

**MONITORING THE SUCCESS AND IMPACTS OF  
COMMUNITY – BASED ECOTOURISM**

*A Manual  
for  
Ecotourism Guides and Managers*

UNESCO Nam Ha Eco-tourism Project  
Luang Namtha  
Lao PDR

## **PREFACE**

This manual is intended to provide an introduction and practical guide to the principles and methodology of monitoring for the ecotourism guides and managers who are presently developing a community-based ecotourism (CBE) industry in the Nam Ha NPA in Luang Namtha province. The content and structure of the manual is taken directly from an introductory training course on ecotourism monitoring held in Luang Namtha in October 2001 and, as such, can be used as a basis for future training courses.

The Nam Ha Eco-tourism Project monitoring plan presented in this manual has been specifically designed for monitoring the success and impacts of CBE currently being implemented in the Nam Ha NPA and therefore may not be suitable for direct application to other areas or ecotourism products in Lao PDR. It can however provide a general guide to ecotourism managers for formulating similar plans in other provinces.

The monitoring plan and many of the examples and case studies presented in this manual are taken from the objectives and experiences of the UNESCO / National Tourism Authority Nam Ha Eco-tourism Project implemented in Luang Namtha province, Lao PDR.

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Guy Marris  
Conservation Management Advisor  
UNESCO / National Tourism Authority Nam Ha Eco-tourism Project

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## ***INTRODUCTION***

*Welcome to the Community-Based Eco-tourism Monitoring Manual. This manual has been prepared to give you, the eco-tourism guides and managers, an introduction to the principles of monitoring and a practical guide on how to collect different types of information to help us monitor the impacts and success of community-based eco-tourism development in the Nam Ha NBCA.*

### **About This Manual**

This manual will tell you what monitoring is and why it is a very important part of our work.

It will teach you how to create and implement a basic monitoring plan.

It will describe the objectives of our eco-tourism activities in Nam Ha NBCA and give you the methods and forms for collecting information which will help us to measure our success in achieving our objectives and for highlighting any negative impacts that eco-tourism is having on the natural environment and way of life of the communities that we work in.

It will also tell you what information we can collect which will help the Nam Ha NBCA Management Unit do their job in monitoring changes in the abundance of wildlife and threats to conservation in the Nam Ha protected area.

## ***SECTION I***

### **COMMUNITY-BASED ECO-TOURISM**

#### **What is it ?**

Before we can understand what it is that we need to monitor in our eco-tourism work we first need to be able to understand what community-based eco-tourism is and what are its objectives.

‘Community-based’ means that our tourism activities involve local people. It also means that local communities are actively participating in the development and management of the tourism activities. Communities actively involved in tourism usually still retain a traditional way of life and culture that is of interest to tourists.

‘Eco-tourism’ is tourism that is based in natural environments, usually in places that are very scenic and which retain lots of forest and wildlife, like the Nam Ha NBCA. It is tourism that should have little or no impact on the natural environment – like trekking, rafting and bird watching for example – and which actively raises awareness among the tourists about the conservation values of the areas that they visit.

#### **Summary**

*Community-based eco-tourism is tourism that is based on a combination of both cultural and natural attractions. It therefore usually takes place in natural areas and involves local communities which still retain traditional cultures and which actively participate in the development and management of tourism activities.*

#### **What are the goals of community-based eco-tourism ?**

There are three main goals of community-based eco-tourism :

- To make a viable tourism business which contributes to local economic development in a way that minimizes negative impacts on the natural and cultural attractions upon which the tourism is based.
- To actively contribute to the conservation of both the natural environment where the tourism is taking place and to the conservation of the cultural heritage of the communities that are involved.
- To ensure that participating communities take an active role in the development and management of eco-tourism activities.

### Trainers Notes

- 1) Ask the trainees to take a piece of paper and write down three ways that eco-tourism can minimize impacts on the natural environment and three ways that it can minimize impacts on the culture of participating communities. Discuss and apply the trainees answers to the Nam Ha Eco-tourism project.
- 2) Discuss how eco-tourism, if managed well, can actively stimulate the conservation of nature.

For example :

- The revenue earned from eco-tourism can stimulate community and government awareness about the value and importance of natural areas which can translate into positive actions to protect the area in question. e.g a village setting aside a bird reserve to which they guide visiting tourists on bird watching trips or a village deciding not to cut down trees in the vicinity of a tourist trail because it will look ugly ; or a local government agency deciding not to proceed with a road to an eco-tourism village in a protected area because of the negative impacts it will have on the eco-tourism industry.
  - Money from tourist fees going to the protected area management agency for use in protection activities – e.g in the form of a trekking permit fee.
  - The regular presence of tourists inside natural areas can act as a deterrent to people conducting illegal activities such as hunting of protected species and commercial logging.
  - When the income earned from guiding tourists to view wildlife exceeds that from hunting it can motivate communities to strictly protect or manage wildlife populations and to enforce rules against outside hunters.
- 3) Discuss how eco-tourism can contribute to the conservation of the cultural heritage of Lao PDR.

## **MONITORING**

### **What is it ?**

*Its nothing new.*

Monitoring is something that we all do every day of our lives. When we cook soup for example, we need to taste it several times to know whether we have put in enough salt or spices or to see if it is hot enough to eat. Or when we drive our motorbike we regularly look at the fuel gauge to see when we need to go to the fuel station to fill it up. When we cross the road we need to look left and then right and then left again before crossing to avoid getting hit by a car. Or when a patient is sick with malaria we need to regularly check his

temperature to know if the drugs are working. All these situations involve collecting information about something that is likely to change, in order to guide our actions. This is what we call monitoring.

### Summary

*It is the regular collection of information about situations that are constantly changing in order to help guide our actions to achieve a desirable result or objective.*

Because the situations that we want to monitor are constantly changing, monitoring is not something we just do once and then forget. After we have collected the information that we need, we then have to evaluate what it means in order to know if we are doing the right things or if we need to change our actions to achieve our desired result. If we change our actions we then need to monitor them again to see if the changes are working. This is an ongoing process that we have to repeat until we have achieved our objective.

For example let's say that our *objective* or desired result is to cook pork vegetable soup for your guests that tastes good. The first thing we need to do is decide on how we will make the soup – *our work plan* – that is, what the steps are and in what order they should be taken and what ingredients – *resources* – we need to make the soup. After the *planning stage* we are ready to prepare the soup – *implement our activities*. Throughout the whole job of cooking the soup we will have to *monitor and evaluate* our progress to make sure we are on track to achieving our *objective* – a tasty vegetable soup. The process could look something like this :

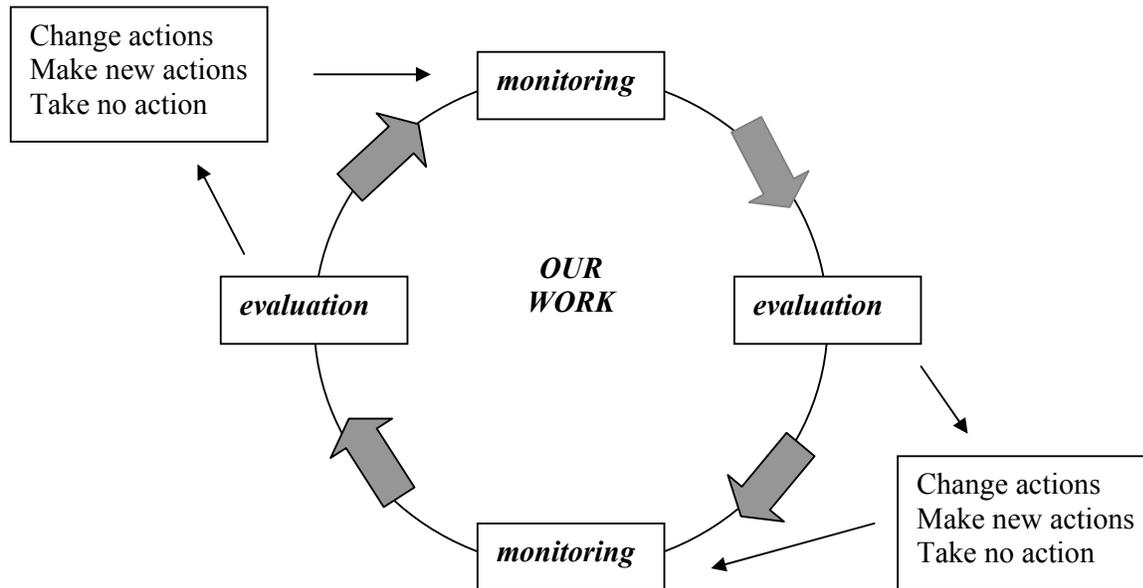
- Step 1 - decide on a recipe and the ingredients you will need - *the work plan*
- Step 2 - cut up the vegetables and meat and put into boiling water – *action 1*
- Step 2 - add salt, pepper, chillis, lemon, and ginger – *action 2*
- Step 3 - taste the soup – *monitoring*
- Step 4 - decide what else the soup needs – *evaluation*
- Step 5 - add more chilli and salt and stir for 2 minutes – *action 3*
- Step 6 - taste the soup again – *monitoring*
- Step 7 - decide that the soup is now too salty – *evaluation*
- Step 8 - add more water to make less salty – *action 4*
- Step 9 - taste soup again – *monitoring*
- Step 10 - decide it tastes good and that is ready to serve – *evaluation*
- Step 11 - serve and eat - *action 6*
- Step 12 - ask your guests what they think of the soup – *monitoring*
- Step 13 - 4 out of 5 guests say it's great so conclude that the soup was a success – *final evaluation*

Cooking soup is a simple example with a start and an end point. In community-based ecotourism there is no end point. As long as there are tourists still going it will require constant monitoring and evaluation to make sure our objectives continue to be met. Our end point is when tourism stops.

The general monitoring and evaluation process can therefore be illustrated as a cycle that is never ending.

*Figure 1*

### The Monitoring Cycle



#### Trainers Notes :

Ask the trainees to each come up with an example of everyday monitoring and evaluation.

### How is monitoring different from surveys ?

Monitoring is not the same as doing a survey, although both activities collect information and may even use the same methods for collecting data. Surveys are usually only carried out once and tell us what the situation is at one time whereas monitoring involves collecting information in the same way, repeatedly *to tell us how a situation is changing*.

For example we might do a survey to locate the important salt licks in the Nam Ha NBCA but would carry out monitoring to know whether the abundance of wildlife using the salt licks is changing.

### Why change is so important in monitoring and how to measure it.

If something is unlikely to change then it is usually not very interesting or important to know about. Think about when you drive a motorbike. You have to keep a close watch on dogs,

people and other vehicles because they might suddenly change direction or their speed and cause you to have an accident. But you pay very little attention to buildings because they are not likely to change their position.

If we want to find out if something is changing we have to measure it repeatedly, using the same methods over the period of time that we want to observe it. After collecting the information many times we then need to present all of our data together – on the same table or graph – so that we can *compare* it and see how it has changed over time.

For example if we collected data on how much income a village receives every three months from ‘eco-tourism’ and want to compare it to ‘other sources’ of income we might see the following changes over the course of a year :

*Table 1*  
Ban Nalan- Monthly Income 2001

<b>Period</b>	<b>Income from Eco-tourism</b>	<b>Income from Other Sources</b>
January - March	\$ 44	\$ 20
April – June	\$ 28	\$ 35
July – September	\$ 32	\$ 38
October - December	\$ 48	\$ 18
<b>YEARLY TOTAL INCOME / 2001</b>	\$ 152	\$ 111

From the above graph you can see that by comparing the data collected we can detect changes in the pattern of income for the village. The information tells us that during the months April – September the income earned from eco-tourism decreases while at the same time income from other sources, such as selling forest products, increases. And in the drier months it is the other way round. This simple data therefore tells us that the levels of village income from eco-tourism and other sources are changing throughout the year. If we then want to try and understand what the causes are for this we need to collect additional monitoring information about related factors – for example the seasonal changes in numbers of tourists visiting Luang Namtha over the year (if less tourists are visiting during the wet months then this could explain why village income from eco-tourism drops over this period).

If we collect this type of information over many years we may begin to see different types of change when comparing years. We may find that over time the total yearly income from eco-tourism is declining as is the income from other sources. This points to a potentially serious

problem for the village that needs to be addressed. It also highlights why monitoring is such an important part of our work.

### Text Box 1

#### **Baseline Information – what is it and why we sometimes need it in monitoring ?**

If we want to know how our work is affecting a particular situation we sometimes need to know what the situation was like before we started our activities so that we can make a comparison of ‘before’ and ‘after’. For example if we want to measure the percentage that eco-tourism has improved the average family income in a village over the first year we first need to know how much the average family income was before eco-tourism was introduced so that we can make a comparison between the ‘before eco-tourism’ and ‘after eco-tourism’ levels. We call this *baseline data*. It is usual to collect *baseline data* in a once-only survey from a village or eco-tourism site before any activities are implemented. *Baseline data* is also used by managers at a start of a project to formulate objectives and work plans which are appropriate and realistic.

### **Monitoring Community-based Eco-tourism (CBE)**

#### **Why do we need to do it ?**

Monitoring community-based eco-tourism tells us if we are being effective in our work and tells us what we need to change or do to improve our progress. In particular monitoring helps both managers and communities to :

- measure our progress toward achieving our CBE objectives.
- identify any problems or negative impacts that need to be addressed before they become too difficult to solve.

In addition, monitoring our work is very useful for collecting evidence that will demonstrate to others, especially high government officials and donors for example, that the eco-tourism initiative is working and that it is worthy of continued support. Hard evidence about progress made in CBE in the form of monitoring data is much more convincing than personal impressions.

#### **Who monitors CBE ?**

Anyone with adequate training and the ability to work well in the field can collect information that is useful for monitoring community-based eco-tourism. In our situation it includes the local eco-guides, staff from the Tourism Office, staff from the NBCA Management Unit , and the communities themselves.

### **How often do we monitor CBE ?**

It depends on the type of information we are collecting. When we are monitoring slow changing situations such as how eco-tourism may be affecting the culture and traditional way of life of a village, we need to collect data less often say once every 3, 6 or 12 months. But if we want to monitor fast changing situations or identify problems quickly before they become too big we need to collect data more often, say every four or every month – for example when we want to identify problems of tourist safety along the trails or environmental issues such as the sale of wildlife products to tourists in the village.

### **Where do we monitor CBE ?**

Mostly we need to collect our data from the villages and along the trails where we conduct eco-tourism activities.

### **What methods can we use for collecting data about CBE ?**

There are several different ways we can collect information that is useful for monitoring community-based eco-tourism.

We can :

- use household questionnaires and interviews.
- visitor feedback questionnaires
- regular surveys.
- use forms for recording the observations of the eco guides.
- use photographs - for example photograph the same stretch of trail at regular intervals over time for comparison to monitor changes in the level of erosion caused by trekking tourists.
- have workshops and discussions with participating communities.

A major difference between monitoring everyday activities, such as cooking soup, and the activities of CBE is the period of time over which the activities takes place and the amount of monitoring information that is collected as a result. Cooking soup takes 30 minutes. Community-based eco-tourism can run for 20 years or more. Therefore when we collect information for monitoring CBE we need to record the information that we collect in a systematic and permanent form, so that in 10 years time, for example, we can go back and retrieve the information (from the filing cabinet) collected at the beginning of our project and compare it with the situation today to see what changes have taken place as a result of our activities. The way we usually do this is to use forms and tables for recording the data.

### **What do we monitor in CBE ?**

Firstly we want to know if we are being successful in meeting the *objectives* of CBE. If we turn our *objectives* into questions this can help us identify the types of information we will need to collect to monitor our progress in meeting our *objectives*. For example on the Nam Ha Eco-tourism Project we need to ask ourselves .....

- is eco-tourism contributing to the economic development of the village and of the province ?
- are the benefits of eco-tourism being fairly distributed in the village ?
- is eco-tourism contributing to positive community development ?
- is eco-tourism contributing to the preservation of local cultures ?
- is eco-tourism contributing to the conservation of nature ?
- are local villages taking an active role in the management of eco-tourism ?

The information that we collect should specifically help us to answer these questions.

Secondly we may decide that we need *additional information* to help us identify any negative environmental or cultural impacts or emerging problems that might affect the overall success of CBE. We call these *additional information needs* and they may be identified by asking the following types of questions :

For example .....

- Is eco-tourism having a negative impact on the culture and general way of life in the village ?

Is eco-tourism causing resentment in the village because of inappropriate or offensive tourist behaviour or simply because there are too many tourists visiting ?

Is it causing conflict in the village because benefits and work loads are not being fairly distributed ?

Is it causing some families to have less time available to devote to other important activities such as collecting forest products or tending to the rice fields ?

Is it causing some families to have a poorer diet because they sell most of their food to tourists ?

- Is eco-tourism having a negative impact on the environment ? – for example, trail erosion, litter, pollution, consumption of wildlife in the village, disturbance of important wildlife habitats, non-sustainable harvesting of forest products by villagers to provide food for tourists or to produce handicrafts for sale to tourists.
- Are the tourists satisfied with the eco-tourism activities and the performance of their guides ?

The most difficult part in designing a CBE plan is deciding on what exactly we will measure or monitor in order to answer the above questions. Generally there are many options but it is not feasible to collect information on all of them. So we tend to select only a few specific things that we can measure well to help us answer these questions. We call these things *indicators*.

## What is an indicator ?

*An indicator is something we can measure or assess which tells us if we are making progress towards our management objectives or if we are having an undesirable impact.*

Suppose that our objective is to :

*“ establish a village nature tourism reserve in order to contribute to the conservation of wildlife in Nam NBCA “*

To monitor our progress in achieving this objective we decide to measure changes in the number of birds in the village nature tourism reserve as this will *indicate* whether or not the bird populations are increasing or decreasing as a result of protection and tourism. In this example, the number of birds in the reserve is our *indicator* for measuring progress in achieving our objective to establish a village nature tourism reserve and so contribute to the conservation of wildlife in the Nam Ha NBCA.

A second objective might be to :

*“ improve village income through establishing a village nature tourism reserve “*

To monitor our progress in achieving this objective we decide to count how many tourists go to the reserve and how much money they spend in the village as a result. In this example therefore we have 2 *indicators* – the number of tourists going to the reserve and the amount of money they spend while in the village.

### Direct and Indirect Indicators

There are 2 types of indicators – a *direct indicator* and an *indirect indicator*. If our objective is “ to increase village income through eco-tourism in the next year “ then to count the monthly income that the village receives from tourists is a *direct indicator* of changing income levels. It is a *direct indicator* because it tells us exactly how much income the village is earning from eco-tourism. If this goes up then we know that we are achieving our objectives. If however we count the number of corrugated iron roofs that the village is buying over one year then this is an *indirect indicator* of village income. It is an *indirect indicator* because it only tells us that more iron roofs in the village probably means that families are getting more income from eco-tourism. But it is not exact, as this income may in fact be obtained from other sources than eco-tourism.

Generally we should try to select *direct indicators* for measuring our objectives and impacts where possible because they are more exact. But sometimes it is difficult to measure our objectives directly and we have to select *indirect indicators* to tell if us we are making progress or having negative impacts. For example if we want to know what impacts eco-tourism might be having on the traditional culture of the village then there is no one thing we can count or measure directly to tell us this. So we have to select maybe 2 or 3 different *indirect indicators* to tell us about possible cultural impacts – for example we could monitor how many television sets the village is buying since they started to receive eco-tourism income ( as this may influence the culture in a negative way) or count the number of young people who leave the village ( if many young people leave there will be likely fewer people learning about the old traditions) or we could ask the villagers themselves how they think

eco-tourism has impacted their culture. These are all *indirect indicators*. When these indicators are monitored together they are likely to give us a good idea if and how eco-tourism is negatively impacting the culture of the village.

Another example would be if we wanted to monitor the changing numbers of Hornbills in the Nam Ha NBCA. A *direct indicator* would be to count the number of Hornbills in the NBCA whereas an *indirect indicator* would be to measure the area of habitat remaining in the NBCA that is suitable for Hornbills to live. If the area of suitable habitat is shown to decline then we can probably assume that the Hornbill populations are also declining but we don't know for sure. If we use the *direct indicator* as well of regularly counting the actual numbers of Hornbills then we will have a much better idea of what the exact situation is at any given time.

Generally the more *indicators* we use to measure a given objective or identify impacts, the more accurate our monitoring will be and the better we will understand any important changes taking place as a result of our activities. However because monitoring CBE is continuous and needs to be undertaken every year we also need to consider how expensive monitoring will be and how much time it will take. We should try to select only important *indicators* which are not too expensive to measure, that don't take too much time and which are easy for the staff to measure. This way there will be a greater chance of any *monitoring plan* being sustained over the long term.

Trainers Notes :

Ask the trainees to identify which are the direct and indirect indicators for the following monitoring examples and to explain why :

- Measuring changes in the health of village children / *Indicators* are : the number of children in the village who are sick ; the amount of income that families spend on medicine ; the average number of children who attend school each day.
- Measuring changes in the abundance of wild cattle inside an NBCA. / *Indicators* are : suitable habitat available for wild cattle ; the actual number of wild cattle ; the number of wild cattle shot by villagers each year.
- Measuring changes in the level of wildlife hunting inside an NBCA. / *Indicators* are : the number of guns owned by villagers in the NBCA ; the amount of wildlife protein in the diet of the villagers ; the average number of hours villagers spend hunting wildlife each week ; changes in the abundance of barking deer.
- Measuring the level of economic development in an eco-tourism village / *Indicators* are : the number of televisions purchased in the village ; the income earned by each family ; the number of people in the village with paid employment ; the number of tourists who visit the village each year.

## **SECTION II**

### **HOW TO MAKE A MONITORING PLAN**

Because the objectives of community-based eco-tourism are often complex we have to think very carefully about the *indicators* we will select to be able to measure our progress in achieving our *objectives* ,to identify unwanted *impacts* and for collecting the *additional information* that we will need to measure the success of our work .We also need to think about the methods we will use for collecting the information and who will do it and when. The best way to plan and organise all of these components is to make a monitoring plan using a standard table or matrix, like that given below :

<b>Objective / Impact / Additional Information Need :</b> .....				
<b>Monitoring Strategy :</b> .....				
<b>Indicators</b>	<b>Method</b>	<b>When</b>	<b>Who</b>	<b>Where</b>

### **A Practical Example**

#### *Monitoring a Small Rural Development Project*

You are the manager of a small rural development assistance project. One of your tasks is to assist a village to grow enough cabbages to feed all the resident families for each day of the year. There are 100 people in the village comprising 25 families. You collect *baseline data* from each family to find out how many cabbages they need a day. On the basis of this data you decide you need to produce 35 ripe cabbages a day to feed the village which you estimate will require about 1.5 ha of garden. Once the garden has been established and has started to produce cabbages to eat you decide you need to implement a basic monitoring plan to ensure that the garden is successful and is able to meet the objective of the project.

There are several steps that you need to follow when making your monitoring plan.

#### **Step 1 / Defining the Objectives, Impacts and Additional Information Needs**

The first step is to clearly define your *objective* or the *impact* that you want to monitor or the *additional information* that you will need to measure the success of your work.

The primary *objective* of the project is :

**“ to grow enough cabbages to meet the daily needs of each family in the village “**

This therefore is the objective that we will want to monitor.

But to ensure the overall success of the project you will also need to monitor the health of the cabbage garden, because if there is lots of disease and pests for example then obviously this will affect the productivity of the garden and your ability to meet the needs of the village. Your *additional information need* therefore is :

**“ the health of the cabbage garden “**

As the manager you may also decide that you want to know about the changing dietary preferences of the village. If for example people were getting sick of eating cabbages and started throwing them out to the pigs then this is not a very efficient use of project resources and time. In such a situation it may be necessary to introduce another crop, like carrots, to meet the dietary preferences of all the people. So another *additional information need* could be :

**“ the dietary preferences of the village “**

## **Step 2 / Selecting Indicators and Designing a Monitoring Strategy**

The next step is to decide what your *indicators* will be. What things will you measure or monitor that will tell you if you are achieving your objective, as written above and which will provide you with your *additional information needs* about the health of the cabbage garden and dietary preferences of the village. When taken together the *indicators* that you select will become your *monitoring strategy*.

To measure our success in achieving the *objective* – to grow enough cabbages to meet the daily needs of the village – we will first need to count how many cabbages we are able to harvest each day. From our *baseline data* we know that our initial target is 35 cabbages per day. If we are harvesting less than this then we will need to increase production perhaps by planting more land or we will have to look at the information we are collecting about the health of the garden to see if there are any other causes as to why we are not able to grow enough. Your first *indicator* should therefore be :

**“ the number of cabbages we can harvest each day “**

The second thing we should monitor is the changing needs of each family for cabbages. Maybe some families will increase in size and others will decrease over time and so the number of cabbages they need will change. If the needs increase then we will have to increase production or if they decrease we can re plant less cabbages or know that we can sell the surplus in the market. Your second *indicator* can therefore be :

**“ the number of cabbages that each family requires a day “**

To monitor our first *additional information need* – the health of the cabbage garden – we will need to regularly assess the health of the plants in the garden. You could collect information

on the number of plants diseased, the number eaten by pests, and the number not growing well. This information is directly relevant to the success of the project because if you have big problems with the health of the cabbages you will probably be unable to produce enough cabbages to feed the village. If the information is collected regularly you are likely to identify any problems quickly and be able to investigate the causes and solve them before they become too serious – solutions might include spraying herbicides or adding compost to the soil to make the cabbages grow faster and larger.

Your *indicator* for this *additional information need* can be :

**“ the number of cabbages showing disease, insect damage or stunted growth “**

Lastly, to monitor your second *additional information need* - the dietary preferences of the village – you will need to assess the changing preferences for eating cabbages and other vegetables in the village in order to work out if you are producing too many cabbages and need to produce another crop to meet the preferences of the people.

Your *indicators* can therefore be :

**“ the number of people in the village who do not want to eat only cabbage “**

**“ the preferred crop substitute for those people who do not want to eat only cabbage “**

Your *indicators* when taken together and written as detailed actions will become your *monitoring strategy*.

### **Summary**

To monitor the project *objective* your *monitoring strategy* will be to :

- 1) to count the number of mature cabbages that are harvested each day from the garden.
- 2) to measure changes in the total of number of cabbages that the village requires to feed all the families.

To monitor the *additional information needs* your *monitoring strategy* will be to :

- 1) to regularly count the number of cabbage plants which are sick and dying from disease, insect damage or poor soils.
- 2) to assess changes in the number of people in the village who do not want to eat cabbages.
- 3) to assess which other crops are most popular as a substitute for those people who do not want to eat cabbage..

### **Step 3 / Selecting Methods for Collecting the Information**

After selecting your *indicators* you will have to decide what methods you will use to measure them or in, other words, how you will collect and record the information that you need.

These methods, as we have seen, can include questionnaires, regular surveys, group discussions, data recording forms, photographic monitoring and so on.

In this example the use of data recording forms, questionnaires and interviews are appropriate methods for collecting the information you need.

For counting the “ number of cabbages harvested each day “ the use of a simple data recording form is sufficient – for example :

<b>Person Harvesting</b>	<b>Date Harvested</b>	<b>Number of Cabbages Harvested</b>
Mr Aloon	4/5/01	28
Ms Viengkham	5/5/01	32

For assessing “ changes in the total number of cabbages that the village needs to feed all of the families “ and the “changing preferences for eating cabbages and other crops “ you can combine these and collect information for both of them with a simple household questionnaire and a recording form. For example :

Table 2

<b>Household Questionnaire</b>				
Date of Interview : _____	Name of Interviewer : _____			
Name of Head of Household : _____				
Number of People in Household : _____				
<u>Questions :</u>				
1) Does everybody in your family eat cabbage every day ?				
Yes <input type="checkbox"/>	No <input type="checkbox"/>			
2) Is your family happy about eating cabbages every day ?				
Yes <input type="checkbox"/>	No <input type="checkbox"/>			
If not , what is the most preferred alternative vegetable your family would like to eat every day ?				
Carrot <input type="checkbox"/>	Asparagus <input type="checkbox"/>	Potatoe <input type="checkbox"/>	Corn <input type="checkbox"/>	Cauliflower <input type="checkbox"/>
Spinach <input type="checkbox"/>	Other _____			
3) How many cabbages does your family currently need each day ? _____				
If this quantity has changed what is the reason for this ?				
_____				
_____				

The questions in this household survey form are designed to help you understand about the changing preferences and needs of the village for cabbages. When collected from every family and analysed it will tell you how many cabbages you should be harvesting to meet the current needs of the village, why the needs of the village are changing, how many families in the village are becoming tired of eating cabbages and what their most preferred choice is for an alternative daily vegetable. This information will help you to monitor the changing situation and guide your actions to adjust your outputs accordingly and achieve successful results.

The accompanying form for collating the above data could look like this :

**Date :** \_\_\_\_\_

<b>Name of Family</b>	<b>Number of People in Household</b>	<b>Number of Cabbages Needed Each Day</b>	<b>Most Preferred Alternative Crop</b>
Uli	5	2	carrot
Aheu	3	1	-
Ala	6	3	asparagus
Alee	4	2	-
Ukhe	5	3	carrot

For collecting the information about “ the health of the cabbages “ you could design a simple data recording form as follows :

**Date :** 1/06/01    **Name of Observer :** Bouaket

<b>Health Problem</b>	<b>Number Affected</b>	<b>Details / Comments</b>
Diseased only	15	Mostly black fungus
Insect damaged only	25	Mostly snails , some beetle damage.
Diseased and insect damaged	10	As above
Poor growth	35	Soil looks too stony in some places. Needs more fine top soil and fertilizer.
<b>TOTAL AFFECTED</b>	90	

#### **Step 4 / When, Who and Where to Monitor**

The final step is to decide how often you will collect the data for each *indicator* (when), who will do it, and where will it be done.

When deciding on how often to collect information you have to consider how fast changing the situation potentially is. For fast changing situations you should collect data more frequently so that you can detect problems early enough before they become too big to solve. For slower changing situations any problems will emerge only slowly, so it s not necessary to collect the information frequently.

For example, “ the changing needs and preferences of the village for cabbages “ is likely to change only slowly. For this information you could safely collect the data once a month or even every 3 months and be assured of detecting significant changes early enough. However because “ disease and insect damage “ can quickly appear and spread it would be wise to monitor the health of the cabbage garden more frequently, say once every week or 2 weeks, so that emerging problems can be detected quickly and addressed.

The persons who are responsible for collecting the data should be those people who have the capability and the necessary expertise to do it well. Generally it is a good idea to not change the people collecting the information unless it is necessary to do so, as the more experienced and practiced they are the better quality data they will collect. The place where we collect the data is where the data is produced – the garden and the village households.

Now that we have completed all the steps we are ready to complete the Monitoring Plan matrix or table :

### **MONITORING PLAN MATRIX – Vegetable Gardening Project, Ban Phonsaat.**

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**Objective 1 :** *to grow enough cabbages to meet the daily needs of all the families in Ban Phonsaat village.*

Monitoring Strategy :

- 1) to count the number of mature cabbages that are harvested each day from the garden.
- 2) to measure changes in the total of number of cabbages that the village requires to feed all the families.
- 3)

<b>Indicator</b>	<b>Method</b>	<b>When</b>	<b>Who</b>	<b>Where</b>
1) the number of cabbages harvested every day.	Data recording form	every day	Person who is harvesting	Cabbage garden
2) the total number of cabbages required by the village each day.	Household questionnaire and data summary form	quarterly	Project staff	Village

**Additional Information Needs :**

- 1) the health of the cabbage garden.
- 2) the changing preferences in the village for eating cabbage on a daily basis.

- 3) the preferred alternative vegetable crops to cabbage to eat on a daily basis.

**Monitoring Strategy :**

- 1) to regularly count the number of cabbage plants which are sick and dying from disease, insect damage or poor soils.
- 2) to assess changes in the number of families in the village who do not have a preference for eating cabbages on a daily basis.
- 3) to assess which other crops are most popular as a substitute for those families who do not want to eat cabbage every day.

<b>Indicator</b>	<b>Method</b>	<b>When</b>	<b>Who</b>	<b>Where</b>
1) the number of cabbages diseased, insect damaged and stunted in growth	Survey. Use data recording form	every 2 weeks	Staff with expertise	Cabbage garden
2) the number of families in the village who do not have a preference for eating cabbage daily.	Household questionnaire	quarterly	Project staff	Village
3) the most preferred choice of alternative vegetable to eat on a daily basis.	Household questionnaire	quarterly	Project staff	Village.

Training Notes :/ Group exercise to make a basic monitoring plan.

Split the trainees in to small groups and provide them with a piece of poster paper, felt pens and the following case study.

**Case Study 1**

“ You are the director of an eco-tourism project inside a protected area. You have identified a potential target village which is interested in participating in eco-tourism and receiving tourists. Before implementing eco-tourism activities in the village you carry out a socio-economic assessment of the village to collect baseline data. You visit each of the 30 households in the village and collect baseline data on the monthly income for each family, an average of 40,000 kip per month per family, although some households have less than this and others have more. You also collect *baseline data* on the health and rice security problems of each family. You find out that more than half the children in the village have recurring health problems, mainly respiratory infections, and that most of the families have only enough rice to feed themselves for 9 months of the year. When asked for ideas about how they might solve these problems, the village says that if they could raise the total village income by about 50% per year they would have enough money to buy medicine ( there is a village nurse available to dispense the medicine) , take their children to hospitals if necessary and to buy rice in the market to feed themselves for the 3 months of the year they have insufficient rice. As one of the *goals* of your project is to contribute to the improved development of local people through the income generating opportunities offered by eco-tourism, you decide to proceed with the project. You decide on the following *objectives* for your project :

- 1) “ *to raise the average monthly income of the village by at least 50 % and to ensure, as far as possible, that this is evenly distributed among all the households of the village* “
- 2) “ *to improve child health in the village through the generation of eco-tourism income* “
- 3) “ *to achieve 12 months of rice security for all households through the generation of eco-tourism income* “

Each group should make a monitoring plan for the above objectives using the planning table already given on page # ..... They need to think carefully about the information they need to collect – the *indicators* and their *monitoring strategy* - to measure the success and progress in achieving the above objectives, the methods they will use to collect the data, how often they will do it and who will do it. They should also think about any *additional information needs* that would be useful for identifying any problems that might be occurring with the eco-tourism activities which would affect the income earned by the village or for understanding the situation more clearly regarding the health and rice security issues in the village. For example although the village may earn 50% more money it may not result in improved health and rice security because people are not spending the money on the right things. To better understand this situation an *additional information need* may be to assess what the villagers buy with their eco-tourism revenue.

Allow approximately 1 hour for this exercise, after which each group should select a representative to present their plan to the class. Discuss.

## ***SECTION 3***

### **AN INTRODUCTION TO THE NHEP MONITORING PLAN**

The Nam Ha Eco-tourism Project has produced a plan to help the managers monitor the success and impacts of community-based eco-tourism in the Nam Ha NPA. *Your role, as eco guides and staff of the Provincial Tourism Office, will be to collect the required monitoring data on a regular basis.* In this section we will explain what we will be monitoring, introduce the various forms that you will use to collect the monitoring data and present the Monitoring Plan Matrix with explanatory notes.

The planning matrix and explanatory notes will help you to understand how the information you collect will help the managers monitor the objectives and various impacts of the eco-tourism activities in Nam Ha NPA.

#### What Will We Monitor ? :

We will monitor our progress and success in achieving the following *objectives* as set by the Nam Ha Eco-tourism Project and Provincial Tourism Office.

- ***Objective 1 / Income Generation***
  - a) To generate ecotourism income in the village that will account for at least 20% of the total village income and to ensure, as far as possible, that it is equally and fairly distributed within the village.
  - b) To contribute to positive village development and an improved standard of living through income generation, in a way that does not harm the environment, culture or cause social problems.
  - c) To contribute to the economic development of Luang Namtha province.
  
- ***Objective 2 / Cultural Preservation***
  - a) To ensure that ecotourism minimizes impacts on culture and promotes where possible the preservation of the cultural heritage of participating communities.
  
- ***Objective 3 / Conservation of Nam Ha NBCA***
  - a) To ensure ecotourism minimizes impacts on the environment and contributes where possible to the conservation of the Nam Ha NPA.
  
- ***Objective 4 / Community Participation***
  - a) To ensure local village people are trained to effectively manage community-based eco-tourism.

We will also monitor the following *additional information needs* to help us ensure that we develop an eco-tourism industry that is successful and which has minimal negative impacts

on the environment of Nam Ha NBCA and the culture and way of life of the participating villages :

*Additional Information Need 1. / **Socio-Economic Impacts***

- 1) Is ecotourism causing some families in the village to spend less time on other important and traditional economic activities with a resultant negative impact upon their way of life ?
- 2) Is ecotourism having any negative or positive impacts on the dietary health of the village ? ; Is the village having problems finding sufficient food to feed to the tourists ?
- 3) General perception of the community and of individual families on how ecotourism is impacting upon the way of life in the village.

*Additional Information Need 2 / **Visitor Satisfaction / Guide Performance***

- 1) Visitor feedback on their satisfaction with the overall ecotourism experience and with the service provided by the ecoguides.
- 2) Satisfaction of individual families in the village with tourists and guides.

We will also collect some information to assist the staff of the Nam Ha NPA in their wildlife and threat monitoring program. The regular presence of the guides inside the NPA provides an ideal opportunity to monitor threatened species of wildlife and serious threats to the protected area both along the trails and in the tourism villages.

## THE MONITORING FORMS

The following forms will be used for the collection of monitoring data.

### **Every Trip**

*Form # 2* “ Visitor Feedback Questionnaire “ should be given to each of the tourists after every trip.

*Form # 6* : “ NPA Wildlife and Threat Monitoring “ should be undertaken on every trek and river trip inside the protected area.

### **Monthly**

*Form # 3* : “ Trail Impact Monitoring and Maintenance Survey ” should be undertaken on all trekking trails at the end of each month.

*Form # 7*: “ Village Conservation Team Data Collection “ should be undertaken by NPA staff eco guides once every month.

### **Biannually**

*Form # 4* : “NBCA Village Threat Monitoring “ should be undertaken in all ecotourism villages every 6 months.

*Form # 5* : “Household Survey “ should be undertaken with all families in all ecotourism villages every 6 months.

### **Annually**

*Checklist # 1* : “ Community Workshop Agenda “ should be undertaken once a year in each of the eco-tourism villages. The eco-tourism managers should take a lead role in facilitating the workshops.

In addition to the above field based monitoring forms the accounts officer for the PTO will be responsible for monitoring provincial ecotourism revenue on a regular basis as outlined in the Monitoring Schedule.