

**Project for Sustainable Forest Management in the Northwest Watershed  
Area - SUSFORM-NOW**

**Results of Study Tours in Da Lat & Hue**



**Department of Agricultural & Rural Development (DARD)  
Japan International Cooperation Agency (JICA)**

**April 2011**

## **INDEX**

---

A, PURPOSES OF THE STUDYTOUR

B, STUDYTOUR TO DA LAT

C, STUDYTOUR TO HUE

D, EVALUATION AND LEARNED LESSON NEED TO BE APPLIED

## **ANNEX**

1. Pictures of the study tour to Da Lat & Hue
2. The list of participants of the studytour to Da Lat & Hue.
3. Schedule of the Study tour to Da Lat & Hue

## **A, PURPOSES OF THE STUDYTOUR**

- For learning skills and experiences of facilitate participation of local people in implementing project activities;
- For learning how to make working plan and implement forest management and livelihood development activities with participation of local people;
- After the study tour, capacity of participants especially Commune officials will be increased. They will get lesson learned and experiences from “The Project for Strengthening Community-based Management Capacity of Bidoup-Nui Ba National Park” (hereinafter referred to as “BNBNP”) and “The Project for Participatory Dissemination of Agro-Waste Charcoal Production and Multipurpose Charcoal Use Technologies” (hereinafter referred to as “Bach Ma Charcoal Project Bach Ma Charcoal Project”), and apply to implement activities of SUSFORM-NOW Project. Commune officials can manage and facilitate villagers to implement project activity with their well participation.

## **B, STUDYTOUR TO DA LAT**

### **I. INTRODUCTION OF BNNP**

22 Feb 2011, Delegation of SUSFORM-NOW Project visited Da Lat Project.

#### **1. Participants**

##### **1.1 Delegation of SUSFORM-NOW Project**

*(See the list of participants in ANNEX)*

##### **1.2 BNNP**

- Mr. Kensei Oda, Chief Advisor
- Ms. Modori Yajima, Coordinator/Community Development
- Mr. Hoang Huu Cai, Expert of Economic Analysis.
- Mr. Ton That Minh, Project Manager

#### **2. Contents**

##### **2.1 Mr. Kensei Oda introduced BNNP**

Purpose of BNNP: Improve capacity of Natural Resource Management in Bi Doup - Nui Ba National Park. Method of Capacity Building is not only concerned to improve Natural Resource Management for counterpart staff of BNNP but also for all local staff of Bidoup-Nui Ba National Park and local people.

Operation of BNNP: The project focuses on setting cooperated models between Bi Doup Nui Ba National Park and local people who are living in and nearby Nui Ba National Park. These models concern in two subjects: Helps local people to conduct forest Ecotourism from forest recourse of Bi Doup Nui Ba National Park and support livelihood development. For Tourism: Project Management Unit will train knowledge of tourism to local people. Some of local people will be trained to be tour guides. Project guides local people to organize and implement tourism activities such as home-tour, Gong performance, visiting, discovery interesting things in Bi Doup Nui Ba National Park etc.

For livelihood Development: Local people will be supported variety, techniques of cultivation, harvest and post-harvest and plan of sustainably and friendly environmental production with high effective economics as well. BNNP has implemented in Lac Duong District. Local people, most of them are Cill, Lach ethnic groups participate in project activities and they receive benefit from Project.

##### **2.2 Some issues are interested by BNNP & Dien Bien Delegation.**

- How to develop forest. It is main issue to be concerned: To develop livelihood with friendly environment; To develop Ecotourism.
- Priority planting purebred coffee.
- Waste form coffee fruit (peel) need to be collected and processed for reuse effectively.
- How to sell products of local people sustainably?
- Coffee Productivity of Lach and Cil ethnic groups is 3 ton/ha but 20 ton/ha for Kinh group. How to reduce the gap of coffee productivity between Lach, Cil ethnic groups and Kinh group?

Trainings on the field need to be organized to support technology of planting coffee for farmers. At the same time, farmers need to receive supports of budget and some related material for planting coffee.

- For Ecotourism needs participation of community with clear divided benefit.

## **II. RESULTS OF VISITING MODELS ON THE FIELD**

### **1. Model of planting beet (den cu) at Lat commune**

The delegation visited a planting beet (Den cu) garden in Lat commune at harvesting time. Beet is very good for blood. It can be cooked dishes and processed drinking-water. Cultivation method is combined machine with by hand.

Ridge of beet cultivation is 1-1.2m wide and 15-20cm high. There are gutters between plots. Beet can be planted by seed or baby beet. Land area of the model is 6,000sqm. Growing season is from 2.5 to 3 months after planting. There are 4 crops of beet per year. Productivity is 8 ton/crop/6,000sqm. Price is VND 8,000/kg. Each famer can get more than VND 75,000,000/year after minus all related expenses (50%). It is a good model for farmers.

### **2. Model of planting strawberry (Dau Tay)**

Strawberry can be harvested 3 years continuously. Cultivation method is combined machine with by hand. Ridge of strawberry cultivation is 1-1.2 m wide and 15-20 cm high. There are gutters between plots. Strawberry can be planted by seed or baby tree. Land area of the model is 3,500sqm Farmer can get VND 70,000,000 per harvest time. (3-5 days per harvest time). Price at the strawberry field is VND 45,000/kg. However, strawberry is damaged by bad weather such as too hot and heavy rain etc.

### **3. Model of planting coffee with persimmon (Hong)**

Coffee with persimmon garden is a model of history. The first, farmers were encouraged to plant persimmon. Then, farmers were encouraged to cut persimmon for plating coffee. Some of the farmers didn't want to cut the persimmon. They kept persimmon and planted coffee under shadow of persimmon at the same area. The model of planting coffee with persimmon was happened.

At the visited place, the model of planting coffee with persimmon was not good because farmers did not invest enough, soil is very poor. Shadow of persimmon could not cover all coffee because time of persimmon leaves fall is necessary persimmon shadow time of coffee.

### **4. Visited Bidoup Nui Ba National Park**

There are 70 staffs with one Forest Protection Unit, nine Sub-Units and one Mobile Group with professional dogs in Bidoup Nui Ba National Park.

Project delegation visited KLong - Klanh Forest Protection Station. There are 7 staffs in the Forest Protection Unit. It is one of the most difficult Forest Protection Unit in Bidoup Nui Ba National Park.

Mr. Dinh Ba Khang, Head of KLong - Klanh Forest Protection Unit introduced that Nui Ba National Park area is about 70,000ha. The area has no buffer zone. There are many kinds of valued trees such as pine with 5 leaves, pine with 2 flat leaves, po mu ect. Percentage of forest cover is about 80%. There are some kinds of valued wild animals such as tiger, bull etc. Its borderland is nearby Da Nhim Protective Forest.

There are 270 households with 1,390 people who are living inside the Nui Ba National Park. They cultivate mainly maize, Indian taro, coffee and persimmon etc.

In 2009, Da Nhim Hydroelectric Plant paid environmental service fee to people who are living in Nui Ba National Park. Each household can receive 4.5 million VND per month. It helps to improve a part of their living conditions. So, last three years, forest fire wasn't happened.

## **C, STUDYTOUR TO HUE**

### ***I. VISITED BACH MA CHARCOAL PROJECT IN HUE***

23 Feb 2011, studytour delegation visited the Project for Improving Rural Living and Nature Conservation by Multipurpose Use of Charcoal and Wood Vinegar in Bach Ma National Park, Thua Thien Hue Province. Ms. Atsuko Saito, Project Coordinator, and project staffs received the SUSFORM-NOW delegation warmly. The Project introduced its activities such as charcoal production, multipurpose charcoal use technologies, Bokashi fertilizer production and use.

### ***II. RESULTS OF VISITING MODELS ON THE FIELD***

#### **1. Process of charcoal production**

Charcoal is produced from natural firewood. Size of brazier depends on scale of production. It is built circle with cap and chimney. The chimney was made by Inox or steel. There is a slot at the broken place. It was made cold for collecting water steam from burned firewood. Wood vinegar can be received when temperature in the brazier reached 85<sup>0</sup>C. Wood vinegar can be used to treat some diseases of animals and trees. It is sub-product but it is high value and friendly with environment as well.

Now, price Charcoal is VND 7,000 -VND 15,000 per kg. It depends on what kind of wood. Charcoal is produced from main body of natural tree but not sub-parts of the tree such as leaves, branches, etc. So it leads local people to cut trees in the forest for making Charcoal. We should compare benefit between making Charcoal and selling natural wood. Which is better?

#### **2. Process of Bokashi fertilizer production**

Rice husk charcoal production is burned. Vinegar is collected during burning rice husk like process of making wood charcoal.

Component of Bokashi fertilizer: decomposed compost + rice husk fertilizer + rich soil + rice mash and alcohol yeast (Keep alcohol with rice mash from 5-6 days then mix up with above component; Continue to keep about 20 days more - it depends on the weather). Mix up one time per week, cover by canvas but airy. Suitable temperature is from 60-80<sup>0</sup>C. Humidity of Bokashi fertilizer goods is from 25-40%.

Bokashi fertilizer is high value. Waste resources can be used to make Boskashi fertilizer.

#### **3. Visited Mr. Cao Thanh's house at Khe Su village**

Members of the visited family introduced process of making and using Bokashi fertilizer to SUSFORM-NOW delegation. It is a good model.

#### **4. Visited Mr. Nguyen Kim Thanh's house at Khe Su village**

SUSFORM-NOW delegation visited process of making rice husk charcoal, collecting vinegar and making art products. This model is high potentiality and it should be expended.

#### **5. Visited Mr. Truong Van Nguyen's House at Khe Su village**

Mr. Nguyen's household is one of households in Khe Su village is applying Bokashi fertilizer in cultivation. It is a good model for learning.

## **D, EVALUATION AND LESSON LEARNED NEED TO BE APPLIED**

### ***I. EVALUATION***

The Studytour has finished successfully following careful preparation and schedule. Staffs of BNNP and Bach Ma Charcoal Project and local people as well received and guided the study tour delegation warmly and enthusiastically. All members of the delegation followed strictly the schedule and received good knowledge and valued experiences from BNNP and Bach Ma Charcoal Project and local people in there. Through this study tour, every member

had good chances to see implemented achievements and learned lessons which will be applied to implement SUSFORM-NOW Project activities in Dien Bien Province.

- ***Advantages of the models:*** Though applied models, households' awareness of cultivation and business households were changed. Potentiality is promoted. Local people produce actively. It gives jobs, keeps society stably and environment friendly. Its products are safe, multilabels and suitable with market.
- ***Shortcoming of the models:*** Farmer's knowledge is still limited; they are lack of marketing experience, new techniques for applying in agricultural production and budget for investment. So, first small model should be applied in households. Then the model will be improved with bigger scale.

## **II. LESSON LEARNED NEED TO BE APPLIED & PROPOSALS.**

### **1. Lesson learned through the studytour need to be applied in Dien Bien**

- Bokashi fertilizer production: Materials for production Bokashi fertilizer are available in pilot sites. Waste can be used to produce fertilizer. Farmers can save money from buying fertilizer for their cultivation.
- Production of wood vinegar and husk vinegar. Wood vinegar is very good for treatment animal diseases and protection diseases of plant.
- In order to get good results like BNBPN, outside investments of JICA project, Vietnamese Government should issue suitable policies for local people who are living inside project area such as food policy, forest management policy and forest protection policy.

### **2. Proposals**

- Project should support allowance to district staffs and commune staffs who manage to implement project activities.
- Project should invest and support local people to implement livelihood development plans.



## ANNEX

### 1. Pictures of study tour to Da Lat & Hue.

#### 1.1 Pictures in Da Lat

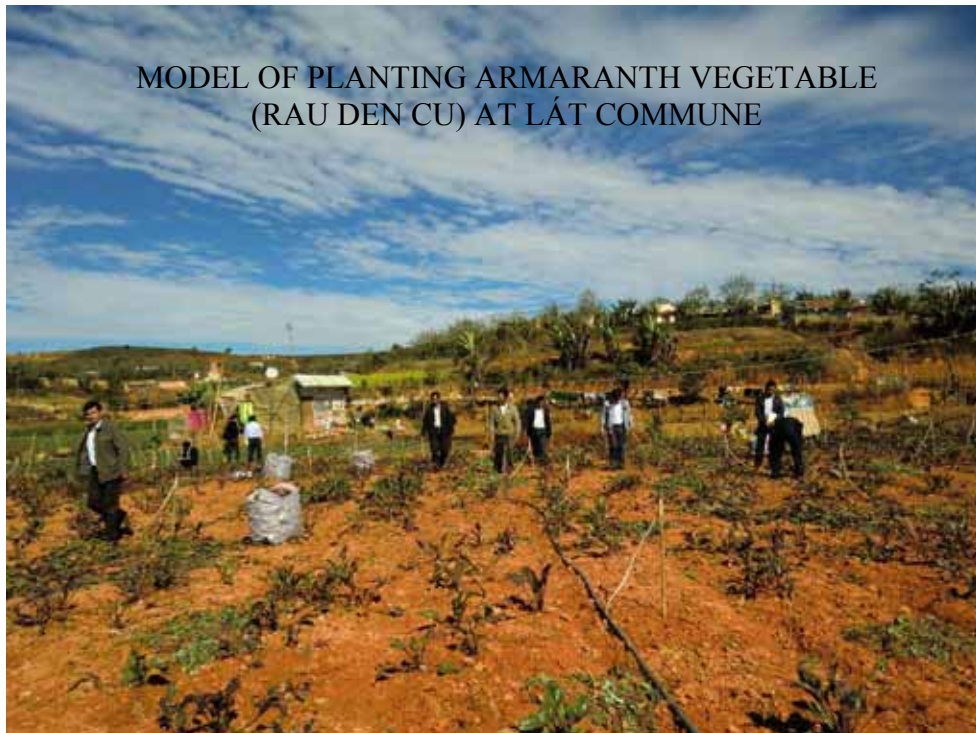
##### INTRODUCTION OF BBNBP



##### VISITED PEOPLE'S COMMITTEE OF LAT COMMUNE, LẠC DUONG DISTRICT



##### MODEL OF PLANTING ARMARANTH VEGETABLE (RAU DEN CU) AT LÁT COMMUNE





MODEL OF PLANTING STRAWBERRY (DAU TAY) AT  
LAT COMMUNE



VISITED MODEL OF PLATING COFFEE WITH PERIMMON (HONG)  
AT LAT COMMUNE



## VISITED BIDOUP NUI BA NATIONAL PARK



### 1.2 Pictures in Hue

## VISITED BACH MA NATIONAL PARK





VISITED MODELS OF CHARCOAL PRODUCTION AND BOKASHI FERTILIZER PRODUCTION AT KHE SU VILLAGE, PHU LOC DISTRICT



VISITED MR. CAO THANH'S HOUSE AT KHE SU VILLAGE



VISITED MR. NGUYỄN KIM THANH'S HOUSE AT KHE SU VILLAGE



## VISITED MR. TRƯỜNG VĂN NGUYỄN'S HOUSE AT KHE SU VILLAGE



### 2. List of Participants of Study Tour

Name	Position
<b>Dien Bien Phu city</b>	
Nguyễn Văn Hải	Head of the City's Forest Protection Unit
Nguyễn Duy Tân	Chairman of Ta Leng Commune People's Committee
<b>Dien Bien District</b>	
Phạm Công Nguyên	Deputy Head of District's Forest Protection Unit
Nguyễn Thế Điều	Vice Chairman of Nua Ngam Commune People's Committee
Lò Văn Hương	Chairman of Thanh An People's Committee
<b>Dien Bien Dong District</b>	
Tô Quang Tiếp	Head of the District's Agricultural Division
Vàng A Bông	Vice Chairman of Keo Lom Commune People's Committee
Lò Văn Khộ	Chairman of Na Son Commune People's Committee
Lò Văn Bồn	Vice Chairman of Pu Nhi Commune People's Committee
<b>Provincial PMU</b>	
Tạ Thị Thanh Bắc	Sub-DOF Officer
<b>SUSFORM-NOW Project</b>	
NONAKA Hiromi	Administrative Coordinator
Nguyễn Tuấn Hiền	Project Officer

### 3. Schedule of the Study tour to Da Lat & Hue

Total 4 days from 21/2 (Mon) to 24/2 (Thu):

- 21/2 (Mon): Departure from Dien Bien at 11:30 and arrival in Da Lat at 16:10 via Hanoi;
- 22/2 (Tue): Studying from and discussion with resource persons of BNNBP, and observation of the target village(s) of the BNNBP, departure from Da Lat at 18:00 and arrival in Ho Chi Minh at 18:50;
- 23/2 (Wed): Departure from Ho Chi Minh at 6:40 and arrival in Hue at 8:00, observation of charcoal production utilizing agro-waste and studying multipurpose utilization of the charcoal; and
- 24/2 (Thu) departure from Hue at 8:00 and arrival in Dien Bien at 14:30 via Hanoi.