



# **Tokyo International Conference on the Forest Governance Initiative**

# - Improving Forest Governance using Forest Early Warning Systems and Satellite Technologies -

October 24-26, 2017 Hotel Metropolitan Edmont Tokyo

As of 5 October, 2017

# **Background**

Forests are vital for all life on earth. Forests provide rich biodiversity, food and water, economic opportunity through timber, foster culture, and support people's livelihoods. Recently, the role of forests in terms of climate change mitigation and adaptation has been increasingly gaining attention worldwide as deforestation and forest degradation accounts for more than 10 percent of total CO2 emissions. While everyone affirms the importance of forests, there was a 129 million hectare forest net loss between 1990 and 2015<sup>1</sup>. The loss of tropical forests continues unabated due to agricultural expansion, wood extraction, infrastructure expansion, illegal logging and other factors, making it high on the global political agenda to address those drivers in order to stop such losses. Under such circumstances, satellite technology has been developed and widely adopted by countries and relevant organizations as the effective and indispensable forest monitoring systems and tools in recent years.

In this context, the Japan International Cooperation Agency (JICA) and the Japan Aerospace Exploration Agency (JAXA) announced the **Forest Governance Initiative** (see Annex 1) at the UNFCCC COP 21 in Paris in December 2015. The initiative led to the creation of a new **JICA-JAXA Forest Early Warning System in the Tropics (JJ-FAST)** (see Annex 2) that tracks deforestation and forest loss with JAXA's Advanced Land Observing Satellite-2 (ALOS-2). JJ-FAST constantly watches for deforestation and forest loss in tropical regions of the globe and provides open access to its imagery findings. The system using ALOS-2 can monitor forest cover changes in tropical forests even under the cloud cover conditions typically found in the tropics. With resolution of up to 50 meters, the JJ-FAST findings are updated about every six weeks on average to the JJ-FAST website.

The possible use of the JJ-FAST can go even further. Based on its relatively frequent data collection intervals and its capacity of surface monitoring under cloud cover, the JJ-FAST is expected to function as an early warning system to improve forest governance. Authorities can keep their eyes on forest changes with the JJ-FAST for tracing possible illegal deforestation activities to facilitate countermeasures to curb them. The constant monitoring of forest changes by the

<sup>&</sup>lt;sup>1</sup> Global Forest Resources Assessment 2015, FAO





JJ-FAST through a whole year is expected to make deforestation activities transparent; thus this would raise deterrent effects on those who may engage in illegal activities.

The initiative also promotes the capacity development of personnel for efficient use of the JJ-FAST to improve forest governance in developing countries through training courses in Japan and regional seminars on the JJ-FAST and other measures which can be used for forest monitoring. The initiative disseminates knowledge about good practices on forest monitoring around the world through the JJ-FAST web-site and international conferences.

It is expected that global efforts, including those through the Forest Governance Initiative, will help countries to promote effective forest management and to control the reduction of forests in line with legitimate national land use policies. Those efforts are counted on to contribute to fight against climate change.

## **Objectives**

This two-day conference provides participants with opportunities to exchange views on how developing countries can effectively promote forest management, including by tackling illegal deforestation activities, by using the JJ-FAST and other forest early warning systems and remote sensing satellite technologies along with necessary policy measures, and also how development partners can support the country's efforts. The seminar will focus on two different aspects, which are "governance" and "satellite technology".

As for the governance aspect, participants are expected to discuss how the countries can improve forest governance by effectively using of forest early warning systems including the JJ-FAST and satellite technologies, along with policy measures such as policy making and implementation, law enforcement, and close collaboration among stakeholders responsible for forest management.

As for the satellite technology aspect, the topic will be how the countries can strengthen their national forest monitoring system by using the JJ-FAST and other systems / tools, incorporating JJ-FAST into their national forest monitoring system, improving monitoring accuracy through grand surveys.

The conference also expects participating countries and organizations to strengthen networks and partnerships to collectively address the deforestation of developing countries and global climate change.







# Date, Place, Co-organizers, Expected Participants and Working Language

- **Date:** October 24 -26, 2017 \* Third day is a visit program
- Place: Hotel Metropolitan Edmont Tokyo (3-10-8 Iidabashi, Chiyoda-ku, Tokyo 102-8130, Japan)
- Co-organizers: Japan International Cooperation Agency (JICA) and Japan Aerospace Exploration Agency (JAXA) in cooperation with Forestry Agency, Ministry of Agriculture, Forestry and Fisheries of Japan and International Tropical Timber Organization (ITTO)
- Expected participants: Around 150 (High-level and senior officials responsible for forest management of partner countries, representatives from international organizations, bilateral donors, NGOs, private companies, related organizations of Japan and so forth)

  Participants for the JICA Knowledge Co-Creation Program; Tropical Forest Conservation using the Forest Monitoring System with ALOS-2 Satellite (around 10 participants from various countries), will join this conference.
- Working Language: English (translation to/from French will be available)

## **Tentative Agenda**

## Day 1

| Time      | Length                                     | Торіс             | Presenter/Moderator  |
|-----------|--|-------------------|--|
| Session 1 | Session I: Opening Session at "Yukyu" hall |                   |  |
| 09:30     | 10   | Opening Remarks   | Mr. Koji Makimoto, Deputy<br>Director-General, Forestry Agency of<br>Japan   |
| 09:40     | 10   | Welcome Remarks   | Ms. Noriko Suzuki, Senior Vice<br>President, JICA  |
| 09:50     | 15   | Keynote Speech 1: | H.E. Mr. Amy Ambatobe Nyongolo,<br>Minister of Environment and Sustainable<br>Development, Democratic Republic of the<br>Congo |
| 10:05     | 15   | Keynote Speech 2: | H.E. Ms. Rosalie Matondo, Minister for Forest Economy, Republic of Congo   |
| 10:20     | 15   | Keynote Speech 3: | Prof. Teruyuki Nakajima, Director, Earth<br>Observation Research Center, JAXA  |
| 10:35     | 15   | Keynote Speech 4: | Dr. Gerhard Dieterle, Executive Director, International Tropical Timber Organization (ITTO)                                    |
| 10:50     | 5  | Summary           | Moderator  |
| 10:55     | 5  | Photo Session     | Secretariat  |
| 11:00     | 20   | Coffee break      |  |











| 11:20     | 30          | Introduction of the Forest Governance    | Mr. Takahiro Morita, Senior Deputy        |
|-----------|-------------|--|---|
|           |             | Initiative (10 min.)                     | Director General, Global Environment      |
|           |             |  | Department, JICA                          |
|           |             | Introduction and Demonstration of        |   |
|           |             | JJ-FAST (20 min.)                        | JJ-FAST Development Team                  |
| 11:50     | 10          | Q&A                                      | Moderator                                 |
| 12:00     | 90          | Lunch break                              |   |
| Session I | I: Sustaina | ble Forest Management Using Forest Earl  | y Warning Systems and Satellite Data      |
| 13:30     | 60          | Key Presentations and Q & A              |   |
|           | (10 min.)   | Improving forest governance with a       | Mr. Simplice Nteme, Director General of   |
|           |             | modern concession management system      | Forestry, Ministry of Forestry, Sea and   |
|           |             | using satellite technology and Drone     | Environment, Gabon                        |
|           |             | (tentative)                              |   |
|           | (10 min.)   |  | Dr. Edson Eyji Sano, Instituto Brasileiro |
|           |             |  | do Meio Ambiente e dos Recursos           |
|           |             |  | Naturais Renováveis (IBAMA) (tentative)   |
|           | (10 min.)   | Views and expectations of UNFCCC on      | Ms. Jenny Wong Lai Ping, Programme        |
|           |             | climate change mitigation through forest | Officer, Mitigation, Data and Analysis    |
|           |             | conservation and forest monitoring using | Programme                                 |
|           |             | satellite technology (tentative)         | UNFCCC Secretariat                        |
|           | (30 min.)   | Q & A and Discussion                     | Moderator                                 |
| 14:30     | 30          | Coffee Break                             |   |
| 15:00     | 90          | Panel Discussion: Improving Forest       | Moderator and Panelists                   |
|           |             | Governance using Forest Early Warning    |   |
|           |             | Systems and Satellite Technologies       |   |
| 16:30     |             | Closing                                  | Moderator / Secretariat                   |
| 17:00     |             | Reception (Invitation Only)              |   |

# Day 2

| Time   | Length | Торіс   | Presenter/Moderator |  |
|--|--------|---|---------------------|--|
| Session III: Separate Sessions * French translation service will be available only at the Group 1. |        |   |                     |  |
| 09:30  | 150    | Separate Sessions: Presentation & Discussions |                     |  |
| 12:00  | 90     | Lunch break                                   |                     |  |
| 13:30  | 60     | Separate Sessions (continue and wrap-up)      |                     |  |

Group 1 (Governance Session): Improving forest governance using the JJ-FAST and satellite technologies along with policy measures (tentative) \* English/French at "Yukyu" hall











**Moderator:** Mr. Kei Suzuki, Senior Coordinator, International Cooperation Group, JAFTA and Dr. Tetra Yanuariadi, Project Manager, Division of Trade and Industry, ITTO

**Objective:** To discuss how the countries can improve forest governance by effectively using of the JJ-FAST and and other satellite-based systems / tools along with policy measures such as policy making and implementation, law enforcement, and close collaboration among stakeholders responsible for forest management. This session seeks possible solutions of the countries to fight against illegal deforestation activities including illegal logging and other challenges to promote sustainable forest management.

## 1. Recap of the 1st day discussion: Moderator

## 2. Key presentations

Speakers: 1) Representative of JICA Knowledge Co-Creation Program, 2) Ms. Chie Matsuyama, Deputy Director, Wood Utilization Division, Forestry Agency of Japan, 3) Mr. John James Leigh Vetter, Executive Director, National Forest and Wildlife Service of Peru (TBC)

### 3. Panel style discussion with interventions from the floor

Panelists: 1) Mr. Ludovic Obed Ndenfoo Uronu, Principal Forest Officer Responsible for Training & Research, Forestry and Beekeeping Division, Ministry Of Natural Resources And Tourism of Tanzania (TBC), 2) Mr. Joko Prihatno, Director for GHG Inventory, Director General of Climate Change, Ministry of Environment and Forestry of Indonesia (TBC), 3) Mr. Huu Thien, Nguyen, Vice Director, Forest Protection Department, Viet Nam Administration of Forestry, Ministry of Agriculture and Rural Development (TBC), 4) Representative of partner country, 5) Representative of development partner

## 4. Wrap-up (develop key messages and way forward)

Group 2 (Technical Session): Strengthening national forest monitoring based on the JJ-FAST and satellite technologies (tentative) \* English at "Kunpu" hall

#### Moderator: Dr. Masanobu Shimada, Tokyo Denki University

**Objective:** To discuss how the countries can conduct national forest monitoring based on the JJ-FAST and satellite technologies in sustainable manners. In this session, current issues / challenges and expected solutions using the JJ-FAST and satellite technologies to achieve the purpose mentioned above will be discussed from a technological aspect. The discussion will include how the countries can use the JJ-FAST with other systems and other satellite technologies complementally, for instance, the combination of radar and optical sensor data.

| Session IV: Wrap-up Session at "Banri" hall |    |  |  |
|---|----|--|--|
| 14:30                                       | 45 | Wrap-up session: Reporting from each Moderator and Rapporteurs |  |
|   |    | senarate session group   |  |











| 15:15 | 15 | Announcement of Communique on the | Moderator / Co-organizers                   |
|-------|----|-----------------------------------|---|
|       |    | Forest Governance Initiative      |   |
| 15:30 | 10 | Closing Remarks                   | Mr. Kazuo TACHI, Technical Counselor,       |
|       |    |                                   | Senior Chief Officer of Space Applications, |
|       |    |                                   | JAXA  |

# <u>Visitor Program for Overseas Participants (Day 3)</u>

Overseas participants including participants from partner countries invited by JICA will be invited to a half-day visitor program (JAXA Tsukuba Space Center) on Day 3, October 26 (optional).











#### Annex 1

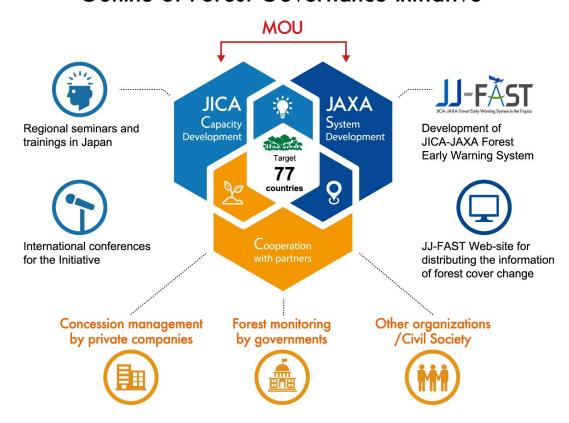
# **Forest Governance Initiative**

**Forest can change the world** – The Forest Governance Initiative aims to encourage better use of satellite technology and multi-stakeholder partnerships to contribute to global tropical forest and biodiversity conservation and climate change mitigation.

JICA and JAXA launched the Forest Governance Initiative at UNFCCC COP 21 in Paris in 2015. JICA and JAXA have committed to the initiative through developing "JICA-JAXA Forest Early Warning System in the Tropics (JJ-FAST)", promoting capacity development and spreading good practices on forest conservation to fight against deforestation in developing countries and global climate change.

JICA and JAXA call development partners and private companies to join the initiative to work together to change the world for the better.

# Outline of Forest Governance Initiative













#### Annex 2

# JICA-JAXA Forest Early Warning System in the Tropics: JJ-FAST

## Monitor global tropical forests with ALOS-2

JICA and JAXA launched the <u>JICA-JAXA Forest Early Warning System</u> in the <u>Tropics (JJ-FAST)</u> in November 2016 as their commitment under the Forest Governance Initiative, which was announced at UNFCCC COP21 in Paris in 2015. JJ-FAST is a web-based system using JAXA's ALOS-2 to monitor tropical forests in 77 countries every 1.5 months and release deforestation data, even in the rainy season. Uses can easily access the data for deforested areas from PCs and mobile devices and download the data.

# Advantage of the PALSAR-2 aboard ALOS-2



The state-of-the-art L-band Synthetic Aperture Radar-2 (PALSAR-2) aboard ALOS-2, which is active microwave radar using the 1.2GHz frequency range, have enhanced performance compared to the DAICHI/PALSAR in responding to society's needs. The PALSAR-2 can observe day and night around the clock.

# **Uniqueness of the JJ-FAST**

- Any time of day or night Since other sources of light such as the sun are unnecessary, SAR present the advantage of providing satellite images regardless day or night.
- <u>All-weather</u> The L-band frequency for transmitting and receiving microwaves is less affected by cloud cover and rain.
- <u>Land surface observation</u> L-band microwave can reach to the ground partially penetrating through vegetation to obtain information about the current vegetation and ground surface.

#### **■** Target Countries

|                  | Area  | Country  |
|------------------|---|--|
| Latin<br>America | South America<br>9 countries                        | Bolivia, Brazil, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname,<br>Venezuela   |
|                  | Central America<br>and the Caribbean<br>9 countries | Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico,<br>Nicaragua, Panama, Trinidad and Tobago  |
| Africa           | West Africa<br>12 countries                         | Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau,<br>Liberia, Mali, Nigeria, Senegal, Sierra Leone, Togo                         |
|                  | East Africa<br>12 countries                         | Burundi, Djibouti, Ethiopia, Kenya, Madagascar, Rwanda, Seychelles,<br>Somalia, Sudan, South Sudan, Tanzania, Uganda                             |
|                  | Central Africa<br>8 countries                       | Cameroon, Central African Republic, Chad, Republic of Congo,<br>Democratic Republic of Congo, Equatorial Guinea, Gabon,<br>Sao Tome and Principe |
|                  | South Africa<br>11 countries                        | Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique,<br>Namibia, Republic of South Africa, Swaziland, Zambia, Zimbabwe                      |
| Asia             | 14 countries  | Bangladesh, Bhutan, Brunei, Cambodia, India, Indonesia, Laos,<br>Malaysia, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Viet Nam            |
| Oceania          | 2 countries   | Papua New Guinea, Solomon  |

#### **■** JJ-FAST Web-site



http://www.eorc.jaxa.jp/jjfast/

