



**ALBERT-LUDWIGS-  
UNIVERSITÄT FREIBURG**

# **Applied Period Report**

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**Erasmus Mundus Master of science in European Forestry  
(2007-2009)**

**Freiburg 18th December 2007**



## Introduction

## Project I: CBD

## Project II: Valwood

## Conclusion

### **Host Institute:**

The institute of Forest and Environmental Policy

**Duration:** 10 weeks

### **Project participated:**

- 1) CBD
- 2) Valwood (Institute of Forest Growth)





## Introduction

## Project I: CBD

## Project II: Valwood

## Conclusion

### Project description

#### *Support of*

Federal Agency for Nature Conservation (BfN)

Federal Ministry for the Environment (BMU)

#### *Regarding*

The preparation of 9th Conference of parties (COP9) of the CBD (2008)

#### *Targeting*

A global network of protected forest areas

### My assignment

Analysis on the potential of financing mechanisms for forest protected areas

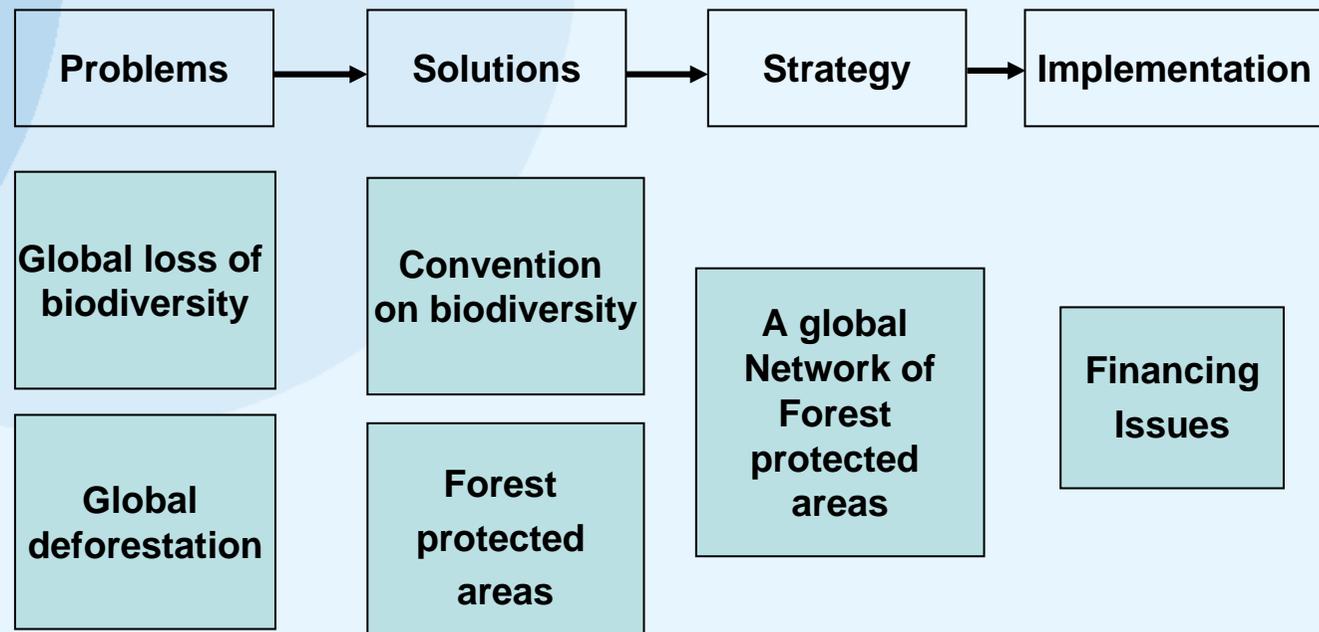


## Analysis on the potential of the financing mechanisms for Forest Protected Areas

### CBD project:

1. Introduction
2. Classification
3. Criteria
4. Evaluation
5. Comparison

### Background:





## Background (Cont.): Financing protected areas

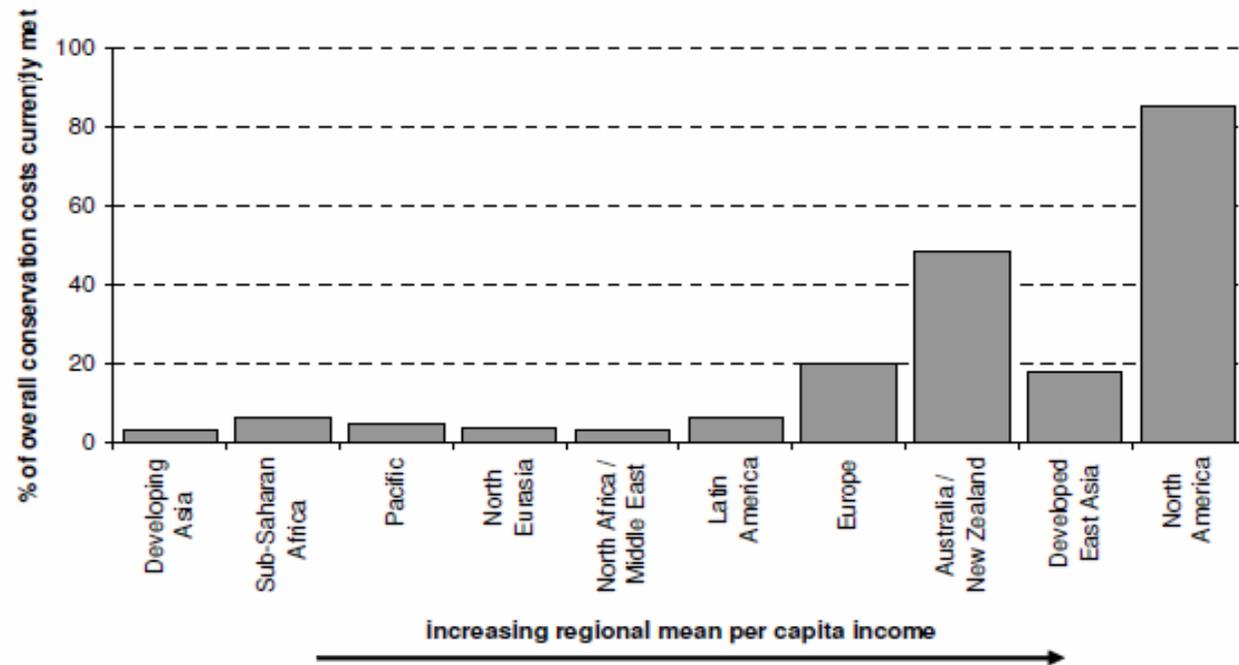
### CBD project:

1. Introduction
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Financing gap worldwide

Urgency in developing countries

Sustainable Financing mechanisms





## **CBD project:**

1. Introduction
2. Classification
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## **Objective**

1. Identify possible financing mechanisms
2. Analyze their potential
3. Make comparison



## CBD project:

1. Introduction
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4. Evaluation
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External  
Source

### External financing sources

- ✓ Domestic government budgets
- ✓ Official development assistance
  - ✓ Bilateral assistance
  - ✓ Multilateral
- ✓ Debt-for-nature-swaps
- ✓ Environmental funds
- ✓ Private donations

### Funding for conservation

- ✓ Fiscal instruments
- ✓ Benefit sharing
- ✓ Cost sharing
- ✓ Green lottery

Internal  
Source

### Market-based mechanisms

- ✓ Tourism charges
- ✓ Resource extraction fee
- ✓ Bio-prospecting charges
- ✓ Reduced emission from deforestation and degradation



**CBD project:**

1. Introduction
2. Classification
3. **Criteria**
4. Evaluation
5. Comparison

<b><i>Criteria</i></b>	<b><i>Indicators</i></b>
<b>Potential amount</b>	Possible amount of money
<b>Stability</b>	Flow of the funding
<b>Direct cost</b>	Operational cost (Staff, management planning, distribution costs etc.)
<b>Transaction cost</b>	Structural barriers (legislative and institutional gaps and barriers, supporting policy)
<b>Sound distribution system</b>	Even, in time, flexible distribution
<b>The user should pay</b>	Source of the funding
<b>Perverse incentives avoidance</b>	Unintended and undesirable effect to the well management of the protected areas

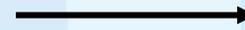


**CBD project:**

1. Introduction
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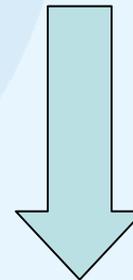
7 Criteria

Apply



Evaluate

13 Financing  
mechanisms



2 Examples

Bilateral  
Assistance

REDD



### Example1: Bilateral assistance (Conti.)

#### CBD project:

- 1. Introduction
- 2. Classification
- 3. Criteria
- 4. Evaluation
- 5. Comparison

#### 1. Stability

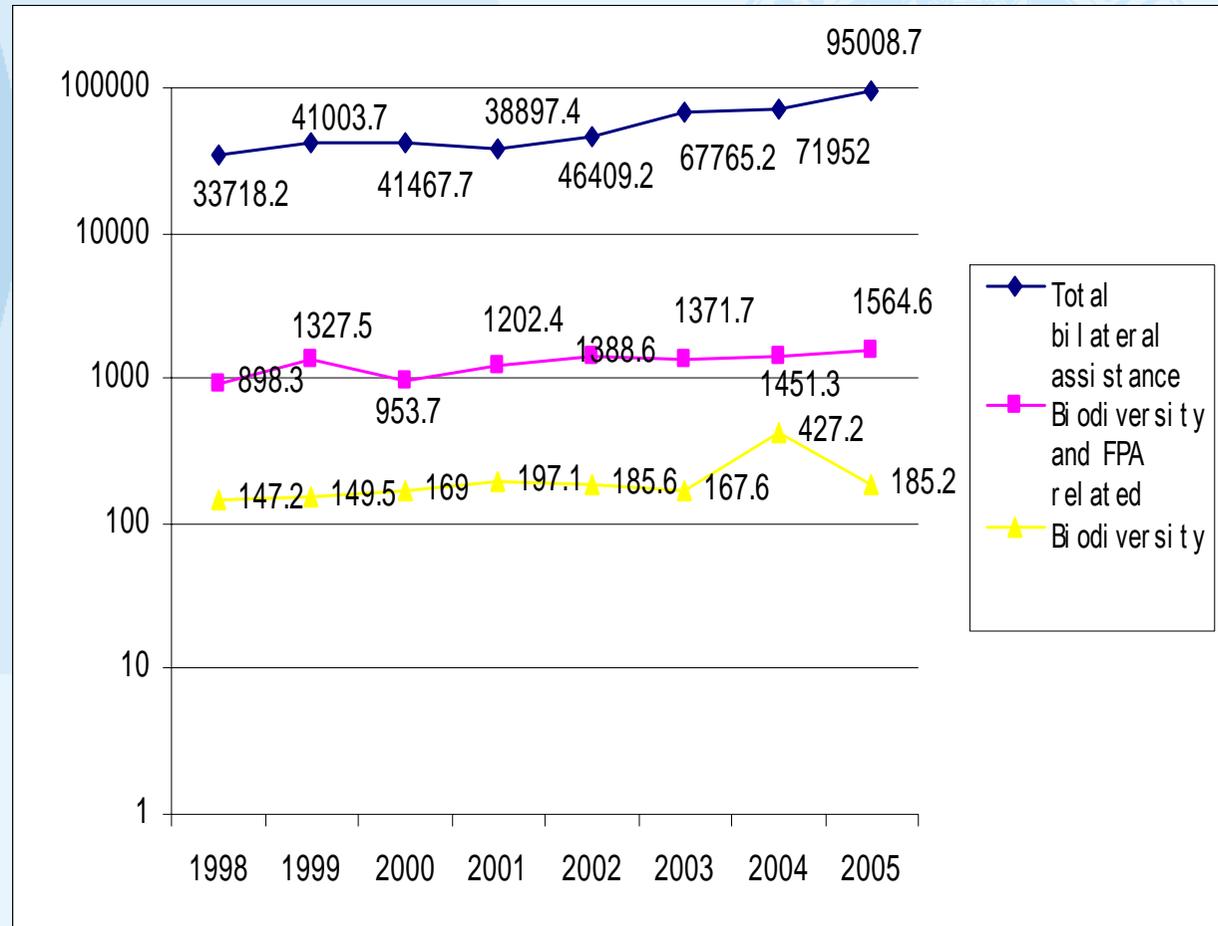


Fig: Trends of the bilateral assistance with different purpose (in million US\$)



## Example1: Bilateral assistance (Conti.)

### CBD project:

1. Introduction
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### 2, Potential amount

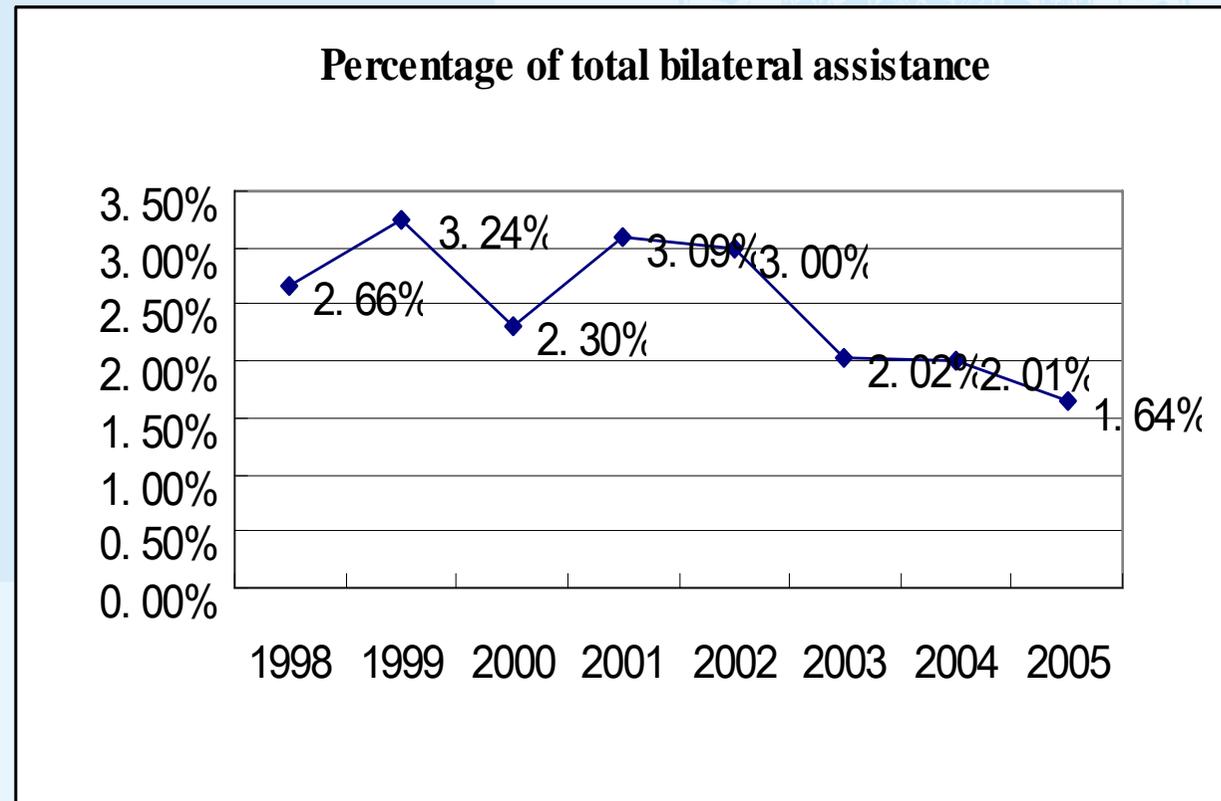


Fig 3: Share of the total bilateral assistance



## **CBD project:**

- 1. Introduction**
- 2. Classification**
- 3. Criteria**
- 4. Evaluation**
- 5. Comparison**

### **3, Direct cost:**

Staff, Money transfer and distribution  
Relatively less bureaucratic and more efficient

### **4, Transaction cost to overcome structural barriers:**

Shifts of the donor' interest to other targets such as poverty reduction  
Transaction cost to related FPA to poverty reduction seems not that high

### **5, Sound distribution system:**

- 1) Fairly distributed among developing countries
- 2) Less time needed for distribution, some project based assistance can be in time distributed.

### **6, The user should pay:**

No, all external source not

### **7, Perverse incentives avoidance:**

No



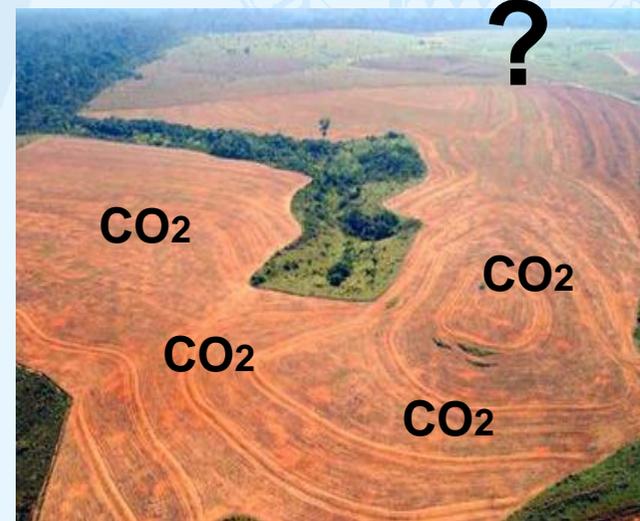
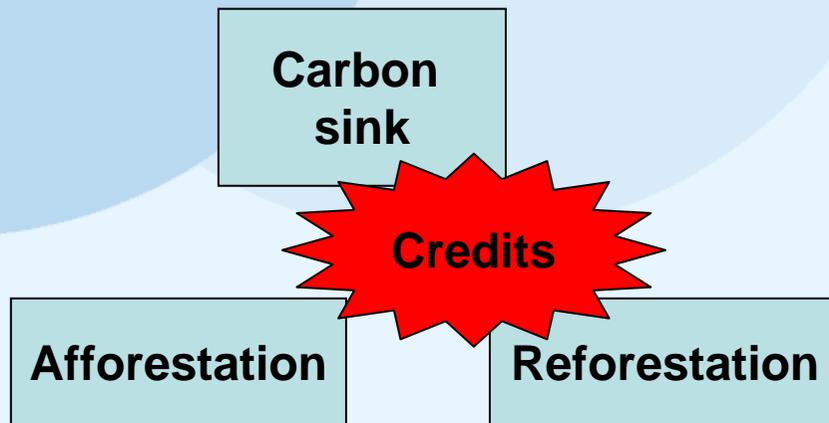
### CBD project:

1. Introduction
2. Classification
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### Example 2:

Reduced emission from deforestation and degradation

Using REDD as a financing mechanisms to collect Carbon Credits for Forest protected areas



Credits for REDD



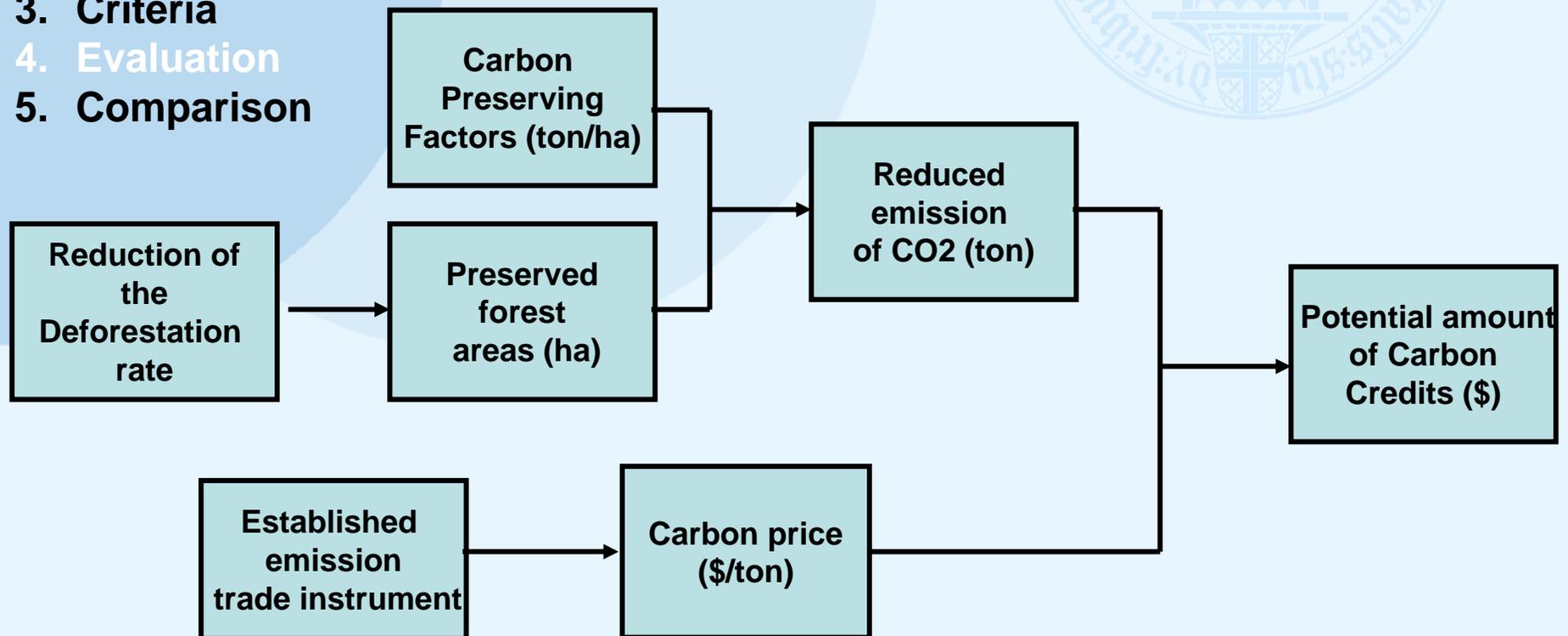
## Example 2: Reduced emission from deforestation and degradation

### CBD project:

1. Introduction
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### 1, Potential amount:

7760.3 million provided 20% reduction of deforestation rate  
(Ebeling,2006)



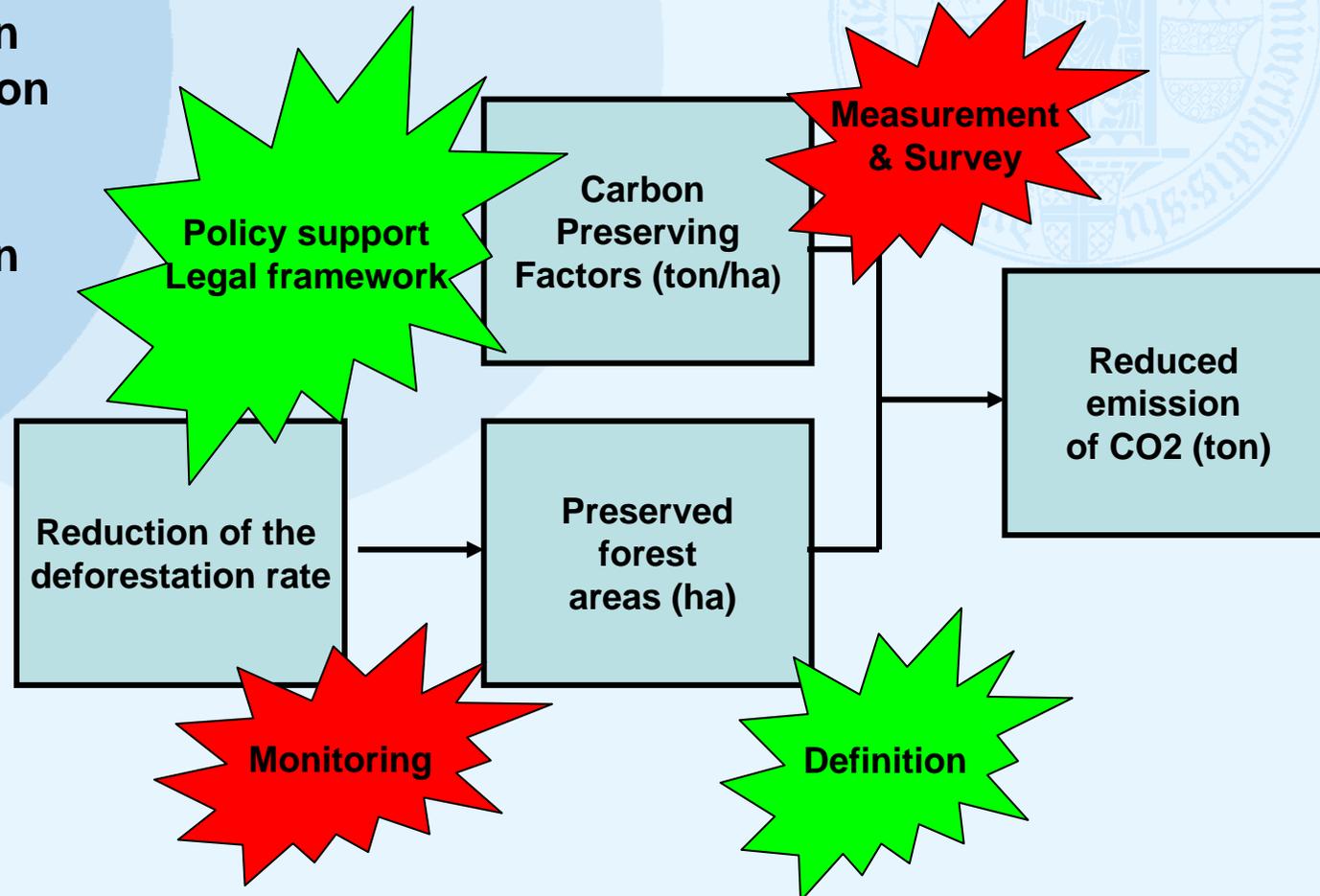


## Example 2: Reduced emission from Deforestation and Degradation (REDD)

CBD project:

1. Introduction
2. Classification
3. Criteria
4. Evaluation
5. Comparison

Direct and Transaction cost to overcome structural barriers





## Example 2: Reduced emission from Deforestation and Degradation (REDD)

CBD project:

1. Introduction
2. Classification
3. Criteria
4. Evaluation
5. Comparison

Direct and Transaction cost

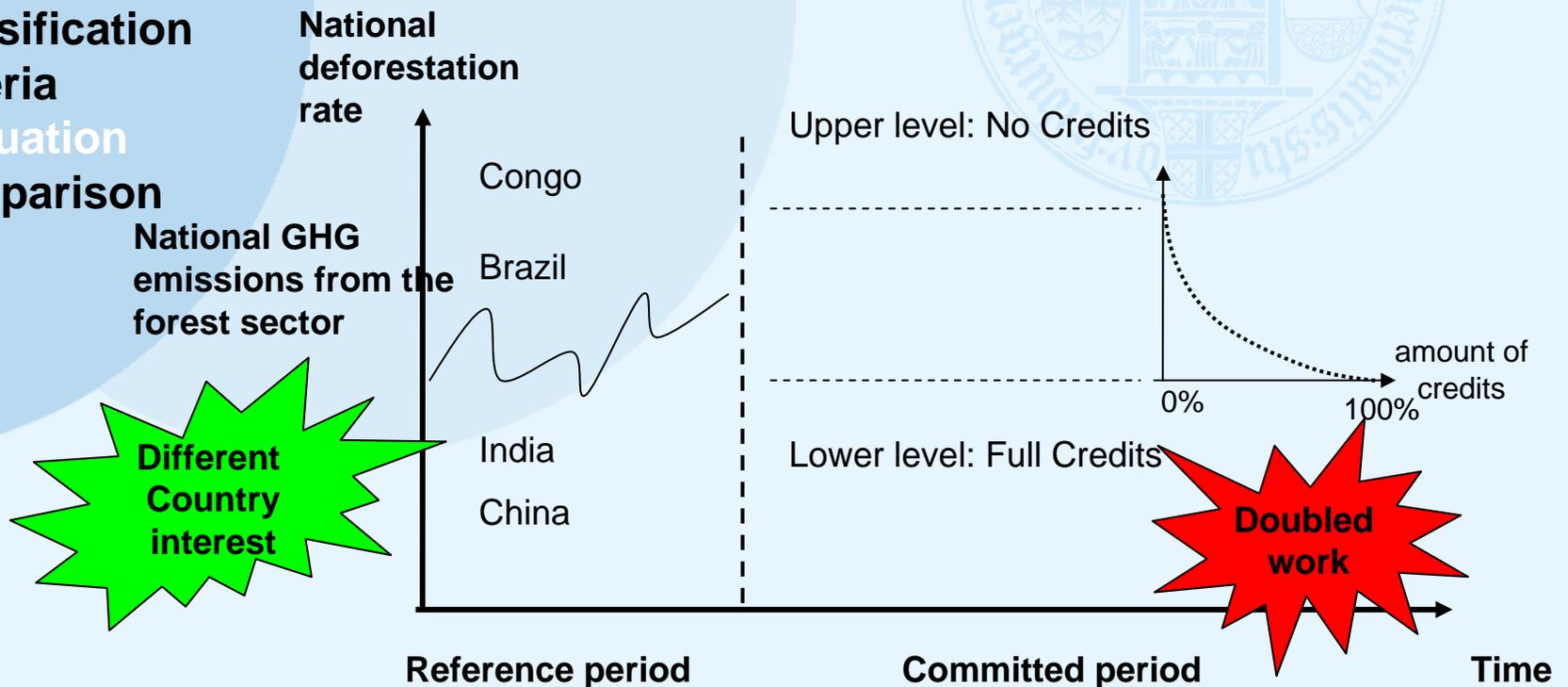


Fig. Emissions (changes in carbon stocks) over time (Bernhard Schlamadinger *et.al*)



## CBD project:

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## Example 2: Reduced emission from deforestation and degradation

### 4, Stability:

Situation may be complex depends on the reduction rate and the carbon price

### 5, Sound distribution system:

Need for in time distribution to realize land use change  
But the only verified reduction will be paid

### 6, The user should pay:

Partly from beneficiaries and users

### 7, Perverse incentive avoidance:

- 1) The over emphasis on some avoided deforestation areas may lead to high rate of deforestation elsewhere.
- 2) Lower the carbon price



## CBD project:

## Comparison between the two examples

1. Introduction
2. Classification
3. Criteria
4. Evaluation
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	Potential Amount	Stability	Direct Cost	Transaction cost.	Sound distribution system	The user should pay	Perverse incentive
Bilateral assistance	***	****	***	***	****	*	****
REDD	****	**	*	*	**	****	*



## Introduction

## Project I: CBD

## Project II: Valwood

## Conclusion

### Project description:

#### *Cooperated between:*

Germany and China

#### *Aimed at*

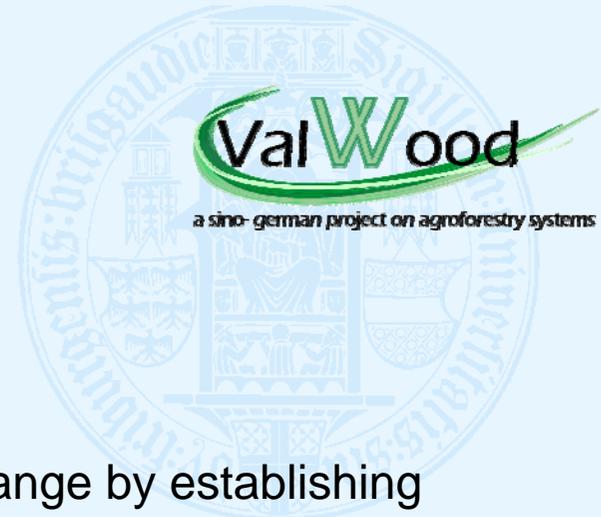
Innovative land use change by establishing agroforestry system combining valuable timber and biomass production

### My assignment:

Prepare and attend the first meeting

Introduction of the project implementation area

Searching the price list of valuable timber species





# I: Geographical location, Land use, Agriculture, Forestry, Climate, Social economy

Microsoft PowerPoint - [最终版presentation]

文件(F) 编辑(E) 视图(V) 插入(I) 格式(O) 工具(T) 幻灯片放映(D) 窗口(W) 帮助(H)

键入需要帮助的问题

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编号

## Introduction of Zhejiang province

ValWood  
a sino-german project on agroforestry systems

单击此处添加备注

绘图(D) 自选图形(O)

幻灯片 1 / 21 Pixel 中文(中国)



## II: Price list of Valuable wood

1			<b>Implementation:</b>	
2	a sino-german project on agroforestry systems		<b>Some selected tree species</b>	
3				
4	Univeristy of Freiburg, State administration of Forestry in China, China Academy of Forestry			
5	德国弗莱堡大学, 中国国家林业局, 中国林科院			
6	Johanna Storch		Jian WU	
7	<a href="mailto:Johanna.Storch@iww.uni-freiburg.de">Johanna.Storch@iww.uni-freiburg.de</a>		<a href="mailto:wujian1985swordsmar">wujian1985swordsmar</a>	
8	<b>Speices name</b>	<b>中文名</b>	<b>Timber price原木价格 (RMB/m3)</b>	<b>Origion产地</b>
9	Zelkova Schneideriana	大叶榉树	市场报价5100-5400元/立方米	Zhejiang Guangxi etc
10	Castanopsis hystrix	刺栲	栲木成品2600.00元/立方	Guangxi
11	Cinnamomum camphora	樟树	香樟木2180.00元/立方	Guangxi
12	Melia azedarach	楝树	苦楝木1358.00元/立方	
13	Phoebe nanmu	滇楠	金丝楠木6500.00元/立方; 缅甸金丝楠木3300.00元/立方	Burma
14	Juglans sp.	胡桃属	胡桃木10000.00元/立方	
15	Hovenia dulcis	北枳		
16	Paulownia sp.	泡桐属		
17	Quercus sp.	栎属	榿栎木388元/平方	
18	Tectona grandis	柚木	非洲柚木7800.00/m3 ; 缅甸柚木9800.00/m3	Africa Burma
19	Mesua ferrea	铁力木		



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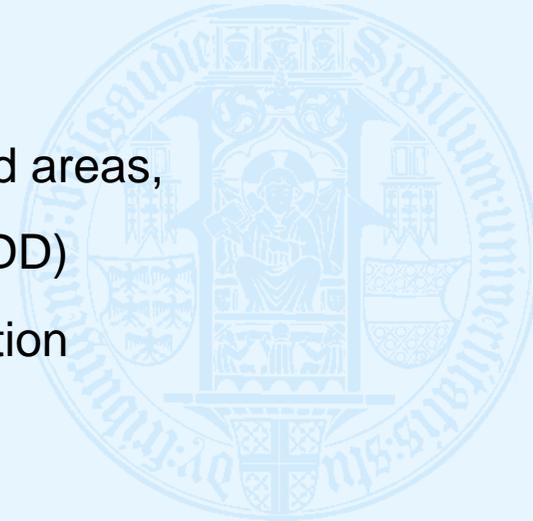
### **Knowledge:**

Biodiversity, Forest protected areas,  
Financing mechanisms (REDD)  
Timber and biomass production

### **Experience:**

How international project is started, planed and managed  
Attitude and habits towards work and study  
Teamwork

### **Great Memory**





Thanks for attention!!  
Freiburg Team

