

U.S. GLOBAL
DEVELOPMENT
LAB

FROM SPACE TO VILLAGE: USING SATELLITES FOR INTERNATIONAL DEVELOPMENT

CARRIE STOKES
Chief Geographer & GeoCenter Director



USAID
FROM THE AMERICAN PEOPLE

**WE PARTNER
TO END EXTREME POVERTY &
PROMOTE RESILIENT, DEMOCRATIC SOCIETIES WHILE
ADVANCING OUR SECURITY & PROSPERITY**

Agriculture * Biodiversity * Climate Change * Conflict * Democracy & Governance
Economic Growth * Education * Humanitarian Assistance * Health * Water

**Africa * Asia * Latin America & Caribbean
Eastern Europe * Middle East**

HOW DO WE USE SATELLITE DATA FOR INTERNATIONAL DEVELOPMENT CHALLENGES?

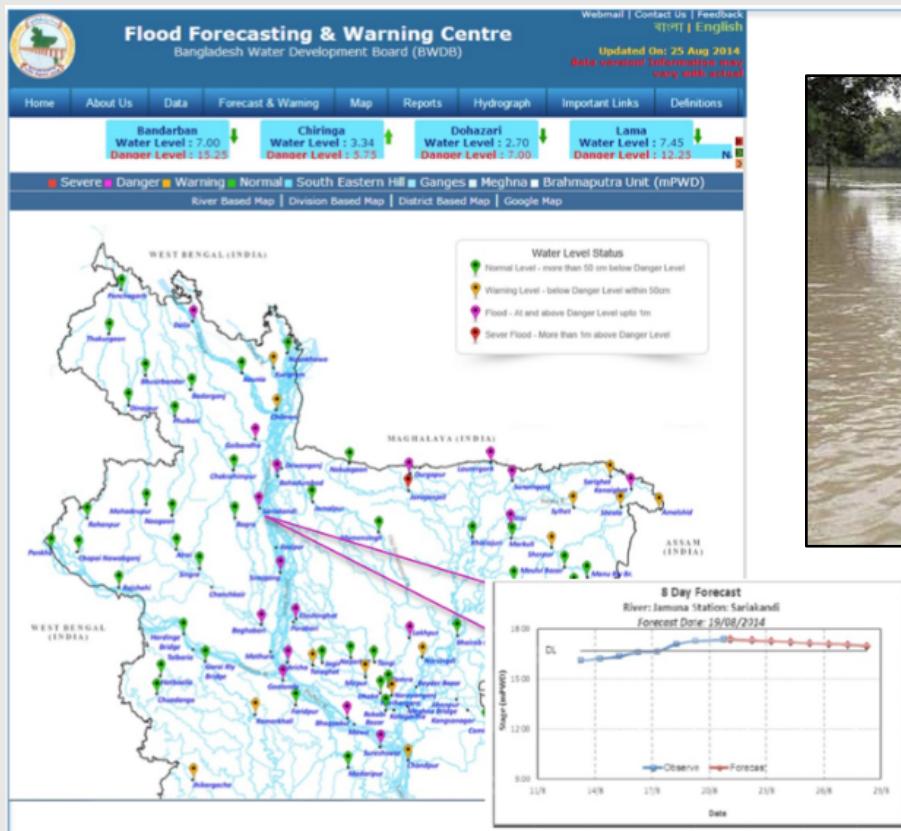
FROM DATA TO DECISIONS

- SERVIR (USAID & NASA)
- GEO (International Group on Earth Observations)
- USAID GeoCenter
- USAID Global Network of GIS Specialists

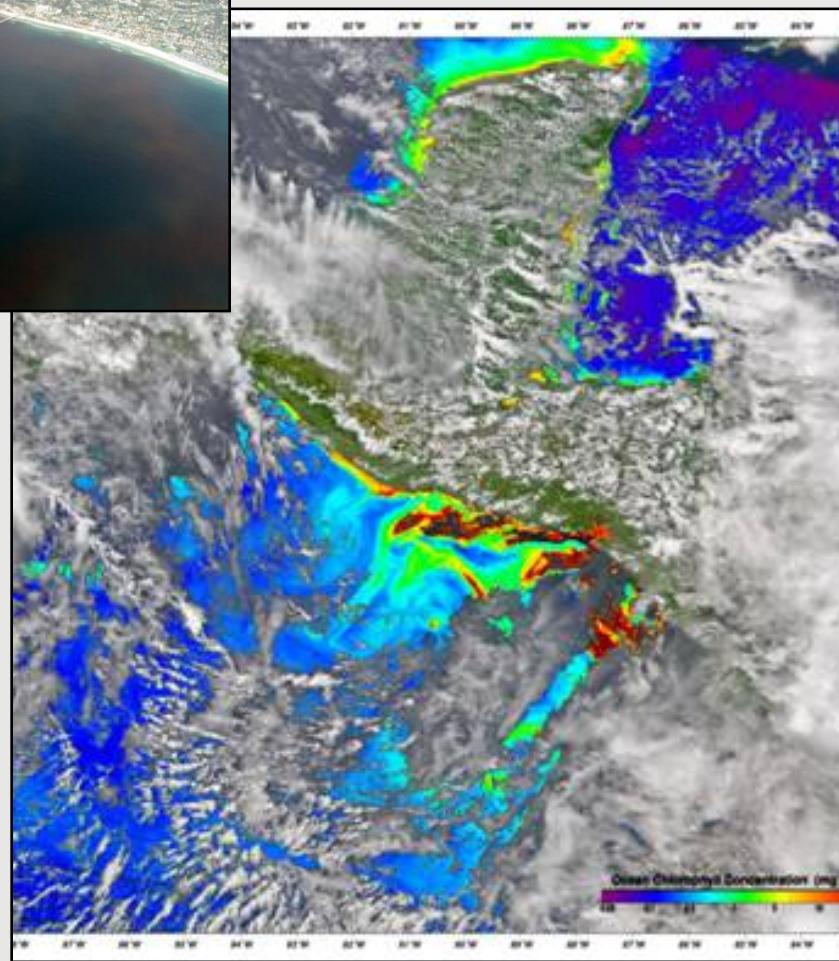


EXAMPLE APPLICATIONS

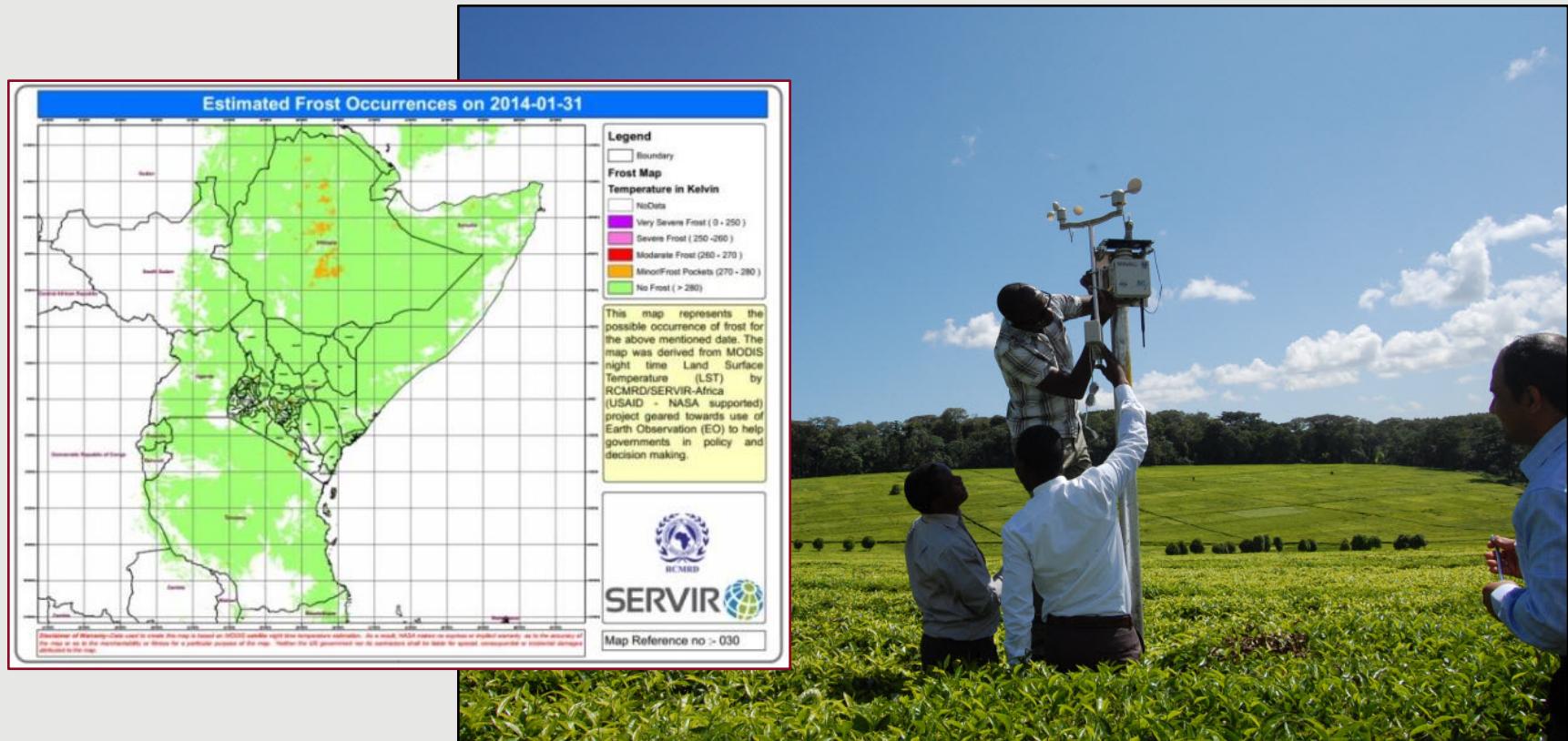
FLOOD EARLY WARNING: BANGLADESH



MONITORING ALGAL BLOOMS: EL SALVADOR



FORECASTING FROST: KENYA



Satellite Datasets Used



Satellite/Sensor Name	Projects Using Data
ALOS (Japanese) (PALSAR data) *	1*
AltiKa (French, Indian)	1
AMSR-E on Aqua *	3*
ASAR (European) Envisat	1
ASTER	3
Digital Globe constellation**	3
EO-1 Visible Imagery, 30-m	1
GPM	1
GRACE	2
ICESat (GLAS)*	1*
Jason-2	1
LANDSAT 5*, 7, and 8	9
Meteosat (European)	2
QuikSCAT *	1*
Radarsat-2 **	3
SMOS (European)	1
SRTM	8
Terra and Aqua- MODIS	18
TRMM*	10
SMAP	3
VIIRS	8

**21 Satellites/Sensors
In Use**

Planned Use of Satellites/Sensors

ICESat-2	1
Jason-3	1

Satellites/Sensors being Explored for Use

OCO-2
ISS-RapidScat
CATS
Sentinel series

* Satellite/sensor no longer producing data

** 5 Commercial Satellites in use through a unique data collection tasking agreement

TRACKING ILLEGAL MINING: PERU

JUEVES 14 DE ABRIL DEL 2016 | 09:00

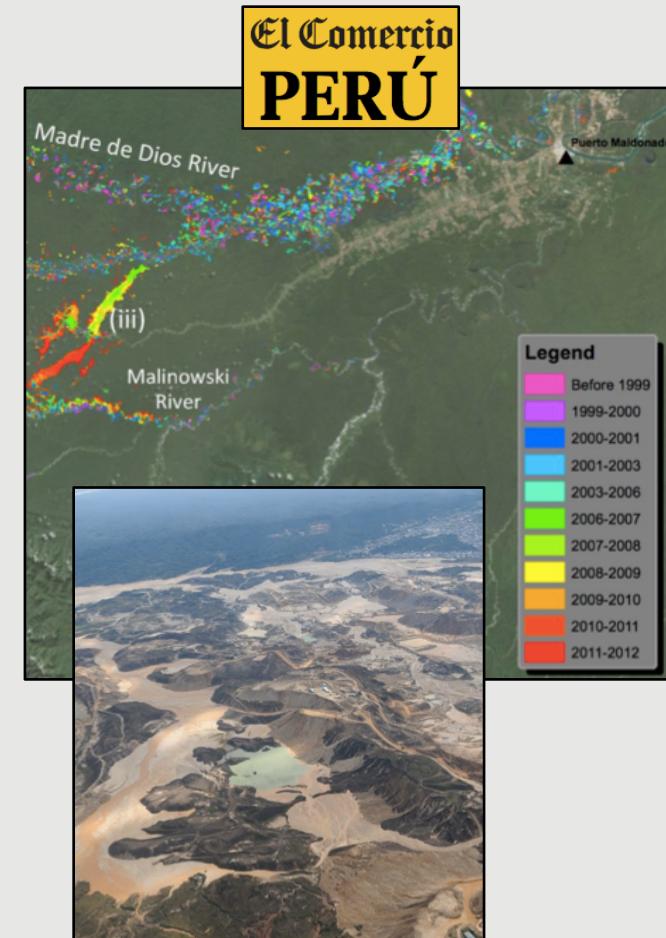
Madre de Dios: minería ilegal se intensifica en zona reservada

Las interdicciones no han logrado frenar a los mineros ilegales. Sernanp plantea presencia militar dentro de la reserva

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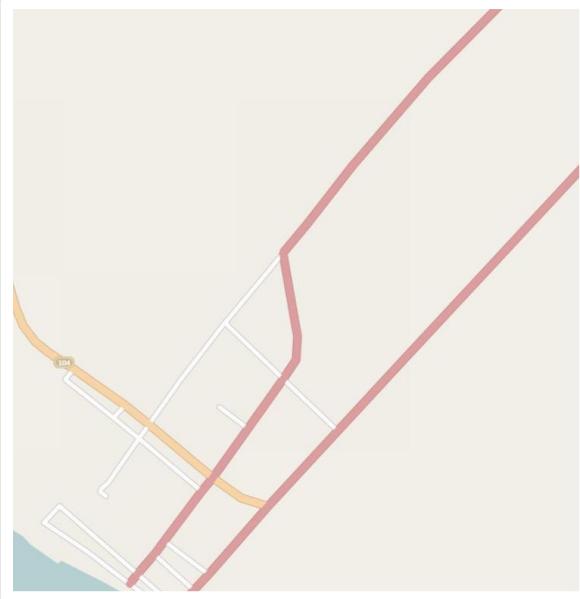


Estas tomas demuestran que entre noviembre del 2015 y abril del 2016 se formó un numeroso campamento minero frente a la reserva de Tambopata. [Fuente: Digital Globe (Nextview)].

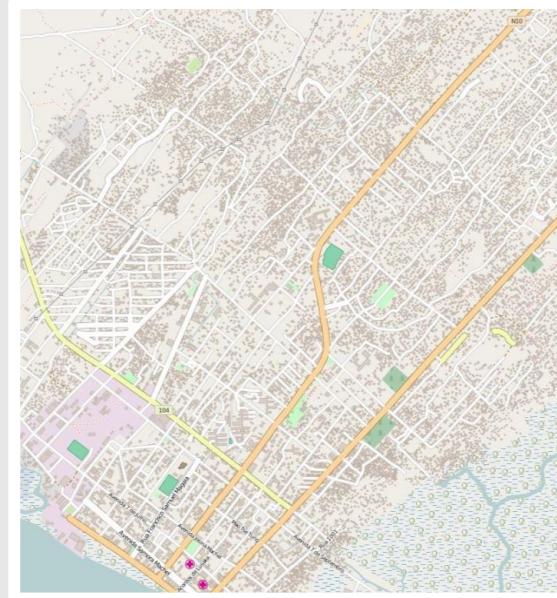


COMBATTING MALARIA: MOZAMBIQUE

Before (March 2015)



After (March 2016)



SECURING LAND RIGHTS: TANZANIA



LESSONS LEARNED

- Understand why data & analysis are needed. What question will be answered?
- Know who the decision-makers are.
- Invest in presentation of analytical findings (format, timing).
- Follow up after delivery to determine how it is being used.