In most cases, LGUs provide counterpart funds, a scheme in which both the national government and local government share accountability to the project.

What is the role of the BSWM in the development and maintenance of SWIP?

Prior to the project planning and development, the BSWM undertakes initial identification and selection of proposed project sites, reconnaissance survey and investigations of selected project sites; topographic mapping, soil survey and investigation; geologic investigation and socio-economic survey are undertaken to collect the necessary data or inputs for the subsequent technical and financial/economic feasibility studies.

Selected sites then undergo a series of studies to determine their technical feasibility, economic viability, social acceptability and environmental impact. The results of these studies serve as the basis in making priority rankings of projects for implementation.

The BSWM also provides technical trainings to LGU staff as part of its program on capability building and creation of enabling environment at the local level. The LGU is responsible in the "right-of-way" negotiation with affected farmers and in the provision of agricultural support services to the project beneficiaries. In collaboration with the LGU, the BSWM also provides trainings to farmer-beneficiaries on the Operation and maintenance of SWIP systems. The farmer-beneficiaries are then organized into an association which is duly responsible in the project O & M. In some cases, farmers provide labor counterpart particularly in the construction of canal and canal structures.

What is the prospect and future of Small Water Impoundments?

The country has varied physical and climatic characteristics that suit the environmental requirements of individual project. The nationwide demand for SWIP and the limiting prime agricultural lands that led to the agricultural cultivation of higher slopes call for a more sensitive and carefully planned implementation of these structures.

As the rainfed farms, particularly those situated in sloping/undulating areas are not serviced by the National Irrigation Administration (NIA) systems, the development of small-scale, on-farm type rainwater storage facilities like SWIP may address the situation.

The nationwide acceptance and recognition of these projects as manifested by the continuous requests from direct and indirect beneficiaries, clearly suggest their appropriateness and usefulness. Substantial demand for SWIP is particularly evident in areas with distinct wet and dry season and in rolling topography. The collected and stored water is more useful during dry season as this serves as the only source of water for crop production. Added incomes from fish and livestock production are also derived from these facilities.

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TIDS 2008

Department of Agriculture
BUREAU OF SOILS AND WATER MANAGEMENT

SMALL WATER IMPOUNDING PROJECT (SWIP)

Pagyamanin: Lupa at Tubig
Laban sa Kahirapan

What is SWIP?

The Small Water Impounding Project or SWIP is a structure constructed across a narrow depression or valley to hold back water and develop a reservoir that will store rainfall and run-off during the rainy season for immediate or future use.

The Small Water Impounding Management Committee (SWIM) once headed by the Department of Public Works and Highways (DPWH) classified small water impounding projects as earthen dams with structural heights of not more than 30 meters and a volume storage not exceeding 50 million cubic meters.

In line with the provision of the Agriculture and Fishery Modernization Act of 1997 (AFMA), the Bureau of Soils and Water Management (BSWM) shall be responsible for the delivery of technical assistance in relation to dams 15 meters or lower.

What is the role of water impounding dams in soil and water conservation?

The SWIP has always been recommended as one of the mechanical measures to conserve soil and water in support to the general objective of effectively promoting the maximum utilization of and conservation of soil and water resources in upland areas. It could transform poor upland rural communities into more self-reliant and viable communities while harmonizing natural resources management and infrastructure development. More importantly, it also enhances the environmental services of agriculture in terms of flood mitigation, fostering groundwater recharge and sediment capture.

What are the uses of SWIP?

SWIP is more than providing irrigation to marginal upland areas. The Project facilitates multiple uses of stored water in terms of the following benefits:

- Provides water for supplemental irrigation, domestic purposes and livestock production in critical, less accessible upland areas and isolated, vulnerable resource-poor communities;
- Enhances upland productivity with strong sense of responsibility among farmers while ensuring environmental sustainability;
- Facilitates inland fish production through the culture of freshwater fish, shrimps, eels and other native freshwater species;
- Contributes in combating local malnutrition problems and helps in alleviating poverty in the uplands;
- Serves as strategic small-scale upland structure of flood prevention and control in high rainfall areas to ensure whole-year round agricultural production, and for soil and water conservation in areas with distinct wet and dry seasons to increase cropping intensity and enhance crop diversification;
- Enhances and facilitates recharging of groundwater and spring sources for domestic and other uses;
- Provides other environmental impacts such as maintaining important habitat for wildlife and biodiversity, thus, augmenting government efforts in protecting our environment; and

- Provides recreational facilities as swimming and picnic grounds for local rural communities.

Who can avail of SWIP? How do farmers benefit from it?

The farmers are the principal beneficiaries of this project. At the farm level, project benefits include increase cropping intensity and yield, facilitate growing crops other than rice (*i.e.,* crop diversification) and farm augmentation through the integration of fish and livestock production.

At the community level, the project contributes well in providing additional sources of income for water users and local people and in increasing labor demand within the rural community.

What is the effect of SWIP to ecology and the environment?

The long-term benefits of SWIPs to the environmental and ecological stability are flood control, reduced soil erosion/ sedimentation and water moisture conservation through agro-forestry development in the watershed.

Who are the implementors of the SWIP Program?

The technical staff for the SWIP Program consists of the Water Resources Management Division of the BSWM and the DA-RFUs. The SWIP is usually implemented in partnership with the LGUs that have the technical capability to implement such types of project.