



Van Cu Village, Huong Toan Commune, Thua Thien Hue Province

GENERAL INFORMATION

Van Cu village had Green Productivity (GP) implemented during 2000 and 2001 under the GP Integrated Community Development Program.

The main road from Huong Toan community to Van Cu is a section of National Highway 1A. The road system in Van Cu is in good condition and can be used even in the rainy season.

Some characteristics of the village are as follows:



Van Cu Village, Huong Toan Commune, Thua Thien Hue Province

Cultivated land: 75 ha. of the total land.

Population: 1642 people within 304 households.

Main production activities

Agriculture: 80% of the villagers

Rice vermicelli production: 66% of households in the village produce rice vermicelli. The gross output is one-third of the total demand for Hue and the neighboring villages.

Other: Pig farming

MAIN ISSUES

- Water pollution from sewage was the predominant issue. Of the 304 households within the village, only 30 had septic tanks while 50 had two-compartment latrines. Many of these latrines, however, were not hygienic. This, along with low standards of living and limited environmental awareness, was adding to the poor hygienic practices. Consequently diseases had suitable conditions to thrive in Van Cu, thereby affecting the health of the villagers and the hygienic standard of rice vermicelli.
- Waste from pigs causing water pollution in ponds and lakes was also an issue. With 70% of households owning five to fifteen pigs, waste generation was significant. However, the pigs fed on the starch waste from vermicelli processing and were thus important for the environmental sustainability of the village.
- The wastewater drainage system was limited. Wastewater from vermicelli production, domestic use, and animals was directly discharged into public ponds or onto the land, resulting in high pollution of both ground and surface water by organic matter. In addition, the main water source for vermicelli production is the Bo River. Its water was used without any treatment.
- Some of the solid waste from households was being deposited in public areas rather than the domestic waste compound, causing environmental pollution and aesthetic damage.
- An integrated model for rice cultivation, vermicelli production, and pig farming is popular in Van Cu. Yet, the agricultural productivity was low due to the high cost of pesticides and fertilizers. In addition, animal waste was not utilized for organic fertilizer or biogas production.

GP OPTIONS

GP was applied in this village to solve environmental pollution problems and to improve productivity. The village GP team has 25 members. Together with the VPC, the members developed the following options:

- (1) Provide training to the villagers to enhance their awareness of environmental protection laws and teach them how to implement such GP options as pretreatment of wastewater and animal waste treatment (composting, biogas).
- (2) Set up village-specific regulations for environmental protection and gain the commitment of the villagers to abide by these regulations. This could be achieved through a reward and fine system.
- (3) Implement a volunteer program entitled “help each other to construct a hygienic latrine.” The purpose of this program is to increase the number of hygienic latrines in the village. The VPC will initially fund the program; however, households wanting a latrine will contribute a certain amount of money per month to a fund until all houses in the program have latrines.
- (4) Construct biogas plants; 50% of the funding for the plants will be from the village and 50% from a sponsoring agency (APO, SIDA). In addition, composting methods will also be applied to some households.
- (5) Construct a treatment plant for wastewater from vermicelli production and pig farming within households. This wastewater will be treated separately from human waste. It will go through a



sedimentation and disintegration filtration system. Different filter materials will be used before the water is discharged onto the land.

- (6) Teach the villagers how to manage domestic waste. The course will teach them how to separate solid waste and how to compost organic waste. It will also teach them how to recognize solid waste that needs special treatment, such as old chemical bottles.
- (7) Conduct a training course on hygiene and good housekeeping in order to meet hygiene and safety requirements for food preparation. This course will be attended by the villagers from vermicelli-producing households.

IMPLEMENTATION AND RESULTS

- A six-day training course was conducted on how to implement GP options. Most people in the village attended the course. Through this course, most villagers became aware that they have a personal responsibility for environmental management. This knowledge made them more willing to participate in implementing GP options within the village. Group activities included solid waste segregation and plastic bag collection. All the villagers are now committed to meeting their environmental regulations.
- A program called “help each other to construct a hygienic latrine” was implemented. Five hygienic latrines were built during the program with technical and financial support from the VPC. Now, the villagers themselves construct latrines. It is expected that all participating households will have hygienic latrines within the next two to three years.
- Two water treatment plants were constructed to treat wastewater from vermicelli production and pig farming.
- Four biogas plants were constructed, each with a capacity of 6 m³. This is effective for human and animal waste management and creates clean fuel for cooking.
- Most households now separate their solid waste into three categories: organic matter, plastics, and other domestic waste. Villagers then sell solid waste such as plastics and metals.
- Two training courses were organized on solid waste management, potable water management, wastewater management, and safety and hygienic practices in food preparation for the GP team and the interested villagers.