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1. BACKGROUND

Overview of the sector

- Agriculture provides livelihoods for more than 70% of the Mekong Basin/s population, with 24% of the regional considered to be below the poverty line.
2. CURRENT STATUS OF THE AGRICULTURE AND LAND USE CHANGE THEMATIC AREA

Land Use and Land Cover in Cambodia

- Total cultivated area of Cambodia is about 4.37 million ha (24% of the land), while forests cover about 56%.
- Rice is the dominant crop, which covers approximately 3.57 million ha, (80% of agricultural land) including the area of receding, floating rice and paddy rice interspersed with villages.
Major changes in agricultural land use in Lao PDR between 1998/99 and 2010/11

<table>
<thead>
<tr>
<th>Land use category</th>
<th>Agricultural land area (‘000 ha)</th>
<th>(%) annual growth*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1998/99</td>
<td>2010/11</td>
</tr>
<tr>
<td>I. Agricultural land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Land under temporary crops</td>
<td>976 (93.1)</td>
<td>1 623 (86.8)</td>
</tr>
<tr>
<td>(b) Land temporarily fallow</td>
<td>765 (73.0)</td>
<td>1 230 (65.8)</td>
</tr>
<tr>
<td>(c) Land under permanent crops</td>
<td>112 (10.7)</td>
<td>198 (10.6)</td>
</tr>
<tr>
<td>(d) Meadows and pastures</td>
<td>81 (7.7)</td>
<td>149 (7.9)</td>
</tr>
<tr>
<td>II. Non-agricultural land</td>
<td>72 (6.9)</td>
<td>247 (13.2)</td>
</tr>
<tr>
<td>(a) Forest and other wooded land</td>
<td>18 (1.7)</td>
<td>26 (1.4)</td>
</tr>
<tr>
<td>(b) Other land</td>
<td>54 (5.2)</td>
<td>122 (6.5)</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1 048 (100.0)</td>
<td>1 870 (100.0)</td>
</tr>
<tr>
<td>% share of total land area</td>
<td>4.43</td>
<td>7.90</td>
</tr>
</tbody>
</table>

Overview of Thailand

- The total area of Thailand is 51.31 million ha consist of
  - Agricultural area is 20.95 million ha.
  - Forest area is 16.78 million ha.
  - Urban and rural area is 13.35 million ha.
  - Mangrove forest is 0.23 million ha.
3. DEVELOPMENT TRENDS

Development trends in Cambodia
Sub-Sectors to Agricultural Growth

Composition by Sector in Agriculture, 2011

- Crops: 54%
- Fisheries: 25%
- Livestock Production: 15%
- Forestry: 6%
Priority programmes of Agricultural Development

1. Enhancing Agricultural Productivity and Diversification;
2. Increase Market Access for Agricultural Products;
3. Strengthening Institutional, Legislative Framework and Human Resource Development (HRD);
4. Sustainable Fisheries Resources Management and
5. Sustainable Forestry Resource Management

Development trends in Laos

The objective of the National Irrigation Development strategy is to create a more irrigated land.

The implementation of the plans could see the new development of 101,700 Ha in the period 2015-2020 and 329,425 Ha in the period 2020-2040 reaching a total irrigated area of 446,125 Ha for the large projects.

The target is to use the potential water resource by developing gravity irrigation systems in order to reduce the cost of irrigation service and production that will enhance the price competitiveness of agriculture products.
Development trends in Thailand

• The Eleventh National Economic and Social Development Plan (2012-2016), and The Agricultural Development Plan.

• The plan can be substantially performed by applying structural measures and non-structural measures.

• The structural measures mainly emphasize the use of water inside the basins especially in the areas suffering from both flood and drought. The water diversion between the basins will then be considered secondly.

• The non-structural measures are the applications of technologies, coordination with other sectors and participations in managements of storages and irrigation projects in the basins and among the basins.

Strategy to Action
Agricultural planning

Land use planning for Northeast Thailand, Mekong sub basin

Strategy 2: The Agricultural Development Goal

Increase agricultural production

Economic crops
• For Thailand 32 crops
• For northeast about 6 crops (cassava, para-rubber, sugarcane, paddy, maize, soybean)
Development trends in Viet Nam

- The overall objective of the Agriculture sector is to develop a comprehensive and sustainable system and to optimally utilize the potential.
- **Generate a greater production characterized by a high productivity, quality, efficiency and competitiveness.**
- The part of Agriculture within the *Agriculture, forest and fisheries sector* will decrease by 2020 in favor of the Aquaculture development.

Development trends in Viet Nam

*Mekong Delta Area*

- **Area subject to climate change effects and urbanization growth**
- **Farmers will switch to aquaculture (shrimp) to overcome the climate change effects and seek for higher income**
- Several major infrastructural projects are scheduled to meet the objectives of the water resources planning. It consists of canal works, dikes improvement, drainage water management, regulation structures and pumping stations development.
The Mekong River Delta Region

Development trends in Viet Nam

Central Highlands Area

- The main objective for the development of the area is to minimize the transfer of agricultural land into unsustainable land cultivation systems.
- It is foreseen to prioritize the expansion of rubber and coffee plantations and the development of land with annual crops in upland fields with irrigation.
- The development of irrigation is targeted to improve rice cultivation areas and address the transfer of water service. Irrigation development will be prioritized to the precarious areas and turn them to cropland and other crops with a high economic efficiency.
4. DIRECT IMPACTS
Analysis of Impact Assessment of agriculture and land use change

Activities were developed to assess the direct impacts and provide information required to assess the impacts of rainfed agriculture and land use change. The activities undertaken were:

- Collection and review of relevant literature and studies about the impacts of rainfed agriculture and forestry at the national level.
- Two type of projects were selected (rainfed agriculture and forestry) for in-depth review and extracting of some selected indicators describing the social, economical and environmental impacts.

Analysis of the Impact Assessment of Agriculture and Land Use Change

- Very few achievements were realised so far
- The activities were concentrated on the data collection and scenario formulation
- The existing dataset do not allow to conduct a significant direct impact analysis
- The activity is ongoing
Coordination with the modelling teams

Discussions were held with the modeling teams on the following topics:
• Models capabilities and models used according to the target zones
• Data exchange framework for the water quality, sediment transport, nutrient transport and water flow assessment
• General discussions on the data needed for the socio economic assessment

5. ISSUES
Issues

- The activities conducted in Phase 1 did not allow to obtain a clear and consistent information on the current and future prospects for the development of the Thematic Area
- Generic and out to date information is only available currently
- Based on the available data, it is difficult to make direct impacts assessed

The RTWG is requested to:

- Take note
- Provide guidance
Thank You