A practical guide for rural electrification trainers and facilitators

Village Management Team Training Manual

Writing Team:
Amalia Suryani, Robert Schultz, Erwina Darmajanti, Atiek Puspa Fadhilah, Masri J. Vani, Akbar Ario Digdo, Agustinus Wijayanto, Langgeng Arief Utomo, Dwiati Novita Rini

Energising Development (EnDev) Indonesia, 2014
Village Management Team
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Preface

“Conservation and rural-life policies are really two sides of the same policy; and down at bottom this policy rests upon the fundamental law that neither man nor nation can prosper unless, in dealing with the present, thought is steadily taken for the future” – Theodore Roosevelt

Sustainable development activities in rural area often focus on the utilisation of natural resources, which are directly connected with communities. Natural resources are a community’s “safety net” and are critical to their livelihood. It therefore stands to reason that rural development can only occur if social aspirations and natural resource opportunities (and limitations) are addressed in an interwoven, holistic manner.

Rural electrification using renewable energy sources has become an important part of sustainable development in rural areas. Access to modern energy opens new hitherto untapped potentials, both socially and economically.

As it is with all potential though, it needs to be harnessed and groomed with care and often coerced into fruition through patience and consistent action.

This manual is a tool. It was formulated, based on several years of experience in Indonesia, and compiled to be user-friendly as well as comprehensive. This tool has one singular objective: to provide rural facilitators and VMT members with the means to conduct their challenging tasks. May it serve you well.

EnDev Indonesia

Ing ngarsa sung tulada
Di depan, seorang guru memberi teladan
In front, a teacher sets examples

Ing madya mangun karsa
Di tengah-tengah, seorang guru menciptakan prakarsa dan ide
In the middle, a teacher creates initiatives and ideas

Tut wuri handayani
Dari belakang, seorang guru memberikan dorongan dan arahan
From the back, a teacher provides encouragement and direction

[Ki Hajar Dewantara, Indonesian education figure]
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TOT Training
A

VMT Training
C
### Glossary and Abbreviation

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Danida</td>
<td>Danish International Development Agency</td>
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<tr>
<td>EnDev</td>
<td>Energising Development, an international programme implemented by GIZ in over 20 countries, to increase communities’ access to modern energy, facilitates energy access to households, social institutions and small and medium-sized enterprises in developing countries in Africa, Asia and Latin America</td>
</tr>
<tr>
<td>Facilitator</td>
<td>A person in a position of mentoring, teaching and training persons through a participatory and interactive approach</td>
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<tr>
<td>FGD</td>
<td>Focus Group Discussion, a dedicated information exchange platform and activity, involving several different stakeholders, with common interests</td>
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<tr>
<td>GIZ</td>
<td><em>The Deutsche Gesellschaft für Internationale Zusammenarbeit</em>, an international agency, based in Germany, implementing development programmes internationally</td>
</tr>
<tr>
<td>LCD</td>
<td>Liquid-crystal display</td>
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<tr>
<td>LMP</td>
<td><em>Lingkungan Mandiri Perdesaan</em>, is a green or environment component of PNPM</td>
</tr>
<tr>
<td>MHP</td>
<td>Micro Hydro Power, generally range from 5 to 200 kW capacity (the Indonesian term is <em>Pembangkit Listrik Tenaga Mikro Hidro</em>)</td>
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<tr>
<td>NRM</td>
<td>Natural Resources Management, a science of different approaches to promote efficient, effective and accountable exploitation of natural resources</td>
</tr>
<tr>
<td>PMD</td>
<td><em>Direktorat Jenderal Pemberdayaan Masyarakat dan Desa</em>, is a government directorate, under the Indonesian Ministry of Home Affairs, overseeing PNPM</td>
</tr>
<tr>
<td>PNPM</td>
<td><em>Program Nasional Pemberdayaan Masyarakat</em>, is a national programme on community empowerment</td>
</tr>
<tr>
<td>Ppt</td>
<td>PowerPoint® presentation is a software used to compile and edit presentation</td>
</tr>
<tr>
<td>PSDA</td>
<td>Pengelolaan Sumber Daya Alam (Natural Resource Management)</td>
</tr>
<tr>
<td>PUE</td>
<td>Productive Use of Energy/Electricity; within this manual, PUE is defined as a small-scale activity, using a renewable energy-based electric energy source for providing a service or adding value to a product in order to sell the product and/or service to a willing market</td>
</tr>
<tr>
<td>Q and A</td>
<td>Questions and Answers</td>
</tr>
<tr>
<td>RE</td>
<td>Renewable Energy or in other context could also be Rural Electrification</td>
</tr>
<tr>
<td>SMG</td>
<td>Solar Mini-Grid, is using photovoltaic technology generally range from 5 to 150 kW capacity (the Indonesian term is <em>Pembangkit Listrik Tenaga Surya</em>)</td>
</tr>
</tbody>
</table>
TOT Training of Trainers is a training approach specifically catering for trainers/facilitators who subsequently train end beneficiaries

VMT Village Management Team, is a small organization in the village whose responsibilities are to operate and maintain MHP and SMG; VMT can be formal or informal

VPS Village Power Systems

YAPEKA *Pemberdayaan Masyarakat dan Pendidikan Konservasi Alam* is an NGO working on natural conservation education and community empowerment
What is a VMT?

Village Management Team (VMT) is a community organization whose responsibilities are to operate, maintain, manage and administer electricity provision to their village through an MHP and/or SMG. VMT members are elected or appointed by the community and report to the community.

A typical structure for a VMT is shown in the diagram below.

- **Operator(s)**: Operate the power plant, perform routine maintenance and basic troubleshooting.
- **Chairperson**: Leads and coordinates VMT, reporting to community.
- **Treasurer**: Receives tariff payment, bookkeeping.
- **Secretary**: Records VMT activities (optional).
1. About The Manual

“Tell me and I forget, teach me and I may remember, involve me and I learn.” — Benjamin Franklin

This is a practical manual for facilitators and trainers on how to establish and capacitate a community VMT to maintain and manage a micro power generation plant and rural mini-grid.

The manual comprises two sets of training materials:

1. **Module A and B**: Training of Trainers (TOT) materials for facilitators and trainers, suitable for improving training and facilitation skills.

2. **Module C**: VMT training materials to be used by facilitators and trainers for providing essential knowledge and tools to VMT members.

In general, users of this manual are facilitators and trainers on implementation of MHP and SMG in rural community

List of topics, materials and resources to organize trainings

User

Syllabus

Reference

Guideline

Shortcuts/hyperlinks that link to various presentations, videos, templates and other tools

Step-by-step guidance on how to conduct training sessions and how to connect each session
**Pre-condition:**
Participants should have a basic understanding of natural resource management and renewable energy technologies and have some experience in facilitating rural community activities regarding natural resources management and managing MHP and SMG infrastructure.

**Time required:**
Ideally the training will require four (4) full days, including field visit (if feasible). A sample of itinerary is included in this manual.

**Resource person(s):**
Experienced facilitators and other experts as required.

**Expected results of TOT training:**
Participants are able to:

1. Recognize and understand facilitation philosophy and skills in the context of natural resources management and renewable energy.
2. Understand the key elements of successful learning sessions in classroom and under field conditions.
3. Demonstrate skills to undertake participatory social and ecological mapping.
4. Understand the contents of VMT training materials.
5. Be able to deliver training to VMT members.

**Expected results of VMT training:**
Participants are able to:

1. Understand the basic technical functionality and requirements of an MHP or SMG in order to operate, maintain, and conduct simple troubleshooting.
2. Demonstrate skills necessary to effectively manage and administer village-based electrification through an MHP or SMG (organizational structure, roles and responsibilities, technical and financial record keeping).
3. Understand how to optimize the performance and sustainability of the MHP or SMG through PUE and other measures.
“The best way to learn is to do; the worst way to teach is to talk.”
— Paul Halmos

There are four (4) components in the training syllabus: training segment, media and tools, activities, and references. It is essential to understand these elements and how to incorporate them to develop VMT training.

TRAINING SEGMENTS are parts of training sessions which typically are divided into four (4) main segments: introduction, main session, assessment and closing.

1. **Introduction** gives opportunity to warm up and create positive and relaxed atmosphere. This segment also serves to quickly assess the participants’ experience, which is useful during next segments and assists to control the pace of the class, and adjust the level of information delivery.

2. **Main Session** is where actual content is delivered to participants. Knowledge about the participants from previous segment allows to adjusting pace. In this segment the trainer may explore the participant a bit more and ignite sharing opportunities if participants have more knowledge and experience. In long or heavy session (e.g. technical session which provides much detail) it is advisable to make short break or use an icebreaker game, as soon as participants become unresponsive.

3. **Assessment** is for evaluating whether participants have captured information. A question and answer, quiz, or pre- and post-test methods can be considered.
4 Closing is to wrap up and reinforce the messages. Thanking everybody for their support and participation is also appropriate. This session also serves to address logistical issues and provide a preview for any next sessions.

MEDIA AND TOOLS are essential for making training sessions practical, interactive and entertaining. Adjust and set media and tools according to topic and local circumstances (participants, time allocation, culture, etc.). For example, accessing Internet during training in rural area may not be a good idea because data connection is usually bad. Check presentation, marker, paper, pens, etc. beforehand and make sure everything is running well. Always consider for Plan B, for example make sure electricity generator is available when rely on electrical equipment such as projector and computer.

ACTIVITIES are ideal for delivering or emphasizing particular information and to maintain positive learning environment. As with media and tools, be sensible of local circumstances.

REFERENCES are books, documents or other media required by the trainer (and perhaps by the participant later on) to properly implement the training. Generally these resources are reviewed as part of preparing for the training. They offer valuable confidence to the trainer to deliver training in a knowledgeable and informed manner.
3 Training Syllabus

“The key is not to prioritize what’s on your schedule, but to schedule your priorities.”
— Stephen Covey

The syllabus is divided into three main modules:

- Module A for Facilitation and Community Empowerment
- Module B for Village and Rural Community
- Module C for Village Management Team in Rural Electrification

Each module contains specific tools, activities and references required for implementing training segments.

Module A and B are designed for participants to improve their facilitation skills within rural context. The implementation of both module A and B should be done by someone who already has good knowledge/skills in rural facilitation.

Module C caters for VMT members and it is presented by the facilitator (who has improved skills through understanding Module A and B). This module provides all the necessary basic information for VMT members to understand their responsibilities and be able to fulfil them.
# MODULE A

## Facilitation and Community Empowerment

### Topic 1: Basics of Facilitation

### Topic 2: Facilitation in Community Empowerment Activities

### Topic 3: Facilitation in Natural Resources Management and Renewable Energy Activities in Rural Area

## Training Segment

<table>
<thead>
<tr>
<th>Training Segment</th>
<th>Media and Tools</th>
<th>Activities</th>
<th>References</th>
</tr>
</thead>
</table>
| **Introduction** | • Brief explanation on the class session  
• Quick assessment through brainstorming | • Program presentation  
• Learning rules  
• Introduction games  
• Brainstorming session: managing expectation (wishes, concerns) using meta-plan | • Games list |
| **Main course/ session, focus on:** | • PowerPoint presentation  
• Meta-plan  
• Marker pens (multi colours preferred)  
• Sticky wall/plano paper  
• LCD projector | • Program presentation  
• Practicing issues of mapping using results from brainstorming session above  
• Role-playing using FGD approach: select 4-6 topics to discuss per groups, preferably topics required by the whole program (will connect to other activities later on)  
• Games: ice breaker, brain gym after 60 minutes. Might need more during “after lunch session” | • A1: Basics of Facilitation  
• A2: Facilitation in Community Empowerment Activities  
• A3: Facilitation in NRM and RE  
• A1_Video_Brain Gym_Hands  
• A3_Video_Green PNPM Best Learning  
• C1_Video_General Information of MHP  
• A2_Seni Memfasilitasi Masyarakat I  
• A2_Seni Memfasilitasi Masyarakat II  
• A2_Seni Memfasilitasi Masyarakat III  
• A3_Buku Panduan Energi Terbarukan I  
• A3_Buku Panduan Energi Terbarukan II  
• A3_Poster_PSDA-DANIDA  
• A3_Booklet_Manual Pelatihan PSDA - DANIDA |
| **Assessment** | • PowerPoint  
• LCD projector  
• Meta-plan  
• Marker pens (multi colours preferred) | • Record Q and A to PowerPoint directly (note taker is recommended)  
• When necessary, participants are allowed to write in meta-plan and give it to facilitator | |
| **Closing** | • PowerPoint  
• LCD projector | • Outlining main ideas from the previous sessions  
• Brief introduction to the next session  
• Extra time is allocated to anticipate participant’s condition | |
## Training Segment

<table>
<thead>
<tr>
<th>Media and Tools</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td><strong>Program presentation</strong></td>
<td><strong>Games and icebreaker games list (need to be developed or adapted from other sources. Might need formal request)</strong></td>
</tr>
<tr>
<td>• Brief explanation on the class session</td>
<td>• Learning rules</td>
<td></td>
</tr>
<tr>
<td>• Quick assessment through brainstorming</td>
<td>• Introduction games</td>
<td></td>
</tr>
<tr>
<td>• PowerPoint presentation</td>
<td>• Brainstorming: reviewing previous sessions</td>
<td></td>
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<tr>
<td>• Meta-plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Marker pens (multi colours preferred)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sticky wall/plano paper</td>
<td></td>
<td></td>
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<tr>
<td>• LCD projector</td>
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<tr>
<td>• Double tape or masking tape</td>
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</tbody>
</table>

### Main course/ session, focus on:

- **B1 Village and Its Dynamics**
- **B2 Village as a Landscape**
- **B3 Village and Target Group**

- **PowerPoint presentation (B1, B2, B3)**
- **Sticky wall/plano paper**
- **Sample movie to develop discussion**
- **LCD projector**
- **Marker pens (multi colours preferred)**
- **Double tape or masking tape**
- **Basic map (may use Google Earth or other sources)**
- **Presentation**
- **Group division: use games**
- **Simulation 1: develop participatory mapping → social-ecological, spatial approach, relevant to the renewable energy issues (indoor) and infrastructure mapping**
- **Simulation 2: develop seasonal calendar to provide temporal context to the map**
- **Simulation 3: develop simple trend analysis based on relevant issues**

- **PowerPoint**
- **LCD projector**
- **Record Q and A to PowerPoint directly (note taker is recommended)**
- **When necessary, participants are allowed to write in metaplan and give it to facilitator**

### Assessment

Providing time for Q and A about the topic delivered

- **PowerPoint**
- **LCD projector**
- **Marker pens (multi colours preferred)**
- **Record Q and A to PowerPoint directly (note taker is recommended)**
- **When necessary, participants are allowed to write in metaplan and give it to facilitator**

### Closing

Conclusion from the whole discussion

- **PowerPoint**
- **LCD projector**
- **Outlining main ideas from the previous sessions**
- **Brief introduction to the next session**
<table>
<thead>
<tr>
<th>Training Segment</th>
<th>Media and Tools</th>
<th>Activities</th>
<th>References</th>
</tr>
</thead>
</table>
| **Introduction** | • PowerPoint presentation  
• Meta-plan  
• Marker pens (multi colours preferred)  
• Sticky wall/plano paper  
• LCD projector  
• Double tape or masking tape | • Program presentation  
• Learning rules  
• Introduction games  
• Brainstorming: reviewing previous sessions | Games list (need to be developed or adapted from other sources, might need formal request) |
| **Main course/session, focus on:** | • PowerPoint presentation (C1, C2,) + specific MHP and PVVP  
• Sticky wall/plano paper  
• Sample movie to develop discussion  
• LCD projector,  
• Marker pens (multi colours preferred)  
• Double tape or masking tape | • PowerPoint presentation  
• Activity 1: develop roles and responsibility of VMT personnel (indoor)  
• Activity 2: develop the village policy on MHP and SMG management (indoor)  
• Group presentation | • C1_Introduction to MHP  
• C1_Introduction to SMG  
• C1_Principles of Electricity Utilization  
• C1_Video_General Information on MHP  
• C2_Legal Aspect of Village Power Systems  
• C2_Video_Institutional Setup  
• C2_Conth AD ART |
| **SPLIT SESSION: Management** | • PowerPoint presentation (C3, C4)  
• Sticky wall/plano paper  
• LCD projector,  
• Marker pens (multi colours preferred)  
• Double tape or masking tape | • PowerPoint presentation  
• Activity 3: practice to use adminbooks  
• Group presentation (for technical team) at the end of the split session | • C3_Institutional Development  
• C3_Secretarial Administration I  
• C3_Secretarial Administration II  
• C3_Contoh_VMT  
• C3_Buku Pelanggan  
• C3_Buku Kegiatan  
• C3_Simulation on Capacity  
• C4_Financial Management I  
• C4_Financial Management II  
• C4_Electricity Cost Calculation  
• C4_Electricity Tariff Setting  
• C4_Video_Financial Management  
• C4_Load and Tariff Tool  
• C4_Buku Tarif  
• C4_Buku Kas  
• C4_Conth Perhitungan Tarif |
### SPLIT SESSION: Technical

- C5 Technical Aspect MHP/SMG
- C6 Productive Use of Energy/Electricity
- C7 Environmental Safeguard (specific needs for MHP/SMG)
- C8 Monitoring and Evaluation

<table>
<thead>
<tr>
<th>Materials and Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint presentation (C5)</td>
</tr>
<tr>
<td>Sticky wall/plano paper</td>
</tr>
<tr>
<td>LCD projector</td>
</tr>
<tr>
<td>Marker pens (multi colours preferred)</td>
</tr>
<tr>
<td>Double tape or masking tape</td>
</tr>
<tr>
<td>Emphasize on MHP or SMG, depends on the need</td>
</tr>
<tr>
<td>PowerPoint presentation (C6, C7, C8)</td>
</tr>
<tr>
<td>Sticky wall/plano paper</td>
</tr>
<tr>
<td>LCD projector</td>
</tr>
<tr>
<td>Marker pens (multi colours preferred)</td>
</tr>
<tr>
<td>Double tape or masking tape</td>
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</tbody>
</table>

### Assessment

- Provide time for Q and A about the topic delivered

<table>
<thead>
<tr>
<th>Materials and Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerPoint</td>
</tr>
<tr>
<td>LCD projector</td>
</tr>
<tr>
<td>Meta-plan</td>
</tr>
<tr>
<td>Marker pen</td>
</tr>
</tbody>
</table>

- Record Q and A to PowerPoint directly (note taker is recommended)
- When necessary, participants are allowed to write in meta-plan and give it to facilitator

### Closing

- Conclusion from previous discussion

<table>
<thead>
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<th>Materials and Resources</th>
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<tr>
<td>PowerPoint</td>
</tr>
<tr>
<td>LCD projector</td>
</tr>
</tbody>
</table>

- Outlining main ideas from the previous sessions
- Brief introduction to the next session (field visit)

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- C5_Technical Aspect of MHP
- C5_Technical Aspect of SMG
- C5_Poster_Troubleshooting for MHP
- C5_Poster_Troubleshooting for SMG
- C5_Video_Technical Aspect of MHP
- C5_Video_Technical Aspect of SMG
- C5_Buku Log PLTMH
- C5_Buku Log PLTS
- C5_Good and Bad MHP Vol I
- C5_Good and Bad MHP Vol II
- C5_Pemecahan Permasalahan Turbin Aliran Silang
- C6_PUE Introduction of PUE
- C6_PUE I Concept of Business Development
- C6_II Steps of Business Development
- C6_Cooperative Establishment Process
- C6_EnDev - PUE Pilot Project
- C6_Video_Productive Use of Energy Concept
- C6_Video_Productive Use of Energy
- C6_Manual_Productive Use of Energy
- C7_Environmental Safeguard MHP
- C7_Poster_Catchment Area Protection MHP
- C7_Pengamanan Sosial dan Lingkungan Hidup PLTMH
- C8_SMS Gateway
- C8_Poster_SMS Gateway PLTMH
- C8_Poster_SMS Gateway PLTS
- C8_Key Performance Indicators Questionnaire
HOW TO CONDUCT THE TRAINING
“Before anything else, preparation is the key to success.”
— Alexander Graham Bell

4 Training Preparation

Essential preparation ahead of delivering training includes:

- Ensuring the suitable time and place of training
- Ensuring accommodation of participants and other required logistics, for example meals and transportation
- Preparing and distributing invitation to the members of VMT, ensuring their presence in training is confirmed
- Preparing materials to be delivered in training
- Preparing stationery and other necessary tools in training

**Tips!** Consider this manual, and all available reference and resource materials in detail, to ensure that you are able to provide this training.

**Tips!** Games that have key messages are excellent tools for ensuring the participants’ attention.
This stage provides general information about training course. Total length depends on the participants’ background. This stage also initiates positive attitude amongst participants. Alternatively, this stage can be integrated directly into the modules as well.

Participants are expected to develop positive relations among themselves, facilitators and trainers during the training, since open communication and information exchange during the training session will improve overall training quality and experience.

Facilitators could adopt the following steps:

- **Introduction** (2 minutes)
  
  Welcome the participants and pay respects for their attendance. To warm up the training atmosphere, ask these questions: Do you already know each other? Is an introduction necessary? Just to recall names of our friends and get to know recently met friends? Have you travelled far?

- **Ice Breaking Games** (15 minutes)
  
  In a 15 minutes introduction round, participants can be invited to introduce themselves formally or through informal interactive approach like “Reporter Interview” and “Self Comic”. Participants, facilitators and organizers could all be included in establishing communicative and fun atmosphere (see “Various Games”).

- **Review** (10 minutes)
  
  Explore the philosophy of the game (see “Various Games”). Ask participant to provide feedback of their impression about the game. Write down their opinion on board. Underline key words and review the purpose and meaning of the game, then link it to the training.

- **Confirmation** (3 minutes)
  
  Lastly, give affirmation to the meaning of the game: participants, facilitators and organizer need to know each other. Not just limited to the name, but also the personality and character of each person. Such acquaintance will create a friendly and respectful interaction and productive training.
“If you can’t explain it simply, you don’t understand it well enough.”
— Albert Einstein

This section emphasizes purpose, expectation, and method that will be implemented during the training. Participants focus and contribute actively in the process.

After facilitator explains the purpose and process of learning, participants should be able to explain the purpose and process of training correctly and set expectations and concerns more realistically.

Facilitator could adopt the following steps:

**Description** (5 minutes)
Provide description of the flow of training process that includes subject matter and objectives, delivery methods or techniques used, and the length of time required for discussion of each material.

**List of Expectations** (15 minutes)
Develop list of participant expectation and concern. Ask participants to fill one meta-plan paper with one expectation. Collect all of these papers and start to group by putting it into larger plano paper.

**Brief Explanation** (5 minutes)
Give a brief explanation of adult training methodologies. In principle, it requires that all participants are expected to be actively involved throughout the discussion process. This is thus not a passive learning through absorption, but learning through sharing.

**Purpose of Training** (10 minutes)
After training methodology, expectation and concern are understood, explain the purpose of training, which is: to improve the participants’ facilitation skill and skill of VMT, including its institutional development as MHP/SMG manager.
Organizing Class

“We build too many walls and not enough bridges.”
— Isaac Newton

After both facilitators and participants have an agreement on class organization and learning rules, the participant is expected to be able to:

- Select a class manager who will organize the participant’s needs during learning process
- Establish order, learning schedule, and duty schedule which will help the process of learning.

Facilitators could adopt the following steps:

- Select and choose a class committee
- Suggest and determine class rules
- Confirmation of committee and rules by all participants

**Tips!**

- Allocate time for a simple test in the beginning (pre-test) and the end of each module (post-test). Use the same set of exercise format to compare result.
- Organize class notes and activity results. It will be useful when we are organizing a work plan.
- Develop a follow-up plan for things to be completed beyond the training session. In a follow-up plan, the elements that should be covered are:
  - What needs to be done?
  - When they need to be completed?
  - Who will be in charge for specific action?
“Tell me and I forget, teach me and I may remember, involve me and I learn.”
— Benjamin Franklin

GENERAL DIRECTION ON SYMBOLS:

Time duration of training session process (in minutes)

Hyperlink button directly to the associate file(s)

Available in video file format

Google Earth
Participants need to know the philosophy and benefit of facilitation to implement community empowerment activities well in the field. Participants’ ability and knowledge in facilitating processes in community are important to guide them before they engage a rural community.

**Learning outcome:** Participants understand basic facilitation techniques, to philosophy behind facilitation and the benefits of facilitation.

**Process of training session:**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Duration</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5 minutes</td>
<td>• Greet the participants then explain the purpose and expected outcomes of the subject</td>
</tr>
<tr>
<td>Main Session</td>
<td>20 minutes</td>
<td>• Present material on “Basics of Facilitation” which relates to participant's prior knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give a chance to participants to give opinion about the topic discussed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• See training syllabus (Chapter 3)</td>
</tr>
<tr>
<td>Assessment</td>
<td>5 minutes</td>
<td>• Provide time for Q and A to check participants’ understanding</td>
</tr>
<tr>
<td>Closing</td>
<td>5 minutes</td>
<td>• Conclude the material which have been discussed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• End the session with a summary and confirmation of important points</td>
</tr>
</tbody>
</table>

*Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes*
After participants have basic understanding of facilitation, they need to know the facilitation techniques suitable for community empowerment in general, and for VMT members specifically. Participant should be sensitive to village conditions and able to offer solutions to challenges in the community regarding natural resource management and renewable energy.

Learning outcome: Participants understand how to facilitate for VMT members, in the context of nature resources management and renewable energy.

Process of training session:

Introduction (5 minutes)
- Greet the participants then explain the purposes and expected outcomes of the subject

Main Session (30 minutes)
- Present the material on “Facilitation in Community Empowerment Activities” which relates with participant’s prior knowledge
- Give a chance to participants to give opinion about the topic discussed
- See training syllabus (Chapter 3)

Assessment (5 minutes)
- Provide time for Q and A to check participants’ understanding

Closing (5 minutes)
- Conclude the material which have been discussed
- End the session with a summary and confirmation of important points

Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
**Tips! Basic attitude of successful facilitators**

There are five basic rules of facilitation. These are essential for successful facilitation, both in a class and in a real environment. Each of the rules can be trained and strengthened by simulation, role-playing and interactive discussion. These rules are:

- Enthusiasm (to instil eagerness in accepting new knowledge)
- Empathy (to reflect respect and understanding of challenges)
- Positive thinking (to ensure that confidence is built in applying new knowledge)
- Trust within the group (to encourage open sharing)
- Simple approach to community (to avoid over complicating new knowledge)

**Tips! Why are facilitators needed?**

- Community facilitation often becomes the focal point of rural development processes. Facilitators are key components to integrate technical aspect of development program and the community component. They will somehow "calibrate" both components to maintain development momentum.

- A facilitator is a partner for community to discuss issues related to his/her scope of work. He/she also becomes key contact of knowledge sharing within community. A facilitator needs to be able to address and engage rural community, characterized by its diversity (ecologically, socially, culturally and economically).

- Facilitator is an agent of change. He/she needs to address changes driven by development as well as to maintain momentum of community empowerment and track/anticipate its direction.
Participants’ ability in providing training on management will be developed. Facilitation is the process through which a community learns to manage its natural resources and renewable energy technology. To provide good management training classes, participants need plenty of exercise. Exchange of experiences among participants will also significantly develop their facilitation skill as rural facilitation has unique aspects.

**Learning outcome:** Participants are able to facilitate natural resources management and renewable energy activities in rural context.

**Process of training session:**

- **Introduction (5 minutes):** Greet the participants then explain the purposes and expected outcomes of the subject.

- **Main Session (30 minutes):**
  - Present the material on “Facilitation in Natural Resources Management and Renewable Energy Activities in Rural Area”
  - Games and movie important to develop session
  - See training syllabus (Chapter 3)

- **Assessment (5 minutes):**
  - Provide time for Q and A to check participants’ understanding

- **Closing (5 minutes):**
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

**Notes:** Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes.
In this session, participants need to be aware that knowledge about village and its dynamics is essential before being able to facilitate rural community in the field.

**Learning outcome:** Participants will recognize characteristics of village, the dynamics of local community and be able to express observation through a basic spatial map.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session** (25 minutes)
  - Present the material on “Village and Its Dynamics”
  - Simulation: develop seasonal calendar and use example from the presentation to showcase a seasonal calendar, how to create it and discuss what type of information are useful for MHP/SMG
  - See training syllabus (Chapter 3)

- **Assessment** (25 minutes)
  - Provide time for Q and A to check participants’ understanding

- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

*Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes*
Participants need to view a village as an integral part of a larger landscape, but also the village as a whole within itself. With the knowledge of its natural landscape, participatory social and ecological map of a village can be developed along with the rural community. Simulation is an approach used by participants in constructing seasonal calendar to provide information on village’s landscape.

**Learning outcome:** Participants can identify the territory of a village, the landscape of a village, and are able to develop participatory social and ecological maps.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session** (25 minutes)
  - Present the material on “Village as a Landscape”
  - Simulation: participatory mapping to cover natural resources, social and infrastructures
  - Identify important elements for MHP/SMG
  - See training syllabus (Chapter 3)

- **Assessment** (25 minutes)
  - Provide time for Q and A to check participants’ understanding

- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

*Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes*
Facilitators need to understand the village and target groups before they facilitate further. Facilitators can then identify target group and whether they are suitable as managers of MHP/SMG. Beneficiaries also need to be identified within community and how their relation is to natural resources. Information is refined through seasonal calendars and simulation will assist in developing simple trend analysis of related issues.

**Learning outcome:** Participants can identify existing organizational structures in a village, the beneficiaries of MHP/SMG, and are able to develop interim information through participatory seasonal calendar and trend analysis.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session** (25 minutes)
  - Present the material on “Village and Target Group”
  - Simulation: develop simple trend analysis based on map and seasonal calendar exercise. Apply "a scenario" into previous map and seasonal calendar, landscape and connect the prediction with the MHP/SMG context
  - See training syllabus (Chapter 3)

- **Assessment** (25 minutes)
  - Provide time for Q and A to check participants’ understanding

- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
VMT members are the target participant in this module. VMT members are responsible for operation, maintenance, management and administration of the village mini-grid installation, using renewable energy technologies (specifically micro-hydro power or MHP and solar photovoltaics mini-grid or SMG).

**Learning outcome:** Participants understand the basics of MHP/SMG.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session** (40 minutes)
  - Present the material about “Basic of Village Power Systems”
  - Use the video as discussion media
  - See training syllabus (Chapter 3)

- **Assessment** (10 minutes)
  - Provide time for Q and A to check participants’ understanding

- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

**Notes:** Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
In this topic, VMT members learn about various VMT institutional forms and their legal base as it relates to the country of training. This information will clarify VMT’s tasks in the context of managing an MHP and SMG.

**Learning outcome:** Participants understand different VMT institutional structures and legal basis.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject
- **Main Session** (40 minutes)
  - Present the material about “VMT Institutional Forms and Legal Base”
  - Include topic on cooperative and possible support from district government cooperative office
  - See training syllabus (Chapter 3)
- **Assessment** (10 minutes)
  - Provide time for Q and A to check participants’ understanding
- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

*Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes*
VMT Structure

Chairperson
Leads and coordinates VMT, reporting to community

- Operator(s)
  Operate the power plant, perform routine maintenance and basic troubleshooting

- Treasurer
  Receives tariff payment, bookkeeping

- Secretary
  Records VMT activities (optional)

VMT Roles and Responsibilities

**Chairperson**
- Prepare legal documents for VMT
- Lead and coordinate VMT
- Planning and budget preparation
- Approve planning and financial reports
- Engage work relation with village/local government
- Report VM activities to local community

**Treasurer/Secretary**
- Receive electricity payments
- Financial accounting
- Manage bank book(s)
- Prepare monthly and annual financial reports
- Record all VMT activities
- Record outgoing and incoming letters

**Operator(s)**
- Operate the power plant
- Perform routine maintenance
- Install a new electrical grid connection for new customer (ONLY if operator has enough experience and uses appropriate equipment)
- Repair and replace small parts
- Fill and report log book
VMT members need to understand the intricacies of managing an MHP and SMG in a rural context and learn from cases or previous documents from other areas. Simulation is an important part in this topic as well as providing useful hands-on experience in dealing with challenges. Participants should be able to ask the facilitators directly how to overcome various challenges.

**Learning outcome:** Participants fully understand all management aspect regarding MHP/SMG.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session** (20 minutes)
  - Present the material on “Management Aspects”
  - Ask participants to create a list of challenges that need to be addressed by VMT after their establishment
  - See training syllabus (Chapter 3)

- **Assessment** (5 minutes)
  - Provide time for Q and A to check participants’ understanding

- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

**Notes:** Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
This topic improves skills of VMT members in management and administration of financial aspects. Participant learns to use related books and documents, such as cash book. Facilitator will provide an example of tariff setting to stimulate participant. An exercise using actual cash book is essential to provide real experiences for participants.

**Learning outcome:** Participants fully understand financial aspects required for managing an MHP/SMG and are able to use financial management tools properly.

**Process of training session:**

- **Introduction (5 minutes)**
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session (20 minutes)**
  - Present the material about “Financial Aspects”
  - Practice to set tariff and how to use admin books
  - Presentation by each team
  - See training syllabus (Chapter 3)

- **Assessment (5 minutes)**
  - Provide time for Q and A to check participants’ understanding

- **Closing (5 minutes)**
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

**Notes:** Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
VMT members receive information to strengthen the basic technical skills for operating and maintaining MHP/SMG. They will exercise by filling in the “technical log book”. In addition, the facilitator should use this session to develop a simple work plan related to technical aspect. This could be included when develop a follow-up plan.

**Learning outcome:** Participants fully understand basic technical aspects of MHP and SMG.

**Process of training session:**

- **Introduction** (5 minutes)
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session** (70 minutes)
  - Present the material on “Technical Aspects”
  - Practice to use the log book
  - See training syllabus (Chapter 3)

- **Assessment** (10 minutes)
  - Provide time for Q and A to check participants’ understanding

- **Closing** (5 minutes)
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

**Notes:** Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
Treasurer’s Customer Book, Electricity Tariff Book, and Cash Book

Customer Book
To record customers’ data and their power consumption based on appliances owned or used.

<table>
<thead>
<tr>
<th>No</th>
<th>Customer Name</th>
<th>Contract No</th>
<th>Installation Date</th>
<th>Power Consumption</th>
<th>Appliances Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Electricity Tariff Book
To record customers name and their monthly payment.

<table>
<thead>
<tr>
<th>No</th>
<th>Customer Name</th>
<th>Month:</th>
<th>Month:</th>
<th>Month:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Date</td>
<td>Payment</td>
<td>Date</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Cash Book
To monitor income, expense and savings. The most important information to be recorded monthly.

<table>
<thead>
<tr>
<th>Date</th>
<th>Transaction</th>
<th>Income (cash-in)</th>
<th>Expenditure (cash-out)</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Above are examples of administration books (activity, customer, electricity tariff, and cash books). For the ready-to-print template, please refer to Admin Books MHP and SMG in “Tool Box”.
### Operator’s Log Book

**Log Book**
To record the performance of power plant operation, so problems could be recognized before becoming critical.

<table>
<thead>
<tr>
<th>Date</th>
<th>Hour meter (h)</th>
<th>Battery state of charge (V)</th>
<th>kWh meter 1</th>
<th>kWh meter 2</th>
<th>kWh meter 3</th>
<th>Faults observed</th>
<th>Maintenance and repairs done</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

Above is an example of a log book to record MHP and/or SMG performance. For the ready-to-print template, please refer to Admin Books MHP and SMG in “Tool Box”.

### Chairman’s Activity Book

**Activity Book**
To record the result at each activity such as a meeting. This record will become basis for management.

<table>
<thead>
<tr>
<th>Date</th>
<th>Attended by</th>
<th>Items discussed</th>
<th>Notes on actions to be taken</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>What? By who? When?</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

Above is an example of an activity book to note activities and meetings related to MHP/SMG. For the ready-to-print template, please refer to Admin Books MHP and SMG in “Tool Box”.
Above is an example calculation tool for determining the load and tariff of a SMG. For more detail, please refer to Admin Books MHP and SMG in “Tool Box”.

**Tariff Setting Calculation Tool**

**OUTPUT: Dashboard of Results**

**SUMMARY**

**ELECTRICITY SUPPLY**

- Total generation capacity: 17 kW
- Total load: 10 kW
- Total energy demand: 42 kWh/day
- Energy surplus/deficit: 43 kWh/day

If energy deficit, you need to reduce your electricity demand.

**CUSTOMER TARIFFS**

- Basic tariff: 30,066 IDR/month
- Si proportion: 5% (HH Basic: 37,869 IDR/month; HH Medium: 51,875 IDR/month; HH High: 51,875 IDR/month)
- Number of non-paying HH: 0

**OTHER**

- Required number of PV modules: 100 PV modules
- Required number of batteries: 145 Batteries
- Required land area: 573 m²
- Estimated infrastructure cost: 3,007,000,000 IDR

**ELECTRICITY DEMAND**

- Demand of household (HH): W per HH Wh per HH # Connection Total kW Total Wh
  - HH Basic: 140 480 50: 7.00 24.00
  - HH Medium: 115 655 10: 1.15 0.56
  - HH High: 475 655 1: 0.48 0.66
- Total HH demand: 8,625 31,205

- Demand of social institution (SI): W per SI Wh per SI # Connection Total kW Total Wh
  - School: 120 960 1: 0.12 0.96
  - Streetlights: 10 80 50: 0.50 4.00
  - Type 5: 0 0 0: - -
- Total SI demand: 0.62 4.96

- Demand of rural business (PUE): W per PUE Wh per PUE # Connection Total kW Total Wh
  - Tailor: 360 720 1: 0.36 0.72
  - Egg hatchery: 200 400 1: 0.20 4.80
  - Type 3: 0 0 0: - -
  - Type 4: 0 0 0: - -
- Total PUE demand: 0.56 5.5
This session introduces another aspect that can improve the performance, income and sustainability of MHP/SMG, particularly the benefits of using energy productively. Examples are given on enterprises and businesses suitable for most MHP and SMG. This session can use village social-economic mapping and questionnaires to identify economic opportunities and impacts.

**Learning outcome:** Participants understand the concept and benefits of productive use of energy and are able to identify them within their communities, as well as can prepare a PUE work plan.

**Process of training session:**

- **Introduction (5 minutes)**
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session (40 minutes)**
  - Present material on “Productive Use of Energy/Electricity” (needs community mapping to understand specific PUE)
  - Questionnaire can be one of tools to strengthen understanding of the area
  - See training syllabus (Chapter 3)

- **Assessment (10 minutes)**
  - Provide time for Q and A to check participants’ understanding

- **Closing (5 minutes)**
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

*Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes*
VMT members are expected to understand environmental safeguard of MHP and SMG. Facilitator provides examples of social and environmental safeguard. In this topic, the practices of making plans for social and environmental safeguards is connected or merged with the result from Module B “Community Empowerment in Rural Context”.

**Learning outcome:** Participants understand environmental safeguard of MHP and SMG and can prepare a safeguard work plan.

**Process of training session:**

- **Introduction (5 minutes)**
  - Greet the participants then explain the purposes and expected outcomes of the subject

- **Main Session (40 minutes)**
  - Present material on “Environmental Safeguard”
  - Create safeguard work plan to demonstrate measures taken to minimize negative impacts
  - See training syllabus (Chapter 3)

- **Assessment (10 minutes)**
  - Provide time for Q and A to check participants’ understanding

- **Closing (5 minutes)**
  - Conclude the material which have been discussed
  - End the session with a summary and confirmation of important points

**Notes:** Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes
VMT members learn how to monitor and evaluate MHP and SMG performance and what key performance indicators are useful. Facilitator gives examples on how to implement proper monitoring and evaluation. End of the session, VMT members are invited to develop a monitoring and evaluation plan. Use results from previous modules and topics as the reference to develop realistic monitoring plan.

Learning outcome: Participants understand the importance of monitoring and evaluation, and can design a monitoring and evaluation plan.

Process of training session:

- **Introduction (5 minutes)**: Greet the participants then explain the purposes and expected outcomes of the subject.

- **Main Session (40 minutes)**: Present material on “Monitoring and Evaluation”; Introducing the SMS Gateway poster; See training syllabus (Chapter 3).

- **Assessment (10 minutes)**: Provide time for Q and A to check participants’ understanding.

- **Closing (5 minutes)**: Conclude the material which have been discussed; End the session with a summary and confirmation of important points.

Notes: Media that should also be prepared are plano papers, meta-plans, markers, LCD projector, and double tapes.
TOOLS AND TEMPLATES
“It always seems impossible until it’s done.”
— Nelson Mandela

Field Visits

**Initial Check**
- Check before conducting field visit to determine the location. Field visit should be conducted on the last day of training, with the distance 2-3 hours from training venue.

**Permit Check**
- Prepare a clearance letter from government to submit to the to-be-visited village. Describe the timing, exact location and how many people will join the visit.
- Consult with relevant agencies if a field visit into a restricted area requires a permit. A formal letter from government might be required as well.

**Safety Check**
- Ideally divide participants into groups that each consists of 5-7 people with a coordinator to manage the group.
- Identify safety and accident risks and take necessary precautions. Always travel with a first aid kit.
- Identify nearby health and safety facilities and evacuation plan such as hospital, police office, etc.

**Logistical Check**
- Itinerary: it is important to manage time.
- Transportation: find the appropriate transportation based on road conditions.
- Accommodation and meals: should be prepared well to anticipate the participant’s well-being during trip.
- Local guide: a person familiar with the location and local condition.
- Check for small detail: Useful small items might include raincoat, umbrella, camera, notebook, flash lights, knife, etc.
Various Games

Games can be used for introduction, energizer, focus stimulation, and to build togetherness in problem solvings.

1. Face drawing

For introduction ± 25 minutes
A4 papers and pens/pencils

1. Give a piece of A4 paper and a pen/pencil to each participant
2. Ask them to draw their own faces
3. Ask them to return the papers to the facilitator
4. Distribute the drawings, each should have other’s drawings
5. Interview owners of drawing (for instance regarding name, address, job,)

2. Self comic

For introduction ± 25 minutes
A4 papers and pens/pencils

1. Give a piece of A4 paper and a (colourful) pen/pencil to each participant
2. Ask them to answer 3 questions using pictures
3. Ask interesting or unforgettable experience such as why interested in the
4. Ask them to present his/her self comic
5. Ask all or some participants to present (depends on time available)
3. Ball-throwing introduction

1. Participants form a circle and each mention their names.
2. Throw the ball to the person in front of him/her and he/she should mention his/her name.
3. The recipient catch the ball and say "Thank you, (thrower’s name) for the ball". The recipient throw the ball to the next person.

4. Tongji-Tongji

1. Say “Tongji-tongji” (left hand is raised and right hand touches left elbow).
2. Say “La-la” (clap your hands twice).
3. Say “Yim-yim” (move both hands).
4. Say “Tole-tole” (turn head to the left and then the right side).
5. Repeat from the beginning, faster each time in each repetition.
5. Hand clap

1. Asked each participant to pick a partner
2. If facilitator say “one”, the participants clap hands once and then clap their partner’s hands once
3. It facilitator say “two”, the participants clap hands twice and then clap their partner’s hands twice, and so on
4. Mention a number and participants do the same pattern as many as the number mentioned
5. The game ends if there is a mistake
6. It can continue with changing the participants formation in groups of three or four, instead of two

6. Tangled hands

1. Participants make a small circle where shoulders bump each other
2. Participants extend their right hand to the person in front of them and hold that person’s right hand
3. It is not allowed to hold hand with the person next to them
4. The same also applies to the participants’ left hand
5. The game ends if there is a mistake
6. After all the participants hold hands, next task is to make a big circle without letting go of the hands they hold
7. Tangled hands (with ropes)

- **Facilitator holds the ropes in his/her hand, and the participants stand in a circle.**
- **Participants take a random grab at the part of a rope above the facilitator’s hand using right hand.**
- **Participants take a random grab at the part of a rope below the facilitator’s hand using their left hand.**
- **After all participants hold parts of the ropes in their hands, next task is to make a big circle without letting go.**

For stimulating concentration

- **± 15 minutes**
- **2 objects representing ‘apple’ and ‘bottle’**

8. Apple and bottle

- **Participants and the facilitator make a big circle.**
- **Facilitator gives a ‘bottle’ to the first person to his/her left by saying, “This is a bottle”. The recipient asks the giver, “What?” And the giver**
- **The person that is holding the ‘bottle’ now gives it to the second person on the left by saying, “This is a bottle”**
- **The recipient asks the giver, “What?” and the giver says, “It’s a bottle”. And so on**
- **The same pattern is done with apple but in the opposite direction.**
9. Chain messages

For ice breaking
± 15 minutes

1. Participants make two groups and form two lines.

2. Facilitator whispers a message to one end of each line. The message must be forwarded until the last person.

3. Message from beginner until end of line must be the same.

4. If not, then the facilitator should find out where exactly the message altered.

5. Two groups competing on which group can forward the message correctly from one end to the other end.
Sample of Training Agenda

**Topic:** Village Management Team (VMT) Training of Rural PNPM Institutional Strengthening for Renewable Energy (ISRE) in Sulawesi Barat and Sulawesi Selatan

**Objective:** To strengthen the capacity of VMT members to carry out tasks related to maintenance, operation and financial administration of micro hydro power (MHP) facility in order to ensure the sustainability of electricity supply

**Target group:** Rural facilitators

**Total number of participants:** 20 to 40 persons in each training

**Estimated date:** 10-13 May 2014

**Course language:** Bahasa Indonesia

**Course duration:** 4 days

**Venue:** Hotel Maria, Mamuju, Sulawesi Barat

### Day 1

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<th>Material</th>
<th>Trainer/Speaker</th>
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<td>Registration</td>
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<tr>
<td>08:30 - 09:00</td>
<td>Opening</td>
<td>Speech from GIZ/organizer</td>
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<td></td>
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<td>Opening speech</td>
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<tr>
<td>09:00 - 09:30</td>
<td>Coffee break</td>
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<tr>
<td>09:30 - 10:00</td>
<td>Ice breaking</td>
<td>Introduction, class organization, pre-test and learning contract</td>
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<tr>
<td>10:00 - 11:00</td>
<td>Maintenance</td>
<td>Maintenance of MHP facility based on Rural PNPM experiences</td>
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<tr>
<td>11:00 - 11:30</td>
<td>Get to know MHP</td>
<td>MHP and the institutional set up</td>
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<tr>
<td>11:30 - 12:30</td>
<td>Electricity utilization</td>
<td>Good principles in utilization of electricity from micro hydro power</td>
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### Day 2

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<td>08:30 - 09:00</td>
<td>Opening</td>
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<td>09:00 - 09:15</td>
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<tr>
<td>09:15 - 10:15</td>
<td>Institutional set up</td>
<td>Structure, role, responsibilities and task division</td>
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<td>10:15 - 10:30</td>
<td>Coffee break</td>
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<tr>
<td>10:30 - 12:00</td>
<td>Admin management</td>
<td>Group discussion</td>
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<td>12:00 - 13:00</td>
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<tr>
<td>08:30 - 09:00</td>
<td>Opening</td>
<td>Review of day 2 and plan of day 3</td>
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<td>09:00 - 10:00</td>
<td>Legal Aspect of VMT</td>
<td>Legal aspect of MHP: Preparing MHP statutes, village regulation, and their application</td>
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<td>10:00 - 10:15</td>
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<td>10:15 - 11:30</td>
<td>MHP legal form</td>
<td>Introduction to cooperatives, one option of VMT legal form</td>
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<td>11:30 - 12:30</td>
<td>Introduction to productive use of micro hydro power</td>
<td>• What is productive use of energy (PUE)</td>
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<td></td>
<td></td>
<td>• Questionnaire regarding PUE potential in participants village</td>
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<td>12:30 - 13:30</td>
<td>Lunch break</td>
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<tr>
<td>13:30 - 15:00</td>
<td>PUE from micro hydro power</td>
<td>Video of Productive Use of Energy (4 minutes)</td>
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<td></td>
<td></td>
<td>Steps for developing business and access to micro credit</td>
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<td>15:00 - 15:30</td>
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<td>15:30 - 17:00</td>
<td>PUE from micro hydro power</td>
<td>Lessons learnt from GIZ PUE pilot project, group discussion</td>
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**Day 4**

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<td>09:00 - 10:00</td>
<td>Action plan</td>
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<td>10:15 - 11:30</td>
<td>Discussion</td>
<td>Regarding follow up action plan</td>
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<td>11:30 - 12:00</td>
<td>Post Test</td>
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<td>12:00 - 12:30</td>
<td>Closing ceremony</td>
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Renewable Energy Programme Indonesia/ASEAN

Program Energi Terbarukan Indonesia/ASEAN memegang peranan penting dalam memberdayakan pelaku lokal untuk mengadopsi solusi energi terbarukan demi kepentingan masyarakat.

The Renewable Energy Program Indonesia/ASEAN plays a prominent role in enabling local actors to adopt renewable energy solutions for the people's benefits.

Das Programm Erneuerbare Energie Indonesien/ASEAN spielt eine prominente Rolle, lokale Akteure zu befähigen, Erneuerbare Energien zum Wohle aller einzusetzen.

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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Ministry of Foreign Affairs of the Netherlands

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