→ EO4SD – EARTH OBSERVATION FOR SUSTAINABLE DEVELOPMENT
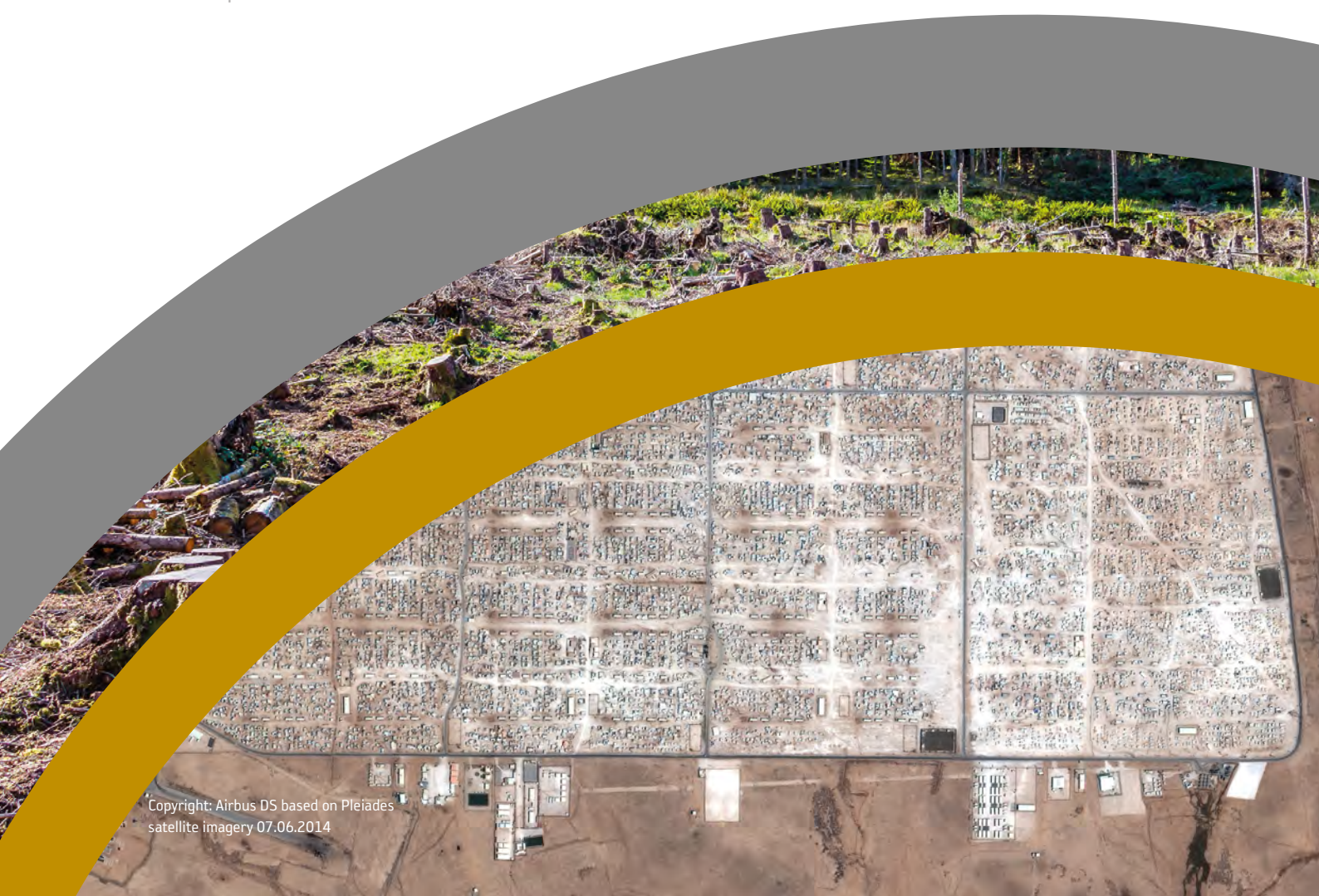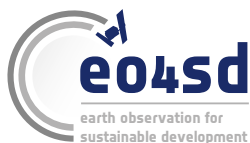
Fragility, Conflict and Security

States affected by fragility, conflict or violence face growing threats to state security, the economy, and to the achievement of the Sustainable Development Goals. Major challenges such as a turbulent economy or surges of violence are causes of human insecurity altering people's way of life. The World Bank estimates that about **two billion** people experience human insecurity because their future is affected by their country's fragility, conflict and/or violence. This can manifest as significant economic losses. Transnational organised environmental crime alone robs developing countries of an estimated 70-213 billion USD annually compared to the 150 billion USD they are receiving through Official Development Assistance (ODA).

International Financial Institutions (IFIs) such as the World Bank and the African Development Bank are exploring the ways in which information based on Earth Observation (EO) data can help them address development challenges in countries affected by fragility, conflict or violence. While EO services are generally known for providing information on environmental indicators, these services will go deeper in the analysis of specific geographic areas to bring new insights on both environmental and social situations in order to support local populations.

ESA EO4SD **Fragility, Conflict and Security** aims to make EO-based products and services mainstream tools in the working processes of projects funded by IFIs. The goal is to provide meaningful support that will contribute to an increase in both environmental and human security in states affected by fragility.

eo4sd
earth observation for
sustainable development

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satellite imagery 07.06.2014

OBJECTIVES

- Multilevel stakeholder engagement to identify and map users' needs
- Demonstrate how EO-based information benefits development projects and activities focused on human and environmental security
- Promote strategic partnerships with key IFIs and their client states. This includes direct support to their projects in addition to collaborating on monitoring & evaluation methodologies, policies and planning using EO for sustainable development
- Mainstream EO-based information into the working processes of individual countries and development organisations ensuring its long-term use
- Regional presence and capacity-building activities concerning the use of EO-based information (e.g. training courses, e-learning platform, training material, etc.)
- Support the World Bank in their planning, implementation and post-project assessment of projects in states affected by fragility

MAIN THEMATIC COMPONENTS AND EO-BASED INFORMATION

› **Natural resources management:**

- Detecting and monitoring of illegal resource extraction (ivory, fish, timber, minerals)
- Detecting and monitoring trafficking of illegally extracted natural resources
- Land use/land cover mapping
- Assessing agricultural and/or water resources

› **Justice, law and early detection of onset of crises:**

- Supporting election planning and implementation
- Detecting illegal activities (illicit crops, terrorist training camps, the proliferation of controlled materials-weapons)
- Detecting crimes against humanity
- Detecting and monitoring of in-region population displacement
- Assessing onset/damage of violence

› **Reconstruction and development of infrastructure:**

- Unexploded ordnance (UXO) assessment and planning
- Damage characterisation and reconstruction planning support
- Supporting the establishment of property rights (land spatial planning)
- Infrastructure construction monitoring (bridges, schools)

› **Management of environmental security:**

- Pollution and contamination assessment
- Characterising primary/secondary disease reservoir habitats
- Critical ecosystem assessment

› **Support for operations in states affected by fragility:**

- Project preparation
- Implementation and supervision
- Evaluation

LIST OF COUNTRIES

- **Colombia, Ecuador and Peru in South America**
- **St. Lucia, Barbados and St. Vincent and the Grenadines in Central America**
- **Burkina Faso, Niger, Cameroon, DRC, Somalia and Kenya in Africa**
- **Iraq in the Middle East**
- **Pakistan and Afghanistan in South Asia**
- **Kiribati in the Pacific**

Specific countries have been selected in liaison with IFIs and others based on their needs, but trials might also be conducted in other locations.

MAIN DEVELOPMENT PROGRAMS AND INITIATIVES

› World Bank FCV group
› Asian Development Bank
› World Bank Global Solutions Group on Stability, Peace, and Security
› UNDP/UN Environment actions on FCV
› African Development Bank, Transition Support Department

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