IWRM Action Hub

CASE STUDY

Vietnam: IWRM principles strengthen sustainability of rural water supply and sanitation

Summary

Half of the land area of Tien Giang Province in Vietnam is exposed to annual floods and the other half to saline intrusion. Action was taken to formulate the National RWSS Strategy and efforts were made to make local communities aware of methods and approaches in harvesting water and well drilling that are cost effective and sustainable in their development. The key lesson learnt is appropriate planning prior the project.

Background

Tien Giang province is located in Cuu Long Delta (the Vietnamese part of Mekong River Delta) in South of Vietnam. Two large rivers, Tien (Mekong mainstream) and Vam Co Tay, and a number of canals formed a dense (0.27km/km^2) network of waterways. The population is 1,635 million, of which 85% are rural and 70% engaged in agriculture. The province lies along the main road connecting Ho Chi Minh City and southwestern provinces, so its socio-economic conditions are quite well developed. The average GDP growth rate is approximately 9.5% per year, with business concentrated in agriculture, fisheries, processing industries, construction and services. People mainly live along the roads, rivers, canals and coastal lines, which have favourable conditions for economic and transport development. Half of the land area of Tien Giang Province in Vietnam is exposed to annual floods and the other half to saline intrusion. Traditional sources of domestic water - rivers, canals and ponds - are naturally polluted by alluvium acidity and salinity, and also by human/animal excreta and other wastes. Water related diseases have been very serious in the Province. Tien Giang rural residents were inspired to develop their own water sources when they saw how UNICEF supported the drilling of wells to supply fresh and clean water to communities. They followed this example and dug individual wells, but without any resources planning. The first real impact was disastrous. The water quality from

the shallow wells was so bad that the water was undrinkable. The wells were abandoned, and their assets lost. A more serious impact was encountered when these abandoned wells were not closed properly, resulting in aquifer deterioration that affected a widespread area. The limited national and provincial budgets prevented rehabilitation and support to these areas.

Actions taken

In Tien Giang, the Provincial RWSS Program had the objective to target 80% coverage of water supply and 50% coverage of hygienic latrines by 2005, thus contributing to poverty alleviation and rural development. The formulation of the National RWSS Strategy (in 1998) provided a good opportunity for the Province to effect changes. Within the wider context of all economic activities, the affected communities were made aware of methods and approaches in harvesting water and well drilling that are cost effective and sustainable in their development. After three years, Tien Giang Province manages both surface and groundwater resources, ensuring water supply for 50% of rural population (nationwide proportion access to potable water is about 35%).Tien Giang worked out options on water supply such as, rainwater harvesting till 2010 as well as to rehabilitate and upgrade existing deep wells, connect them in order to expand the serving scope. The Province and the communities worked through self-help, without any external support.

Key components of the strategy included:

- A participatory approach, throughout project planning and implementation,
- Technical support from the provincial government,
- Appropriate financial policies for poor and difficult areas,
- Establishment of water user groups, with the legal entity to hold, manage and operate facilities,
- Training and educating for water user groups so that they have enough ability to make plans, choose technology, manage the water resources and the environment.

Outcomes

Tien Giang has not received any external assistance after the UNICEF program has been completed in 1988. The province was not considered poor enough for eligible to the Government poverty alleviation support program. Through its own rational investment policies, Tien Giang managed to develop 415 pipe-water supply structures by the end of 2002. The rural water supply coverage reaches 65% of the population.

Though the number of structures increased quite quickly, Tien Giang has still been able to responsibly manage the exploitation of water resources. In the Tien Giang area, there are no longer illegal users of water resources. All drilling activities without permits are considered illegal and are handled accordingly.

The case shows how good planning leads to efficient use of water resources, and the integrated approach has led to a harmonious and equitable share of economic and social benefits among communities: all people have clean water for use and improved their life quality by their own contribution. The management of sanitation, domestic waste and rural waste production has contributed to good water quality and preservation of eco-systems.

Lessons Learned

RWSS is considered as a useful point of departure for poverty elimination and rural development, and achievements from RWSS motivates other social efforts.
Information, education and communication (IEC) activities are essential to communities, local authorities, technical and credit agencies.

Water resources for RWSS are of small quantity and dispersed in nature, mainly related to groundwater and the monitoring of which is very weak. Therefore, development must be integrated within integrated regional and basin planning to avoid negative environmental impacts.

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