



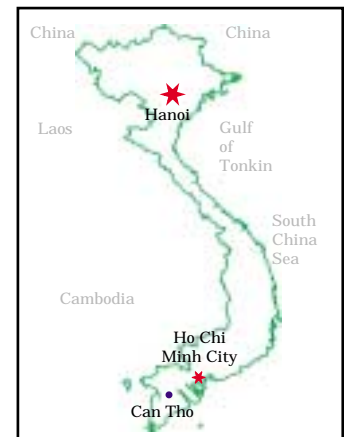
## Nhon Loc Village, Nhon Ai Commune, Chau Thanh Town, Can Tho Province

### GENERAL INFORMATION

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

Can Tho province is located approximately 168 km west of Ho Chi Minh City. Nhon Loc is a village near Chau Thanh town in Can Tho province and is located between the Can Tho River and Road Number 4. The distance between Nhon Loc and the Can Tho province center is 15 km.

Some characteristics of the village are as follows:



*Nhon Loc Village, Nhon Ai Commune, Chau Thanh Town, Can Tho Province*

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| Total amount of land: 164.38 ha.   |
| Cultivated land: 156.38 ha of the total land   |
| Population: 1037 people within 213 households.   |
| Average income: 3,900,000 VND/person/year.   |
| Main production activities   |
| Farming: Growing fruits and vegetables for sale in markets                             |
| Other: Producing fish sauce, processing wood, processing rice, and breeding livestock. |

### MAIN ISSUES

- The water used for domestic purpose was of poor quality. Bore water was used by 90 households (accounting for 41.86%) while others used river water either treated with alum or used without treatment, and some households used rain water in the wet season.



- Most households use rainwater for drinking purposes. However, the drinking water used was not boiled and thus was unhygienic.
- Low level of environmental protection awareness was leading to a poor general state of the environment.
- Few households had hygienic latrines and most people excreted in the fish pond.
- Solid waste management was difficult as houses are located in close proximity to each other. Households generally disposed of their waste directly into the garden.
- Pesticide was used in large amounts, although with little effectiveness, as some fruit trees still did not resist damage from pests. Moreover, the use of pesticides and chemical fertilizers was also polluting the environment.

### GP OPTIONS

- (1) Construct a centralized water treatment plant using the main pipe along the river. The households will be responsible for installing the pipe in their houses.
- (2) Create environmental awareness and encourage people to use clean water and to protect the environment.
- (3) Construct hygienic latrines. Undertake primary treatment of human and animal waste before discharging into the canal system.
- (4) Introduce crop rotation and use new plant varieties that have high pest resistance capacity and high productivity. This would reduce the amount of chemical pesticides and ensure a higher income from fruit harvesting.
- (5) Apply integrated pest management (IPM) technology to reduce the use of pesticides and chemical fertilizers.
- (6) Apply natural farming techniques to fruit trees and vegetables.

### IMPLEMENTATION AND RESULTS

- Training courses and campaigns were organized to raise awareness of clean water and environmental hygiene. People were taught to apply solid waste management at the household level and to implement solid waste removal from the roads. They were encouraged to classify solid waste and to utilize it for other purposes.
- Training courses on natural farming in Nhon Loc were undertaken with the participation of 60 people.
- A pilot natural farming program was applied on a small scale.
- Villagers were trained in the proper use of pesticides and chemical fertilizers for fruit trees.
- A study mission was organized to share best practice experiences with other villages.

The following options were generated but not implemented:

- Construction of a centralized water supply plant using the main pipe along the river. The GP team generated this option. However, there was a lack of free land available among the houses within the village, and thus the construction of a water supply unit was not feasible.
- Construction of hygienic latrine and primary treatment of human and animal waste before discharging into the canal system. This option will be analyzed in greater detail before implementation.
- Crop rotation and use of new varieties that have high pest resistance to reduce the amount of pesticide used and to generate a higher income from fruit harvesting. This was a long-term option and its effect was not clearly identified at that moment. It is necessary to have more detailed information on the natural environment such as climate, soil, etc. Therefore, this option was not suitable to disseminate through a demonstration model.

The main reasons for options not being implemented were as follows:

- The participation of local authorities is an important factor for the success of the project as they can combine this program with other existing programs. Their participation can mobilize the available resources in the village during implementation of the project. It is difficult to analyze the feasibility of GP options without their participation. The cooperation between Vietnam Productivity Center (VPC) and local authorities was not strong enough to support the GP team activities.
- The GP team is very active during the application of GP options that are easy to implement and require small amounts of money with recognized results. However, these options were only applied in some households and the dissemination remains limited.
- Some GP options need more time for feasibility analysis to ensure their suitability for the villagers.