# COMMUNITY RESOURCE DOCUMENTATION TOOLKIT

## Acknowledgements

The authors would like to acknowledge the contributions made by the Land Tenure Project partners:

- BadeidhaMoe
- Farmers and Land Workers Union
- Myanmar Institute for Integrated Development
- Public Network
- Pyoe Khin Thit Foundation
- Upper Chindwin Youth Network

Special thanks to those who took the time to review and provide feedback on the draft toolkit: Kyaw Thinn Latt, Patrick Oswald, Father Albino, Stephen Brooks, and Travis Guymon.

This toolkit is dedicated to the memory of Nick Thomas, who launched us on this path.

# COMMUNITY RESOURCE DOCUMENTATION TOOLKIT

## MYANMAR LAND TENURE PROJECT

## NOVEMBER 2017

# TABLE OF CONTENTS

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| CBO | Community-Based Organization |
| CSO | Civil Society Organization |
| DALMS | Department of Agricultural Land Management and Statistics |
| GAD | General Administration Department |
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| KNU | Karen National Union |
| LTP | Land Tenure Project |
| LUC | Land Use Certificate |
| MAST | Mobile Applications to Secure Tenure |
| MIMU | Myanmar Information Management Unit |
| MOALI | Ministry of Agriculture, Livestock, and Irrigation |
| MOHA | Ministry of Home Affairs |
| MONREC | Ministry of Natural Resources and Environmental Conservation |
| MP | Member of Parliament |
| MRLG | Mekong Region Land Governance |
| NGO | Nongovernmental Organization |
| NLUP | National Land Use Policy |
| PRA | Participatory Rural Appraisal |
| QGIS | (formerly Quantum Geographic Information System) |
| RRA | Rapid Rural Appraisal |
| USAID | United States Agency for International Development |
| UTM | Universal Transverse Mercator |
| VFV | Vacant, Fallow, and Virgin |
| WCS | Wildlife Conservation Society |

# INTRODUCTION

Participatory mapping is an approach used to document the land resources of rural communities in Myanmar. This toolkit describes procedures and tools that the United States Agency for International Development (USAID) Myanmar Land Tenure Project (LTP) team developed and tested in 11 village tracts across the country. The project conducted pilot site activities to demonstrate how articles of the National Land Use Policy (NLUP) could be implemented on the ground.

LTP created this toolkit for an audience of local groups: civil society organizations (CSOs), nongovernmental organizations (NGOs), community-based organizations (CBOs), and private companies. The results of this exercise are of value to the communities involved, local authorities at the township and village tract administrative levels, and, potentially, regional authorities.

This toolkit presents the steps required to implement a community resource documentation approach. These include community profile interviews, participatory mapping, and engagement activities. The main output of this approach is a collection of the information assembled on community land resources (maps and a village folio) made accessible to relevant stakeholders. This documentation will increase transparency between stakeholders and may provide greater tenure security for communities.

The community resource documentation process provides communities with an opportunity to engage with local authorities and contribute their voices to the land rights conversation. At the completion of activities, communities receive a map of their boundaries and land uses as well as a village folio documenting the process. Communities can use the map and folio as tools for planning, management, and engagement.

Local organizations take on the role of facilitator throughout the community resource documentation process. Staff from these organizations meet frequently with local authorities and community members in the village tract to learn about land uses and resource constraints. Local organizations work hand-in-hand with communities to map their village boundaries and their resource uses, and then present that information to local authorities for discussion and acceptance.

This toolkit is part of USAID's Mobile Applications to Secure Tenure (MAST) approach, which is USAID's broad array of

technology-related tenure strengthening tools. This toolkit does not prescribe specific technologies to undertake this process. An ever-expanding array of technology options can be used to document community resources. The toolkit provides some background on the options, but LTP encourages readers to find the best tools for their needs. While LTP used mobile technology and geographic information systems (GIS) to gather and map data on village boundaries and land uses, less-technology-centric options are possible to gather the same information. Local organizations may not have experience in or be comfortable with mapping techniques, and this toolkit is not intended as a substitute for GIS training. However, LTP pilots demonstrated that local organizations without prior mapping experience can be supported through training and technical assistance to create community maps. LTP recommends that local organizations reach out to mapping resource organizations for assistance or training (i.e., the Myanmar Information Management Unit or OneMap Myanmar).

LTP hopes that this toolkit is viewed as a step toward a more standardized approach to participatory mapping that will allow the comparison of outputs from across the country, irrespective of who conducted the work. As such, the toolkit describes the spatial data produced to help inform the development of modern land administration systems. LTP recognizes that participatory mapping in Myanmar will grow and evolve. The project is also aware that Myanmar is a very diverse country and most pilot locations were in primarily Bamar areas; the toolkit should be adapted for use in parallel administrative areas. This toolkit documents LTP's efforts to date, and it is the project team's hope that organizations will build upon and update it as methods are further tested and refined.

# FREQUENTLY ASKED QUESTIONS

**Q: What is community resource documentation?**

**A:** It is a process in which a community identifies its land uses and boundaries. The process results in a village folio and maps that can be used to engage with local authorities and other stakeholders about land concerns.

**Q: How is community resource documentation relevant to Myanmar?**

**A:** The process empowers a community and individuals to document and learn about their lands and to engage relevant local authorities to address land issues.

**Q: Why should I be interested in community resource documentation?**

**A:** Communities can strengthen their land rights, improve understanding of the land legal framework, and learn about their boundaries and land resources. Local organizations can build technical skills and engage with communities and local authorities. Local authorities can learn about community perspectives on the areas they manage and improve engagement in local natural resource management.

**Q: Who benefits from community resource documentation?**

**A:** Community members and local authorities benefit from understanding more about how their land is being used and their village boundaries for future planning.

**Q: How do I find a local organization to document my community's resources?**

**A:** Many local organizations conduct participatory mapping activities around Myanmar. Contact the Land Core Group or OneMap Myanmar to learn more.

**Q: How does a local organization get funding to document community resources?**

**A:** As of this writing, potential funding sources for local organizations include the Land Core Group and OneMap Myanmar.

**Q: How much time would I or my community have to give to this process?**

**A:** While the process takes approximately six months in total, the time commitment required from community members is limited for all but

# FREQUENTLY ASKED QUESTIONS (CONTINUED)

committee members. For those working directly with the local organizations, no step will require more than a few hours at one time.

**Q: How much does it cost to conduct this process?**

**A:** Funds will be necessary to cover the cost of facilitation, transport, and map production and will vary depending on location and context. Communities are not asked at this time to pay for these services (this could change depending on the availability of outside funding sources).

**Q: Where will the information collected from communities be stored?**

**A:** The local organization will compile all information in a folio and present it to the village leaders at the end of the process. With permission from the village, the local organization may share the mapping data with local authorities and OneMap Myanmar.

**Q: Who has access to the information collected from communities?**

**A:** With village permission, the local organization and government officials (i.e., Village Tract Administrator, MONREC, GAD, DALMS, and OneMap Myanmar) can access the data.

**Q: Does the community resource documentation process give me title to my land?**

**A:** No, the process results in an unofficial maps of the village and village tract.

**Q: Do I need to be a technical specialist? Where do I get technical support for mapping?**

**A:** The process does not require previous experience in technical mapping skills. If the local organization does not have the technical understanding, they can ask MIMU, OneMap Myanmar, or another organization for technical assistance or training.

**Q: Where can I get the materials for community resource documentation?**

**A:** Contact the Land Core Group or OneMap Myanmar for materials. USAID's LandLinks website (https://land-links.org/project/tenure-global-climate-change-burma/) will ultimately host the toolkit. Annex A of this report also contains relevant links.

# LAND TENURE PROJECT COMMUNITY RESOURCE DOCUMENTATION PROCESS

This toolkit details the steps that make up the community resource documentation process, tested by the USAID Land Tenure Project (LTP) over 24 months in 11 village tracts in Myanmar. LTP lessons learned have informed an approach that other organizations and donors may apply and adapt to document and map community resources.

Resource mapping is essential to securing the rights of community members to their farmland, paddy land, community forests, water, and other resources. Communities may have different goals when undertaking community resource documentation. By working through a participatory process, communities can identify resources that are culturally significant or important to their livelihoods. Understanding boundaries and land uses may also help to:

- Improve economic benefits
- Increase community-based decision-making regarding land concerns
- Build awareness of local government to understand community resources
- Increase awareness of the legal framework that governs the access and use of land resources
- Protect natural resources (i.e., community forests)
- Ensure that land acquisition or land-based investments happen with consent (free, prior, and informed consent).

The community resource documentation process consists of nine steps (see Figure 1), which can be adapted to the local communities' needs. Throughout the process, local organizations assist communities to document their lands and resources, engage with local authorities, and contribute to discussions on land rights. While community members own the final data and outputs, local organizations act as intermediaries, storing the data and sharing with relevant stakeholders approved by communities through a data-sharing agreement. The maps and folios that make up the final output of the community resource documentation process provide

The Community Resource Documentation Toolkit defines a *local organization* as a CSO, NGO, CBO, or private company that works with community members of a village tract to define and map their resources. A local organization is a neutral third party in the documentation process. The role of the local organization is to facilitate broad, inclusive engagement of community members, carefully and accurately represent community perspectives throughout the documentation process, and facilitate discussions between community members and local authorities.

communities with a tangible, evidence base from which to begin engaging, planning, and making informed decisions. This participatory and inclusive approach creates a space for all members of the community, whether from a place of power or one of vulnerability, to contribute to the mapping of land and resource use and community boundaries.

**FIGURE 1: THE NINE STEPS OF COMMUNITY RESOURCE DOCUMENTATION**

| | |
|---|---|
| 1 | STAKEHOLDER ENGAGEMENT |
| 2 | COMMUNITY SENSITIZATION |
| 3 | COMMUNITY PROFILE INTERVIEWS |
| 4 | SPATIAL AWARENESS EXERCISES |
| 5 | BOUNDARY VERIFICATION WALK |
| 6 | LAND USE INVENTORY |
| 7 | COMUNITY MEETING TO REVIEW MAPPING |
| 8 | MULTI-STAKEHOLDER MEETING |
| 9 | VILLAGE FOLIO HANDOVER CEREMONY |

The outputs of the process are village and village tract boundary and land use maps and village-specific folios containing the information collected during the process (see Figure 2 and Annex C). Local organizations facilitate the collection of boundary and land use information, and final data outputs belong to communities. At the completion of activities, communities receive a copy of the maps and supporting information. These outputs can be used as a resource for future planning and discussions. After discussion with and approval from the communities, local organizations may share data and information with local authorities and national data-sharing platforms.

## FIGURE 2: HOW EACH STEP CONTRIBUTES TO FINAL RESOURCE DOCUMENTATION OUTPUTS

| STEP | | OUTPUT |
|---|---|---|
| Preparation | 0 | Community and resources identified |
| Stakeholder Engagement | 1 | Agreement from local authorities to work in the village tract |
| Community Sensitization | 2 | Agreement to work with the community & share information |
| Community Profile Interviews | 3 | Information on village settlement history; general economic and livelihoods status |
| Spatial Awareness Exercises | 4 | Spatial data on community land resources and boundaries |
| Boundary Verification Walk | 5 | Spatial data on community boundaries |
| Land Use Inventory | 6 | Spatial data on land uses; detailed understanding of land use types; information on land disputes |
| Community Meeting to Review Mapping | 7 | Feedback on draft maps for final map presentation |
| Multi-Stakeholder Meeting | 8 | Improved understanding of land issues in the village tract; next steps for addressing land issues; strengthened relationship between community and local authorities |
| Village Folio Handover Ceremony | 9 | Village map; village folio; next steps on addressing land issues in the village tract |

For each of the nine steps, the toolkit explains the purpose and outputs, people involved, planning and timing considerations, and resources needed. This summary information is included at the beginning of each step.

Throughout the toolkit, LTP has identified resources for additional information and training as well as best practices learned from pilot activities. Where relevant, the toolkit includes specific instructions for mapping activities. Red-bordered text boxes in Steps 3 through 7 describe considerations for mapping communities with confusing, overlapping, or conflicted geographic areas. The annexes to this toolkit also provide templates and links to resources to guide the implementation of the documentation process.

# STEP 0: PREPARATION AND RESOURCES

**People Involved:**

- Local organization, including Project Manager, Community Engagement Specialist, and Mapping Specialist
- Field support (including community volunteers)

**Planning Considerations:**

- Engage stakeholders. Contact the community at least one month before Step 1.
- Decide whether to pay travel allowances and per diems.
- If the village does not have electricity, plan to use solar power, batteries, and candles for night meetings.

**Resources Needed:**

- Computer
- Camera or smartphone for photographs
- Tablet or GPS unit
- Projector and screen

**Timing Considerations:**

- Note that preparations and the gathering of documents and maps can take several months.
- Consider rainy and dry seasons. Conducting mapping activities during the monsoon adds extra complexity to field work. While not impossible, this requires more flexibility.

Before starting the community resource documentation process, review Steps 1 through 9 to ensure that the required resources are available to plan and conduct this process efficiently. This section outlines considerations for planning. Weigh these considerations carefully before beginning the process. Have a clear understanding of the logistical requirements as well as the tools that will be used throughout field activities.

**Team members.** Some of the steps require quite a bit of planning and logistical arrangements. LTP's pilot teams were most successful with a team of three to carry out the field activities: a Project Manager, a Community Engagement Specialist, and a Mapping Specialist. Many teams also included a Field Assistant to support meetings and activities. Each local organization should determine the team structure that works best in the local situation. LTP recommends a Community Engagement Specialist or similar position to lead all community meetings, with a Mapping Specialist to support meeting facilitation and data collection. Choose team members with strong facilitation skills and knowledge of the local context. LTP also strongly recommends at least one team member who can touch type in Burmese.

**Community permission.** Identify a community in which to carry out community resource documentation. This may come from communities themselves or from an issue that stakeholders would like to address. Work with state/region, district, and township authorities to identify or confirm an appropriate community in which to work. Obtain approval from local authorities to work in the village tract. Before engaging stakeholders (i.e., state/regional, district, township, and village tract officials) in Step 1 and the community in Step 2, meet with the community to get permission to undertake community resource documentation. In LTP's experience, an established relationship with the community and the local authorities helps to ensure that a smooth process. Before starting Step 1, work with the community to decide on the scale to be mapped (village tract, township, village, etc.). LTP pilot teams mapped villages in a village tract.

**Background research.** In preparation for stakeholder and community engagement (Steps 1 and 2), gather general information and any existing maps of the community. General information includes village population, size, ethnic makeup, known history, and neighboring village tracts. The team will gather more in-depth information about each community during community profile interviews (Step 3).

**Technology and hardware.** Determine the technologies and tools that the team will use during field activities. LTP pilot teams carried a laptop computer, tablet, handheld global positioning system (GPS) device, and battery-operated projector to the field. While technology-intensive, these tools allow rapid capture and sharing of data in formats that can be readily incorporated into modern databases, facilitate data storage and management, and enable map production. Pilot teams utilized both a mobile data collection application on a phone or tablet and handheld GPS devices for field data collection during boundary verification walks. While this provided some redundant data capture, it also helped the teams explore different technologies. While not all of this technology is necessary, LTP recommends a computer and a smartphone or tablet at a minimum.

Documenting activities with a camera is valuable for both the local organization and community members. However, a fancy camera is not necessary; a phone camera is sufficient. A photographic record of community resource documentation is an important part of the process. Plan to take photos during every step of the process.

Mobile devices (smartphones or tablets) have many different uses. Most mobile devices have a GPS application (app), a camera, and a keypad to enter text and numbers. Many users find it easier to collect data on mobile devices than on traditional handheld GPS

**LOCAL LANGUAGE**

It is essential to work in the local language most commonly spoken in the village. If the local organization does not have native speakers of that language, plan to find a translator and build in extra time for translation (i.e., for a meeting that would last one hour without translation needed, plan for an hour and a half with a translator). If multiple languages are spoken (for example, if people from another region have relocated to the village), make sure that they have access to someone who can translate on their behalf.

units or with pen and paper. LTP pilots explored several mobile data collection tools (see Annex J) that utilize a smartphone or tablet to collect information. While this toolkit does not recommend one mobile data collection tool over another, many LTP pilot teams used Kobo Toolbox, which is free, open source, and easy to set up. If the local organization decides to use a mobile data collection option, plan extra time to prepare and test data collection forms. Annexes B and H contain sample data collection forms, and Annex A includes resources for training on mobile data collection. LTP pilot teams used mobile data collection for two purposes: to collect monitoring data about each activity and to collect spatial data during boundary verification walks (see Step 5). If conducting community resource documentation during the rainy season, make sure to use a waterproof case for the mobile device.



**Technical mapping resources.** With the objective of producing outputs that can be included in a modern spatial database, this process relies on geographic information system (GIS) or computerized mapping. LTP pilot teams used QGIS, a free and open-source software, that can be downloaded from the internet. Prior to beginning fieldwork, determine what GIS resources are available. These may include technical support or training (see text box and Annex A). While pilot Mapping Specialists did not have knowledge of GIS prior to beginning mapping activities, LTP provided training and technical support throughout the process. Mapping Specialists were able to complete the mapping successfully. This toolkit does not describe GIS processes in detail, but does provide information on the general data collection, data management, and map production processes LTP teams used to produce maps.

Prior to beginning activities, work with a mapping resource organization (see text box and Annex A) to identify satellite image and Universal Transverse Mercator (UTM) topographic maps of the

area. UTM topographic data, created in 2004, do not show a community's current land resources, but provides a general understanding of the major geographic features (roads, rivers, mountains, forests) in the area. High-resolution satellite imagery provides a detailed, bird's-eye view of a community. Accessing recent imagery is very important to the community resource documentation process. Work with a mapping resource organization to understand imagery options for mapping better. These may include the use of unmanned aerial vehicles, or drones, to obtain imagery for small village areas.

**Monitoring activities.** Before starting the documentation process, clearly state the expected results and develop of a set of indicators for tracking progress toward achieving these results. Keep track of who attends every meeting and document what was discussed. Monitoring the results and the participation of the community throughout the documentation process will help track whether activities are making progress toward goals. This monitoring information can help identify and document lessons learned throughout the process and allow teams to adapt activities based on ongoing learning. Monitoring data also provides reference information during compilation of village folios. LTP pilot teams used mobile data collection forms on a tablet to track their field activities. Annex B contains templates for monitoring data. Make sure to complete these forms for each visit to the community or local authorities to keep a comprehensive, accurate record of activities.

## REFERENCES

- **Annex A: Resources**
    - Education and Outreach Materials by the Land Tenure Project
    - Mapping

- **Annex B: Monitoring and Evaluation Data Collection Templates**

- **Annex H: Example Data Collection Forms and Attribute Tables**

- **Annex J: Mobile Data Collection Options for Participatory Mapping**

## BEST PRACTICES

- Do not work in a village tract that is new to your organization. Identify sites where you already have relationships and are not too far from your organization's office.

- If the village tract is far from your organization's office, take time to get to know the communities and stay in the village whenever possible.

- Not all organizations will decide to pay travel allowances and per diems to participating community members. Decide before starting the process if your organization will do so, considering the budgetary impacts and sustainability.

- Provide refreshments for community members. Make sure these costs are included in the budget during planning.

- Take photos throughout the process to document each step and include them in village folios.

- Identify technology and hardware needs and available resources before beginning the process.

- Identify technical mapping support or training resources before beginning the process.

# STEP 1: STAKEHOLDER ENGAGEMENT

**STEP 1: STAKEHOLDER ENGAGEMENT**

**People Involved:**

- Local organization
- Local authorities

**Planning Considerations:**

- Schedule meetings well in advance so that the necessary people can attend.
- Hold stakeholder meetings at least one week before community meetings.
- Note that meetings with individual stakeholders may be easier than one large group meeting.
- Prepare an agenda for the meeting (see example in Annex D).

**Resources Needed:**

- Computer
- Camera or smartphone for photographs
- Tablet
- Projector and screen
- Agendas
- Nine-step cartoon posters
- Attendance sheets and meeting minutes form
- PowerPoint presentation on NLUP
- Venue rental

**Timing Considerations:**

- Ensure that the meeting does not last more than half a day (two to four hours are generally sufficient).

1

After obtaining approval from local authorities to work in the village tract, set up a meeting with community leaders, local authorities, and the private sector to discuss community resource documentation objectives and to explain how the process works. Contact the following authorities and institutions:

- Regional, state, and district governments
- Village Tract Administrator
- Village Tract Clerk
- Village leaders (including Ten Household Leaders and Hundred Household Leaders)
- Department of Agricultural Land Management and Statistics (DALMS) of the Ministry of Agriculture, Livestock, and Irrigation (MOALI)
- Ministry of Natural Resources and Environmental Conservation (MONREC)
- General Administration Department (GAD) of the Ministry of Home Affairs
- Ethnic group leaders (e.g., the Karen National Union [KNU])
- Private companies or individuals with land certificates or leases within the village tract
- Local police (Special Branch)

All of these stakeholders have a voice in the land resources being documented, either formally or informally, and so it is important to bring them together. Figure 3 shows how some LTP partners engage different stakeholders. The process of community resource documentation can prompt discussions about land use both between government departments and between government and community members.

## FIGURE 3: STAKEHOLDER ENGAGEMENT FOR COMMUNITY RESOURCE DOCUMENTATION

CSO → Regional Huttlaw → District/ Township → Village Leaders → Village

It is important to contact representatives from the highest level of government (regional or state) to the lowest level (village). Informing all stakeholders of the process early ensures greater likelihood of government and private sector support and stakeholder acceptance of a final map's validity if boundaries or land use are questioned in the future.

## PURPOSE

- To provide local government and village leaders with a clear understanding of the documentation process, how resources will be mapped, and what the final products will be (i.e., village folio and map of boundaries and resources within the village tract).

## OUTPUT

- Buy-in from local authorities, village leaders, and other decision makers in the area.

## HOW THIS STEP WORKS

### 1.1 Introduce participants and organizations

Go around the room and have everyone introduce themselves.

### 1.2 Introduce objectives

State why this meeting and the community resource documentation process are important. Reference the following:

- Community resource documentation is an opportunity for local authorities to engage with communities and learn about their land resources.

- Community resource documentation is an opportunity for stakeholders to have an open dialogue about land resources and land rights.

- Community resource documentation will provide local stakeholders with maps and village folios. These resources describe village boundaries and land uses. While the maps and folios are not official, they can be used as tools for planning, management, and engagement.

### 1.3 Discuss the National Land Use Policy

Use the National Land Use Policy (NLUP) PowerPoint presentation to walk through the NLUP and explain why it is important (http://pdf.usaid.gov/pdf_docs/PA00N2RP.pdf).

### 1.4 Show the "Mapping Our Land" video

Introduce the "Mapping Our Land" video (https://www.land-links.org/2017/10/tgcc-burma-mapping-land-full-version/) and answer questions about the process after stakeholders have viewed the film.

### 1.5 Present the community resource documentation process and activities

Introduce the toolkit as a resource and walk through the steps in the process using the nine-step cartoon posters (http://pdf.usaid.gov/pdf_docs/PA00N2RF.pdf).

### 1.6 Introduce the village tract

Present information about the village tract. If initial maps of the village tract are available, show them to the group. Explain how the decision was made to work with this community and any work completed to date on preparations. Obtain approval from the Village Tract Administrator to continue work in the selected village tract.

### 1.7 Lead discussion of next steps

Explain the community sensitization step (Step 2) in more detail. Ask if the participants have any questions on the process. Remind them that you will keep them updated throughout the process and that you will bring them back together for the multi-stakeholder meeting (Step 8) to present the final products (village maps, village tract map, and village folios).

## REFERENCES

- **Annex A: Resources – Education and Outreach Materials by the Land Tenure Project**

    - USAID Land Tenure Project NLUP PowerPoint Presentation (http://pdf.usaid.gov/pdf_docs/PA00N2RP.pdf)

    - "Mapping Our Land" video (https://www.land-links.org/2017/10/tgcc-burma-mapping-land-full-version/)

    - Nine-step cartoon poster (http://pdf.usaid.gov/pdf_docs/PA00N2RF.pdf)

- **Annex D: Example Agendas**

    - Stakeholder Engagement Meeting Agenda

# BEST PRACTICES

- Facilitate discussions between local authorities and the community and play the role of a neutral third party in the event of land resource issues in the village tract.

- Note that the more inclusive the involvement of stakeholders, the greater the chance of outputs being officially recognized by local authorities to the benefit of communities.

- Strive for early, collective engagement with all authorities in the same room in the township.

- Communicate first with district-level government offices to facilitate communication with township offices.

- Include local government stakeholders such as police, Members of Parliament, and state/regional representatives when possible. If they cannot attend the stakeholder engagement meeting, inform them of process objectives and activities at separate meetings.

- Ask the local MONREC officer to set up meetings with other government representatives if necessary.

- Before the larger stakeholder meeting, hold one-on-one meetings with local officials to discuss the community resource documentation process.

- Request a meeting with advance notice to stakeholders so that the people you want to attend the meeting are available.

- Ensure meeting materials such as an attendance sheets, agendas, and cartoon posters are assembled before the meeting.

- Define the role of each team member in each session.

- Test equipment needed before the meeting (e.g., projector and sound system).

- Use media tools and sensitization materials (i.e., cartoon posters, land type classifications poster, videos, and PowerPoint presentations) when possible to ensure that information presented is clear and understandable.

- Schedule enough time to go over all of the topics.

- Involve both women and men in the meeting.

- Have a clear communication protocol and stick to it. Include in this protocol the practice of reporting back to stakeholders throughout process.

# STEP 2: COMMUNITY SENSITIZATION

**STEP 2: COMMUNITY SENSITIZATION**

**People Involved:**

- Local organization facilitators (men and women)
- Village administrative leaders
- Community members (women, men, youth, and elders)

**Planning Considerations:**

- Obtain access to meeting space (e.g., village hall or local monastery) in advance of the meeting.
- Use agenda from stakeholder engagement meeting if desired (see Annex D).
- Ensure that women have a chance to ask questions and voice opinions.
- Remember to monitor data collection (e.g., attendance sheets, meeting notes).
- Leave nine-step cartoon posters behind (one copy for each village if resources allow).

**Resources Needed:**

- Computer
- Camera or smartphone for photographs
- Tablet
- Projector and screen
- Agendas
- Nine-step cartoon posters
- Attendance sheets and meeting minutes form

**Timing Considerations:**

- Plan the meetings when most people are available, even if that means scheduling at night.
- Ensure that the community meeting does not last more than three hours.

2

Meet with leaders and community members of individual villages to describe and discuss community resource documentation objectives and explain how the process works. These meetings provide an opportunity to plan with and brief local community leaders before the next steps. Step 2 should also help community members understand how and why the process will benefit their communities.

## PURPOSE

- To build trust with community members and establish clear expectations about the planned activities throughout the community resource documentation process and community members' roles in the activity.

## OUTPUT

- Community member understanding of the process, and readiness and willingness to participate in documentation and mapping activities.
- Agreement by the community to collaborate and share the information collected during the process with the local organization and other relevant stakeholders such as local authorities and OneMap Myanmar (see data-sharing agreement template in Annex C).

# HOW THIS STEP WORKS

**2.1    Introduce the team**

Introduce your organization and the facilitators. Explain what your organization does.

**2.2    Explain why the work is important and what the benefits to the community are**

State why this meeting and the community resource documentation process are important. Reference the following:

- Community resource documentation is an opportunity to create a map of the village's boundaries and land uses. This map can be a tool for planning, management, and engagement.

- The process provides communities with an opportunity to engage with local authorities.

- Community resource documentation is an opportunity to include the community's voice in land rights conversations.

**2.3    Discuss the NLUP and show the "Mapping Our Land" video**

Use the presentation to walk through the NLUP and explain why it is important (http://pdf.usaid.gov/pdf_docs/PA00N2RP.pdf). Show the "Mapping Our Land" video (https://www.land-links.org/2017/10/tgcc-burma-mapping-land-full-version/) and explain links to the community resource documentation process.

**2.4    Present community resource documentation activities and data-sharing agreement and ask for community feedback**

Introduce the toolkit as a resource and walk through the steps in the process using the nine-step cartoon posters (http://pdf.usaid.gov/pdf_docs/PA00N2RF.pdf). Ask the community if they want to engage in the process. Introduce the data-sharing agreement (see Annex C). Make clear that the data and information generated by the activities are owned by the community. Discuss whether mapping objectives reflect the needs of the community. Ask if the community wants to map anything that is not already included in the plan.

**2.5** **Explain why it is important that all groups be represented (women, men, youth, elders, minority groups, disabled, etc.)**

The maps need to represent all land resources. In order to show land uses throughout the community accurately, people from all parts of the community need to provide their opinions. Women and men often use land differently, minority groups may not have the same access and use rights as non-minority groups, and there may be more than one use for a parcel of land (e.g., land could be used for either paddy or grazing, depending on the season).

**2.6** **Lead discussion of next steps**

Explain the next step, when the team will return to talk to the community, and what the community members can expect. Open up the meeting to discussion and questions. Leave the nine-step posters in the village. Leave contact information for the team and clearly explain how the team will communicate with the community throughout the process.

# REFERENCES

- **Annex A: Resources – Education Outreach Materials by the Land Tenure Project**

    - USAID Land Tenure Project NLUP PowerPoint Presentation (http://pdf.usaid.gov/pdf_docs/PA00N2RP.pdf)

    - "Mapping Our Land" video (https://www.land-links.org/2017/10/tgcc-burma-mapping-land-full-version/)

    - Nine-step cartoon posters (http://pdf.usaid.gov/pdf_docs/PA00N2RF.pdf)

- **Annex C: Village Folios**

    - Data-Sharing Agreement Template

- **Annex D: Example Agendas**

    - Community Sensitization Meeting Agenda

## BEST PRACTICES

- Ensure meeting materials such as attendance sheets, agendas, and cartoon poster are ready.

- Define the role of each team member in each session.

- Check the equipment beforehand (e.g., projector) and make sure electronics are fully charged (e.g., computer and camera).

- Information must be clear and understandable. Use media tools and sensitization materials (i.e., nine-step cartoon posters, land type classifications poster, videos, and PowerPoint presentations) when possible to share information.

- Schedule enough time to go over all of the topics to be covered.

- Ensure that community members are available at the planned time.

- Make the meeting interactive and allow enough time for all questions and discussion.

- Involve both women and men in the meeting.

- Consider translating communications media into the local language of the area if not Burmese.

- Check in with communities throughout the process to get a sense of how things are going. They may need more communication materials or training.

- Enter into a "social contract" in which the community acknowledges their desire to participate in community resource documentation activities and clearly understands that they own the data and information outputs of the process.

# STEP 3: COMMUNITY PROFILE INTERVIEWS

## STEP 3: COMMUNITY PROFILE INTERVIEWS

### People Involved:

- Local organization (men and women)
- Local authorities (Village Tract Administrator, village leaders)
- Community members (men, women, youth, and elders)

### Planning Considerations:

- Carefully review the questionnaire and interview objectives.
- Create space and opportunity for women, youth, minorities, or other vulnerable people to share their knowledge and opinions freely.
- Charge the phone or tablet ahead of time if using one for recording. Have back-up power sources (power banks or solar-powered chargers).

### Resources Needed:

- Smartphone (or tablet) for recording
- Camera or smartphone for photographs
- Questionnaires
- Attendance sheets and meeting minutes form
- Notebook and pen
- Tablet
- Tape recorder

### Timing Considerations:

- Find a time that is convenient for community members that does not conflict with farming or working.
- Arrange meeting times and locations that work for both women and men.
- Ensure that no focus group meeting or interview lasts longer than two hours.

**3**

Conduct a series of interviews with local authorities and community members about land uses and resources. This information provides background understanding about the community. Information collected during this step is included in the village folio as the community profile (see Annex C).

## PURPOSE

• To document information on the community such as its history, who lives in the village tract, existing land disputes, and who has the right to access and use the resources on the land.

• To involve community members in the community land resource documentation process.

• To improve communication and coordination with local government, communities, and local organizations.

## OUTPUT

• Written profile on the history and makeup of the community, to include how the community members use the land in the village tract. This information will be included in the final village folio.



## HOW THIS STEP WORKS

3.1  **Conduct background research and prepare for interviews**

Before meeting with the community, gather general information on each village (see Step 0: Preparation and Resources). If available, this should include location, population, ethnic makeup, types of crops, and sources of income. Potential sources of information include

newspaper articles, reports by research institutes and CSOs/NGOs, statistics, *kwin* maps, agricultural production and forest cover maps, and knowledgeable residents in the main township.

Consult the Mekong Region Land Governance's (MRLG) *Documenting Customary Tenure in Myanmar: A Guidebook* (2017). This source contains additional background on the preparation stage in Chapter 4 and the importance of and strategies for customary tenure documentation in Chapter 6 (http://mrlg.org/resources/documenting-customary-tenure-in-myanmar-a-guidebook-first-edition/).

At the beginning of this step, determine what technology, if any, you will use to record interviews. LTP does not recommend using mobile data collection for this step, as open-ended questions are difficult to capture when typing on a tablet. Several of LTP's pilot teams used a recorder, phone, or tablet to make an audio recording of interviews. If conducting the interview in a large room, several recording devices may be necessary to capture responses from all participants. Always test the recorder before beginning interviews and remember to charge the device or bring back-up batteries. During interviews, have one team member act as a facilitator and another as notetaker.

### 3.2 Conduct assessment interviews with local authorities and community members

Interview several different groups to collect detailed information about the communities in the village tract. See the Community Profile Interview Questionnaire Guide in Annex E for more detailed questions and the Community Profile Template in Annex C. Feel free to adapt the sample questions provided in Annex E to your local needs, adding or subtracting questions as needed. During interviews, do not ask only the questions on the questionnaire. Ask follow-up questions to understand the respondents' answers better. Participatory rural appraisal (PRA) and rapid rural appraisal (RRA) techniques, such as ranking answers and walking through the village, are useful to get more in-depth answers. See also the resources in Annex A for links to additional tools (https://www.crs.org/sites/default/files/tools-research/rapid-rural-appraisal-and-participatory-rural-appraisal.pdf).

Annex E provides sample interview questions for the following key interviewees:

- Village members (all)
- Village women
- Village Tract Administrator and GAD Clerk
- MONREC township leadership staff
- DALMS township leadership staff
- Members of Parliament (MPs)
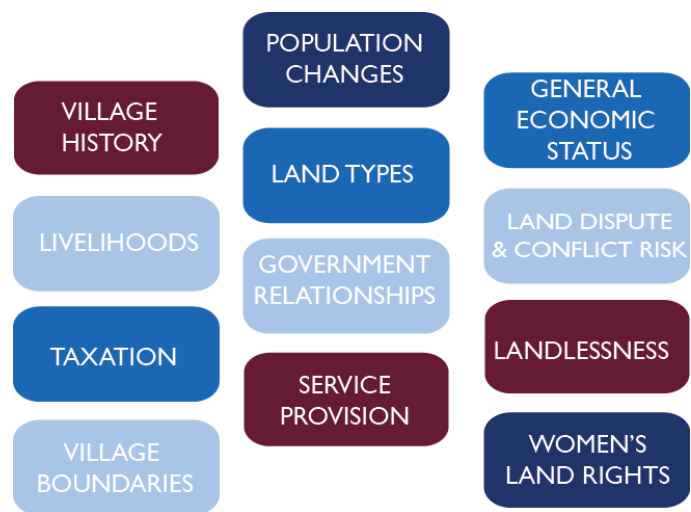- 100 household leader/village head

- Religious leaders, school masters, or other well-respected persons.

The questionnaire guide includes main questions with associated additional questions if needed for clarification. In this way, interviewers can elicit information on each key topic. Adjust the questions to reflect the realities of the local context in terms of economy, infrastructure, migration, cultural dimensions of community, agriculture, and forests.

**FIGURE 4: KEY COMPONENTS OF COMMUNITY PROFILE INTERVIEWS**

POPULATION CHANGES

VILLAGE HISTORY

GENERAL ECONOMIC STATUS

LAND TYPES

LIVELIHOODS

LAND DISPUTE & CONFLICT RISK

GOVERNMENT RELATIONSHIPS

TAXATION

LANDLESSNESS

SERVICE PROVISION

VILLAGE BOUNDARIES

WOMEN'S LAND RIGHTS

If interviews last longer than two hours, schedule a follow-up interview or ask questions about other topics at future documentation activities. Questions on land use and access can be asked during spatial awareness exercises (Step 4), boundary verification walk (Step 5), and land use inventory (Step 6). Information gathered throughout the process should be assembled for inclusion in the folio to be presented to the community and local authorities (see Step 9 and Annex C).

The team can also gather information by walking through the village to view the resource areas and the village's organization. Take photos during the activity to include as documentation of the community's land resources and the community resource documentation process.

## INCLUSION OF VULNERABLE GROUPS

A participatory research process must not just include the village leaders and the most-educated residents. Include vulnerable groups in the interviews conducted in Step 3 to provide a broad understanding of the function of customary tenure and land use in each village. Vulnerable groups often take more time or effort to reach because they may be less available for meetings, might not speak the same language as the research team, or might not think of themselves as experts or people who should be involved in politics. People may be vulnerable because of their social or economic status. They may also be vulnerable if they do not belong to the dominant ethnic group in an area, do not follow the same customs, or are not comfortable speaking in the same language. Vulnerable groups include elderly people who cannot easily leave the home, women who are responsible for housework and are unavailable for group discussions, members of minority ethnic groups, recent migrants, and the poor. Displaced people, migrant workers, and refugees are also vulnerable groups.

Vulnerable groups provide important information that otherwise would not be included, especially about livelihoods and equality. Including these groups in the documentation process also increases understanding of the customary system in the village and builds support for further advocacy and land use planning.

To identify vulnerable groups and ensure an inclusive process, consider people who are marginalized by their economic, social, and cultural status.

**Source:** MLRG, 2017.

### 3.3      Compile data and prepare report

As information is gathered from stakeholders (local authorities, village elders, women, etc.), meet with the team and record findings on the same day as the interviews. Write the community profile in clear, accessible language so that the village tract communities understand the main messages. Add photos of community members and their land resources from the interviews to document the village conditions. Include direct quotes to highlight important issues.

As more information is gathered during the subsequent steps, update the community profile accordingly. (The draft format for the community profile in the village folio can be found in Annex C.) Folio completion and handover is the last step (Step 9).

## CREATE A MAPPING ACTION PLAN FOR BOUNDARY HARMONIZATION

After Step 3, you should have a good understanding of areas where communities may have boundary disputes or may overlap. Develop a mapping action plan to address these areas. A mapping action plan is a schedule of planned activities that identifies key events where neighboring villages or parties should provide joint input. The mapping action plan helps to reduce the potential for conflict and ensure that all community members support results from the community resource documentation process.

LTP experience has shown that it is important to develop these plans in areas where villages closely border one another, are changing in size relative to historical patterns, or have active boundary disputes. This action plan may involve the normal set of mapping activities conducted on an individual village basis (spatial awareness exercises, boundary verification, and land use inventory). The mapping action plan should also include additional activities such as joint community meetings to discuss disputed or confusing areas and boundary walks and joint land use inventory activities with representatives from multiple villages. Be careful to engage members of different communities in joint and combined activities before tensions rise.

The mapping action plan should also identify any risks for mapping. In some LTP pilot sites, communities were not able to identify village boundaries or the boundaries were too conflicted to map. In these areas, mapping activities focused on documenting shared land resources at the village tract level.

# REFERENCES

- **Annex A: Resources – Other Resource Documents**

    - *MRLG Documenting Customary Tenure in Myanmar: A Guidebook* (2017). ([http://mrlg.org/resources/documenting-customary-tenure-in-myanmar-a-guidebook-first-edition/](http://mrlg.org/resources/documenting-customary-tenure-in-myanmar-a-guidebook-first-edition/))

    - Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA): A Manual for CRS Field Workers and Partners, Volume I. ([https://www.crs.org/sites/default/files/tools-research/rapid-rural-appraisal-and-participatory-rural-appraisal.pdf](https://www.crs.org/sites/default/files/tools-research/rapid-rural-appraisal-and-participatory-rural-appraisal.pdf))

- **Annex C: Village Folios**

    - Community Profile Template

- **Annex E: Community Profile Interview Questionnaire Guide**

## BEST PRACTICES

- Ask assessment questions village by village as opposed to grouping representatives of several villages to respond together.

- Before the assessment, discuss the structure of questions that are relevant to the village with the team.

- Be flexible in the questions you ask; they will depend on a participant's answers and the specific situation of the village.

- Ask "Why?" often so that people reflect on their rules and values.

- If the participants do not know the history of their village, ask the elders.

- Write responses as they are spoken by interviewees to avoid misunderstandings.

- Choose a dedicated notetaker to ensure that the flow of information is uninterrupted.

- Record interviewee data such as the number of people interviewed, the number of men and women participants, those in leadership positions, and members of vulnerable or minority groups.

- Verify information by asking questions in different ways to different people.

# STEP 4: SPATIAL AWARENESS EXERCISES

**STEP 4: SPATIAL AWARENESS EXERCISES**

**People Involved:**

- Local organization (men and women)
- Community members (women, men, youth, and elders)

**Planning Considerations:**

- Following community sensitization (Step 2) and community profile interview (Step 3) activities, community members should already be familiar with the local organization and the community resource documentation process.
- This activity occurs at the village level, but can also be conducted with neighboring villages.
- Find times that work for community members to ensure participation.
- Identify a location in the village where there is space to lay large maps out on the floor or on desks or tables. Spatial awareness exercises often take place at village monasteries or schools.
- In light of the materials involved, at least three people from the local organization should be assigned to this step.
- Facilitators should study the UTM topographic and satellite maps before working with the community so that they are familiar with the maps.
- Some pilot teams benefitted from adding the UTM and satellite image maps to tablets for visual reference during activities.

4

**(CONTINUED)**

**Resources Needed:**

- Computer (Google Earth may be helpful for some teams)
- Smartphone or tablet
- Camera or smartphone for photographs
- Projector
- Two large-format vinyl maps: one UTM topographic map and one satellite imagery map. Scale should be no smaller than 1:10,000 so that detailed features are easy to see. Both maps should show exactly the same area at the same scale.
- Markers (both thick and thin, to include at least blue, red, black, and green)
- Roll of tracing paper or transparent plastic sheets
- Ruler
- Tape (clear and paper masking)
- Scissors or knife
- Large flipcharts (A0 size)
- Attendance sheets and meeting minutes form

**Timing Considerations:**

- Vinyl map preparation requires technical mapping skills and time to identify data and imagery. Plan time to prepare and print maps (see Section 4.1 below).
- Plan at least four hours with each village for this step. Village meetings should not last more than three hours in order to keep community members' attention. Activities may be split over two days as necessary.
- Make appointments to meet with communities when they are available. Note that this step is difficult to conduct at night as it requires good light.
- Prepare tracing paper or transparent plastic sheet overlay and sketch mapping stations before community members arrive, as this step requires many materials and time (see Section 4.7 below).

Spatial awareness exercises are the community's first exposure to participatory mapping. Participatory mapping is a process that involves community members and their knowledge of geographic features in their community. Through a series of broadly inclusive, interactive activities, community members identify important geographic information about their community. This information is translated to a computer so that it can be displayed on a formal map.

In this step the local organization facilitates participatory mapping activities with community members to document village boundary markers. Community members select committee representatives for future activities and identify boundary markers on large-format vinyl maps. This step includes a series of progressive mapping activities that generate data to be included in a GIS platform.

## PURPOSE

- To share, document, and discuss community members' land resources and community boundaries. This sharing and mapping creates a strong foundation for future mapping activities.

- To identify major features in the village area, reach agreement on community boundary markers, and identify areas where boundaries need clarification and verification.

- To select community representatives for future mapping activities.

## OUTPUT

- Village boundary markers identified, areas where boundary verification walks (Step 5) should occur identified, and committee representatives for future mapping activities selected.



### BOUNDARY MARKERS AND BOUNDARY LINES

For mapping purposes, it is helpful to know the difference between a boundary marker and a boundary line.

A **boundary marker** identifies a border between one village and another. Boundary markers are often large geographic features such as road junctions, river junctions, trees, bridges, or hilltops.

A **boundary line** also marks a border between one village and another, but it is a long, continuous feature such as a road or a stream.

## HOW THIS STEP WORKS

Read the "Planning Considerations" section on the first page of this step carefully as these exercises require preparation. Repeat this step in every village.

### 4.1    Prepare for the community meeting

Have the Mapping Specialist (or mapping resource organization) prepare two large-format maps of the village area: one UTM topographic map and one satellite image map. Identify the village area using the UTM topographic map and create a large-format (A0 or 4x6 feet) PDF. Create a satellite map of the exact same area using the same scale. It is very important that the UTM topographic map and the satellite image map show the same area at the same scale. Consult with a mapping resource organization on how to obtain or create imagery for the village tract. See Annex A for mapping resources that can help obtain UTM topographic and satellite image map data.

Print the two large-format village maps on vinyl (a service that should be available in most large towns in Myanmar). Purchase other materials at local stationery stores. Familiarize yourself with the UTM topographic map legend. Have a clear understanding of what each symbol on the UTM topographic map represents.

Purchase markers, flipcharts, tape, and other stationery items for mapping. LTP pilot teams used rolls of tracing paper, which can be purchased in Yangon. Other teams recommend using transparent plastic sheets for mapping as it can be difficult to see through tracing paper.

Ensure that all local organization team members have a good understanding of the spatial awareness exercise process and activities so that they can help the event run efficiently and smoothly.

**CONSULT YOUR MAPPING ACTION PLAN**

For villages that have overlapping, unclear, or conflicted boundaries with neighboring villages, consult your mapping action plan (see text box in Step 3). Talk to community members about how they want their village shown on the map. It is often helpful to conduct spatial awareness activities with individual villages first. Once individual villages have identified their boundaries, conduct a joint meeting with neighboring villages to review areas where boundaries are unclear, overlap, or conflicting. Use the vinyl maps and projector to facilitate joint discussions with communities.

During several LTP pilot mapping exercises, the boundaries of a small village were entirely within the boundary of a larger one. There were also instances of villages that had grown, resulting in overlapping boundaries with neighboring villages. In these situations, it is important to discuss with community members from all villages affected how they want their boundaries to be represented on the map. Where there is potential for disagreement, convene additional meetings between villages. Encourage neighboring villages to conduct boundary walks and land use inventories together, especially where there is overlap.

## 4.2 Open the meeting and set expectations

Open the meeting with introductions and a clear explanation of the purpose. Statements could include the following:

- "Today we are going to make a map of community boundaries. Have you ever seen a map? Have you ever drawn a map?"

- "Today we're going to select representatives to participate in future mapping activities. These are representatives of your community."

- "Women should be part of this meeting."

- "Today we want to learn what you know about your community and its boundaries."

## 4.3 Introduce sketch mapping

Explain how to draw a sketch map of the village and its land on a large flipchart.

Demonstrate how to draw a village with a monastery, school, road, and lake. Start at the center of the village. Show major features of the village on the sketch map. Do not use the actual village where you are working so that participants do not copy the example. Do not focus on cardinal directions (north, south, east, west). The focus of this exercise is to encourage participation and get community members thinking about their land resources.

After demonstrating how to draw a sketch map, divide community members into groups. Groups usually split naturally, often along gender and age lines. Encourage women, men, youth, and elders to draw sketch maps. Groups should not be larger than six members if possible.

### 4.4    Groups draw sketch maps

Give each group a large flipchart and markers. Ask each group to draw a map of their community, starting with a major landmarks (e.g., monastery, school, or health clinic). Next have them draw water features (lakes, streams, and water sources), roads, paths, community forests, grazing areas, houses, cultural landmarks, and other areas of interest. Ask what if any of these features are used to mark a boundary.



Again, do not focus on the cardinal directions as this can distract community members and take time away from the mapping. Local organizations can add this information to the sketch map later. Provide coaching and guidance to each group along the way, if needed.

## 4.5    Groups present their sketch maps

Ask a representative of each group to come to the front of the meeting and present their group's map. Ask each group to identify village boundary markers and boundary lines. Someone on your team should take notes on the boundary markers that are mentioned during the presentation.

Compare the different sketch maps. What did one group highlight more than another? Keep good examples of sketch maps for future reference.

## 4.6    Select village committee representatives



For community resource documentation to be successful, perspectives from all community representatives (including women, youth, and elders) are needed. Village committee representatives

help document village boundaries and resources and ensure broad buy-in from the community.

There is no need to create a new committee if one already exists (e.g., village development committee or social welfare committee). If community members agree, use an existing committee, with changes as needed to account for full community representation (i.e., women, men, youth, and elders).

Explain the roles and responsibilities of a committee member. Reference the following:

- The NLUP states the importance of committees in Part 2 Chapter 1.

- Committee members provide a representative, locally legitimate, transparent body to support the community and the local organization in documenting village boundaries and resources.

- Being a committee member for community resource documentation activities only requires a few hours on those days when the local organization team is at the village. Serving as a committee member does not require a daily time commitment.

- Recommend an odd number of committee members, typically five, seven, or nine members.

- Note that participation at future meetings is required whenever possible, so committee member commitment is very important.

- Encourage communities to appoint women, men, youth, the elderly, and members from other vulnerable groups to the committee.

## ENSURING THAT WOMEN, YOUTH, AND MINORITIES HAVE VOICE AND POWER ON THE VILLAGE COMMITTEE

To encourage the authentic participation of all members of the village committees, facilitators can:

- Support communities to elect strong, respected, and outspoken women, youth, and minority group representatives to the committee.

- Support committee rules stating that all committee members must speak before a decision is made, or other creative, locally appropriate guidelines to ensure that women, youth, and minority representatives' ideas are heard and their opinions considered during decision-making processes.

- Facilitate the community resource documentation process in such a way that men, elders, and leaders are shown by example that women, youth, and other groups have useful, informative, and important contributions to make about decisions concerning land and natural resource management, and thus should be given space to speak and listened to carefully.

- Offer specific training or strategy advice to committee members who may face discrimination or dismissal by more powerful committee members. Ensuring authentic participation by women and members of marginalized groups in community land governance is not a simple task. Community facilitators should talk directly to leaders and committee members about barriers to women's and minority groups' equal participation in land governance, and ask them to share their thoughts, opinions, and ideas. Together in dialogue with facilitators, the committee members may be able to speak about the issue openly and find creative, local solutions that will allow the voices of women and members of minority groups to be heard. Facilitators should allow the community to find its way to solutions that are culturally appropriate and can integrate well into existing culture and practices.

Adapted from Namati, *Community Land Facilitator's Guide, Ed. 1*, 2016.

As community members select them, ask committee members to come to the front of the room for recognition.

- Other community members should agree on the committee representation. Receive verbal agreement from men, women, youth, and members of other groups present that these members are able to describe the village boundary and are acceptable village representatives for future activities. This step is essential to ensuring that the full community accepts the mapping outputs at the completion of mapping activities.

- One of the local organization's team members should make note of committee member names.

- Take a photo of the list of committee member names.

After the committee is selected, the other community members are free to leave but may also stay and observe.

While this activity is underway, the local organization team members should set up for the next step (if all of Step 4 is to be completed in one day).

## 4.7    Introduce the **UTM** topographic map



Preparation for this step:

- Cut the tracing paper or transparent plastic sheet to a size that covers the vinyl map. This may involve using clear tape to combine pieces of tracing paper or plastic that are not as wide as the map.

- Clear and/or arrange for a large flat surface (floor, table, or desks) on which the map can be placed flat.

- Ensure that there is enough space for community members to gather around the surface where the map is laid out.

- Align the map so that the north edge of the map points north. (Use the compass app on your phone to determine where north is if necessary.) This will help community members to visualize better the correct direction.

Display the UTM topographic map so that all community members can see it. Introduce it using language similar to the following:

- "This map was created in 2004 so it does not show the current situation in the village. It does not show a lot of detailed village features. The map shows major features in the village area such as roads, streams, and settlement areas. We will use this map to identify major features as we talk about the village boundary."

## 4.8 Identify key features on the topographic map

Many village boundaries are formed by streams and roads. Identify major features on the UTM map. These include creeks, roads, mountains, and settlement areas. Explain different features so that committee members clearly understand what each symbol represents. Consult the legend for the UTM map, if needed.



Once committee members have a clear understanding of the symbols and lines on the UTM map, lay the tracing paper or transparent plastic sheet on top of the vinyl UTM map. Using paper masking tape, affix the tracing paper or transparent plastic sheet to the vinyl map. Using a ruler as a guide, trace the map border with a black marker on the tracing paper. This border drawn on the transparent layer (tracing paper or plastic) is an important reference.

Ask committee members to trace important features on the tracing paper. Committee members can draw streams in blue and roads in red. Explain that they should not trace contour lines.

Ask community members to name major features on the map such as roads, rivers, streams, mountain ridges, and settlement areas. Write these names alongside the features on the transparent layer (tracing paper or plastic) as community members provide them. Use a pencil to mark names for those features about which community members are uncertain. Most of the small streams will have no name on the topographic map, but they will have names on the ground. Stream and ridge names are important because facilitators can use these when communicating with the community members during this process.

### 4.9    Document the village boundary on the topographic map

After committee members have identified and named major features, ask them to identify boundary markers and boundary lines. Start at a well-known and easily identifiable boundary marker, such as a bridge or a road junction. Mark the boundary marker with a star on the transparent layer (tracing paper or plastic) using a green marker.

Continue asking questions of community members to identify boundary markers. Work your way from one boundary marker to another, making note of boundary markers and lines with a green marker. Draw green arrows along boundary lines to mark the village boundary.

There may be confusion over some boundary markers and boundary lines. When there is confusion, introduce the satellite image map as a more updated reference.

## 4.10    Introduce the satellite image map

Display the satellite image map so that all community members can see it. Introduce it using language similar to the following:

- "This map is a picture of the village area taken from the sky. It shows large and small features such as roads and individual houses. It shows the exact same area as the UTM topographic map. We use this map to help identify a village boundary and will also use it for future mapping activities."

### 4.11 Update features with the satellite image map

Lay the transparent layer (tracing paper or plastic) map on top of the satellite image map. (During preparation, the UTM topographic map and satellite image map should have been created to show the same area at the same scale.) Demonstrate how the same features are visible on the satellite image map as on the UTM topographic map. Point out roads, rivers, settlement areas, and other features on the satellite map.

Review areas from the UTM topographic map about which committee members were confused or unclear. See if any of the features are clearer on the satellite image map.

Update boundary marker and boundary line information on the transparent layer (tracing paper or plastic) map. The village boundary markers and boundary lines should now be complete. For features that cannot be identified on the maps, take careful note of their location as they will require a boundary verification walk.

## 4.12    Create a list of boundary markers

Using the transparent layer (tracing paper or plastic) map as a guide, make a list of boundary markers on a flipchart. Take a photo of the flipchart of boundary markers to keep as a record. Present the list of boundary markers to committee members for their feedback and agreement.



## 4.13    Identify areas for boundary walk

Some areas of the village boundary are easy to identify on satellite imagery. These are areas such as streams and roads. Make note of areas that are not clearly identifiable on satellite imagery. These areas should be marked for a boundary walk. Any boundary markers or boundary lines that are not streams or roads should be included in a boundary verification walk (see Step 5).

Write the date and participant list on the transparent layer (tracing paper or plastic) map. Take a photo of the transparent layer map to save for reference.

## 4.14    Lead discussion on next steps

Review the nine steps of the community resource documentation process with the committee members. Explain the next steps and when the team will next visit the village. Answer any questions from committee members.

## 4.15    Process and manage spatial data

After completing all spatial awareness exercises, return to the office for data management. LTP recommends saving the following data and information to village data folders (making sure to follow clear and consistent file naming conventions):

• Photo of committee member names

• Photo of the transparent layer (tracing paper or plastic) map

• Photo of the list of boundary markers

• Meeting notes (in particular, areas where boundary verification walks are required)

• Written list and description of boundary markers and boundary lines

Digitize village boundary lines that do not require a boundary verification walk. These include roads and large streams or rivers that are easily visible on satellite imagery. Save the village boundary layer as a line shapefile.



• For recommended shapefile attributes, see Annex H.

- For tutorials on digitizing, see Annex A: MIMU GIS Training (http://themimu.info/sites/themimu.info/files/documents/Manual_ Basic_QGIS_Training_V.03_Jan2016_MMR.pdf).

Digitize major features of interest that are not village boundaries. These may include roads, streams, pagodas, schools, churches, or railroad tracks. They may be points, lines, or polygons.
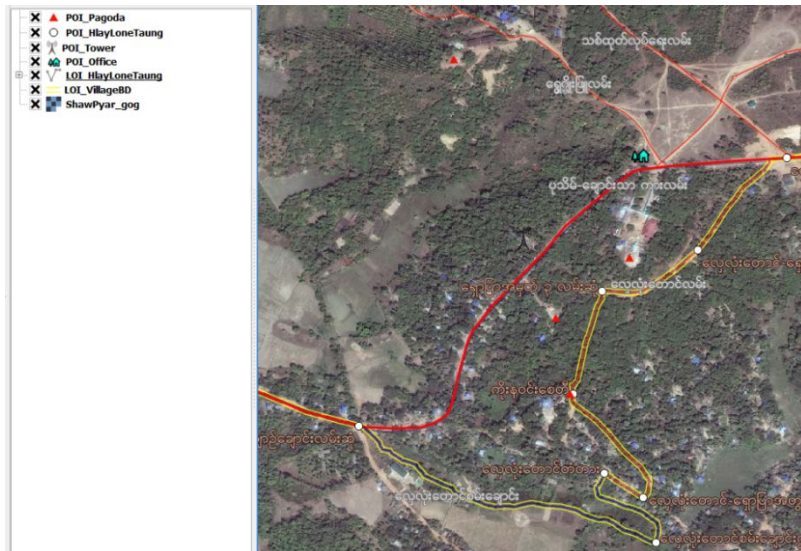


## DATA OUTPUT

- Line segment shapefile layers of village boundary, major features of interest (point, line, polygon)

## REFERENCES

- **Annex A: Resources – Mapping**

  – MIMU GIS Training (http://themimu.info/sites/themimu.info/files/documents/Man ual_Basic_QGIS_Training_V.03_Jan2016_MMR.pdf)

## BEST PRACTICES

- Prepare all members of the local organization team in advance so that everyone clearly understands the spatial awareness exercises and can help facilitate the process.

- Take time to select community committee members. Do not rush through the process. Have a separate meeting if necessary.

- Share the importance of women, youth, and ethnic minority participation throughout the process, especially as members of the committee. Only through representation of the community can the map created be accurate.

- Invite representatives from neighboring communities to attend the community meeting.

- Ask community elders to provide input into historic boundaries between neighboring villages.

- Take photos of the results at the end of the day.

# STEP 5: BOUNDARY VERIFICATION WALK

## STEP 5: BOUNDARY VERIFICATION WALK

### People Involved:

- Local organization (men and women)
- Community members from village that participated in Step 4 (women, men, youth, and elders)
- Community members from neighboring villages (women, men, youth, and elders)

### Planning Considerations:

- Determine how the team will collect boundary markers and boundary lines (e.g., smartphone/tablet with a mobile data collection or GPS app, or a traditional handheld GPS unit).
- Prepare the data collection form, either paper or electronic (see Annex H).
- If using a phone or tablet, make sure the device is charged before beginning this activity. Have back-up power sources (power banks or solar-powered chargers). If using a handheld GPS unit, bring extra batteries. If collecting data during the rainy season, make sure to have a waterproof case.
- Bring a list of boundary markers to the field (on paper or on a smartphone/tablet). A photo of the tracing paper map on a smartphone/tablet may also be helpful.
- Load the satellite image map or a Google Maps version on a smartphone/tablet for reference. This will help to double check locations during boundary walk activities.
- Arrange for transportation if needed (e.g., boat, motorcycle, or truck).

5

**(CONTINUED)**

**Resources Needed:**

- Camera
- Smartphone/tablet and data collection app
- GPS unit and battery
- Attendance sheets
- Notebook and pen
- Boots and raingear during rainy season

**Timing Considerations:**

- Some boundary walks can be long, so be prepared with the proper walking shoes, hats, water, and food.

5

Conduct this step after completing the spatial awareness exercises for the village. In this step, walk with committee members to verify village boundaries and collect spatial data using a handheld GPS unit or mobile device. During spatial awareness exercises (Step 4), the team identified areas necessary for the boundary verification walk. Boundaries formed by large streams or roads generally do not require a boundary verification walk; however, all other boundary lines should be verified.

For local organizations that do not have mapping experience, consult with a local mapping organization about this step. Annex A has resources for data collection training.

Careful planning is required to collect boundary verification walk data successfully. Before beginning this step, familiarize yourself with how to collect data on GPS or mobile data collection apps. See Annex A for training resources on mobile data collection (http://pdf.usaid.gov/pdf_docs/PA00N2R9.pdf) and handheld GPS data collection (http://pdf.usaid.gov/pdf_docs/PA00N2R8.pdf). See Annex J for an overview of mobile data collection options for participatory mapping. Encourage community participation in boundary walks, and include women and youth in the activity to ensure representation.



## PURPOSE

- To collect data with community members to verify community boundaries.

## OUTPUT

- Verified village boundary markers and boundary line.

## MAPPING ACTION PLAN: CONDUCT JOINT BOUNDARY WALKS

It is important to include neighboring villages on boundary walks whenever possible. For villages that have overlapping, unclear, or conflicted boundaries with neighboring villages, the mapping action plan should include joint boundary walks that involve neighboring villages. Before the boundary walk, hold a meeting with the villages involved and discuss where the boundary walk will occur. While walking the boundary, community members may discuss and alter the walk. After finishing the boundary walk, display results to the committees and village leaders and discuss problematic areas to work toward consensus. Use a printout of a map with the boundary walk results or display the boundary walk data during the meeting using a projector.

## BOUNDARY MARKER AND BOUNDARY LINE CONFIDENCE LEVEL

LTP pilot teams utilized a confidence level designation to collect boundary marker and boundary line data. The green, yellow, and red confidence levels reflect the community's understanding of and confidence in the data. If a boundary marker is red or yellow confidence, take notes on the reason why.

**Green:** Boundary markers or boundary lines where there is no disagreement within a community or between communities, and the geographic feature is well understood by many, if not all, community members. These features can usually be determined from satellite imagery. Examples include roads, rivers, monasteries, and bridges.

**Yellow:** Boundary markers or boundary lines where there is confusion or lack of understanding within the village and perhaps with neighboring villages. These features are not openly disputed, but they are also not clear. These boundaries are sometimes described as "fuzzy." Boundary walks are recommended for these areas. Examples include footpaths, large trees, small streams, and gullies.

**Red:** Boundary markers or boundary lines where there is conflict or where it is too dangerous to travel. These features demonstrate areas of disagreement within a community or between neighboring communities. In some pilot sites, community members refused to participate in the boundary walk in these areas due to the presence of wild animals or gangs.

## HOW THIS STEP WORKS

### 5.1    Prepare for the boundary walk

Before joining the committee members in the village:

- Develop the boundary walk data collection form (see Annex H for an example). If using a mobile data collection app, build and test the boundary walk form on the mobile device. If using a handheld GPS unit, develop a paper-based form for back-up.

- Test boundary walk data collection before traveling to the village. If using a mobile data collection app, check that the form is loaded to the device and ready to use.

- Charge the smartphone/tablet or carry extra batteries for the GPS unit. Bring back-up power supply, if possible.

- Carry a photo of the tracing paper (or transparent plastic) map on a smartphone/tablet. Also carry a list of boundary markers for reference during the boundary walk.

## 5.2    Conduct GPS data collection training

Show the boundary walk data collection form to committee members and explain what information the team will be collecting. Explain how to enter data on the handheld GPS unit or tablet so committee members are aware of what you are collecting and how the data will be used. Pilot team members mostly collected data themselves, but feel free to train community members in data collection if they are interested,

See Annex A for links to GPS training (http://pdf.usaid.gov/pdf_docs/PA00N2R8.pdf) and mobile data collection training resources (http://pdf.usaid.gov/pdf_docs/PA00N2R9.pdf).



**TIPS FOR USING GPS ON A SMARTPHONE/TABLET**

- Turn off Bluetooth and other apps to save the device's battery life.
- Make sure the location mode is turned on (status should be visible on the device's notification bar).
- GPS will only track properly while outdoors.
- Save collected waypoints offline on the device.
- Protect the tablet from entering water, direct sunlight, and dust. Use a waterproof case.

## 5.3    Conduct boundary walk with committee members

Schedule a time with the committee members when they have half a day or more to conduct the boundary walk. Review and confirm boundary marker names with the committee members, and set the route for the boundary walk with them.

During the boundary walk, collect points for boundary markers and tracks (lines that follow where the team walked) for boundary lines.

Pilot teams collected boundary marker data with a mobile data collection application called Kobo Toolbox. Teams also collected boundary line data using a handheld GPS unit.



Take pictures during the boundary walk to document the exercise. Photos should show who from the community participated on the walk and where the walk occurred.

## 5.4      Process and manage data

After finishing the boundary walk with committee members, upload and process the data.

Import data to computer:

- If using a handheld GPS unit, download GPX data from the handheld device to the computer.

- If using a mobile data collection app, download and save the data collected to the computer. For many apps this may involve downloading data from the server, often saved in CSV format. Latitudinal and longitudinal information may need to be separated into different columns.

Load the data to QGIS:

- For GPX data, enable the QGIS "GPS Tools" plug-in and load the GPX file to QGIS.

- For many mobile data applications, you will load a CSV file containing the spatial data.

Export the data as a shapefile:

- Save the files so that the file name includes information on the village, when the data was collected, and if the data collected was boundary markers (waypoints) or boundary lines (tracks, segments).

Check the data in QGIS to ensure that this it is complete and accurate. Boundary markers should align with boundary lines.

- Check and correct the GPS data as needed. There is a margin of error for GPS units as the path walked does not always align exactly with the actual boundary. Digitize the actual boundary line, not just the GPS track as it was collected.

*NOTE: Some LTP pilot areas were too dangerous or inaccessible to allow completion of boundary walks. Make a note of areas that could not be walked in the village boundary attribute table. Make sure this information appears on the final maps and in the village folio.*
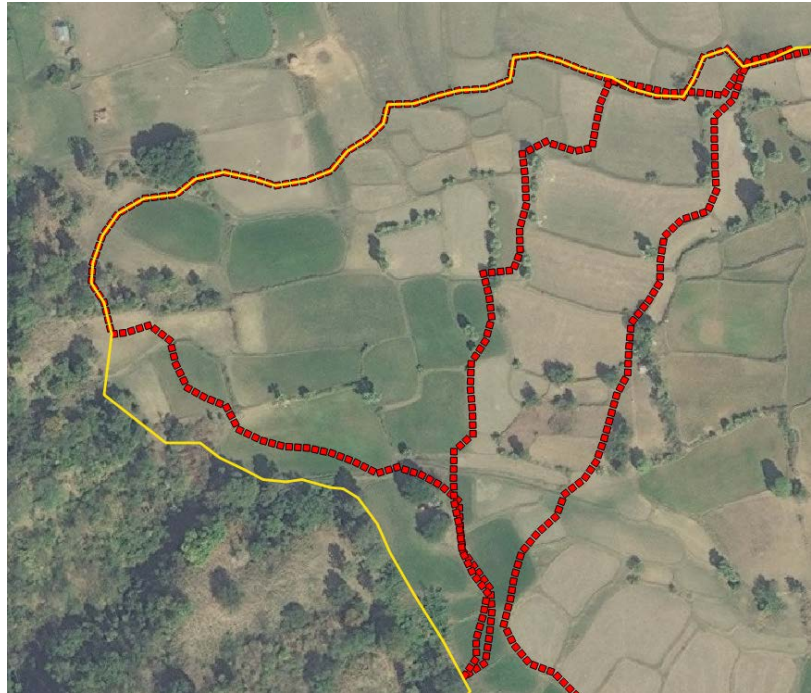
Combine boundary walk segments with digitized village boundary segments from Step 4. To combine the two data types, merge or copy geometry in QGIS. This should result in a complete village boundary.

- Ensure that attribute data for the line shapefile layer is complete. The attribute table should include the boundary line type (road, creek, footpath), confidence level (red, yellow, green), and means of verification (digitized, boundary walked). See Annex H for an example attribute table for boundary line data.

When the line village boundary is complete, convert the entire boundary to a polygon shapefile.

Update the features of interest data described in Step 4. These data layers may be point, line, or polygon and show features that are important to the community but are not necessarily part of the village boundary.

## DATA OUTPUT

- Boundary marker point layer for each village, village boundary line and polygon shapefiles, updated features of interest layers (point, line, polygon)

## REFERENCES

- **Annex A: Resources**

  – Fundamentals of Global Positioning System Use
    (http://pdf.usaid.gov/pdf_docs/PA00N2R8.pdf)

  – Using Mobile Mapping Application (Kobo) in the Land
    Tenure Project
    (http://pdf.usaid.gov/pdf_docs/PA00N2R9.pdf)

- **Annex H: Example Data Collection Forms and
  Attribute Tables**

- **Annex J: Mobile Data Collection Options for
  Participatory Mapping**

## BEST PRACTICES

- Neighboring villages should be involved in conducting
  boundary walks and verifying community maps.

- If possible, arrange for boundary walks in the dry season.

- Any type of vehicle is appropriate for boundary walks
  (e.g., ox cart, motorbike, or boat).

- Be informed of potential risks in areas to be walked (i.e.,
  snakes, elephants, dense forests, waterways, and
  potential flooding). Take precautions or reschedule
  wherever possible.

- Take photos of boundary markers.

- Have back-up power for smartphones/tablets or GPS
  units. Duplicate data collection is better than lost data.

- Download and back up boundary walk data regularly
  from the GPS unit or smartphone/tablet. Do not forget
  to back up data!

# STEP 6:
# LAND USE INVENTORY

## STEP 6: LAND USE INVENTORY

### People Involved:

- Local organization (men and women)
- Village committee members (women, men, youth, and elders)

### Planning Considerations:

- Before the community meeting, identify and digitize major land uses using satellite imagery and build the QGIS attribute table using drop-down lists for land use types. This will help make data collection faster and keep community members interested.

### Resources Needed:

- Computer
- Camera
- Tablet/smartphone
- Projector and screen
- QGIS
- Satellite image vinyl map
- Land type classifications poster
- Attendance sheets and meeting minutes form
- Flipcharts
- Markers

### Timing Considerations:

- Arrange a meeting time and place so that both women and men from the community can attend.
- Community meeting should not last more than three hours.

6

In this step, village committee members meet to review village boundaries and identify land uses. This community meeting also involves raising awareness about government land type classifications.

Before starting this step, complete the spatial awareness exercises (Step 4) and boundary verification walk (Step 5), as well as the spatial data processing that follows each step. Steps 4 and 5 generate information about the village boundary that is needed for the land use inventory. Step 6 requires significant time for data processing before meeting the community. Plan to leave time for data processing after finishing the boundary walk and before the land use inventory. The GIS processes involved in creating land use inventory data are more complicated than previous steps and may require additional resources or training.

LTP pilot teams found preparing draft land use data before the community meeting to be essential. For this task, the Mapping Specialist identifies and digitizes major, visible land uses in the village before the meeting. These land uses may include settlement areas, large farm plots, lakes, and forested areas. When visible land use data is not prepared before the community meeting, data collection takes too long and community members lose interest in the process.

## PURPOSE

- To assist village committee members to document how land is used in their village and learn about government classifications of land.

## OUTPUT

- Map showing how communities use land in the village.





## MAPPING ACTION PLAN: CONDUCT A COMBINED LAND USE INVENTORY

Where there is confusion or disagreement about land uses or where communities share access and use of resources, invite neighboring villages to participate in land use inventory meetings. Facilitate conversations about problematic land uses. Note that land uses can be displayed on maps to show use by multiple villages, families, or individuals.

## MAPPING VISIBLE LAND USE, COMMUNITY LAND USE, AND LAND TYPE CLASSIFICATION

Land use may appear simple on a map, but it can be quite complex in practice. Communities may use a field differently from one season to another. Areas where farmers cultivate crops in the dry season may be fishing areas in the rainy season. Areas classified as forest may actually be used by community members for firewood or bamboo-cutting. Some areas may be used by multiple villages.

Data and maps produced during land use inventory should describe different levels of land use. Maps should display the community's perception of how they use that plot of land. Some communities may also want to map previous land use, especially for areas that were common use at one time, such as pasture land or firewood plantations. Community members should understand that a land use map that is 100% correct is not possible with the methodology described here, but that this process will identify major land uses understood by the entire community. Also note that this process does not describe mapping individual parcels, but could be adapted to incorporate such mapping needs.

To help guide the land use inventory process, LTP has created three different designations:

**Visible Land Use:** These land uses can be identified from satellite imagery. They include forested areas, lakes, farmland, mangroves, rubber, oil palms, and settlement areas. These land uses should be identified on maps prior to the community land use inventory meeting. This data layer is sometimes called land cover.

**Community Land Use:** These land uses describe how the community uses an area of land or resource. Areas that appear as farmland on the satellite imagery visible land use may be used for grazing. Some areas may be smallholder plots and others private plantations. The goal of the land use inventory meeting is to elicit this type of information from community members and make sure it is reflected on community maps. Community land use cannot necessarily be identified from satellite imagery alone. It is important to have an open conversation with community members to ensure that the maps capture what communities perceive as their land uses.

**Land Type Classification:** These government designations for land (see Annex G) describe formal land types classifications. For example, an area designated as a forest for firewood extraction or bamboo-cutting by community members may be classified as a community forest, protected public forest, or forest reserve. Community farmlands may be classified as garden lands, perennial crop lands, lowland, etc.

# HOW THIS STEP WORKS

## 6.1     Prepare for the community meeting

Before the meeting with the community, have the Mapping Specialist (or mapping resource organization) carry out the following steps:

- Prepare the village boundary data (boundary markers and lines) to review with the community. Use the actions outlined above in Section 5.4 as a reference.

- Digitize visible land uses that are easily identifiable from satellite imagery. These features may include farmland, settlement areas, lakes, and forested areas (see table). Build the attribute table with pre-defined visible land use categories to enable rapid data entry during the community meeting (see Annex H for the attributes LTP pilot teams included). These visible land uses will need to be edited and refined during the community meeting.
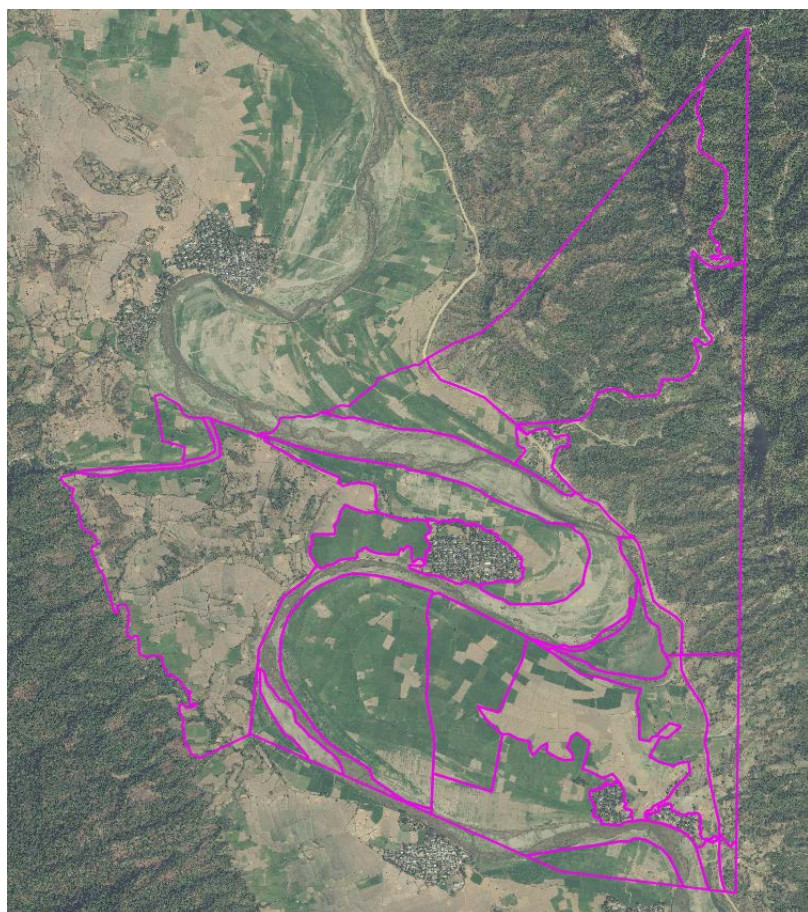


| COMMON LAND USES IDENTIFIED DURING LAND USE INVENTORY |
| --- |
| Clinic |
| Common Use |
| Farmland |
| Firewood Plantation |
| Forest |
| Graveyard |
| Grazing Land |
| Market |
| Microwave Tower |
| Monastery |
| Other |
| Paddy |
| Pagoda |
| Plantation |
| Playground |
| Quarry |
| School |
| Settlement |
| Spiritual Site |
| Water Body |
| Yarland |

## 6.2    Open the meeting and set expectations

Introduce the purpose of the day's activities. Statements could include the following:

- "The meeting will review the village boundary data collected in previous steps."

- "The purpose of a land use inventory is to identify and document how the community currently uses land."

- "The NLUP mandates identification of land classifications (Agricultural Land, Forest Land, and Other Land). These are formal government land classifications."

- "The purpose of the land use inventory is to understand community land use. The meeting will focus on identifying areas of community use, not individual land uses."

## 6.3    Review the village boundary

Review the community resource documentation process to date and share the village boundary map produced before the meeting. The map can be shown using a computer and projector. Show the community the corresponding areas on the large-format vinyl satellite image map.

## 6.4    List and identify land use classes

Ask about land uses in the village. Questions could include the following:

- "How do you use your land? What land uses do you have here?"

Ask community members to describe their land uses. Remind them that they are mapping community land uses, not individual parcels. Record village land uses on a flipchart. Continue to ask community members questions about land uses until they have described the entire village area.

Introduce the land type classifications poster and describe the different land classifications. See Annex G for a narrative on how to describe the land types classifications. Relate the land uses described by community members to the land types classifications poster. Ask the group, "What is considered agricultural land? Forest land? Other land?"

Take a photo of the flipchart of land uses to record how the community perceives their lands.

## 6.5    Collect land use data

Use the flipchart with land uses and the large-format vinyl satellite image map for this step. Lay the map on the floor or a similar flat surface where many committee members can participate.

Relate the land use types flipchart to the vinyl map. Invite committee members to gather around the map and identify areas where the land uses are present. Questions could include the following:

- "You've listed community forest on the flipchart. Can you show me where on the vinyl map the community forest is?"

Encourage women to participate in the conversation and make space for them around the map.

As committee members identify land use locations, ask them to draw the outline of the area on the vinyl map. Community members should draw and write the name of the land use on the map. Use thin markers to draw and label land uses. Marker can be wiped off of the vinyl map if using the map in more than one village.

For many LTP pilot teams, the Community Engagement Specialist facilitated questions and the drawing of land uses while the Mapping Specialist entered the corresponding data into QGIS.

- Make sure to keep the drawing and naming of land uses to a slow pace so that the Mapping Specialist can keep up with data entry and editing.

- Start with land uses that cover a large area (farmland, plantation area, settlement area) to identify how communities use the different areas. Slowly work into smaller, more detailed land uses (monastery, school, clinic, pagoda).

- Some visible land uses identified before the meeting will need to be edited and adjusted to reflect community information.

- New land uses should be added at this time.

- Where the vinyl map does not show enough detail on the satellite image, zoom in on the computer and show the more detailed area on the satellite image. This will help community members to confirm the locations of land uses.

Continue the process of facilitating questions and drawing with markers while the Mapping Specialist enters data into QGIS until committee members have identified all village land uses. Sometimes communities identify areas that they use outside of their village boundaries. Make note of these and include them in the data entry. These areas will need to be reviewed during Step 7.

Take a photo of the vinyl map with land use names written in marker to save a record of the mapping activity.

## 6.6    Review data collected and identify small land uses

Turn on the projector to review the land use data collected so far on the screen. Slowly zoom in and out on QGIS. Be careful not to zoom in and out too fast as community members will get confused.

Work with the village committee to identify smaller land uses and to confirm identified land uses.

Review with the group how large blocks of land are managed and owned. For example, are the land uses privately owned, community managed, or government held? This question is most relevant for plantation areas.

## 6.7    Discuss next steps in the community resource documentation process

Explain that the information provided during the meeting will be included on the village map. The next step is to conduct a meeting with the community to review the map. After the community reviews and provides feedback on the map, the local organization will host a multi-stakeholder dialogue to present the final maps and village folios. The local organization will provide a copy of the map and folio to the communities and to local authorities.

## 6.8    Process spatial data and create draft map

Before the land use inventory meeting:

- Convert the village boundary line shapefile to a polygon shapefile. This polygon shapefile is the village land use layer.

- Build a standard attribute table for land use that includes the local name, visible land use type, community land use, crops grown, villages that access this land, and resources. See Annex H for an example attribute table that LTP pilot teams used.

- Digitize visible land uses (farmland, plantation area, settlement area) using the polygon layer.

    – Use advanced digitizing tools such as "Add Ring" and "Reshape Feature" to edit the polygon layer.

    – Set topological editing to ensure data quality.

- Before going to the community, prepare the village boundary line shapefile to review with community members. Also be prepared to edit and update the land use shapefile.

After the land use inventory meeting, update the village folder in the following ways:

- Save a photo of the flipchart of land use types identified by the community.

- Save a photo of the vinyl satellite image map with land uses written on it.

- Update the village boundary with any changes recommended by the community.

- Update the land use data based on community feedback.

- There will likely be data errors from quickly entering information during the meeting. This is normal. Use the topology checker to identify gaps and overlaps in spatial data.

- Clean and process spatial data until topological errors have been fixed. Note that LTP pilot teams needed several days to clean data.

- Complete attribute table data, following up with community members as needed.

- Update the features of interest data described in Steps 4 and 5. These data layers may be point, line, or polygon and show features that are important to the community, but are not necessarily part of the village boundary.

**MAPPING ACTION PLAN: ADD OVERLAPPING OR DISPUTED BOUNDARIES TO A MAP**

Remember that it may not always be possible to resolve boundary or land use conflicts or disagreements between villages. Longstanding conflicts or land issues should be reflected on the map. Overlapping or conflicted boundaries can be displayed on a map with a dotted line or cross-hatched area.
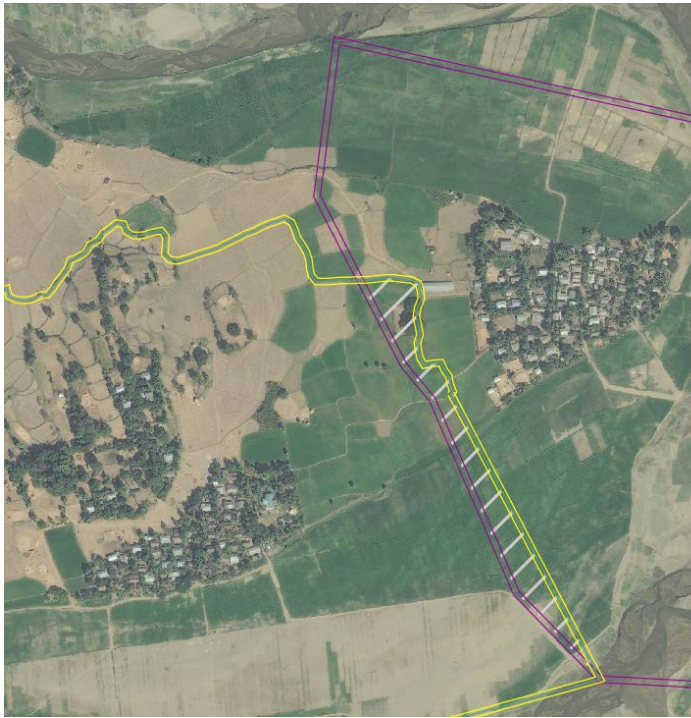


## DATA OUTPUT

- Village boundary layer, village land use layer, updated features of interest layers.

## REFERENCES

- **Annex A: Resources**

  - Land Type Classifications Poster
    (http://pdf.usaid.gov/pdf_docs/PA00N2RH.pdf)

  - MRLG Documenting Customary Tenure in Myanmar: A
    Guidebook, Chapter 6 for strategies to obtain information
    from community on land use and management
    (http://mrlg.org/resources/documenting-customary-tenure-
    in-myanmar-a-guidebook-first-edition/)

- **Annex G: Land Type Classifications and Responsible
  Ministries Poster Talking Points**

- **Annex H: Example Data Collection Forms and
  Attribute Tables – Village Land Use**

### BEST PRACTICES

- Keep land use questions simple during the
  community meeting.

- Community members may identify land that is
  used outside of the village boundaries. This
  information should be included during the land
  use inventory as it is a full representation of the
  community's understanding of their lands.

- Take photos of the results at the end of the day.

- Build the attribute table in QGIS before the
  community meeting so that the Mapping
  Specialist can use a drop-down list when
  identifying land use types.

- Check for data standards and processing tools in
  order to be compatible with other land-related
  initiatives in Myanmar, including OneMap
  Myanmar.

# STEP 7: COMMUNITY MEETING TO REVIEW MAPPING

## STEP 7: COMMUNITY MEETING TO REVIEW MAPPING

**People Involved:**

- Local organization (men and women)
- Village committee members (women, men, youth, and elders)
- Local authorities, Village Tract Administrator, and other relevant authorities

**Planning Considerations:**

- Prepare and review all draft boundary and land use maps before meeting.
- Encourage as much participation as possible. The more people in attendance, the greater the degree of village tract networking and, therefore, the more productive the meeting will be.
- Select a location that community members can easily access.
- Include facilitator-led presentations, group exercises, and participation by all in active discussions, with an easy-to-follow structure (the overall format can vary).

**Resources Needed:**

- Computer
- Camera

7

**(CONTINUED)**

- Tablet/smartphone
- Projector and screen
- Flipcharts
- Colored pens
- Post-it notes
- Attendance sheets and meeting minutes form
- Venue rental
- PowerPoint presentation

**Timing Considerations:**

- Consider spreading this step across two days to break up the time commitment.

7

In this step, committee members from all villages meet at the village tract level to learn about the land legal framework, review mapping outputs, and discuss land issues. Local organizations may identify a resource organization to provide land legal awareness if they are not confident in providing this training. Local organizations should determine whether to include local authorities in this meeting.

## PURPOSE

- To review maps with village committee members to reach agreement on any changes necessary. This meeting encourages discussion and relationship-building and helps community members voice any land issues or concerns and brainstorm ideas of how villages can work together to solve issues.

## OUTPUT

- Revised village maps, list of important land issues.

## HOW THIS STEP WORKS

### 7.1     Facilitate committee member introductions

Use different kinds of introduction games to allow participants to get to know one another. See Annex A for introduction game resources.



### 7.2     Conduct activities to encourage meeting participation

Set ground rules by asking participants for suggested rules during the meeting. Write ground rules on a flipchart and post them on the wall for the remainder of the meeting.

## MAPPING ACTION PLAN: HOLD STEPWISE COMMITTEE MEETINGS

For villages where there is potential for disagreement over boundaries or land uses, schedule a separate intermediate community committee meeting to review outputs with only the selected villages. Plan team-building activities for members of neighboring communities to work together, and allow for substantial time to discuss land concerns between the villages. Keep a written record of the meeting and ask committee members to agree to the meeting statement if consensus is reached. Continue with a large, village tract-wide committee meeting after completing smaller meetings between communities.

Ask participants to write their expectations for the meeting on Post-it notes. Include these notes on an expectation tree. Explain the purpose of the meeting and agenda.

Introduce the "parking lot" concept and explain that it is a safe space where participants can list issues, topics, and questions that they think of during the meeting but that may not have been addressed. The parking lot can be listed on a flipchart posted on the wall and discussed informally during breaks.

### 7.3 Conduct awareness training on land legal framework

Provide an overview of the land legal framework that deals with the documentation of community land resources, including the NLUP; the Vacant, Fallow, and Virgin (VFV) Land Management Law; and the Farmland Law. Resources for legal awareness training are provided in Annex A – Legal Framework. Consult with the Land Core Group if the local organization team needs additional resources for legal awareness training.

Give participants a chance to ask questions related to the NLUP or other laws. Encourage local authorities to provide answers to any questions from community members.

### 7.4 Review community boundary and land use inventory

Ask each village to review their village map in small groups. They should be able to identify the village boundary markers and land uses in their village on their map.

Next, mix the groups so that there is one representative from each village in a small group. Ask committee members to take turns presenting their village boundaries to other members of the small group using individual village maps as a guide. Ask each group to make note of any areas where they have changes or disagreement.

Gather the entire group back together and ask each small group to report out on their presentations. Make note of any changes to the map or any potential conflicts.

**7.5      Lead discussion of land issues within the village tract**

Ask participants to think about important land issues that have occurred in the area. Divide participants into smaller groups. Ask each group to identify land-related issues they face that affect their livelihoods. Write their ideas on a flipchart. Have each group present their land issues to the larger group. Write all land issues mentioned on one flipchart and keep score of how frequently an issue is mentioned. Rank the results based on their score.

**EXAMPLE LAND ISSUES RANKING TABLE**

| # | Land Issue Identified | Number of Votes |
|---|---|---|
| 1 | Outside, private company leasing land in the village area | 23 |
| 2 | Paddy fields and crops destroyed by the government or invasion of wild elephants | 16 |
| 3 | Losing areas previously used to grow bamboo or firewood species | 14 |
| 4 | Lack of land for annual or perennial crop planting | 12 |
| 5 | Lack of grazing land in the village tract area | 9 |
| 6 | Farmers who lost their land to private land leases | 5 |
| 7 | No registration of land tenure | 3 |

**7.6      Discuss potential solutions for land issues**

Ask participants to think about possible solutions and support needed for the top three priority land issues. Divide participants into smaller groups to identify possible solutions. Ask each group to write their ideas on a flipchart. Invite a representative from each group to present their proposed solutions to the land issues. Write the collective results on a flipchart.

Some land issues will need outside support for resolution. See Annex A for potential resources on conflict resolution and land dispute mitigation.

### 7.7   Wrap up and answer questions

At the close of the day, review the participants' expectation tree and meeting objectives. Summarize the workshop results. Allow time for additional questions from participants.

## REFERENCES

- **Annex A: Resources**
    - Legal Framework Training (http://pdf.usaid.gov/pdf_docs/PA00N2RN.pdf)

- **Annex D: Example Agendas**
    - Community Committee Meeting

## BEST PRACTICES

- Neighboring villages should be involved in the verification of community boundary maps.

- The review may take several meetings if the community has changes or if there is conflict.

- Not all land issues can be resolved with the help of the local organization. Know what resources are available to help the communities to resolve any disputes or answer unanswered questions.

# STEP 8: MULTI-STAKEHOLDER MEETING

## STEP 8: MULTI-STAKEHOLDER MEETING

### People Involved:

- Local organization
- Community members (women, men, youth, and elders)
- Local authorities (village leaders, Village Tract Administrators, representatives from GAD, DALMS, and MONREC)
- MPs, state/regional ministers
- Representatives from CSOs and other relevant stakeholders

### Planning Considerations:

- If holding the folio handover ceremony in the afternoon, arrange for lunch if possible.
- Ensure that printing and preparations are complete before the meeting. Printing maps may be more difficult in smaller towns.

### Resources Needed:

- Computer
- Camera
- Tablet/smartphone
- Projector and screen
- Agendas
- Village maps
- Attendance sheets and meeting minutes form
- Venue rental

### Timing Considerations:

- The meeting should not take more than three hours.
- This meeting can be combined with Step 9: Village Folio Handover Ceremony.

8

In this step, community members and local authorities interact to discuss local land issues. Present information that was created during the documentation process. Participants discuss and identify priority land issues.

## PURPOSE

- To allow community members to contribute their voice and input about local land resource concerns. This meeting engages community members and local authorities in transparent, participatory dialogue around government services for communities and clarifies roles and responsibilities between government and communities.

## OUTPUT

- Enhanced engagement between communities and local authorities.

## HOW THIS STEP WORKS

### 8.1 Invite participants to the meeting and prepare community members

Invite local authorities, including village leaders, Village Tract Administrators, and representatives from GAD, DALMS, and MONREC, to participate in the meeting. Also invite state/regional ministers, MPs, other CSOs, and other relevant stakeholders.

Before the meeting, visit each village to prepare community members on how to present their land issues to government authorities. This will help community members feel more comfortable in the meeting and will result in better dialogue.

**8.2    Introduce local authorities, community participants, and local organization**

Ask all participants to introduce themselves, stating their name and where they are from.

**8.3    Review community resource documentation activities**

With the help of village committee members, review the steps (1 through 7) that have occurred in each village within the village tract.

**8.4    Community representatives present the maps and land issues in their village**

Ask representatives from at least two of the village committees in the village tract to present the land issues that were discussed at the community meeting in Step 7.

**8.5    Government authorities respond to the map presentations and present perceptions of land issues in the village tract and discuss roles and responsibilities**

Ask participating local authorities to respond to the land issues that were presented by the community members.

**8.6    Lead discussion of community land rights, recognition, and next steps**

Facilitate a discussion between the government and community members on the resource documentation process, land issues, and resources for the community members within the village tract. This is an opportunity for community members to ask government representatives any questions that they may have.

## REFERENCES

- **Annex D: Example Agendas**
  - Multi-Stakeholder Meeting Dialogue Agenda

## BEST PRACTICES

- Encourage community members to ask questions; if they are hesitant, the local organization can ask questions based on topics that have come up throughout the documentation process.

- Provide an opportunity for everyone to speak.

# STEP 9: VILLAGE FOLIO HANDOVER CEREMONY

**STEP 9: VILLAGE FOLIO HANDOVER CEREMONY**

**People Involved:**

- Local organization
- Community members (women, men, youth and elders)
- Village leaders
- Village Tract Administrators
- Township officials from MONREC, DALMS, and GAD
- Members of Parliament

**Planning Considerations:**

- Preparing the folios takes time. Work on folio preparation throughout the documentation process. Assemble the folios at least a week before the meeting to ensure that they are ready.
- Plan for enough time and budget to allow for folio and vinyl map printing.
- Bring enough copies of the folio for all representatives.

**Resources Needed:**

- Computer
- Camera
- Projector and screen
- Village folios
- Attendance sheets and meeting minutes form
- Venue rental
- "Mapping Our Land" video
- Copy of the National Land Use Policy
- List of additional resources

9

**(CONTINUED)**

**Timing Considerations:**

- The folio handover ceremony can happen on the same day as the multi-stakeholder meeting (i.e., have the meeting in the morning, break for lunch, and have the folio ceremony in the afternoon).

9

At the end of the community resource documentation process, village committees receive a village map, village tract map, and folio. Local authorities also receive copies of the folios and maps.

## PURPOSE

- To provide evidence, backed by data, for community members to engage with local authorities or other outsiders about their land concerns. Folios represent the end of the community resource documentation process.

## OUTPUT

- All contents of the folio and supporting documents, in both hard and digital copy, delivered to committee members, village leaders, Village Tract Administrators, and township local authorities (MONREC, DALMS, and GAD).
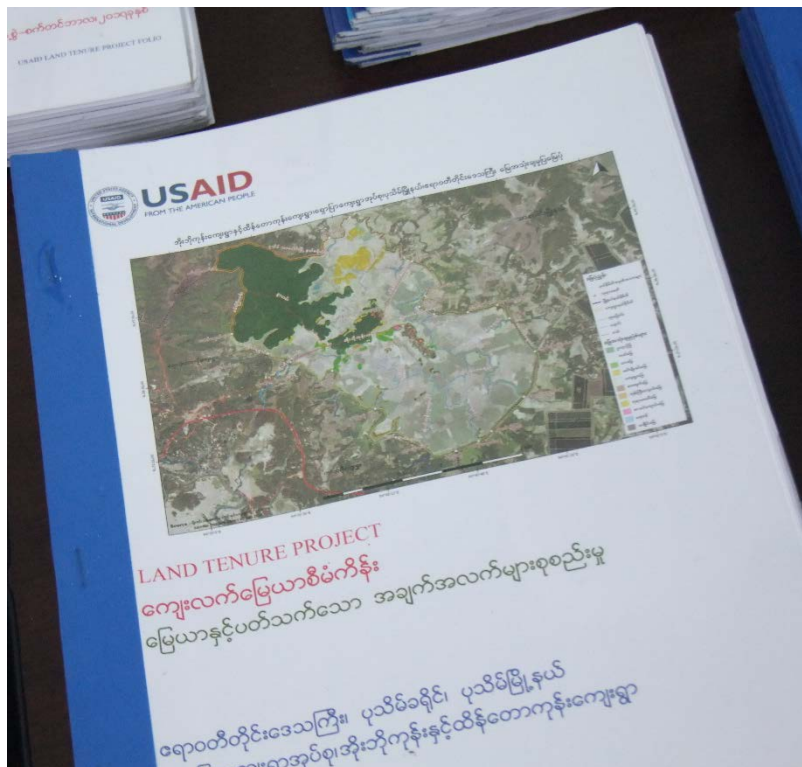


The folio contains the following (see Annex C for LTP's guide for creating a village folio and a village folio template):

*Schedule of Activities in the Village Tract* – A written chronology of activities with dates, a description of the activity, and any associated outputs.

*Village Committee Member Names* – A list of those village representatives nominated to play a part in the community committee.

*Village Boundary Markers and Boundary Lines* – A list of boundary point names, with longitude and latitude.

*Community Profile* – Summary information about the village and its land. Topics include the village population, access to services, livelihoods, and land concerns.

*Village Land Uses* – A list of the land uses identified by the community along with the size in acres.

*Summary of Village Tract Land Issues* – As described by community members at the community meeting, a list of the priority land resource issues faced by community members. This section should also include proposed solutions to alleviate these challenges.

*Village Photos* – General photographs of activities undertaken with community members throughout the community resource documentation process.

*Data-Sharing Agreement* – An agreement between village committee members and the local organization that provides permission to share the data collected throughout the community resource documentation process.

*Village Maps* – A3-sized maps that show the village boundary and land uses with the satellite image for the village. Neighboring villages should also be displayed. Stakeholders should receive both a small version of the map inside the folio as well as a large-format vinyl version. If resources allow, stakeholders should also receive a large-format map that shows all of the villages in the village tract.

*Digital Versions of All Files* – Provide a digital copy of all files associated with the village folio. Files should be provided on a USB memory stick and a DVD or SD card with write protection so the files cannot be corrupted.

# HOW THIS STEP WORKS

### 9.1    Lead introductions

Introductions may not be required if the handover is a continuation of the multi-stakeholder meeting (Step 8). Check to see if the participants in the meeting have changed and provide introductions as necessary.

### 9.2    Summarize activities and present results

Summarize the outcomes of the multi-stakeholder meeting and the community resource documentation process. Explain how the steps led to the production of the village folios.

### 9.3    Lead handover of folio and photographs

The following should be given to the community along with the folio:

- "Mapping Our Land" video (https://www.land-links.org/2017/10/tgcc-burma-mapping-land-full-version/)
- Copy of the National Land Use Policy

### 9.4    Facilitate open mic session for community members

Give community members the chance to ask questions or to share their thoughts.

## 9.5    Discuss next steps and summarize meeting

Remind all participants that creating the map is only the first step in the process and that these maps are not official government documents. Encourage community members to use the maps. Potential uses for the maps after the community resource documentation process, as identified by the LTP pilot teams, include:

- To achieve community consensus on borders and land uses;
- To support land and resource use decision-making within the community;
- To identify VFV lands, supported by legal training;
- To use as supporting documentation in land conflicts;
- To share with regional and village tract authorities as a reference; and
- To post in places that are visited often such as monasteries, Village Tract Administrator's house, etc.

Provide participants with a list of resources.

## REFERENCES

- **Annex C: Village Folios**

### BEST PRACTICES

- Hold the handover ceremony the same day as the multi-stakeholder meeting to save time and money, as the participants will be the same.

- Make sure that the community and local authorities know where to go in the future with questions or concerns. Leave them with a list of resources.

# ANNEX A. RESOURCES

## Education and Outreach Materials by the USAID Land Tenure Project

Fundamentals of Global Positioning System Use: http://pdf.usaid.gov/pdf_docs/PA00N2R8.pdf

Land Type Classification Facilitation Cards: http://pdf.usaid.gov/pdf_docs/PA00N329.pdf

Land Type Classification Poster: http://pdf.usaid.gov/pdf_docs/PA00N2RH.pdf

"Mapping Our Land" Video: https://www.land-links.org/2017/10/tgcc-burma-mapping-land-full-version/

Nine-Step Cartoon Poster: http://pdf.usaid.gov/pdf_docs/PA00N2RF.pdf

Nine-Step Facilitation Cards: http://pdf.usaid.gov/pdf_docs/PA00N328.pdf

National Land Use Policy PowerPoint Presentation: http://pdf.usaid.gov/pdf_docs/PA00N2RP.pdf

Existing Land Law PowerPoint Presentation: http://pdf.usaid.gov/pdf_docs/PA00N2RN.pdf

Using Mobile Mapping Application (Kobo) in the Land Tenure Project PowerPoint Presentation: http://pdf.usaid.gov/pdf_docs/PA00N2R9.pdf

## Legal Framework and Training Materials

Government of Myanmar, Community Forestry Instruction (2016):

- English: http://mylaff.org/document/view/3632

- Burmese: http://www.fdmoecaf.gov.mm/sites/default/files/Documents/CFI%202016%20aug%2016.pdf

Government of Myanmar, Farmland Law (2012):

- English: http://mylaff.org/document/view/3461

- Burmese: http://www.burmalibrary.org/docs15/2012-Pyidaungsu_Hluttaw_Law_11-2012-bu.pdf

Government of Myanmar, Forest Law (1992):

- English: http://displacementsolutions.org/wp-content/uploads/THE-FOREST-LAW-1992.pdf

- Burmese: http://www.fdmoecaf.gov.mm/eng/node/8097

Government of Myanmar, Forest Policy (1995): http://www.burmalibrary.org/docs20/1995-Forest_Policy+1996-Forest_Policy_Statement-en-tu.pdf

Government of Myanmar, National Land Use Policy (NLUP):

- English: http://www.burmalibrary.org/docs21/Government-of-Myanmar-2016-01-National_Land_Use_Policy-en.pdf

- Burmese: http://www.burmalibrary.org/docs21/Government-of-Myanmar-2016-01-National_Land_Use_Policy-bu.pdf

Government of Myanmar, Vacant, Fallow, and Virgin Land Management Law (2012):

- English: http://mylaff.org/document/view/3462

- Burmese: http://www.burmalibrary.org/docs22/2012-03-30-VacantFallowAndVirginLands-10-en+bu-red.pdf

Land Core Group, Farmer Extension Note on Land Tenure Security:

- English: http://mylaff.org/document/view/3264

- Burmese: http://mylaff.org/document/view/3265

- Karen: http://mylaff.org/document/view/2442

Land Core Group, Forms Used in Land Registration Process under Farm Land Law and VFV Land Management Law (Contact Land Core Group)

Land Core Group, Guidelines for Land Law Training Facilitator (Contact Land Core Group)

Namati, Community Forestry Application Process Notes (Contact Namati)

Namati, Form 105/106 Application Process Handout (Contact Namati)

Namati, Simple Land Registration Steps Handout (Contact Namati)

# Facilitation Skills and Training Games

101 Great Training Games: http://www.fenman.co.uk/traineractive/training-manual/101-great-training-games.html

European Union Agency for Network and Information Security. (2014). Good Practice Guide on Training Methodologies. November 2014. https://www.enisa.europa.eu/publications/good-practice-guide-on-training-methodologies

International Development Wales. Training Resources: Participatory Approaches for Development. http://www.wcia.org.uk/images/user/Hub%20Participatory%20Approaches%20to%20Development%20Training%20Resources%20v10.pdf

Pike, Bob, and Christopher Busse. (2004). 101 More Games for Trainers: A Collection of the Best Activities from Creative Training Techniques Newsletter. HRD Press. http://www.jandwyer.com/wp-content/uploads/2014/07/101_More_Games_for_Trainers.pdf

PRIA International Academy. (2014). Participatory Training Methodology. http://pria-academy.org/pdf/ptm/PTM_Unit-1_Course%20Content.pdf

# Other Resource Documents

Burgess, Claire. (2016). Community Voices and Land Reform in Myanmar Policy Brief. ActionAid. March 2016. http://www.mylaff.org/document/view/3555

Catholic Relief Services. (n.d.). Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA): A Manual for CRS Field Workers and Partners, Volume I. Karen Schoonmaker Freudenberger. https://www.crs.org/sites/default/files/tools-research/rapid-rural-appraisal-and-participatory-rural-appraisal.pdf

European Union–African, Caribbean, and Pacific Group of States (EU-ACP) Technical Centre for Agricultural and Rural Cooperation. (2010). Training Kit on Participatory Spatial Information Management and Communication. CTA, the Netherlands, and the International Fund for Agriculture (IFAD), Italy. ISBN: 978-92-9081-446-7. http://pgis-tk-en.cta.int/

Ewers Anderson, K. (2016). Land Core Group, Institutional Models for a Future Recognition and Registration of Customary Communal Tenure in Myanmar. http://www.mylaff.org/document/view/3446

Gender Equality Network. (2014). Gender in the NLUP Power Point Presentation. November 2014. http://mylaff.org/document/view/2478

Hunt, G. (2016). Land Governance Reform for Indigenous Land Rights: Opportunities and Challenges PowerPoint Presentation. Land Core Croup. June 2016. http://mylaff.org/document/view/3543

Hunt, G. (2016). Land Smallholder Agriculture: The Foundation of Economic Development Power Point Presentation. Land Core Croup. June 2016. http://www.mylaff.org/document/view/3570

International Fund for Agricultural Development. (n.d.). Good Practices in Participatory Mapping. https://www.ifad.org/documents/10180/d1383979-4976-4c8e-ba5d-53419e37cbcc

Inya Institute. (2015). Introduction to Social Research Methods Manual. Available in English and Burmese: https://www.lift-fund.org/introduction-social-research-methods-english-and-myanmar (Other training materials available at: http://www.inyainstitute.org/training/)

Knight, R., J. Vogelsang, and M. Brinkhurst. (2016). Community Land Protection Facilitators Guide. Namati. https://namati.org/resources/community-land-protection-facilitators-guide/

Land Core Group, Notes to Know Right for Farming Pamphlet (Burmese). Brief explanation on farm land, rights for farming, how to apply the fight to work farmland, and farmland utilization under the Farmland Law. (Contact Land Core Group)

Mekong Region Land Governance (MRLG). (2017). Documenting Customary Tenure in Myanmar: A Guidebook (First Edition). http://mrlg.org/resources/documenting-customary-tenure-in-myanmar-a-guidebook-first-edition/

Myanmar Business Forum. (2016). Urban Issues Position Paper PowerPoint Presentation.

- English: http://www.mylaff.org/document/view/3419

- Burmese: http://www.mylaff.org/document/view/3420

Naing, U. A. (2014). Union Attorney General's Office, The Framework of the National Land Law (Draft) PowerPoint Presentation. http://mylaff.org/document/view/2613

Oberndorf, R.B., J.D. (2012). Improving the Legal Policy Frameworks Relating to Land Management in Myanmar. Forest Trends Association/Food Security Working Group's Land Core Group.

- English: http://www.mylaff.org/document/view/2451

- Burmese: http://mylaff.org/document/view/2969

Rambaldi, G. and J. Callosa-Tarr. (2002). Participatory 3-Dimensional Modelling: Guiding Principles and Applications. http://www.iapad.org/wp-content/uploads/2015/07/p3dm_arcbc.pdf

Share Mercy. (2015). How Government is Resolving Land Confiscation in Myanmar. http://www.mylaff.org/document/view/3046

Soe, N. N. and C. Pierce. (2016). Streamlining Institutions to Restore Land and Justice to Farmers in Myanmar. Namati. June 2016. http://www.mylaff.org/document/view/3558

SPECTRUM. (2015). Sustainable Development Knowledge Network, Form 7: Seven Case Studies of Farmland Registration in Kachin State – Briefing Paper and Report.

- Brief: http://www.mylaff.org/document/view/3248

- Report: http://www.mylaff.org/document/view/3249

USAID. (2014). Implementing the National Land Use Policy: Integrated Pilot Programs PowerPoint Presentation. USAID Land Tenure Project. http://mylaff.org/document/view/2614

USAID. (2015). Understanding How the Legal Framework in Myanmar Currently Supports Recognition of Shifting Cultivation Tenure Arrangements PowerPoint Presentation. USAID Land Tenure Project. http://www.mylaff.org/document/view/2621; http://mylaff.org/document/view/3540

# Mapping

Gmap (GIS and Remote Sensing Service Provider): http://gmap-myanmar.blogspot.com

Google Earth: https://www.google.com/earth/

Myanmar Information Management Unit (MIMU): http://www.themimu.info/gis-resources

- GIS Training: http://themimu.info/sites/themimu.info/files/documents/Manual_Basic_QGIS_Training_V.03_Jan2016_MMR.pdf

QGIS: http://www.qgis.org

# Organizations

Land Core Group

- Web: http://www.lcgmyanmar.org

- Facebook: https://www.facebook.com/landcoregroup/

Myanmar Information Management Unit (MIMU): http://www.themimu.info

MYLAFF: www.mylaff.org

Namati: https://namati.org/

OneMap Myanmar: https://www.facebook.com/OneMapMyanmar/

Online Burma/Myanmar Library: www.ibiblio.org/obl

USAID Land Links: https://www.land-links.org/

# ANNEX B: MONITORING AND EVALUATION DATA COLLECTION TEMPLATES

## ACTIVITY MINUTES

| | |
|---|---|
| **Activity Title** | |
| **Activity Start Date** | |
| **Activity End Date** | |
| **Purpose of the Activity** | |
| | |
| | |
| | |
| **Trainer/Facilitator Names** | |
| **Activity Total Hours** | |
| **Activity Total Days** | |
| **Activity Venue** | |
| **Total Number of Participants** | |
| **Number of Men** | |
| **Number of Women** | |
| **Number of Youth** | |
| **Participating Organizations/Villages** | |

| Topics Discussed |
|---|
|  |
|  |
|  |
|  |
|  |
| **Notes for Improvement** |
|  |
|  |
|  |
|  |
|  |
| **Supporting Documentation** |
|  |
|  |
|  |
|  |

| **Notetaker Name** |  |
|---|---|

## ATTENDANCE LIST

**Activity Name:**

**Village:**                    **Township:**                    **State/Region:**

**Date**

| No | Name | Position | Organization/Department/Village Tract/Village Name | Contact Phone Number | Male | Female | Signature |
|----|------|----------|---------------------------------------------------|---------------------|------|--------|-----------|
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |
|    |      |          |                                                   |                     |      |        |           |

# ANNEX C: VILLAGE FOLIOS

## A Guide for Creating a Village Folio

### What is a Village Folio?

A village folio is the final output of the community resource documentation process. A folio provides evidence, backed by data, that community members can use to engage with local authorities or other stakeholders about their land concerns. Local organizations collect content for the folio throughout the community resource documentation process. At the completion of the process, the folio is handed over to community members and local township authorities. The folio provides documentation and a record of the community's activities. It is intended to be used for documenting and clarifying perceived community rights for future engagement with local authorities, private companies, or other stakeholders interested in community lands and resources. LTP has developed a village folio template that should be used alongside this guide.

### Village Folio Handover

All contents for the folio and supporting documents should be compiled in hard and digital copies. Folio materials should be delivered to committee members, village leaders, Village Tract Administrators, township local authorities (MONREC, DALMS, and GAD). A digital version of all files should be provided on a USB memory stick.

### Contents of a Village Folio

As a local organization, you collect most of the folio information through the steps that make up the community resource documentation process. The table below lists each section of the folio and describes the contents and information source for each. Folio contents may vary depending on local context and the process followed. Some information may differ from village to village, and other information will be the same across the village tract.

| Section | Description of Contents | Information Source (Where This Information is Recorded) |
|---|---|---|
| I. Schedule of Activities in the Village Tract | • Date<br>• Description of activity conducted<br>• Village name<br>• Activity result/output | • Monitoring data |
| II. Village Committee Member List | • Committee member name<br>• Female or male<br>• Occupation | • Spatial awareness session |
| III. Village Boundary Markers and Boundary Lines | Boundary Markers<br>• Boundary point name<br>• Latitude, longitude<br>• Method of verification<br>Boundary Line<br>• Boundary line description<br>• Method of verification | • Boundary marker spatial data<br>• Boundary line spatial data |
| IV. Community Profile | • Summary findings of community profile interviews in the village | • Community profile interviews |
| V. Village Land Uses | • Land type name<br>• Local name (if applicable)<br>• Area (in acres, if applicable) | • Land use inventory spatial data |
| VI. Summary of Village Tract Land Issues | • Issue name and description<br>• Photo of discussion sheet (voting) | • Output from committee member meeting |
| VII. Village Photos | • Photos from activities in this village | • Photos taken throughout the community resource documentation process |
| VIII. Agreement Sheet for Signatures | • See template | |

## Village Folio Supporting Documents

The following materials should be provided during handover of the final village folios:

- Large-format vinyl map of the village boundary
- Large-format vinyl map of the village tract
- Copy of the National Land Use Policy

# Village Folio Template

**[Insert Village Name]** Community Resource Documentation Folio

[Add map and text here.]

## Folio Contents

This village folio is the output of the community resource documentation process. From [insert start date] to [insert end date] [insert number of villages] villages in [insert name of village tract] village tract participated in a process that involved a land tenure, gender, and resource assessment as well as participatory mapping exercises. These participatory mapping exercises represent the communities' views of their land boundaries and the land uses and resources within these boundaries. This folio is not a legal document but is intended to provide evidence, backed by data, with which community members can engage with local authorities or other stakeholders about their land concerns. This folio is accompanied by a land tenure assessment report and large-format vinyl maps of the village and village tract.

[Insert descriptions of each of the following:

1. Activities list
2. Community profile
3. Committee members list
4. Village photos
5. Boundary markers and boundary lines
6. Land use types
7. Land issues
8. Data-sharing agreement]

## Activities List

[Insert the activities completed throughout the community resource documentation process.]

| Date | Activity | Output |
|------|----------|--------|
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Community Profile

[Insert the information gathered during Step 3 for the community profile. Add to the community profile throughout the documentation process as additional information is gathered.]

### [Village Name] Profile

| Community Name | Population Statistics | Ethnic Composition | Services |
|---|---|---|---|
| Village Name<br>Village Tract<br>Township<br>District<br>State/Region | [e.g., population and any other known details] | | Health<br>School<br>Road Access<br>[Other] |

### SETTLEMENT HISTORY


### GENERAL ECONOMIC AND LIVELIHOODS STATUS

- Livelihoods and sources of income

- Poverty levels

- Food security, water availability

- Population growth and migration

- Weather and climate challenges


### LAND USE AND TENURE CONDITIONS

- Land types in this village: farmland, forest land, other land types

- Concessions and plantations

- Land Use Certificates (Form No. 7) and ethnic land titles (e.g., Karen National Union)

- Land disputes

- Landless

### VILLAGE CHALLENGES

# Committee Members List

[Insert information for the village committee members selected in Step 4: Spatial Awareness Exercises.]

| No. | Name | Gender | Job | Contact Information |
|-----|------|--------|-----|---------------------|
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |
|     |      |        |     |                     |

## Village Photos

[Insert photos taken throughout the community resource documentation process.]

# Boundary Markers and Boundary Lines

[Insert information on the boundary markers and boundary lines recorded during Step 5: Boundary Verification Walk.]

**Boundary Markers**

| Name | Latitude | Longitude | Method of Verification |
|------|----------|-----------|------------------------|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Boundary Line**

| Name | Start Point | End Point | Method of Verification |
|---|---|---|---|
| [Describe the features the boundary follows (watershed, river, road, etc.).] | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

## Land Use Types

[List the land uses discussed in Step 6: Land Use Inventory. This information should replicate the land use attribute table produced in QGIS and may include any management issues identified in the village.]

| No. | Name of Land Use | Acreage | Villages That Use the Land |
|-----|------------------|---------|----------------------------|
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |
|     |                  |         |                            |

## Land Issues

[Insert the land uses discussed in Step 7: Community Meeting to Review Mapping.]

## Data-Sharing Agreement

[Today's Date]

[Community Name]                                    [CSO/NGO Name]
                                                    [CSO/NGO Address]

**Understanding on Sharing of Boundary and Land Use Data with Relevant Stakeholders**

WHEREAS, we, residents of [Name of community], [Township], [District], [Region], give our consent and approval for [CSO/NGO Name] to store and share spatial data collected about our community. This data involves village boundaries and land uses.

[CSO/NGO Name] may share the data about our community with appropriate, relevant stakeholders such as Government of Myanmar representatives at the local, township, district, and state/region level. [CSO/NGO Name] may also share information with relevant data-sharing institutions such as OneMap Myanmar. [CSO/NGO Name] will not share personal information about individual community members. If [CSO/NGO Name] receives any additional data requests from other stakeholders, they will check with the community for approval.

The community reserves the right to request changes or amendments to this land-related information.

Signed on behalf of the community:              Signed on behalf of [CSO/NGO Name]:

_____                _____
Committee Chair                                 Project Manager


_____                _____
Committee Member                                Community Engagement Specialist


_____                _____
Committee Member                                Mapping Specialist


_____
Committee Member


_____
Committee Member


_____
[Add more rows as needed]

# ANNEX D: EXAMPLE AGENDAS

**STAKEHOLDER ENGAGEMENT MEETING AGENDA**

**Date:**

**Time: 9:00AM to 12:00PM**

**Place:**

**Objective:**

- To share information about project objectives
- To understand relationship to NLUP
- To understand the participatory mapping process and site areas

| Time | Topic Covered | Delivery | Trainers |
|------|---------------|----------|----------|
| 9:00–9:30 | Registration | | Local organization |
| 9:30–10:30 | Introductions, objectives, and NLUP | PowerPoint presentation | Local organization |
| 10:30–10:45 | "Mapping Our Land" video | | |
| 10:45–11:00 | Tea Break | | |
| 11:00–11:30 | Introduction to and messaging about participatory mapping | PowerPoint presentation | Local organization |
| 11:30–12:00 | Introduction to target areas; discussion and next steps | Q&A session | Local organization |

## COMMUNITY SENSITIZATION MEETING AGENDA

**Date:**

**Time: 9:00AM to 12:00PM**

**Place:**

**Objective:**

- To share information about project objectives
- To understand relationship to NLUP
- To understand the participatory mapping process and site areas

| Time | Topic Covered | Delivery | Trainers |
|------|--------------|----------|----------|
| 9:00–9:30 | Registration | | Local organization |
| 9:30–10:30 | Introductions, objectives, and NLUP | PowerPoint presentation | Local organization |
| 10:30–10:45 | "Mapping Our Land" video | | |
| 10:45–11:00 | Tea Break | | |
| 11:00–11:30 | Introduction to and messaging about participatory mapping | PowerPoint presentation | Local organization |
| 11:30–12:00 | Introduction to target areas; discussion and next steps | Q&A session | Local organization |

# COMMUNITY COMMITTEE MEETING

**Date:**

**Time: 9:00AM to 3:30PM**

**Place:**

**Objective**

- To review community resource documentation activities
- To provide feedback on draft village boundary and village land use maps
- To review boundaries with neighboring villages
- To identify land issues in the village tract
- To increase awareness of land legal framework

| Time | Topic Covered | Delivery | Trainers |
|------|---------------|----------|----------|
| 9:00–9:30 | Registration and introductions | Group introductions | Local organization |
| 9:30–10:00 | Sharing of experiences from community resource documentation activities | PowerPoint presentation or flipcharts | Local organization |
| 10:00–10:30 | Map review of boundaries and land uses | Discussion | Local organization |
| 10:30–10:45 | Tea Break | | |
| 10:45–12:00 | Awareness session on existing Land Law, NLUP, and Forest Law | PowerPoint presentation | Local organization |
| 12:00–1:00 | Lunch | | |
| 1:00–2:00 | What are the main land issues in each village of the village tract?<br><br>• What are the causes of land issues?<br>• How do these affect livelihoods?<br><br>Voting for three main land issues in the village tract | PowerPoint presentation<br><br>Village group exercises<br><br>Group presentation | Local organization |
| 2:00–2:15 | Tea Break | | |
| 2:15–3:15 | Next steps<br><br>• What support is needed to strengthen land tenure security? | Group discussion | Local organization |
| 3:15–3:30 | Wrap-up session | | Local organization |

# MULTI-STAKEHOLDER DIALOGUE AND VILLAGE FOLIO HANDOVER CEREMONY

**Date:**

**Time: 9:00AM to 4:00PM**

**Place:**

**Objectives:**

- To empower communities to use maps for engagement and negotiation
- To discuss land issues with local authorities
- To identify priority next steps
- To hand over folio and map documentation

| Time | Topic | Delivery | Facilitator |
|---|---|---|---|
| 9:00–9:30 | Introductions – local authorities, community representatives, local organization team members | Group introduction | Local organization |
| 9:30–10:00 | Community resource documentation summary<br>• Objectives<br>• Activities | Presentation | Local organization |
| 10:00–10:15 | Tea break | | |
| 10:15–10:45 | Community perceptions of land concerns | Presentation | Committee representative members |
| 10:45–11:30 | Government of Myanmar perception of land concerns; discussion of role and responsibilities | Presentation | Government staff |
| 11:30–12:00 | Q&A session | | Local organization |
| 12:00–1:00 | Lunch | | |
| 1:00–1:15 | Icebreaker | Discussion | All attendees |
| 1:15–1:30 | Introduction of folio purpose | Discussion | All attendees |
| 1:30–2:00 | Map discussion and review | Discussion | All attendees |
| 2:00–2:30 | Review of folio contents | Discussion | All attendees |
| 2:30–2:45 | Tea Break | | |
| 2:45–3:00 | "Mapping Our Land" video (summary video and women's video) | Video | Local organization |
| 3:00–3:30 | Handover of folio and photographs | Handover | Local organization |
| 3:30–4:00 | Next steps<br>Summary of the meeting | | Local organization |

# ANNEX E: COMMUNITY PROFILE INTERVIEW QUESTIONNAIRE GUIDE

## COMMUNITY MEETING WITH ALL VILLAGE MEMBERS

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| What can you tell me about the history of the village? | When was it formed? Who came to live here? From where? Was the village newly formed or was it relocated? |
| | What is the name of the village tract administrative leader? How long has he or she been in this position? |
| | Are there community members who are not members of the official villages near your village (for example, who live in small settlements outside of the main village)? |
| | How does one become a member of the village? Are there benefits of being a member of the village (e.g., the right to use village taungya land or forest, or the ability to participate in community decision-making)? |
| Is the population growing? | Has it expanded a lot in recent years? Why? |
| | Are households getting bigger? |
| | Are there newcomers to the village? |
| | Are there many people leaving for work? Where to? Who? For how long? |
| | Are most people in your village of one ethnic group? Which group? If not, who lives here? Do different groups have different styles of agricultural production? |
| In terms of overall economic status compared to the township, would you say that the village is wealthy, middle income, poor, or very poor? | What percentage of this village is: wealthy? middle income? poor? very poor? |
| | Do the poor live on land of poorer agricultural quality? What is the main reason for their poverty? |
| Is there a school and clinic in the village? | If there is a school, is it a primary school, a middle school, or a high school? |
| | If there is a clinic, is there a midwife there? |
| Can you describe the roads, rivers, and dams in this area? | When was the road constructed? |
| | When was the dam constructed? |
| | Have there been any river changes? How have these affected cultivation of village lands? |
| Have you experienced climate or weather change here? | What kind? |
| | How does it affect you? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| | Has there been any flooding? How long did the flooding last? How did this affect villagers' livelihoods? |
| | What did you do to address it? |
| | Does the government provide support? |
| What is the economic status of people in the village? What are the villagers' main livelihoods? | What are the land use types in this area? |
| | Do most people grow rice in paddy fields? Or in yar land or taungya? |
| | How many times a year is paddy rice grown? |
| | Who works in the paddy fields (or yar or taungya): men, women, or both? If both, are there certain tasks performed by each? |
| | Who organizes the water supply for paddy fields? |
| | Is there an irrigation tax? How is it calculated? How is it paid? |
| | Are there any disputes over water? Who resolves these? |
| What other major cash crops do people grow? Beans? Cucumbers? Watermelon? Chili? Sesame? Cotton? Corn? | Are these grown on irrigated land or dry land? |
| | Is this for household consumption? For barter? For selling in local markets? |
| | Who within the household grows each of these crops? |
| | Are rice or other crops profitable? |
| How would you describe the food security situation in the village? | Are there periods of the year when food is less available? |
| | How do people manage during difficult times when food is less available? |
| | Are there big differences between households in terms of food security? Who has better food security? |
| | Is better food security related to water access? Do you get enough water during rice transplanting time? During the rest of the season? |
| | What is the quality of the farmland here? |
| Is there enough labor for farm work and taungya here? | Do women now work more in areas in which men used to work? |
| | What is the daily wage for agricultural labor? Is it the same for women and men? If different, why? |
| | Do you hire people from outside the village? |
| | Do people come from other villages to work on your farms? |
| Do people have outside jobs to supplement income? | Where do they go? |
| | What time of year? |
| | Do women and men take similar sorts of outside jobs to supplement income? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| Do most households have Land Use Certificates (Form No. 7)? | Have you seen *kwin* maps for this area? |
| | Why is it important to have this Land Use Certificate (Form No. 7)? |
| | Do you know whose name is on the Land Use Certificate (Form No. 7)? Can a Land Use Certificate be in a woman's name? If so, when? |
| | Who was involved in the process? |
| | Was it easy to get it? |
| Do you pay land tax? | How is this paid? |
| | How are records kept? |
| In general, do you think land rights at the household level are clear? What about for village lands? | Are there types of land for which use or management rights are unclear? |
| | Why? |
| | How can this be improved? |
| Does the community have any maps of household or community land? | Are the boundaries of the village tract clear? Are the boundaries of the village clear? How are these recorded? |
| Are there households that do not own any land? | Is landlessness a problem that affects a specific group of people? |
| | How did they become landless? What happened? |
| | If those without land were dispossessed (if the land they had in this village was taken away): |
| | • Explain what happened. *(Find out the nature of dispossession, e.g., conflict, land grabbing, natural disaster, debt, mortgage, family dispute, crop failure.)* |
| | • Did the households receive any sort of compensation for these lands? |
| | • Are they trying to get these lands back? What is the process to get land back? |
| | If those without land are not from this village: |
| | • Did they move here because they were displaced? If yes, please describe when and where they were displaced and how they became dispossessed. |
| What land tenure security needs are there in this area? | What are the best ways of achieving land tenure security? |
| Is there a farmland management body organized by government at the village tract level? | How many people are involved? |
| | Who is involved in this committee? |
| | What are they doing for community members? |
| Who are the main village leaders? | Are they elders or younger people today? |
| | Are there any women who are considered village leaders? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| | Do village leaders have to solve legal problems about land rights among their community members? |
| | Do they help bring community members together to decide on land use management? How is this done? |
| | How are decisions made? |
| | Who are the stronger voices? |
| | Who are the weaker voices in the community? |
| | Do these leaders help resolve disputes inside the village? Outside the village? |
| | What types of disputes are typical? |
| | Do you typically have to go to the village tract administrator to solve disputes? |
| Have there been any land or resource use disputes or conflicts in recent years? Have you been able to address these conflicts? What additional assistance is needed to address these conflicts? | If there have been land or resource use disputes, what kind? <br>• Within households? <br>• Between households? <br>• Between villages? <br>• With government agencies? <br>• With private sector investors? <br>How are these conflicts resolved? Who has authority to assist (e.g., from the community, local government, state/regional government, government departments)? <br>Have community members been satisfied with the resolution? |
| Please describe the relationship with GAD, MOALI (DALMS), and MONREC/Forest Department | Do these institutions ever visit the village? If yes, how often? Who within the village interacts with them? <br>Do you know who to contact for assistance with forest management, documentation of land rights, or any other issues? <br>Is there anything these institutions can do to support the land needs of your community better? |
| **FOREST SUB-GROUP** | |
| Do you know which forest lands are reserve forests? Unclassified forests? | Can you use these forests for your basic household needs? <br>Can you cut timber in these forests? <br>Do you need permission? <br>Do taxes have to be paid? <br>Are you involved in forest protection? <br>Who carries this out? <br>Who decides on forest management approaches? <br>Do you have community forests in this area? When were they started? Do you have approved certificates? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| | Are both women and men involved in forest protection? |
| Do you protect any forest areas to ensure good water supply? | Where are these forests? |
| | Has this helped with water supply in recent years? |
| | Do you have sacred forest areas here? |
| Do you collect firewood regularly from forests? | Is it accessible? |
| | Who collects the firewood? |
| | Are there rules about when you can collect firewood and how much? |
| | Do you have to pay a fee to access these forests? How much? |
| | Who decides on these rules? |
| | Is your ability to use these forests secure? |
| | Who primarily collects firewood in households? |
| | Do outsiders also come to your forest to collect firewood? Is this accepted behavior? |
| Are there a lot of bamboo groves in your village? | What is the bamboo used for? |
| | Who can access and use it? |
| | How is it managed? |
| | Is it sold in the market? Locally? Where is it sold? |
| Is there any taungya in this village area? | Where are these individual taungya plots located? |
| | How does somebody gain access to an individual taungya plot? |
| | Who carries out taungya? If both women and men, are there particular tasks that each performs? |
| | Is teak grown in taungya fields? |
| | What is the typical length of rotation for taungya plots? Has this changed in recent years? |
| | Is the area under taungya expanding? |
| **GRAZING AND GARDENS SUB-GROUP** | |
| Do you have grazing land? | Where is it located? |
| | Does this fall under the 2012 Farmland Law? |
| | What types of livestock graze? How many grazing animals are there per household? Who takes the livestock to graze? |
| | What is the quality of the grazing land? |
| | Do you collect fodder in the forests? Stall feeding? |
| | Who collects it? |
| | Are there any difficulties in collecting forest products (e.g., firewood, fodder, herbs, thatching materials, honey, or mushrooms)? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| Do you have garden lands in this village? | What is grown on the garden lands? |
| | Where are they located? |
| | How large are they? |
| | Who uses them? |
| | Is the produce from the garden lands for household consumption or for sale? |
| Do you have orchards or other perennial crop land? | Where are they located? |
| | Do all households have them? |
| | Who within the household is responsible for tending these? |
| **WATER SUB-GROUP** | |
| What is the rainfall situation like here? | When do you get the most rain? |
| | Has the pattern changed in recent years? |
| | Where do you get water for paddy/rice production? |
| | How is it managed? |
| | Who built that irrigation structure? |
| | Who helps clean and protect the canals? |
| | Do you pay a tax for irrigation water? How much is it? Is it expensive? |
| | Are there any disputes in water management? What types? How often? Between whom? |
| | How are these disputes typically resolved? |
| | Are some disputes long-lasting? What type of dispute are they? |
| Does everyone know about the 2012 Farmland Law? | What is the main issue that the law addresses? |
| Does everyone know about the 2012 Vacant, Fallow, and Virgin Land Law? | Have nearby lands been defined as vacant, fallow, or virgin around here? |
| | What does it mean? |
| | Have any outsiders tried to buy or access land in this area? |
| | Is this land that is used by the community? If so, what is it used for and who is using it? |
| What about the Association Law? | What does it mean? |
| Have you heard about the National Land Use Policy? | What is the main idea behind it? |
| | Will it help you in terms of land titles and registration of your village lands? |
| | What is the best communication channel through which to share law-related information? |

# WOMEN'S VILLAGE MEETING

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| How are you involved in agricultural production in the village? | Which activities are you involved with mostly? Paddy transplanting and weeding? Harvesting? Ya land? Home gardens? Livestock? |
| | Are you involved with irrigation water management? |
| | Are there activities/lands from which women are excluded? If so, why is that? What prevents them from doing this activity? Or from using those types of land? |
| | Are there any activities that women do together or for each other? Do women cultivate in groups? Do women collect forest resources together? Do women work on each other's land in exchange for work on their own land? |
| How far is school for your children in this area? | Do you have to take them to school? |
| | Do your sons and daughters all go to school? For how many years? |
| Are there many women-headed households in this village? How many? | If yes, how have these women become heads of household (i.e., they are single or their husbands migrated, left them, or died)? |
| Do you collect firewood regularly or only a few times a year? | Which areas can you access to collect firewood? Fodder? What kind of forest area is this? |
| | How does MONREC manage these forests? Or does the village manage these forests? |
| | Are they nearby or far? |
| | Is it generally safe for women to collect forest products? |
| | Is there any difficulty in collecting firewood? Do you collect dead branches and twigs only? Can you manage the forests for firewood? |
| | Can landless families also get firewood and forest products? |
| | Do you pay any fees to access and collect firewood? |
| | Do you collect anything else from the forest? Medicinal herbs? Mushrooms? Honey? Thatching materials for roofs? Other? |
| Are there village committees (or village tract committees) that manage forests? | Are there women members? Older? Younger? Educated? |
| | Would you be interested in joining such a committee? |
| | Is there a reason for not joining? |
| | How do women interact with these committees? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| Who is the official or office in charge of land-related matters in this village? Who are they? Where are they? What are they responsible for? | Do women interact with them? If not, why not? |
| | Have you seen a woman as a village leader or government official? What do you think about increasing women's participation in leadership positions? What do you think about a woman being in that role? |
| | Does the village tract have a head (Village Tract Administrator)? Who is she or he? |
| Do you collect anything from forests that you sell in the local markets? | Who within the family collects each of these products? Who takes them to market to sell? |
| | Is this easy to do? Or are there obstacles? What kind? |
| | Does this provide good income? |
| | Are you interested in selling products but do not have the support to do so? |
| Are you involved in protecting or managing the forests? | What type of responsibilities do you have? Do men help you? If so, what types of responsibilities do they have? Guarding? Fire protection? Nurseries? |
| Have you ever seen or heard about Land Use Certificates (LUCs)? | What are LUCs? Do any households in the village have LUCs? When did they get them? How did they get them? |
| | Do you think LUCs are important/helpful? What is the benefit of having an LUC? |
| | Under whose names are these documents typically issued (head of household, husband, adult, husband and wife, the eldest, etc.)? |
| | Have you ever seen or heard about LUCs that include a woman's name? *(Probe to see how common it is [only a few, some, several, many, most]. Do they tend to be women-headed households or another type of woman?)* |
| | Does that create any problems? |
| | Does it make any difference for the women if their names are included in the LUCs? Please describe. |
| How do households that own land typically acquire it? | Though intra-family inheritance? Through government grants? By purchase? |
| | How do women become landowners? |
| How is land inherited in the village? | Can women inherit land from their (birth) families? How common is it? Please describe the process. |
| | Do women get equal amounts of land as their brothers? |
| | Does it matter whether women are married or not? |
| | How does a small farming household divide land if there are several children? Do any children get preference if, for example, the household has only a small plot but has four children? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| | At what age do women generally get married here? Does the girl's family usually give something to the boy's family or receive anything from them? What is exchanged? Does land figure in these exchanges? |
| | What happens to land owned by women if they marry and leave the village? |
| | What happens with population growth? |
| Can women inherit land from their spouses? How common is it? | Are there any rules on this issue? |
| | Does it matter whether a man and woman are legally married? |
| | What happens to women who marry into this village, but then their husbands pass away? |
| | Does it matter if he has more than one wife? |
| In what situations do women lose access to their household land? | Is this a reason for concern for many women in this village? |
| | What happens to a women's access to land if she is divorced, separated, or abandoned? What about her children? |
| | • Scenario 1: Mr. X decides to leave his wife. What happens to the wife's access to land? What happens to her children? |
| | What happens to a woman's access to land if her husband migrates? |
| | • Scenario 2: Mr. X migrates for work. Who takes control of the land? Please describe. |
| | Are there situations that would lead the entire household to lose access to the land they are currently using? Please describe. Who are the households most likely to be affected by this? Are households in this village worried about this? |
| Can women purchase land? | How common is it? |
| Can households lease land? Can they sharecrop? Can they borrow land? | Are women able to lease land? To sharecrop? To borrow? |
| | If leasing is an option: |
| | • How common is leasing (both in general and for women)? |
| | • What do people tend to do with the land they lease? |
| | • Are the leases generally seasonal, yearly, or long term? |
| | • Are these agreements typically documented or verbal only? |
| | • What happens when there are tenancy-related disputes? Are these common? How are these disputes typically resolved? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| | • Do women have the same options/opportunities as men when it comes to leasing land?<br><br>If sharecropping is an option:<br><br>• How common is sharecropping (both in general and for women)?<br><br>• What do people tend to do with the land they sharecrop?<br><br>• What does a typical sharecropping agreement look like?<br><br>• Please describe who contributes what, what the expected sharing agreement is, and what happens if the crop fails.<br><br>• What happens when there are sharecropping-related disputes? Are those common? How are these disputes typically resolved?<br><br>• Do women have the same options/opportunities as men when it comes to sharecropping? |
| If a man wants to sell or mortgage land in this village and his wife does not want that, what happens? Can he sell or mortgage without her permission? | What happens if a woman wants to sell or mortgage land and her husband does not agree? Can she still sell/mortgage the land? Can she do it without his permission?<br><br>What happens when a man has left the village to work for three months and his wife needs money urgently? Could she decide to mortgage or lease the land? Does she have to ask him first? Does she have to ask other male relatives (e.g., father-in-law, father, or brother)? What do you think would happen if the woman mortgaged the land without asking her husband first?<br><br>Could the husband mortgage or lease the land without his wife's permission if she were away working or visiting relatives and he needed the money?<br><br>Would the circumstances be the same if a husband or wife wanted to sell land?<br><br>Do men consult with their wives in decisions related to the land (e.g., what to grow, how much fertilizer to use, when to plant, or how much labor to employ)? |
| Are there any disputes that particularly affect women? | What kind of disputes are these?<br><br>How are they resolved?<br><br>If people are not satisfied, can they take their cases to court? If not, why not? *(Probe about cost, length of time, etc.).*<br><br>Are there women in the local dispute resolution body?<br><br>What kind of land-related disputes tend to affect women? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| | Do women approach this local person/committee when they are involved in a dispute? If not, why? Can they resort to the courts to resolve a dispute? |
| | How are disputes within the home (between husband and wife or between brothers and sisters) addressed (e.g., a man leaves his wife but does not allow her to use the land)? |
| | If a woman from a women-headed household has a problem with her land or needs help with her documents, how would she get help? Could she go directly to an official? If not, who would mediate on her behalf? Male relatives? Others? |
| Do you have bank accounts in your own name? | Who controls/saves money within the household? |
| | If people need to borrow money, what do they do? From whom can they borrow? Are there banks that people can access? Are group arrangements (like self-help groups) available? Or do people only rely on friends and relatives? Are loans taken for emergencies only or can people borrow to build a house or expand production? |
| | Can individual women get bank loans? How large of a loan can you get for your land area? |
| | Is there any microfinancing in this village area? Who organizes it? |
| | Do you have a cell phone? |
| | Is there any technology that saves you labor in the areas of agricultural production and grain processing? |
| | What about agricultural extension? Does the government or do NGOs provide training? What type of training? For whom? |
| | Do they provide fertilizer, seeds, seedlings, small animals, etc.? What do they provide? To whom? |
| | Do women receive training too? Is it for different activities than men? What kind of training do women receive? |
| | Do women receive fertilizer, seeds, seedlings, and small animals too? Is what they receive different from men? Please explain. |
| | Are there any services for which you need to have an LUC to apply (for example, to receive extension services or to get a loan)? |
| What are the biggest challenges that people in the village face? | What are the biggest challenges that women in the village face? |

## VILLAGE TRACT ADMINISTRATOR AND GENERAL ADMINISTRATION DEPARTMENT CLERK

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| Can you tell us about the economic situation within the local township? | Are the four villages we have selected in the village tract typical of the township in economic terms? |
| | What are the main products from these villages that are sold outside? |
| | What main factors explain the economic situation for these villages? |
| | Have there been major infrastructure developments here in recent years? |
| | What is the role of the village tract development support committee? |
| In what types of agricultural production activities does the village engage? | Is this primarily for subsistence? Barter? Local markets? Yangon markets? |
| | Have the types of crops farmers grow changed much? |
| | Is taungya active or growing in this area? |
| Have there been changes in the population levels of these villages? | What are the main reasons for this? |
| | Are these old or new settlements? When were they established? |
| | Is there much in-migration or out-migration? If so, what are the driving factors? |
| | Who are the main residents of these villages (Bamar, Kayin, Chin, Mon, or others)? |
| | What is the percentage of community members in these villages who are landless? |
| | Is landlessness a problem that affects a specific group of people? How did they become landless? What happened? |
| Is irrigation water available for these villages? | Is irrigated land expanding in this village tract? |
| | What are the reasons for this? |
| | Where does irrigation water come from? |
| | Is irrigation provided seasonally or all year round? |
| | Which government office manages this? |
| | What irrigation water fees are paid by farmers? |
| Is paddy cultivation profitable? | Which type of crops produce the best profits? |
| | Farmers sell about 75% of their total rice production. Is that right? |
| What types of taxes do you collect from these villages? | Land tax? Irrigation tax? Have there been changes in the amounts collected in recent years? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| Is there much demand for land in this area? | Is there an active land market in this area? |
| | What are the reasons for this? Local buyers? Outside buyers? |
| | Has there been any rapid price increase in recent years? |
| What types of support are provided to these villages in the areas of poverty reduction or economic development? | Is this support used by the villages? |
| | What types of activities does the Department of Rural Development assist with in these villages? |
| Are you involved with land use planning in this village tract or township? | How is planning carried out? |
| | What support is needed to carry out land use planning? |
| Do you think there has been much climate or weather change here? | How does this impact farmers? |
| | Does the government provide any support to help farmers adapt? |
| Do all households in these villages have Land Use Certificates (under the 2012 Farmland Law) for their land? | Are there *kwin* maps for these village tracts/villages? In what year were they developed? |
| | Are the boundaries of each village tract and village clear? How are these established? Recorded? |
| | What is the percentage in each village of households that have a Land Use Certificate (Form No. 7)? |
| | Are there any Land Use Certificates (Form No. 7) in women's names? |
| | What is the process for obtaining Land Use Certificates (Form No. 7)? Is the village tract farmland management committee involved? |
| | If they do not have Land Use Certificates (Form No. 7), are there clear land boundaries for paddy and ya and other land termed "farmland"? |
| | How do community members manage the land outside the Land Use Certificate? Does this fall under the 2012 Vacant, Fallow, and Virgin Lands Management Law? |
| | Are the forest area boundaries used by community members clear to everyone? |
| Is there much vacant, fallow, and virgin land in this area? | Typically, what is this land currently used for? Is it easy to identify land designated as vacant, fallow, and virgin? Are you allowed to or do you use this land for grazing? |
| | Where do they exist? |
| Do you have to mediate disputes within or between villages in this village tract? (If so, does the village tract farmland management committee or "Yat Me Yat Pha" [village elders] oversee mediation?) | What type of issues do you have to mediate? |
| | Do community members ask you to mediate or do you decide when to intervene? |
| | Do women approach you for intervention? If so, for what types of disputes? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
|  | Are issues easy to resolve or are they long-standing problems? |
|  | What is your general approach to resolving them? |
|  | Do you work with village leaders or elders to resolve these disputes? |
| Do you have any published reports or statistics on the economic status, administrative situation, taxes, demographics, land area, and registration in these villages? | Would it be possible for us to see these? |
|  | Are there any data that examine male and female income generation? Or land owned by women-headed households? |

# MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL CONSERVATION TOWNSHIP STAFF

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| How has the forest cover changed in this area? | What is the primary kind of forest? Teak and what other species? |
| | When did the forest cover start to change significantly? |
| | Has there been forest cover change in the uplands around taungya areas? Forest cover change in the lowlands? |
| Has there been much logging of teak trees? | If yes, when did this take place? |
| | What are the reasons for this? |
| | Is the logging carried out by companies or by farmers? |
| | Is this associated with the long-time Burma Communist Party settlement in the mountains? Or is it related to changes in recent years? |
| What are the major classifications of forest land under MONREC management? | Is there a map that shows these? When was it created? Is it available for us to see? |
| | Are community members familiar with where these areas are near their village? |
| Is scrub land or bamboo land part of forest land? | How is this classified? |
| There have been many forest protection and afforestation protection programs in this area. Can you tell us about them? | When did they start? |
| | How were they organized? |
| | How effective have they been? |
| Do you have existing teak taungya plantations in this township or village tract area? | Are community members from these four villages involved in these plantations? |
| | What benefits do they get from participating? |
| | Is this type of plantation going to expand in the future? |
| Is there any community forestry in this area? | Do you have official community forest establishment certificates? If so, what is the duration of the agreement? |
| | When were they established? |
| | How many are there? |
| Are there any commercial bamboo plantations assigned to private companies in this area? | If so, how large is the area? |
| Have any forests been degazetted in reserved forests? | Is this going on among the four villages with which we are working? |
| | What is the process? |
| | How long does it take? |
| | What are the costs involved? |

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| What arrangements are in place for community members to use forests (reserved, etc.)? | Does MONREC have forest guards who collect forest use fees? |
| | Is there a system of monitoring in place? |
| | Are the rules generally followed by community members? |
| | Do men or women mostly use these forests? Of which ethnic group? |
| | Are communities involved in the management of the forest? |
| How many MONREC staff are men and how many are women? | Are they gazetted or non-gazetted staff? |
| | What are the responsibilities for men and women? |
| | Do women work in villages on forest management issues? |
| Do you have statistical data on forest cover or timber production in the forests near these villages? | |
| Do you collaborate much with GAD, DALMS, and communities on forest management? | What level of collaboration do you have with each department and the local communities? |
| What type of additional support is necessary to provide to local communities on their land management (e.g., outreach materials, meetings, or maps)? | What limitations do you face in supporting the communities? Are these technical, financial, process, etc.? |

## DALMS, MINISTRY OF AGRICULTURE, LIVESTOCK, AND IRRIGATION TOWNSHIP STAFF

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| Is the area of farmland in this village tract expanding? | What are the main reasons for this? |
| What kind of records do you collect on taungya? | Do you record the size of individual taungya plots and year of formation? |
| What is the level of landlessness in this area? | Do you collect data on this? |
| Is the area of irrigation expanding in this village tract? | What are the main reasons for this? |
| What are your main responsibilities? | Do you have adequate staff and capacity to carry out your work? Do you have to collaborate with GAD on data collection? |
| Is it easy to keep records on land registration updated? | What are the problems you face when managing the records? Are there any people applying for land use rights on vacant, fallow, and virgin land? Who are they? Are they representatives of a private company or landless people? Is it easy for community members to see these records? |
| Is there much new housing construction in this area by new migrants? | What is driving this? |
| Do you collaborate much with GAD, MONREC, and communities on land management? | What level of collaboration do you have with each department and local communities? |
| What type of additional support do you think is necessary to provide to local communities on their land management (e.g., outreach materials, meetings, or maps)? | What limitations do you face in supporting the communities? Are these technical, financial, process, etc.? |

## ELECTED GOVERNMENT (MEMBERS OF PARLIAMENT)

| MAIN QUESTION | ADDITIONAL QUESTIONS |
|---|---|
| What are the main land issues facing the village tracts in your area (e.g., landlessness, outsider investors, land grabs, irrigation, or historical conflicts)? | |
| What is the role of the MP in mediating these issues? | Do you have a formal and/or informal role in resolving these issues?<br><br>Are you working on any of these issues specifically? |
| Do you see value in the production of community land use maps? | Do you have any maps of your area?<br><br>If you had informal community maps, what would you want to use them for?<br><br>Is there anything about the land documentation process that interests you specifically? |

# ANNEX F: COMMUNITY RESOURCE DOCUMENTATION PROCESS TALKING POINTS

## Step 1: Stakeholder Engagement



- Before the start of activities, the team explains the community resource documentation process and expected results to the relevant stakeholders.

- Stakeholders should include staff from MONREC, DALMS, and GAD, and other local government officials.

- As a result of this step, attendees will understand project objectives, activities, and the participatory mapping approach. This will enable stakeholders to participate and collaborate with local organizations.

# Step 2: Community Sensitization
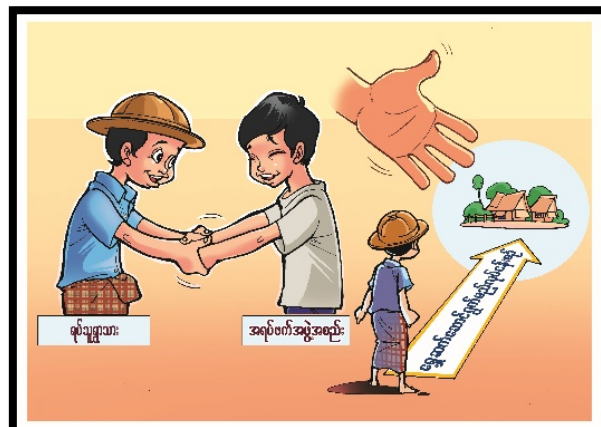


- In this step, the team shares the objectives of the community resource documentation with community members through a community meeting.

- At this meeting, the team explains to community members why the participatory mapping is happening, why it is important, and the participatory mapping and land use inventory process.

- As a result of this step, community members will understand project objectives, activities, and the community resource documentation approach. This understanding will help them to participate and collaborate in the process.

# Step 3: Community Profile Interviews



- In this step, the team collects land-related information about settlement history, land use, tenure, gender dynamics, and socio-economics of the villages.

- The team will divide community members into three groups, such as a broad community group, a women's group, and the Village Tract Administrator and Village Tract Clerk, to conduct the interviews.

- The team will also interview local government staff from MONREC, DALMS, and GAD.

- The result of these interviews will be a clear picture of the village's land use types (e.g., monastery, settlement area, graveyard, and farmland), land tenure security (e.g., Land Use Certificate [Form No. 7] status), gender roles related to land use, and socio-economic status.

- This information will be included in the village folio at the end of the process.

# Step 4: Spatial Awareness Exercises
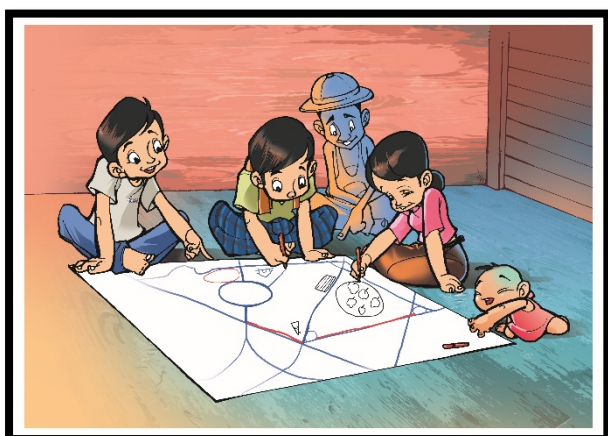


- In this step, community members draw maps of village boundaries and land uses. The team instructs the attendees on a number of mapping methods. Community members learn how to draw sketch maps and use large-format vinyl maps.

- During this step, the group selects community representatives to participate in future activities.

- As a result of this step, the group will have identified areas of the village boundary to be included in the boundary walk. These are areas that are not clear on the map.

# Step 5: Boundary Verification Walk
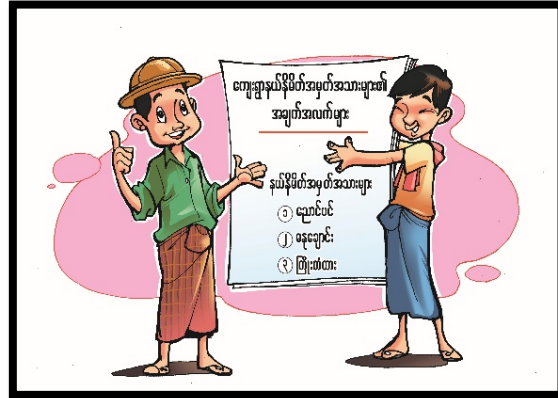


- In the previous step (spatial awareness exercises), the team identified areas with unclear boundary markers or village boundaries. During this step, the group conducts a boundary walk for these unclear areas.

- Committee members are involved in the boundary walk.

- As a result of this step, the team will have collected accurate boundary markers for the village. This information will be added to the final map.

# Step 6: Land Use Inventory
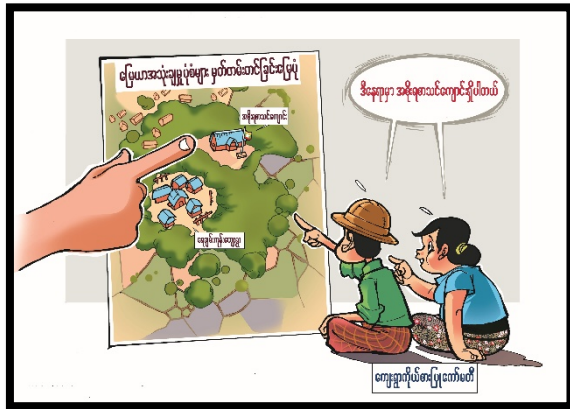


- In this step, the team works with community members to understand their current land uses, such as a monastery, community forest, area for bamboo cutting, grazing, farming, and gardening.

- The team reviews preliminary results of the village boundary walk with the community.

- As a result, community members will have a better understanding of land uses in their village. This information will be added to the final map and village folio.

# Step 7: Community Meeting to Review Mapping
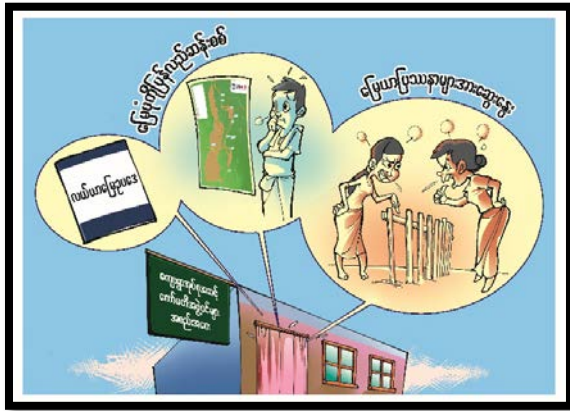


- After participatory mapping activities are finished, the team conducts a village committee meeting. In this meeting, all committee members from all villages in the village tract attend.

- Committee members can discuss important land issues in their village tract at this time.

- Community members can also review their village maps and add information. This helps them to understand their village boundaries and how to mitigate disputes.

- This meeting can also include legal awareness training to improve understanding of the land legal framework, such as the 2012 Farmland Law or the Vacant, Fallow, and Virgin Land Management Law.

# Step 8: Multi-Stakeholder Meeting



- In this step, the team conducts a stakeholder dialogue with relevant government departments such as MONREC, DALMS, and GAD and with Village Tract Administrators. Community committee members, village leaders, and local organizations also participate.

- During the meeting, all groups can review and discuss the village boundary and land use maps.

- This dialogue provides community members with an opportunity to discuss their land issues with local government representatives. As a result, government gains an understanding of their land resource management and community concerns.

# Step 9: Village Folio Handover Ceremony



- This is the final step in the community resource documentation process. During this meeting, communities receive the outputs of the project. This includes village boundary and land use maps and a village folio.

- The village folio contains a committee member list, schedule of activities, data-sharing agreement, and community profiles.

- Local government staff and community members receive copies of the maps and village folio.

- These outputs provide documentation for a village's land resources and can be a tool for engagement, planning, and negotiation in the future.

# ANNEX G: LAND TYPE CLASSIFICATIONS AND RESPONSIBLE MINISTRIES POSTER TALKING POINTS

In Myanmar, due to a multiplicity of laws and regulations related to land, numerous government institutions are engaged in land administration and management. The land type classification poster introduces communities to these institutions and describes common land type classifications under each jurisdiction. The poster is intended to help community members understand which government departments to contact for land-related issues.

Three main ministries have direct jurisdiction over land uses: the Ministry of Agriculture, Livestock, and Irrigation (MOALI); the Ministry of Natural Resources and Environmental Conservation (MONREC); and the Ministry of Home Affairs (MOHA).

Individual departments within each ministry have jurisdiction over different types of land. The poster includes 18 different land type classifications under six departments. The descriptions below provide short talking points to introduce the land types within the ministries and their departments.

# Ministry of Agriculture, Livestock, and Irrigation

MOALI is the main governmental body responsible for land administration, including agricultural policy, land use planning, water resources, and irrigation. Three MOALI departments have land administration responsibilities: the Department of Agricultural Land Management and Statistics (DALMS), the Department of Irrigation, and the Department of Fisheries.

## Department of Agricultural Land Management and Statistics

DALMS (formerly the Settlement and Land Record Department) is responsible for maintenance of the land registry and cadastral maps. DALMS has jurisdiction over eight types of agricultural land, which are eligible to apply for Land Use Certificates (Form No. 7).

1.  **Low Land (Paddy Land):** Land on which paddy (rice) is cultivated. Low land retains water for cultivation by natural or artificial means.
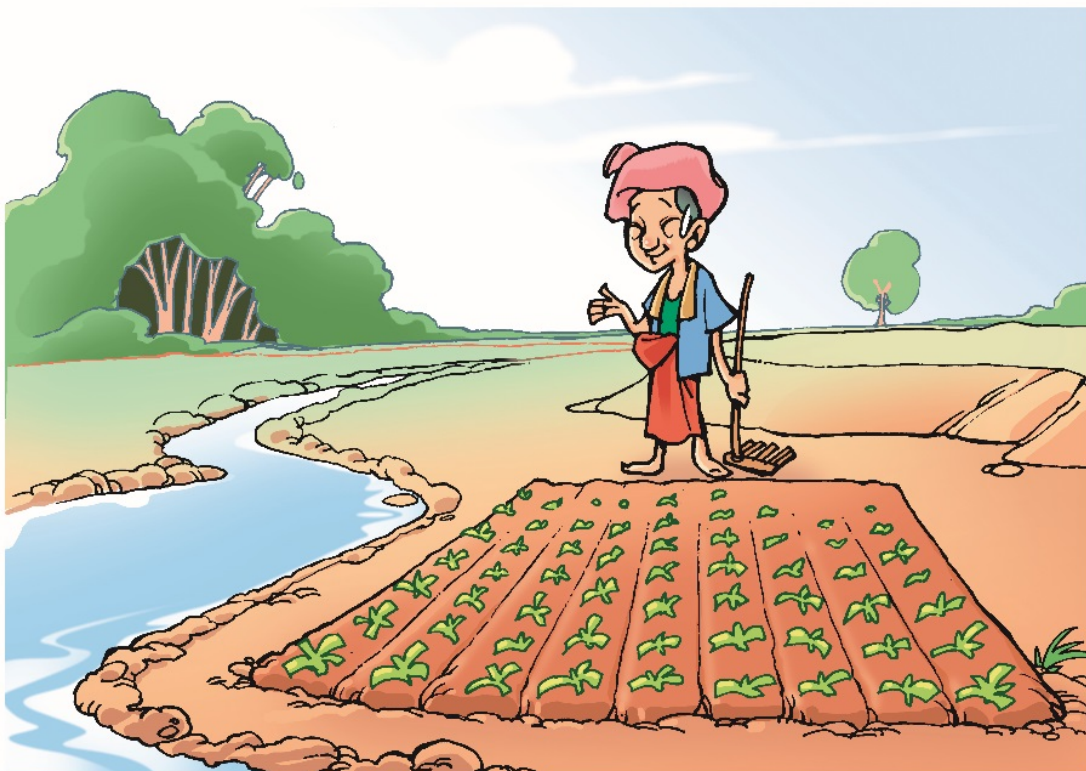


2.  **Yar Land:** Land that mainly relies on rainwater to cultivate seasonal crops.

3.  **Horticultural Land:** Land on which short-term vegetables are cultivated (e.g., coriander).



4.  **Alluvial Land (Kaing Kyun):** Land that is seasonally flooded and used for cultivation.

5. **Taungya (Hillside Cultivation Land):** Hillside land that mainly depends upon rainwater and where seasonal crops are cultivated.



6. **Perennial Crop Land:** Land on which rubber, palm oil, etc. are cultivated for long-term economic purposes.

7. **Nipa Palm Land (Dhani):** Land on which Nipa palms are grown and where tidal waves occur.
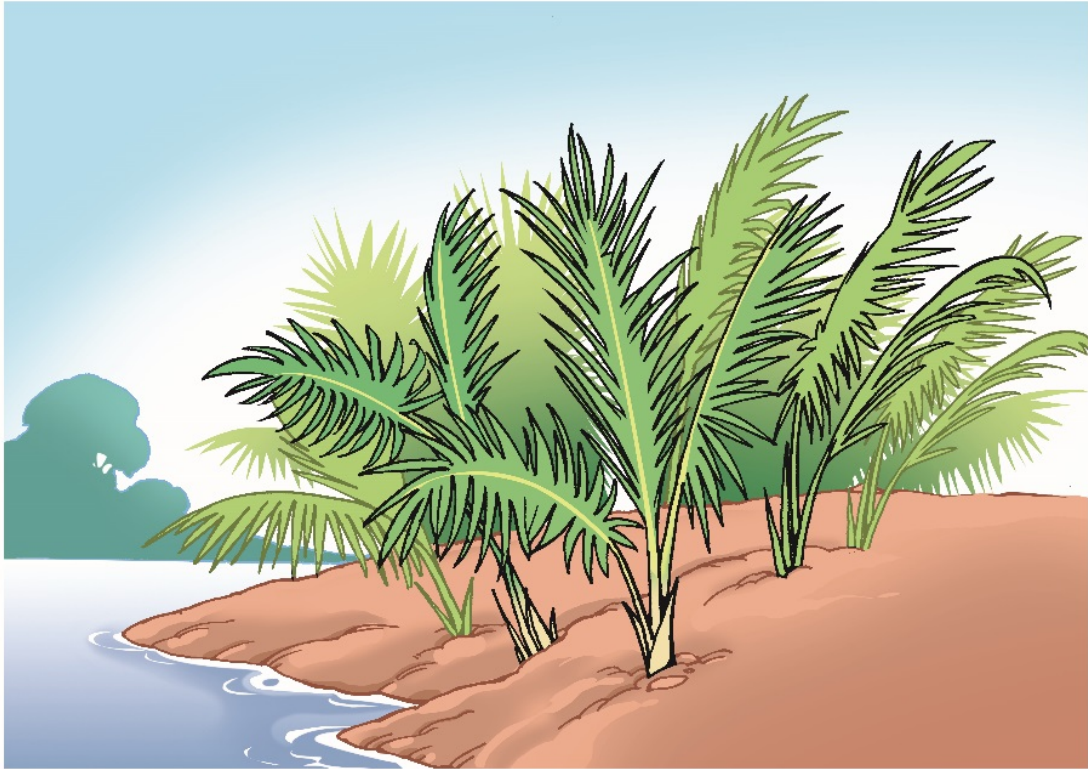


8. **Garden Land:** Land on which perennial plants are cultivated (e.g., mango and orange orchards).

## Department of Irrigation

The Department of Irrigation oversees dams and irrigation canals.

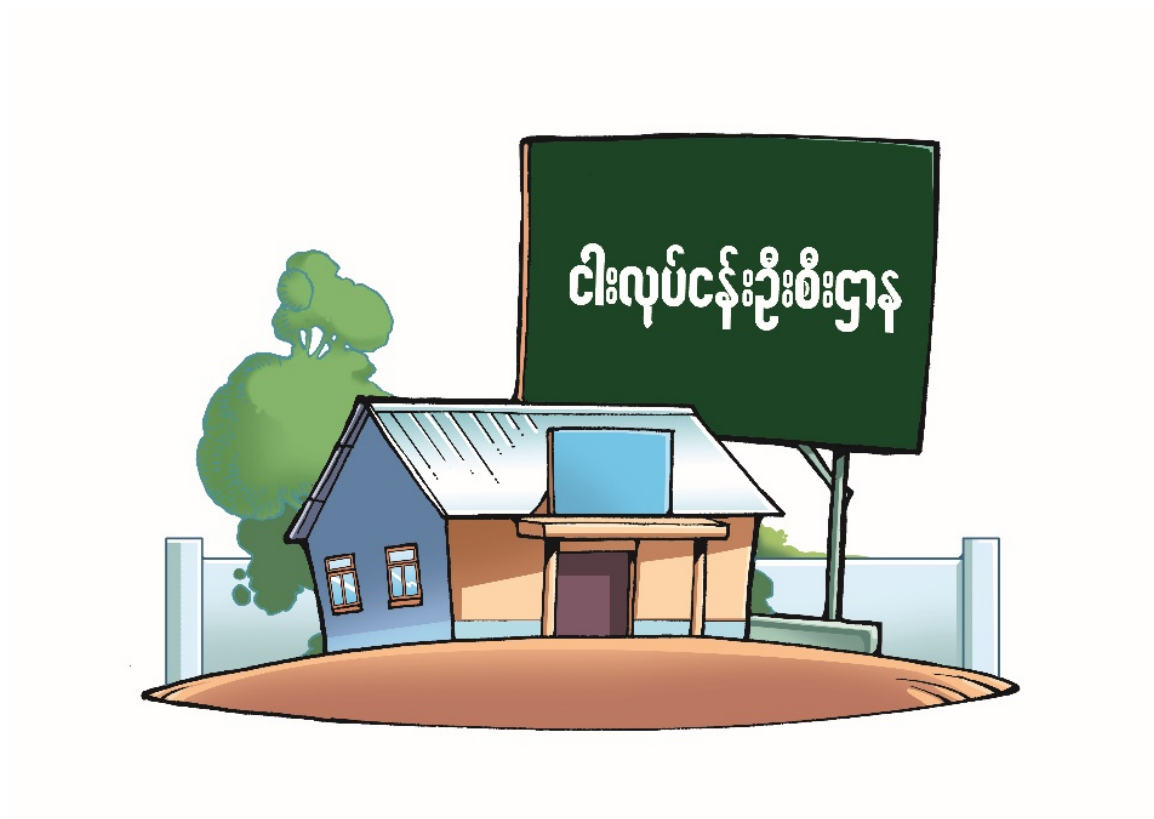1.  **Dams and Irrigation Canals:** Land that is used for dams and irrigation canals for cultivation.
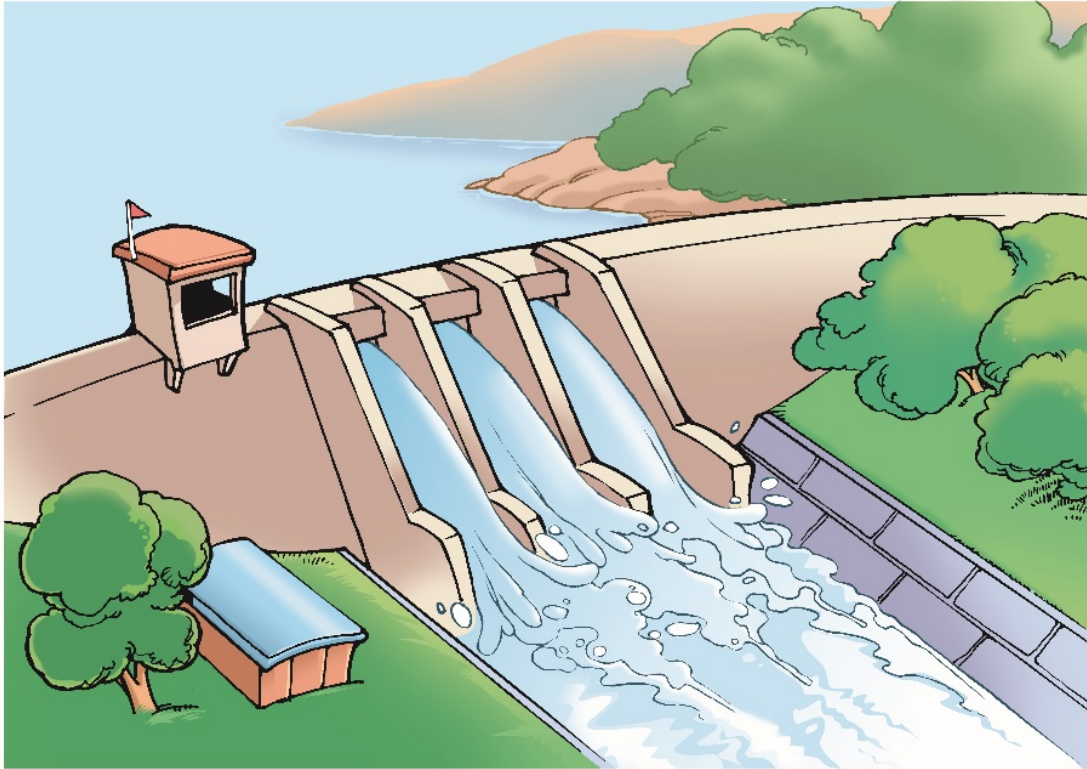
# Department of Fisheries

The Department of Fisheries oversees fish ponds.

1. **Fish Breeding Pond:** A pond defined and permitted by the Department of Fisheries according to law that is more than one fourth of one acre wide and used to breed fish and prawns.

# Ministry of Natural Resources and Environmental Conservation

MONREC was created through a reorganization of the former Ministry of Environmental Conservation and Forestry (MOECAF) and the Department of Mines. It includes two main sectors for land administration: 1) environmental conservation and forestry and 2) mining. Within MONREC, the Forest Department and Department of Mines have jurisdiction over different land type classifications.

## Forest Department

The Forest Department has primary responsibility for areas designated as forests.

1. **Protected Area:** Forest area where biodiversity (rare plants and animals) is preserved. This strict conservation category includes national parks, nature and wildlife reserves, and other conservation areas (e.g., Inlay Lake). These conservation areas do not permit any resource use except for conservation purposes.

2.  **Reserved Forest:** Protected forest land for forest production and environmental conservation. Reserved forests are established for watershed management, management for commercial logging, and local wood supply reserves for village use. Community forestry can be designated in these areas.

3. **Protected Public Forest:** An alternative to forest reserves for protecting trees and restricting land use in non-reserved forested areas. This classification means immediate protection of forest land from deforestation. Although commercial logging is also possible in this forest land category, protected public forests are intended for conservation purposes. Community forests can also be designated in these areas.
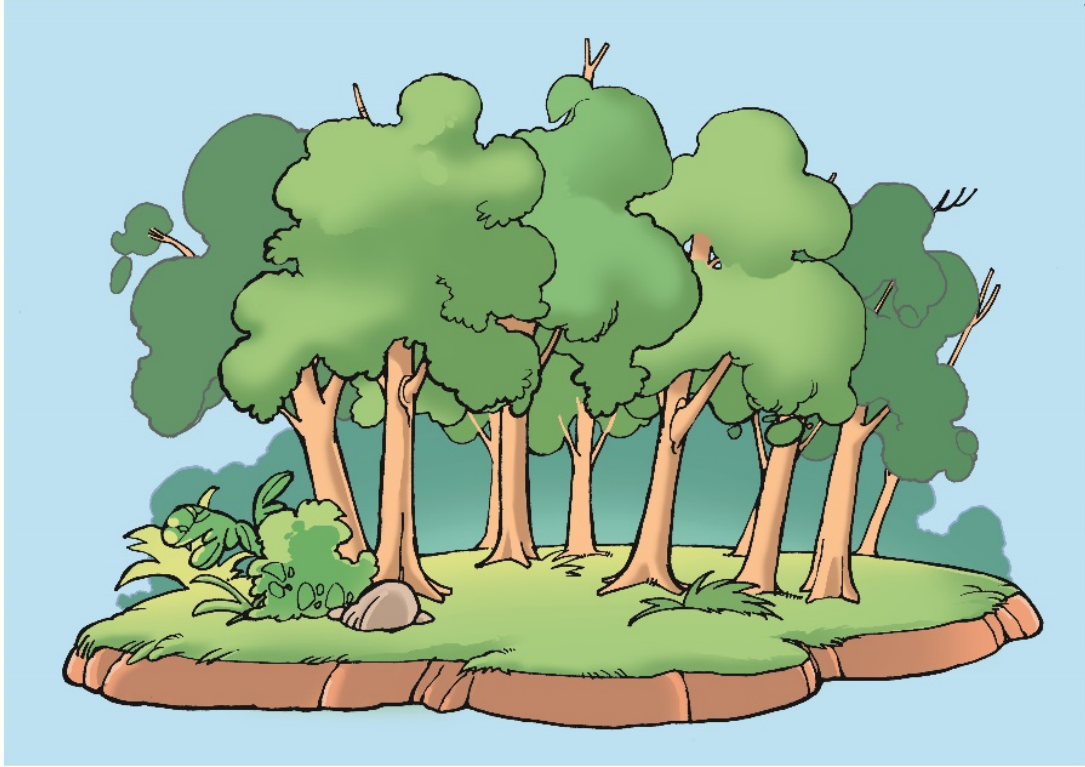
## Department of Mines

The Department of Mines oversees mining land.

1. **Mining Land:** Land for mineral extraction (e.g., protected mine land, gemstone land, and other mineral resources).
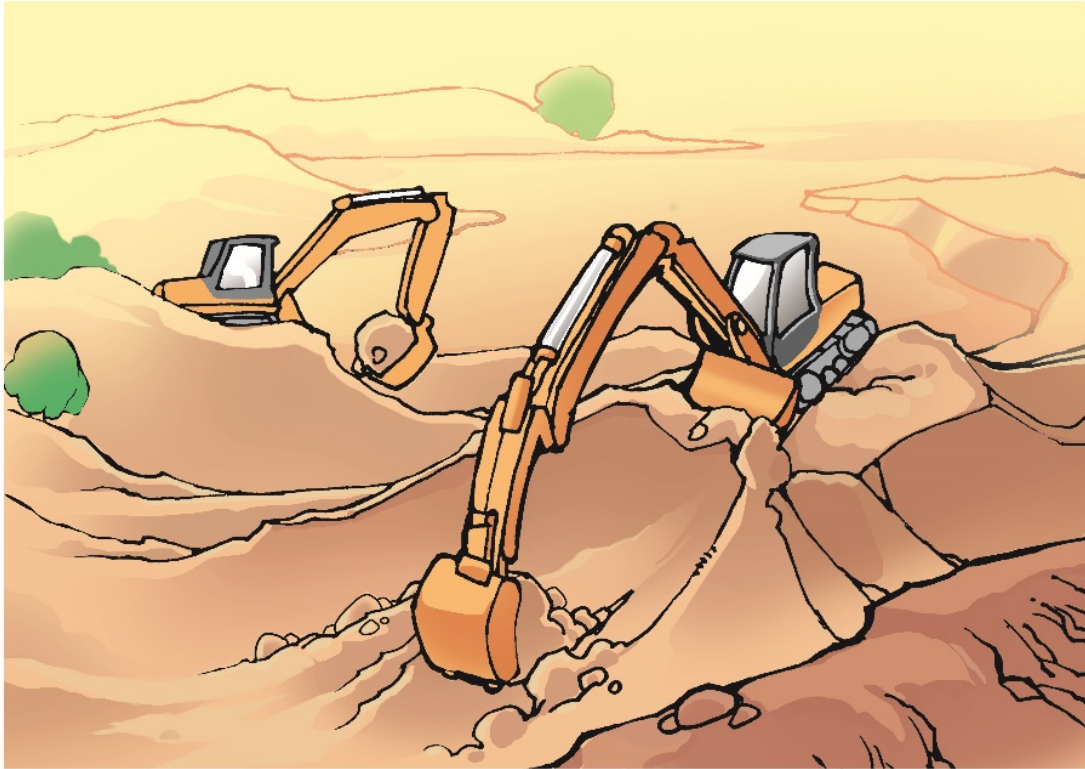
# Ministry of Home Affairs

MOHA technically has jurisdiction over all land considered at the disposal of the Union Government. MOHA decides what is classified as monastery land (i.e., not subject to land taxes); formally recognizes village or town settlement land; manages payments for vacant, fallow, and virgin land leases; and issues recognition of customary community use of public forestlands.

## General Administration Department (GAD)

GAD is responsible for administering and managing non-forest and non-farm land in the country. Specific land types under GAD jurisdiction are described below.

1. **Village/Town Land:** Land administered by GAD for settlement and buildings.



2. **Village Common Land:** Land for common use by a whole village (e.g., cemetery, football ground, village school, or lake).
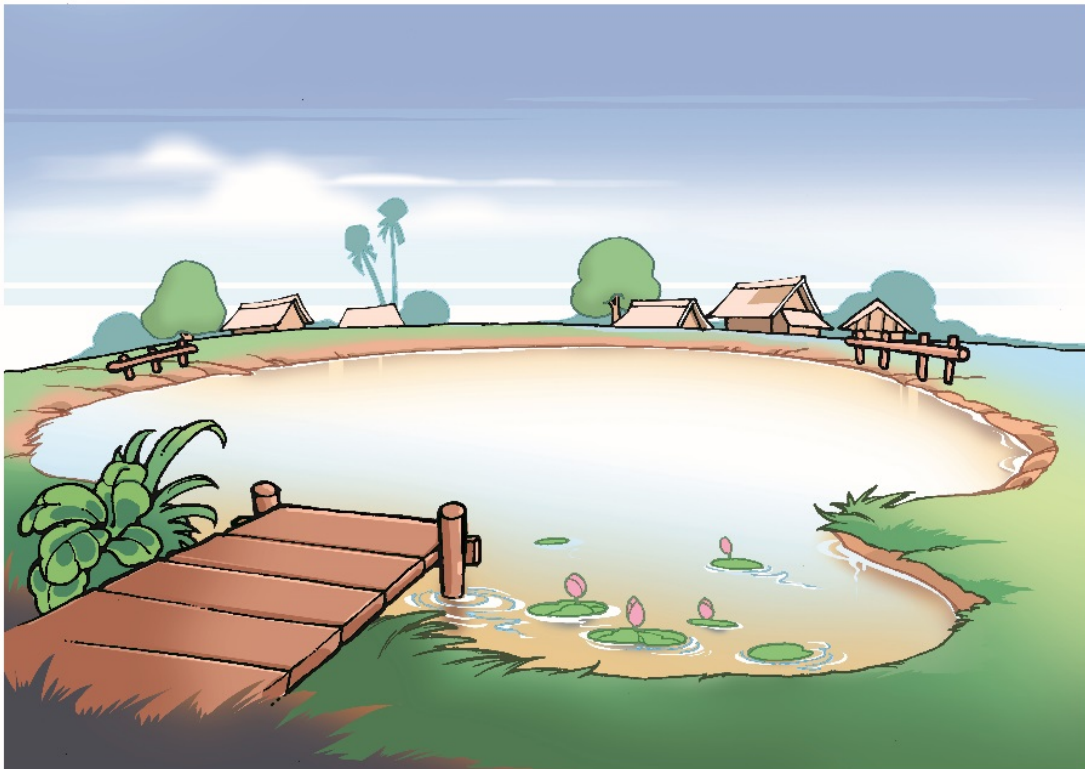
3.  **Pasture Land:** Land used for animal grazing.

4. **Religious Land:** Land recommended by the Department of Religious Affairs for Buddhism, Christianity, Hinduism, and Islam for religious purposes.



# Other Government-Administered Land

Lands that are excluded from the statements above are occupied by other government departmental work such as railway tracks, roads, and lamppost areas.

# ANNEX H: EXAMPLE DATA COLLECTION FORMS AND ATTRIBUTE TABLES

## Boundary Verification Walk/Boundary Marker

Below is an example of a boundary verification walk data collection form used by LTP pilot teams on a mobile data collection app. Program these values into a mobile data collection form before fieldwork begins. Remember to test the data collection form before using in the field.

As described in Step 5, LTP pilot teams utilized a confidence level designation to collect boundary marker and boundary line data. The green, yellow, and red confidence levels reflect a community's understanding of and confidence in the data.
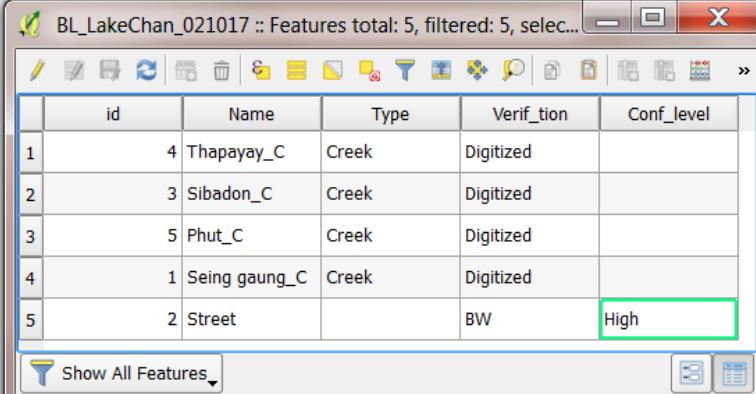
- **Green:** Boundary markers or boundary lines where there is no disagreement and the geographic features are well understood by many, if not all, community members. These features can usually be determined from satellite imagery. Examples include roads, rivers, monasteries, and bridges.
- **Yellow:** Boundary markers or boundary lines where there is some confusion or lack of clear understanding within the village and maybe with neighboring villages. These features are not openly disputed but are also not clear. Sometimes referred to as "fuzzy," these are areas where boundary walks are required. Examples include footpaths, large trees, small streams, and gullies.
- **Red:** Boundary markers or boundary lines where there is conflict or where it is too dangerous to travel. These features demonstrate areas of disagreement within a community or between neighboring communities. For these reasons at some pilot sites, community members refused to participate in the boundary walk.

| Select village name | [List of villages in village tract] |
| | Ye Bu |
| | Loi New |
| | Nyaung Lay Pin |
| | Phyar Taung |
| | Other |
| Local boundary marker name | [Type village name] |
| Select boundary marker descriptor | [List of common boundary markers] |
| | Tree |
| | Creek |
| | River |
| | Mountain |
| | Hill |
| | Pagoda |
| | Lake |
| | Other |
| If other, specify | [Type name of boundary marker] |
| Boundary marker location | [GPS location] |
| | Latitude |
| | Longitude |
| Take a picture of the boundary marker | [Picture] |
| Confidence Level: Is the boundary marker green, yellow, or red? | [Select from list] |
| | Green |
| | Yellow |
| | Red |
| If yellow or red, why? | [Enter brief description of confidence level] |

Village boundary markers will have the same attribute table as the boundary walk data collection form.

# Village Boundary Line

LTP pilot teams created village boundary line shapefiles with the following attributes:
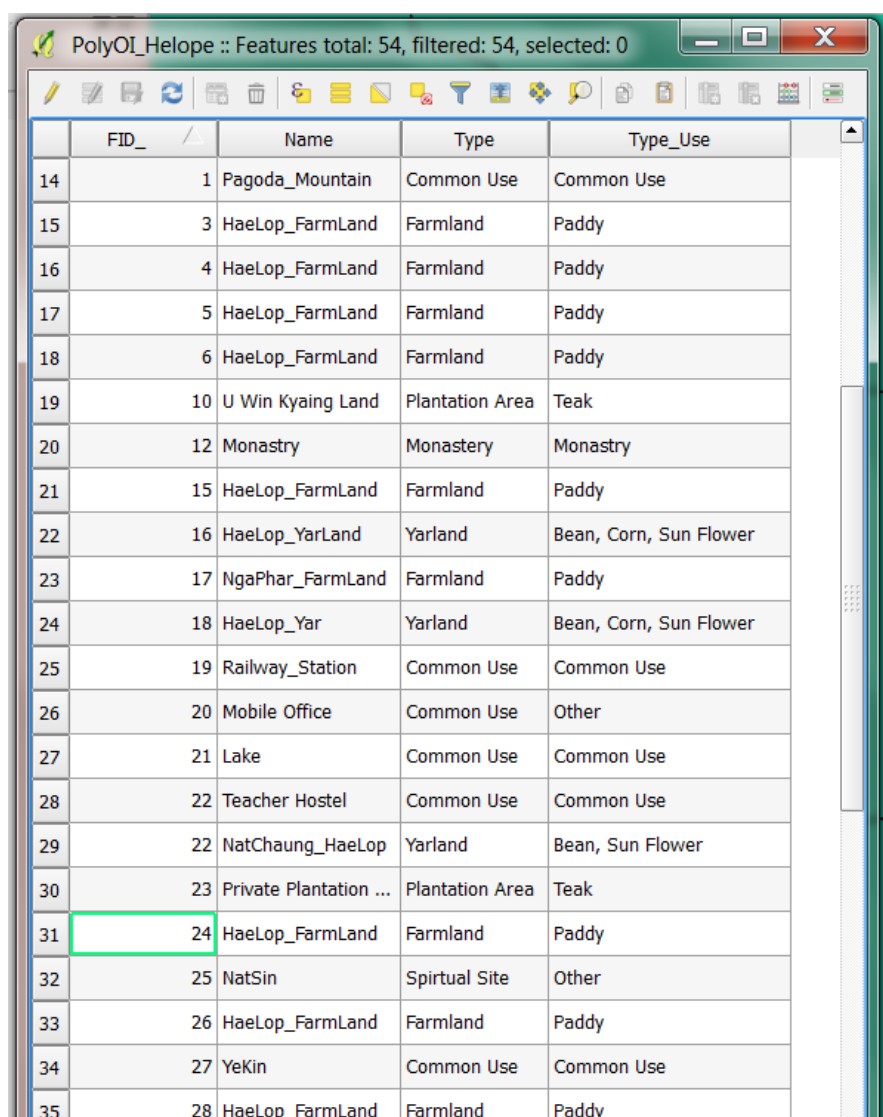
| Attribute | Values |
|---|---|
| Name | [Type local name] |
| Type | Creek, Road, Footpath, Other |
| Confidence | Green, Yellow, Red |
| Means of Verification | Digitized, Boundary Walked |

# Village Land Use

Land use categories should be adapted depending on the village.

| Attribute | Values |
|---|---|
| Name | [Type local name] |
| Type | Clinic, Common Use, Farmland, Firewood Plantation, Forest, Graveyard, Grazing Land, Market, Microwave Tower, Monastery, Other, Pagoda, Plantation, Playground, Quarry, School, Settlement, Spiritual Site, Water Body, Yar Land |
| Type of Use | [Type of crop] Bamboo, Banana, Dragon Fruit, Mango, Other, Paddy, Pineapple, Rubber, Teak, Thiho |
| Village Access | [Select villages that have used this land use type] |
| Ownership | Government, Private, Community, Other |

During the LTP piloting process, teams started with a more detailed land use inventory questionnaire. An example of this questionnaire is provided below for reference. Over time, LTP and partners simplified the land use data collection because the original questionnaire was too time consuming and did not provide a great depth of information.

| | |
|---|---|
| Select village name | [List of villages in village tract]<br>Ye Bu<br>Loi New<br>Nyaung Lay Pin<br>Phyar Taung<br>Other |
| Land Use Type | [Select multiple options]<br>Bean<br>Paddy<br>Grazing<br>Bamboo Cutting<br>Firewood<br>Teak<br>Dragon Fruit<br>Cashew Nut<br>Hardwood<br>Slash and Burn<br>Rock Digging<br>Monastery<br>Mango<br>Clinic<br>Other |
| If other, specify | [Type description of land use] |
| Land Use Ownership | [Select from list]<br>Government<br>Private<br>Community<br>Other |
| If other, specify | [Type ownership] |
| Has this land use changed in the last 5 years? | [Select]<br><br>Yes<br>No |
| If yes, what was the previous land use type? | [Select previous land use type. Same list as above.] |
| Note | |

# ANNEX I: GLOSSARY OF LAND TERMS

This glossary provides definitions for internationally recognized land governance terms that are frequently used in the areas of land administration, land management, and efforts to strengthen the land tenure security of individuals, households, and communities. While additional terms are used that are unique to the Burma context, the purpose of this glossary is to bring greater awareness of internationally used terminology.

**Access to land:** The local and/or legally recognized right to enter and use a physically defined area. Access rights may be obtained through family or group membership or through legally sanctioned processes such as allocation, purchase, and inheritance. Rights may be defined in terms of location, time, use, and the individual's relationship to the community (Leonard & Longbottom, 2000).

**Adjudication of property rights:** The process leading to a final and authoritative determination of the existing rights and claims of people to land. This may be in the context of First Registration, or it may be to resolve a doubt or dispute after First Registration. It may also be used in redistributive land reform processes. The process of adjudication should reveal what rights already exist, who holds them, and what restrictions or limitations exist on them (Ciparisse, 2003; UNECE, 1996).

**Adverse possession:** The right under the law of someone who has occupied a piece of land for a prescribed, extended period of time, is behaving like an owner, and has not recognized another's ownership to become the owner of the land. This is regardless of the fact that another owned the land when the occupant entered into the occupation (Bruce with Holt, 2011).

**Agrarian reform:** A program of activities designed to alter the agricultural structure of a country to increase agricultural production and improve standards of living of rural populations. Such reforms often include land reform or land tenure reform components (Bruce, 1998; Ciparisse, 2003).

**Agroforestry:** A land use system where woody perennials are grown on the same piece of land as agricultural crops and/or livestock, resulting in both ecological and economic interactions between the different components (Ciparisse, 2003).

**Agro-pastoralism:** A land use system that combines both crop agriculture and animal husbandry with pasture uses (Ciparisse, 2003).

**Alienation of land:** The transfer of ownership rights in land or property to someone without regard to status, implying both the existence of private property and free will. In customary tenure systems, land is rarely seen as a commodity that can be traded at will, and the ability to alienate land is limited (Garner, 2009; UNECE, 1996).

**Allocation of state land:** The assignment of state land to an individual or group under specified tenure or use restrictions (USAID, 2013).

**Alternative dispute resolution:** A process of dispute resolution taking place out of the formal court structure using mechanisms upon which both parties have agreed, such as arbitration or mediation (Garner, 2009; Ciparisse, 2003).

**Arbitration:** A formal process of dispute resolution through which a neutral third party renders a decision based on evidence and arguments submitted by the parties in contention (Ciparisse, 2003; Garner, 2009).

**Assurance of rights:** The act or process of assuring a right (Garner, 2009).

**Beneficiary:** A person for whose benefit property is held in trust, especially one designated to benefit from an appointment, disposition, or assignment (as in a will, insurance policy, etc.) or to receive something as a result of a legal arrangement or instrument (Garner, 2009).

**Boundary:** The physical demarcation on the ground or by a mathematical description, usually based on a coordinate system. The accuracy and cost of cadastral surveys is dependent on the accuracy needed for boundary descriptions. The accuracy should reflect factors such as the value of the land, the risk and cost of land disputes, and the information needs of the users of the cadaster (Ciparisse, 2003).

**Bundle of rights:** Rights held in relation to access and utilization of land resources. These include, but are not restricted to, the right to sell, mortgage, and bequeath land; cut trees; cultivate; and construct homes. This bundle can be broken up, rearranged, and passed on to others. Some of these rights will be held by individuals, some by groups, and others by political entities (USAID, 2013).

**Cadaster:** A type of land information system that contains a set of records on land parcels. Specialized cadasters may support records of property rights (judicial cadaster), taxation (fiscal cadaster), or land use (land use cadaster). A multi-purpose cadaster will register many different attributes of land parcels (Ciparisse, 2003; UNECE, 1996).

**Cadastral map:** A map that shows the boundaries and ownership of land within a specified area. Some cadastral maps show details including district names, unique identifying numbers for parcels, certificate of title numbers, positions of existing structures, section or lot numbers and their respective areas, adjoining and adjacent street names, selected boundary dimensions, and references to prior maps (USAID, 2013).

**Codification of customary law:** The process of collecting, systematically organizing, and codifying the laws, customs, and practice of a community as they relate to land and related resources. The end product may be formalized into statutory law or code (USAID, 2013).

**Codified law:** Laws, rules, and regulations that have been systematically collected and arranged, usually by subject, e.g., commercial code or criminal code (USAID, 2013).

**Collateral:** Property pledged as a guarantee for repayment of a loan. The most common form of immovable property used as collateral is the mortgage, a transfer of an interest in the land as security for a debt (Ciparisse, 2003; Leonard & Longbottom, 2000; UNECE, 1996).

**Collective ownership:** A situation where holders of land rights are clearly defined as a group and have the right to exclude others from the enjoyment of those land rights (Münkner & Kaunianen, 2000).

**Common property:** Land and other resources over which entitled beneficiaries, whether individual or community-defined, have specific common rights. The community controls the use of the common property and can exclude non-members from using it (Ciparisse, 2003).

**Communal ownership:** A situation where rights to use resources are held by a community. While these rights may include communal rights to pastures and forests, they may also include exclusive private rights to agricultural land and residential plots (Ciparisse, 2003).

**Compensation:** The payment made for property taken or adversely affected by another. Compensation payments for land are generally related to expropriation exercises, but may also include planning and zoning restrictions (Ciparisse, 2003).

**Concession:** A specialized form of lease, generally defined as a grant of specific rights and privileges over property by a government to an individual or company to develop the resources of the property, such as a mining concession, forestry concession, a concession to build a canal, or a concession to manage a government property. Payments for concessions may be related to the volume of sales or resources extracted, rather than a fixed annual rental payment (USAID, 2013).

**Condominium:** A form of ownership where parts of a property are owned individually (for example, apartments in the same building) and parts of the property are owned jointly (such as stairways, common areas, and other components integral to the design of the property) (Ciparisse, 2003; Münkner & Kaunianen, 2000).

**Continuum of land rights:** The range of possible forms of tenure, from informal land rights to registered freehold rights (UN-HABITAT, 2008)

**Co-ownership:** Property held jointly by two or more people. The enjoyment of a property in co-ownership is said to be in undivided shares, in that each person has the same right to any part of the property. There are two forms of co-ownership: joint tenancy and tenancy in common (Ciparisse, 2003).

**Customary land law:** A community's mechanism for regulating the right to use land through customary practice, rather than through written law (Ciparisse, 2003).

**Customary land rights:** The holding of land in accordance with customary law or tradition. Customary land law regulates rights to enjoy use of land that arises through customary, unwritten practice, rather than through written or codified law (Ciparisse, 2003).

**Customary land tenure:** The rules generated and enforced by a community or larger sub-state polity to govern the holding and use of land by its members. Customary rules are typically but not always unwritten (Bruce with Holt, 2011).

**Customary law:** Law consisting of customs that are accepted as legal requirements or obligatory rules of conduct; practices and beliefs that are so vital and intrinsic a part of a social and economic system that they are treated as if they were laws (Black, 2009).

**Decentralization:** The transfer of administrative powers (decision-making, executive, and fiscal) to lower levels of government, with varying degrees of autonomy (USAID, 2013).

**Deed:** The written document, or contract, that transfers title (ownership) or an interest in real property to another person (USAID, 2013).

**Deeds registration:** A system of proof of property ownership and interests, based on the registration of transfer and other deeds. A deeds registration system is limited in that it does not provide a guarantee of title. All that it typically provides is access into the chain of transactions that can be used to prove title (Ciparisse, 2003).

**Demarcation:** The marking-out of the boundaries of each land parcel on the ground (UNECE, 1996).

**Dispute resolution:** The settlement of conflict between groups or individuals. The factors determining how societies deal with internal disputes are related to the formal authority structures of courts and written law or traditional authority structures of family, village councils, and leadership figures. Dispute resolution may be formal (recognized by law and the state administration system for dispute resolution) or informal (community-based adjudication or mediation). Decisions made under informal resolution mechanisms are not always legally binding (Leonard & Longbottom, 2000).

**Easement:** The right of use over the property of another, for example, the right of access or the right of passage of utilities (USAID, 2013).

**Eviction** (of tenants and farm workers)**:** The dispossession by law from a plot of land or rental property that had been occupied or leased (Ciparisse, 2003; Garner, 2009).

**Expropriation:** The taking of land or property from the rightful owners, often in pursuit of government-sanctioned public purpose. Land may be expropriated legally by the state under compulsory acquisition or compulsory purchase procedures. The processes for expropriation should include a basis for setting compensation for the loss of the owner expropriated (Ciparisse, 2003; Leonard & Longbottom, 2000).

**Fragmentation:** The division of land into units too small for rational exploitation, usually as a result of the system of inheritance (UNECE, 2004).

**Freehold:** The right to full private ownership of land, free of any obligations to the state other than payment of taxes and observance of land use controls, imposed by the state in the public interest. This term is used interchangeably with *private property* or "private land ownership" (Bruce, 1998; Leonard & Longbottom, 2000).

**Geographical information systems (GIS):** A set of computer tools for collecting, storing, retrieving, analyzing, transforming, and displaying spatial data (Ciparisse, 2003; UNECE, 1996).

**Illegal/informal occupation:** The occupation of land or housing by an individual or household without formal approval from the legal owner (state or private). Illegal occupation ranges from an individual squatting on the property of another to informal settlements where large areas of land are occupied by many people (USAID, 2013).

**Immovable property:** See *real estate/real property*.

**Indigenous tenure systems:** Rights specific to a particular ethnic group, evolved through interaction of culture and environment and overseen by authorities whose legitimacy is based on occupation and spiritual ties to the locality (Leonard & Longbottom, 2000; Münkner & Kaunianen, 2000).

**Informal property:** Rights that lack formal, official recognition and protection. In some cases, informal property rights are illegal, i.e., held in direct violation of the law. In other cases, informal property may be "extra-legal," i.e., not against the law, but not recognized by law (Ciparisse, 2003).

**Informal settlements:** Areas where a large number of people illegally occupy land and build housing and businesses. Informal settlements, also called "squatter settlements," are generally located on the periphery of urban centers and are created because of a lack of access to urban land or housing. Rights to the property are not recognized by the state. Tenure in informal settlements is insecure, and the property is not part of the formal property or financial markets (USAID, 2013).

**Joint ownership:** Ownership by two or more persons of the same property. The individuals, who are called joint tenants, share equal ownership of the property and have the equal, undivided right to keep or dispose of the property (Lehman & Phelps, 2005).

**Land access:** The opportunity to acquire and use land; also, the fact of having acquired access (Bruce with Holt, 2011).

**Land administration:** The management of information about the ownership, value, and use of land and its associated resources. The function of a land administration system is to record, maintain, and make available information that can create security of tenure and support the land market (UNECE, 2004).

**Land allocation:** The process through which the state distributes land resources in ownership or use rights. State land resources allocated/distributed may be from the existing state asset base, the result of a land reform program where larger (formerly private) landholdings have been broken up for allocation, or the land assets of former collectives or cooperatives. In customary tenure systems,

the term refers to the process through which the traditional leader gives land use rights to individuals or families (USAID, 2013).

**Land-based revenue:** Revenue (public funds) generated from land through sales of state assets, property taxation, transfer fees, and various land administration fees (USAID, 2013).

**Land commission:** Formally constituted bodies that investigate land-related issues or implement some aspect of land policy, such as adjudication (Ciparisse, 2003).

**Land conflicts:** Competing or conflicting claims to land, often to large areas of land, typically by groups that reflect broader and deeper competing interests than those involved in most land disputes and that are not easily resolved through negotiation or adjudication within the existing legal framework. The term "conflict" implies tension and danger of violence but not necessarily the presence of violence, unless this is specified (Bruce with Holt, 2011).

**Land consolidation:** A sequence of operations designed to reorganize land parcels in an area, regrouping them into consolidated holdings of more regular form and with improved access. Consolidation of parcels of land into a single holding, whether voluntary or enforced, is intended to provide a more rational distribution of land to improve the efficiency of farming (Ciparisse, 2003).

**Land contract:** An agreement for the purchase and sale of land, usually involving installment payments by the purchaser with the transfer of title occurring upon payment of the final installment (Garner, 2009).

**Land court:** An established court having exclusive original jurisdiction over land disputes (USAID, 2013).

**Land development:** The transformation of land to be used more efficiently through the application of capital, labor, or management (USAID, 2013).

**Land disputes:** Competing or conflicting claims to rights to land by two or more parties, individuals, or groups. Disputes are generally related to boundaries, overlapping use rights, access to land, competition for resources, ownership, and inheritance (Bruce with Holt, 2011; Ciparisse, 2003; Münkner & Kaunianen, 2000).

**Land formalization:** The process by which landholding held "outside the law" (informally, without a right to do so recognized by the state) is given such legal recognition by the state. This begins with legal recognition and is then often implemented through land titling and registration (Bruce with Holt, 2011).

**Land fragmentation:** The ownership of multiple, non-contiguous parcels of land by a single owner. These are often described to be very small, non-economically viable land units. Fragmentation becomes a concern when the division of land results in units too small for rational exploitation or so widely dispersed as to present constraints to the effective management by the landholder. The principal cause of fragmentation is the subdivision of land through inheritance (USAID, 2013).

**Landholding:** A piece of land owned or possessed (USAID, 2013).

**Land governance:** The bundle of rules, rights, policies, processes, institutions, and structures created to manage the access to and use, allocation, control, ownership, management, and transfer of land and natural resources found on land (USAID, 2013).

**Land governance system:** Include state organizations that deal with land such as ministries of land, land registries, and cadastral services, and courts. Informal land governance systems include customary (informal) institutions that develop land use rules, allocate land, and resolve disputes related to land (USAID, 2013).

**Land information system:** A tool for legal, administrative, and economic decision-making and an aid for planning and development. The base of a land information system is a uniform spatial referencing system that also simplifies linking data within the system to other land-related data (Ciparisse, 2003).

**Land law:** The body of law relating to the acquisition, use, and disposal of land, including laws defining and regulating property rights and those conferring on state or other institutions land-related competencies, such as land administration, land management, land use planning, and land taxation (Bruce with Holt, 2011).

**Landlessness:** The state of having no access to land or rights in land. May also be used to indicate a situation where someone holds land but has no formal recognition of access and use rights (USAID, 2013).

**Landlord:** One who leases or rents real property to another (Garner, 2009).

**Land management:** The process of managing the use and development of land resources. Some of the critical, and sometimes conflicting, objectives that must be addressed by land management policies today include:

- Improving the efficiency of land resource use to support a growing population;

- Providing incentives for development, including the provision of residential housing and basic infrastructure, such as sewer and water facilities;

- Protecting the natural environment from degradation;

- Providing equitable and efficient access to the economic benefits of land and real estate markets; and

- Supporting government services through taxation and fees related to land and improvements (Ciparisse, 2003; UNECE, 1996).

**Land market:** The processes involved where buyers and sellers of interests in land meet. Broadly speaking, includes a range of possible transactions, such as sales, leases, mortgages, land exchanges, and other temporary transfers (Bruce, 1998; Ciparisse, 2003).

**Land ownership:** The set of rights in land held by an owner or owners. These include rights to use and dispose of the interests in the land through sale, lease, bequest, or other terms agreed upon with the person acquiring those rights (Ciparisse, 2003).

**Land policy:** The set of intentions embodied in various policy instruments that are adopted by the state to organize land tenure and land use (Ciparisse, 2003).

**Land reclamation:** The process of bringing unusable land to a usable state with higher value, for example, through swamp drainage, desalinization, reforestation, or recovery from past environmentally unsound land use or natural disaster (USAID, 2013).

**Land redistribution:** The redistribution of landholdings, usually involving the resettlement of farmers and reallocation of property rights over the land (USAID, 2013).

**Land reform:** The redistribution or reallocation of landholdings in an attempt to improve access rights to certain segments of a society. The process usually involves the breaking up of large landholdings and redistributing the land to landless people or to those who have been working on the larger landholdings. See also *agrarian reform* (Bruce, 1998; Ciparisse, 2003; Leonard & Longbottom, 2000; Ciparisse, 2003).

**Land register:** A public register used to record the existence of deeds or title documents over land, comprising the registered details of each property (Ciparisse, 2003; UNECE, 1996).

**Land registration:** See *land titling and registration*.

**Land registry:** The location (office and books or files) where records of property rights and maps are maintained, usually by a government agency (Bruce with Holt, 2011).

**Land registry fees:** Fees collected in the process of using the services of the land registry. These include initial registration as well as subsequent activities, such as obtaining copies of registration documents, registering mortgages, transferring titles, and subdividing property (USAID, 2013).

**Land rehabilitation:** See *land reclamation*.

**Land reserves:** Land set aside by the state for a particular purpose such as future allocation, protection of unique ecosystems or biodiversity, or exclusive use of indigenous peoples. May also be referred to as a "land bank" (Ciparisse, 2003).

**Land sector agencies:** Land-related administrative and regulatory institutions that play a vital role in land management and administration and in defining and supporting land markets (USAID, 2013).

**Land speculation:** The process through which land is acquired not for immediate productive use, but with the expectation that the land will increase in value and that subsequent sale will generate a profit. This practice is generally common in situations of rapidly increasing land values due to urban expansion, public works programs (road corridors), or other changing economic opportunities (USAID, 2013).

**Land subdivision:** The process through which a piece of land is divided into smaller units. This may occur for purposes of development or as a result of inheritance and the sharing of the land assets among the heirs of the landholder. See also *land fragmentation* (USAID, 2013).

**Land taxation:** The process through which governments levy taxation on land parcels. This practice is a major source of local government revenue for those countries where land and property taxation is in place (USAID, 2013).

**Land tenure:** The relationship (whether defined under formal *de jure* law or under customary law) that individuals and groups hold with respect to land. Land tenure rules define the ways in which property rights to land are allocated, transferred, used, or managed in a particular society (USAID, 2013).

**Land tenure system:** The totality of property rights in land operating within a state or sub-state polity, as well as the institutions responsible for implementing them, the patterns of land distribution they have formed and protect, and the cultural meanings of land in which the various elements work together to achieve policy objectives (Bruce with Holt, 2011).

**Land titling and registration:** The processes by which the state confers land rights upon, or recognizes claims to, land rights by occupants or other claimants (titling) and then makes an official record of such rights to facilitate their proof (registration) (Bruce with Holt, 2011).

**Land transaction:** The transfer of property rights or ownership of land permanently (through sales or inheritances) or temporarily (through leases, sharecropping arrangements, mortgages, etc.) (USAID, 2013).

**Land use planning:** The systematic assessment of land and water potential, alternative patterns of land use, and other physical, social, and economic conditions for the purpose of selecting and adopting land use options most beneficial to land users without degrading the resources or the environment, together with the selection of measures most likely to encourage such land uses (Ciparisse, 2003).

**Land use/ownership certificates:** An alternative to formal title registration that provides evidence and legitimization of occupancy without a costly land registration program. This is often seen as an intermediate step between informal land records and more formal titling programs. Use

certificates can offer security of tenure to land users without addressing potential conflicts over land ownership. In some countries or customary tenure settings, governments that are not willing to alienate land into private ownership use land use certificates as a mechanism to provide the necessary evidence of ownership or, as in China or Vietnam, provide evidence of the long-term security of the use right, rather than an ownership right, to secure access to credit (USAID, 2013).

**Land valuation:** The determination of the value of property. Value can have many meanings in real estate appraisal; the applicable definition depends on the context and usage. Appraisers estimate property value with specific procedures that reflect three distinct methods of data analysis: cost, sales comparison, and income capitalization (UNECE, 1996).

**Law review commissions:** Temporary or permanent commissions established by government to review, amend, and consolidate existing law; review proposed laws for conformity to existing law; or deal with issues arising in legally pluralistic societies (USAID, 2013).

**Lease:** To grant the possession and use of (land, buildings, rooms, movable property, etc.) to another in return for rent or other considerations (Garner, 2009).

**Leasehold:** A contractual arrangement under which a landlord (the lessor) grants the right of exclusive occupation of the land to a tenant (the lessee) for an agreed amount of money for an agreed period of time (UNECE, 2004).

**Legal aid:** The process of providing legal assistance and counseling to those who cannot afford private counsel, or who are uninformed of their rights (USAID, 2013).

**Legal pluralism:** The coexistence within a single polity of different bodies of law with different origins and, in the case of land, the coexistence of different bodies of norms governing the use of land (Bruce with Holt, 2011).

**Legitimate tenure rights:** Land tenure rights explicitly recognized in national law or policy and those rights, while not legally recognized, considered to be socially legitimate in local societies or communities (FAO, 2012).

**Map:** The presentation of the Earth's surface showing topographical features (e.g., mountains, lakes, and rivers) and other physical features (e.g., roads, forests, and areas of settlement). Thematic maps may deal with property boundaries, land use categories, soil quality, etc. (USAID, 2013).

**Marginalized groups:** Those individuals or groups who have limited or restricted access to or control over land resources because of gender, economic or social status, tribal or ethnic background, citizenship, religion, or other stratification mechanisms. Marginalized groups typically have little or no security of tenure, access to resources, access to credit, access to bureaucratic/power structures, or representation (USAID, 2013).

**Marital property:** Property, including land, owned by married couples (and, in some cases, couples in consensual unions) that is managed during marriage and is divided if the marriage ends. Property brought into the marriage may have different rules than that which is acquired during the marriage (USAID, 2013).

**Market-assisted access** (also known as "market-assisted land reform")**:** A form of land reallocation that encourages willing buyers to negotiate land purchase deals with willing sellers, with the government facilitating the purchase process through grants and other supportive measures (USAID, 2013).

**Matrilineal inheritance:** A system by which, according to law or custom, property passes from the deceased owner through the female line to his or her heirs (USAID, 2013).

**Mediation:** A method of non-binding dispute resolution involving neutral third parties who try to help the disputing parties reach a mutually agreeable solution (Garner, 2009).

**Mortgage:** The conveyance of a property by a debtor (the "mortgagor") to a creditor (the "mortgagee") as security for a financial loan with the provision that the property shall be returned when the loan is paid off by a certain date. In some legal systems, there is provision that the mortgagee has the power to sell the concerned property when the interest is not paid in time and the loan is not paid off by a certain date in accordance with the agreed stipulations (UNECE, 1996).

**Movable property:** A category of property that can be moved. This is generally property other than immovable property, also referred to as "personal property" (USAID, 2013).

**Open access resources:** Resources to which all have unrestricted access and that are not considered to be the property of anyone. This does not imply that everyone has equal ability to use the resource (USAID, 2013).

**Parcel:** A single closed area or polygon that is determined geographically by its boundaries, contains land under homogeneous property rights, and is held in one ownership (UNECE, 2004).

**Parcel/property identification:** The mechanism by which individual parcels of land are identified. Every basic property unit and parcel recorded within a cadaster or land book/land register must have an identifier (UNECE, 2004).

**Patrilineal inheritance:** A system by which, according to law or custom, property passes from the deceased owner through the male line to his or her heirs (USAID, 2013).

**Peri-urban area:** Neighborhoods, suburbs, or villages in or around the boundaries of a city or town, characterized by urban physical development activities and based on active land market transactions (Leonard & Longbottom, 2000).

**Personal property:** See *movable property*.

**Plot:** A closed polygon on the surface of the Earth that belongs to only one parcel. This area can be plotted on a plan and is the smallest unit that can be identified for the purposes of land resource management, for example, a field with a particular type of vegetation or form of use, or an area under specifically designated use such as a building. One or more plots make up a *parcel* (UNECE, 2004).

**Private property:** Property that is held privately, whether individually, jointly, or corporately (Ciparisse, 2003).

**Privatization:** The transfer of economic activities and resources from state ownership and/or control to private ownership. These activities include state enterprises, state farms, collectives, and public lands (USAID, 2013).

**Property rights:** The rights that individuals, groups, and the state hold with respect to particular land, resources, and other assets and in relation to each other (USAID, 2013).

**Public property:** Property owned by any level of government (USAID, 2013).

**Real estate/real property:** Land and anything permanently attached to it. Also referred to as *immovable property* (USAID, 2013).

**Registration:** The process of recording rights in land either in the form of a register of deeds and other documents associated with the ownership of the land rights or in the form of a register of titles to land (UNECE, 2004).

**Regularization:** A process through which informal or illegal occupation of land is legalized by statute, giving the occupiers a recognized legal right of access to the land through ownership or leasehold (Ciparisse, 2003).

**Remote sensing:** A set of techniques used for gathering information about the environment without being in direct contact with it (Ciparisse, 2003).

**Resettlement:** The relocation of individuals, households, or communities from land they own or land they are occupying. Resettlement often results from infrastructure upgrading, large development initiatives, new government land policies, or natural disasters that destroy land. Resettlement can be either voluntary or involuntary (USAID, 2013).

**Restitution:** The process of restoring land or other property to its former owners. In cases where property cannot be returned, restitution may involve compensation for its loss (USAID, 2013).

**Rule of law:** The supremacy of regular, as opposed to arbitrary, power. Respect for the legal system (constitution, civil code, laws, and regulations) in a given country by all citizens and public authorities, such that legal decisions are made by application of the law in a systematic and transparent fashion (Garner, 2009; Münkner & Kaunianen, 2000).

**Security of tenure:** The perception by individuals that rights to land will be recognized by others and protected in the event of specific challenges (USAID, 2013).

**Sedentary agriculture:** Agriculture practiced at a fixed location that utilizes the same pieces of land in successive years for crop production (USAID, 2013).

**Servitude:** An encumbrance consisting in a right to the limited use of a piece of land or other immovable property without the possession of it. A charge or burden of an estate for another's benefit (Garner, 2009).

**Sharecropping:** A system of agricultural production where a landowner allows a sharecropper to use the land in return for a share of the crop produced on the land. In this situation, labor-short households are able to provide land-short households with land for cropping without losing their rights over that land (Bruce, 1998; Ciparisse, 2003).

**Sporadic registration:** The process of registering land on a case-by-case basis. This practice is usually based on a specific action or actions of the owner of the property to trigger its entry into the registration system (Bruce, 1998; Ciparisse, 2003; UNECE, 1996).

**Squatter:** An individual who takes unauthorized possession of unoccupied premises (Ciparisse, 2003).

**Statutory land rights:** Land rights derived from state, national, or local law, as opposed to customary, religious, or traditional laws and practices (USAID, 2013).

**State land:** Land owned by the state, in contrast to land owned by private persons, either legal or natural (USAID, 2013).

**State land management:** The legislative and administrative framework that defines how state land can be allocated and managed. The legal regime governing state land will cover specific aspects of its management and mode of exploitation. This may include defining the organizations responsible for managing the land, stating applicable general principles, and/or detailing the basis for its use (USAID, 2013).

**Survey:** The process of measuring land and recording the related geographical information for planning, management, and administrative purposes (USAID, 2013).

**Systematic registration:** The systematic approach to adjudicating, surveying, and registering parcels on an area-by-area basis and bringing all claims in an area to light at the same time (Bruce, 1998; Ciparisse, 2003; UNECE, 1996).

**Tenant:** A lessee who has the exclusive right of possession of premises under a lease (Ciparisse, 2003).

**Tenure insecurity:** The situation whereby tenure rights are considered precarious due to the risk of dispossession by the actions of other individuals, communities, or the state (USAID, 2013).

**Tenure security:** The situation in which landholders consider their continued occupancy rights to be guaranteed whether by virtue of formal rights, customary rules, or some other form of assurance (Leonard & Longbottom, 2000).

**Title registration:** A system for improving the quality of ownership and proof of title through the recording of documents that confer rights over land. In a title registration system, the title registry is the final arbitrator of determining who has legal land tenure rights over a particular parcel of land (Ciparisse, 2003).

**Town and regional planning:** A framework that enables decisions to be made on how land should be used. Such planning can be relatively flexible, allowing for negotiation in implementation in the public interest, or relatively fixed, through the imposition of zoning regulations designed to protect individual property rights (Ciparisse, 2003).

**Topography:** The discipline that describes, measures, and represents landforms and features at the local level. The topographer carries out surveys, either by taking direct measurements or by using aerial or satellite photographs. "Topography" is also used to describe the geographical features of an area (Leonard & Longbottom, 2000).

**Transaction costs:** The expenses involved in completing a transaction in land rights, including both opportunity and monetary costs. Opportunity costs involve the cost of transportation and accommodation (if coming to the registration office from long distances) and rent-seeking practices of land registry officials. Monetary costs may include sales contracts, survey costs, legal fees, and stamp duties, as well as the cost of registration of the transaction in the title or deeds registry (USAID, 2013).

**Tree rights:** Specific rights held by individuals over trees and their products. These include the right to plant trees, harvest fruits from the trees, harvest the trees themselves, and own or inherit the trees. While trees are attached to the land, tree rights may vary from the land rights over the land on which the tree grows (Ciparisse, 2003).

**Trust:** An arrangement through which property rights are transferred from an individual to one or more trustees to be held for a set of beneficiaries. A trust may be set up to manage property on behalf of minors, or a charitable trust may be established to manage income from property on behalf of a large group of people (Leonard & Longbottom, 2000).

**Urbanization:** The process of development of towns and cities where population growth and population drift typically result in rapid acceleration in the size of the urbanized population (Ciparisse, 2003).

**Use right:** The right to use a thing in accordance with its designated purpose. It may be linked to membership of the resident community and perpetuated by stable and continuous occupation, confirmed by the work carried out by a family of farmers (Leonard & Longbottom, 2000).

**Usufruct:** A right in a property owned by another, normally for a limited time or until death. It is the right to use the property, enjoy the fruits and income of the property, rent it out. and collect the rents—all to the exclusion of the underlying owner. The usufructuary has the full right to use the property but can neither dispose of nor destroy the property (USAID, 2013).

**Valuation:** The process of putting a price on a piece of property. The value of businesses, personal property, intellectual property (such as patents, trademarks, and copyrights), and real estate are all commonly determined through the practice of valuation (USAID, 2013).

**Willing buyer/willing seller:** Generally used in the context of land reform or land redistribution programs where government avoids coercion or other actions to acquire land against a seller's interest. Rather, land redistribution reinforces land market transactions where a seller and a buyer willingly negotiate over terms of sale. The buyer may be the government on behalf of smallholders, tillers, and communities, or private individuals or companies (USAID, 2013).

**Zoning:** A planning procedure where a designated area is allocated for a specified use or uses. This is a commonly used approach to planning, which identifies the uses to which the zoned land may be put and specifies the type, amount, and location of that development. It is planned to promote orderly development and to reduce or avoid inconsistent uses adjacent to one another (Ciparisse, 2003).

## REFERENCES

Black, H.C. (1990.) *Black's law dictionary*, 6th ed. St. Paul, Minnesota: West Publishing Co.

Bruce, J. (1998). *Review of tenure terminology*. Madison, Wisconsin: Land Tenure Center, University of Wisconsin.

Bruce, J. with Holt, S. (2011). *Land and conflict prevention.* Colchester, UK: Initiative on Quiet Diplomacy, University of Essex.

Ciparisse, G. (ed.) (2003). *Multilingual thesaurus on land tenure*. Rome: Food and Agriculture Organization.

[FAO] Food and Agriculture Organization. (2012). *Voluntary guidelines on the responsible governance of tenure of land, fisheries, and forests in the context of national food security*. Rome: Food and Agriculture Organization.

Garner, B. (ed.) (2009). *Black's law dictionary*, 9th ed. St. Paul, Minnesota: West Publishing Co.

Lehman, J., & Phelps, S. (2005) *West's encyclopedia of American law*, 2nd ed. Detroit: Thomson/Gale.

Leonard, R., & Longbottom, J. (eds.). (2000). *Land tenure lexicon: A glossary of terms from English- and French-speaking West Africa*. London: International Institute for Environment and Development.

Münkner, H-H., & Kaunianen, H. H. (2000). Fachglossar zum Orientierungsrahmen Bodenrecht und Bodenordnung der GTZ. Berlin: GTZ.

[UNECE] United Nations Economic Commission for Europe. (2004). *Guidelines on real property units and identifiers*. New York and Geneva: United Nations Economic Commission for Europe.

UNECE. (1996). *Land administration guidelines: With special reference to countries in transition*. Geneva: United Nations Economic Commission for Europe.

[UN-HABITAT] United Nations Human Settlement Program. (2008). *Secure land rights for all.* Kenya: United Nations Human Settlement Program.

[USAID] United States Agency for International Development. (2013). *Land tenure and property rights framework*. Washington, DC: United States Agency for International Development.

# ANNEX J: MOBILE DATA COLLECTION OPTIONS FOR PARTICIPATORY MAPPING

In 2015, prior to beginning pilot field work, LTP conducted a desk study of different technology options for mobile data collection and mapping. A summary of the different apps and the features LTP investigated is highlighted in the table below. Note that this analysis has not been updated since 2015, except to add Kobo Toolbox, and technology changes very quickly, so these results are not up to date. Local organizations should carefully evaluate different technology options before beginning field work. Remember that using mobile devices for data collection will require additional time for set up and testing, but may result in faster data collection and produce data that are easier to manage.

Throughout pilot testing, LTP utilized several different technology options and found that free and open-source app options are ideal in Myanmar, as payment for monthly fees often requires a credit card. At the beginning of piloting, LTP used two technologies that require payment: iFormBuilder and Geospago. After testing these apps, LTP moved to Kobo Toolbox, a free, open-source alternative. LTP tested other free, open-source applications, but found them to be difficult to use. Kobo Toolbox, at the time of this writing, is easy to use and provides a full data collection and management solution without investment in a local server. LTP teams also used handheld global positioning system (GPS) units as a back-up to data collection and to track boundary walk data.

# OPTIONS FOR MOBILE DATA COLLECTION

| | Application | Android | iOS | Open Source | Free | Non-Spatial Data Capture | Cloud Data Storage | Offline Capability | Collect Features | Draw Features | Customizable | External GPS supported | Wireless Upload | Multimedia | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **LTPR Tools** | **MAST** | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | ● | ● | Data model configured on STDM and LADM. Good for parcel-level land tenure data collection. |
| | **STDM** | | | ● | ● | | | | | | | | | | Not mobile, entirely desktop. |
| | **Open Tenure** | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | ● | ● | ● | Data model configured on LADM. Good for recording claims for formal registration. |
| | **Cadasta** | | | ● | ● | ● | ● | ● | | | | | | | | TBD early 2016. |
| **Generic Tools** | **Qfield (QGIS mobile)** | ● | | ● | ● | | ● | ● | | | | | | ● | ● | In beta testing phase. Good open-source competitor to ESRI. |
| | **Geo Open Data Kit (ODK)** | ● | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | Large suite of tools that can be flexible and customizable for any data need. |
| | **Collector for ArcGIS** | ● | ● | | | ● | | ● | ● | | | | | ● | ● | Tool within ESRI platform, easily integrated with ArcGIS Online. US$2,500per year for 5 users. |
| | **Kobo Toolbox** | ● | | ● | ● | ● | ● | ● | | | ● | ● | ● | ● | | Free and easy to create usernames on online platform. New version may not support line and polygon capture. |
| | **Geospago** | ● | ● | | | ● | ● | ● | ● | ● | ● | | | ● | ● | One simple platform for data collection, management, and visualization. US$14.99per mo. or US$164.89 per year per user. |

| Application | Android | iOS | Open Source | Free | Non-Spatial Data Capture | Cloud Data Storage | Offline Capability | Collect Features | Draw Features | Customizable | External GPS supported | Wireless Upload | Multimedia | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANDMAP | ● | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | Well designed for utilities, fewer options for form customization. US$199 per device per year. |
| Fulcrum | ● | ● | | | ● | | ● | ● | | ● | | ● | ● | No line and polygon collection. US$18 per month per user. |
| FAIMS Mobile App | ● | | ● | ● | ● | ● | ● | ● | ● | ● | | ● | ● | Designed for archeological use. |