

International Workshop On Land Cover/Land Use Changes (LCLUC), Forestry, and Agriculture in South/Southeast Asia, August 8-10th, Cambodia

AGENDA

DAY 1 (8TH AUGUST, MONDAY)

9:00-9:40	Opening Session-I
------------------	--------------------------

8:30 Registration

9:00 Welcome Address – Huon Thavrak (Vice Rector, Royal University of Agriculture, Cambodia)

9:15 Welcome Remarks –Garik Gutman (NASA HQ, USA)

9:25 Welcome Remarks - Krishna Vadrevu (NASA Marshall Space Flight Center, USA)

9:35 Welcome Remarks –Matsunaga Tsuneo (National Institute of Environmental Studies, Japan)

9:40-11:45	Session-II: Programmatic Presentations Chair: Garik Gutman (NASA LCLUC Program, USA)
-------------------	---

9:40 NASA LCLUC Program Updates – Garik Gutman (NASA Headquarters, USA)

10:10 NASA South/Southeast Asia Research Initiative (SARI) Updates – Krishna Vadrevu (NASA MSFC, USA)

10:35-10:45

Group Photo

10:45-11:15

Tea Break

11:15 USAID's Environment Program in Cambodia – Andrea Pavlick (USAID, Cambodia)

11:45-2:55	Session-III: LCLUC and Forestry Chair: Mark Cochrane (University of Maryland Center for Environmental Science (UMCES), USA) Co-Chair: Thav Sopheak (Royal University of Agriculture, Cambodia)
-------------------	---

Keynote Presentation (20-min Presentations;5-min discussion)

11:45 Transformative Change of Land Cover and Land Use in Southeast Asia - Son Nghiem (JPL, California Institute of Technology, USA)

12:10 Geospatial Data Needs and Priorities in Cambodia – Thy Try (Open Development Cambodia (ODC), Cambodia)

12:35-1:35

Lunch

Technical Presentations (15-min Presentations; 5-min discussion)

1:35 The Impact of Land Use and Land Cover Change on River Morphology - Kasturi Kanniah (Universiti Teknologi Malaysia)

1:55 Spatial and Temporal Analysis of Land Use Land Cover of Preah Sihanouk Province, Cambodia Seng Bunthion, Ministry of Environment, Cambodia

2:15 Land Use and Ecosystem Services in Traditional Home Gardens in Sri Lanka - Ajith Gunawardane (Central Environmental Authority, Sri Lanka)

2:35 Dynamic Landslide Hazard Evaluation using Persistent Scatter Interferometry for Environmental Impact Assessment - Luis Carlos Mabaquiao (Univ. of Philippines, Diliman)

2:55 – 5:10 Session – IV. LCLUC and Forestry

Chair: Tsuneo Matsunaga (National Institute of Environmental Studies (NIES)) Japan

Co-Chair: Nydia Chhinh (Royal University of Phnom Penh, Cambodia)

Keynote Presentation (20-min Presentation; 5-min discussion)

2:55 Oil Palm and Land Cover Change Dynamics in Indonesian Peatlands – Mark Cochrane (University of Maryland Center for Environmental Science (UMCES), USA)

3:20-3:50

Tea Break

Technical Presentations (15-min Presentation; 5-min discussion)

3:50 Open data for Forest Cover, Land Cover and Land use – Koem Chhuonvuoch (Open Development Cambodia (ODC), Cambodia)

- 4:10 Mangrove Phenology And Environmental Drivers Derived from Remote Sensing In Southern Thailand - Werapong Koedsin (Prince of Songkla University Phuket Campus, Thailand)
- 4:30 Analysis of Borneo Terrestrial Ecosystem Change Using Satellite Solar-Induced Fluorescence (SIF) Data - Kazutaka Murakami (NIES, Japan)
- 4:50 An Overview of GEDI Lidar Satellite for Forestry Resource Monitoring - Opportunities and Challenges in SE Asia - Hao Tang (National University of Singapore)
- 5:10 *Adjourn*

DAY 2 (9TH AUGUST, TUESDAY)

<p>9:00-1:20 Session-I. Agricultural LCLUC Chair: Krishna Vadrevu (NASA MSFC, Japan) Co-Chair: Phy Chhin (Directorate of Agriculture, Cambodia)</p>

Keynote Presentation (20-min Presentation; 5-min discussion)

- 9:00 Rethinking Agrarian Transition Through Rice Farming in Southeast Asia - Jeff Fox (East West Center, USA)
- 9:25 Land Cover/Land Use and Agriculture in Cambodia - Current Status and Priorities – Seng Vang (General Directorate of Agriculture, Cambodia)

Technical Presentations (15-min Presentation; 5-min discussion)

- 9:50 Crop Mapping and Monitoring in Thailand and CLM (Cambodia, Laos and Myanmar) Countries – Panu Nuangjumnong (GISTDA, Thailand)

10:10-10:40
Tea Break

- 10:40 Drought and Crop Yield Modeling Impacted by Climate Change in the Mekong River Basin – Venkataramana Sridhar (Virginia Tech, USA)
- 11:00 Climate Change Impact on Rice Yield and Food Security in the Riverine Communities In Cambodia – Sok Serey (Royal University of Phnom Penh, Cambodia)
- 11:20 Suitability Analyses of Paddy Fields and Coffee Plantations in Indonesia Under Climate Change Scenarios - Edvin Aldrian (BMKG, Indonesia)

11:40 Impact of Agricultural Land Expansion on Land Use Change and Land Degradation in Cambodia
Phanith Chou and Taingoun Sourn (Royal University of Phnom Penh, Cambodia)

12:00 Land Use Shifts in Indian Agriculture - Nilabja Ghosh (Delhi University, India)

12:20-1:20

Lunch

1:20-3:50 Session-II. Agriculture – Crop mapping, monitoring, acreage estimation and modeling

Chair: Seng Vang (Directorate of Agriculture, Cambodia)

Co-Chair: Sridhar Venkataramana (Virginia Tech, USA)

Keynote Presentation (20-min Presentation; 5-min discussion)

1:20 Asia Rice and JAXA Activities – Shinichi Sobue (JAXA, Japan)

1:45 Applying RIICE Technology for Rice Crop Monitoring and Insurance in Cambodia -Phy Chhin
(General Directorate of Agriculture, MAFF, Cambodia)

Technical Presentations (15-min Presentation; 5-min discussion)

2:10 Rice Crop Mapping and Yield Estimation in the Mekong Delta and Red River Delta, Vietnam –
Lam Dao Nguyen (VNSC, STAC, Vietnam)

2:30 Pixel-Based Evaluation of Rice Production and Related Greenhouse Gas Emissions In The
Mekong Delta Via a Digital-Twin System With a Simultaneous Data Assimilation Scheme of
SAR Data And Ground Observations - Hironori Arai (CESBIO, France)

2:50 Groundnut Acreage Estimation and Yield Modeling in Part of West and South India using
Satellite Images - Dharmesh Verma (India)

3:10 Decision Support Tools for Food Security – Yasar Khan (World Resources Institute, India)

3:30 Soil Texture Classification Using Lab Spectroscopy Techniques - Chirag Ternikar (Indian Institute
of Science, India)

3:50-4:20

Tea Break

4:20 *Adjourn*

DAY 3 (10TH AUGUST, WEDNESDAY)

9:30-1:45	Session-I. Emission inventories, GHG's and Aerosols Chair: Tsuneo Matsunaga (NIES, Japan) Co-Chair: - Siwatt Pongpiachin (NIDA, Thailand)
------------------	--

Keynote Presentation (20-min Presentation; 5-min discussion)

- 9:30 GOSAT-2 Observation in Southeastern Asia Over the Past Three Years: CO₂, CH₄, CO, And Aerosol - Tsuneo Matsunaga (National Institute of Environmental Studies, Japan)
- 9:55 Vegetation Fires in South/Southeast Asia and Emissions during COVID-2020 and Pre-Pandemic- Krishna Vadrevu (NASA MSFC, USA)

Technical Presentations (15-min Presentation; 5-min discussion)

10:20-10:50

Tea Break

- 10:50 Role of Land and Forest Fire Management on Indonesia's Forest and Other Land Use (FOLU) Net Sink 2030 - Israr Albar (Directorate of Land and Forest Fire Management, Ministry of Environment and Forestry, Indonesia)
- 11:10 Forestry and Carbon Emission from Cambodia – Thav Sopheak (Royal University of Cambodia)
- 11:30 Greenhouse Gases Fluxes Across Land-Use Gradient in Sabah, Malaysia - Justin Sentian (Univ. of Malaysia Sabah, Malaysia)
- 11:50 Multi-sensor Satellite Data for Estimating PM_{2.5} across Malaysia - Kasturi Kanniah (University of Technology, Malaysia)
- 12:10 Solar PV Mapping With Remotely Sensed Data, and Prospects for the less GHG Emission Society Based on the Efficient Strategy of Solar Power Production - Shoki Shimada and Wataru Takeuchi (University of Tokyo, Japan)

12:30-1:30

Lunch

1:30-4:20	Session-II. Emission Inventories of Air Pollutants, SLCP, GHG's and Aerosols Chair: Kasturi Kanniah (Universiti Teknologi Malaysia) Co-Chair: Israr Alabar (Ministry of Environment and Forestry, Indonesia)
------------------	---

Keynote Presentation (20-min Presentation; 5-min discussion)

- 1:30 Vegetation fires in Indonesia and Meteorological Drivers – Edvin Aldrian (BKMKG, Indonesia)

1:55 Impact of Biomass Burning on Aerosol Properties in Penang, Malaysia - Hwee SanLim (University Sains, Malaysia)

Technical Presentations (15-min Presentation; 5-min discussion)

2:20 Validation of GOSAT-2/CAI-2 Aerosol Products (Optical Properties) in Southeast Asia – Akihiro Uchiyama (NIES, Japan)

2:40 Influence of Open Biomass Burning on Fine and Ultrafine Airborne Particles in Phnom Penh, Cambodia - Worradorn Phairuang (Kanazawa University, Japan)

3:00 Emission Factors From Combustions of Biomass Materials for Source Apportionment—A New Database For 17 Plant Species - Siwatt Pongpiachin (NIDA Center for Research and Development of Disaster Prevention and Management, Thailand)

3:20-3:50

Tea Break

3:50 – 4:30 - Discussion Session – Research Needs and Priorities

Chair: Garik Gutman (NASA HQ, USA)

Co-Chair: Krishna Vadrevu (NASA MSFC, USA)

4:40 Meeting Outputs – Krishna Vadrevu (NASA Marshall Space Flight Center, USA)

4:50 Vote Of Thanks – Thav Sopheak, Garik Gutman, Matsunaga Tsuneo and Krishna Vadrevu

5:00 *Adjourn*
