and programmes established. Initiatives undertaken by Benin before the beginning of PAWDII (August 2005) include:

- conducting, between 1996 and 1997, of a study on a national strategy for water resources management, which was validated by all stakeholders in February 1998. Benin Government then adopted the conclusions of the study, in particular the recommendation to take integrated approach to water resources management;
- development, in dialogue with all stakeholder and with GWP's support, of a long-term national Vision for water resources management by 2025, presented at the 2<sup>nd</sup> World Water Forum (The Hague, March 2000);
- organisation of the 1<sup>st</sup> National Water Forum in January 2001,;
- Organisation in September 2001 of Benin-CWP's statutory General Assembly;
- adoption of the first Budget Per Objective Programme by the Ministry of Mines, Energy and Hydraulics (2002-2005), which stressed the need for a formal dialogue framework in order to guarantee equitable and sustainable management of water resources in accordance with established rules;
- publication in January 2004 of a situation analysis report on the legal and institutional framework of the water sector;
- development of a new strategy for drinking water supply sub-sector in rural area (Strategy AEP 2004-2015) which takes into account IWRM principles and decentralization context, through the preparation of mechanisms to transfer competences and resources to municipalities;
- establishment in September 2004 of a Technical Permanent Secretariat for Coordination and Promotion of IWRM (STPC-GIRE) within the Ministry of Mines, Energy and Hydraulics;

proposition of an institutional framework to conduct the reforms towards IWRM: the framework for Promotion and Coordination of IWRM (CPC-GIRE), that Secretariat is hosted by STPC-GIRE.The intermediate objective of the IWRM process is to have an national IWRM action plan, supplemented by a portfolio of investments projects.

# 4.1. Beginning of IWRM planning process in Benin

Benin formally engaged in IWRM planning process through the Kouhounou Declaration, dated February 1998. However, despite good appreciation of the actions engaged in favour for integrated water resources management, the political will that is important to make progressed the process was not obvious before Johannesburg's WSSD of 2002.

#### 4.1.1. Process

The starting point of the IWRM planning process in Benin remains the February 1998 Kouhounou declaration, through which Benin's Government committed itself to elaborate and implement national IWRM action plan. With support from PAWDII, Beninese IWRM planning process was revived through:

- active and constant advocacy actions conducted by CWP-Benin 's senior staff that targeted the main sectoral ministries involved in water management and its uses (water, environment, agriculture, transport, decentralization, tourism, etc.) and towards other governmental institutions staff, for strengthened political will;
- sensitization for effective awareness of water resources management issues, aimed stakeholders, decision makers and managers at

various levels, through workshops organized at national and sub-national levels;

- signature of a draft agreement defining the roles of the Government, GWPO, GWP/WA and CWP-Benin within the framework of the IWRM planning process;
- establishment of a Steering Committee cochaired by the Ministry in charge of water resources and CWP-Benin;
- setting up of a multi-stakeholders and multidisciplinary platform for concerted actions in water sector;
- definition of an IWRM roadmap, by all stakeholders together with the Ministry in charge of water resources, in accordance with IWRM planning cycle developed by GWP.

The official launching workshop of PAWDII, chaired by the Minister in charge of water resources and a representative of Technical and Financial Partners (Picture 1), was held in Cotonou, on 11-12 August 2005, that followed: i) a sub-regional launch meeting of the programme in Nairobi (Kenya), on 14-18 March 2005; and ii) a pre validation workshop of IWRM roadmap held in Ouidah, on 5-7 May 2005. The launching workshop was attended by more than 70 participants, representing key sectoral ministries involved in water management and its uses; Technical and Financial Partners (Netherlands, Denmark, GTZ, AFD, CTB, etc.); Benin Electric Community (CEB), universities and research institutes; local communities; CWP-Benin Area Water Partnerships; Water Users' Associations (WUA); national and international non-governmental organisations (NGOs); and consulting firms of the private sector (Pictures 2, 3 and 4).



#### Picture 1: Opening ceremony of the PAWDII launching workshop in August 2005



Picture 2, 3 and 4: Participants to the plenary and working group sessions during a PAWDII workshop

#### 4.1.2. Main results

Concerns from all stakeholders were taken into account in the definition of IWRM roadmap as well as in setting up of the organisational mechanisms for its management, through advocacy and awareness campaigns carried out by CWP-Benin. Therefore, the political support, though weak at the beginning, soon became very effective and determining for achieving commonly agreed objectives.

#### 4.1.3. Lessons learnt

- It is necessary to register any activities related to national IWRM action plan development within the framework of the global national IWRM process.
- Advocacy for strengthening political will for supporting the process must be seen as a transversal and on-going action throughout the whole IWRM process.
- Defining the role(s) of key stakeholders is essential for smooth implementation of process. This need must be addressed during the preparation phase.

#### 4.2. Water situational analysis

#### 4.2.1. Process

Before the starting of IWRM planning process, the water sector was almost unknown to most stakeholders. Various studies linked to water situation analysis were needed to better understand

and appreciate water-related issues. The most important studies include:

- study on national strategy for water resources management (1996-1997);
- study on analysis of the legal and institutional framework of the water sector (2002-2003);
- study on development of a training/capacity building plan for water stakeholders linked to IWRM principles promotion in Benin (2006);
- studies on water resources management and its uses, completed by definition of priority local actions based on IWRM approach (2006-2007);
- complementary thematic studies on water situation analysis (2008-2009):
  - Part 1: Economic and financial mechanisms of IWRM, translated and integrated in the national water law;
  - Part 2: Legal and institutional reforms of IWRM, translated and integrated in the national water law;
  - c. Part 3: Capacity building plan and additional measures for efficient and effective implementation of IWRM-related reforms in Benin;
  - Part 4: Assessment of water information dissemination and definition of adequate mechanisms for trans-sectoral coordination, management and use of water information;

- e. Part 5: conflicts and risks related to Water in Benin.
- Study on gender and IWRM in Benin (2008-2009);
- Study on macroeconomic framework of the water sector in Benin (2009).

These studies were all conducted under the supervision and management of a Steering Committee, made up of resource people with proven experience, which ensured good-quality reports. The reports of the studies were all validated during workshops that gathered all relevant stakeholders (representatives of sectoral ministries, both from the central level and decentralised bodies; local communities; private institutions; non-governmental organisations; and water resources users at various levels).

#### 4.2.2. Main results

The studies conducted from 1996 to 2009 on assessment, management and use of water resources in Benin highlighted the strengths and weaknesses, as well as the opportunities and threats, of the water sector in Benin.

The weaknesses include:

- an institutional framework in contradiction with the principles of good water governance with multiple decision-making centres; overlap of competences and roles, resulting in conflicts; sector-based management; lack of dialogue and mechanisms of conflicts regulation between various stakeholders;
- a legal framework made up of inappropriate enactments and acts, ignored by all socio professional categories of stakeholders, due to their high level of analphabetism, and poor communication or dissemination;
- lack of knowledge on the quantity and the quality of water resources;
- lack of management tools and decision-support mechanisms;
- unequal space and time distribution of available water resources and very their low level of development;

- weak coverage rate of drinking water supply to meet the needs of urban, rural and semi-urban populations;
- chronic shortage of qualified human resources.

These various studies were complemented by recommendations aimed for building the foundation for good water governance. They constitute the basic elements used to identify the main actions of the national IWRM action plan.

#### 4.2.3. Lessons learnt

- The administrations in charge of procurement processes and launching of studies need smooth operational procedures, if deadlines for submission and validation of reports are to be respected.
- Likewise, involvement of stakeholders with proven experience and competence in validation workshops is capital, if the quality and credibility of the results are to be guaranteed.

# 4.3. Drafting the national IWRM action plan

#### 4.3.1. Process

After the main baseline studies (water situation analysis and complementary thematic studies) were completed, the drafting of the national IWRM action plan for Benin proceeded, through the following steps:

- The Ministry in charge of water through General Directorate of Water (DG-Water) set up a Drafting Committee made up of national experts coming from relevant ministries, civil society, universities. private sector and nonorganisations. governmental National consultants funded through PAWDII were accompanied in the drafting process by 2 international consultants from DHI recruited by DANIDA:
- The main issues identified in the various situation analysis studies were analysed and ranked based on the WRIAM method (Water Resources Issues Assessment Method) during a two-day workshop attended by national experts as well as the national and international drafting consultants (Pictures 5 to 7);

Thematic sub-groups were formed, taking into account IWRM pillars as developed in GWP Toolbox. These groups debated on various water resources management themes and came up with proposals for actions which were amended, corrected and validated, first in an internal workshop between national experts and second together with the national and international drafting consultants. Several meetings of the thematic sub-groups, knowledge-sharing and pre-validation workshops were held from September 2009 to January 2010;

A first draft of the national IWRM action plan was developed. In order for grassroots communities to better contribute to the process, the report was also examined during 6 regional workshops.



Picture 5 to 7: Participants in the workshops on validation of water situation analysis report (January 2007) and application of WRIAM method (September 2009)

#### 4.3.2. Main results

Benin's draft national IWRM action plan resulting from this process consists of two volumes:

- Volume 1: synthesis of the needs assessment in water resources management and appendices made up of reports of all the thematic studies initiated in the context of the IWRM planning process.
- 2. Volume 2: comprising six parts:
- 2.1 General introduction;
- 2.2 Justification, synthesising the results of the needs assessment and highlighting the water quality and quantity issues, water-related risks, environmental resources management issues, etc.. The justification section also presents the strengths and weaknesses of Benin water resources management;
- 2.3 Identification of actions and their implementation in the field, which establishes linkages between the management framework weaknesses, the vision and strategic orientations formulated in the water policy document, and the national development objectives;
- 2.4 Total budget of the plan and budget per activity;
- 2.5 Implementation modalities;
- 2.6 Appendices
  - a) Outline of IWRM principles;
  - b) Presentation of WRIAM method, to rank the main water resources management issues identified;
  - c) Detailed compilation of proposed actions (justification, objectives and expected

results, beneficiaries and implementing agencies, budget, etc);

d) Synthesis of the budget per activity.

water resources management approach The envisaged in the national IWRM action plan uses the basin as management unit. The four major hydrographical basins in Benin (Mono-Couffo, Ouémé-Yéwa, Niger and Volta) are transboundary, Niger and Volta bassins already endowed with a management authority (sub-regional institutional Steps are envisaged to establish bodies). transboundary management body for other two bassins. They are shared with Togo (Mono-Couffo basin) and Nigeria (Ouémé-Yéwa basin).

The plan has a 15 years prospect. It is structured in three phases, the first one concerning actions suggested and planned over the next 5 years. It is obvious that all actions, according to their kind and importance, have neither the same importance nor the same implementation period. Some actions, in particular those related to the general framework within which other actions will have to be carried out (governance framework and implementation of the water resources management law for instance) should urgently be implemented during the first years.

The cost of all suggested actions is estimated at 15 billion FCFA (22,410,000  $\in$ ) over the period 2010-2014.

#### 4.3.3. Lessons learnt

Relative abundance of water resources should not overlook the need for planning and rational management of these resources, for supporting national development needs. It therefore becomes necessary to reorganize the institutional framework for water resources management following IWRM principles.

- Involvement of various structures in the planning process allows hoping easy implementation of the plan by sectoral stakeholders as well as its timely adoption by the Government. The involvement of Ministry of Finance and Economy, and that of Ministry of Planning and Development within the Drafting Committee help to create linkages between the national IWRM action plan and the Strategic Document for Growth and Poverty Alleviation in Benin, while the latter was being finalized for the period 2010-2014.
- Organisation of workshops out of the places of national experts residence contributed to better involvement them experts and, consequently, in respect of the timeframe for drafting the plan. In addition, the involvement of multi-field experts adds value to the quality of data analysis, and brings various dimensions to the draft report.
- The difficulties related to staff changes and mobility influenced the timing, because it was necessary to sensitize and convince each new official of the relevance of the process. CWP-Benin contributed enormously in that process, through on-going advocacy, sensitization, information and communication activities. For that purpose, CWP-Benin developed a capacity building and communication strategy, involving the media.

#### 4.4. The draft national IWRM action plan

Comments and observations resulting from the various stakeholders meetings were compiled by the national and international experts and integrated into a draft national IWRM action plan. The revised plan will be validated during a national workshop, followed by its submitting to Government for review and adoption.

The Ministry in charge of water will assign an Implementing Unit with the effective implementation of the plan. However, this unit will be built on existing organs of the Ministry, like the Directorate of Water Planning and Management (DPGE). The Implementing Unit will look for fundraising, as well as ensure good coordination of all activities. In addition to following the instructions of the various project documents (including tender procedures, etc.), the Implementing Unit will establish and maintain permanent contacts with various high-level stakeholders (water-related administrations, main water users, Inter-ministerial Water Commission, officials), including basin organisations and Technical and Financial Partners. In other words, this unit will play a key coordination role amongst all stakeholders, for a comprehensive and harmonious implementation of the plan.

A Steering Committee will be assigned with on-going monitoring of the progress made in implementing the plan. However, after the establishment of Interministerial Water Commission (CIE), it will be endowed with the role of monitoring good implementation of the plan. It is therefore envisaged that representatives of Technical and Financial Partners will be invited to attend CIE meetings, as they've already expressed their commitment to support the implementation of the plan.

CWP-Benin will work as a Steering Committee Advisor on various aspects relating to the implementation of the plan. It will also be associated to the Steering Committee 6-monthly meetings, in order to bring a broader perspective and complement to CIE members' administrative representation. CWP-Benin will also provide significant and useful support to the Steering Committee for promoting the plan amongst Technical and Financial Partners, as well as for fundraising and coordinating activities.

The plan will be periodically evaluated by an external auditor. It is suggested that external evaluations carried out by national, sub-regional and international consultants are planned every 2 years. Those evaluations will assess the progress made in implementing of the national IWRM action plan as regards planning, quality and sustainability of achieved results, completed with recommendations in order to solve any issued identified during the evaluation, or improve the overall process and its sustainability.

#### 4.5. Management of the process

In Benin, the management of the IWRM planning process was assigned to the Ministry in charge of water through a Management Committee (MC) comprising of:

- a) the Director General of Water (DG-Water) within the Ministry in charge of water (Chairman of the Management Committee);
- b) the Chairman of CWP-Benin (Vice-Chairman of the Management Committee);
- c) the Technical Secretary of CPC-GIRE (Secretary of the MC), that has now become Directorate of Water Planning and Management (DPGE);
- d) the Executive Secretary of CWP-Benin who is also PAWDII Coordinator (Deputy Secretary of the MC);
- e) the Director of Rural Engineering in the Ministry of Agriculture, Breeding and Fishery (member);
- f) the Director of Regional and National Development of the Ministry of Decentralisation, Local Governance and National Territory Development (member);
- g) one representative of the National Water Supply Office (SONEB) (member);
- h) one representative of the National Association of Municipalities (member);
- i) one representative of higher education and research institutions (member);
- j) one representative of non-governmental organisations working in water sector (member).

A framework has been set up for consultation of multi-stakeholders and multidisciplinary participation. It includes Ministry of Energy and Water Supply; Ministry of Agriculture, Breeding and Fishery; Ministry of Environment and Conservation of Nature; Ministry of Health; Ministry of Industry; Ministry of Decentralisation, Local Governance and National Territory Development; Ministry of Economy and Finance; Ministry of Planning and Development; Ministry of Foreign Affairs and African Integration; Ministry of Public Works and Transports; Economic and Social Council; higher education and research institutions; municipalities; civil society. The process was financed mainly by Technical and Financial Partners (the Netherlands, GWP, Denmark, Germany and French Development Agency).

# 4.6. Capacity building for water stakeholders on IWRM

Before PAWDII started in Benin, water stakeholders in general, including officials from different Directorates of sectoral Ministries directly involved in water management, had not enough knowledge about water resources management and IWRM principles. Some officials were often wondering "what IWRM is all about". CWP-Benin, through PAWDII, identified capacity building for water stakeholders as one of its most pressing priorities.

In that context, ten officials from governmental and non-governmental structures took part in October 2005 in a training for IWRM workshop facilitators, followed by local-level training workshops organized with support from Area Water Partnerships.

Following these initial trainings, several training on IWRM and related issues were organized at national level and in the different department with PAWDII financial support. Moreover, PAWDII funds made it possible to facilitate the participation of officials from various sectoral Ministries, CWP-Benin Executive Secretariat and members of Area Water Partnership in regional training on water conflicts (Dakar, 2006), economic and financial tools of IWRM (Ouagadougou, 2006 and Lomé, 2007), gender and IWRM (Ouagadougou, 2007, Thiès and Abidjan, 2009). Other relevant issues such as "results-based management and behavioural change process in the water sector" (Ouidah, 2006) have also been taken on board. CWP-Benin was able to put in place in 2006 an IWRM capacity building plan, aimed for Beninese water stakeholders. Since 2005, at least three officials of sectoral Ministries and Area Water Partnerships have been able to participate, each year, in the international IWRM training for West Africa, the first phase of which takes place in Sweden with a second phase organized in West Africa (Benin and Burkina).

CWP-Benin has been striving since 2005 to engage with school stakeholders by trying to integrate water-

related issues in primary school curricula. The process, lead by CWP-Benin and its traditional partner the Belgian international NGO PROTOS, took shape in 2005 with the editing of a school manual entitled "Water, Hygiene, Health" meant for pupils and teachers of primary school (CM1 and CM2) as part of the World Water Day celebrations (22 March 2005). In 2006, that manual was updated by officials of the educational system (primary school inspectors, headmasters, educational consultants

and teachers, as well as resource persons), and promoted amongst senior officials of the Ministry of Primary and Nursery Education. An updated version was published in 2008, including a foreword by the Minister. A partnership agreement was signed between the Minister in charge of primary education and CWP-Benin in order to ensure proper integration of the concepts developed in the manual into school curricula (Pictures 8-10).



Pictures 8 - 10: Teachers participating in a training session and a manual explanation session

To support this process, CWP-Benin developed a series of cartoons entitled "Houéfa's Adventures" (Pictures 11 and 12) which addressed different water-related issues in Benin. To date (2010), 4 issues have been published (8000 copies each) and

distributed to children on various occasions, as well as in schools. In order to evaluate the level of ownership of the manual and cartoons, CWP-Benin organizes every year some water competitions (pictures and sketches).



Pictures 11 and 12: School Manual "Water, Hygiene, Health" and Cartoon Issue 4 in the series "Houéfa's Adventures"

#### 4.7. Media involvement and participation in the IWRM planning process

Recognising the crucial role of the media in general public sensitization, CWP-Benin has developed since its establishment in 2001 a working relationship with journalists, by positioning them as key stakeholders for achieving water-related development goals. Then, on 26 October 2007, following a constitutive General Assembly, CWP- Benin accepted to support the process of formalising and strengthening a Network of Beninese Journalists on Water and Sanitation (RJBEA), established by some 40 journalists from different media (newspapers, TV, radio, etc.) and different parts of the country (Pictures 13 and 14).



#### Picture 13: RJBEA members at the constitutive General Assembly

CWP-Benin relied on that network to carry out various media campaigns, mainly for the adoption of the national water policy by the Government in 2009, the transmission by the Government to Parliament the request regarding the ratification of the 1997 United Nations Convention on Non-navigable Uses of International Watercourses, and the on-going advocacy for adoption by Parliament of a new water law.

In addition, the first media competition on water and sanitation, organized by CWP-Benin with connection of RJBEA, also contributed to building Beninese



## Picture 14: Participants in the Ouidah training session in December 2007

journalists' managerial capacities in view of their empowerment. Rewards are given as follows: 1 for audiovisual activities, 4 for audio activities in French, 1 for activities in local languages, 3 for written activities and 1 for cartoons. The office of each of the winners, in all disciplines, received some support between 1 October 2009 and 15 February 2010 for the production of journalistic works on water-relevant issues identified by partners (Pictures 15 to 19).



Pictures 15 - 19: Awards ceremony for the winners of the media competition on water, sanitation and IWRM

With that experience, RJBEA has gradually positioned itself as a key stakeholder in Benin and the sub-region. Its existence facilitates the documentation and dissemination of various aspects

of water-related issues in Benin, from the national level to the local level and vice-versa.

# 4.8. Integrating water-related issues in development planning and decision-making processes

The Management Committee of the IWRM planning process worked together with national structures to ensure that water, gender and climate changerelated issues are all integrated into national development strategies and policies. Priority was given to the Strategy for Growth and Poverty Alleviation (SCRP), which is both a national reference document on Benin socio-economic and a two-way communication development document between the Government and Technical and Financial Partners. SCRP is a mechanism used to raise external resources and allows for aid coordination according to national priorities and under the Government's leadership.

The participation of the IWRM structures in activities carried out by the thematic groups developing SCRP2 (2007-2009) and SCRP3 (2010-2014) enhanced the level of integration of water-related issues and IWRM principles in the development orientations of the country. It should be noted that the first SCRP generation (2003-2005) focused more on water supply and sanitation issues than the following generations. That exercise also ensured better alignment of the IWRM plan objectives along with national development objectives as presented in the SCRP.

As such, SCRP 3 covers the scope of the national IWRM action plan, which emanates from the 4 strategic orientations of the national water policy adopted by the Government in July 2009. Those strategic orientations are as follows:

- strengthen the management framework by improving water governance;
- ensure an equitable and sustainable access to clean water and sanitation for urban and rural populations;
- ensure water availability, in quantities sufficient for all economic activities; and

ensure health, human security, and the conservation of aquatic ecosystems.

SCRP 3 in Benin considers the water sector as an economic development factor. As such, sustainable water resources management as well as better access to water services for all uses have been regularly defined as one of the core priorities of SCRP 3 (2010-2014).

# 4.8.1. Integrating a gender approach in national development policies and strategies

The 3<sup>rd</sup> IWRM principle places women at the heart of water management. However, one observes that the gender approach is usually not adequately captured in water-related development projects and strategies.

CWP-Benin has therefore been striving since 2007 for the promotion of a gender approach, through efficient and equitable water resources management. Its resource persons participated in a training session on gender and IWRM organized by GWP/West Africa. CWP-Benin also developed a Memorandum of Understanding with Gender and Water Alliance (GWA) network for the organisation, in September 2008, of a training session on crosscutting integration of a gender approach in IWRM in Benin. That training session brought together 40 participants representing the central and technical directorates as well as decentralised services of sectoral Ministries (Economy and Finance; Water Supply; Higher Education; Agriculture, Breeding and Fishery: Environment; Regional and National Development; etc.), national, sub-regional and international NGOs, consultant firms, development socio-professional associations, projects. local communities, journalists, Technical and Financial Partners (Pictures 20 to 23).



Pictures 20 - 23 : Participants in gender training (plenary, break-up sessions and field visit)

The training session allowed participants to provide inputs to on-going reflections in Benin, in order to facilitate integration of gender approach in the activities identified in the national IWRM action plan and implementation of national development orientations. At the end of the training session, each participant had developed an action plan for gender and IWRM promotion in his/her organisation or field/sector of intervention.

As part of PAWDII, a thematic study was facilitated on integration of gender and IWRM approaches in development programmes, projects and strategies in Benin. The outcomes of that survey revealed that socio cultural realities make the most vulnerable communities in general, and women in particular, secondary importance. partners of Although guarantors of the key roles of supplying and using water, vulnerable communities are generally absent, or very far away, from decision-making centres. The consequence is that, in order to respect social equity and justice, lack of knowledge and illiteracy must be harshly fought against, and the current methods of diagnosis, initiation, conception and establishment of development projects must be completely reviewed.

## 4.8.2. Integrating climate change in national development policies and strategies

Realising the challenge posed by climate change on water resources and their uses, CWP-Benin engaged with the Ministry in charge of Environment as early as 2005 to facilitate a regional dialogue between West African experts. The advocacy carried out by CWP-Benin was favourably received by the Beninese Government. In that context, was organized in Cotonou (Benin) on 6-9 June 2007 a regional Conference on climate change and extreme weather variability in Sub-Saharan Africa on the topic "Impacts on natural resources, consequences for research and decision-making processes". The recommendations from the Conference, endorsed by the Government of Benin through a Council meeting decision, emphasises among others the need to:

- strengthen and extend climate observation networks in order to ensure reliable, exploitable and regularly updated data;
- increase financial resources and develop effective weather forecast systems for the implementation of the National Adaptation Action Programme (PANA);
- integrate climate change issues in development plans and programmes at national, regional and local level, including the national IWRM action plan;
- support relevant structures for documenting and disseminating information on extreme meteorological and climatic phenomena, through in particular dynamic cooperation between governmental structures responsible for climaterelated issues and research institutions;
- set up a multi-risk, rapid prevention and warning system for the management of risks linked to extreme events and climate change;
- increase the financial allocation for climate change adaptation in the national budget;
- integrate climate change issues in educational curricula;
- institutionalise of a meeting every 3 years in order to take stock of the implementation of emergency measures and to establish a monitoring mechanism.

Due to the political interest resulting from the Conference, the Government initiated in November 2008, with support of Economic Community Of West African States (ECOWAS), a regional climate change dialogue between West African States. One

of the advantages stemming from that dialogue is the creation of a Weather Forecast Centre with technical and financial support from Germany. The 2<sup>nd</sup> regional conference on climate change was held in Cotonou, from 15<sup>th</sup> to 17<sup>th</sup> February 2010.

## 4.8.3. Area Water Partnerships' contribution to the IWRM Planning process

The setting up of Area Water Partnerships through PAWDII increased CWP-Benin visibility in the field and encouraged the involvement of local structures, including municipalities. These decentralised representations of CWP-Benin played a major role in facilitating the participation of various stakeholders throughout the process. As such, representatives from different regions of the country were able to participate in the process, through training sessions as local and national workshops. Their experiences and perspectives were considered by the experts who conducted the baseline studies.

# 4.9. Synthesis of the outputs and lessons learnt from the process

The major results of the programme include:

- establishment of a comprehensive inventory of the water sector in Benin, through water-related political, institutional, legal, regulatory, technical, economic and socio-cultural studies;
- development t of a real political will in favour of IWRM, resulting from efficient and sustained advocacy of CWP-Benin;
- setting up of a consultation framework between main water stakeholders, both from the public administration and civil society;
- development and adoption of a national water policy by the Government;
- development and transmission to Parliament a draft water law;
- inception of a process of integrating IWRM principles in various educational system in Benin in general, and in primary school in particular;
- training and capacity building of water stakeholders, from all socio professional categories;
- development of different thematic case studies likely to influence water resources management

with a view to sustainably establishing good governance.

The lessons learned from this planning process are:

- the mobility of administration staff, in particular leading staff, leads to delays in the planning process;
- the activities related to iinformation, sensitization and training on IWRM are of paramount importance for capacity development of water stakeholders throughout IWRM planning process. GWP, through GWP/WA and CWP-Benin, has played an important role for building local capacities;
- the participation of the media broadens the audience of stakeholders reached by information and awareness activities. In addition to ensuring visibility of the activities developed during the planning process, this also contributes to the emergence of journalists specialised in water, environment and IWRM-related issues;
- the over-politicization of the administration does not facilitate the neutrality and impartiality that should characterise the activities;
- the harmonization of perception and understanding of the planning process, the real expected objective(s), the methodological approach, amongst officials responsible for facilitating the process is essential. This need special attention and enough time for avoiding difficulties ;;
- any legal and regulatory text developed without appropriate participation, and expected to be enforced irrespective of indigenous customs and traditions, is unlikely to be successful
- the harmonisation of PAWDII with the water reform process in Benin as a whole allowed for a sustainable IWRM planning process, through support from traditional Technical and Financial partners;
- it is important to articulate the objectives of the IWRM planning process with national development goals through functional relationships with officials from the Ministries in charge of development, economy and finance

#### 5.0 CONCLUSION AND RECOMMENDATIONS

In spite of delays in the effective start of the national IWRM action plan development process, strongly supported through PAWDII, determination from various stakeholders contributed to achieving tangible results. The setting up of new structures constitutes one of the core priorities for effective implementation of the IWRM action plan.

The drafting of the plan was finalized and came up with several major recommendations:

- continue to build the capacities of all stakeholders for effective IWRM implementation in the country;
- invest more in setting up facilities, infrastructure and equipments needed for collecting and processing quantitative and qualitative, spatial and temporal data on water resources, as well as for regular update of operational database;
- ensure the unwavering support from Government and Technical Financial and Partners, and their sustained commitment to IWRM, through strengthened collaboration with the media for on-going coverage of water resources management issues;
- maintain and strengthen regional and international cooperation, in particular at the level of shared basins, in order to set up management tools and consensual decision support mechanisms, with a view to ensuring the cohesion and synergy needed for the sustainable management of water resources and dependent ecosystems in those basins;
- support integration of IWRM at different academic levels of the educational system and invest in training, capacity building and specialised courses for a qualified staff;
- Set up and implement a new institutional framework for IWRM, including operational monitoring and evaluation bodies with sufficient means for regular monitoring of the implementation of the national IWRM action plan;
- maintain support from GWP to the IWRM implementation process through new programmes yet to be defined.

#### **BIBLIOGRAPHY**

CWP-Benin et al, Benin blue book « Water, life, human development », 2008, 90 p
DG-Eau, National water policy document, 2008
DG-Eau, National water supply strategy in rural areas in Benin, 2005
MEE, Draft law for water management in Benin
MEE, Thematic report of SCRP sectoral group on water and sanitation, 2009, 22 p.
MISP, Texts of laws on decentralisation in Benin, 1999
MSP, Sanitation code, 1987, 48p
MSP, PHA implementation document, 2006, 70p
MSP, National sanitation policy document of Benin, 1995
MSP, National hygiene and sanitation policy document, 2002, 82 p