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Cat Tien National Park (CAT TIEN PMU)

*In collaboration with*

Center for International Forestry Research (CIFOR)

The World Conservation Union (IUCN)

World Wild Fund (WWF)

University of Charles Darwin (CDU)

The MacArthur Foundation

## **Workshop Summary**

**“Modelling conservation and development outcomes”**

**Training course on participatory modelling**

***Cat Tien National Park***

***10 – 14 September 2007***

## Participants

No	Full name	Org/Location	Email address
<b>FACILITATORS</b>			
1	Bruce Morgan CAMPBELL	CIFOR/ CDU Australia	<a href="mailto:bruce.campbell@cdu.edu.au">bruce.campbell@cdu.edu.au</a>
2	Jeffrey Sayer	IUCN/Switzerland	<a href="mailto:jeffrey.sayer@iucn.org">jeffrey.sayer@iucn.org</a>
3	Marieke Sandker	CIFOR/Cameroon	<a href="mailto:m.a.sandker@cgiar.org">m.a.sandker@cgiar.org</a>
4	Manuel Ruiz-Perez	Universidad Autonoma de Madrid, Spain	manuel.ruiz@uam.es
<b>PARTICIPANTS</b>			
5	Trần Văn Thành	Director of Cat Tien National Park	thanhppmudn@yahoo.com
6	Sombo Yin	Cambodia	<a href="mailto:yinsombo@yahoo.com">yinsombo@yahoo.com</a>
7	Luke Daniel Preece	CDU/Australia	<a href="mailto:lukepreece@gmail.com">lukepreece@gmail.com</a>
8	Neil Collier	CDU/Australia	<a href="mailto:Neil.Collier@cdu.edu.au">Neil.Collier@cdu.edu.au</a>
9	Stephen Garnett	CDU/Australia	<a href="mailto:stephen.garnett@cdu.edu.au">stephen.garnett@cdu.edu.au</a>
10	Hmalan Maureen HUNTER-XENIE	CDU/Australia	<a href="mailto:Hmalan.Hunter-Xenie@cdu.edu.au">Hmalan.Hunter-Xenie@cdu.edu.au</a>
11	Phạm Thu Thủy	CIFOR/ICRAF Vietnam	<a href="mailto:brissiesugar@gmail.com">brissiesugar@gmail.com</a>
12	Mai Hoàng Yến	CIFOR/ICRAF Vietnam	<a href="mailto:maiyenny@yahoo.com">maiyenny@yahoo.com</a>
13	Bustar Maitar	IUCN LLS - Samdhana Institute's, Papua	<a href="mailto:bmaitar@dialb.greenpeace.org">bmaitar@dialb.greenpeace.org</a>
24	Totok Mei Untarto	IUCN LLS - Samdhana Institute's, Papua	<a href="mailto:meiuntarto@yahoo.com">meiuntarto@yahoo.com</a>
14	Marta Monjane	IUCN/Mozambic	<a href="mailto:marta.monjane@iucn.org">marta.monjane@iucn.org</a>
15	Yassin Mkwizu	IUCN/Tanzania	<a href="mailto:yassin@iucn.or.tz">yassin@iucn.or.tz</a>
16	Dong Ke	IUCN/China	<a href="mailto:dongke@iucn.org.cn">dongke@iucn.org.cn</a>
17	Mr Chen Junqi	Beijing Parks and Forestry Department of International Cooperation, China	chenjq@bfdic.com or hbchjq@163.com
18	Agni Klintuni Boedhihartono	IUCN/Switzerland	<a href="mailto:Agni.Boedhihartono@iucn.org">Agni.Boedhihartono@iucn.org</a>
19	Zacharie Laurent NZOOH DONGMO	WWF, Central Africa Region	<a href="mailto:ZNzooH@wwfcarpo.org">ZNzooH@wwfcarpo.org</a>
20	Dominique Endamana	WWF NSP, Cameroon	<a href="mailto:dendamana@yahoo.fr">dendamana@yahoo.fr</a>

21	Samuel Kofi Nyame	IUCN, Ghana	samuel.kofi.nyame@iucn.org or samknyame@yahoo.com
22	Ittiphonh Chanthamaline	IUCN Laos	<a href="mailto:ittiphonh@yahoo.com">ittiphonh@yahoo.com</a>
23	Marcelo Arguelles de Souza	The World Conservation Union - Coordinator of the Brazilian Forest Conservation Office	<a href="mailto:marcelo.arguelles@sur.iucn.org">marcelo.arguelles@sur.iucn.org</a>
25	James Gordon	IUCN consultant	jegordon_selva@hotmail.com
26	Nguyễn Văn Thành	Manager of Science Technology division, CTNP	<a href="mailto:nguyenvanthanh_21@yahoo.com">nguyenvanthanh_21@yahoo.com</a>
27	Nguyễn Duy Khang	Vice director of ecotourism and environment education, CTNP	<a href="mailto:ndkhang02@yahoo.com">ndkhang02@yahoo.com</a>
28	Nguyễn Hoàng Hào	Officer of Science Technology in Vinh Cuu National Park, Dong Nai	<a href="mailto:haox131@yahoo.com">haox131@yahoo.com</a>
29	Đặng Quang Trọng	Ecotourism division, CTNP	<a href="mailto:henry_trong@yahoo.com">henry_trong@yahoo.com</a>
30	Nguyễn Huỳnh Thuật	Specialist of Forestry Science, CTNP	<a href="mailto:ngthuat@yahoo.com">ngthuat@yahoo.com</a>
31	Lê Văn Điền	Ecotourism division, Vinh Cuu national park, Dong Nai	<a href="mailto:tonydien2001@yahoo.com">tonydien2001@yahoo.com</a>

***Monday 10/09/2007***

**8:00 Introductions**

**8:30 Presentation: What is participatory modelling? Bruce Campbell**

**8:55 Examples of participatory modelling: Marieke Sandker**

- Built basic example of a STELLA model
- Presented the interface and model structure

*Why do we not use predictive models?*

Because that would require very accurate data and we do not have this. We also need to know all the relationships between all aspects of the landscape. If you design a predictive model, it would go into a lot of complexity and take years, but people are making decisions right now and they are doing it with limited information. The exploratory model makes the decisions more explicit.

*Can you incorporate a predictive model into STELLA?*

Some models can be accurate and predictive models, and these could be put into the framework.

*Who is the user of this model?*

Users depend on the context: in this case, it could be an NGO or Government interested in something to do with the area they are working.

*What are the expected results for this training course?*

By the end of the course, we should be able to use the model and have a working model of the landscape. All people here are dealing with complex conservation and development issues at a landscape. We all need to make decisions very quickly. We may realise that looking at certain aspects are only part of the problem, but these models can incorporate a large amount of information. These models are then used to communicate, share ideas and build links with people from other parts of the landscape. Hence we have to put the best data available into the model, so you can look a year later and see if the data and model were correct. We would like to see these used more by conservation and development organisations.

**(9:00 – 11:00 Selected participants interviewed for media)**

**9:30 Presentation on Cat Tien NP: Tran Van Thanh**

*Seems that there is a situation of conflict between local people and conservation.*

*Improving livelihoods is the third main objective.*

There are many projects to improve livelihoods; we have moved one village of three from the core zone. This happened seven years ago and the government cannot invest in anything more for them, so we have lots of difficulties in this area and still do not have a good solution. We hope this workshop will help to better understand the links between the rhinos and the people.

*Which communities are allowed to do activities in the area? Which are the main activities for their livelihoods?*

In the law of Vietnam, they are not allowed to conduct any activities inside the protected area. This includes bamboo and rattan harvesting. There is a small population living inside the national park, but we don't allow any activities. They are only allowed to work in their house and their farm. These activities include cultivation of their agriculture, including rice and cashew nut.

*Do people get any benefits from the NP?*

We have some activities for some to get local people involved, but it is difficult. This includes ecotourism for guides or sales to tourists.

*Where does the NP work?*

The national park is in the core zone, the buffer zone is government.

*Is there a management plan?*

We conduct a revision of the management plan every year for government approval. Last year we had a project with World Bank to help people with irrigation, to build roads, power lines and schools, to teach them how to cultivate and provide education. This project has now finished.

*In general, are local people happy?*

Yes, happy, but some are poor. They also understand that the forest is important.

*Why have violations decreased?*

That is difficult to answer; it depends on what and how. If the activity is to only go to the forest to look or take a small amount of rattan or bamboo, then this is not a violation. We only prosecute for hunting or clearing the forest.

### **10:00 Coffee break**

### **10:45 STELLA installation and CD distribution**

### **11:00 Demonstration: Build and run a model for SE Cameroon forests**

Includes data from documents and judgement to fill in the stocks and converters. Components include national park, agriculture, forest in agriculture zone, concession forest, total forest, total land area, fraction of forest and deforestation rates.

### **12:30 Lunch**

### **1:00 Group work: Threats to Cat Tien**

*Two questions:*

Q1. What are the most important two problems faced by CTNP?

Q2. What will be the two big drivers for landscape change in Cat Tien Region?

Gp 1, Q1.

Economic Change

Government Trends  
Climate change – but is uncertain  
*Assumptions:*  
Gradual transitions  
Regional integration  
No global or regional big conflicts

Gp 2, Q2.  
Internal – slash and burn; illegal logging and hunting  
External – law on indigenous people in the park

Gp 3, Q1.  
Population influences: Birth rate and migration  
Lack of economic means to local populations

Gp 4, Q2.  
Problems not different from group 2  
Poverty causes encroachment: agriculture and hunting  
Also a problem with not including local participation in management

### **2:50 Coffee break**

### **3:20 Group work: Model sectors**

*Question: Which sectors to model?*

Four group presentations

Gp 4 – CTNP Management, Conservation Value, Economic Development, Population, Land Use, Governance

Gp 1 – Livelihoods, Governance, Biodiversity, Economy, Land Cover, Human population

Gp 2 – Population, Governance, social wellbeing, biodiversity, GDP, Land Use

Gp 3 – Land Use, Wildlife, Payments for Environmental Services, Economic activities, governance, population

Went through the last two group exercises and combined ideas

### **4:45 Close**

## ***Tuesday 11/09/2007***

### **8:30 Recap on the grouping of sectors**

Split into groups to model sectors.

### **10:30 Morning tea**

### **11:00 Presentation of model sectors**

*Sectors:*

Environmental services

Population

Land Use

Wildlife and biodiversity conservation value

Governance

Livelihoods

*Scenario and decision operation framework (using switches and sliders):*

CTNP management

Economy

Note: Some of the sectors had an overlap of other sectors, and all could be linked to other sectors.

### **12:00 Presentation: Visual techniques for communicating to communities – Agni Klintuni Boedhihartono**

*What are the problems of trying to deal with scale and dealing with different people across the landscapes?*

Different landscapes have different scales, policies and context, so depending on the situation, each visualisation has to be adapted to the landscape we are working because everyone has a different vision.

Landscape means different things to everyone. Size multiplies the complexity of the problem.

### **12:20 Lunch**

### **2:00 Separate group field trips to village and buffer zone**

### **5:00 Return & dinner**

### **8:00 – 10:00 Spotlighting**

**Wednesday 12/09/2007**

**8:15 Report back on field trip**

***Livelihoods group***

Kinh are migrants and came from the west. They were told this was a good place to come, but things did not happen the way they expected. They settled in the area that was for indigenous people from the Park. Their main activities – livestock (chicken, ducks, some goats and cows). They were not entitled to land credit but had to gain official recognition to use the land. Cannot use for agricultural purposes. Cannot use the land for trade or sell to other people. In principal, they are included in the park's system, but do not get any support from government. It is difficult to get socioeconomic data. Whenever they need the cash for rice and vegetables, they just cross the bridge and sell it. Households arrived 1982; 5 years after the proclamation of the reserve. They used to take non-timber for subsistence and market. There was a business for carrying things across the bridge. Products they previously took included rattan, wood, deer meat, pig etc.

*What was the percentage of money they get from the market for different purposes of the household?*

They buy food and rice, spend a little for health, primary education is free, and sometimes they make a loan in the bank to start some household activities.

*What would they like to see in the area to make their lives better?*

Want opportunity for livestock for cows and goats because they are easy to breed and raise and give good prices in the market. We not see much land for them to do that. They also want employment. But they do not want to go far from where they live now.

*What was the structure in the village?*

Commune committee is split up into village chiefs. There was no meeting of the managers of the parks. Do not collect NTFPs from the park because it is protected.

***Biodiversity group: Forest walk***

Edge of the park has well cultivated paddy-fields, plantations and citrus groves.

A place that was cultivated intensely in the park previously has grown back.

There are also transects into the forest and trees had been cut down what appears to be a long time ago.

Floodplain area had been cut. Don't know when or what damage it had caused – cleared a long time ago.

We are concerned that if this was the case around the park, then the area of the forest and park is less than we modelled.

It seems there are other projects in the park that we were not aware of.

***Cultural centre group***

Were interested in budget allocation but could not get the information on incomes, fines, allocation etc.

They recently signed MOU for joint ecotourism activities – if the park receives tourists, will bring them over to the cultural centres. 90% of revenue to performers, 10% to park.

*How many people employed by the park?*

Only two – forest guards as park staff.

Meetings held for protection and security of the park. (Nothing discussed about the welfare of the people)

*How do the members of the community get the 90% share?*

Only to those who performed. Different members of the community can do different activities.

Incomes increased by 50% by tourism – easy access to markets, easy access to tourism.

### **8:45 Continue to build and refine the model**

Environmental services –focus on Carbon

Land-use group – habitats and land conversion (includes biodiversity).

Livelihoods split into:

    Agriculture and agroforestry group

    Hunting and wages group

GDP to make links to tourism

### **12:00 Report back**

Population

Land Use

Carbon

Livelihoods and income

Agroforestry and agriculture livelihoods

Economy

### **12:50 Lunch**

### **2:20 Presentation: Landscape approaches – Jeff Sayer**

*As was introduced – ecosystem approach failed. Don't see much difference between that and landscape approach?*

Landscape approaches are not different and we cannot tell if succeeded or not.

Landscape includes more of measurements and social factors. Ecosystem approach is a biophysical concept. CBD definition and principals are closer to the landscape approach.

*Landscape approach is to balance C & D, but ICDP doesn't work.*

Many studies of ICDPs claimed they don't work. They want to maximise both conservation and development, but if you want to maximise development, you may lose environmental benefits. What they are really trying to do is to balance both. A recent review concluded that projects didn't have enough info. This is built on a win-win situation. ICDPs are similar to here.

*Capital assets were presented, but are there others that may be better?*

Want to make sure people not only focus on income or species populations. If you use the capital assets framework, can get a diversity of factors. But if you get a set of 20-30 indicators can be difficult to look at, so the capital assets framework simplifies this. Not rigorous but good rough estimate for indicators. Other organisations have a good framework that one could use. They all work, but our practical assets in the field have been quite positive.

*This morning we want to improve income and social well-being, but we don't have the data in places. We want hints on household income, but is so difficult. Can we go through some information and use that information for capital assets?*

Can do household surveys but is expensive and difficult. This means you are dealing with proxy indicators to give some idea of how people's livelihoods have changed. Balance between having rigorous data and having rough estimates to work with. PEN project has people doing very detailed surveys and this is a potential resource.

*There is a problem with the definition of landscapes. Reflect on difficulties in landscape approaches? How to make sense at different locations?*

We have been working in large areas of forests about to be transformed. It is complex. Landscape implies a degree of homogeneity but we do not have this here. One would struggle to find a definition that is correct and easy to communicate.

*It is easy to define our indicators, but hard to measure those indicators. Several of those were reasonable and others are not. Can you tell us how can we get a complete list of institutional indicators? How can we fit the variables and STELLA with the project?*

In popular usage, 'landscape' is what you can see from the top of the hill. The current view of landscapes are now an accepted practice in conservation area. Those indicators are not the ones you should use everywhere – starting point is to look at what makes sense to local people.

In Congo we used three countries, in Indo we used one administrative boundaries. Cat Tien is difficult to figure out where to use.

Donor timeframes are short, and it takes time to work on learning the landscape. We don't solve problems in 4 years, rapid change can come in a development investment, but we cannot do this.

### **3:15 Group work**

### **5:30 Small group: connection of model components**

### **7:30 Cultural display at local village**

### **9:30 Close**

## ***Thursday 14/09/07***

**8:00 Preparations for presentations**

**8:30 Short presentations on model sectors**

Carbon

Kinh livelihoods

Indigenous livelihoods

Land uses

Economy

Population

**9:30 Presentation: more in-depth components of the model**

**10:15 Morning tea**

**10:45 Presentation: Connected model – Niel Collier**

**11:10 Group work to fix and run sectors**

**1:30 Lunch**

**2:30 Tidying up the models**

**4:00 Walk to forest for photo**

**5:30 Small group: clean-up of the model**

**7:00 Farewell party**

**9:30 – 12:00 Small group: clean-up of model**

## **Friday 13/09/07**

**8:00 Tree planting Ceremony**

**8:30 Presentations on landscapes**

*Marta – Mozambique LLS*

*Dong Ke – China LLS*

*Zacharie – TNS landscape*

*Bustar – West Papua*

*Marcelo – Brasil's LLS*

**10:10 Tea break**

**10:30 Final model given out: presentation preparations**

**12:00 Presentations of model sectors including buttons and sliders**

Four policies in a slider for the core zone:

1. Business as usual
2. Community forestry
3. PES for Biodiversity
4. Removal and compensation of people

**13:00 Lunch**

**14:15 Summary and way forward**

**15:30 Final close**