Concept Note

Regional Training
Implementing GLAD System for forest cover change monitoring in the Mekong Region
7-9 August 2017
GISTDA, Sri Racha, Chonburi, Thailand

Background:

Countries in the Mekong region are committed to developing National Forest Monitoring System for REDD+, and improving the information on forest extend and status. Cambodia, Lao PDR, Myanmar and Thailand, have been aligning their forest cover mapping with the UNFCCC Good Practice Guidance, which includes transparency, consistency, comparability, completeness, and accuracy.

As part of these efforts, Forestry Agencies in the Mekong region identified that the lack of time series and temporal data and standardized method to assess uncertainties are the primary constraints in ensuring consistency of the produced maps.

Through discussions with national counterparts during various regional workshops and trainings organized by SilvaCarbon, it was identified that there is an opportunity to address these constraints by implementing the forest cover change mapping method developed by the University of Maryland (UMD) - the Global Land Analysis and Discovery (GLAD) System.

GLAD System uses an automated Landsat data compositing and classification algorithm for forest cover change mapping. As part of the SilvaCarbon program, Cambodia, Lao PDR and Thailand will start implementing the GLAD system in 2017.

In parallel, SERVIR-Mekong has been collaborating with different land use agencies and other stakeholders from the Mekong region to produce high-quality regional land cover maps and identify land cover changes in the Lower Mekong. This is done through the collaborative development of the Regional Land Cover Monitoring System (RLCMS) that leverages the power of Google Earth Engine and the increased availability of open source tools and products.

SERVIR-Mekong is also collaborating with UMD to implement the GLAD system at regional level and calibrate the global forest cover change products for the Mekong region. Under the Applied Sciences Team grant, UMD will strengthen capacity of SERVIR-Mekong to implement the GLAD system in the region, provide technical support to countries as needed, and integrate forest resources data in the RLCMS.

In order to align these various developments, SERVIR-Mekong, UMD and SilvaCarbon are planning a regional training to convene forestry officers and key research partners from Cambodia, Lao PDR, Myanmar and Thailand. The training will be hosted by the Geo-Informatics and Space Technology

Development Agency (GISTDA) and will be organized in collaboration with the Department of National Parks, Wildlife and Plant Conservation, Thailand, Ministry of Environment, Cambodia, Department of Forestry, Lao PDR, and Department of Forestry, Myanmar.

The training will be organized from 7-9 August at GISTDA training centre in Sri Racha, Chonburi, Thailand.

Overall objective of the training is to provide brief introduction to the GLAD System, its methodology and tools, with a particular focus on sample-based methods of forest cover area and change estimation and map accuracy quantification. Each country will work on its own country samples.

The training will kick-start the implementation of the GLAD System at national level. The in-depth training on national data management and characterization will be performed during the countries training workshop at UMD.

Training objectives:

1. Providing an overview of the UMD GLAD methodology for national forest monitoring and the existing products developed with different countries
2. Providing training and hands-on exercise on sample-based area and change quantification, including stratified sampling design, image interpretation, and sample data analysis.
3. Initiating the national sample-based forest cover and change analysis for 2000 - 2016 time interval
4. Discussing the mapping objectives at country level: baseline, frequency, priority forest types to be mapped (e.g., primary forest, secondary forest, natural forest, plantations) and the disturbance types.

Expected Outcomes:

1. Increased understanding of the GLAD national forest monitoring methods and tools.
2. Understating of the use of SERVIR regional products for national forest monitoring applications. Increased understanding on the complementarities between nationally-owned change products and regional data sets, depending on the mapping objectives
3. 100 samples interpreted: Each country will be working on interpreting its own samples. The rest of the samples the countries will be able to interpret and analyze after the workshop using provided tools and datasets.

Training participants:

- Remote sensing officers responsible for producing forest cover maps for REDD+ from Cambodia, Lao PDR, Myanmar, and Thailand
- Academia representatives from Cambodia, Lao PDR, Myanmar, and Thailand
- GISTDA remote sensing officers working with forestry/land use data
- Remote sensing specialists from SERVIR-Mekong and SERVIR HKH