Lao PDR
Poverty-Environment Nexus
Case Study: Non Timber Forest Product (NTFP)

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PRESENTATION OUTLINES
Presentation Outline

• Background of the case study
  – NGPES and its relevance to Case Study
  – Roles and trends of forest resources
  – Objectives
  – Design & Methodology
• Findings
  – Enabling policy, legal, institutional framework
  – Poverty and environment situation of study sites
  – NTFP status and trends
  – NTFP uses and management
  – NTFP market and taxation
  – NTFP contribution to poverty eradication
• Conclusion
• Recommendation
BACKGROUND
Relevance of Case Study to NGPES

• NGPES is central to the national development agenda encapsulating the essence of the Government approach towards achieving the goal of exiting the group of LDCs by 2020 by:
  – Moving consistently towards a market-oriented economy.
  – Building-up the needed infrastructure throughout the country;
  – Improving the well-being of the people through greater food security, extension of social services and environment conservation, while enhancing the spiritual and cultural life of the Lao multi-ethnic population.

• NGPES emphasizes the promotion of sustainable growth, coupled with continuous social progress and equity through the improvement of material conditions and quality of life and eradicating basic poverty.
Relevance of Case Study to NGPES

• Policy objective regarding agriculture/forestry - improvement of household food security by:
  – Enhancing market-based farming
  – Reducing disparities between lowland and sloping land farming
  – Enforcing sustainable forest and watershed management

• Agricultural and forestry based Government’s development objectives to 2020:
  – Ensure food security for all Lao people.
  – Maintain a growth rate in agricultural output of 4-5 per cent annually.
  – Promote commodity production, especially for export.
  – Stabilize shifting cultivation and eradicate poppy cultivation.
  – Diversify and modernize the agricultural and forestry sector.
  – Conserve the natural environment and protect threatened species and habitats.
  – Maintain a healthy and productive forest cover as an integral part of the rural livelihood system, and generate a sustainable stream of forest products.
  – Improve rural livelihoods.
Role of Forest Resources

- The agriculture and forestry contribute more than 50% of GDP of which:
  - Forests, including NTFPs contribute 7-10% of the GDP, and 15-20% of the non-agricultural GDP.
- Almost all Lao people in rural areas depend on forest resources, and NTFP - a central means for addressing poverty associated problems, especially for shifting cultivators in the uplands:
  - Being an alternative income source for the poor (US$ 69-127/year)
  - Serve as direct food and medicines (hard to convert into monetary value)
  - Being an incentive for forest conservation (due to benefits from NTFP)
Trend of Forest Resources

- In spite of a number of efforts given by the GOL, forest cover declines rapidly, and so do NTFPs.

- Causes:
  - lack of an integrated land and forest management system,
  - insufficient law enforcement,
  - weak institutional capacity, and
  - the lack of funds and resources.
Study Objectives

• To examine status & trends of NTFPs in relation to marketed quantity, availability of resources and cultivation status of income important species at national and local levels.

• To study environmental, poverty and policy linkages of NTFP in connection to village consolidation and village migration; road network development, UXO contamination, and local livelihood and land use practices.
Study Sites

Study sites:
- 4 villages in Namo (Oudomxay);
  - Nakham, Nahom, Houaypord, Kewchaep
- 4 villages Phouvong (Attopeu)
  - Vomgxay, Houaykout, Taoum, and Phouhom

Rationale for selection:
- Northern and Southern representatives
  - Socio-economical differences
  - Ecological differences
  - Ethnical and cultural differences
  - Difference in other environmental factors (e.g. market, etc.)
- NGPES priority districts
Study Design & Methodology

• Study design:
  – Desk study (Policy document, relevant reports, national data set)
  – National survey (39 districts from ....provinces)
  – Field survey (district, village, and household surveys)

• Data collection and tools used:
  – National data (questionnaire forms, Literature review, interview)
  – District data (interviews, literature review)
  – Village data (interview, focus group meeting, observation)
  – Household data (HH sampling, interview)

• Data analysis:
  – Excels & SPSS
  – Correlation between poverty, NTFP income and uses, and
Study Design & Methodology

• **Main content of questionnaire:**
  – General information (Geography, demography and ethnicity)
  – Poverty status (poverty indicators)
  – NTFP status and trends
    • Species with most income importance and sources
    • Trends of NTFP (Sold quantity, Price, status in nature, Domestication status)
  – NTFP access
  – Income sources and NTFP contribution
  – NTFP management, uses and regulations
  – NTFP trading and marketing
STUDY RESULTS
NTFP related Policy, legal and institutional framework

• Policy:
  – NTFP is an important element in the NGPES agriculture and forestry development plan.
  – Government promotes marketing and sustainable use of NTFP for food security and forest conservation, yet it has not been clearly interpreted into real practices.
  – While NTFP market is increasing and resources are declining, there is no specific policy statement about NTFP cultivation or rehabilitation.
NTFP related Policy, legal and institutional framework

• Legal framework:
  – There is legal framework for sustainable management and utilization of forest resources /NTFP and development is ongoing
  – There are forest regulations, but insufficient specific regulations regarding sustainable NTFP management and uses
  – The existing regulation supporting NTFP market is vague, scattered and difficult to follow
NTFP related Policy, legal and institutional framework

• Institutional framework
  – Increasing interests and involvement in NTFP development and research
  – Some certain Information sharing and networking in place, but not institutionalized and enhanced
  – Limited access to market information to support NTFP cultivation and processing
  – lack of clear roles and responsibilities of stakeholders, especially within Government sectors
  – Weak cross-sectoral coordination
### Poverty Indicators

<table>
<thead>
<tr>
<th>Poverty Indicators</th>
<th>Namo</th>
<th>Phouvong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest cover (%)</td>
<td>23</td>
<td>83</td>
</tr>
<tr>
<td>Poor villages (%)</td>
<td>91</td>
<td>100</td>
</tr>
<tr>
<td>Average village age (years)</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Poverty rank</td>
<td>37</td>
<td>3</td>
</tr>
<tr>
<td>Ethnic households (%)</td>
<td>91%</td>
<td>100%</td>
</tr>
<tr>
<td>Road network (road density)</td>
<td>0.19</td>
<td>0.08</td>
</tr>
<tr>
<td>Market access</td>
<td>Good</td>
<td>Limited</td>
</tr>
<tr>
<td>Distance to old grow forest (km)</td>
<td>9.8</td>
<td>16</td>
</tr>
<tr>
<td>Paddy field /HH (ha)</td>
<td>0.5</td>
<td>0.75</td>
</tr>
<tr>
<td>Upland rice area /HH (ha)</td>
<td>0.6</td>
<td>0.05</td>
</tr>
<tr>
<td>Large animals/HH (ha)</td>
<td>1.9 head</td>
<td>1.0 head</td>
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</tbody>
</table>
## Poverty & environmental comparison

<table>
<thead>
<tr>
<th>Variables</th>
<th>Namo</th>
<th>Phouvong</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTFP income (1000 kip)</td>
<td>770</td>
<td>235</td>
</tr>
<tr>
<td>Member of VMG (%)</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Selling NTFP to traders (%)</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Distance to old-grow forest (km)</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Awareness of regulation (%)</td>
<td>91</td>
<td>84</td>
</tr>
<tr>
<td>Participation in reg. Implim. (%)</td>
<td>90</td>
<td>64</td>
</tr>
<tr>
<td>Pay NTFP tax</td>
<td>52</td>
<td>12</td>
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</table>
NTFP status

National level:
Survey done in 39 of 142 districts in 9 of 17 provinces

- Marketed species:
  - Species reported = 37 of which:
  - 8 species identified as of national importance, of which
    - 2 (Rattan & Cardamom) spread over in all regions
    - Regional importance (N=9; C=8; S=6)

- Sale quantity:
  - 2 species increasing (broom grass & paper mulberry) the rest decreasing

- Price:
  - All species have price increased, except bamboo shoot in C.

- Status in nature:
  - All decreasing, except for broom grass & paper mulberry

- Plantation:
  - Cardamom (N); Agar wood (N&C); Meuak bark (N)
<table>
<thead>
<tr>
<th>Species</th>
<th>Import.</th>
<th>M. Source</th>
<th>S. Quant.</th>
<th>Price Situ.</th>
<th>N. Status</th>
<th>Planted</th>
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<tr>
<td></td>
<td>NM</td>
<td>PV</td>
<td>NM</td>
<td>PV</td>
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<td>PV</td>
</tr>
<tr>
<td>B. Bamboo shoot</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Meuak Bark</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Red Mushroom</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Galangal</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Eagle wood</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Paper mulberry</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Leaf-dotted grass</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
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<tr>
<td>Rattan</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
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<td>Cardamom</td>
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<td>2</td>
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<td>2</td>
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<td>Drama ressin</td>
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<td>1</td>
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<td>1</td>
<td>3</td>
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<td>Malva nut</td>
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<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
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<tr>
<td>Bong Bark</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td></td>
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<tr>
<td>Kheua Haem</td>
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<td>2</td>
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Prepared for PEN II National Consultation Workshop, August 1-2, 2005.
## NTFP status (village)

<table>
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<th>No</th>
<th>Species</th>
<th>NM Import.</th>
<th>PV</th>
<th>NM M. Source</th>
<th>PV Sale Quant.</th>
<th>NM Price Situ.</th>
<th>PV Nat. Status</th>
<th>NM Planted</th>
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<td>Douk Deua</td>
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<td>2</td>
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<td>3</td>
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<tr>
<td>3</td>
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<td>1</td>
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<td>4</td>
<td>Cardamom</td>
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<td>3</td>
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<td>2</td>
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<td>5</td>
<td>Meuak bark</td>
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<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>Yes</td>
<td></td>
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<tr>
<td>6</td>
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<td>1</td>
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<td>2</td>
<td>3</td>
<td>1</td>
<td>3</td>
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<tr>
<td>9</td>
<td>Peuakbong</td>
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<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
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<td>10</td>
<td>Bamboo</td>
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<td>3</td>
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<td>11</td>
<td>Khixi</td>
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<td>3</td>
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<td>12</td>
<td>Mak Chong</td>
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<td>13</td>
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<td>14</td>
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<td>3</td>
<td>No</td>
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<td>15</td>
<td>Yang Oil</td>
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<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
NTFP Status and trend in sum

Status:
• Commercial importance very by locations, depending on market availability
• Forest species in nature are declining, but fallow species increasing.
• Sale quantity for most forest specs declines, but increase for fallow species
• Price of all species increase, except for broom grass in PV and Cardamom in NM
• Domestication of NTFP occurred at a limited scale, predominated in the North

Trend:
• In general NTFP resources are declining in both quantity and quality due to: (1) Over harvesting; (2) Shifting cultivation; (3) Forest fire; (4) Animal damage; (5) Lack of management regulation; (6) Road construction
• Given the existing market demand and domestication is not in the position compensate, decline will certainly continue, and most likely lead to NTFP extinction.
NTFP Management and uses

• NTFP is mainly managed in traditional way based on customary rules (openly accessible for collection for HH consumption, but not for sale)
• Neither NTFP inventory is conducted, nor sust. Management system developed and applied, due to lacks of capacity and resources
• quota allocation is based on a rough quantity estimate and market demand, its implementation is not village-participatory, mainly uncontrollable (using depleted harvesting techniques and methods, exceeding allowable quantity)
• NTFP processing for value addition exist at basic level, but in extremely limited scale and still far to read commodity production stage
Market and taxation

• In general, Market for NTFP is increasing, especially in the North
• Market controls harvest, and limited by the lack of information, and accessibility
• Market change is diverse, mainly through middlemen with few direct trading
• Uncontrolled NTFP trading cross intern. borders, observed
• Village NTFP marketing group initiated in the Namo, illustrating a substantial amount of lessons learnt, experiences, and benefits, but not been well expanded.
• Existing taxation system does not fully support official NTFP trading
Contribution to Poverty

• NTFP contributes a substantial share for a household food consumption and cash income:
  – NTFP ranked third at national level, but 2\textsuperscript{nd} at district and village levels.
  – Contribution to food consumption is not exactly known, but observed a lot.

• NTFP income ranked 2\textsuperscript{nd} in poor districts, after agriculture produces, before animal and others; but ranked 3\textsuperscript{rd} at national level.
Income from NTFPs

- Average income from NTFP/HH
  - Average: 507,60 kip
  - Namo: 771,750 kip
  - Phouvong: 236,660 kip

- Less forest per capita in Namo, but higher income from NTFP, also high NTFP depletion:
  - Closer to Chinese markets
  - (Better road access)
  - More market information
  - Marketing groups
  - Better trader network
Income from NTFPs

- Better-Off and Poor make more income from NTFP

- Reason might be:
  - Poor more involved in collection
  - Better-Off more involved in Trading

- Not clear!!
Who (use) and earn most

Study factors:
- Settlement (highly significant)
- Upland rice area (highly significant)
- NTFP cultivation (marginally significant)
- Membership of NTFP Marketing Group (highly significant)
- Direct trading (highly significant) Taxation
- Wealth (marginally significant)

Households make more income if:
- Living in older villages
- Having more upland rice area
- Member of NTFP Marketing group
- Selling NTFP to traders
Income from NTFPs

• Living in older villages
  – Old villages:
    – More knowledge of resources
    – More trust to traders
    – Better organized
  – New villages:
    – Loss access to traditional NTFP
    – Less familiar with NTFP in new areas
    – Less known by traders
    – Spent more time on settling in and rice paddy establishing
Income from NTFPs

- Having more upland rice area
  - NTFP from fallow land? Only some!
  - More familiar, knowledge, spent more time, being closer to NTFP sources
  - Less rice - more need on NFTP for rice substitution (between paddy & Upland field)

- Kmou received higher income from NTFP, who are doing shifting cultivation in a larger area
Income from NTFPs

- Member of NTFP Marketing group (MG)/Selling NTFP to traders
  - MG Normally sell products directly to traders
  - More bargaining power
  - Know more about market situations

Income difference: Members & non-members

Income difference: Traders & non-Traders
Conclusions

• NTFP is important to basic poverty eradication (as safety, shifting cultivation stabilization, and forest conservation;
• Overall policy and legal framework for NTFP exist, but practical guidelines are still missing,
• Shifting cultivation has a negative impact for forest species, but favor for fallow species, (short cycle !!!);
• Village relocation has both negative and positive impacts on NFTP (may reduces opportunity to access to NTFP, but increase market access)- (not clear in case of Phouvong )
• Different NTFP regulations exist in different governance levels, and some of them are inconsistent; and not fully encouraging;
• More interests and efforts on NTFP at higher levels (at project level), but limited at grass root level, as a result of insufficient government supports;
Conclusions

- NTFP resources are decreasing, except for fallow species, as a result of the lack of unsustainable management system, strong legal enforcement, forest loss, market pressure, support service, limited domestication, - this will continue, given capacity, regal framework, other alternative sources of income. – risky for the poor.

- NTFP remains and will continue to be an important income source, especially for the poor.

- Both the better-off and the poor all have equivalent access to and earn income from NTFP, but the poor are more dependent.

- People who use more and get most of NTFP are: shifting cultivators (Lao theung), marketing group members, and those living in old village, no matter of distance, ?????
Recommendations

- Enhancing legal framework for sustainable NTFP management, utilization and marketing, by development of missing practical guidelines, and consolidation of the existing scattered and inconsistent regulations;
- Conducting NTFP assessment, developing sound management practices, and control illegal trades and unsustainable practices in a participatory manner;
- Establishing NTFP coordinating body and NTFP marketing and information network;
- Institutionalizing NTFP management, cultivation, processing and marketing into rural development alternatives (village development plan);
Recommendations

• Promoting NTFP domestication, e.g. integrating NTFP cultivation into (Upland) farming system for shifting cultivators, as well for those in new resettlement;

• Promoting NTFP marketing in conjunction with community organizing (marketing group) and local capacity building;

• Promote NTFP processing for value addition

• Enhancing NTFP research and extension

• More works are needed:
More work to be done

• Due to the limitation of this study, in terms of geographic coverage, a national study need to be conducted to see clearer picture;
• a more comprehensive study on legal aspects is needed to identify specific gaps and inconsistency;
• a specific study on who make more income from NTFP between collectors and traders;
• A more comprehensive study on NTFP decline and actual causes.
PICTURE PRESENTATION
How did we work?

This’s what we called “Participatory”

Do you know NTFP?

Help me!

How many kids?

Pls, ask, can’t wait any longer ....

How many kids?
What did we discover?

Are they so diverse???
What did we discover?

If I had known, it’s NTFP Market.....
Thank your for your attention
And...See you next time !