Participatory Economic Valuation

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26 March 2008
Outline

• Introduction to PEV

• Methodological steps

• Livelihood impact assessment
Introduction to PEV

PEV =>> the valuation technique that allow people to define the values of resources within the context of their own.

PEV is used when:
- standard methods such as actual, surrogate, and hypothetical market behavior are not applicable.
- cash prices have little relevance as an indicator of values.
- work with subsistent economy
- use of natural resources are diversified.
- people do not/ cannot indicate the quantity or value directly.
PEV can be employed for:

• Assessing the use value derived from G&S of the ecosystem

• Livelihood impact assessment, i.e., establishment of marine protected area
1. Find the “numeraire” for valuation which forms part of the local economy and can be translated into monetary amount, i.e., “amount of rice sufficient for the whole family per year”

2. Identify types of use/benefit or issues of concerns (using picture as a tool)

3. Rank the items of use/benefits (per year basis), as well as the numeraire, from least significant to most significant or …

4. Perform a scoring exercise, using number of counters allocated to each item, and make a note of the scores on the recording sheet.

5. Review the findings with the respondent.

6. Transform each item of use/benefit into cash amount, which translate into an annual value.
Assessment of livelihood impact at local level resulting from an establishment of marine protected area program (pro-poor conservation financing)

The impact assessment is based on sustainable livelihood framework developed by DFID (2006)
Human capital: health, nutrition, education, knowledge&skill, capacity to work, capacity to adapt

Social capital: connection, networking, trust, collective representation

Natural capital: land, water, forest, wildlife, aquatic resources, wild food&fibers, biodiversity, environmental services

Financial capital: saving, credits, debt, wages

Physical capital: infrastructure, tools and technologies,
MPA program can create +/- impacts to local people according to the law and policy regulation.

**Example:**

<table>
<thead>
<tr>
<th>Positive impact</th>
<th>Negative impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased tourism revenue</td>
<td>Conflict between communities</td>
</tr>
<tr>
<td>Water availability</td>
<td>Reduced water for agriculture</td>
</tr>
<tr>
<td>Flood protection</td>
<td>Reduced domestic water supply</td>
</tr>
<tr>
<td>Increased NTFPs</td>
<td>Reduced/lost access to captured fisheries</td>
</tr>
<tr>
<td>Greater knowledge/skills</td>
<td>Restrictions on infrastructure</td>
</tr>
<tr>
<td>Ecotourism development</td>
<td>Time spent do work for PA</td>
</tr>
<tr>
<td>Reduced water pollution</td>
<td>Reduced/lost agricultural land</td>
</tr>
</tbody>
</table>
### Natural asset

- Land access
- Irrigation access
- Agric. productivity
- Grazing access
- Access water livestock
- Livestock productivity
- Rainfall
- Drinking water access
- Timber access
- Firewood access
- NTFP access

### Human asset

- Health
- School attendance
- Knowledge, skills
- Available time
- In-migration
- Out-migration

### Physical asset

- Road development
- Water infra dev/maint
- Electricity

### Social asset

- Intra-village conflict
- Inter-village conflict
- NGO support level
- Social status
- Security

### Financial asset

- Income from PA
- Fines from PA

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PEV in practice

1. Determine the numeraire (a proxy of money), its amount and value.

2. Identify issues of concerns (ie, positive impacts, once finished continued with negative impacts – one at a time)
3. Rank the issues
(numeraire is included in the ranking process)
4. Rate the issues
(including the numeraire)
Negative impact and Positive impact

Cost

Benefit

Net impact = Benefit - Cost