



## Phu Thanh Village, Tan Phu Commune, Vinh Long Province

### GENERAL INFORMATION

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

Phu Thanh is a village near Tan Phu town in Vinh Long province. This village is 137 km west of Ho Chi Minh City. Phu Thanh village is located 20 km from the Tien River and 10 km from the Hau River and is next to National Highway 1A. It is low-lying with an average height of 0.5 to 0.7 m above sea level.

Some characteristics of the village are as follows:



#### *Phu Thanh Village, Tan Phu Commune, Vinh Long Province*

Total amount of land: 212 ha.
Cultivated land: 163 ha., and Land containing fruit and vegetable gardens: 40 ha.
Population: 1385 people within 297 households.
Main production activities
Agriculture: cultivation
Other: breeding livestock and fish

### MAIN ISSUES

- Surface and groundwater pollution due to direct discharge of untreated sewage into rivers and drains caused numerous environmental and health problems.

- Annual flooding led to problems such as contamination of potable water by sewage.
- Inappropriate use of chemical fertilizers and pesticides was also adding to the pollution of surface and groundwater and was reducing the fertility of the land.
- The solid waste was not properly treated. Most of the solid waste was disposed of near to the living areas. Only plastic and glasses were collected and sold for recycling.
- The potential income from fish production was not being achieved.

## GP OPTIONS

- (1) Treat water within individual households by use of a filter bag, sand, and tank.
- (2) Install biogas chambers using plastic bags to manage sewage. The bag stores and decomposes excrement and produces a gas that is used as an energy source for cooking.
- (3) Teach villagers how to compost organic waste from their households. This will reduce waste and increase the quality of soil where compost is applied.
- (4) Establish waste collection teams to collect rubbish from houses and public areas.
- (5) Apply the integrated pest management (IPM) technique within the village to limit the use of chemical fertilizers and pesticides.
- (6) Introduce the Korean natural farming technique for livestock breeding and cultivation. This method uses locally produced natural ingredients and enables farmers themselves to prepare fertilizer mixtures.
- (7) Organize promotion and training sessions to enhance the awareness of the villagers of environmental protection issues.
- (8) Introduce mushroom farming to make use of straw waste from rice production that normally is burned.
- (9) Introduce crayfish production to increase the income of the villagers.

## IMPLEMENTATION AND RESULTS

- Eighteen GP team members from the two villages visited My Khanh B village and attended a GP team conference to learn about implementing some options.
- Two training courses on GP implementation within the villages were conducted. A total of eight different topics was covered during the course. The topics included establishing and applying biogas bags, potable water, and hygiene, status of waste management in rural areas, composting techniques, high-productivity rice cultivation techniques, mushroom-growing techniques, garden-pond-poultry model, and IPM application for rice cultivation.
- Water treatment using a filter bag, sand, and tank was implemented as it is a cheap, simple, and highly effective method.
- Sixteen pilot biogas chambers using plastic bags were installed. These solved some of the human and animal waste disposal problems and provided fuel for 16 households. The villages are now planning to remove all the unhygienic latrines from the rivers and main channels.



- Twenty-five households were supplied with 1,370 kg of new variety rice seeds. This new rice variety, together with IPM, will produce multiple crops per year and will require less fertilizer for production.
- Six natural farming models of fish-rice combination and fish-vegetable combination were completed, with initial results indicating a reduction in the amount of chemical use.
- Fifteen households implemented mushroom production.
- Eight households implemented crayfish rearing in the rice fields on a total area of 4 ha..