Livelihood assets mapping of the farmer on managing forest

Silvi Nur Oktalina\textsuperscript{1}, Digby Race\textsuperscript{2} and Wiyono\textsuperscript{1}  
\textsuperscript{1} Gadjah Mada University, silvi.nuroktalina@ugm.ac.id  
\textsuperscript{2} Australia National University

Background

• Livelihood asset is an important factor to be revealed and understood precisely because every resource has carrying capacity and different support to the community.

• Through asset mapping farmers in forest management can describe the dynamics between individual and collective assets at a specified time and contribution to livelihoods.
Objective

• The purpose of this study was to mapping the livelihood assets (HUMAN, NATURAL, PHYSICAL, FINANCIAL and SOCIAL assets) that used by farmers based class welfare in managing community forests.
• This research is parts of ACIAR project FST/2008/030 “Overcoming constraints to community based commercial forestry in Indonesia”.

Study site

This study was conducted on community forest farmers in Gunungkidul by taking three villages of three zones:
• Katongan village represent northern zone/ Baturagung.
• Dengok village represent middle zone/ Ledok Wonosari.
• Jepitu village represent the southern zone/ pegunungan seribu.

Each village was taken 30 respondents randomly
Methods

• The data were collected using several techniques: (1) Focus Group Discussions (FGD); (2) Household survey; (3) In-depth interviews with key people.

• Data analysis was performed by the method of multi-criteria analysis (MCA). MCA is a decision-making approach developed for complex multi-criteria problems that include qualitative and/or quantitative aspects.

• The livelihood assets of the community illustrated in a pentagon diagram.
Wealth Criteria

• Community forest farmer have different assets that influence the wealth classes.
• The wealth classes will influence the livelihood strategy and the intensity of farmer to manage community forest.

<table>
<thead>
<tr>
<th>District</th>
<th>Village</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dengok</td>
<td>Land ownership, house, vehicle, livestock, number of trees</td>
<td></td>
</tr>
<tr>
<td>Jepitu</td>
<td>Land ownership, house, vehicle, occupation, saving, children education</td>
<td></td>
</tr>
<tr>
<td>Katongan</td>
<td>Land ownership, house, vehicle, income</td>
<td></td>
</tr>
</tbody>
</table>

Wealth Criteria

• In Dengok village the farmer classified into high wealth class if the land ownership more than 2 ha, the house made from stone or teak wood, having car or truck, the number of cows more than 2 and the number of teak trees more than 50.
• In Jepitu the farmer classified into high wealth class if the land ownership more than 6 location, the house made from stone, having car and motorcycle, the number of cows more than 5 and the children education minimum is graduate from university.
• In Katongan village the farmer classified into high wealth class if the land ownership more than 1 ha, the house made from stone, having car or truck and the income from more than 1 sources.
Land Ownership

<table>
<thead>
<tr>
<th>Location</th>
<th>Land ownership according to wealth class (ha)</th>
<th>Average land ownership (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
<td>medium</td>
</tr>
<tr>
<td>Gunung Kidul</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dengok</td>
<td>1.04</td>
<td>0.52</td>
</tr>
<tr>
<td>Jepitu</td>
<td>1.70</td>
<td>1.60</td>
</tr>
<tr>
<td>Katongan</td>
<td>0.72</td>
<td>0.65</td>
</tr>
</tbody>
</table>

- Land ownership was the criterion to be nominated by the local community in all the study sites, reflecting the importance of land as an asset for farmers.
- In the north part of Gunungkidul the average land ownership is 0.54 ha, in middle is 0.5 ha, while in southern is 1.53 ha per household.
- In the southern part of Gunungkidul is wider than the other site but the topography of the land is mountainous and the soil fertility is low. So the southern part of Gunungkidul is very favourable for community forest.

Livelihood Asset
Livelihood Asset

• In Dengok village, physical assets were the most owned by the community, followed by social, human, financial and natural assets. Physical asset, such as housing, vehicles. Physical asset is priority in this village because the farmers in Dengok already aware the importance of marketing.

• In Jepitu, the social asset is considered as the strongest asset for the community, followed by their physical, financial, human and natural assets. In this village, the strength of the social asset was vital for making community forest successful for them.

• In Katongan, the financial asset was most notable as the strongest asset, followed by the physical, social, natural and human assets. Financial assets in this village included: income, family savings, access to credit and a degree of financial sufficiency.

Thank You