

EARTH OBSERVATION FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT

27-28 September 2018 - World Bank HQ, Washington DC



AWARENESS EVENT: EARTH OBSERVATION FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT

Hosted by the Agriculture Global Practice and the European Space Agency

Thursday, September 27, 2018 | 9:00 am - 5:30 pm

MC 13-121



This knowledge and capacity enhancement event aims to inform and build awareness among WB staff of the utility, benefits, and potential constraints of using Earth Observation information services in WBG operations and analytical products in the agriculture and wider sustainable development sectors. Based on practical examples, interactive discussions, and hands-on demonstrations of EO tools and services, the focus of this day will be on harnessing Earth Observation information services as demonstrated under the ESA Earth Observation for Sustainable Development (EO4SD) initiative to support:

- Monitoring of **agricultural production and productivity**
- Assessment of environmental impacts of agricultural **commodities**
- **Food security** and **agriculture risk** management
- **Irrigation** system development and management
- **Environmental impact** assessments
- M&E of **sustainable land management**

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Following the knowledge-intensive sessions on September 27, WBG teams will have the opportunity for a technical discussion with the EO4SD consortium on September 28.

To schedule a technical meeting, WBG teams can sign in the below sheet, or send an email to Annemarie Klaasse: annemarie.klaasse@eleaf.com

For any other enquiries related to the event, please contact Frieda Mikulcak (Agriculture GP): fmikulcak@worldbank.org

For more details on the ESA Earth Observation for Sustainable Development (EO4SD) initiative see EO4SD.ESA.int/agriculture

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9:00	Introduction and welcome Welcome by Juergen Voegel (Sr Director, Agriculture GP, World Bank) Introduction by Christoph Aubrecht (ESA Representative to the World Bank)
9:30	Earth Observation – Key concepts, challenges, and opportunities <i>Speaker: Rolf de By (ITC, EO4SD consortium)</i> This session introduces the key concepts and terminology of Earth Observation, and highlights its main opportunities and limitations to achieve the Sustainable Development Goals.
10:00	Theme 1: Earth Observation for enhanced agricultural productivity <i>Speaker: Annemarie Klaasse (eLEAF, EO4SD consortium)</i> Earth Observation technology provides historical and up-to-date information on crop condition, distribution, and dynamics from the regional and national to the field level. This session shows how EO-derived services contribute to (1) baseline and targeting criteria for strategic planning and project formulation, (2) informed management decisions, and (3) progress and result indicators on crop performance.
10:20	EO Applied: Assessing agricultural production in Syria <i>Speaker: Bekzod Shamsiev (Sr Agriculture Economist, World Bank)</i>
10:25	Q&A
10:30	Theme 2: Earth Observation for improved agricultural water management <i>Speaker: Annemarie Klaasse (eLEAF, EO4SD consortium)</i> How does Earth Observation contribute to improved water management? EO-derived information on irrigated area, irrigation suitability, water distribution and crop water consumption contributes to improved crop productivity and irrigation efficiency.
10:50	EO Applied: Monitoring water productivity of agriculture investments <i>Speaker: Livia Peiser (Land & Water Division, FAO)</i>
10:55	Q&A
11:00	Coffee break

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11:30	<p>Theme 3: Fostering sustainable land management through Earth Observation Speaker: Eva Haas (GeoVille, EO4SD consortium) Earth Observation is particularly useful to support Sustainable Land Management (SLM) initiatives and the dialogue across multiple stakeholders in a given spatial context because it provides quantifiable, unbiased global data at high spatial and temporal detail. EO can be used to establish project baselines, to monitor and evaluate the progress and environmental impact of projects, and to identify and address “hot spots” of environmental change and land degradation.</p>
11:50	<p>Lightning Talks: Applying EO across the landscape (1) ‘It takes a community: CGIAR’s effort to mainstream geospatial data science in agriculture’, Jawoo Ko (Sr Research Fellow, IFPRI) (2) ‘Minimizing Ecological Risks from Rural Development: Big Geospatial data on Biodiversity’, Susmita Dasgupta (Lead Environmental Economist, DEC, World Bank) (3) ‘Earth observation for forest landscapes monitoring in the context of REDD+’, Paola Agostini (Global Lead, Forests, Landscapes, Ecosystems, World Bank) (4) ‘Wealth Accounting and the Valuation of Ecosystem Services: Experiences from WAVES, Glenn-Marie Lange (Sr Environmental Economist, World Bank) (TBC)</p>
12:20	Q&A
12:30	<p>Working lunch: EO in WB operations – challenges and opportunities <i>Chair: Marianne Fay (Chief Economist SDVP, World Bank)</i> <i>Discussants: Keith Patrick Garrett (Sr Geographer, World Bank), Christoph Aubrecht (ESA Representative to the World Bank), EO4SD team</i> This working lunch session provides an update of how Earth Observation services have been used within WB operations to date. It discusses the requirements for successfully using EO services across the project cycle, and opportunities for EO services in upcoming projects, analyses, and programs.</p>
14:00	<p>Zooming in: Satellite data and open source solutions for sustainable development Speaker: Rolf de By (ITC, EO4SD consortium) This session aims to provide participants with an overview of ESA and other geospatial services and open source solutions, as well as of practical courses on Earth Observation related data and services.</p>
15:00	Coffee break
15:30	<p>From theory to practice: Demonstration of EO tools for WB operations Speaker: Annemarie Klaasse (eLEAF, EO4SD consortium) and colleagues An interactive, hands-on training demonstrating service functionality, including regional aggregation, temporal analysis and data export, of different portals including the EO4SD portal, the FAO WaPOR portal, the Ag Observatory, and Spatial Agents.</p>
16:30	<p>Discussion: Successes, challenges, and lessons learnt – EO applied among WB TTL <i>Chair: Nadia Fernanda Piffaretti, Global Center on Conflict, Security and Development, World Bank)</i> <i>Discussants: Esha Dilip Zaveri (Economist, Water GP); Iftikhar Mostafa (Sr Agriculture Economist, Agriculture GP); Jia Jun Lee (Research Analyst, Environment GP)</i> This session invites TTL and practitioners to discuss their experiences with the application of Earth Observation services, the challenges they have encountered, and the lessons learnt. How can constraints to applying EO services in WB projects and analytical products be best overcome, and better anticipated in project design? Which services have shown most useful in WB products and operations, and where are further opportunities for EO service application to achieve the Bank’s twin goals?</p>
17:15	Closing remarks and next steps: Christoph Aubrecht

TECHNICAL SESSIONS 28 SEPTEMBER 2018

- BILATERAL DISCUSSIONS -

MC-C1 200

Please sign in for a time slot, or send an email to Annemarie Klaase: annemarie.klaase@eleaf.com
to:

- Receive further information on the presented studies/services
- Get advice on what Earth Observation can contribute to your project
- Discuss needs for know-how on Terms-of-References documenting.
- Discuss advantages and limitations of EO for agriculture and rural development.
- Discuss requirements (e.g. EO-based services need ground data for training but also for validation and verification addressing field data collection and contributions from local implementation teams)
- Discuss options for upcoming projects

Friday 28 September	Topic to be discussed	Contact person telephone & email	Team names
9:00 am			
9:30 am			
10:00 am			
10:30 am			
11:00 am			
11:30 am			
12 am			
12:30 am			
1:00 pm			
1:30 pm			
2:00 pm			
2:30 pm			
3:00 pm			
3:30 pm			