

# Land Cover/Land Use Change SARI International Regional Science Meeting in South/Southeast Asia, Chiang Mai, Thailand 17-19<sup>th</sup>, 2017

## AGENDA

---

**DAY 1 (17<sup>TH</sup> JULY, MONDAY) LEELAWADEE ROOM, 5<sup>TH</sup> FLOOR, FURAMA HOTEL, CHIANG MAI**

**9:25-10:35 Introduction Session**

8:00 Registration

9:10 Welcome Introduction – Ronald Macatangay (Researcher, NARIT)

9:15 Welcome Address – Boonrucksar Soonthornthum (Prof. and Executive Director, NARIT)

9:35 Welcome Remarks – Chris Justice (U. Maryland College Park, USA)

9:45 Welcome Remarks – Toshimasa Ohara (NIES, Japan)

9:55 Welcome Remarks and NASA LCLUC Program Updates - Garik Gutman (NASA HQ)

10:15 Welcome Remarks, South/Southeast Asia Research Initiative (SARI) Updates and Meeting Objectives – Krishna Vadrevu (NASA MSFC, USA)

10:35-10:45

*Group Picture*

10:45-11:15

*Tea Break*

**11:15-12:40 Session-I: Agricultural LCLUC**  
**Chair: Chris Justice (University of Maryland College Park, USA)**

### **Keynote Presentation (20-min Presentation-5-min discussion)**

11:15 GEOGLAM Activities – Chris Justice (University of Maryland College Park, USA)

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

11:40 JAXA's Mission Updates and Agricultural Applications – Kei Oyoshi (JAXA, Japan)

12:00 Monitoring of Rice crops in the Mekong Delta, Vietnam Using Multi-Temporal Sentinel Data – Lamdao Nguyen (Vietnam National Satellite Center, Vietnam)

12:20 Crop Mapping in the Hindu-Kush Himalaya Region – Kabir Uddin (ICIMOD, Nepal)

12:40-1:40

*Lunch*

<b>1:40 – 5:40</b> <b>Session – II. Emission Inventories and Land Atmospheric Interactions</b> Chair: <b>Krishna Vadrevu (NASA MSFC, USA)</b>
--

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

- 1:40    Historical Analysis and Inverse Modeling of Air Pollutant Emissions in Asia – Toshimasa Ohara (National Institute of Environmental Studies, Japan)
- 2:05    A Generic Approach For Inversion And Validation Of Surface Reflectance and Aerosol Over Land: Application To Landsat 8 And Sentinel 2 – Eric Vermote (NASA Goddard Space Flight Center, USA)

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

- 2:25    Updates of the Seven South East Asian Studies (7-SEAS) – George Lin (National Central University, Taiwan)
- 2:45    New Ground-Based Environmental Remote Sensing Stations and Aircraft Campaigns in Southeast Asia – Ronald Macatangay (National Astronomical Research Institute of Thailand, Thailand)
- 3:05    Carbon Dioxide and Methane Emissions Derived from GOSAT Data – Tsuneo Matsunaga (National Institute of Environmental Studies, Japan)
- 3:25    Emission Inventories in Thailand from Industrial and Biomass burning Sector during 2011 – Narisara Thongboonchoo (King Mongkut’s University, Thailand)

3:45-4:15

*Tea Break*

<b>4:15 – 5:40</b> <b>Session – II. Emission Inventories and Land Atmospheric Interactions</b> Chair: <b>Toshimasa Ohara (NIES, Japan)</b>
---

- 4:15    Emissions of Biomass Burning Simulated in Open Burning Combustion Chamber – Somporn Chantara (Chiang Mai University, Thailand)
- 4:35    Simulations of Tropospheric Ozone in the Later 21st Century Using the United Kingdom

Chemistry and Aerosols (UKCA) Chemistry-Climate Model: Interactions Between Isoprene Emissions, Climate and Land Use Change – Paul Griffiths (National Centre for Atmospheric Science (NCAS-Climate) and Cambridge University, United Kingdom)

4:55 Impact Assessment of Socio-Economic Development on Urban Air Quality in Indian Mega-Cities- Wataru Takeuchi (The University of Tokyo, Japan)

5:15 Impacts of Electrification and Urbanization in South/Southeast Asia for Estimating Future GHGs and Air Pollutants Emissions – Tatsuya Hanaoka (National Institute of Environmental Studies, Japan)

5:35 Adjourn

7:00 *Welcome Dinner*

**DAY 2 (18TH JULY, TUESDAY) LEELAWADEE ROOM, 5<sup>TH</sup> FLOOR, FURAMA HOTEL, CHIANG MAI**

**9:15 – 12:00 Technical Session – III. Urban LCLUC**  
Chair: **Soe Myint (Arizona State University, USA)**

9:15 Land Cover Change / Land Use Efficiency in Southeast Asia: The Objectives and Language of Urban Planners and Economists – Doug Webster (Arizona State University, USA)

9:35 Urbanization and Environmental Changes in Southeast Asia Countries – Peilei Fan (Michigan State University, USA)

9:55 Adapting Climate Change Impacts in the Urban Ecosystem: Green Spaces and Community Carbon Footprint in Malaysia – Mastura Mahmud (Universiti Kebangsaan, Malaysia)

**10:15 – 11:45 Session – IV. Poster Introductions**  
Chair: **Ronald Macatungay (NARIT, Thailand)**

**10:15 Poster Introductions (2-mins each)**

10:40 *Tea Break and Poster Viewing*

11:45 *Parallel Panel Discussion Sessions*

**11:45 – 12:45 Session V. Panel and Discussion: Emerging Research Questions in Agricultural Land Use** (Venue: Tabtim room, Ground Floor, Furama Hotel)  
Chair: **Chris Justice (University of Maryland College Park, USA)**  
Rapporteur: TBD  
Panel Members: Lamdao Nguyen (Vietnam); Dharmesh Verma (India); Birendra Bajracharya (SERVIR HKH, Nepal); Wataru Takeuchi (Japan); Attachai Jintrawet (Thailand)

**11:45 – 12:45 Session V. Panel and Discussion: Emerging Research Questions in Land Cover/Land Use Change** (Bussarakam room, Ground Floor, Furama Hotel)  
Chair: **Jeff Fox (East West Center, USA)**  
Rapporteur: Kristofer Lasko (UMD, USA)  
Panel members: J.K.Garg (India); Israr Alabar (Indonesia); Faizul Bari (Pakistan); Van Pham Cu (Vietnam); Louis Lebel (Thailand)

**11:45 – 12:45 Session V. Panel and Discussion: Emerging Research Questions in Land Atmospheric Interactions** (Leelawadee room, 5th Floor, Furama Hotel)  
Chairs: **Krishna Vadrevu (NASA MSFC)**  
Rapporteur: Ronald Macatangay (NARIT, Thailand)  
Panel members: Toshimasa Ohara (NIES, Japan), Narisara Thongboonchoo (Thailand), George Lin (Taiwan); Mylene Cayetano (Phillippines); Nina Yulianti (Indonesia)

12:45 - 2:00

*Lunch*

2:00 *Adjourn (Informal Side-Meeting Opportunities or City Visit on your own)*

7:00 *Hosted Dinner*

**DAY 3 (19TH JULY, WEDNESDAY)**

**9:15-9:55 Session - VI. Report Back on Panel Discussions from Day-2 Sessions**  
Chair: **Chris Justice (University of Maryland College Park, USA)**

**9:15 - Agricultural Remote Sensing**

9:20 - Land Cover/Land Use Changes

9:25 - Land Atmospheric Interactions

<b>9:30-4:20</b> <b>Session VII. Land Use/Cover Change and Forestry</b> Chair: <b>Jeff Fox (East West Center, USA)</b>
---

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

9:30    Resilient Landscapes and Socio-economic Development in Thailand – Louis Lebel (Chiang Mai University, Thailand)

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

9:55    High-resolution Land Cover Mapping Projects in JAXA/EORC – Kenlo Nasahara (JAXA, Japan)

10:15    Land Use Cover/Change Activities in SERVIR Himalayas – Birendra Bajracharya (SERVIR HKH, ICIMOD, Nepal)

10:35-11:05

*Tea Break*

11:05    Regional Land Cover Monitoring System – David Saah (University of San Francisco and Spatial Informatics Group, USA)

11:25    Improving the Satellite Derived Forest Cover Dynamics in South and Southeast Asia – Atul Jain (University of Illinois at Urbana Champaign, USA)

11:45    Land Use/Cover Changes in Nepal – Rabin Raj Niraula (Helvetas Swiss Inter-cooperation, Nepal)

12:05    Evaluating the Status and Ecosystem Services of Myanmar's Mangroves (2000-2014) – Soe Myint (Arizona State University, USA)

12:25-1:25

*Lunch*

<b>1:25-4:00</b> <b>Session - VII. Land Use/Cover Change and Forestry (continued..)</b> Chair: <b>Garik Gutman (NASA HQ)</b>
---

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

1:25    Integrated Monitoring of Forest Life Cycle Using Time Series Landsat Observations and Field Inventory Data – Chengquan Huang (USA)

- 1:45 Rubber and LCLUC in Mainland Southeast Asia – Jefferson Fox (East West Center, USA)
- 2:05 Assessing the Extent and Drivers of Forest Plantation Establishment in Andhra Pradesh – Randolph Wynne (Virginia Tech, USA)
- 2:25 Multi-Scalar Telecouplings in the East-West Economic Corridor between Da Nang, Vietnam and Khon Kaen, Thailand - Stephen Leisz (Colorado State University, USA)
- 2:45 Evaluation of Sentinel-1A Data for Above Ground Biomass Estimation in Different Forest Types of India – Krishna Vadrevu (NASA MSFC, USA)
- 3:05 Land Cover/Land Use Changes in Pakistan – Faizul Bari (Conservator of Forest, Planning and Monitoring, Pakistan)
- 3:25-4:00  
*Tea Break*
- 4:00 Dynamics and Impact of Land Use/Land Cover Change of Mahanadi Delta Region, India – Mani Murali (National Institute of Oceanography, GOA)

<b>4:20-5:20</b>	<b>Discussion Session VIII: Regional Science Summary, Research and Capacity Building Priorities</b> Chair: <b>Chris Justice</b> ; Rapporteur: <b>Krishna Vadrevu</b>
------------------	---

- 5:40 Vote of Thanks
- 6:00 Adjourn

-----