As part of its capacity building efforts, ENERGIA held a regional training of trainers and practitioners on gender mainstreaming in energy projects. The training was held in October 2007 in Chiang Mai, Thailand. Programme staff of the Lao Biogas Pilot Program (BPP) participated at the training and also participated in the e-coaching trajectory that ENERGIA provided to a number of selected projects, following the regional training. The team put together a gender action plan based on identified gender gaps in the project, and information collected through a baseline survey. Tools for collecting and analysing gender disaggregated data from communities were developed specifically for this project, which will be presented to you in this article, including the outcomes of using them.

Gender Mainstreaming Tools in the Lao Biogas Pilot Program

Part of ENERGIA’s coaching efforts to BPP involved the joint development of a gender assessment instrument package by SNV Lao PDR and ENERGIA on mainstreaming gender in the Lao Biogas Pilot Program. This package is adapted from existing tools, approaches and experiences from SNV, ENERGIA and other development agencies.

One of the primary objectives of the package is to outline a strategy for conducting a gender-based baseline assessment for new biogas interventions. The tools have been kept as simple and practical as possible for user friendliness and have been designed for energy practitioners who want to mainstream gender into their biogas or other energy programmes.

The tools in the package deal with different levels that are relevant to the programme:
- Institutional level;
- Programme level;
- Community level; and
- Household level.

The tools used at the institutional and programme levels, centre around SWOT (Strengths, Weaknesses, Opportunities and Threats) and BRET (Build on strengths – Reduce weaknesses – Extend opportunities – Tackle threat) analyses, gender capacity needs assessments, programme document review and stakeholder analysis. This article will focus on the tools that were developed for use at the community and household levels. It will then continue to show the findings and recommendations of the baseline survey.

About the Lao Biogas Pilot Program

The Lao Biogas Pilot Program (BPP) aims to reduce poverty and improve the lives of rural households in the Lao PDR. It does this by creating a commercial and sustainable market sector for domestic biogas technology. This technology provides a wide range of benefits for rural households and communities. The program is implemented by the Department of Livestock and Fisheries within the Ministry of Agriculture and Forestry, with support from SNV Netherlands Development Organisation, and with funding from the Government of The Netherlands.

Source: http://www.biogaslao.org

Authors
Phanmaly Siliphong* and Soma Dutta*
*
Email: phanmalysiliphong@yahoo.com
Email: abhisoma@gmail.com
Community and household level tools

The BPP field survey was conducted in seven communities, four in the capital of Vientiane and three in Savannakhet province in October to November 2008. The objectives of this field survey at community level were to:

- Assess the gender equality and women’s empowerment status in the biogas communities. The survey also tried to look at the related governance and social issues. The survey explores and tries to answer who in the community does what, when and where, in the context of biogas;
- Identify the good practices and constraints of the biogas services;
- Provide ground information for project management to consider and take action.

The survey used a participatory approach to ensure that each community group was represented and that each member had a chance to express his/her own opinion. The baseline survey used community focus group discussions and individual household interviews. The survey tried to find out the gender differences between users and non-users of biogas technology by using the following tools:

- socio-economic profile;
- gender profile and seasonal calendar;
- access and control profile;
- gender issues identification;
- household survey form.

These tools will be familiar to practitioners working with participatory approaches, but they do not necessarily bring out gender issues when applying them. This has been addressed by the BPP by specifically building gender related questions into these tools and by making sure that staff who use the tools have sufficient understanding of gender concepts to be able to use the adapted tools. An example of gender inclusion in such a tool is Table 1, which shows the questions in the household survey form that are related to the section on information on household biogas technologies. The tools are available upon request from BPP.

---

Village socio-economic profile

Objectives
1. To investigate and understand the current socio-economic status of the village in relation to biogas supply;
2. To identify an idea of differential perceptions regarding biogas plants among men and women and understanding what factors influence the adoption of biogas plants.

Sampling
A village could be selected for the survey, if it at least matches with two of the following four main criteria: (1) biogas plants installed and programme is active in the village, (2) different economic classes -poor vs. non poor, (3) ethnic diversity, (4) geographical setting -rural vs. urban, off-grid vs. grid, etc. At least three villages would be selected for the baseline survey in each province.

Participants
10-15 people (men and women) from village committee and a Lao Women’s Union’s representative.

Time required 1 hour

Process
1. Organise a meeting with men and women representatives in the village committee.
2. Explain the objective of the exercise and ask the questions from the survey form, trying to keep a friendly atmosphere.

Activity profile and seasonal calendar

Objective
To identify the reproductive, productive and community activities done by women and men, girls and boys in the homes, communities and offices, in the provinces/districts, and villages, especially in the energy sector.

Participants
Biogas user and non-user villagers, 10-15 people in each group, ensuring that both men and women from different social-economic and ethnic backgrounds actively participate in the groups.

Time required 1 hour

Process
1. Separate biogas user and non-user groups, if possible, men and women separately.
2. The facilitator introduces the exercise, defines what reproductive, productive and community activities/roles are, and asks the participants to list them and follow by questioning when they are doing it, by who and where. One chart would be filled for each group, through a process of discussion and consensus. If necessary the data can be supplemented by interviews with key informants.

Access and control profile

Objective
To identify who has access to, and control over energy resources, services and benefits from BPP in the households and in the community.

Participants
The same biogas user and non-user villagers as in the previous exercise.

Time required 1 hour

Process
1. Continue with the same biogas user and non-user groups, if possible, men and women separately.
2. The facilitator introduces the exercise, defines the concepts (access, control, acquisition, benefits and maintenance), and asks the participants to list the existing energy resources and benefits. Then the facilitator asks the participants to indicate who (men or women) have access to (or uses) the resources and for what purpose, who (men or women) has control over (or has the power to make decisions about) the resources and who (men or women) benefits from the use of the resources. If necessary the data can be supplemented by interviews with key informants.
Gender issues identification

Objective
To identify the issues faced by women and men in biogas management at community level. The exercise will also try to find out the perceptions and understanding of biogas non-users and those of the poor in their ability to gain access to biogas.

Participants
Village authority, biogas user and non-user villagers, 5-7 people in each group.

Time required 1.5 hours

Process
1. Separate biogas user and non-user groups, if possible, men and women separately. It is likely to have four groups: men from biogas households, women from biogas households, men from non-biogas households, women from non-user households. Have a separate group of women headed households, if they are significant in number.

2. Have a discussion with each group separately. Ask the participants of each group to list the main issues and problems faced by men/boys and women/girls in the biogas management and their causes and possible solutions. Some of the issues to discuss are:
   - Are men and women equally participating in project decision-making?
   - What are the features of biogas plants that users value? Ask men and women to separately list three most important benefits to them.
   - What are the features of biogas plants that users do not like? Ask men and women to separately list three problems with biogas plants that they would like rectified.
   - How did you find out about the biogas programme? From the men of the household/ from the BPP field worker who came to our house? Include possible alternatives.

Some field findings and recommendations

With regard to gender, the first finding relating to the use of biogas shows a significant improvement of the livelihoods of women and children by reducing their workload. Women save about 1.3 hours per day in fetching firewood and cooking, which has enabled them to undertake more productive activities from farm and off-farm activities. This has led to more gender equality within households using biogas, than in non-using households. Related to this is the increased enrollment and a reduced drop-out rate by girl students, as reported by a primary school in Vientiane. Within biogas-using households, girls are no longer needed at home to assist with household chores, and particularly with fetching firewood. This enables them to attend school and finalize their primary education.

To reach more women in the promotion of the biogas initiative, it was also found that it would be essential to have a gender balance in the promotion team. Male members of the team generally speak to the men in a community or household. Women therefore get information about the biogas initiative indirectly, incompletely, or not at all. Though some members of the promotion team recognise that men and women will experience different benefits from biogas (bio-slurry of more importance to men, while cooking and fuel saving more to women), clear promotion guidelines are needed. Having well-targeted promotion material that reach both men and women, in terms of content and in ensuring that the information is available in places frequented by both men and women, is also essential. BPP should consider whether its promotion is convenient to women, especially in the period following the cooking time.

Traditionally, men take care of the construction, operation and management of technologies, where women usually get support from men when something goes wrong or breaks down. In the interviews during the baseline survey, many women expressed that in practice they share half the operation and maintenance tasks, especially those related to the stove. Women face difficulties with these tasks, when men are away from home. Women should therefore also be targeted by the training that BPP offers.

To make this training available to women, it is strongly recommended that it is done in local languages, not using textbook training materials, and by choosing a location and time that is convenient to all trainees, particularly at village level. The use of female trainers may also help the likelihood of women participating, and help increase their comfort level. All basic information from the training could be also put on a laminated sheet or poster pictorially. These can be put up in the kitchen, so that the information is always close at hand and does not get lost to women.

Facilitating access to credit, especially in areas where credit facilities are not well developed necessarily improves access to biogas facilities to people who may not otherwise be able to afford it. The development of group credits, making use of credit providers who already specialise in credit facilities for women and the poor, and facilitating access to the cattle bank are options open to the programme.

Lastly, increasing the number of female masons and construction workers, as well as increasing women’s participation in biogas committees and management are actions that BPP could take up.

It is clear that the baseline survey has shown a number of gender gaps that existed within the Lao BPP. The practical recommendations make it easy to redress this situation and make the programme more effective in reaching women and marginalised communities. This will have a positive effect on the livelihoods of these groups and their families.
<table>
<thead>
<tr>
<th>G. Information on Household Biogas Technologies</th>
<th>Men’s response</th>
<th>Women’s response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acquisition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who decided to purchase the Biogas technology appliances?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who paid/is paying for the Biogas technology/appliances (or were they a gift from relatives)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is subsidy, credit available? And for whom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who was registered (by name) as the owner of the biogas technology?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What energy technologies were available, and why was this one chosen?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Access and benefits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who decides who uses it and for what purpose?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What benefits does it bring and for whom?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who keeps the profit?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who gets more employment and income?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any negative aspects?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who decides on where it is located?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Supply</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who purchases/collects the energy source used?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What energy sources are available and why is this one used?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who decides how much, when and where to collect/purchase the fuel (kerosene etc)?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who pays?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operation and Maintenance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who is responsible for operation and maintenance?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who takes care of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning of nozzles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water removal from the pipes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning of slurry pool, preventing mosquito breeding</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other fixing or repairing (e.g. fixing gas leakage, broken vessel/lamp etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can you follow the instructions presented in the posters?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who has access to the resources necessary for maintenance?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who has access to training, workshops, study tours and other knowledge? Please name the training.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Who found out about the biogas plant technology, and from where?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Section G of the Household Survey Form: Information on Household Biogas Technologies

---

**Household survey form**

**Objective**
To identify the perceptions, understandings and roles of women and men in biogas management at household level.

**Sampling**
In principle, at least 10% of total households in the village would be selected as the sample. With that however, the biogas user households, in fact, are less than 10% of total households so all biogas users would be selected as the sample plus 2-3 non-users for triangulation purposes.

**Participants**
All biogas users, 2-3 biogas non-users. Ensure that both men and women from different social-economic and ethnic backgrounds are selected as respondents.

**Time required**
Not more than 1 hour

**Process**
1. Select the sample of households with the village authority.
2. Introduce yourself to the men and women in the households and explain the objective of the exercise. Show them that you want to understand their status for project development and promise to keep their household information secret.
3. Start interviewing question by question following the survey form. Importantly, the surveyor should maintain a friendly conversation as much as possible.

---

**References**
