Experience so far from introduction of Land Consolidation in Myanmar

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“Land Consolidation is like a vehicle which can carry all stakeholders of an irrigation project to the goal of sustainable development in Myanmar and could contribute to the Voluntary Guidelines on Governance of Tenure and the United Nation Sustainable Development Goal globally.”
Our Mission

* To implement the Land Consolidation in irrigation projects of Myanmar with Participatory Land Use Planning (PLUP) Process for sustainable development and Governance of Tenure.

- Kachin State (1913) acres
- Sagaing Region (2359) acres
- Magway Region (2045) acres
- Rakhine State (1079) acres
- Naypyitaw Council Area (10026) acres
- Ayeyarwaddy Region (10566) acres
- Yangon Region (26880) acres
- Mandalay Region (5051) acres
- Shan State (879) acres
- Kayar State (817) acres
- Bago Region (10698) acres
- Kayin Region (2897) acres
- Mon State (1605) acres
- Tanintharyi Region (460) acres

Total (77275) acres
Experiences so far from introduction of land consolidation in Myanmar

- Experiences
- Irrigation Development in Myanmar
- Challenges in Irrigation Development
- “Land Consolidation” Solution of Challenges in Irrigation Development
- Institutional Change through Land Consolidation
- Way Forward
Experiences so far from introduction of land consolidation in Myanmar

- Systematic community mobilization and development could assist smooth implementation of Participatory Land Use Planning (PLUP) process jointly implemented by PLUP Team of Ministry and Project Implementation Committee (PIC) of Farmers.
- Proper and in time competition of PLUP process ensure efficient Land Consolidation work.
- Realization of institutional change “joint management” works well for sustainable irrigation development (O and M) via land Consolidation with PLUP process.
Farmers (PIC) participation in PLUP Process ‘cadastral resurvey’ to update
Farmers (PIC) participation in ‘reallocation’ of consolidated land
Joint Management for Irrigation Development (Operation and Maintenance)
At the end of April 2016, 581 additional irrigation projects have been completed in Myanmar.

Increased beneficial area to more than 1.14 million hectares.
Challenges in Irrigation Development

- Irrigation and Drainage management with plot to plot irrigation and drainage lack behind to increase irrigated area coverage, productivity and better distribution of benefits (Upstream and Downstream).
- Manual Land Preparation could not synchronize with progress of irrigation leads to low irrigation efficiency.
- Double to triple cropping with irrigation need farm mechanization to finish farm activities in time.
‘Land Consolidation’ solution for irrigation development challenges

- Better Irrigation and Drainage Management avoiding plot to plot system (individual access to irrigation and drainage)
- Efficient use of Farm Machinery (Land Preparation)
- Better access to farm plots for farming activities (Low Cost and Lost)
- Efficient harvesting (Low Cost and Lost)
- Joint Irrigation Management (or) Participatory Irrigation Management (PIM) through PLUP Activities
- Clear demarcation of irrigable area for each outlet of tertiary canal (Water Users’ Group forming and Irrigation Information management)
<table>
<thead>
<tr>
<th>Category</th>
<th>Field Condition</th>
<th>Width (ft)</th>
<th>Length (ft)</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field lot</td>
<td>Paddy Field</td>
<td>360</td>
<td>120</td>
<td>1.0</td>
</tr>
<tr>
<td>Field block</td>
<td>Paddy Field</td>
<td>360</td>
<td>1,200 – 2,400</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Farm block</td>
<td>Paddy Field</td>
<td>360 - 720</td>
<td>1,200 – 2,400</td>
<td>20 - 40</td>
</tr>
</tbody>
</table>
Outline of the Project

- Farmland before Consolidation
Outline of the Project

- Farmland after Consolidation
## Outline of the Project

### Summary of the Project

<table>
<thead>
<tr>
<th>Project Location</th>
<th>Tegyi Gone Village</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zabu Thiri Township</td>
</tr>
<tr>
<td></td>
<td>Nay Pyi Taw</td>
</tr>
<tr>
<td>Project Area</td>
<td>100 Hectares</td>
</tr>
<tr>
<td>Total Farmers</td>
<td>97 Nos.</td>
</tr>
<tr>
<td>Main Components</td>
<td>Farm Road</td>
</tr>
<tr>
<td></td>
<td>- 11 Nos. @ 9.4 km</td>
</tr>
<tr>
<td></td>
<td>Irrigation Canal</td>
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<tr>
<td></td>
<td>- 33 Nos. @ 14.89 km</td>
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<tr>
<td></td>
<td>Drainage Canal</td>
</tr>
<tr>
<td></td>
<td>- 20 Nos. @ 9.54 km</td>
</tr>
<tr>
<td></td>
<td>Bridge</td>
</tr>
<tr>
<td></td>
<td>- 2 Nos.</td>
</tr>
<tr>
<td></td>
<td>Hydraulic Structures</td>
</tr>
<tr>
<td></td>
<td>- 123 Nos.</td>
</tr>
<tr>
<td></td>
<td>Exhibition Hall &amp;</td>
</tr>
<tr>
<td></td>
<td>Agricultural Machinery Warehouse</td>
</tr>
<tr>
<td>Construction Period</td>
<td>2 December 2014 to</td>
</tr>
<tr>
<td></td>
<td>31 March 2015 (4 months)</td>
</tr>
<tr>
<td>Project Implementing Organization</td>
<td>Korea International Cooperation Agency</td>
</tr>
<tr>
<td></td>
<td>Korea Rural Community Corporation</td>
</tr>
<tr>
<td></td>
<td>&amp;</td>
</tr>
<tr>
<td></td>
<td>Ministry of Agriculture and Irrigation</td>
</tr>
</tbody>
</table>
Map for The Ownership of Farmers (Cadastral Map)

Blank Map
Institutional change (Joint Management) through PLUP of Land Consolidation

• Up dated Cadastral Map and attribute area data of proposed land consolidation block are approved by PLUP Team and each beneficiary farmers through PIC.
• Final Design and Reallocation Plan approved by PLUP Team and each beneficiary farmers through PIC
• Extension of Joint Management in construction of land consolidation, operation and management of an irrigation canal for sustainable irrigation development with the experience of PLUP Process
• Then extension to other irrigation canals of the project and then to other irrigation projects (Think big and start with small steps)
Challenges in smooth institutional change

- Lack of Law (or) Legal instructions for Land Consolidation.
- Lack of experienced officials and National Specialist to implement the PLUP process efficiently
- Lack of group work when grievance issues rise up
Challenges in smooth institutional change

- Improper provision of service provider (only specialist) for social/community mobilization.
- Limited capacity of counterparts to International Technical Assistant (ITA) for Design
- Limited capacity to have approved and issued land titles using updated cadastral maps and attribute area data
Measures against Challenges in smooth institutional change

- Establishment of Law (or) Legal instructions (Guidelines) for Land Consolidation base on the experience
- Before Law (or) Legal Instruction (Guidelines) have been established close and joint back up of Local Government, Local Authority (MIA) and Ministry (MOALI) for land consolidation activities.
- Capacity building of Officials, National Specialists and Service Providers to implement the PLUP process efficiently.
- Set up of grievance system ahead of grievance issues rise up (social safeguard mechanism)
Measures against Challenges in smooth institutional change

- Provision of service provider (not only specialist) in time and strength needed
- Capacity building of counterparts to International Technical Assistant (ITA) for Design.
- Capacity building of surveyors and managers to have approved and issued land titles using updated cadastral maps and attribute area data with the participation of all farmers of an area planned for land consolidation.
Way forward

- Capacity building for all stakeholders of Sustainable Irrigation Development through Land Consolidation to access Advanced Survey Technology and Agriculture Land Management System.
- To look for the assistance and aid from Local, Regional and International Organization for capacity building to implement Model land Consolidation Projects proving that it is the solution for sustainable development of Irrigated Agriculture.
Thank You for your Attention!