

**Technical Cooperation Project on the Villagers
Support for Sustainable Forest Management in
Central Highland
in the Socialist Republic of Viet Nam,
(Villager Support Program)**

Project Document

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Technical Cooperation

between

The Government of the Socialist Republic of Viet Nam

and

Japan International Cooperation Agency (JICA)

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Abbreviation

CAP	Community Action Planning
C/P	Counter Part
CPC	Commune People's Committee
DARD	Department of Agriculture and Rural Development
DPC	District People's Committee
DPI	Department of Planning and Investment
ED	Economic Department
FD	Forestry Department
FE	Forest Enterprise
GOJ	Government of Japan
GOV	Government of Vietnam
ICD	International Cooperation Department
JICA	Japan International Cooperation Agency
MARD	Ministry of Agriculture and Rural Development
PC	People's Committee
PDM	Project Design Matrix
PLA	Participatory Learning & Action
PMU	Project Management Unit
PO	Plan of Operation
PRA	Participatory Rural Appraisal
PPC	Provincial People's Committee
R/D	Record of Discussion
Sub-DFD	Sub-Department of Forestry Development
VSP	Villager Support Program
WB	World Bank

1. Introduction

1.1 Background and Objectives of the Cooperation between GOV and GOJ

Central Highland, with Kon Tum Province at the center, is located in the south central area of the Annan Mountains. The mountains form the mountain ridge boundary with Laos and this area still possesses one of the largest natural forests in Vietnam, and has high potential for forestry development. The area also comprises much biodiversity and is inhabited by large mammals such as tigers and bears. It is also recognized as an important watershed area. Ethnic minority people are dominant in the Central Highland, therefore, improvement of their living standards and fixed domiciliation are also recognized as highly important political objectives.

In developing forest resources, it is necessary to give careful consideration to conservation of the ecosystem as well as to the socio-economic background, and sustainable forest management is a key factor. However, as the forestry enterprise responsible for forest management in the area lacked a forestry operation plan based on forest inventory sufficient to grasp the current forest conditions, it was unclear whether or not sustainable use of forest resources had been achieved. Therefore, the need to prepare a forest management plan, and to implement forest operations based on the plan, was firmly recognized.

Backed by this fact, a development study, The Feasibility Study on the Forest Management Plan in the Central Highland in Socialist Republic of Viet Nam (hereinafter referred to as “the Development Study”), was conducted in Kon Tum Province, located in the Central Highland, from February 2000, for introduction of a sustainable forest management.

In the Development Study, the areas for the forest operation were specified from among about 230,000 hectares of area for former Kon Plong district of Kon Tum Province, based on the analysis on the results of forest resources inventory, the business situation survey of the six Forest Enterprises and the socio-economic survey and biodiversity survey in this district. The master plans for forest management were drawn up to include not only a cutting and silviculture plan but also the villager support program (hereinafter referred to as “the VSP”), the wildlife protection and conservation program, and the institutional enhancement program. In addition, one Forest Enterprise (Mang La Forest Enterprise) was selected from the six Forest Enterprises, and a Feasibility Study was conducted in the jurisdiction as a model area. Particularly, the VSP was established so that villagers would not destroy the forest, but would be able to sustainably preserve and utilize it. Kon Tum Province side considered the introduction of VSP to be of great importance for conducting a sustainable forest management.

However, the operation of the VSP has fallen behind in the administration bodies of Kon Tum Province, due to constraints in terms of experience as well as in technical and human resources. For these reasons, the Vietnam government requested a technical cooperation project to promote a VSP model project in the important communes (hereinafter referred to as “the Project), contributing to the establishment of the structure for sustainable forest management in Kon Tum Province.

1.2 The Framework of the Project

1.2.1 Name of the Project

The Project name is “Villager Support Program Model Project”.

1.2.2 Target Area

The target area is below 5 model villages. Model villages are selected through the workshops at commune level after target communes are decided in the meetings at district level. The selected villages as model villages are ① Kon K Tau (Po E Commune), ② Vi Chiring (Hieu Commune), ③ Nuoc Not (Ngoc Tem Commune), ④ Kon Tuc (Dak Phe Commune), ⑤ Tu Ro Bang (Dak Koi Commune).

1.2.3 Target Group

The Target Groups of the Project are Villagers in the five model villages, and Governmental staff for planning of VSP and extension staff at the Provincial, District, Commune and Village level.

1.2.4 Duration of the Project

Project duration is 3 years. If JICA begins the Project in 2004, it is better that JICA starts the Project by early December at the latest due to finalize the community activity plan in dry season.

1.2.5 Super Goal

Pressures to forest resources by villagers are alleviated.

1.2.6 Overall Goal

- (1) Living standard of the villagers is improved.
- (2) Successful models in model villages are expanded to other villages.

1.2.7 Project Purpose

Activities for community development aimed for better management of forest are strengthened through the Villager Support Program.

1.2.8 Output

(1) Villagers' knowledge and techniques on mainly agroforestry are improved through the activities of Villager Support Program.

(2) Capacity of the governmental staff in provincial, district and commune level for planning and evaluation of Villager Support Program is strengthened.

(3) The villagers accumulate experience of activities in the Villager Support Program.

(4) The villagers have markets information on the products they produce.

(5) Importance of forest is recognized by the villagers.

(6) Techniques & knowledge applied in the model villages are instructed to villagers in other villages.

1.3 Basic Strategy for the Project Implementation

(1) The purpose of the project is that villagers who are participate in the VSP Model activities continue and develop the activities of VSP by themselves even after the project termination. Therefore the project is based in participatory approach, defines the responsibility of villagers and administrative staff who support villagers, and capacitate the villagers to plan, manage and evaluate the VSP model activities in 5 model villages with support from administrative staff.

2 Outputs of the Work

2.1 Draft PDM and PO for the Project

Draft Project Design Matrix (PDM) was prepared in the workshop which was held at provincial level from 11th May to 13th May 2004. Regarding Community Action Plan mentioned in the Activities 3.1, Personnel, Project Fund, and Machinery, Equipment and Materials mentioned in the Input in the PDM, please refer “Draft VSP Activities Plan” in the chapter 2.3.4, “Draft VSP Implementation and Management System Plan” in the chapter 2.3.3, Draft Plan for the Required Project Funds in “Draft Input Plan” in the chapter 2.3.3, and Draft plan for the Required Machinery, Equipment and Materials in “Draft Input Plan” in the chapter 2.3.3 respectively.

Regarding Plan of Operation (PO), “Person in charge” of Vietnam side (Provincial level, District level, Commune level, and Villagers group) in the PO has not yet mentioned. The assignment of person in charge should be considered and results of the consideration should be submitted to JICA Vietnam office by middle of June 2004.

Draft PDM and PO are shown in below table 2.1 and 2.2.

2.2 Natural and Socio-economic Condition in the Model Villages

2.2.1 Location of the Model Villages

The model villages are selected through the workshops at commune level after target communes are decided in the meetings at district level. The selected villages as model villages are ① Kon K Tau (Po E Commune), ② Vi Chiring (Hieu Commune), ③ Nuoc Not (Ngoc Tem Commune), ④ Kon Tuc (Dak Pne Commune), ⑤ Tu Ro Bang (Dak Koi Commune). The model villages' location is shown on Fig. 2.1.

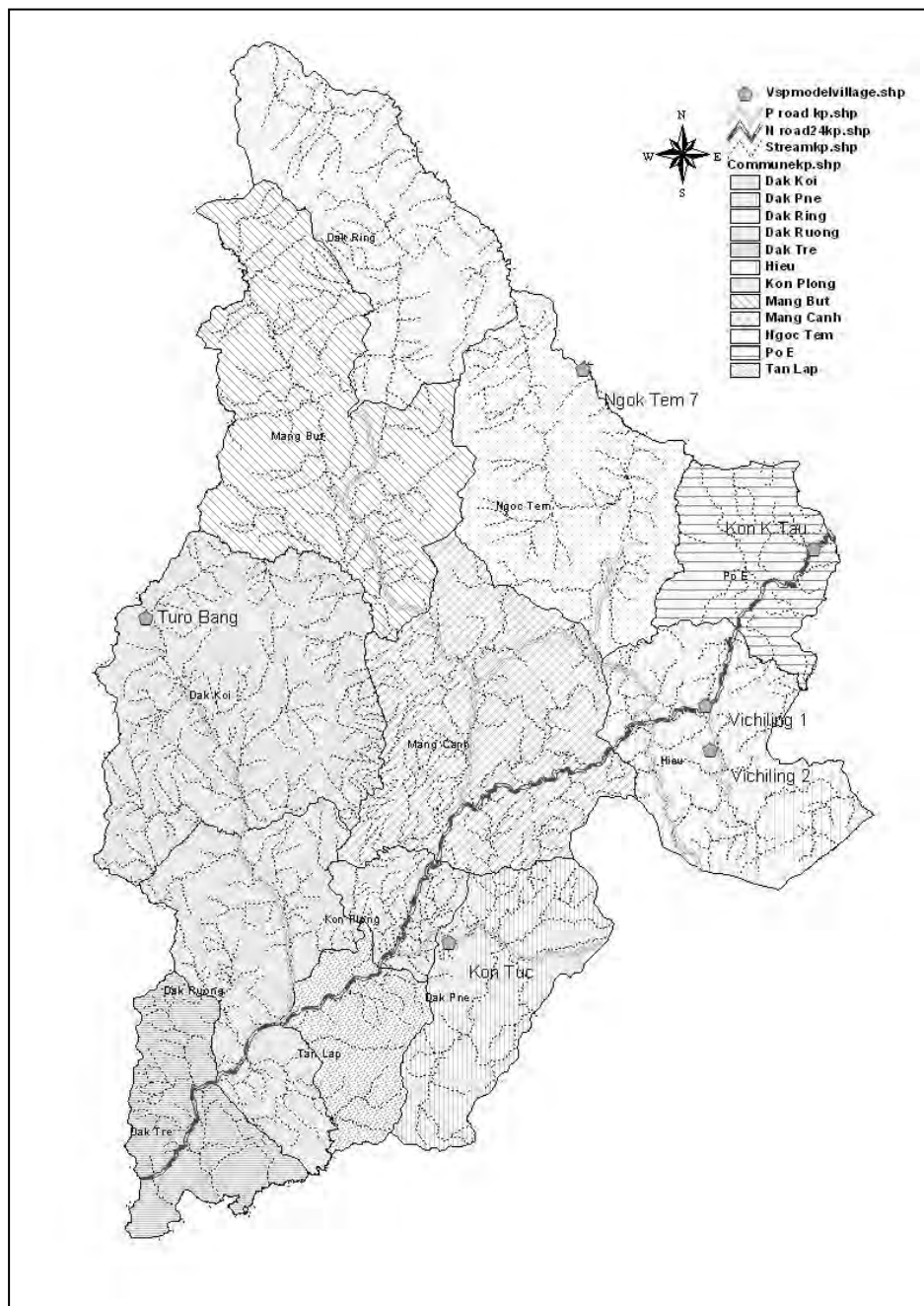


Fig. 2.1 Location map of the model villages

2.2.2 Natural Condition

The model villages are located different natural condition. The Kon Ray District is basically affected to Central highland (strong dry season); on the other hand, Kon Plong District is affected to southern monsoon come from South China Sea. Rainy season starts generally May to June from Kon Tum town to Kon Ray District. But villages in Kon Plong District are little late to start. Especially in village Nuoc Not, the rain starts late June. Rain of villages in Kon Ray District and Vi Chiring comes averaged through the rainy season, but Nuoc Not in October strong rain attacking, and in Kon K Tau rain comes almost full years. 2 villages in Kon Ray District have severer dry season.

Temperature as means of accumulating a year is not so difference, nevertheless, the situation of January and February, the coldest season, is quite difference, Vi Chiring and Kon K Tau are show rather low temperature than Nuoc Not and other villages due to the highly altitude. Because of the sea level, and effects for southern monsoon, rainfall condition, especially heavy rain attacking terms, intensiveness of dry season, etc., the natural conditions are quite differences between model villages. These differentiated natural conditions there are different types of natural forests grew. The original natural forest types are as follows.



Natural forest surrounded Kon K Tau



Natural forest surrounded Vi Chiring



Natural forest surrounded Nuoc Not

Kon K Tau: Humid mountain evergreen broadleaves forest

Vi Chiring: Humid Evergreen conifers and broadleaves forest

Nuoc Not: Tropical Evergreen broadleaves forest

Kon Tuc: Tropical Dry Dipterocarpus forest

Tu Ro Bang: Pine (*Pinus merksii*) and evergreen broad leaves forest



Natural forest surrounded Tu Ro Bang



Natural forest surrounded Kon Tuc

These differences in natural conditions are important factor for introducing agroforestry especially to the selection for introducing tree species. In Kon K Tau and Vi Chiring are not suitable natural condition for general tropical fruit trees such as mango, jackfruit.

2.2.3 Profiles of the Model Villages

The socio-economic conditions of the model villages are also difference. The five villages are consisting different five ethnic minority groups by each. Kon K Tau is He Le, Vi Chiring is M' Nam, Nuoc Not is Ko Dong, Kon Tuc is Ba Na, and Tu Ro Bang is Xe Dang.

Because of the deference of the Ethnic group and natural condition, farming activities also deference by each village. Kon K Tau and Vi Chiring are mainly cultivating rice. Nuoc Not cultivates rice but the areas of the paddy fields are limited. Therefore, slash and burn cultivation is other large cultivating style.

Kon Tuc is depending to slash and burn cultivation. Only a small paddy field was developed, but the production level is low, and too narrow to use the paddy field for the more than 80 households. Therefore, slash and burn on the mountains are the dominant farming style. If no paddy fields development and no improvement hillside areas productivity, the pressure to exploit forest will never eased.

Tu Ro Bang had moved their hamlet from a mountain top to the today's place four years ago, therefore, they are facing difficulties to develop their farm lands not only paddy fields but also upland areas. Their old upland farming area had changed to the man made forest by a paper material company, therefore, they need new lands for cultivation.

These five villages are facing difficulties to obtain enough foods for their family. They have only limited products for selling, therefore, cash income is very low. The brief introduction for the five villages profile shows as follows. In addition, the summary of the model villages shows on Table2.3

a. Kon K Tau

a-1. Natural conditions:

In general, the climate features here are similar to the ones in Vi Chiring. Due to the cold climate in winter-spring, winter-spring crop does not exist. Although research has been done for many years, there has been no good result. Therefore, only one seasonal crop is practiced.

a-2 Soil features:

There are two types of major soils. Those are on slope land, Reddish brown leaf-mould (or light yellowish brown) on basalt rock, and on Steep slope, on long slope Yellowish brown leaf-mould on Gneiss and Micaschist rocks. Soils generally have medium deep layer or deep layer, and many rocks coming between. Humus content is quite high, or rich in humus.

a-3. Socio-economic conditions:

There are 58 households in the whole village with the total number of 245 peoples. The average number of peoples in each household is 5 peoples / household. 50 households are H'Re people; 8 households are Kinh people. The annual average income per household is: 3 millions VND – 4 millions VND / year due to developed husbandry. In the 58 households in the village, there are: 4 households with over-medium income; 34 households with medium income; 9 households with below-medium income (account for 15% of the total households)

a-4 Farming activities

* Wet-rice cultivation:

The area for wet-rice production: 201 sao (20.1 hectares), (816m² / person). Household with medium area of wet-paddy field is 4000m²-5000m² only 3 hectares have small irrigation- There are two kinds of local rice: soon rice and late rice. The average productivity is 1,7tons / hectare / crop. Only one crop can be produced in a year.

* Upland cultivation:

There are 8 hectares of slope land for upland cultivation in the whole village (326m² / person). The average area of land for upland cultivation per household is 1379m². Cassava is mostly planted in upland farm. Upland rice is not planted because the harvest time is right at the rainy season.

*. Husbandry:

There are 142 buffaloes, 73 cows (each household has the average of 1-2 buffaloes and cows), 160

pigs (each household has the average of 2-3 pigs), 50 chickens and ducks (have just gone through the disease). Husbandry plays an important role in the income of the families. However, the techniques in husbandry are still very low. Mostly, livestock are let wander around, food for husbandry has low quality

*. Home garden:

Home garden to grow vegetables, subsidiary crops area is 20m² in average. Some fruit trees with timber are spatially planted. (orange: most important; jackfruit grapefruit and guava: normal)

*. Tree garden:

At the moment, the villagers want to develop perennial tree crop and use them to cash crop such as Shan Tea. There is one household plant Shan Tea that grows quite well. Special trees cinnamon (most important), green Boi Loi and agar wood (important) need to be strongly developed.



Views the village Kon K Tau from national road (left) and surrounded paddy field (right).

b. Vi Chiring

b-1. Natural conditions:

Vi Chiring village locates 1.100^m – 1.200^m above sea-level with humid subtropical climate feature. The annual average temperature is 20⁰C. There are two coldest months in the year (December and January with the average temperature is 16⁰C). The lowest temperature is below 15⁰C. The annual average rainfall is quite high: above 2.600^{mm}. October, November and December is most rain coming. In February and March, it still rains though not much, which causes difficulties to slash and burn activity. Rainy season lasts from May to the end of December (8 months). The dry season is short (4 months), there are two months with the annual rainfall below 50^{mm} (February and March)

b-2 Soil features

On Slope land there are two types of soil. One is brown leaf-mould or reddish brown on basalt rock [Hu] (Humic Rnodic Ferralsols). The land is less slope, the soil layer is deep and rich in humus. The other one is yellowish brown leaf-mould (or bright yellowish brown on granite rock) [Humich Acric

Ferrasols] on steep slope. The soil layer is average deep and rich in humus.

On lowland and concave land, there are two types of soil. One is muddy soil, slope meet together at one point with gray (product from the decomposition of basalt rock, rich in clay and there is sedimentary alluvium from rivers and streams). And the other is muddy soil, slope meet together at one point with gray (product from the decomposition of granite rock, quite high in sand content, and there is sedimentary alluvium from rivers and streams).

b-3 Socio-economic conditions:

The total households in the whole village: 22 households in which 21 households are M'Nam people, 1 household is Kinh people. The total number of people is 103 peoples. The economic condition is not developed, the annual income of each household is about: 2.500.000 VND – 3.000.000 VND / year (mostly the income comes from wet paddy field, then forest protection and then husbandry). The average number of people in one household is 5 peoples. There are 15 poor households in the whole village (lack food), account for 68% of the total households in the village.

b-4 Farming activities

* wet paddy field cultivation:

The paddy land area for wet-rice cultivation: 57 sao (5,7 hectares). The average paddy land area per capita is 553,4 m². The paddy field can produce only one crop of wet-rice a year. There are two kinds of local rice for seasonal crop (long-term rice (late rice) and short-term rice (soon rice)). The productivity is not high (+ For soon rice: 100 kilos / sao (1,00 tons / hectare)+ For late rice: 125 kilos / sao (1.25 ton / hectare)). No manure is used for wet-rice cultivation.

* Upland cultivation:

- There are 3 hectares (30 sao) in the whole village. The average upland land area per capita: 291m² / person (very little). On upland farm, cassava is mostly grown with the productivity of 1000 kilos / sao (10 tons / hectare / year). Cassava is inter-planted with rice in order to be harvested in August to prevent from hunger. Cassava is kept for 2 years. In the third year, the land is fallowed. The period to fallow the land: 3 – 5 years. The area 15 hectares (very small) of land fallowed after upland cultivation.

* Husbandry:

There are 43 buffaloes in the whole village (use buffaloes to prepare the field before sowing rice seeds). There are 20 cows, 25 pigs, 220 chickens and ducks. Each household has the average of 2-3 buffaloes and cows, 1 pig. In general, husbandry activity in the households is quite developed but cattle are still let wander around. Foods do not have enough nutrition (it takes two years for pig to be sold with the weight of 40 - 50 kilos / head); often get disease.

* Fishpond

There are 7 fishponds in the whole village. The average area is 15m²-32m². Villagers' interesting level

is high.

*** Fruit trees in home garden:**

Orange trees grow well and bear many fruits. Persimmon trees grow well, but not bear fruits yet (new plant). Besides, there are guava trees, grapefruit trees, etc are raised.

*** Non-Timber industrial tree**

The long-term industrial crop that is mostly mentioned is Shan tea which is available in the nature. Every household grows this tea to use as drinks in the family. Shan tea has not become a product to sell in the market. Cinnamon is very suitable to the area and the villagers want to grow in large area. Agar wood and green Boi Loi also have important role in the future.



Village Vichiling has two separated hamlets. The isolated one (right) is scheduled to move to the place to the approaching areas for the national road.

c. Nuoc Not

c-1 Topography and geological structure

Most area in Nuoc Not village are composed of pre- Cambrian, ancient granite rocks of Truong Son range, and are come between with some metamorphic rocks (Gneiss). Topography is steep slope, from 20° to 30° slopes, average slope is 25° , in some area, and the slope comes to 30°

c-2 Climate features:

Rainfall is high, about $2800 \text{ mm} / \text{year} - 3000 \text{ mm} / \text{year}$ (higher than the rainfall in Quang Ngai Province, lower than rainfall in Mang Canh of Kon Plong district). Rainy season here begins and ends later than that in Eastern slope of the Truong Son range. Rainy season starts at the beginning of early July and lasts until January (6 months rain). Months in the year with heavy rain are September, October, November and December in which October and November have the heaviest rain. (Soil from steep slopes often falls down in heavy rains during these months). Dry season (less rain) are in February, March, April, May, June and July in which February and July have least rain. It sometimes rains in

February, March, April, May and June. Average annual temperature: 23^o (°C) It's hot in summer time. Besides, it less rains so the temperature can come to 27^oC – 28^oC. The highest temperature is 35^oC. In months that North-easterly winds blow, the temperature decrease to 18^oC – 20^oC, the lowest temperature can be 15^oC or less.

c-3 Soil features:

Main soil is yellowish brown on granite rock [Fa] [Acric Ferralsols]; less rich in SiO₂ than the granite rock in Kon Tuc village (Dak Phe commune), but the amount of coarse sand is still high. Many exposed rocks with large size are common. The soil layer is quite deep. The fertility is low. Easy to be eroded and “washed” when do upland cultivation.

c-4. Socio-economic condition:

There are 79 households in the whole village. All are Ka Dong people. There are 337 peoples. The average number of people in each household is 4 – 5 peoples. The area for wet-rice cultivation is few, some area lack water for winter-spring crop; the area for upland cultivation is not much so many household lack foods. At the moment, the number of households that lack food for 4 months in a year is 30 households, account for 40% of the total households.

c-5 Farming activities

* wet paddy field cultivation:

The area of wet-rice paddy fields used for two- crops production is 12 hectares. The average area of land for wet-rice cultivation is 356m² / person, quite low. The average productivity of wet-rice: 200 kilos – 250 kilos / 1000m² / one crop (2 tons – 2,5 tons / hectare / crop). People have started to use new kind of rice seeds (DR2, KD18 and Khang Dan)

* Upland cultivation:

The area for upland cultivation in the whole village is 18 hectares. The average area of land for upland cultivation is 534m² / person. The area of land fallowed after upland cultivation: 125 hectares. The productivity of upland rice is 200 kilos / 1000m² (2 tons / hectare / year). The productivity of cassava: about 1 ton / 1000m² (10 tons / hectare / year). Upland rice are sowed in June and harvested in October or November. These 2 months have the heaviest rain in the year so there is no sun to dry the rice. All households in the village think upland cultivation plays the most important role because upland farms are close to home, the crop is relatively stable, rarely have lean year, low investment

* Grow perennial trees:

Every household highly appreciated the importance of perennial trees such as cinnamon, machilus odoratissima, betel (areca, Palmaeae). Planting perennial trees on slope land is reasonable. This can increase the income for the villager and it's also suitable with the natural conditions.

Quang Nam province, whose Tra My district is very famous for cinnamon planting for long time; Tra Bong district of Quang Ngai province is also a famous place for cinnamon planting for long time. The main product of cinnamon is its bark. When harvested, there's no need to spend so much money on transportation. The villagers can use traditional backpack to carry cinnamon bark home.

* Husbandry

In the whole village, there are 20 buffalos, 70 cows, and 40 goats. In 2003, the whole village had 195 pigs but they died in 2004. Most of chickens and ducks also died. The villagers here raise buffaloes and cows not to serve agricultural production. The dung from buffaloes and cows and pigs are not used for intensive cultivation. At recent time, the villagers like to raise goat, especially the Bach Thao goat. Each goat gives birth 3 litters per year. After 5 to 6 months raising, it can be sold 300.000 VND to 400.000VND / 1 head. I

* Orchard and fishponds in households, in residential land:

In general, economy from orchards, fishponds and husbandry in households do not develop yet. Fruit trees that have been planted: jackfruit (most popular). Some households plant oranges, mangoes, and Siamese custard-apple. Many households want to have fishponds together with raise ducks. Water will be used



Village Nuoc Not. There are tow hamlets. There are moved from mountain top to road side

d. Kon Tuc

d-1 Natural conditions

Rainfall is lower than that in Kon Plong District: 1700 – 1800 mm / year. Distinguished tropical climate, average annual temperature is $23^{\circ}2$ ($^{\circ}\text{C}$), Annual total heat is $8000^{\circ}\text{C} - 8500^{\circ}\text{C}$. Dry season lasts for 6 months (from December until May).

d-2 Soil:

The main soil is the light yellowish or light orange feralite on granite rock crystal (SiO_2) [ferralic

Acrisols (Xa)]. On steep slope, soil has high volume of coarse sand, mix with rocks. Average thickness of soil is very thin and poor fertility. Soil is sterile easily because of erosion process

d-3 Socio - economic conditions:

There are 83 households in the village with 403 peoples in which 136 peoples are main laborers, 51 peoples are labor assistance, 183 peoples are children under 15 years of age.

d-4 Farming activities

* Wet-rice cultivation:

Areas for paddy field cultivation are few: 1,6 hectares (16 sao). The average area of paddy field per capita is 39,7 m² / person. This is one of the localities that have the smallest area for paddy field cultivation in the country. Paddy fields are used to cultivate two – crops wet rice but the productivity is very low because of sandy soil. Water recourse for irrigation is not enough and depends on rain water; the amount of manures being used is few. The villagers do not use compost even though they have many cows and pigs. The productivity is low: 1,8 ton / hectare / crop. (the highest productivity is 2,5 – 3 tons / hectare / crop) though new kinds of high productivity rice seeds were used such as Khang Dan 18 (winter – spring crop) and Nhi 338 (seasonal crop)

* Upland cultivation:

To maintain the food security, the Ba Na people follow their custom to slash and burn forest for upland cultivation. The existing area of upland farm: 41.5 hectares (415 sao). The average area of upland farm per household: 5 sao. The average area of upland farm per capita: 1025m² / person. Cash crops are cultivated for 3 years. First year: plant upland rice. Second year: plant corn and cassava. Third year: keep cassava. After that the land is fallowed for 5 years before being restarted for the second cultivation. Therefore, each year, there's 13,8 hectares of young forest is burned for upland cultivation. And there's always 207,5 hectares is fallowed to let the forest re-grow after the cultivation. Upland rice yield: 0, 900 ton / hectare (very low). Corn yield: 620 kilos / hectare (very low). Cassava yield: 10 tons / hectare / year or 20 tons /hectares / 2 years (cassava that is kept for 2 years)



Slash and burn area surrounding the village Kon Tuc

*. Husbandry:

In the whole village, there are 88 cows (villagers do not raise buffalo); 103 pigs; 52 goats; 267 poultry heads (chickens, ducks, goose). In general, husbandry situation in the village is not developed. Livestock are let wander about. Pigs weighs only 40 –50 kilos after 2 years, cows only have enough weight to be sold after 3 years of raising.

*. Home garden:

Do not develop. Some kinds of fruit trees are thinly planted in the garden such as jackfruit, mango, orange, guava, banana, and pineapple. Their fruits are used in the family.

* Fishpond

There is one fishpond. But fish-culture is not common because of lacking water recourse.

e. Tu Ro Bang

e-1. Natural conditions:

The climate and soil conditions are almost similar with the ones in Kon Tuc. It locates in humid tropical climate with the average temperature of 23^o5, and with the total annual heat of more than 8.500^oC. The annual rainfall is 1.700^{mm} – 1.800^{mm}. Rainy season is from middle May to October.

d-2 Soil:

There are 2 types. One is Mostly are yellowish brown soil on granite rock [Fa]. This type of soil has higher content of clay than the light yellowish soil on granite rock rich in SiO₂. Other one is light reddish brown soil on metamorphic rock (Grai) distributed scatters and come between other soil in some areas. This is certainly not the major soil. This soil has quite high content of clay (FS). Generally, the land is steep slope, long slope, many exposed rocks, and quite deep layer of soil. Mostly this soil has been used many times for upland cultivation. Fertility rate is medium or less than medium.

e-3 Socio - economic conditions:

In the whole village, there are 21 households with 125 peoples. The numbers of adults above 15 years of age are 50 peoples; children under 15 years of age are 75 peoples. The villagers of village 10 have just moved here for 4 years so land for wet-rice cultivation is not much. Upland areas are often sterile after being cultivated many times by village 8 and village 9. According to the statistic about the livelihoods of the villagers in 2001, there are 376 households in Dak Koi commune but only 30 households lack food, account for 8% of the total households. (This is the lowest percentage in the project area). However, in Tu Ro Bang village (village 10), there are 6 households lack food in the total of 21 households, account for 28,5% of the total households. Tu Ro Bang can be said the poorest village in the total 12 villages of Dak Koi commune.

e-4 Farming activities

* Wet-rice cultivation:

The total area of wet paddy field is 2 hectares. The average area of wet paddy field (two crops) per capita is 160^{m²} / person (too little) The average area of wet paddy field per capita in the neighboring village 9 which settled for 10 years (3 years before village 10) is 862^{m²} / person. This means the average area of wet paddy field in village 9 is 539% of the one in village 10 (5 times more) The

productivity of winter-spring crop: 200 kilos / 1000^{m2} because of lacking water. The productivity of seasonal crop: 300 kilos / sao (water is enough in rainy season).

* Upland cultivation:

The area of upland land in the whole village is 12 hectares. The average area of upland land per capita is 960^{m2}. The area of land fallowed after upland cultivation is about 100 hectares. The productivity of upland of cassava: 2000 kilos / sao/year. Lacking the land for upland cultivation (because the paper material company planted pine trees in the area of fallowed land of the village), less fertile soil, strong soil erosion and there are many exposed rocks, upland cultivation is difficult. On sterile soil, the villagers cultivate only for 2 years. First year plant upland rice and cassava. Second year keep cassava. Third year let fallow. After 5-7 years, cultivate again.

* Husbandry:

Husbandry: do not develop in general. Cows are 31 heads in the whole village (do not have buffaloes or goats). Pigs are 4 heads. Chickens are mostly died because of disease.

* Home garden:

Generally, these things do not develop in the whole village. Only fruit trees such as jackfruits, mangoes are scatteredly planted with coffee. *Machilus odoratissima* is mostly planted in home gardens and on upland farm. There are two ways of planting. Plant scatter in home gardens and plant as forest on upland farm (there's about 6 hectares of *Machilus odoratissima* at the moment).

* Fishpond

There is no fishpond in the whole village



Village Tu Ro Bang. The village was moved from mountain top to road side

Table 2.3 Profile for VSP Model Villages for Forest Management Plan in the Central Highland in the Socialist Republic of Viet Nam

Category	Item	Target Villages				
		Kon K Tau	Vi Chiring	Nuoc Not	Kon Tuc	Tu Ro Bang
Administration	Commune	Po E	Hieu	Ngoc Tem	Dak Phe	Dak Koi
	District	Kon Plong	Kon Plong	Kon Plong	Kon Ray	Kon Ray
	Province	Kon Tum	Kon Tum	Kon Tum	Kon Tum	Kon Tum
Location	Distance from District Center	34.4 km 1.1 hours by car	19.8 km 0.3 hours by car	42.9 km 3.5 hour by 4WD	4.9 km 0.2 hours by 4WD	37.9 km 1.4 hours by 4WD
	Road condition	National Road (all paved) passing by the village center	National Road (all paved) passing by the village center	Provincial road reached the village center (hamlet) 10 km on National Road (all paved). Remaining 33 km is newly constructed rough dirt road.	Dirt road passed by the village center. Need to cross Dak Phe River where can pass only 4WD vehicle. A small hanging bridge is the only way to lead the village in rainy season.	Company constructed forest road pass the village center. 10 km on National road (Paved) and 23 km unpaved provincial road lead to commune center. But remaining 5 km is very rough dirt road.
Natural Condition	Distance from commune center	Same place	Same place	Same place	Approximately 2 km distance	Approximately 5 km distance
	Height (See level)	900-1000 m	1200-1300 m	450-550 m	600-700 m	700-800 m
	Original Vegetation	Monte Evergreen Broadleaves Forest (humid)	Evergreen Conifers and Broadleaves Forest (humid)	Tropical Ever Green Broadleaves Forest (humid)	Tropical Dry Dipterocarpus Forest (Semi deciduous)	Pine (Pinus merkisii) and Broadleaves Forest

Category	Item	Target Villages				
		Kon K Tau	Vi Chiring	Nuoc Not	Kon Tuc	Tu Ro Bang
Natural Condition	Mean annual rainfall	2800 mm	2600 mm	3000 mm Strong rain come in October	1800 mm Insufficient rain in the winter monsoon season	1700-1800 mm
	Mean annual temperature	20 C low in winter	20 C lowest 15 C	23 C hottest 35 C. Lowest 18-20 C	24 C	23.5 C
	Annual mean accumulated temperature	≥ 7500 C	< 7500 C	≥ 8000 C	< 8000 C	≥ 8500 C
	Rainy season	May- December but Rains come in February. No severe dry season	May- December February and March is below 50 mm	Late July – Late January Heavy rain comes October and November	Late May - October	Middle May - October
Forest surrounded	Management objective	Protection forest	Production forest	Protection forest	Production forest	Production forest
Soil condition	Base lock	Gneiss stone Basalt	Basalt, porphyrite	Pre- Cambrian, ancient granite rocks of Truong Son range	Granite stone (rich SiO ₂ mineral)	Gneiss stone (quartz mineral (SiO ₂))
	Top soil	Humid reddish brown soil on Basalt. Yellowish brown (10 YR 4/3) on genesis stone, humus are little, sandy-silt,	Reddish brown soil (7.5YR 3/2), humus are pretty good, clay-silt,	yellowish brown on granite rock Humus: little Clay - Silt	Grayish yellow brown (10YR 5/2), humus are little, sandy-silt,	Dull reddish brown (5 YR 4/3), humus: little, clay-silt

Category	Item	Target Villages					
		Kon K Tau	Vi Chiring	Nuoc Not	Kon Tuc	Tu Ro Bang	
Socio-economic condition	Ethnic	H' Le	M' Nam	Ka Dong	Ba Na	Xe Dang	
	Household	58 household, 245 people	22 household 103 people	79 household 337 people	83 household 403 people	21 household 125 people	
	Income of medium household	4,000,000 VND	3,000,000 VND	5,340,000 VND	3,400,000 VND	2,500,000 VND	
	Main income source	Wet rice Forest Protection Fee	Wet rice	Wet rice Caw Forest Protection Fee	Upland cassava Upland rice Maize	No particular (all products are not enough for selling)	
	General property of middle class villager	5 sao Paddy field 1.0 sao upland farm 1-2 Buffalos 2-3 pigs	3 sao Paddy field 1.5 sao upland farm 2-3 Buffalos 1 cow 1 pig	1.5 sao Paddy field 2.5 sao upland farm 1 Caw/Buffalos 0 pigs (died 2003)	1-1.2 sao Paddy field 5 sao upland farm 5 sao upland farm 1 Caw 1-2 pigs 4 chi kin	1 sao Paddy field 5 sao upland farm 1 Caw 0 pigs 0 chi kin (died 2003)	
	Food shortage household	4	10	30 households are seasonally shortage	53 household facing seasonal shortage	6 Almost villagers are facing seasonal short -age	

Category	Item	Target Villages				
		Kon K Tau	Vi Chiring	Nuoc Not	Kon Tuc	Tu R Bang
Social services	Clinic	<input type="radio"/>	X	<input type="radio"/>	X	X
	School (elementary)	<input type="radio"/>	X	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Electricity	<input type="radio"/>	△ a hamlet only	X	<input type="radio"/>	X
	Drinking water	Piped water from a stream is existed	Well or stream water	Piped water from a stream is existed	Piped water from a stream is existed	Piped water from a stream is existed
General Activity	Paddy	201 Sao (1 crop) Hoe up: late January to earl February. Transplanting: April Harvesting: September 1.5-2.0 ton/ha Local long time variety	57 Sao (1 crop) Hoe up: late January Transplanting: April Harvesting: August 1.25 ton/ha In case of local long time variety	180 Sao (2 crop) Winter Spring Hoe up: December. Transplanting: January Harvesting: June 2.0 ton/ha Seasonal Hoe up: May to June. Transplanting: late June Harvesting: September 2.5 ton/ha Local long time variety New variety is testing	16 Sao (2 crop) Winter Spring Hoe up: December. Transplanting: January Harvesting: May 3.0 ton/ha Seasonal Hoe up: May. Transplanting: June Harvesting: November 1.8 ton/ha Local long time variety Too narrow paddy field	20 Sao (2 crop) Winter Spring Hoe up: December. Transplanting: January Harvesting: May 2.5 ton/ha Seasonal Hoe up: May. Transplanting: June Harvesting: November 2.0 ton/ha Local long time variety Too narrow paddy field

Target Villages						
Category	Item	Kon K Tau	Vi Chiring	Nuoc Not	Kon Tuc	Tu R Bang
	Up land (slash and burn)	Approximately 8 ha (2-7 Sao/household) Burning: February to March 1 st : Plant corn, cassava, 2 nd : Maintain cassava 3 rd : Leave the site 3 years into Fallow Harvest Cassava: 4 ton/sao/2 year (crude)	Approximately 3 ha (1-2 Sao/household) Burning: January 1 st : Plant corn, pumpkin 2 nd : Plant Cassava 3 rd : Maintain cassava 4 th : Leave the site 5 years into Fallow Harvest 2 ton/ sao/2 year Cassava (crude)	Approximately 18 ha (3 Sao/ house -hold) Burning: January 1 st : Plant rice 2 nd : Plant Cassava, corn. 3 rd : Maintain cassava 4 th : Leave the site 7 years into Fallow Harvest 0.1 ton upland rice/sao, 2 ton / sao/2 years Cassava (crude)	Approximately 41.5 ha (5 Sao/household) Burning: January 1 st : Plant rice, (Cassava, cone) 2 nd : Maintain Cassava 3 rd : Maintain cassava 4 th : Leave the site 5 years into Fallow Harvest 0.1 ton/sao upland rice, 0.06 ton/sao Corn, 2 ton/sao/2 year Cassava (crude) Total fallows 207 ha	Approximately 12 ha (0.6 Sao/household) Burning: January 1 st : Plant rice, 2 nd : Plant Cassava and corn 3 rd : Maintain cassava 4 th : Leave the site 7 years into Fallow Harvest 0.2 ton/sao upland rice, 0.06 ton/sao Corn, 1.5 ton/sao/2 year Cassava (crude) Total fallows 100 ha
Tree Planting	Experience of tree (Non wood) planting (△: could not get good results)	Orange Jackfruit: △ Guava Cinnamon Green Boi Loi Shan tea Coffee △ Papaya △ Bamboo	Orange Mandarin Grape fruit Jackfruit: △ Logan△ Mango△ Guava Green Boi Loi Coffee △ Shan tea Cinnamon	Jackfruit Cinnamon Mango Red Boi Loi (testing) betel (medicine for export to china) Orange Custard apple	Orange guava Jackfruit: Mango Red Boi Loi Green Boi Loi Coffee △ (lack of water and fertilizer) Cashew nuts Shan tea, Bamboo	Jackfruit: Mango Red Boi Loi Betel (medicine for export to china) Coffee △ (lack of water and fertilizer)

Category	Item	Target Villages				
		Kon K Tau	Vi Chiring	Nuoc Not	Kon Tuc	Tu R Bang
Home garden	Experience of farm crops other than rice, corn, cassava	Sweet potato Indian Taro Pumpkin Lemon grass Sugar cane Tobacco Pineapple	Sweet potato Indian Taro Lemon grass Sugar cane Tobacco	Gourd nuts Pumpkin Some other vegetables	Thailong (Dragon fruit) Pumpkin Sugarcane Lemongrass Pineapple Tobacco Some other vegetables	Some vegetables
Husbandry	Experience of animal husbandry	Buffalo Cow Pig Chicken, Duck	Buffalo Cow Pig Chicken Duck	Pig Goat Caw Chicken	Pig Caw Goat Chicken and Duck	Caw Pig Chicken Duck
Other important social factors.	Special Difficulties that cannot manage by the villagers only.	Limited land to expand paddy fields because existed paddy fields are closely connected to protected natural forests.	One hamlet is scheduling to move to the place near the national road. New farmland development is indispensable; nevertheless, forests surrounded are important for wildlife protection.		Granite oriented sandy soil is weak to stop soil erosion, and lack of fertility, therefore, wider areas are necessary for surviving for the villagers. Gradually reducing slash and burn is important. 3 years is too short for reduction of burning areas of the fallows.	Paper material company planted pine tree on their old upland farm (Fallows) Come to the place on 4 years ago. The surrounded uplands are basically belonging surrounding villagers.

2.3 Draft VSP Model Project Implementation Plan

2.3.1 Draft VSP Implementation and Management System Plan

(1) VSP Implementation and Management Structure

Concerning the VSP implementation and management structure, the structure shown in the below Fig. 2.2 is prepared.

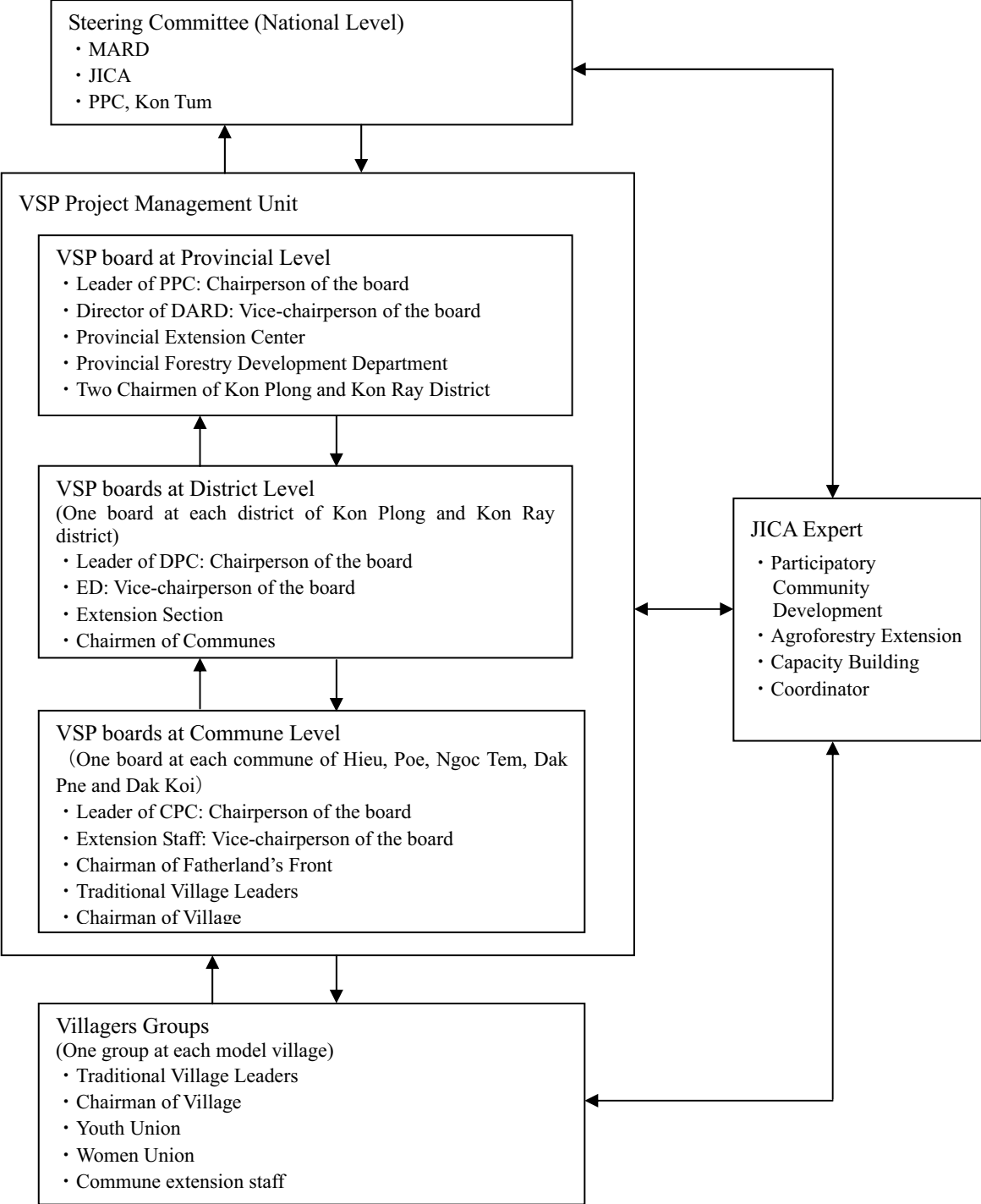


Fig. 2.2 Draft VSP Implementation and Management Structure

Roles of Steering Committee, VSP Project Management Unit and Villagers Groups are as follows,

1) Role of Steering Committee

- Responsibility to overall supervise the implementation of the Project.

2) Role of VSP Project Management Unit

- Responsibility for the implementation and management of the Project as per its work schedule.
- Monitoring and evaluation of the Project.
- Disbursement of the budget
- Reporting to the Steering Committee
- Consultation and partnership with the Villager Groups

3) Role of Villagers Groups

- Focal point for the Project
- Responsibility of the implementation of activities at the village level in the Community Action Plan.
- Monitoring and evaluation of the activities at village level
- Taking the initiative to prepare the activities plan from 2nd year

(2) Counter Part (C/P) Personnel

C/P personnel of the Project will be, 1) all of the members of the Project Management Unit, 2) Three persons in Province level and at the least each one person in each district level who will usually work together with the Japanese experts. In addition, one of the extension staff in CPC also should usually play role to facilitate the activities accompanying with Japanese experts when the experts carry out activities in each model village

Main position of the project C/P personnel is as follows,

Project Director: Leader of PPC in Kon Tum

Vice Project Director: Director of DARD

Project Manager: Director of Sub-DFD

Vice Project Managers: Leaders of DPC of Kon Plong and Kon Ray District

Coordinator: Chief of General Office in Sub-DFD

2.3.2 Draft Input Plan

The draft input plan consisting of the required project funds plan and required machinery, equipment and materials plan to carry out the VSP model project was prepared. These two draft plans were

prepared on the assumption that counter part fund by GOV that is 10 % of total amount of the Project cost will be smoothly disbursed without delay.

The two draft plans are shown in Table 2.4 and Table 2.5.

Table 2.4 Draft Plan of the required project funds

Item		Amounts of Required Funds	Responsible Organization
Cost for the Activities in the Model Villages Excluding Training & Survey Cost in the Model Villages	Vi Chiring Village in Hieu Commune	10,000 US\$ limit	Japanese side
	Kon K Tau Village in Poe Commune	10,000 US\$ limit	Japanese side
	Nuoc Not Village in Ngoc Tem Commune	10,000 US\$ limit	Japanese side
	Kon Tuc Village in Dak Phe Commune	10,000 US\$ limit	Japanese side
	Tu Ro Bang Village in Dak Koi Commune	10,000 US\$ limit	Japanese side
Cost for Training including every types of training such as workshop, Seminar, Training Course, Cross-Visit	Cost for lecturers	Honorarium	Lecture in Kon Tum by Vietnam side/Others by Japanese side
		Travel Allowance	Lecture in Kon Tum by Vietnam side/Others by Japanese side
		Actual Transportation Expense	Japanese side
	Cost for Trainees/Participants	Travel Allowance	Japanese side
		Actual Transportation Expense	Japanese side
	Cost for preparation of materials for the trainings	Preparation of the original materials	Vietnam side (small amount)/Japanese side
		Reproducing cost	Vietnam side (small amount)/Japanese side
		Others	Vietnam side (small amount)/Japanese side
	Contract fee with NGO which manage the training		Japanese side
Study Cost	Cost for Experts	Salary	Japanese side
		Travel Allowance	Japanese side
		Actual Transportation Expense	Japanese side
	Cost for materials & Equipments		Japanese side
Management Cost	Vehicle Cost	Fuel	Japanese side
		Maintenance	Vietnam side
Management Cost	Vehicle Cost	Insurance	Vietnam side /Japanese side for only Japanese Experts
		Driver Salary	Vietnam side
		Rent cars	Vietnam side
	Office Cost	Expendable Supplies	Japanese side
		Durable Consumer Goods	Desks and chairs by Vietnam side/Others by Japanese side
		Electricity & Water Charge	Vietnam side

	Telephone Charge		Provincial local call by Vietnam side/ Other by Japanese side
	Running Cost for Equipment such as Photocopy Machines		Vietnam side
Vietnamese C/P Travelling Cost	Travel Allowance		Cost within the Province by Vietnam side/Others by Japanese side
	Actual Transportation Expense		Cost within the Province by Vietnam side/Others by Japanese side
JICA Expert Travelling Cost	Actual Transportation Expense		Japanese side
Cost for Project Staff Such as Secretary, Interpreter and Typist	Salary		1 typist by Vietnam side/Others by Japanese side
	Travelling Cost		Japanese side
Cost for Facilitator of Implementation of VSP in the model villages	Salary		Vietnam side (make effort to get 10 % of cost)/Japanese side
	Travelling Cost		Vietnam side (make effort to get 10 % of cost)/Japanese side
Cost for Meeting/Workshops except for the travelling cost of C/P	Travelling Cost for Participants		Japanese side
	Cost for Venue		Japanese side
	Food for participants		Japanese side
Facilitation cost	project stations in village level.		Japanese side
incidental expenses			

Table 2.5 Draft Plan of required machinery, equipment and materials

Item	Specification	Activities for Use	Place for Use	Required Number	Installation Place	Responsible Organization
Pick-up Vehicle	Five seats, with frame level height as higher as possible	Any Project Activities	Any place for the Project Activities	2	Kon Plong & Kon Ray District Office	Japanese side
Micro-bus	for 20 persons	Any Project Activities Especially for Cross-Visit	Any place for the Project Activities	1	Sub-DFD	Japanese side
Photo Copy Machine	Sorter, feeder, A3 paper	Office Work for Any Project Activities	the Project Offices	3	Sub-DFD, Kon Plong & Kon Ray District Office	Japanese side
Personal Computer	Laptop, Windows XP, Pentium 4, 10GB HDD, 256 MB	Office Work for Any Project Activities	Any place for the Project Activities	3	Sub-DFD, Kon Plong & Kon Ray District Office	1 desk top computer by Vietnam side (50 % probability), 2 laptop by Japanese side

Printer	Block-white Leaser Print	Office Work for Any Project Activities	the Project Offices	3	Sub-DFD, Kon Plong & Kon Ray District Office	1 printer by Vietnam side, 2 printer by Japanese side
Printer	Colour Ink Jet	Office Work for Any Project Activities	the Project Offices	1	Sub-DFD	Japanese side
Digital Video-Camera		Any Project Activities	Any place for the Project Activities	3	Sub-DFD, Kon Plong & Kon Ray District Office	Japanese side
Motor Bike	Honda	Any Project Activities	Any place for the Project Activities	7 or 8	Kon Plong & Kon Ray District Office, and five model villages, (Sub-DFD)	Japanese side
GPS		Any Project Activities especially for the Study	Any place for the Project Activities	3	Sub-DFD, Kon Plong & Kon Ray District Office	Japanese side
LCD Projector		Any Project Activities especially for the training	Any place for the Project Activities	1	Sub-DFD	Japanese side
Screen		Any Project Activities especially for the training	Any place for the Project Activities	1	Sub-DFD	Japanese side
Generator	3kw	Any Project Activities	Any place for the Project Activities	1	Sub-DFD	Japanese side

2.3.3 Draft Training Plan

For the capacity building for villagers in the model villages and administration personnel, the three (3) kind of draft training plans are prepared based on the PDM.

(1) Draft Technical Training Plan for Villagers

The draft technical training plan for the activities of the VSP for the mainly villagers in the model villages is prepared. The extension staff at the Commune and District level also should be participated in the training as much as possible. Practical training methods such as field practice and cross-visits are adopted.

The draft plan is shown in below Table 2.6 and 2.7. The plan is divided into 2 parts that are 1) mainly practice in the real field in the model villages, and 2) cross-visiting.

The items listed in the draft plan will be reduced or combined in the discussions of the project implementation stage to harmonize them with villagers' real activities. The technical training is

conducted in each village using real fields. NGO is requested to arrange teachers, text books and tools in consultation with commune leveled extension officers as well as project staff. Duration, frequency and conducting time frame will be changed to meet the villages' situation and budgetary reason.

Table 2.6 Draft Technical Training Plan for Villagers (mainly practice in the field)

Activity	Title	Duration	Place	Resource
Livestock	Feeding to Caw and pig and compost for tree/home garden	2 day x 5 villages x 2 times, & 1 day x 5 villages x 3 times	Village room and field	Coll, ExD, ExC, ExV, FT
	Daily care for healthy caw, pig	1 day x 5 villages x 5 times	Villager' field	Coll, FT, ExC, ExV
	Veterinarian techniques	1 day x 1 village x 1 times	Villager' field	Coll, FT, ExC
Livestock	Rising Duck	1 day x 1 village x 1 times	Villager' field	Coll, FT, ExC
	Raising goat	1 day x 1 villages x 1 times	Villager' field	Coll, FT, ExC
Raising fodder	Fodder Grass and tree raising	2 day x 5 villages x 1 times, & 1 day x 5 villages x 4 times	Village room and field	Coll, ExD, ExC, ExV, FT
Home garden	Compost making and using	2 day x 5 villages x times, & 1 day x 5 villages x 3 times	Village room and field	Coll, ExD, ExC, ExV, FT
Tree planting	Agroforestry techniques	2 day x 5 villages x 2 times, & 1 day x 5 villages x 3 times	Village room and field	Coll, ExD, ExC, ExV, FT
Tree planting	Nitrogen fixing tree and grass	2 day x 5 villages x 2 times, & 1 day x 5 villages x 2 times	Village room and field	Coll, ExD, ExC, ExV, FT
	Non Timber Industrial trees	2 day x 5 villages x 2 times, & 1 day x 5 villages x 2 times	Village room and field	Coll, ExD, ExC, ExV, FT
	Nursery management	2 day x 5 villages x 1 times, & 1 day x 5 villages x 4 times	Village room and field	Coll, ExD, ExC, ExV, FT
	Terracing and hedgerow	2 day x 5 villages x 1 times, & 1 day x 5 villages x 3 times	Village room and field	Coll, ExD, ExC, ExV, FT
	Allay cropping techniques	2 day x 5 villages x 1 times, & 1 day x 5 villages x 4 times	Village room and field	Coll, ExD, ExC, ExV, FT
	Raising bamboo	1 day x 2 villages x 1 times	Villager' field	Coll, FT, ExC
Paddy	Techniques for new rice	1 day x 5 villages x 3 times	Villager' field	Coll, ExD, ExC
Bee keeping	Bee keeping techniques	1 day x 1 villages x 3 times	Villager' field	Coll, ExD, ExC
Fish raising	Fish culture using animal dung	2 day x 1 villages x 1 times, & 1 day x 1 villages x 1 times	Villager' field	Coll, ExD, ExC

Cardamom and galangale	1 day x 1 villages x 2 times	Villager' field	Coll, ExD, ExC
Mushroom raising techniques	1 day x 1 villages x 2 times	Villager' field	Coll, ExD, ExC

Note: Regarding Resource, Coll means the lecturer will be invited from outside (Collage level teacher), FT= Facilitator, ExD= District Extension officer, ExC= Commune Extension person, ExV= Group Leader of the Villager

Table 2.7 Draft Technical Training Plan for Villagers (Cross-visit)

Title	Duration	Place	Resource
Cross Visiting 1	4 days x 5 villages x 2 times	Kon Tum, Quan Nam, Gia Lai, Etc	FT, NGO
Cross visiting 2 (Shows Model village each other)	2 days x 5 villages x 2 times	Model villages	FT and/or NGO

Note: Meanings of symbol in the column of Resources are same as them in Table 2.6

(2) Draft Training Plan for Extension Staff

The draft training plan on the participatory development and extension method for the mainly extension staff is prepared. The expected participants are mainly extension staff of the five (5) CPCs that govern the model villages, tow (2) DPCs, and some villagers selected who are expected to play role as extensionist in the five (5) model villages. Practical training methods such as practice, study tours, seminars and workshops as well as lectures are adopted. The draft plan is shown in Table 2.8.

Table 2.8 Draft Training Plan for the Extension Staff

Title	Duration	Place	Resource
Participatory Planning	5 days	Kon Tum/Model V.	NGO, FT
Participatory Monitoring & Evaluation	5 days	Kon Tum/Model V.	NGO, FT
PRA (PLA)	5 days	Kon Tum/Model V.	NGO, FT
Communication skill	3 days	Kon Tum	Coll, NGO
Study tour Central Highland	5 days	Tay Nguyen UNV.	NGO, FT
Cross monitoring Workshop within model villages	5 days x 2 team	Kon Tum/Model V.	NGO, FT
Commune Seminar for surrounded villages including cross-visit among model villages and other villages	3 days x 5 communes	Kon Tum/Model V.	NGO, FT
Provincial Seminar for presentation of the VSP activities	1 days	Kon Tum	NGO, FT

Note: Meanings of symbol in the column of Resources are same as them in Table 2.6

(3) Draft Training Plan for the Persons In Charge of Project Planning & Evaluation

The draft training plan on improving capabilities of project planning and evaluation for the person in charge in the administrative organization at Provincial and District level. Practical training methods such as field observation, practice, study tours, seminars and workshops are adopted. The draft plan is shown in Table 2.9.

Table 2.9 Draft Training Plan for the Person in Charge of Project Planning & Evaluation

Title	Duration	Place	Resource
Participatory Planning※	5 days	Kon Tum/Model V.	NGO, FT
Participatory Monitoring & Evaluation※	5 days	Kon Tum/Model V.	NGO, FT
PRA (PLA) ※	5 days	Kon Tum/Model V.	NGO, FT
Cross monitoring Workshop※	5 days x 2 team	Kon Tum/Model V.	NGO, FT
Commune Seminar for surrounded villages※	3 days x 5 communes	Kon Tum/Model V.	NGO, FT
Practice for VSP plan preparation	2 weeks	Kon Tum/Model V.	NGO, FT
Practice for project proposal preparation	2 weeks	Kon Tum/Model V.	NGO, FT
Provincial Seminar	3 days	Kon Tum	NGO, FT

Note: 1. The subjects with ※ mark are implemented at the same time of the subjects in the training for extension staff mentioned in 5.2
 2. Meanings of symbol in the column of Resources are same as them in Table 2.6

2.3.4 Draft VS P Activities Plan

(1) Draft Community Action Plan

Draft Community Action Plan of each model village, which is main part of the draft VSP activities plan, was prepared by using “Community Action Planning (CAP)” method through the workshops held in each model village.

There are three major components in the draft Community Action Plans of the model villages, which are Paddy field agriculture activities, Up-land agroforestry activities, and Livestock management activities. It is important that some activities should be combined as agroforestry activities. For example, those who want to carry out activities for rising cattle should also carry out activities of planting fodder trees and/or grasses, making manure and putting it in up-land field and/or paddy field.

In addition, it should be paid attention to that Community Action Plan for each model village has not yet been completed. Columns for target, implementation schedule, person in charge and monitoring & evaluation schedule in the draft Community Action Plan have not yet been mentioned. In addition, all

of the activities shown in the draft Community Action Plans will not be able to be carried out because of limitation of budget and project duration etc. Moreover, priority of each purpose in the Community Action Plans was decided by participants in the workshops.

Therefore, the next step in early stage of the project period will be to decide which activities will be really carried out based on the budget, project duration and the priority thorough the discussion with the villagers, who want to carry out each activity, where each activity can be carried out, when each activity can be carried out.

The Draft Community Action Plan for each model village is shown below.

Table 2.10 Community Action Plan for Vi Chiring Village, Hieu Commune

PURPOSE	ACTIVITIES	TARGET	NECESSARY INPUT		IMPLEMENT ACTION SCHEDULE	PERSON IN CHARGE	M & E SCHEDULE	
			INTERNAL	EXTERNAL				
DIVERSIFY THE INCOME SOURCE 77 seeds first priority 37%	-Plant cash crop such as: cinnamon, Machilus odoratisima (boi loi), pine - apple, ...		-Land -Fertilizer & manure, ... -Labor	-Provide seedling for the first year -Materials to establish nursery for producing seedling for next years -Train techniques on nursery & cultivation				
	Bee-keeping		-Labor -Food, medicine for bee	-Bee hives -Train techniques on keeping bee				
	Rise mushroom		Environment for planting mushroom	Bed-log with spore of mushroom Training techniques				
	Plant bamboo to get bamboo shoot		Labor, fertilizer, manure, land	-Young shoot -Train techniques				
	Plant galingale & bastard cardamom		Labor, manure, fertilizer, land	-Provide technique to collect galingale & bastard cardamom planting materials -Train techniques for planting				
DEVELOP ANIMALS RISING 68 seeds second priority 32.6 %	Solution of food for Animals + Plant forages for cattle		-Labor -Fertilizer, manure,... -Temporary fence	-Seeds of forages -Seeds of green fence tree -Train & guide techniques				
	+ Treatment & use agriculture by-product for cattle		-Labor, straw, salt	-Train & guide techniques -Provide materials such as: nylon for cover straw				
	Develop new pig breed Introducing Mong cai sow for producing F ₁ (MCx Exotic)		-Labor -Existing materials to make stable	-Provide sows and boar -Feed for pigs in first cycle -Training techniques -Provide semen for artificial insemination				
	Make stable with proof for cattle (ox, buffalo,...)		-Labor & existing materials to make pigs and cattle houses	Materials for making pigs and cattle houses				

Table 2.10 Community Action Plan for Vi Chiring Village, Hieu Commune

<p>INCREASE THE PRODUCTIVITY OF AGRICULTURE CROPS 63 seeds third priority <u>30.2 %</u></p>	<p>Introduce new hybrid maize & rice</p>	<p>-Labor -Manure -Land</p>	<p>-Train techniques for planting new seeds -Provide seed & fertilizer for the first year -Provide legume seed and seedling -Train techniques to compost & guide how to use</p>			
	<p>Make compost & use manure to fertilize the soil</p>	<p>-Labor -Hole for making green manure</p>	<p>-Train techniques to compost & guide how to use</p>			
	<p>Improve knowledge on plant protection for villagers</p>	<p>-Labor</p>	<p>Train techniques on IPM (Integrate Pest Management)</p>			
	<p>Upgrade the existing irrigation channel on the field</p>	<p>-Labor, Channels on their rice fields</p>	<p>Provide gabion, main water pipes</p>			
	<p>Make terrace field and plant the contour lines for soil erosion control</p>	<p>-Land, - Labor</p>	<p>-Train techniques -Provide seeds and seedling for planting the contour lines</p>			
	<p><u>Introduce interplant model</u> -Plant long-term tree -Plant short-term tree -Plant cover crops</p>	<p>-Labour -Land -Fertilizer, manure, ... -Produce seed for the next years</p>	<p>- Provide seeds and seedling for the first year -Materials to establish nursery garden -Select the suitable short-term crops for inter-planting -Train techniques on inter-planting</p>			

Table 2.11 Community Action Plan For Kon K Tar Village, Poe Commune

PURPOSE	ACTIVITIES	TARGET	NECESSARY INPUT		IMPLEMENTATION SCHEDULE	PERSON IN CHARGE	M&E SCHEDULE
			INTERNAL	EXTERNAL			
DEVELOP LIVESTOCK PRODUCTION 30 seeds the 1 st priority 37,5 %	Make the cattle house		- Labor, - Timber	Provide materials for making house such as roofing iron sheets, cements			
	Increase the ability of skill for veterinarian in village		Send villager to participate the training course	Provide training course for village veterinarians			
	Increase the knowledge of farmers on protection and treatment livestock from disease for villagers		Villagers joint in the training course	Provide training courses to the villagers			
	Introduce the new pig breed to villagers		Labor, and food for pig	-Provide apart of materials to make house for pigs (Roof and floor) -Provide 1 Cross-breed boar and 5 Mong Cai sows for the first time -Guide the techniques on rising the new breed			
	Develop duck production		Labor, house for duck, and food for duck	-Provide breed - Apart of feeds and medicine for duck for the first time -Guide techniques on rising duck			
	Develop cattle production		Join in training course, labor , food for cattle	-Provide 5 cows, 1 Lai sind bull -Provide materials for roofing and cement for flooring -Provide medicine and guide techniques for the first time			
	Plant forages for animals		Land, labor	- Provide suitable species - Seeds/seedling for planting for the first year			
	Establish nursery for tree legume seedling		Labor and some materials (Timber, bamboo...)	- Provide basic materials - Seeds, technique.			
	Improve knowledge and technique of villagers on livestock production		Join training course	Provide training course to villagers			
INTENSIVE PADDY RICE PRODUCTION	Introduce high yield varieties of rice		-Labor -Produce seeds for the after time	-Provide seed, insecticide, sprayer, fertilizer (for the first time)			

Table 2.11 Community Action Plan For Kon K Tar Village, Poe Commune

24seeds the 2 nd priority 30 %	Produce Manure +Green manure +Collect animal manure +Grow plants to make compost	Labor, land	-Guide how to produce seeds -Train techniques			
	Reclaim the alum paddy field	Labor, join in the training course	-Provide Materials for making animal houses to collect manure(mentioned in first purpose) - Seeds for growing plant for making green manure -Provide training course on reclaiming alum field -Provide lime for the first time			
	Improve knowledge on plant protection for villagers	Join the training course	- Provide practical training course on IPM (Ingrate Pest Management)			
INCREASE THE EFFECTIVENES OF UPLAND PRODUCTION 14 seeds the 3 rd priority 17,5 %	Establish agro-forestry garden - Develop perennial crops (citrus, longan, cinnamon, boi loi,....)	Labor, land	-Provide seedlings for the first time -Provide some materials to make nursery-garden -Guide techniques -Provide fertilizer for the first time -Select the suitable short-term crops -Provide seeds and guide techniques -Select the suitable species -Provide seeds and seedling for the first time -Guide techniques			
	- Inter-Plant short-term crops	Labor, land, manure				
	- Plant hedge row to keep land from erosion and feed livestock	-Join in the training course -land -Labor				
INTENSIFY HOME GARDEN 12 seeds the 4th priority 15 %	Multipurpose tree for fencing and feed for animals Plant fruit tree	-Labor, join in the training course -Land and some materials	-Provide seeds and seedling for the first time -Guide techniques			
	Plant pumpkin for selling	Labor, land	Introduce pumpkin seed with high productivity			
	Rabbit husbandry	-Labor -Make house for the rabbit	-Training techniques -Provide breeds for the first time			

Table 2.12 Community Action Plan For Nuoc Not Village, Ngoc Tem Commune

PURPOSE	ACTIVITIES	TARGET	NECESSARY INPUT		IMPLEMENT ACTION SCHEDULE	PERSON IN CHARGE	M & E SCHEDULE
			INTERNAL	EXTERNAL			
PADDY RICE PRODUCTION DEVELOPMENT. 90 SEEDS FIRST PRIORITY 28,3 %	Survey and design irrigation systems		Villagers show the water source(name: Braây, P.o.ngoc tem)	Experts			
	Make channel systems		Labor	Provide materials to make the channel systems (water pipes)			
	Establish small dams to hold water		Labor	Provide materials for making the small dams (Gabion)			
	Make terraces		Labor	Guide techniques			
DEVELOP CROP ON UPLAND FIELD. 88 seeds SECOND PRIORITY 27,67 %	Introduce high yield varieties of rice		-Labor, land, manure, green manure	-Provide seeds, fertilizer, insecticide for the first time -Train techniques			
	Produce organic manure		Labor	-Guide techniques for making cattle house to collect animal manure (Roof and floor) -Provide seeds for growing green manure plants			
	Develop perennial crops on steep land (cashew, areca, acasia hybrid, cinnamon and other fruit -tree)		-Labor, land, manure	-Provide seedlings for the first year -Guide techniques			
	Establish and manage the nursery		-Labor	-Provide materials nursery -Guide techniques			
DEVELOP FISH PRODUCTION.	Develop on inter-planting short-term crops: +Hybrid maize +Pine-apple +Leguminous - crops		Labor, land	+ Provide seeds of maize and bean and shoots of pine- apple in first time +Provide +Train techniques			
	- Planting the hedge rows -Plant grass under shade		Labor, land	Select the suitable species for hedge rows and cover land under shade -Guide techniques -Provide seeds and seedling for the first time			
	Dig pond		Labor, land	-Introduce fish-breeds with high productivity			

Table 2.12 Community Action Plan For Nuoc Not Village, Ngoc Tem Commune

56 seeds THIRD PRIORITY 17,61 % DEVELOP ON RISING GOAT. 44 seeds FOURTH PRIORITY 13,8 %	Rise fish		labor, food for fish	-Guide techniques on rising fish			
	Introduce Bach Thao goat to villages		-Labor -join in training course	-Provide 1 male and 16 female of Bach Thao goats -Guide techniques on rising goat			
	Make house for goat		Labor	Provide materials to make house for goats			
	Plant fodder for goats		-Labor, land	-Select suitable species for planting - Provide seeds and seedlings			
DEVELOP CATTLE PRODUCTION. 40 seeds FIFTH PRIORITY 12,57 %	Introduce Lai sind breed		-Labor, food	-Provide 1 bull of LAI SIND and 5 cows			
	Plant forages for cattle		-Labor, land -Make fence around the area which is planted by grass	-Provide forage seeds -Guide techniques - Provide field visit to successful places			
	Plant multipurpose tree for green fence and feed for animals		Labor , land	- Select suitable species that can use the leaf for animal/green manure - Provide seeds in first year - Guide techniques and how to use			
	Make cattle's house		-Labor -Wood -Join in training course	-Provide material for cattle house such as cements and roofing iron sheet -Train techniques			

Table 2.13 Community Action Plan For Kon Tuc Village, Dak Pne Commune

PURPOSE	ACTIVITY	TARGET	NECESSARY INPUT		IMPLEMENT ACTION SCHEDULE	PERSON IN CHARGE	M & E SCHEDULE
			INTERNAL	EXTERNAL			
DEVELOP CATTLE PRODUCTION 132 SEEDS <u>28,8 %</u>	Provide bulls and cows for breeding		Labor	Provide 3 bulls, 12 cows			
	Plant forages for cattle		-Labor, land, manure	-Guide techniques -Provide seeds of forages for the first year -Provide fertilizer for the first year			
	Plant live fence		-Labor -Make temporary fence before having live fence	-Provide seeds and seedling for planting live fence for the first year			
	Make house for cattle		-Labor -Wood, bamboo	-Provide materials such as cements, iron sheets			
EXPAND AREA OF PADDY FIELD 113 seeds <u>24,67 %</u>	Increase the ability, skill for veterinarian of villages/commune		-Send villagers to join the training course	Provide training courses			
	Reclaim the area near the BUJH-water-source to make paddy field		-Labor -Reclaim paddy field	-Provide 2 km of water-pipe -Gabions			
	Supply enough water to Rlong-paddy-field		Labor	Provide water-pipe			
INCREASE THE YIELD OF UPLAND CROPS 87 seeds 18,99 %	Produce organic manure (animal manure and green manure)		Labor	-Provide materials to make house for cattle to collect manure (mentioned in first purpose) -Provide seeds and seedling which can be planted to make green manure			
	-Plant hedge -row on upland field for controlling soil erosion		-Labor -Land -Join training course	-Select suitable species -Provide seeds for the first year -Train techniques			
	Plant cover crops		-Labor -Land -Join training course	-Select species -Provide seeds for the first year -Train techniques			

Table 2.13 Community Action Plan For Kon Tuc Village, Dak Phe Commune

DEVELOP PIG PRODUCTION 66 seeds 14,41 %	Introduce new high yield varieties of rice				-Labor, join training course, land, manure	-Provide seeds for the first year -Provide fertilizer for the first year -Train techniques -Provide field visit for villagers to successful places			
	Introduce hybrid-maize				-Labor -Land -Join in training course	-Provide hybrid-maize-seeds for the first year -Train techniques			
	Introduce cassava with high productivity				-Labor -Land -Join in training course	-Provide high yield variety of cassava for the first year -Train techniques			
	Reduce the damage from wild-animals and insect				-Join in the training course -Apply technologies from the courses	Open training course			
	Make pig's house				-Labor -Wood, bamboo	Provide materials such as cements and roofing iron sheets			
	Introduce new Pig breed				-Labor -Food	-Provide 10 Mong Cai sows and 1 hybrid Boar for the first year -Train techniques			
	Plant fruit tree				-Labor -Land	-Provide seedlings for the first year -Train techniques			
	-Plant cashew-nut-tree				-Labor -Land -Manure	-Train techniques -Provide seedlings for the first year			
	-Plant ground-nut				-Labor -Land	-Train techniques -Provide seeds and fertilizer for the first year			
	-Establish and manage nursery-garden				-Labor	-Provide materials for nursery - Provide training courses on nursery management			
INCREASE INCOME FOR VILLAGERS 60 seeds 13,1 %									

Table 2.14 Community Action Plan For Tu Ro Bang Village, Dak Koi Commune

PURPOSE	ACTIVITIES	TARGET	NECESSARY INPUT		IMPLEMENT ACTION SCHEDULE	PERSON IN CHARGE	M&E PROGRESS
			INTERNAL	EXTERNAL			
LIVESTOCK PRODUCTION DEVELOPMENT (59 seeds FIRST PRIORITY) 36,8 %	CATTLE PRODUCTION DEVELOPMENT: -Provide cattle for breeding - Make house for cattle - Grow forages for cattle		-Labor -Food for cattle - Manage cattle -Labor -Wood, bamboo -Labor -Land	- Provide 1 bull of Lai Sind breed ox and 5 local cows - Provide materials such as cement and roofing iron sheet -Provide seeds for the first year -Provide fertilizer for the first year			
	PIGS PRODUCTION - Provide pigs for breeding - Make house for pigs - Improve techniques for the villagers		-Labor -local feed -Labor -Wood and bamboo -Send people to participate in the training	-Provide 1 cross-bred boar and 10 Mong cai sows -Provide concentrate feed for the first year - Provide materials such as cement and roofing iron sheet -Provide training courses			
	Grow hedge rows for trees/grasses for controlling erosion Produce green manure		-Labor -Land -Labor -Material to rod manure	-Provide seeds for the first year -Instruct techniques -Instruct techniques			
UPLAND PRODUCTION (51 seeds, SECOND PRIORITY) 31,8 %	INTER-PLANT ANNUAL CROPS AND PERENNIAL CROPS -Grow annual crops		-Labor -Land	-Provide Hybrid corn, bean, and manure for the first year -Instruct techniques -Provide seedlings for the first year -Instruct techniques			
	-Grow perennial crops		-Labor -Land	-Provide seedlings for the first year -Instruct techniques			

Table 2.14 Community Action Plan For Tu Ro Bang Village, Dak Koi Commune

<p>PADDY PRODUCTION (50 seeds, THIRD PRIORITY) 31,2 %</p>	<p>(Machilus odoratissima (Boi Loi), Cinnamomum cassia (Que), Aquilaria crassna (Do bau)</p>		<p>-Labor -Land</p>	<p>-Design nursery -Instruct techniques -Provide material</p>		
	<p>-Establish nursery for industrial crops</p>		<p>-Labor -Channels lead water from the main channel to the paddy fields themselves</p>	<p>-Provide main water pipe line -Provide gabion to keep stone</p>		
	<p>-Make channel system for irrigation</p>		<p>-Labor -Paddy field -Manure</p>	<p>-Identify suitable varieties of rice -Provide fertilizer, seeds for the first year -Train techniques</p>		
	<p>-Introduce high yield varieties of paddy rice</p>		<p>-Participate in the training -Labor -From the second year, the villagers must buy limes themselves</p>	<p>-Techniques to treat alums -Provide lime for the first year</p>		
	<p>Alums treatment</p>		<p>-Labor -Participate in training</p>	<p>-Train techniques -Provide materials for training</p>		
	<p>Improve the knowledge of villagers on plan protection</p>					

(2) Agroforestry Activities Frame

a. Core Menu of the Activities on Agro-forestry

To harmonize model villages natural condition, landscape, and land use situation, following three types of agroforestry models are proposed to facilitate the discussions with participated villagers.

- ① **Slop farming** for the hillside areas of the slash and burn farming areas
- ② **Home-garden and tree garden** for surrounded areas of the houses and areas connected with lowland paddy field gentle than above ① areas.
- ③ **Integrated silvopastoral** including compost production and it's usage for above ② and paddy fields.

The image of these types shows on below Fig. 2.3 and 2.4.

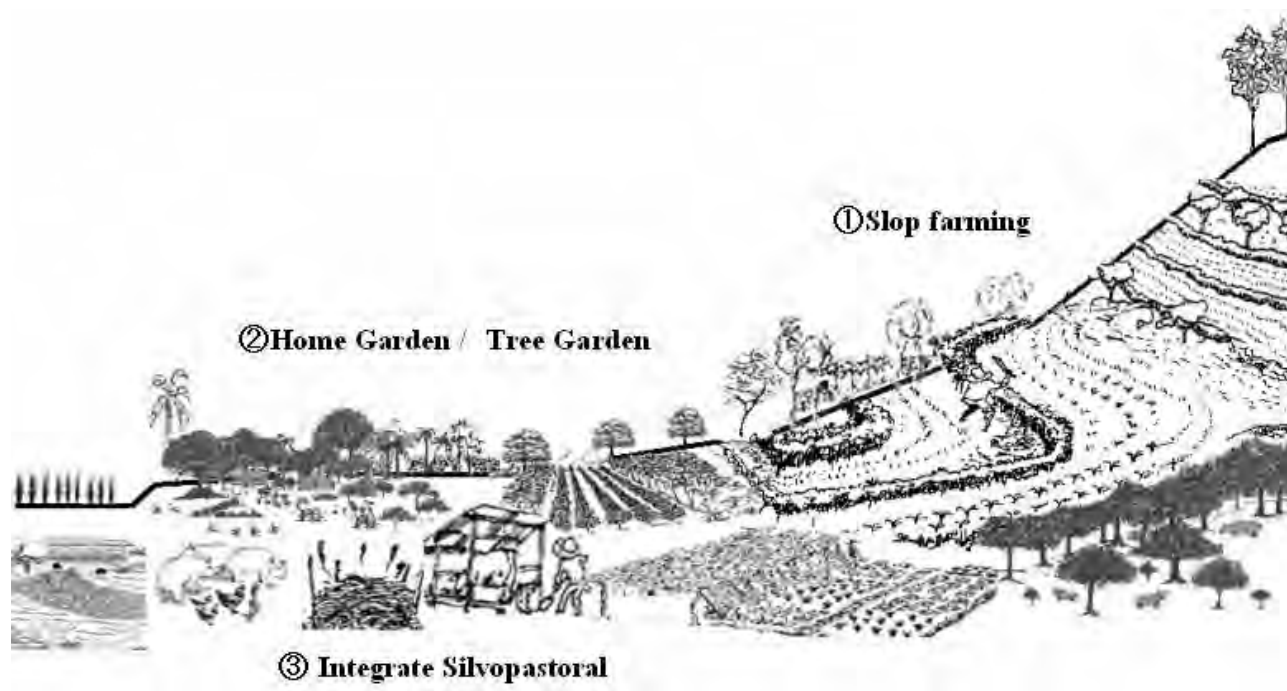


Fig. 2.3 Agroforestry activities image for VSP (1)

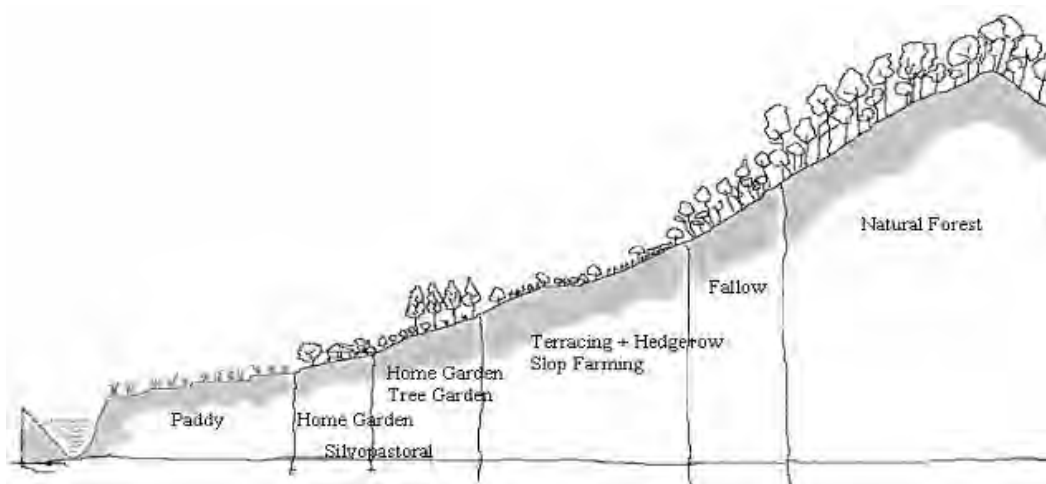


Fig. 2.4 Agroforestry activities image for VSP (2)

Pattern 1 Slope Farming (SALT: Hedgerow, Nitrogen fixing tree, cash crops)

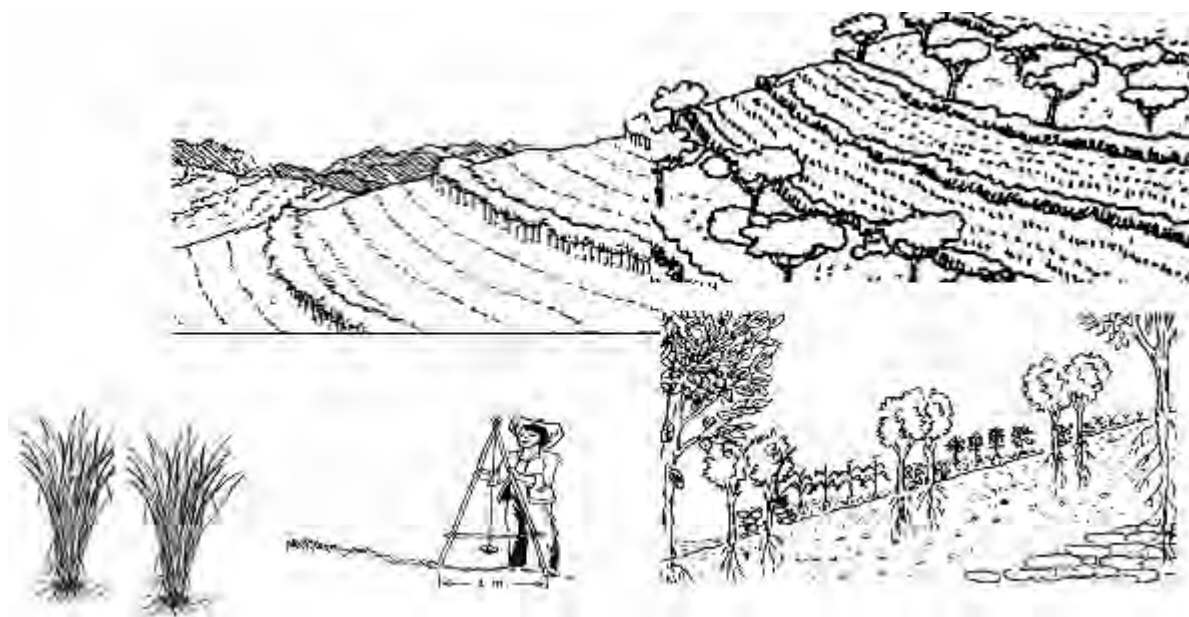


Fig. 2.5 Image of Slope Farming

Actions

- a. Small terrace and hedgerow development (A Frame, Small terrace)
- b. Planting grass/tree on hedge row (Leguminous trees for nitrogen fixing)
- c. Cultivation between hedge row (Allay crops, Perennial crops, Nitrogen fixing vegetables)
- d. Maintenance of hedge (Trimming and use for fodder)

Pattern 2 Home Garden and Non Wood Industrial Tree Garden (Compost, poultry, cash crops, fruit and perennial tree)

○ Home garden for cash crops

Pattern-2: Backyard Garden

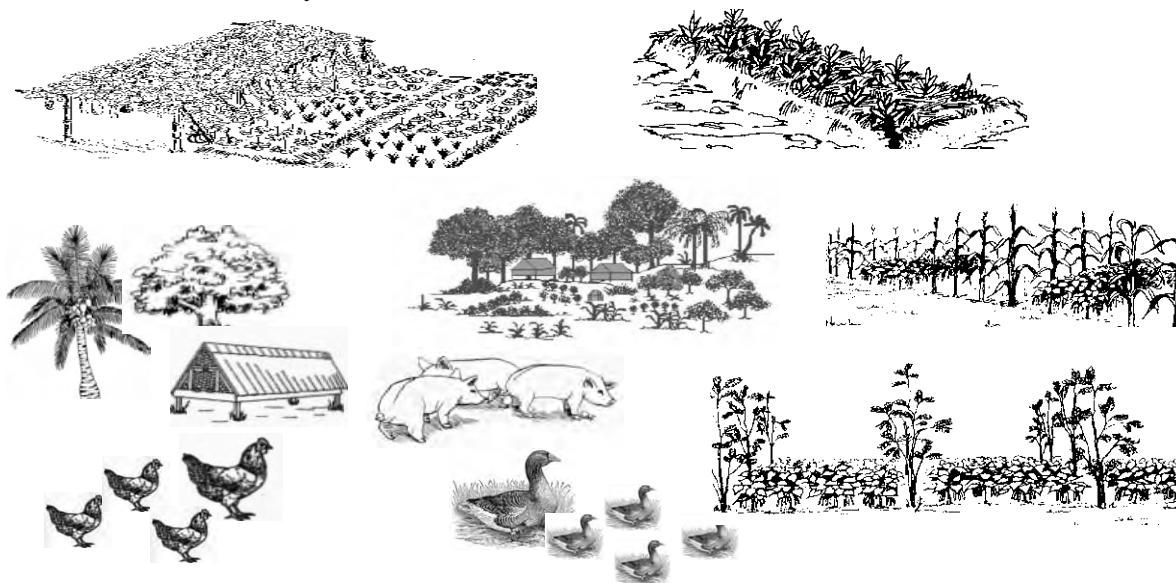


Fig. 2.6 Image of Home Garden

Actions

- a. Cultivate garden
- b. Plant nitrogen fixing tree for the live fence
- c. Produce compost using animal dung and grass
- d. Make small house for poultry
- e. Introduce chicken, pig, etc.
- f. Plant cash crops (Vegetables, Lemon grass, Pumpkins, etc.)

○ Tree Garden (Using compost, nitrogen fixing trees, and alley crops)



Fig. 2.7 Image of Tree Garden

Actions

- a. Plant fruit tree and/or Non timber industrial trees
- b. Plant nitrogen fixing trees
- c. Compost production for alley crops
- d. Plant alley crops in between trees

Pattern 3 Integrated Silvo-pastoral (Compost, Fodder grass/tree)

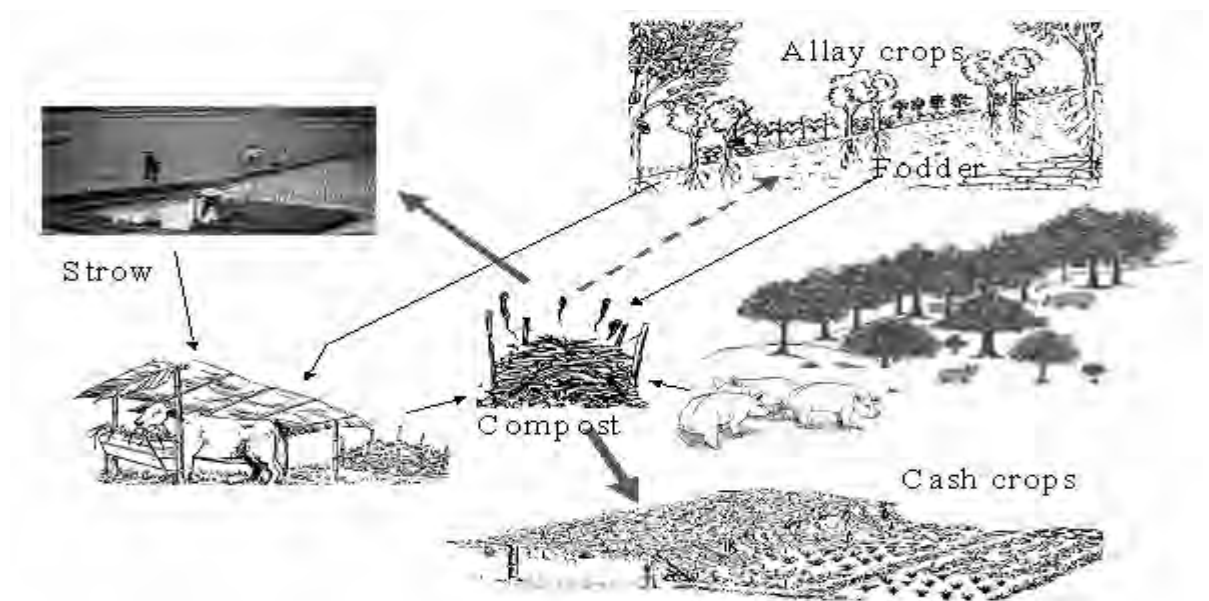


Fig. 2.8 Image of Integrated Silvopastoral

Actions

- a. Make house for caws and/or pigs for collecting animal dung.
- b. Collect Grass and animal dung.
- c. Produce compost.
- d. Produce fodder grass
- e. Plant Fodder tree/nitrogen fixing tree.
- f. Plant alley clops between fodder tree.
- g. Scatter compost to paddy fields, garden, and farms.
- f. Collect fodder for feeding animals

2.4 Proposal for Discussions on Capacity Building

The most important matter for this VSP project is to establish a clear answer to the question of what

impact will be created after the project is over. The one of real objectives of the Project is to obtain a situation where the outputs of model villages' activities are transferred to the other villages after the project. The project cannot be fully evaluated as a success even if it establishes an improvement in living standard or income in only model villages through the project activities. Activities of the model villages will lead to reduced pressure to exploit natural forests; nevertheless, the objective cannot be achieved by only 5 model villages, the situation to reduce pressure to exploit forests may not be seen after activities for only 3 years. It is essential to expand the project experiences of model villages from small points to large areas, such as from model villages to other villages, to communes and to districts. The capacity building program is requested to prepare the manpower for developing the project output to surrounding villages and communes.

To realize the above objective of the capacity building activities, it is important to recognize the fact that the extension activities are implemented not only by the special extension staff but also by persons involving the extension system at all levels. Therefore, the capacity building plan focuses on the duties of the different levels of extension staff as well as on the villagers in the model villages, and several measures for the extension staff of each level of the extension system are prepared.

For villagers, the project must guide and stimulate the inspiration for self development and for them to improve their technical skills. For extension staff in the field (commune level), the project provides chances to acquire skills and knowledge to answer villagers' expectations and to meet villagers' real needs, and techniques to encourage the villagers. Extension staff are not only teachers for technical training or the carriers of government messages but supporters or partners of villagers to encourage their own motivation and will. To create such characteristics in extension staff is one of the pillars of the project's goals.

For planning and for guiding extension staff in the field from a high stand point (district and province level), the project provides high level extension officers with some opportunities to improve planning and monitoring skills to support extension staff in the field. The most important duties of the high level extension officers are 1) to know the real movements in the field, 2) to build up an information collecting and information exchange system, 3) to obtain the skills to hear the real voices from the field, and 4) to obtain the ability to discuss with field staff.

The capacity building plan expects extension staff of each level to obtain the following capabilities:

- (1) Villagers
 - a. to obtain technical knowledge
 - b. to obtain experience in carrying out the group activities
 - c. to obtain teaching ability by teaching skills to people in other villages (leadership)
- (2) Commune extension staff

- a. to obtain technical knowledge to find real needs and solutions based on the natural and socio-economic condition
 - b. to obtain technical knowledge
 - c. to obtain managing and planning skills to support the villagers plan
 - d. to obtain the monitoring skills to find real problems and the attitude to discuss with villagers
- (3) District extension officers
- a. to obtain monitoring and planning skills
 - b. to obtain presentation skills for arranging budgets
- (4) Provincial extension staff
- a. to obtain planning and monitoring skills
 - b. to obtain presentation and explanation capacity

2.4.1 Technical Training Plan for Villagers

Technical training is prepared to meet villagers' expectations for technical fields based on Community Action Plans. The details of the training plan are composed of: 1) the field training in each model village in the table 2.6, and 2) the cross visit in the table 2.7. The plan being proposed has to be evaluated and discussed with each program participant in the model villages. Frequency, duration and conducting time have to be harmonized with general farming activities and the weather, etc., in each model village. The training items in this plan include all items in the Community Action Plan listed in 2.3.4 (1). However, the Community Action Plan will be modified at the beginning in the project period, so the training plan must be modified based on the final items of the Community Action Plan. In addition, it is efficient and effective to prioritize the training items by discussing with villagers and to implement some items incorporated with each other.

Repeated technical training aims to make participants maintain their motivation to obtain knowledge and technical skills. Commune extension staff in charge are expected to participate in technical training. It is not only an opportunity to obtain knowledge but also a chance to grasp the real situation in the villages through many exchanges with villagers.

The draft plan proposed five training sessions for one item. This plan proposed not only to teach knowledge but also expected the knowledge to be actually applied and for participants to improve by themselves through trial and error, questioning and repeating training.

Experts from outside of the districts will be invited for the training at the beginning. After the second time, training is performed by the extension staff, supported by lecturers from outside and facilitators of the Project, then it is transferred to the key persons of the activities. It aims to make villagers as

key persons with capacity and motivation able to expand technical skills to other villages by the end. This is the reason the draft plan proposes five training sessions for one item.

As mentioned above, the training plan includes two components. The importance of cross visits, one of the two components, is that to visit successful villages which have similar natural and socio-economic condition can be a strong motivation for success. In addition, it is expected to see activities each other among the model villages provoke others to work harder. Consequently cross visits can be an effective method to create a preferable situation.

On the occasion of drawing up the curriculum for each training session, the planner is requested to keep in mind to insert items connected with forest environmental protection. These matters concern why the VSP is requested in this area.

2.4.2 Capacity Building Plan for Extension Staff

The draft plan is shown in the table 2.8. The main points of the implementation measures are:

- (1) Participatory planning is guided by Vietnamese experts. At first, lectures on principals of participatory planning and field observations are conducted. Then the workshops are conducted to practice problem analysis, objective analysis and preparation of Community Action Plan. The Vietnamese experts work as facilitators.
- (2) Study tours to see other projects related to international aid are conducted to get real images and knowledge of the process of the projects. Since raising livestock, and production and utilization of compost cover an important part of the agroforestry in the Project, visits are mainly to Tay Nguyen University that conducts many experiments for species of fodder grass. Since Tay Nguyen University has conducted supporting activities for ethnic minority groups, visitors can learn about ethnic minority groups in study tours.
- (3) Cross monitoring is carried out in three-day field observation conducted by participants themselves. Commune extension staffs monitor other villages except for village to work in charge. Then workshops are conducted to analyze the problems in each village, to discuss the measures as practices and to make a better plan. The discussion results are expected to reflect them in the activities of model villages through the extension staff of each commune.
- (4) A commune seminar is organized by the district extension authority to expand the experiences of the model villages to other villages in the commune. Presentation is made by the commune extension staff and group leaders of the activities in the model villages. Attendants are key

persons of the other villages within the commune, such as village chief, traditional leader, persons from the communist party, leaders of the agricultural union, women's union and youth union.

- (5) A provincial seminar is conducted on the third year of the project period to introduce the project activities. It becomes the base to spread the activities to the whole of Kon Tum province. The seminar is organized by the Kon Tum DARD. Presentation will be done by district extension officers of Kon Ray and Kon Plong, the project facilitators and Japanese experts.
- (6) The project facilitators, Vietnamese experts, JICA and the local NGO staff contracting with the Project for management of the training and will manage the planning and implementation of the training programs.
- (7) Japanese experts assist all capacity building activities; nevertheless, this assistance should be minimized to enforce the self-management capacity and extension activity's self sustainability of Vietnam side.

2.4.3 Capacity Building Plan for Staff in Charge of Project Planning and Evaluation of VSP in Province and District

The participants of this training, who are staff in charge of project planning and evaluation of VSP in province and district level, are required to make the plan including budget by themselves, to advance the project to the next stage which aims to spread the experience obtained from the project to other villages. Table 2.9 shows the training plan. Some items will be combined with the courses for extension staff. "Practice for making VSP plan," "practice for making proposal" and "seminar at provincial level" in the training items will be conducted as follows.

The first and second session will be conducted as "practice for making VSP plan."

First session

- a. Using the knowledge obtained from the training, including "participatory planning method" and "cross monitoring", the commune VSP plan-making practice is implemented basically on the participants' initiative. In the first session, the participants are requested to make a study plan (including materials and expense) to prepare the VSP plan.
- b. Three days are allowed to make the study plan, and the contents are examined by JICA experts.
- c. Management in the first session can be assisted by the Japanese experts, NGO and the project facilitators.

- d. In the first session, participants are divided into two groups: Kon Ray and Kon Plong. The two teams are evaluated by the results in competition.
- e. On the fourth day, each team is requested to present study plan and process of discussion to the other team and key persons of the PPC and the DPCs.

Second session

- f. The second session will be held 3-4 week after the first session. During the weeks, participants are requested to do field work (including local workshop) based on their own study plan.
- g. In 2-3 days, participants are requested to analyze the results of field survey and to find problems and objectives based on the PCM method. Basic knowledge of PCM will be guided by Vietnamese experts (facilitators).
- h. In 2-3 days, participants are requested to discuss a VSP implementation plan as practice.
- i. The participants can be guided by Vietnamese experts (facilitators) in a process of the formulating plan.
- j. In 1-2 days, PDM will be arranged and materials for presentation will be prepared. The power of persuasion to obtain a budget is evaluated by key persons of the PPC. It is recommended to use tables and projectors (visual materials) in the presentation.

In the third session, “seminar at provincial level” is held, followed by “practice for making proposal.”

- k. In “seminar at provincial level,” the attendance of key persons is required (Chairman, Vice Chairman and DPI) from the PPC and the DPCs.
- l. Finally the participants are requested to submit a project proposal on how to implement the VSP plan including measures to spread VSP from the model villages to other villages.
- m. The proposal will be submitted to the authorities of the PPC. The participants will consequently be evaluated by PCs, and they may obtain the opportunity to realize the project.

3. Contents of the Works Implemented

3.1 Schedule of the Work Implemented

The schedule of the work implemented by the short-term experts in Vietnam is as shown in Table 3.1.

Table 3.1 Schedule of the work implemented

No.	Month	Day	day of the week	Kazuhiisa KATO Planning of Villager Support Program (Implementing Arrangement)	Nobumitsu MIYAZAKI Planning of Villager Support Program (Agroforestry)
1	4	4	Sun	Narita→Hong Kong→Hanoi (arrival at 15:55)	
2		5	Mon	Courtesy call to and Meeting with JICA, Embassy of Japan and MARD	
3		6	Tue	Explanation and Discussion of Inception Report to MARD	
4		7	Wed	Procurement of materials	
5		8	Thu	Hanoi→Da Nang→Pleiku (arrival at 14:50) by airplane → Kon Tum on the road	
6		9	Fri	Courtesy call and meeting with Provincial and District DARD (Explanation of Inception Report to DARD and Selection of communes for VSP implementation, and Preparation for several workshops)	
7		10	Sat	Preparation for several workshops	
8		11	Sun	Preparation for several workshops	
9		12	Mon	Study on obstruction factors for implementation of VSP and preparation of workshops	Narita→Hong Kong→Hanoi (arrival at 15:55)
10		13	Tue	Study on obstruction factors for implementation of VSP and preparation of workshops	Courtesy call to and Meeting with JICA and MARD
11		14	Wed	Commune level workshop for Hieu Commune	Meeting with specialist of Agroforestry
12		15	Thu	Commune level workshop for Poe Commune	Survey for local resources such as NGO in the implementation of VSP
13		16	Fri	Commune level workshop for Dak Phe Commune	ditto
14		17	Sat	Commune level workshop for Dak Koi Commune	Hanoi→Da Nang→Pleiku (arrival at 14:50) by airplane → Kon Tum on the road
15		18	Sun	Kon Tum→ Ngoc Tem	Meeting with specialist of Agroforestry
16		19	Mon	Commune level workshop for Ngoc Tem Commune	Courtesy call and meeting in Kon Tum DARD
17		20	Tue	Analysis for results of commune level workshops	Agroforestry Survey in Vi Chiring village in Hieu Commune
18		21	Wed	Village level workshop in Vi Chiring village in Hieu Commune	Agroforestry Survey in Kon K Tau village in Poe Commune
19		22	Thu	ditto	Same as Mr. KATO's Schedule
20		23	Fri	ditto	Agroforestry Survey in Kon Tuc village in Dak Phe Commune
21		24	Sat	Analysis for results of village level workshops	Analysis for results of agroforestry survey
22		25	Sun	Analysis for results of village level workshops	ditto
23		26	Mon	Village level workshop in Kon K Tau village in Poe Commune	Agroforestry Survey in Kon Tuc village in Dak Phe Commune
24		27	Tue	ditto	Same as Mr. KATO's Schedule
25		28	Wed	ditto	Agroforestry Survey in Nuoc Not village in Ngoc Tem Commune
26		29	Thu	Village level workshop in Nuoc Not village in	ditto

				Ngoc Tem Commune	
27	4	30	Fri	ditto	Same as Mr. KATO's Schedule
28	5	1	Sat	ditto	Agroforestry Survey in Nuoc Not village in Ngoc Tem Commune
29		2	Sun	Village level workshop in Kon Tuc village in Dak Phe Commune	Agroforestry Survey in Kon Tuc village in Dak Phe Commune
30		3	Mon	ditto	Same as Mr. KATO's Schedule
31		4	Tue	ditto	Agroforestry Survey in Tu Ro Bang village in Dak Koi Commune
32		5	Wed	Village level workshop in Tu Ro Bang village in Dak Koi Commune	ditto
33		6	Thu	ditto	Same as Mr. KATO's Schedule
34		7	Fri	Analysis for results of village level workshops	Agroforestry Survey in Tu Ro Bang village in Dak Koi Commune
35		8	Sat	ditto	Analysis for results of agroforestry survey
36		9	Sun	ditto	ditto
37		10	Mon	Preparation of Provincial level workshop	ditto
38		11	Tue	Provincial level workshop	Same as Mr. KATO's Schedule
39		12	Wed	ditto	Accompanying with Mr. Nishimiya for going to the field
40		13	Thu	ditto, Meeting for consideration of Project Management Mechanism	Same as Mr. KATO's Schedule
41		14	Fri	Preparation of draft PO (Plan of Operations) based on PDM	Preparation of draft VSP implementation plan
42		15	Sat	ditto	ditto
43		16	Sun	ditto	ditto
44		17	Mon	Preparation of draft VSP implementation plan	ditto
45		18	Tue	ditto, Discussion with WB project	Same as Mr. KATO's Schedule
46		19	Wed	ditto, Discussion with Extension Center	ditto
47		20	Thu	ditto	ditto
48		21	Fri	ditto, Discussion with DPI	ditto
49		22	Sat	ditto	ditto
50		23	Sun	ditto	Pleiku→Da Nang→ Hanoi
51		24	Mon	ditto	Survey for local resources such as NGO in the implementation of VSP
52		25	Tue	Explanation and Discussion of draft VSP implementation plan with Sub-DFD	ditto
53		26	Wed	Pleiku→Da Nang→ Hanoi	ditto
54		27	Thu	Explanation and Discussion of draft VSP implementation plan with MARD	Same as Mr. KATO's Schedule
55		28	Fri	Report to JICA and Embassy of Japan	ditto
56		29	Sat	Preparation of final report	ditto
57		30	Sun	ditto	ditto
58		31	Mon	Hanoi→Hong Kong→ Narita	ditto

3.2 Results of the Discussion with Relevant Authorities in Vietnam

- (1) **The Substance of the Discussion between the JICA Office (Mr. Nishimiya), and the Vice Director of Kon Tum Provincial DARD, the Vice Chairman of Kon Ray DPC, and the Vice Chairman of Kon Plong DPC**

Date: May 11, 2004

Location: Sub-DFD head office

Principal attendants: Vietnam side

Mr. Truong Khac Toi (Vice Director of DARD)

Ms. Nguyen Tho Tonh (Vice Chairman of Kon Plong DPC)

Mr. Naeng Vaen Sooung (Vice Chairman of Kon Ray DPC)

Mr. Nguyen Viet Khoa (FD of MARD)

Japan side

Koji Nishimiya (JICA Vietnam office)

Kensei Oda (JICA long-term expert)

Nobumitsu Miyazaki (JICA short-term expert)

The opening statement about the substance of the meeting was made by Mr. Nishimiya.

(To hear the opinion about the approach of the Vietnam side toward the Project, and the preferable method of the Project, from the people in charge of the Vietnam side)

Vice Director of DARD:

The Project is a very important plan. Since Mr. Kato, the short-term expert from JICA, has been conducting the workshops in each village for about a month, I am convinced that the Project will become a substantial plan.

Vice Chairman of Kon Ray DPC:

The Project is also very important for DPC. I am convinced that you can understand the high level of necessity for the operation of the Project if you visit the local villages. I would like to see early onset of the Project due to the difficult circumstances in the selected villages.

Mr. Miyazaki:

I anticipate that the following will be the important check points in deciding whether or not the JICA will realize the Project: 1) how you will spread the results obtained from the Project to the other villages, and 2) what type of plan the Kon Tum DARD is going to implement to secure sustainability. JICA HQs is concerned with these points. I hope that you will take this opportunity to talk freely with Mr. Nishimiya.

Vice Director of DARD:

I am convinced that we will obtain good results from the Project. There is a State regulation regarding the counter budget (10% of the total expense is distributed; it includes pay for the counterparts), and the government will respond to the counter budget appropriately. In addition, the budget for future

activities will be approved if the result of the Project is accepted. It is essential to realize the Project.

(2) Discussion with Vice Chairman of Kon Tum PPC

Date: May 12

Location: Meeting room of Kon Tum PPC

Attendants: Vietnam side

Mr. Tran Quang Vinh (Vice Chairman of PPC)

Mr. Nguyen Hung (Staff, Department of Foreign Affairs)

Mr. Nguyen Viet Khoa (Forest Department of MARD)

Japan side

Koji Nishimiya (JICA Vietnam office)

Kensei Oda (JICA long-term expert)

Nobumitsu Miyazaki (JICA short-term expert)

The opening statement about the substance of the visit was made by Mr. Nishimiya. The Forest Management Plan was presented based on the Development Study of two years ago. The importance of VSP was recognized in the Forest Management Plan. JICA also recognizes the importance of VSP for forest conservation and preservation. To investigate the possibilities for cooperation with the Vietnam side, JICA has been working on the preparation including the dispatch of two short-term experts and carrying out Workshops for the discussion on the preparation of the Project with the relevant authorities and villagers. At this stage of the project planning, JICA understands that workshops in five villages have finished, and the workshop to discuss the final framework of the Project is now ongoing.

Mr. Nishimiya explained that the Japan side wants to hear the opinions about the Project from the relevant authorities in Vietnam and the Kon Tum PPC.

(After a brief explanation for proceeding project preparation from the Vietnam side counterpart agency to the Vice Chairman of the PPC)

Vice Chairman:

I understand that many workshops have been held in order to build up the Project, with Japanese experts at the center. I also understand that the substance of the Project is to reduce pressure toward the forest through the improvement of living standards in villages. I have heard that many relevant agencies are going forward with Workshops in cooperation with Japanese experts. I believe DARD and JICA being in charge of this plan will develop the discussion and build up the framework of the Project as expected. The Project has been discussed based on the long-term survey (Development

Study), and many data have already been collected. I am convinced that it is time to realize the Project.

The implementing agency will prepare implementation plan of the Project and will proceed to obtain the government's agreement. I represent the PPC to emphasize that we really want to implement the Project. DARD and Sub-DFD are going to handle the Project. If any problems arise which exceed the powers of DARD and Sub-DFD, please let us know and consult with us about the problems. The PPC intends to provide all possible assistance.

MARD (Mr. Koah):

Preparations are now being made for the realization of the Project. I understand that the purpose of this preparation stage is to develop a framework for the Project by clarifying measures to support villagers in forest conservation through evaluating: 1) the components of project activities, 2) the villagers' capability for participating in sustainable forest management, and 3) the possibility for livelihood improvement of villagers, through agriculture and agroforestry.

MARD is interested in the success or failure of the Project. MARD intends to complete the essential documents and procedures soon, and wants to go forward from preparation to realization.

Mr. Nishimiya:

The purpose of the Project is to realize sustainable forest management. So improvement of living standards is essential for the villages adjoining forest areas. The most important challenge for the Project is how to spread the experience gained from the model villages to other villages. For that reason, to establish ownership on the Vietnam side is important. This time I would like to confirm this point.

I hope that both the Japan and Vietnam sides will recognize and confirm their shared responsibilities clearly. Then we will discuss whether to implement the Project or not. Many problems are expected to arise, but I hope the Vietnam side will solve them on the basis of their share of the responsibility and ownership to the Project.

Vice Chairman:

Regarding the ability of the Vietnam side to fulfill its responsibilities, we have already displayed management ability in this type of project. For example, we are already implementing a similar project (Kon Tum Forest Protection and Rural Development Project to preserve Chi Mo Ray National Park, assisted by the World Bank), and improvement in the livelihood of the local inhabitants for forest preservation is also essential in the Project. Similar activities to achieve similar purposes are built into both projects, even though the locations are different. The project by the World Bank is a

large-scale one and includes the improvement of the infrastructure and school system, as well as activities related to agroforestry. Education of local inhabitants is also an important factor.

I think Sub-DFD will be involved in this cooperative project with JICA. I believe that Sub-DFD will sufficiently discuss with the Japan side to prepare the substantial plan.

Mr. Nishimiya explained that this cooperative project is technical cooperation from within the system of JICA, and he explained the three elements of the technical cooperation.

Vice Chairman:

I want you to recognize that to reinforce infrastructure such as roads is essential for the livelihood improvement of the villages in mountainous areas.

Mr. Oda:

Since the Project is performed from within the technical cooperation scheme of JICA, investment in infrastructure is not included in the activities. However, regarding infrastructure, Vietnam has already submitted proposal to GOJ for the request of the matter as a small-scale grant aid project, and this plan will cover the issue of infrastructure. I cannot say whether Japan will take up this proposal of grant aid project or not, but please convey your needs regarding improvements in infrastructure, etc., to the experts.

Vice Chairman:

The villages in the target area of the Project are extremely poor, so any support from JICA will have a great impact on these villages. We are working on getting a budget for infrastructure and so on to improve the poor villages, and we strongly want to cooperate with JICA.

(3) Discussion with the Person in Charge of WB Project

Date: May 17

Location: Meeting room of DARD

Principal attendants: Vietnam side

Mr. Dan Hieu Trang (Vice Director of WB project)

Japan side

Nobumitsu Miyazaki (short-term expert of JICA)

Kazuhisa Kato (short-term expert of JICA)

Mr. Kato explained the substance of the visit and introduced the content of the JICA projects under preparation. He asked about summary of the World Bank project and the possibility of cross-visits in

the future between the Project and the WB project, and requested mutual exchange of information.

Mr. Trang gave the following summary of the World Bank project.

1. Title of the project: Kon Tum Forest Protection and Rural Development Project
2. Term: 1999-2004 (expected to extend to 2006)
3. Donor: World Bank and the Netherlands (grant aid)
4. Target area: 60 villages of 8 communes in Ngoc Hoi district and Sa Thay district of Kon Tum Province, in the buffer zone of Chi Mo Ray National Park. The target area is approximately 450,000 ha.
5. Purpose: To enhance the preservation system of National Parks in Vietnam through the support for socio-economic development of the local inhabitants in the buffer zone.
6. Main activities:
 - 1) Forming plans for local community development by villagers independently
 - 2) Distributing treeless areas in forest land to villagers, aiming at exploiting land efficiently and recovering forest
 - 3) Supporting villagers for improvement in socio-economic conditions
This activity supports the development of social infrastructure based on the plans as stated above in 1) by supplying materials for nurseries, schools, water supply, irrigation facilities, suspension bridges and so on in the order of the community's priority. For building structures, materials are supplied and building guidance and post-construction inspections are carried out in the project.
 - 4) Reinforcing agricultural activities
Agroforestry activities are included in this activity. It intends to develop the following methods: 10 model farmers from each village are selected to implement training for agricultural skills and forming demonstration farms, and they become the nuclei of farmers in villages to disseminate their skills and knowledge. The activities for agriculture focus on the farmers who have a relatively high income and high motivation. On the other hand, the activities for agroforestry focus on those in poverty. (So far, because activities 1) and 2) have taken a lot of time, the other activities including agroforestry remain future developments.)
 - 5) Promoting contracts for forest protection
This is to make contracts with villagers, which are similar to the forest protection contracts project in program 661. They are paid a certain amount to patrol in the forest of the buffer zone. This activity has achieved actual results in preventing encroachment from outside. The target area was 12,500 ha.
 - 6) Developing infrastructure (roads, irrigation system, and others)
 - 7) Capacity-building for project managers and relevant staff

Finally, Mr. Kato confirmed the possibilities of future cooperation including cross-visiting, and proposed to exchange mutual information during implementation periods of the JICA project. Both sides promised to continue contact.

(4) Discussion with the Staff of ADB Project in Kon Tum Provincial DPI

Date: May 21

Location: Meeting room of DPI

Attendants: Vietnam side

Mr. Le Quang Chiong (Director of DPI)

Mr. Tran Van Chi (Chief of Economic Division, Project Director of ADB)

Mr. Nguyen Chinh Bac (Chief of Strategy General Division)

Mr. Huynh Minh Chan (Staff of DPI)

Mr. Bui Thanh Phong (Staff of DPI, Project staff of ADB)

Japan side

Nobumitsu Miyazaki (JICA short-term expert)

Kazuhisa Kato (JICA short-term expert)

After mutual introductions, Mr. Miyazaki explained the purpose of this visit. He asked the Vietnam side to explain the substance of the ADB project to be developed in Kon Plong district and Kon Ray district, since JICA wanted to examine whether or not adjustments of the contents of both the ADB project and JICA project were necessary. Mr. Kato explained the situation regarding discussion of the purpose, issues and outline of activities of the JICA project, based on the PDM.

Director of DPI:

I heard that the Project under examination by JICA concerns VSP, which was proposed in a previous Development Study. The recognition of JICA that the improvement of living standards is deeply related to forest conservation is consistent with our own recognition. Mr. Chi, Project Director of ADB, was going to explain about the ADB project.

Chief of Economic Division:

The ADB project is for “Support to prepare Central Region Livelihood Improvement” (CRLIP) of 451CP-QILQT 9/5 2000. CRLIP is an extensive project which includes infrastructure, capacity building including internship and training, offering materials to the local people, technical support, supply of equipment for project management, and micro finance.

This ADB project (Middle Region Poverty Reduction Project) will be implemented in four provinces

(Quang Binh, Quang Tri, Thua Thien Hue, Kon Tum) within the CRLIP system. The target area includes 136 communes. The project will be approved by 2004, and then will start. On June 1, ADB experts will enter Kon Tum, in which 44 communes are targeted.

The target districts in Kon Tum Province are Kon Plong, Kon Ray, Dak To, Ngoc Hoi and Dak Glay.

The components of this project are the following.

- 1) Securing food: Enhancing home gardens, investment for farm production improvement (provision of farming tools, appropriate seeds, improved seeds and others)
- 2) Improvement of income: Improvement of agricultural production, commercialization of natural resources products, acquirement of income generation from other than agriculture products, infrastructure improvement (making roads, water supply, irrigation system, small-scale hydroelectric power plant, and local market)
- 3) Development of local society: Provision of materials and science information needed for monitoring and evaluation, training of PRA method, and supporting the promotion of distribution of forest area (treeless land) to villagers
- 4) Enhancing organizations
- 5) Supporting project management
- 6) International and local consulting services

The fund is 20 billion US\$ (4.8 billion of the 20 billion US\$ is for grant aid tasks).

The share of the expenses by Vietnam is from government funds, and labor force by participation of villagers.

DPI explained that it is not necessary to worry about the duplication of activities and investment from JICA and ADB, because DPI is in a position to approve plans every year, and DPI can avoid the duplication of activities and investment even if the JICA project and ADB project have similar components. Moreover, in the ADB project, the basic unit is a commune, and it includes infrastructure improvement, which the JICA project does not. Therefore, there is room for cooperation between JICA and ADB.

Mr. Kato and Mr. Miyazaki explained that they were not in a position to announce whether or not the JICA project will be realized. However, they announced that if the Project reaches realization, JICA wants to establish cooperation and a closer information exchange with the ADB project.

In addition, they explained that JICA will not interrupt the ADB project to conduct infrastructure improvement, in communes including Kon Plong and Kon Ray, even if they are JICA's model

villages.

(5) Discussion with MARD for VSP Model Project Implementation Plan (Draft)

Date: May 27, 2004

Location: Meeting Room 403 – B9 Bldg. – MARD

Attendants: Vietnam side

Dr. Pham Quang Minh – Head of Silviculture Division - Forestry Dept. of MARD

Mr. Nguyen Viet Khoa – Forestry Dept. of MARD

Dr. Vo Dai Hai – Deputy Director of Institute of Forestry Science of MARD

Mr. Tran Kim Long – Deputy Director of International Cooperation Dept. of MARD

Japan side

Mr. Koji Nishimiya – JICA Vietnam Office

Ms. Tao Thi Tu – JICA Vietnam Office

Mr. Kensei Oda – JICA Expert at MARD

Mr. Kazuhisa Kato – JICA Short-term Expert for Planning of VSP (Implementing Arrangement)

Mr. Nobumitsu Miyazaki – JICA Short-term Expert for Planning of VSP (Agroforestry)

1) Objectives of meeting:

- Presentation on Project Proposal (Draft) by Study Team (Mr. Kato & Mr. Miyazaki)
- Getting mutual agreement on the concept, framework and activities of the Project.
- Confirmation of application timing and procedure.

2) Discussion points:

a. Objectives vs. title of the Project:

- Mr. Hai suggested that the draft name of the Project did not describe the goal of the Project (to alleviate pressure on forests by villagers), and he suggested the name to be modified or supplemented. Mr. Minh also recommended modifying the name of the Project in a way that the goal can be seen easily.
- Mr. Nishimiya reminded the original name of the Project should be “Project on Forest Management Plan in Central Highland”. He also recommended that the 2 words “forest management” should be included in the name the Project.

b. Activities of the Project:

- Mr. Hai thought that the proposed activities seemed to mainly cover economic aspect while forestry related activities had not been mentioned so many. He recommended attaching more

subjects on forestry to the training activities and villagers' planning after the completion of the Project.

- Mr. Kato reminded audience about the Development Study concerned where villager support program is just one component. He understood Mr. Hai's point that final goal should be sustainable forest management. He pointed that forest conservation education was included in the output of the proposed project. Therefore, it could be understood that what Mr. Hai mentioned had already been included in the Project. Mr. Kato additionally emphasized that the Project was formed using bottom-up approach which meant that it was based on villagers' demands.
- Mr. Long recommended that present system of agro-forestry in target villages should be investigated to see whether the new model would be suitable or not. He also suggested introducing more activities in forestry since the Project would be for forestry sector.
- Mr. Kato replied Mr. Long's comments that study on present system of agro-forestry in target villages would be carried out in PRA stage. He also explained that more activities would be introduced upon request of villagers. However, forestry activities would require large area of land while villagers have relatively small area of land at present.
- Mr. Minh suggested introducing land-use planning at village level in the activities of the Project.
- Mr. Nishimiya reminded about the explanation of Mr. Kato and Mr. Miyazaki regarding scale and characteristic of the Project. He reconfirmed that this would be trial project for forest management aimed to disseminate to other villages later on. Therefore, they cannot carry out all activities in the Project at this stage. He also mentioned that the Project now is aimed to secure villagers' life first, and during the implementation of the Project, explanations and instructions on the importance of forest and forest management will be given to villagers.
- Mr. Nishimiya also emphasized that beside the ownership of villagers to the Project, it is necessary to have the participation of local authorities in the Project. However, as Mr. Minh mentioned earlier, it was difficult for Kon Tum to make decision on framework and activities of the Project.

c. Budget of the Project:

- Mr. Khoa expressed his concern that the integrated agro-forestry model would be costly. He took a project by EU in Nghe An province as an example where it cost 2000\$ ~ 3000\$ for one model. He suggested focusing on some technical subjects if budget is limited since he was afraid that the 10,000\$ budget for each village would be short for so many activities.
- Mr. Miyazaki agreed that the cost would be not so low, but he thought the Project would start with small scale first as a tactic.
- Mr. Minh asked how the budget of 10,000\$/village was decided and also he was afraid that the sum would be not enough. He also suggested some request to support in infrastructure

improvement in target areas.

- Mr. Kato reminded that the budget of 10,000\$/village would be the cost for only materials to be provided the villagers for the implementation of the activities by VSP in the model villages and training, survey and management cost in the model villages would be excluded in the amount of 10,000\$/village, therefore, the amount is not so small. He also said that 10,000\$ was decided taking into consideration the sustainability of the Project.

d. Project management unit:

- Mr. Minh pointed out that the proposed project management unit seemed too complicated while the scale of the Project is small. In his opinion, just one Project Director (either Director or Deputy Director of DARD Kon Tum) and one Project Coordinator (Head of Sub-Dept. of Forestry Development) would be OK
- Mr. Nishimiya affirmed that both Vietnamese and Japanese sides should involve in Project Management Unit.
- Mr. Nishimiya asked MARD to consider the suitable project framework.

e. Timing of procedure:

- It was suggested the Project to be started at the latest at early December 2004 in case that the Project will be launched within year 2004. Both parties would like to proceed the Project soon. However, Mr. Minh pointed that because the total budget for project is not clear decided then it is difficult for Vietnamese side to push the procedure. He suggested an official estimation of fund by JICA would be necessary to get approval of MPI.
- Mr. Nishimiya explained that budget information is not needed at this planning stage, and still it cannot be estimated since the information about Experts or equipments....have not been decided yet. However, he reminded that ToR should be prepared by mid June. Both sides will consider the feasibility of it, and after we decide to implement the Project, Draft R/D should be prepared and submitted to JICA by August 2004.

f. Conclusions:

Both parties could reach common understanding about concept of the Project. However, there are several points should be revised. Mr. Minh confirmed to review the Project in consultation with Mr. Oda as recommended by Mr. Nishimiya, and try to produce revised version in time for submission.

3.3 The Survey on the Factors Obstructing the Implementation of VSP

This section examines the factors obstructing the implementation of VSP, as a program under the supervision of Sub-DFD, DARD of Kon Tum Province, which was the counter part (C/P) organization during the Development Study. Factors obstructing the implementation of VSP are examined from the standpoint of the institution, the organizational structure, the implementation system, the human resources, and the budget.

3.3.1 A Review of VSP Framework in the Development Study

The basic framework of the VSP in the master plan, which was created in the Development Study, is comprised of the following five components: food shortage alleviation, shifting cultivation control, household income enhancement, industrial afforestation, and basic human needs (BHN) improvement. Under these components, the following activities were proposed.

(1) Carrying out agroforestry on up-land agriculture fields (on an inclined landscape)

- Introduction of alley cropping and hedgerows (cultivation of fruit trees and other perennial plants, and trees that can be used to fertilize soil)
- Establishment and management of nurseries
- Improving the homegarden (cultivation of cash crops).
- Development of fishponds
- Beekeeping

(2) Development of paddy fields

- Creating new paddy fields
- Promotion of tow periods cropping
- Improving irrigation dam and chnnel
- Introduction of improved varieties of plants (rice)

(3) Livestock management

- Introduction of new breed
- Cultivation of fodder trees and grasses
- Promoting barn-based system
- Manure production

- Introduction of animal breeding management to maintain the health of livestock (i.e. disease prevention)

(4) Industrial afforestation

- Promotion of planting activities based on contracts with villagers
- Establishment and management of nurseries

(5) BHN improvements

- Securing safe drinking water
- Introduction of portable hydroelectric power generators
- Installation of toilet facilities

Although there are some exceptions, note that each of the activities above involves technical guidance.

3.3.2 Analysis of Factors Obstructing the Implementation of VSP

The conclusion of the analysis on the factors obstructing the implementation of VSP, including the activities mentioned above, by Sub-DFD is mentioned as follows.

Although the overall objectives of VSP is to contribute the introduction of sustainable forest management, the actual activities proposed are quite diverse; some of the activities are tasks that are under the jurisdiction of other sub-departments within DARD, including the Extension Center, Irrigation Department and Livestock Department (See Appendix 7 for an illustration of DARD departmental organization), and of Program 135. Given that these activities that are being proposed under VSP are wide ranging, it will be extremely difficult for Sub-DFD to undertake all the proposed activities on its own; they do not possess sufficient operating budget, and they also do not have the organizational structure, the system, and qualified personnel to implement the activities. Therefore, instead of Sub-DFD executing these activities independently, it is necessary for Sub-DFD to play a leading role in a collaborative effort with other organizational units to implement VSP. However, other organizational units, too, do not have ample operating budget to spare for VSP activities. Therefore, for Sub-DFD to be able to jointly execute the activities, it is important to convince other organizational units that VSP is a worthwhile investment to make. To accomplish this, Sub-DFD must provide a definite plan, with examples of successful model cases of VSP. However Sub-DFD was not able to provide these to the potential collaborators because they lacked the ability to come up with definite plans to implement VSP. Additionally, they were not able to allocate a part of their budget to

conduct some model cases to create examples of successful activities.

Based on the points made thus far, the factors obstructing the implementation of VSP are analyzed based on two scenarios; 1) Sub-DFD implements the VSP independently, and 2) Sub-DFD implements the VSP in collaboration with other organizational units. Detailed analyses of these two scenarios are given below.

(1) Obstructing Factors if Sub-DFD Implements VSP Independently

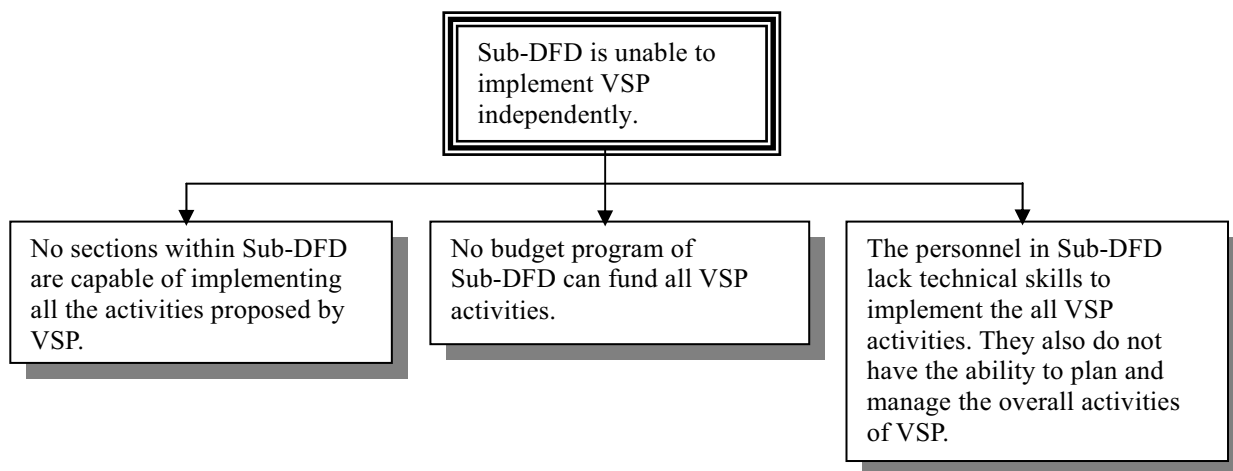


Fig. 3.1 Obstructing Factors if Sub-DFD Implements VSP Independently

The current status of the Sub-DFD’s organizational structure, implementation system, personnel, and the budget programs, which are the underlying sources of the obstruction factors, is as follows.

1) Organizational structure, implementation system and personnel

There are two sections within Sub-DFD, the General Affairs Section and the Technology Section. The Technology Section is primarily responsible for planning and implementing logging projects, and thus has no common grounds with VSP activities.

The “Management Sector for 5 million ha Forestation Project”, which is officially the unit is an independent section within DARD but practically placed under the supervision of Sub-DFD, manages activities related to Program 661¹. Forest protection projects, which are contracted out to villagers, and afforestation projects are being implemented under the Program 661 within the Protection Forest. Planting fruit trees and other perennial plants that allow the villagers to harvest crops (fruits) can be institutionally carried out under the framework of Program 661’s afforestation project. However, this

¹ Refers to the “Decision of Prime Minister on Objectives, Tasks, Policies, and Organization for the Implementation of Afforestation of 5 Million ha Program” established in 1998.

has yet to take place in Kon Tum Province². If this kind of planting activities is actually implemented in the Kon Tum Province, a part of activities in the VSP can be accomplished within the framework of Program 661. For this to take place in Kon Tum, the leadership of the PC and the improvements in technical skills of the villagers are imperative based on an interview with the person in charge.

Currently, there are 11 staff members in Sub-DFD including the manager, and 9 other members are assigned to the Management Sector for 5 million ha Forestation Project. These staff members are managing the above-mentioned tasks, and they do not have much spare time to contribute to the VSP projects. The majority of knowledge and skills that these staff members possess are obviously linked to their respective duties; they do not have any knowledge and skills related to paddy field development and livestock management. Additionally, the fact that VSP implementation plan has not been produced by the Sub-DFD (as of April 2004) illustrates their inability to come up with a plan.

2) Budget

The operating budget of Sub-DFD is split into general overhead and administration expenses and forest-work expenses. There are no programs within the budget that can be used to fund all the activities of VSP outlined in chapter 3.3.1. Regarding budget for the forest-work, expenses for the year 2003 was US\$10,600. Within the Province of Kon Tum, there are 76 communes, thus each commune receives only \$140 on average. It is clear that Sub-DFD lacks funding.

The following table illustrates the budget and project scale of Program 661 for the year 2003 in Kon Plong, Kon Lay, and the total amount for the Kon Tum Province as a whole.

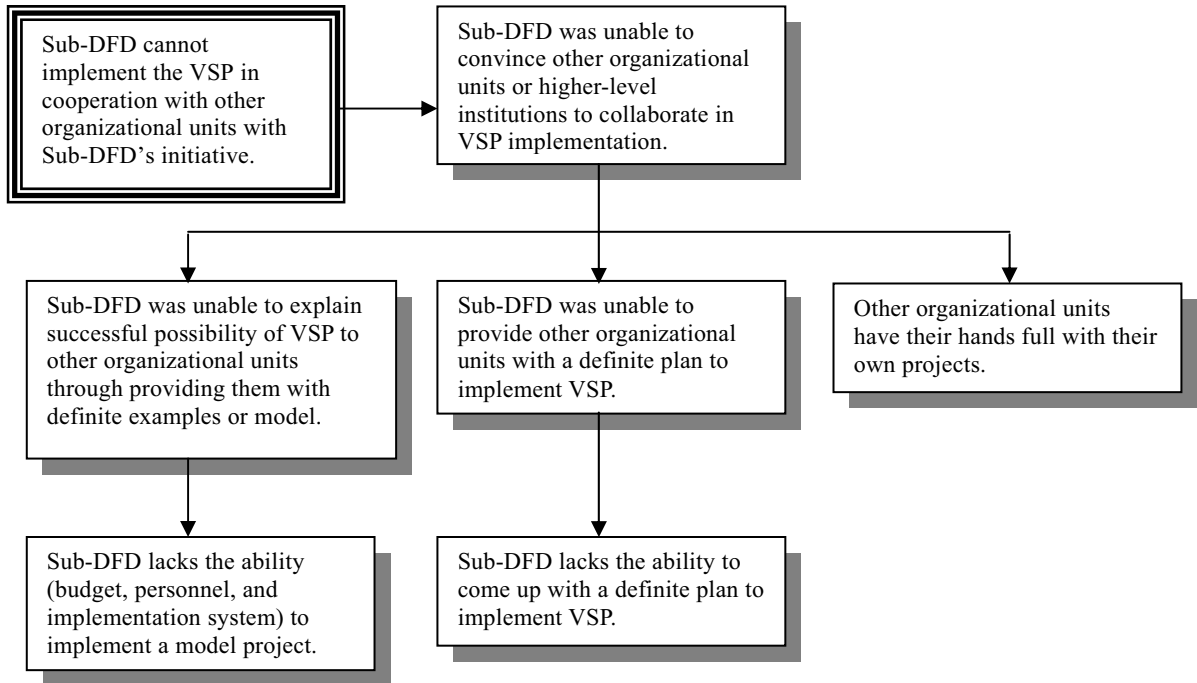
Table 3.2 Budget and Project Scale of Program 661

Budget program		Kon Plong District		Kon Lay District		Provincial total	
		Project scale (ha)	Budget amount (US\$)	Project scale (ha)	Budget amount (US\$)	Project scale (ha)	Budget amount (US\$)
Afforestation project	Plantations	0	0	200	71,000	1,200	359,000
	Maintenance	0		350		3,000	
Forest protection contract projects		30,754	98,000	4,850	15,000	123,363	393,000
Total			98,000		86,000		751,000

(2) Obstructing Factors if Sub-DFD implements the VSP in Collaboration with Other

² Based on the interview with the person in charge, planing of fruit tree and other perennial plants is being conducted in Northern Vietnam under the framework of Program 661. In the north, there are less Production Forest land available for these trees planing, and therefore must utilize the Protection Forest. Additionally, the northern residents have higher technical skills.

Organizational Units.



Failure to come up with an implementation plan and the inability to set up a model project are clear indications that factors described above are impeding the implementation of VSP. Inability of Sub-DFD to set up a model project and to come up with a VSP implementation plan has already been discussed in section (1) "Obstructing Factors if Sub-DFD Implements VSP Independently". As a reference, the current status of other organizational units is described below; specifically, the role and activities of the Extension Center (another sub-department under DARD) and the projects conducted under Program 135 are mentioned.

1) the Extension Center

This section is based on results of interviews with the person responsible within the Extension Center. At the Extension Center, extension projects to promote agriculture, forestry, fisheries, and livestock management are being planned and implemented. Training for the villagers and establishment of model areas in which can be used to teach the villagers make up a part of their projects.

The Extension Center directly supervised the district-level extension sections until 2000, but since then, changes have been made to the organizational structure. Currently, the extension sections are placed under the supervision of the ED in DPCs. This organizational restructuring has allowed the district-level extension sections to become more independent from the Extension Center. Currently, the Extension Center only provides technical assistance to the extension sections.

The Extension Center manages a budget distributed directly from the MARD. The total amount of this budget is in excess of 600,000,000 VND (approximately US\$38,000) per year. The maximum amount that can be allocated to one commune is approx. 20,000,000 VND (approx. US\$1,300) per year, and of the 76 communes within the province, 30 to 40 communes receive funds per year. However, the number of villages within a commune can be anywhere between several to a little more than ten villages; based on the maximum amount that can be distributed to each commune, the amount of funds that each village receives is estimated to be a very small amount.

For a project to be assigned a budget, it must go through the following steps. First, Extension Center reviews the project proposals, submitted by district-level units or by communes, through the discussion with district –level units. If a project is determined to be acceptable (final approval is given by the director of the DARD), they decide on the amount of funds that will be allocated to this particular project from the budget. Then district-level units or communes receive the funds and implements the projects.

While there are various projects being funded under this program, the total amount of this budget is not a huge amount; therefore, it is supposed that most of the projects that have been proposed are not executed as initially planned.

2) Program 135³

The program's main activities involve making improvements to the infrastructure of the communes. They include construction of power supply facilities, roads, irrigation systems, dams, schools and health centers, etc.

The steering committee placed under the PPC manages Program 135, and its working office is placed under the Ethnic Section in the provincial Department of Ethnic and Religions. Steering committees are also placed at the district level since the DPC is doing the actual implementation of the projects related to Program 135.

The total provincial budget for Program 135 is as follows (since 2000):

2000: 12,400,000,000 VND (approx. US\$790,000)

2001: 25,070,000,000 VND (approx. US\$1,600,000)

2002: 21,600,000,000 VND (approx. US\$1,380,000)

³ Refers to the “The Program on socio-economic development in mountainous, deep-lying and remote communes with special difficulties.” established in 1998.

2003: 27,000,000,000 VND (approx. US\$1,720,000)

2004: 27,000,000,000 VND (approx. US\$1,720,000)

To date, this program has been applied to 54 communes within the province.

For a project to be implemented under this program, following steps must be taken. First, communes that are eligible to submit project plans under Program 135 must create an implementation proposal each year. This proposal is then passed on to the PPC through the DPC. The PPC carefully reviews all the project plans and decides which of the submitted projects are to be carried out. The PPC then notifies the decisions and distributes the budget to the DPC. The DPC then executes the projects by using the allocated funds.

3.3.3 Analysis for the Removal of Factors Obstructing the Implementation of VSP

In this section, effective measures for VSP implementation are going to be analyzed, based on the following two obstructing factors which were already analyzed in the former section; 1) the obstructing factors to implement VSP by Sub-DFD independently, and 2) the obstructing factors to implement VSP by Sub-DFD and other organizational units in coordination.

For Sub-DFD to be able to implement VSP independently (described in section (1)), they must establish an organizational structure and an implementation system to manage VSP. They must also work the program into their budget. However, when there are other organizational units that can execute some of the activities proposed under VSP (described in 3.2.2), establishing a new organizational structure within Sub-DFD is not administratively efficient, as some of the activities may overlap. Therefore, independent implementation of VSP by Sub-DFD is not a realistic plan. It is thus crucial that they cooperate with other organizational units to remove factors that are impeding the implementation of VSP. Current project draft plan, which aims to establish model cases in five villages, will be effective in removing these obstructing factors and building a collaborative working environment with other organizational units. However, following points must be taken into consideration when developing the implementation and management structure of the Project.

The proposal of draft implementation and management structure has already been made (see 2.3.1). However, further discussions leading up to the signing of R/D are being planned to make the implementation and management structure more functional and effective. During these discussions, it is important to bear in mind that the implementation and management structure must be made so that Sub-DFD can play a leading role in implementing VSP after the Projects will have been terminated.

For example, one option is to get other potential organizational units involved in the PMU. By

sharing information related to the project management system with other organizational units (e.g. what and how the Project are being carried out), it is possible to establish a system that is necessary for a continued implementation of VSP by the Vietnam side beyond completion of the Project. In the current draft implementation and management structure proposed, the Extension Center has already been noted as an organizational unit that needs to be involved. However, if necessary, the Irrigation Sub-Department and Livestock Sub-Department within DARD, and the section of Program 135 (Ethnics Section in the Provincial Department of Ethnics and Religions) may be considered as well.

To be able to provide leadership after project termination, it is important that a responsible person from the PPC and leaders of DARD participate in the PMU, so that they can assist in creating links among other organizational units.

Additionally, Sub-DFD is expected to be a “coordinator” to implement VSP activities after the Project will be ended. Therefore, it is important that Sub-DFD plays this role within the PMU.

3.4 Results of Workshops

In this section, the procedures and the results of meeting and workshops are described. These meeting and workshops were held at four different levels : (1) meeting at the district level to select five communes from which each one model village is selected, (2) workshops at the commune level to determine the five model villages where the project activities are to take place, (3) workshops at the village level to discuss activity plans within the model village, and (4) provincial level workshop to discuss the framework of the entire project.

3.4.1 Meeting at the District Level to Select the Communes

Prior to the model village selection process, it is decided to choose one each village from five different communes (total of five villages). The meeting at the district level was held to determine these five communes, which constitutes a part of the entire model village selection procedure.

Considering jurisdiction of Mang La Forest Enterprise has already selected the model area for the Development Study, at first Hieu commune and Poe commune in this jurisdiction were selected. Regarding the other three communes, Ngoc Tem commune in the Kon Plong district and Dak Phe commune and Dak Koi commune in the Kon Ray district were selected taking account of the following conditions.

- Communes should have natural and socio-economic conditions which are different from

those of Hieu commune and Poe commune.

- Communes should have access roads for vehicular traffic even in the rainy season as much as possible.
- Communes should not be assisted by any other donor at present or in the future. If other support does become available, we must be able to distinguish our project activities from those of other donors.
- Is there at least extension staff in the Communal Peoples Committee
- There is potential of sustainable forest management

Composition of ethnic minority are different with the selected five communes. They also have different socio-economic status (e.g., differences in their reliance towards rice) and surrounding natural environments (e.g., elevation and vegetation). These information are shown in Table 2.3

3.4.2 Workshops at the Commune Level to Select the Model Villages

In this section, the results of workshops that were held at each of the selected five communes are mentioned. At all workshops, the model villages were determined based on selection standards which were decided by the participants at first stage of the each workshop. Because the selection procedure was decided based on discussions with the workshop participants, each commune had slightly different methods of selecting the model village. In addition, the workshops were held based on the recognition that it is important for all participants to be satisfied themselves of selecting the model villages.

(1) Hieu Commune

At Hieu commune, each participant listed the standards they believed to be important for the selection of the model village (each participant was allowed to write down multiple standards). All the cards were then collected, and the degree of importance of each selection standards was determined based on the number of times they appeared on the cards. The results are provided in the following table 3.3.

Table 3.3 Selecton standards and the importance order at Hieu Commune workshop

Selection Standards	Number of cards that the standard was mentioned
Lack of cultivated land	24
Village with many poor households	11
Villages rely forest product	4
Villages rely on upland crop	3
Low income in cash	3
Lack of farming technique	2
Community's awareness on forest benefit	1

Based on these results, the participants discussed which of the villages within the commune has “lack of cultivated land” which is the most important standard. All participants raised Vi Chiring as a village with a serious shortage of cultivation land. Then Vi Chiring was selected unanimously as the model village because the participants decided to select model village by using only most important standard.

(2) Poe Commune

The participants first discussed and determined the selection standards, and then had a vote to determine the degree of importance of each standard. Note that the participants were allowed to vote for multiple standards. The results of the selection standards and the vote are shown in the following table 3.4.

Table 3.4 Selecton standards and the importance order at Poe Commune workshop

Standards	Number of votes polled
Village with many hunger-households	14
Village with high scale of difficulty	4
Live on forest product	4
Lack of cultivated land	3
Low cash income	2
Lack of nurseries (seedling) & livestock	1
Lack of irrigation works	1
Live on upland crop	0

After determining the degree of importance of each selection standard, the participants held another vote to select the village that best portrayed the characteristics given by each selection standard (votes were held separately for each selection standard). For a given selection standard, the participants were allowed to choose multiple villages. The results are given in the following table 3.5.

Table 3.5 Results of votes polled in each standard at Poe Commune workshop

Village	Number of votes polled in each standard								Total
	Village with many hunger-households	Village with high scale of difficulty	Lack of cultivated land	Live on upland crop	Low cash income	Live on forest product	Lack of irrigation works	Lack of nurseries (seedling) & livestock	
KonKlang 1	1	1	1	1				1	5
KonKlang 2	2	3	2			2		1	10
Kon K Tau	11	11	14	8	6	7	3	5	65
Poe 1									
Poe 2	2		1				1	1	5
Kon Koa	4	2	1			1			8
Vi O Lak	1		1		1	1			4

Based on the results, Kon K Tau was selected as the model village where the project activities are to take place. For the selection, to consider the degree of importance of the selection standards were not needed because of overwhelming number of votes polled of Kon K Tau village.

(3) Ngoc Tem Commune

After discussing and deciding on the selection standards, the participants determined the degree of importance of selection standards. For the determination, the participants compared any two selection standards for deciding on which of the two standards was more important. This procedure was repeated until they were able to rank all the selection standards. The results are following table 3.6.

Table 3.6 Selection standards and the importance order at Ngoc Tem Commune workshop

Standards	Importance order
Village with many poor & hungry households	1
Village where is easy for villagers to access	2
Village with less paddy field	3
Village stays near forest	4
Village with large area and large population	5

The participants then had another vote to select the village that best portrayed the situation described by a given selection standard (votes were held separately for each selection standard). The results of this vote are given below table 3.7. The participants were only allowed to vote for one village for a given selection standards so that they will give serious consideration before actually casting their ballots. The participants were not able to determine the village that best portrayed the condition described by the standards "Village stays near forest", because all the villages possessed this characteristic. Therefore, the participants decided to allocate all ballots to all the villages for this particular standard.

Table 3.7 Results of votes polled in each standard at Ngoc Tme Commne wrorkshop

Village Number	Number of votes polled in each standard					Total
	Select the village where is easy for villagers to access	Village with large area and large population	Village with many poor & hungry households	Village stays near forest	Village with less paddy field	
Village 1				17		17
Village 2				17		17
Village 3				17	3	20
Village 4			11	17		28
Village 5		7		17		24
Village 6			9	17	15	41
Village 7	15	10		17		42
Village 8				17		17
Village 9				17		17
Village 10				17		17
Village 11				17		17
Village 12				17		17

Because the total numbers of votes among the some villages were relatively similar, the participants decided to rank villages by giving weights to the selection standards based on their degree of importance. The procedure was as follows. First, for each selection standards, the participants gave 3 points to the village that had the highest number of votes polled shown in the table 3.7, 2 points to the village that had the second highest, and 1 point for the third. Next, the participants tripled the points that were given to the selection standard that was deemed to be the most important (i.e., “Village with many poor & hungry households”). The participants also doubled the points given to the standards that had the second and the third highest degree of importance. No weights were applied to the selection standards that had the fourth and the fifth ranking. Finally, the participants added all the points assigned to a given village, and compared the total points among the villages. The results of this process and calculation are shown in the following table 3.8.

Table 3.8 Number of scores obtained in each standard at Ngoc Tme Commne wrorkshop

Village Number	Number of scores obtained in each standard					Total scores
	Select the village where is easy for villagers to access	Village with large area and large population	Village with many poor & hungry households	Village stays near forest	Village with less paddy field	
Village 1				3 x 1 = 3		3
Village 2				3 x 1 = 3		3
Village 3				3 x 1 = 3	2 x 2 = 4	7
Village 4			3 x 3 = 9	3 x 1 = 3		12
Village 5		2 x 1 = 2		3 x 1 = 3		5
Village 6			2 x 3 = 6	3 x 1 = 3	3 x 2 = 6	15
Village 7	3 x 2 = 6	3 x 1 = 3		3 x 1 = 3		12
Village 8				3 x 1 = 3		3

Village 9				3 x 1 = 3		3
Village 10				3 x 1 = 3		3
Village 11				3 x 1 = 3		3
Village 12				3 x 1 = 3		3

Given the total score and the number of votes, the participants decided to select the model village from one of the three villages that had the highest scores (villages 4, 6 and 7). To decide on a single village, the participants qualitatively compared and examined the advantages and disadvantages of each village. From this examination, the participants found that villages 4 and 6 had some characteristics that were not suitable to be selected as model villages; village 4 do not have good road access and village 6 have unstable fixed domiciliation. Thus village 7 (Nuoc Not Village) was selected unanimously as the model village.

Table 3.9 Caractaristic in villages No. 4, 6, and 7

Village No. 4	Village No. 7	Village No. 6
- Haven't got road	- Large area of forest needs protecting. - Large population. - Village located at the center of the commune.	- Unstable fixed domiciliation

(4) Dak Pne Commune

After discussing and deciding on the selection standards, the participants determined the degree of importance by a vote. The results are shown in the following table 3.10. The participants were allowed to vote for multiple selection standards.

Table 3.10 Selecton standards and the importance order at Dak Pne Commune workshop

Standards	Number of votes polled	Order of importance
Village with many hunger-households	8	3
Village with high scale of difficulty	5	4
Lack of low-land for cultivation	9	1
Villages live on upland crop	3	5
Villages with low cash income	1	6
Live on forest product	0	7
Villages with bad roads, especially very dangerous for transporting in the rainy season	8	2

Note: If the two selection standards had the same number of votes, the one that was deemed more important was given a higher ranking.

Then, the participants voted again to select the village that best portrayed the characteristic of a given selection standard (votes were held separately for each selection standard). The results are shown in the following table 3.11. The participants were allowed to vote for multiple selection standards.

Table 3.11 Results of votes polled in each standard at Dak Pne Commune workshop

Village	Number of votes polled in each standard							Total
	Village with many hunger-hous eholds	Village with high scale of difficulty	Lack of low-land for cultivation	Villages live on upland crop	Villages with low cash income	Live on forest product	Villages with bad roads, especially very dangerous for transporting in the rainy season	
Kon Tuc	10	8	9	8	6	5	3	49
Kon Go 1	3	6	3	1	2	1	1	17
Kon Go 2	3	4	4	3	5	2	2	23
Kon Gop	6	3	3	4	1	0	8	25

Based on the results, the participants were able to select Kon Tuc as the model village without considering the relative importance of the selection standards because of overwhelming number of votes polled of Kon Tuu village.

(5) Dak Koi Commune

After discussing and deciding on the selection standards, the participants determined the degree of importance of selection standards. For the determination, the participants compared any two selection standards for deciding on which of the two standards was more important. This procedure was repeated until they were able to rank all the selection standards. The results are following table 3.12.

Table 3.12 Selection standards and the importance order at Ngoc Tem Commune workshop

Selection standards	Importance order
Lack of paddy field	1
Village with many poor households	2
Easy to access	3
Rely on upland field	5
Rely on forest product	4

The participants then held a vote to select the village that best portrayed the condition given by a selection standard (vote on each selection standard was done separately). The results are shown in the following table 3.13. In principle, the participants were allowed to vote for only one village for a given selection standards so that they will give serious consideration before actually casting their ballots. However, the participants were allowed to cast ballots to multiple villages in cases where they were unable to decide.

Table 3.13 Results of votes polled in each standard at Dak Koi Commne wrorkshop

Village	Number of votes polled in each standard					Total
	Lack of paddy field	Village with many poor households	Easy to access	Rely on forest product	Rely on upland field	
Kon Do						0
Kon Tu Ngo	3	12		3	2	19
Kon Goh			5			5
Kon Ro Long			13			13
Nhon Lieu			1	5		6
Tu Roi				2		2
Trang No				9		9
Kon Blo						0
Dak Rieng		10				10
Tu Ro Bang	16				19	35

Based on the vote, Tu Ro Bang Village had the highest number of ballots. However, Kon Tu Ngo Village also captured a relatively high number of ballots, with these ballots being well-dispersed among the various selection standards. The participants, therefore, considered scoremethod by giving weights to the selection standards adopted in Ngoc Tem Village in section 3.4.2 (3), but in the end, the participants decided not to do so for the following reasons: 1) Tu Ro Bang Village had the highest number of ballots by far, and 2) the village had the highest number of votes in the category "Lack of paddy fields", which was considered as the most important selection standard. Therefore, Tu Ro Bang was selected as the model village.

3.4.3 Workshops at the Village Level

The workshops in each model village were held to discuss the draft VSP activity plan. For the preparation of the draft VSP activity plan in the workshops, "Community Action Planning (CAP)" method was adopted.

The procedure of the CAP is as follows,

- (a) Problem Analysis
- (b) Objective Analysis
- (c) Project Selection
- (d) Prioritization of the Activities Selected
- (e) Preparation of Draft Community Action Plan

The results of problem analysis and objective analysis for each village are provided in Appendices from 2 to 6. The fundamental role of the Project was to support the activities that are implemented by the villagers themselves. In other words, the Project do not implement project activities where the Project merely "provide" the villagers with the finalized products. Such activities include making

improvements to the infrastructure, such as building schools and roads. Therefore, the project selection was made based on this general principle. The results of activity prioritization and Community Action Plan are given in section 2.3.4.

3.4.4 Provincial Level Workshop

Provincial level workshop was held to prepare the PDM, which is framework of the Project. The workshop basically followed the participatory planning method of the PCM method, however, not all the steps of this method were followed. Here, it is mentioned about some of the steps which is different from the usual method procedures.

At the workshop, the stakeholder analysis was omitted and it was begun by going through the problem analysis. This omission of the stakeholder analysis was decided because of the following two reasons: 1) conditions of the villagers, who are the target group of the Project, were grasped through the village level workshops prior to the provincial level workshop, and 2) time limitation.

From the onset, the objective of VSP model projects in the five villages was to enhance community development activities that would contribute to sustainable forest management. Therefore, “Activities for community development on villagers’ own are insufficient in each villager based on villager support program” was taken as the core problem for the problem analysis.

Many problems related to this core problem were revealed during the village level workshops. Because the villagers did not participate in the provincial level workshop, these problems were presented to the workshop participants as opinions of the villagers.

The workshop proceeded with these premises. The results of problem analysis and objective analysis are shown in Appendix 1. The PDM, which is the output of this workshop, can be found in section 2.1.

3.5 Results of Agroforestry Survey

3.5.1 Agroforestry Introduction Measures Example for Discussions

a. Kon K Tau

- 1) Need to create grass-planting model under forest canopy for raising livestock.
- 2) Produce green manure on site for wet- paddy field for instance Dien Thanh + wet-rice
- 3) Plant trees: cinnamon, green Boi Loi, agar wood, especially cinnamon is advisable for base

tree as agroforestry model

4) Make living fence, instead of wooden fence like at the moment.

Taking in to above, following is advisable plan to facilitate the discussions about the real implementation plan within the villagers.

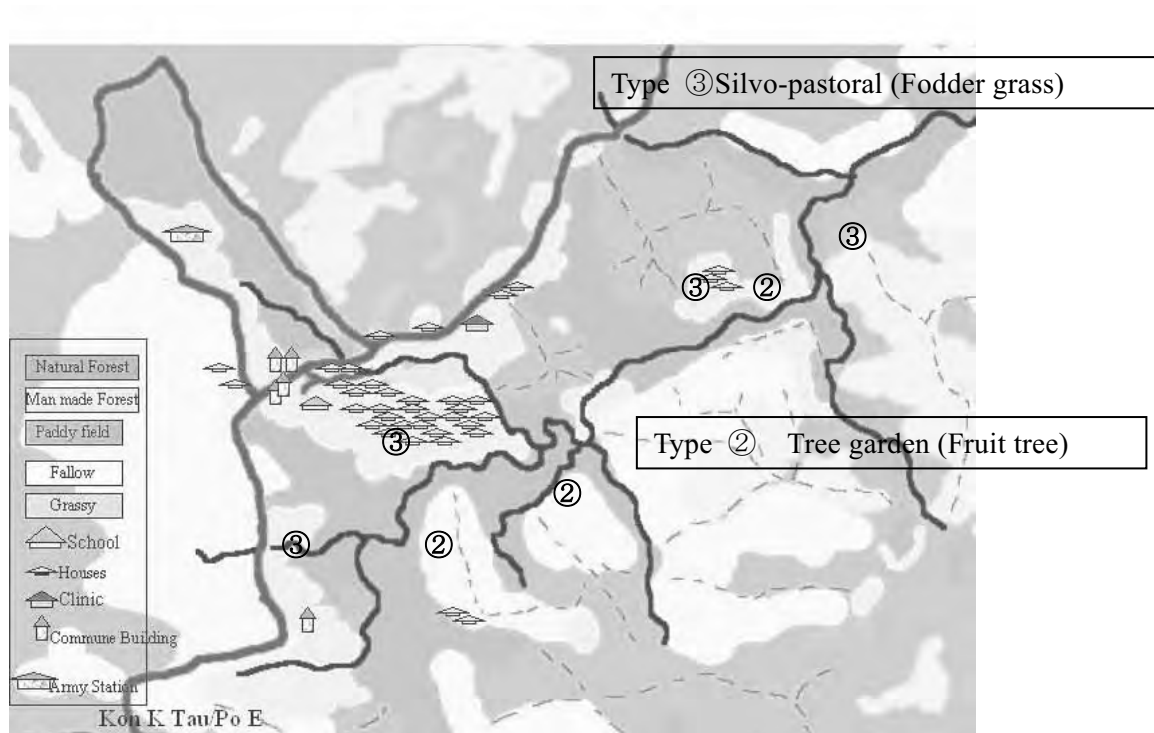


Figure3.3 Agroforestry activities plan sample Kon K Tau

b. Vi Chiring

- 1) Need the practices agroforestry model type ② Tree garden (perennial fruit trees), and type ③ (Silvo-pastoral for cows, pigs, buffaloes)
- 2) Plant cinnamon, green Boi Loi, agar wood base on agroforestry model
- 3) Plant industrial crops: Shan tea base on agroforestry model, with the support of hedgerow of bean family and trees that give shade.
- 4) Plant hedgerow of bean family on upland farm to prevent the soil from erosion and create green manure on site for the plants.
- 5) Plant grass under forest canopy for husbandry

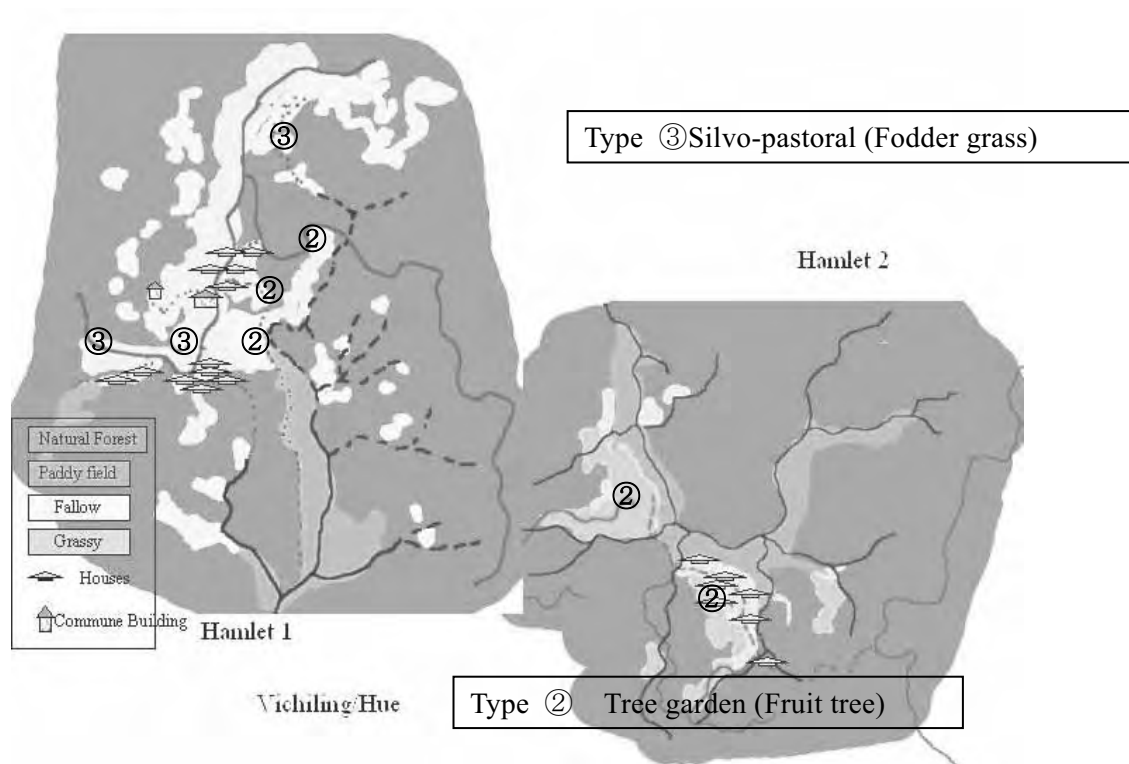


Figure 3.4 Agroforestry activities plan sample Vi Chiring

c. Nuoc Not

To improve paddy fields including open new paddy field with water channel is one of the interest for the villagers; nevertheless, slop land surrounded hamlets should be improved the productivity for tree gardens is advisable. Three types of agroforestry may considerable (①slopland development, ②tree garden, ③Intensive silvopastoral). The project activity may include paddy field improvement (④). Following is advisable plan to facilitate the discussions about the real implementation plan within the villagers.

The establishing tree garden Cinamon may the best choice.. The establishment methods are follows:

a) First period: (Taungya)

First year: Inter-plant agricultural crop with cinnamon, and plant cassava + corn + cinnamon)

Second year: harvest corn, keep cassava (for 2 years) with cinnamon. (cinnamon always need the canopy of inter-planting agricultural crops, the most suitable is cassava)

Third year: cassava (keep for 3 years) + cinnamon

Forth year: cinnamon begins to have canopy and in this period, cinnamon needs light completely.

b) Second period: when the cinnamon has canopy:

Planting some agricultural crops or medicinal trees under the canopy of cinnamon such as *Annas comosus* or *Amomum xanthioides*. This is practiced in order to create income for poor households

while waiting until the eighth year, the time cinnamon gives income through thinly harvest, and this is also the time cinnamon bark has good quality which meet the demand of the market.

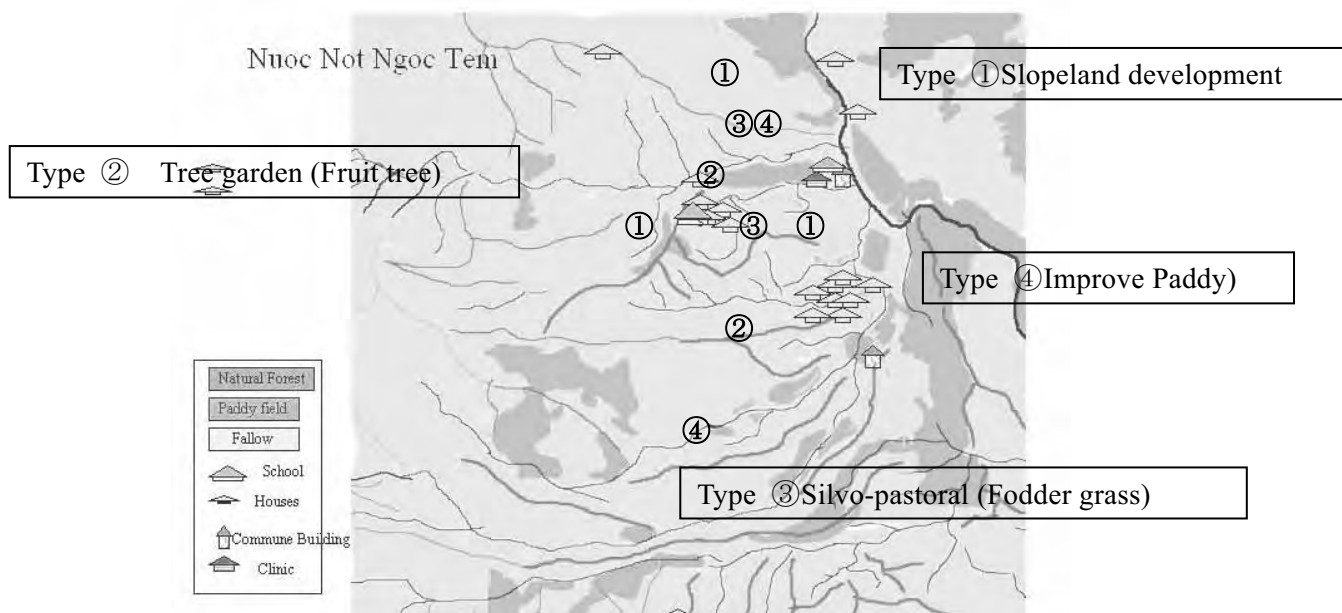


Figure 3.5 Agroforestry activities plan sample Nuoc Not

Machilus odoratissima is the another applicable choice. The establishment methods are follows:

a) First period: (Taungya)

Upland rice or corn can be inter-planted with *Machilus odoratissima*. They can be inter-planted for 2 years

b) Second period: (when *Machilus odoratissima* has canopy)

Try to test some agricultural crop or medicinal trees that can be planted under the canopy.

Also betel (*Areca*) may interest to meet existing markets in Cuan Gay province.

In Nuoc Not, the villagers plant quite a lot of betel in their home garden. Betel has small leaves, narrow canopy which does not occupy much land. After the period of 5 years of giving flowers and bearing fruit, the fruits are old enough to be harvested. Each tree can produce from 750 g – 1.250 g with the price of 12.000 VND to 15.000VND / tree. Under the canopy of betel many kinds of trees that fond of shade such as tea, orange, mandarin, sweet potatoes. Especially betel stalk is often the place for pepper.

cashew (*Anacardium occidentale*) is another choice to meet weather conditions of Nuoc Not. Nevertheless, this species is not common in this village, and price is not stable. If the Project to use cashew it may better for test planting on limited areas.

In husbandry, growing plants trees and grass for fodder, leguminous species, needed to be created upon models. Models of planting grass, leguminous family under forest canopy, for instance: acacia + co sua, *Machilus odoratissima* + *Arachis pintoii* (which can reach the productivity of 4 tons to 5 tons of fresh fodder / hectare) are the one of the examples.

d. Kon Tuc

Kon Tuc is highly dependent village to the upland farming (slash and burn), and same time facing difficulties declining slope land productivity. This leads villagers to move to new natural forest exploitation for their survive. Presser becoming higher and higher. To change the situation, the first thing that need to be done immediately is to grow the greenbelt along to contour lines to prevent erosion. And to use nitrogen fixing grass and trees to recover the slash and burn areas production capacity. To meet these situation, three types of agroforestry may considerable (①slopland development, ②tree garden, ③silvopastoral). The project activity may include paddy field improvement (④). Following is advisable plan to facilitate the discussions about the real implementation plan within the villagers.

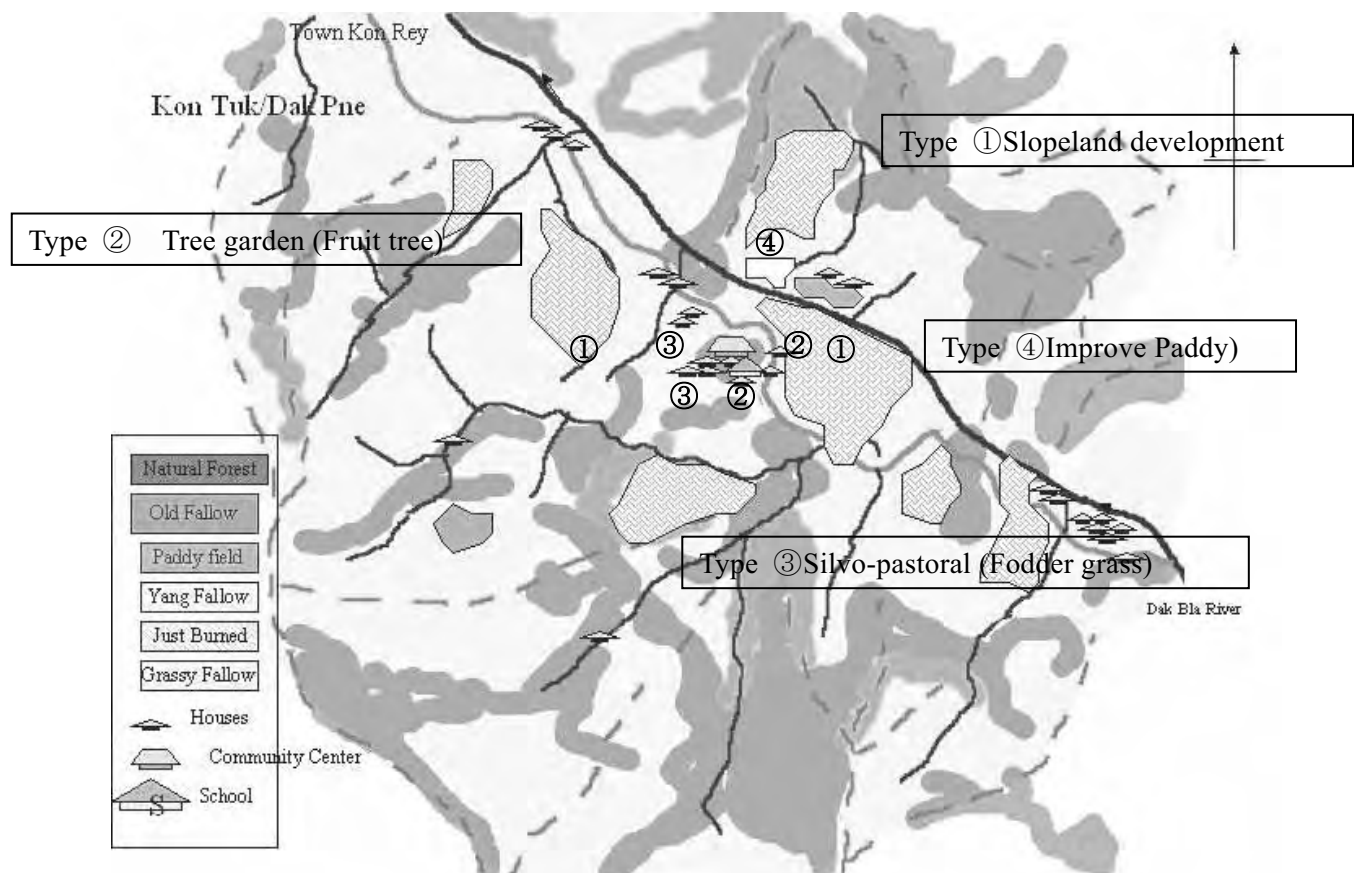


Figure3.6 Agroforestry activities plan sample Kon Tuc

The considerable methods for slop-land development is follows:

- 1) Corn and cassava, especially cassava, need to be planted in contour line. While weeding and earthing up, try to make beds in contour line and make terraced fields.
(corn + cassava + *Mucuma utilis* or *Phaseolus callcaratus*)
- 2) Plant cash crops among perennial trees on slop land in order to cover surface for avoiding soil loss in the rainy season.

It is expected to use enough manures for upland farm include compost and NPK to improve the productivity, and maintain the soil coverage. (reduce the flow line, prevent soil erosion); nevertheless, to scatter compost on the wider areas of slash and burn is not easy, therefore, alternative measures using nitrogen fix trees and grasses have to be given significant priority within the project activities.

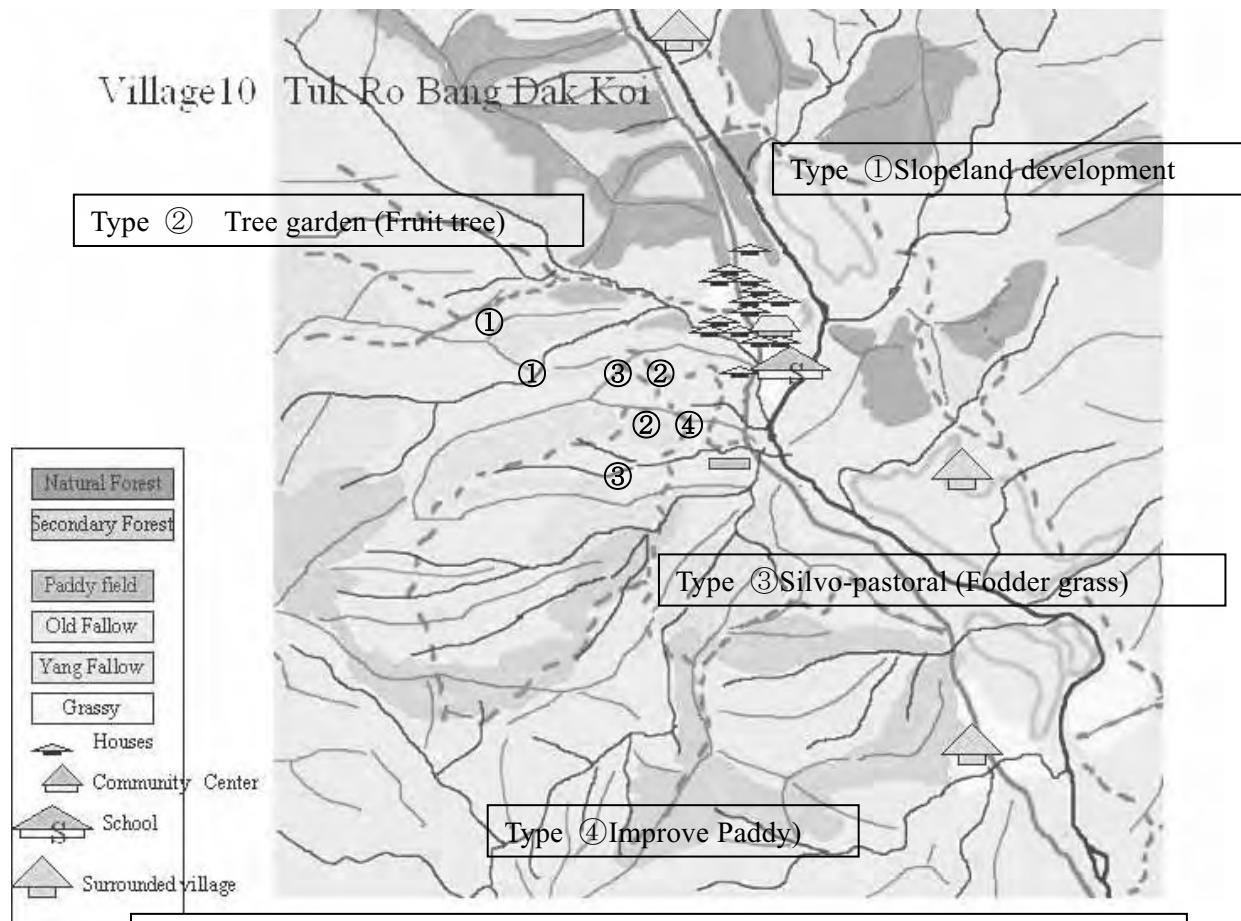
Recovering soil fertility during the fallow period, planting leguminous trees or beans such as a/ *Leucovena diversifolia*, b/ *Flemingia congesta*, c/ *Flemingia macrophylla*, d/ *Phaseolus Calcaratus* is important. Planting those plants can shorten the fallow period from 5 years down to 3 years, even the fallow period can reduce to only 1 year; or it becomes permanent upland farm and do not need to shift for cultivation.

For fruit, non timber industrial tree for home garden, species such as Jackfruit tree (*Artocarpus integrifolia*), Mango, Orange, mandarin (*Citrus nobilis lour*; *Citrus reticeelata blanco*), Peper (*peper nigrum*), Pineapple (*Ananas canosus*) and *Ananas victoria*, are applicable. Plants under the umbrella trees as alley clops such as *Amorphophallus campanulatus.*, *Maranta arundinacea*, *Canna edulis.ke*, *Zingiber officinale*, *Ipomoea baatas*. *Manihot utilissima* are applicable. Pohl and Dragon plant is applicable to make fruit as well as live fence: (fence to protect the orchard from livestock)

e. Tu Ro Bang

Tu Ro Bang removed their hamlets to latest place 4 years ago, therefore, farmlands development is indispensable for the living standards improvement. Surrounded uplands are basically belongs to the villagers living in the other village. Therefore, to use limited land efficiency is the main interest for the project activities. In this reason, to seek the possible land for paddy field, to use home garden for fruit trees, to improve slop land productivity are the important program for livery hood improvement. The villagers discussed and agreed to make hedgerow by leguminous.

To meet these situation, three types of agroforestry may considerable (①slopland development, ② tree garden, ③silvopastoral). The project activity may include paddy field improvement (④). Following is advisable plan to facilitate the discussions about the real implementation plan within the villagers.



Figur3.7 Agroforestry plan for discussion on Tu Ro Bang

Grow corn and inter-plant with green bean, black bean on upland farm can make the soil more fertile than grow purely corn. Bean family can stabilize the N in the soil (few places in the project area do this). The economic effect is also high: on 1 sao of land, sow 0.5 kilos of green bean (or black bean) that can give 100 kilos of seeds which can have the price of 500,000 VND (quite high income)

The villagers also want to use agroforestry method for *Machilus odoratissima*. Establishment measures are:

- In the first period: (when the plantation does not have canopy yet):
 - Grow corn + green bean or black bean and interplant with *Machilus odoratissima* (it's possible to inter-plant for 2 years with the density of *Machilus odoratissima* is 2,500 seedlings / hectare (2^m*2^m))
- In the second period: (when the plantation has had canopy)
 - + On sterile soil or medium soil: inter-plant pineapple under the canopy of *Machilus*

odorartissima (5 tons pineapples / hectare / year)

3.5.2 Species list for the Activities (Species candidate for introduction by the villagers to meet natural condition and their expectation)

List of species which should be introduced are shown in table 3.14 to 3.19 for each purpose.

Table 3.14 Species list for nitrogen fixing tree

Common name	Scientific name	V-1	V-2	V-3	V-4	V-5
	<i>Acacia angustissima</i>	○	○	○	○	○
	<i>Albizia saman</i>	○	○	○	X	○
	<i>Calliandra calothyrsus</i>	○	○	X	X	X
	<i>Arbisia lebeck</i>	○	○	+	X	+
	<i>Cajanus cajan</i>	X	X	+	+	X
	<i>Gliricidia sepium</i>	○	○	○	○	○
	<i>Leucaena Diversifolia</i>	+	+	○	X	X

++ suitable, + good, ○ Can use, X: not advisable

V-1= Kon K Tau, V-2=Vi Chiring, V3=Nuoc Not, V4=Kon Tuc, V5=Tu Ro Bang

Table 3.15 Species list for hedge row

Common name	Scientific name	V-1	V-2	V-3	V-4	V-5
	<i>Gliricidia sepium</i>	○	○	○	○	○
	<i>Leucaena leucocephala</i>	○	○	+	+	+
	<i>Desmananthus virgatus</i>	○	○	○	○	○

++ suitable, + good, ○ Can use, X: not advisable

Table 3.16 Species list for fodder tree

Common name	Scientific name	V-1	V-2	V-3	V-4	V-5
	<i>Albizia saman</i>	○	○	○	○	○
	<i>Cajanus cajan</i>	○	○	○	○	X
	<i>Calliandra calothyrsus</i>	+	+	○	X	X
	<i>Desmodium heterocarpon</i>	○	○	○	○	○
	<i>Erythria indica</i>	○	○	○	○	○
	<i>Flemingia macrophylla</i>	○	○	○	○	○
	<i>Flemingia congesta</i>	?	?	?	?	?
	<i>Phaseolus Calcaratus</i>	?	?	?	?	?
	<i>Gliricidia sepium</i>	○	○	○	○	○
	<i>Leucaena diversifolia</i>	○	○	○	○	○
	<i>Leucaena leucocephala</i>	○	○	+	+	+
	<i>Sesbania grandiflora</i>	○	○	○	○	○

++ suitable, + good, ○ Can use, X: not advisable

Table 3.17 Species list for fodder grass

Common name	Scientific name	V-1	V-2	V-3	V-4	V-5
Elephant grasses.		○	○	○	○	○
	<i>Andropogon gayanus</i>	○	○	○	○	○
	<i>Arachis pintoii</i>	○	○	○	○	○
	<i>Arachis pintoii</i>	○	○	○	○	○
	<i>Brachiaria brizantha</i>	○	○	○	○	○
	<i>Brachiaria humidicola 6133</i>	○	○	○	○	○
	<i>Brachiaria humidicola 678</i>	○	○	○	○	○
	<i>Brachiaria ruziziensis</i>	○	○	○	○	○
	<i>Brachiaria decumbens</i>	○	○	○	○	○
	<i>Calopogonium mucronoides</i>	○	○	○	○	○
	<i>Centrosema plumieri</i>	○	○	○	○	○
	<i>Panicum maximum</i>	○	○	○	○	○
	<i>Panicum maximum.</i>	○	○	○	○	○
	<i>Paspalum atratum</i>	○	○	○	○	○
	<i>Stylosanthes gracilis</i>	○	○	○	○	○
	<i>Stylosanthes guianensis CIAT</i>	○	○	○	○	○
	<i>Stylosanthes hamata</i>	○	○	○	○	○

++ suitable, + good, ○ Can use, X: not advisable

Table 3.18 Species list for alley crops

Common name	Scientific name	V-1	V-2	V-3	V-4	V-5
	<i>Amorphophallus campanulatus.</i> ,	○	○	○	○	○
Pigion pee	<i>Cajjanus cajan</i>	X	X	++	+	X
	<i>Maranta arundinacea,</i>	○	○	+	○	+
	<i>Canna edulis.ke,</i>	-	-	+	○	+
	<i>Zingiber officinale,</i>	-	-	+	○	+
	<i>Ipomoea baatas.</i>	-	-	+	○	+
	<i>Manihot utilissima</i>	-	-	+	○	+
	<i>Flemingia macrophlla</i>	○	○	○	○	○
	<i>Tephrosia candida</i>	○	○	○	○	○
	<i>Phaseolus callcaratus</i>	○	○	○	○	○
	<i>Mucuma utilis</i>	○	○	○	○	○

++ suitable, + good, ○ Can use, X: not advisable

Table 3.19 Species list for fruit tree and non timber industrial tree/perennial tree

Common name	Scientific name	V-1	V-2	V-3	V-4	V-5
Orange		++	++	+	+	+
Mandarin	<i>Citrus nobilis</i>	++	++	++	+	++
	<i>Citrus reticeelata</i>	+	+	+	+	+
Jackfruit:	<i>Artocarpus integrifolia</i>	X	X	++	+	++
Logan		X	X	?	?	?
Grape fruit		+	+	++	+	++
Guava		+	+	++	++	++
Green Boi Loi		○	○	++	++	++
Red Boi Loi	<i>Machilus odoratissima</i>	++	++	++	++	++
Betel		X	X	++	X	○
Cinnamon		+	+	++	○	+
Papaya		X	X	++	++	++
Shan tea		++	++	+	+	++
Coffee		X	X	X	X	X
Bamboo		++	++	++	++	++
Cashew	<i>Anacardium occidetale</i>	X	X	+	+	○
Pohl		X	X	+	++	++
Dragon Fruit		X	X	+	++	++

++ suitable, + good, ○Can use, X: not advisable

3.6 Local Resource for the Project Implementation and Training

For the technical training, the Project needs to find excellent teachers for each training item. The Kon Tum Agroforestry Extension Center has information the resource persons. In the project implementation stage, project staff NGO should be make prior consultation with the extension center about the lecture. Following organizations have capacity to provide excellent lectures to meet the need of the Project.

- (1) Tay Nguyen University in Dak Lak:
- (2) Forestry college in Gia Lai
- (3) Agroforestry Extension Center in Kon Tum
- (4) General college of economic in Kon Tum
- (5) Agriculture and forestry seedling center in Kon Tum
- (6) Veterinary Department in Kon Tum (DARD)

Following NGOs, Institutions and Universities have experience to carry various projects with International donor organizations closely related to the project in Vietnam such as Community forestry, Agroforestry, and related trainings including capacity building for the rural government staff.

The team send a message to these NGOs, Institutions and Universities to ask that if they have interest.
The reactions come from VIFA, ECOECO, FSIV, INBMAT and Tay Nguyen University..

Local Resource for the JICA Technical Cooperation Project on Villager Support Program in Kon Tum Province (2004)			
No	Name of the NGO	Main function	Remarks
1	<p>Name: Vietnam Forestry Science and Technology Association (VIFA)</p> <p>President: Dr. Nguyen Ngoc Lung (former Director General of Forestry Department)</p> <p>Contact person: Eng. Doan Dziem (Former Vice Director General of Forest Planning Department)</p> <p>Tel/Fax: 84-4-7541311 Fax: 84-4-7541311/7552220 E-mail: vifa@hn.vnn.vn</p>	<p>Projects collaboration with donor organizations</p> <p>Sustainable Forest management and Forest Certification (Ford Fund USA)</p> <p>Preparation on silvicultural education curriculum and technical manuals (WB)</p> <p>Management systems of natural forest (JIFPRO) ,</p> <p>Environmental Education system (JICA)</p> <p>Encouragement on poverty reduction and community forestry development(CIDA)</p> <p>Conservation of bio-diversity (National park association of Japan)</p> <p>Community development(Mac Arthur Fund USA)</p> <p>Landuse and management system plan(IIED UK)</p>	<p>Establish : 1982</p>
2	<p>Name:Center for Environ ment, Tourism and Develop -ment (CETD)</p> <p>President: Prof. Hoang Hoe</p> <p>Contact person:</p> <p>Tel/Fax: 84-4-7560233 E-mail: cen-cetd@hn.vnn.vn</p>	<p>CETD is Project implementing body for VIFA and VNPPA.</p> <p>Main activities are:</p> <p>Environmental education and interpretation focusing protection area management, environment protection training, conduction workshop, seminar. For rural village development, CETD conducted buffer zone management planning and the plan implementation.</p>	<p>Establish 1993</p>
3	<p>Name:Instituteof Ecological Economy (Eco-Eco)</p> <p>President: Prof. Dr. Nguyen Van Troung</p> <p>Contact person:</p> <p>Tel/Fax: 84-4-8574400 Fax: 84-4-8572697 E-mail: ecoeco@hn.vnn.vn</p>	<p>Main activities:</p> <p>-Study on the natural conditions and the socio-economic situation of the human communities for improving the enrichment the livelihood embellishing the landscape for the local population and enriching the ecosystems.</p> <p>-Disseminating the knowledge about ecology, Eco-technology and training the cadres at all level, following the research objectives.</p> <p>-Promoting theoretical and practical training for capacity building of the projects implementing staff.</p>	<p>Establish 1990 Member of IUCN</p>
4	<p>Name: The Research and Training center for community Development (RTCCD)</p> <p>President: Dr. Tran Yuan</p> <p>Contact person:</p> <p>Tel/Fax: 84-4-6280350 Fax: 84-4-6280200 E-mail: rtccd@fpt.vn RTCD@rtc.ac.vn</p>	<p>Mainly act to conduct research, training, and community development for grass root level project implementation.</p> <p>Activities are health and nutrition, poverty and education.</p> <p>Have experiences work with WB, EU, Save the children Alliance.</p>	<p>Establish 1996</p>
5	<p>Name: Vietnam National Park and Protected area Association (VNPPA)</p> <p>President: Dr. Nguyen Duc</p>	<p>Established to shoulder the works as a member of VIFA.</p> <p>More than 100 protected areas covered by the VNPPA network. The technical staff is consisted various experts such as biodiversity, forestry, agriculture,</p>	<p>Establish 1995</p>

	<p>Khang Contact person: Le Van Lanh Tel/Fax: 84-4-7560233 E-mail: cen-cetd@hn.vnn.vn</p>	<p>Activities are: -to assist information exchange of protected area conservation. -to promote ecotourism in NP -to help buffer zone communities to sustain their life by transferring appropriate agroforestry techniques.</p>	
6	<p>Name:Forest Science Institute of Viet Nam(FSIV) President: Prof. Dr. Trieu Van Hung Contact person: Nguyen Quang Trung (International cooperation Div.) Tel/Fax: 84-4-8362232 E-mail: ddsam@netnam.vn</p>	<p>Governmental Institution. Many research activities conducted by economic department for Agroforestry, rural village development with forestry. Many works including projects supported international donor organizations.</p>	
7	<p>Name: Forest Inventory and Planning Institute (FIPI) President: Contact person: Msc. Phan Duc Lan Tel/Fax: 84-4-8612056 E-mail:</p>	<p>Governmental Institution Many research activities conducted by economic department for Agroforestry, rural village development with forestry. Many works including projects supported international donor organizations.</p>	
8	<p>Name: Center for research and cooperation for mountainous area development (CERACOMD) President: Mr. Trinh Minh Cu Contact person: Tel/Fax: 84-4-9782526, 0903433422 Fax: 84-4-9715151 E-mail: md-center@fpt.vn</p>	<p>The main activity is following research and project formation for mountainous ethnic minority society to realize sustainable development. -environment, socio-economy, traditional culture, education, and health. -gender for isolated society -thechnology for agroforestry</p>	Establish 1997
9	<p>Name:Research and support center for agriculture and rural development (RESCARD) President: Prof. Ho Phuong Contact person: Prof. Dr. Nguyen Trung Que Tel/Fax: 84-4-8720490 E-mail: :rescard@fpt.vn</p>	<p>Following research activities are carried -socio-economic survey for agriculture and rural society. -project formation for agricultural and rural development. -training for engineers about agriculture, rural development, extension. -capacity building for project implementation</p>	Establish 1998
10	<p>Name: Tay Nguyen University (TNU) Contact: Dr.Nguyen Tan Vui Faculty of Agriculture and Forestry E-mail: FaF@dng.vnn.vn</p>	<p>TNU's developmental goals to the requirements of development process of Central Highlands and some other mountainous areas (Kontum, Gialai, Daklak, part of Lam dong and mountainous districts from Quang tri to Ninh thuan), on the following aspects: + Training human resource at bachelor and post graduate levels. + Carrying out Scientific and technological research and development. + Engaging in poverty alleviation and sustainable development activities.</p>	

		<p>+ Developing social services.</p> <p>+ Conserving and promoting ethnic groups' traditional culture.</p> <p>TNU tries to be one of advanced universities in the country and the leading one in some specialized disciplines of Central Highlands.</p>	
11	<p>Name: Forestry University of Vietnam</p> <p>Dr. Nguyen Ba Ngai</p> <p>Vice director in social forestry</p> <p>E-mail: ngai-xm@hn.vnn.vn</p>		
12	<p>Name: Institute for International Business Management and training (INBMAT)</p> <p>Contact: Dr. Bui Minh Vu</p> <p>Director</p> <p>E-mail: buiminhvu@yahoo.com</p>	<p>INBUMAT have completed and continued the following works:</p> <p>Participate in project “Construction of model of economic development in Cuc Phuong National Park’s buffer zone (ICBG, University of Illinois USA).</p> <p>Projects for economic development of Buffer zone in Tam Dao National Park, (JOFCA).</p> <p>Cao Bang- Bac Can Rural Development Project. INBUMAT involved in training</p> <p>Rural Income Development Project (RIDP) in Tuyen Quang.(IFAD/SIDA).</p> <p>Doctor/ master training Programs in National Economic University,</p> <p>To conduct training courses on farm economy, economic management renovation, Hanoi and Ho Chi Minh city, Ha Giang, Bac Can, Son La, Bac Giang, Quang Binh, Da Nang, Khanh Hoa.</p> <p>To participate in survey, field study on evaluation of forest enterprise (Dac Lak, Gia Lai, Kon Tum, Lam Dong, etc.)</p>	Establish 2003

4. Results of Input

4.1 Results of Equipments Carried from Japan

There was no equipments carried from Japan to implement the work.

4.2 Results of Expenses for the Work in the Vietnam

Results of approx. expenses for the work in the Vietnam are as follows.

Expenses for Travelling : 1,490 US\$

Expenses for Employment : 9,040 US\$

Expenses for Communication and Carrying : 320 US\$

Expenses for Preparation of Documents and Materials : 170 US\$

Expenses for Expendable Supplies : 160 US\$

Expenses for Rent : 3,280 US\$

Expenses for Conference : 190 US\$

Incidental Expenses : 60 US\$

Total : 14,710 US\$