Towards Integrated Water Resources Management in Municipalities A case study of SNV Benin

March 2006 José Hoogervorst Nampula, Moçambique

Executive summary

Early 2004 SNV Netherlands Development Organisation and the Partenariat National de l'Eau (PNE - National Water Partnership) established a partnership in Benin. The objective of this collaboration is twofold: on the one hand to assist the PNE with the integration of gender aspects¹ and on the other to strengthen capacities of locally elected leaders to mainstream an Integrated Water Resources Management (IWRM) approach. IWRM is defined as an approach that promotes the coordinated development and management of water, land, and related resources². It should substantially reduce and/or avoid problems with water and sanitation. One year after the start of the partnership between SNV and PNE, we can report the first, preliminary, results:

- organisational development: increased awareness and capacity at municipal level to adopt and formulate actions for integrated water resources management;
- capacity development: increased integration of IWRM in Development Plans;
- collaboration between stakeholders at municipal level: increased awareness of elected councillors regarding the need and importance of intermunicipal collaboration (in particular, but not exclusively, for water issues).

Context

Since the first local elections took place in Benin (December 2002), the councils in the 77 municipalities ('communes' in the denomination of Benin's administrative system) became responsible for the provision of water to their inhabitants. Previously, the Directorate of Hydraulics (national/ministerial level) and the Hydraulics Services at department level (more or less equivalent to provincial level) were responsible for executing and coordinating activities in the area of water and sanitation.

Yet, although considerable efforts were made to improve the water and sanitation situation, still less than 50% of the rural population has regular access to safe water (DGH, 2004). Some of the persisting problems regarding access to water and sanitation are:

- frequent breakdowns of water points and long delays before they get repaired (if at all) have often lead to neglect of the system (Hartmann, 2001).
- carrying water is a time-consuming task, mostly carried out by women and girls (Hadjer, 2005).
- water borne diseases and other health problems due to lack of access to safe water.
- many sources are threatened by contamination (Heidecke, 2006) among others because of high amount of fertilizer and pesticide used (in particular for cotton production).
- little influence of local population (on decisions like choice of technology, etc.).
 Programmes do exist to mobilise community members for the (financial) contribution to be made, but these do not always have the expected result. User committees do not always exist and / or function in an adequate way.

¹ As this paper case concentrates on the collaboration between SNV- and PNE-Benin in the area of IWRM, the gender component will not be mentioned specifically.

² Definition by the Global Water Partnership: "An IWRM approach promotes the coordinated development and management of water, land, and related resources, in order to maximize the resultant economical and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (GWP; 2004, p.7).

 very little or no coordination between the various institutions involved in decision making.

These main problems affect various sectors like water and sanitation, agriculture, health. A general problem with a sector approach is the inclination to look exclusively at the interests of one sector and not necessarily to the consequences and interests of other sectors. Therefore a coordinated intersectoral approach, involving various stakeholders and interest groups, is more likely to contribute to the solution of these issues than isolated sectoral efforts.

A coordinated intersectoral approach is one of the principles of IWRM. Also the integrated management foresees to avoid future problems as it gives considerable attention to possible consequences and results of decisions and measures taken. Another important aspect of the IWRM approach is participation of stakeholders like the users. Direct involvement of stakeholders is expected to improve effectiveness and sustainability, as they can draw attention to their needs and interests.

In Benin politicians and hydraulics engineers at national level recognised the importance of an IWRM approach. At lower administrative levels knowledge of the approach was limited, thus was recognition. The national branch of the Global Water Partnership (PNE), established in 2001, lobbied for and promoted the "coordinated development and management of water, land, and related resources, in order to maximize the resultant economical and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (IWRM approach; definition GWP, 2004). One of the actions of the PNE was to actively support a dialogue between stakeholders, users, engineers, council members etc., in order to ensure a coordinated use and development of water resources.

Lack of knowledge and capacity

Despite efforts by government and NGOs, the provision of water is still in short supply. As a consequence, the newly elected municipal councils were faced with a huge task. Most of the elected councillors had no experience with issues related to water and sanitation, elaboration of development plans, budgeting, and so on. On the subject of water and sanitation facilities, the municipalities could request technical assistance from the hydraulics division at department (province) level. Most engineers were, however, not familiar with an IWRM approach and only a few with participative methods. Though some engineers realised that the development and use of water resources could not be dealt with in isolation of the exploitation of available water sources and the multiple - often conflicting - interests of its users; they were unable to take this into account due to unfamiliarity with the approaches and methodologies. As a result the wider implications of activities and decisions on water use did not receive due attention.

SNV Benin has been active in the water sector for many years. Like some other NGOs active in this field, their present approach is based on community participation, mainstreaming gender and environment. However, no particular attention is given to mainstreaming IWRM.

SNV Benin and PNE support locally elected leaders

Early 2004 SNV started a partnership with PNE Benin with the main objective to on the one hand assist PNE with the integration of gender aspects in its activities and, on the other to strengthen capacities of locally elected leaders for mainstreaming IWRM. One SNV advisor was directly involved in the cooperation with PNE (as a member of their technical committee).

At the time SNV Benin was already working with a substantial number of municipalities, giving advice on how to elaborate the development plans (later to be followed by advice during the implementation phase). Most of the municipal plans (at least those elaborated with SNV assistance) contained elements of water and sanitation, but not in an integrated way. A plan would, for example, mention the need to construct a certain number of waterpoints, but would not point out the links with other facets of water use and/or the potential multiple uses of the water. Little or no attention was paid to the management aspects at various levels. To fill this gap, SNV and PNE decided to join forces in order to promote the IWRM approach at municipal level and to reduce the lack of knowledge and methodology.

In the given situation, where municipalities were in the process of elaborating their Development Plans, including elements of water and sanitation, it made sense to take the opportunity to use the Plans to mainstream IWRM. It was agreed that, in broad lines, PNE would bring in technical experience regarding IWRM. SNV would, during the process of elaborating and implementing the five-year plans, draw attention to the need for IWRM.

The methodology proposed by SNV adhered to the principles of community participation. Consultations, organised at local level in order to give people -women and men alike - the opportunity to have their say, were an important part of it. Needs and priorities of the population were assessed and taken into account. Another important reason for promoting this approach was the involvement of people at different levels, so that the councils would be held accountable for the implementation of the plan.

One of the first main activities in the framework of introducing an IWRM approach in the five-year Development Plans was the organisation of a workshop on IWRM and decentralised management of water issues. This two-day workshop was held in March 2005 in Parakou (Centre - North of the country) and targeted elected local leaders. Advisors from SNV participated as well, both to upgrade their knowledge on the IWRM approach and to follow up on decisions made. One of the conclusions of the workshop was that there was indeed a need for the elected council members to increase their knowledge and skills in the area of Integrated Water Resources Management and to get advice as how to integrate this in the Development Plans.

Workshop participants observed: "in general, the Development Plans partially take into account issues related to water, but not in a structured way". And: "we pay attention to water and sanitation in our Development Plans, but we need assistance in order to learn how to deal with conflicting users interests".

During the workshop attention was drawn to the fact that, in particular for adequate management of resources like water, cross-border intermunicipal collaboration and exchange is vital. Because of this and also because of the fact that not all municipalities were represented (mainly for logistical and financial reasons) the participants were encouraged to contact neighbouring municipalities and actively collaborate with them. Then a multiplier effect may occur and thus increase the adoption of an IWRM approach.

Elected local leaders that participated in this workshop were assisted by SNV and PNE advisors, in particular in the areas of:

- identification of specific water challenges facing their municipalities and how application of an IWRM approach could be useful in dealing with those;
- assessment of the extent to which these water challenges are sufficiently incorporated in the Development Plans;
- identification of the specific needs (especially capacity building) by the targeted communities to ensure that water issues and an IWRM approach are properly

taken into consideration in the formulation as well as in the implementation of the Development Plans.

The results after the first year of collaboration

The described initiative for promoting IWRM has only taken off one year ago. At the time, the municipalities that had effectively started implementing the Development Plan were few. Many of them were still busy finalising the Plan, getting it approved and mobilising additional funds. For these reasons the results mentioned are preliminary.

Most of the Development Plans already made reference of water and sanitation aspects, mainly concentrating on increasing the number of facilities. In general there was little or no attention for the possible consequences of these proposed actions. As a result of SNV and PNE's assistance, the insights in linkages and possible consequences improved. Members of the councils increasingly became aware of the connections between various factors such as the use of pesticides for crops and water contamination and decrease of water table as a result of increased number of water points.

Some preliminary results of the work with municipalities:

- increased awareness and capacity at municipal level (organisational development) to adopt and formulate actions in order to apply an integrated water resources management;
- increased integration of an IWRM approach in Development Plans;
- awakened interest in intermunicipal collaboration: during the workshop, where councillors were debating on cross border issues, this was initiated. SNV and PNE advisors will continue to stress the importance of collaboration between municipalities.

Some expected results on the longer term:

- improved governance (in particular at municipal level) in the water and sanitation sector;
- reduced number of conflicts between multiple users;
- improved sustainable use of water resources.

In order to achieve these results, municipalities and other main stakeholders need to continue to dedicate attention to IWRM. Both PNE and SNV are committed to advise them in this process and to ensure attention for an IWRM approach. Colleagues, those who participated in the workshop and others, will pay follow-up visits and, together with PNE, assist the municipalities with this. The fact that decision makers at national level committed themselves to this approach and included it in national policies is also expected to be a positive stimulus.

Conclusion

The collaboration between the two organisations has proven to be a very fruitful one, benefiting the municipalities and its inhabitants in particular, as well as enhancing the knowledge of SNV and PNE Benin on IWRM and Local Governance respectively. The joint work of SNV and PNE with the municipalities has resulted in an increased awareness of the need for integrated water resources management. Joining forces meant that municipalities could be reached and trained in the importance of an integrated approach for water and sanitation.

It is clear however, that this is just a first step and that continuous follow-up, exchange of experiences and discussions will be necessary in order to improve the application of the IWRM approach by the municipalities and to improve the management of (water) resources. The fact that the municipalities have shown interest and have come to understand that IWRM is for the benefit of all is already very important. One of the main challenges will be to keep the momentum and to effectively apply an integrated approach.

Keywords Benin, capacity strengthening, IWRM

DAD: (one advisor, one year, collaboration with PNE) 30

References

Direction Générale de l'Hydraulique (2004) stratégie nationale de l'approvisionnement en eau potable en milieu rural du Bénin 2004-2015; Cotonou, Bénin.

GWP (2004) Catalyzing change: a handbook for developing integrated water resources management (IWRM) and water efficiency strategies. Norway.

Hadjer K., Klein T., Schopp M. (2005) *Water consumption embedded in its social context, north-western Benin*; in Elsevier / Physics and chemistry of the earth.

Hartmann P. (2001) *Rural water supply in Benin*; German Development Service, Porto Novo, Benin.

Heidecke C. (2006) *Development and evaluation of a regional water poverty index for Benin*; International Food Policy Research Institute (IFPRI), Washington, USA.

IMPETUS project. www.impetus.uni-koeln.de

Moriarty et.al. (2004) *Integrated Water Resources Management*. And the domestic water and sanitation sub-sector. IRC, Delft, The Netherlands