



Regional Centre for Mapping of Resources for Development {RCMRD}

Role of RCMRD in Disaster Management in the East & Southern Africa Region



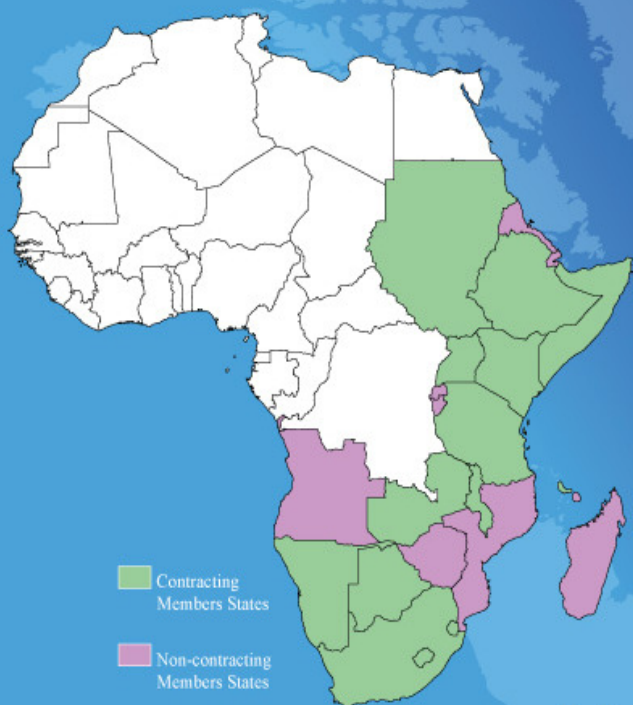
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E-mail: rcmrd.org website: <http://www.rcmrd.org>



REGIONAL CENTRE FOR MAPPING OF RESOURCES FOR DEVELOPMENT



Our Vision

To be a premier Centre of excellence in the provision of Geo-Information & Information Technology Applications in Africa & beyond

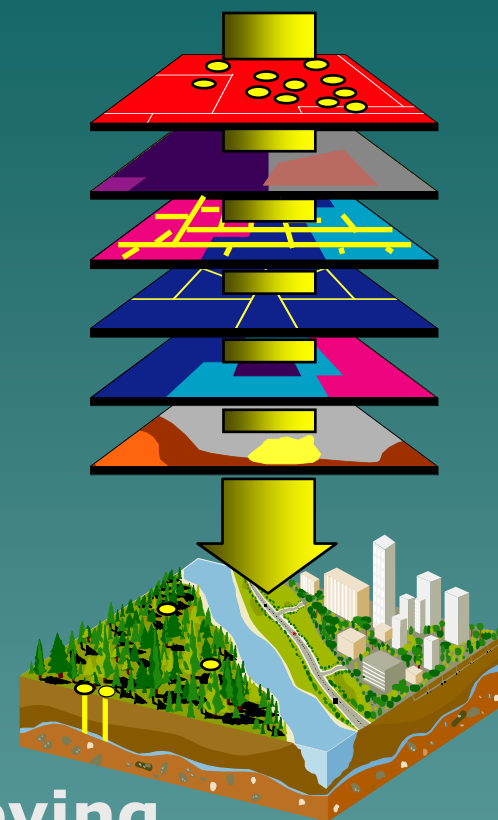
Our Mission

To provide quality Geo - Information & allied Information Communication Technology products & services in environmental & resource management for sustainable development in our Member countries & beyond



II. Major Activities of RCMRD

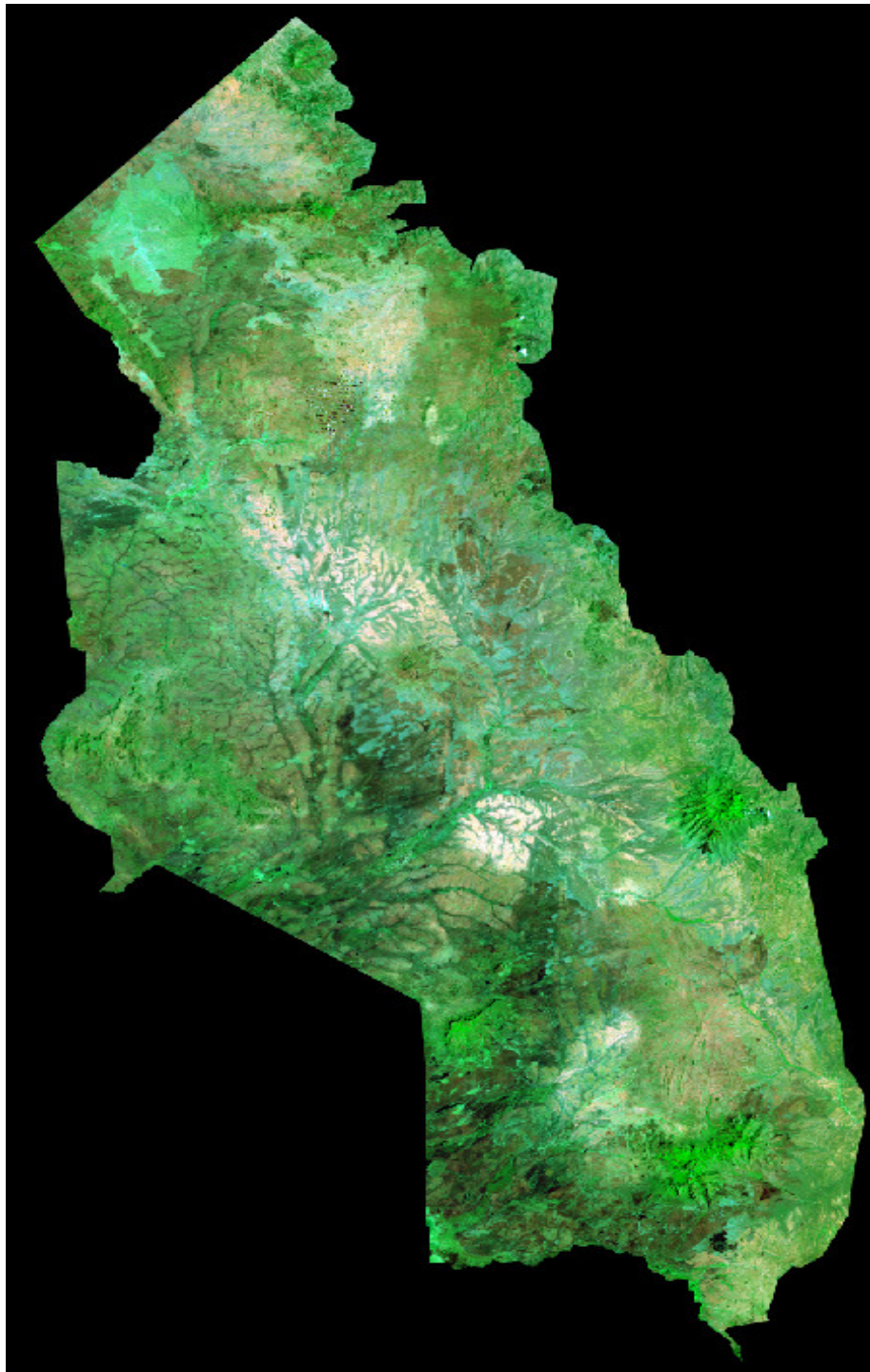
- A. Advisory services
- B. Training
- C. Project implementation
- D. Research and Development
- E. Servicing and Maintenance of Surveying and Mapping Equipments
- F. Data and information Dissemination



A. Advisory services

- Development of National Policies and Strategies
- Disaster early warning and management strategies
- Geoinformation Standards
- Project Proposal Development and Implementation





**Mapping of Gum Arabica
and Aloe in Karamoja
Uganda**

B. Training

i. Basic programmes

- Short-term Training,
- Post-Graduate Courses
- Workshops and Seminars



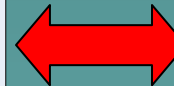
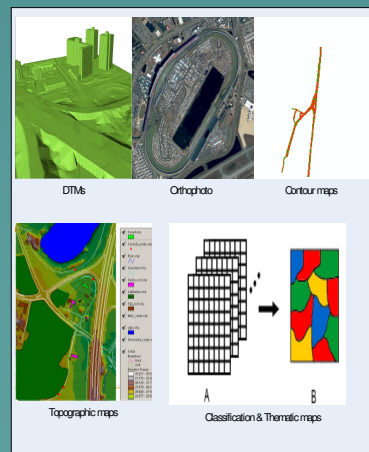
ii. Applied programmes

- Environmental impact assessment
- Water Resources Management
- Spatial Database Management
- Early warning and disaster management



New Technologies

- Surveys - GNSS/GPS
- Digital Production of Maps
- Modern Information System
- Spatial Data Infrastructure



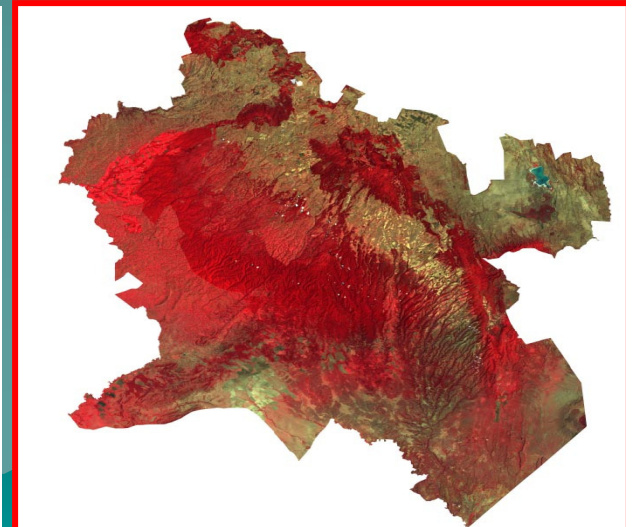
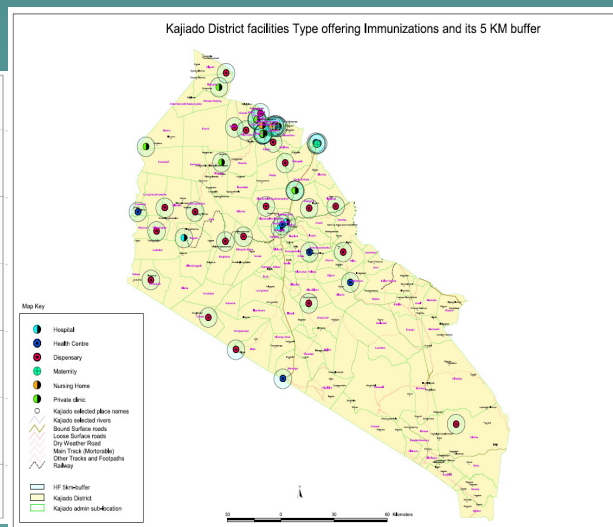
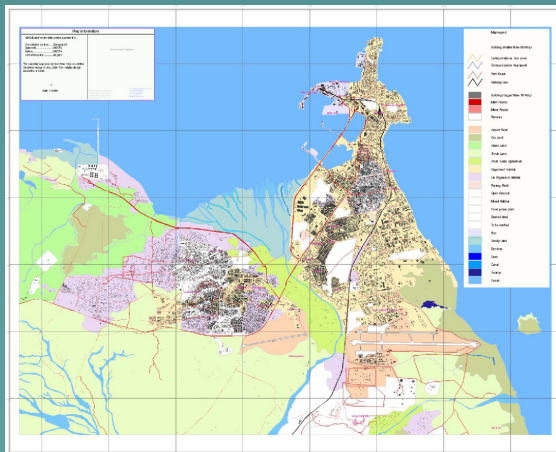
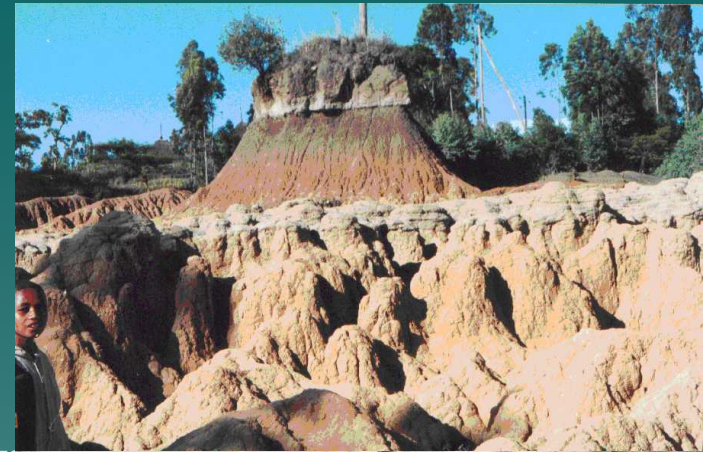
Parcel Details : Table							
ID	Field1	Field2	Field3	Field4	Field5	Field6	Field7
1	LR No.	Parcel type	Owner	Value (mill. Ksh.)	Tax Due ('000 Ksh.)	City	Lease Hold (y
2	712/101	commercial	Sekalaba J.	7.5	75	Nairobi	999
3	209/191	Residential	Ngovi T.	10.6	106	nairobi	999
* (AutoNumber)							
Record: 1 of 3							

owner details : Table					
ID	Field1	Field2	Field3	Field4	Field5
1	Owner ID	Owner name	Address	City	Date of Birth
2	sj1	Sekalaba J.	632-00618, Kasarani	Nairobi	23/06/1933
3	nt2	Ngovi T.	30045, Dunuma Road	Nairobi	06/03/1947
* (AutoNumber)					
Record: 1 of 3					

House Details : Table			
House Owner	Parcel ID	House No	
Sekalaba J.	712/101	712/101/1	
Ngovi T.	209/191	209/191/3	
* (AutoNumber)			
Record: 1 of 2			

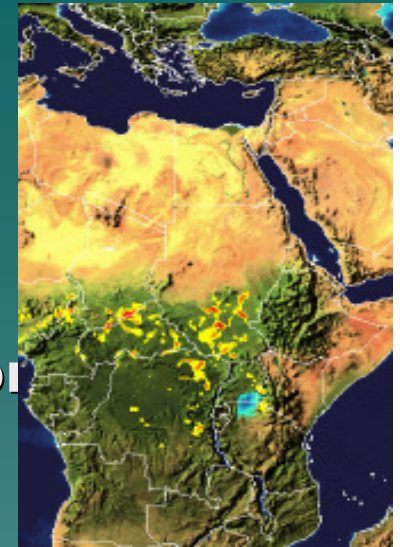
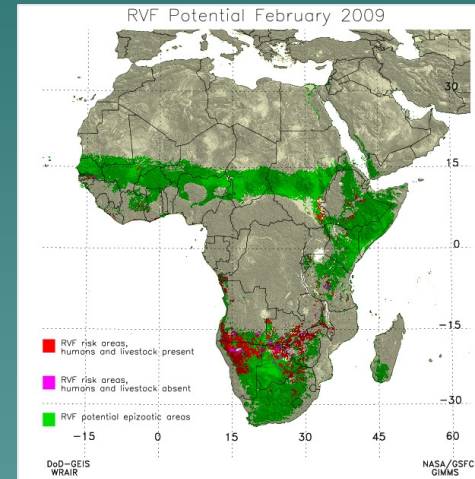
C. Project implementation

- ◆ Environment
- ◆ Natural Resources Management
- ◆ Disaster Management
- ◆ Infrastructure and Service Provision
- ◆ Urban Mapping and Planning
- ◆ Good Governance

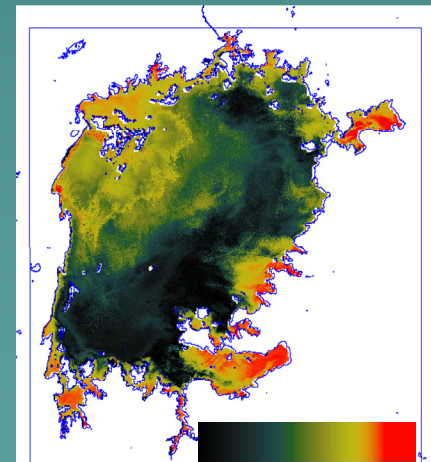


D. Research and Development

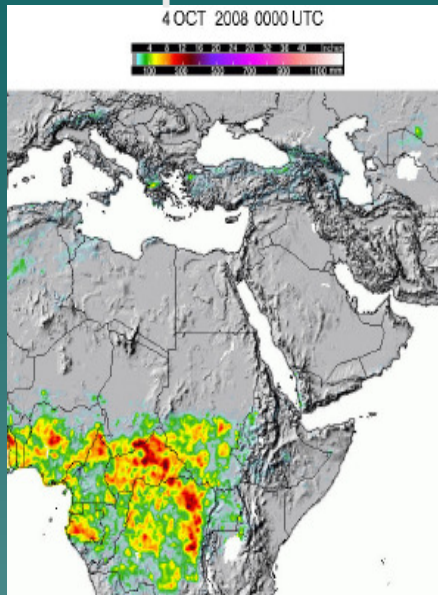
- ◆ Flood forecast modeling
- ◆ RVF forecasting
- ◆ Groundwater pollution monitoring
- ◆ Tsetse and Trypanosomiasis spread simulation and prediction



- ◆ GMFS: Crop yield estimation
- ◆ TIGER: Water resources management
- ◆ AMESD: Land Degradation and Habitat conservation
- ◆ GARNET-E: Disaster management capacity building
- ◆ AFREF: African Geodetic Reference Frame



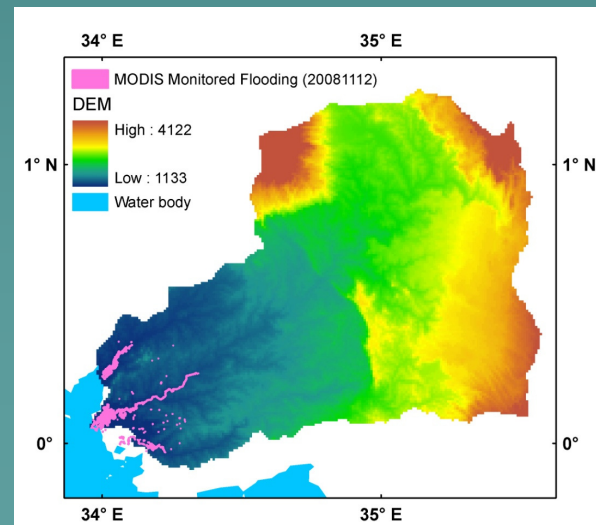
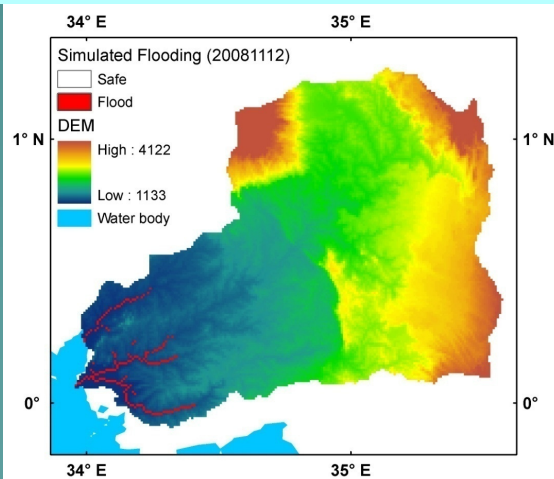
Precipitation



Flood Potential/Forecast



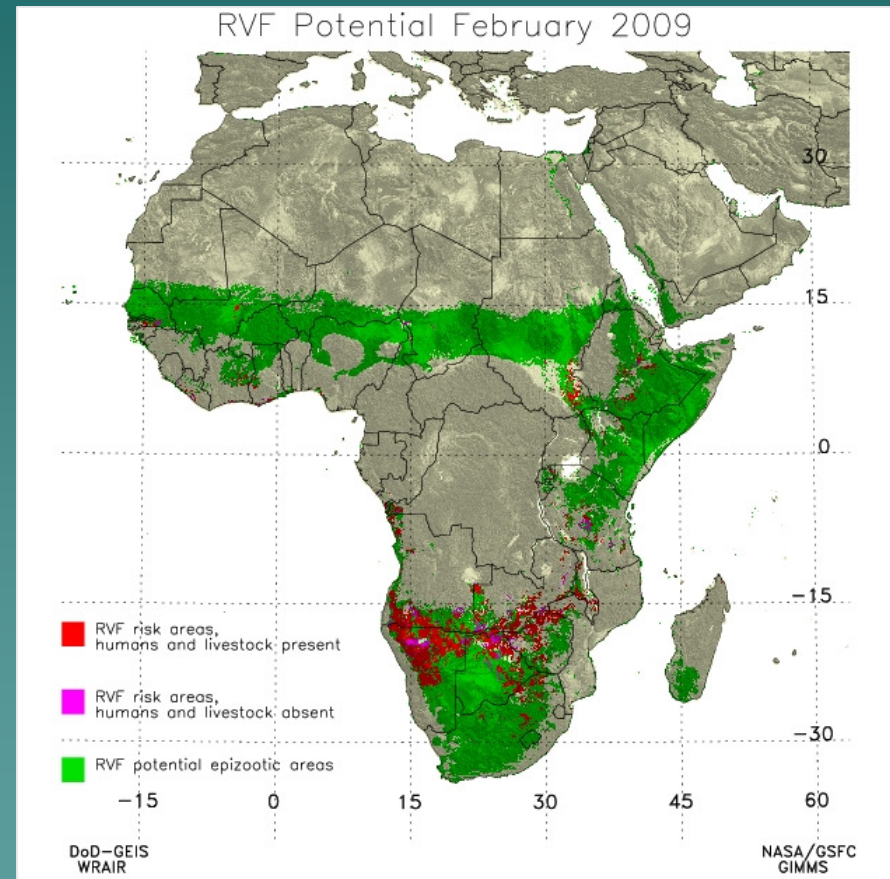
High resolution Model



Rift Valley Fever Outbreak Prediction

Rift Valley Fever Risk Map

Sensors: MODIS and AVHRR



E. Service and Maintenance of Equipments



Service and Calibration
campaign to member
states on request basis

Country	No. Of Instruments	Labour Cost Us \$	Replacement Value Us \$
Namibia	24	9,500.00	143,300.00
Botswana	48	24,800.00	204,600.00
Uganda	4	4,800.00	120,000.00
Malawi	23	13,240.00	160,000.00
Tanzania	32	14,300.00	240,400.00
Kenya	34	6,158.00	143,300.00
		72,798.00	1,011,600.00



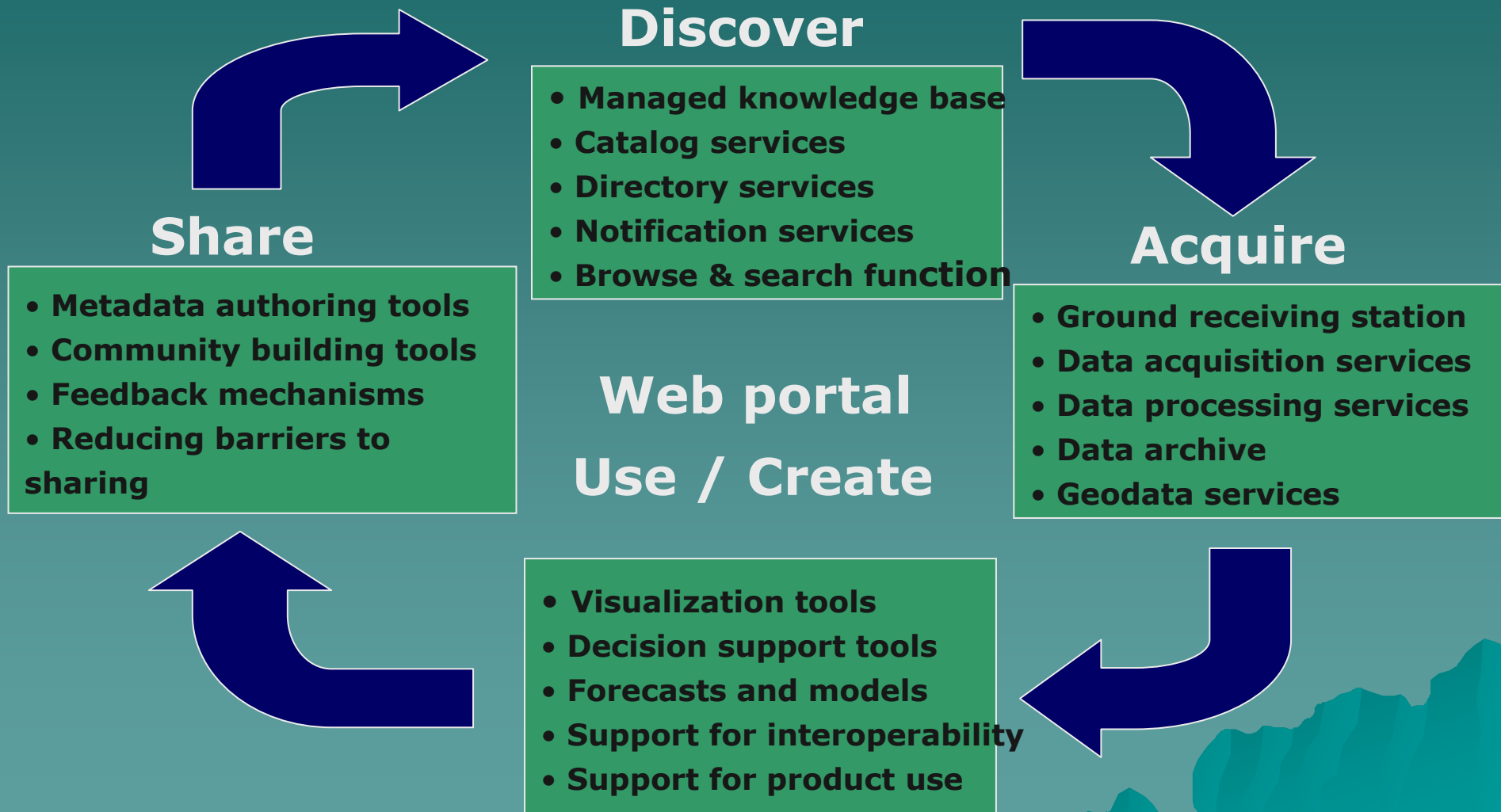
F. Data and Information Dissemination



Web-portal Training

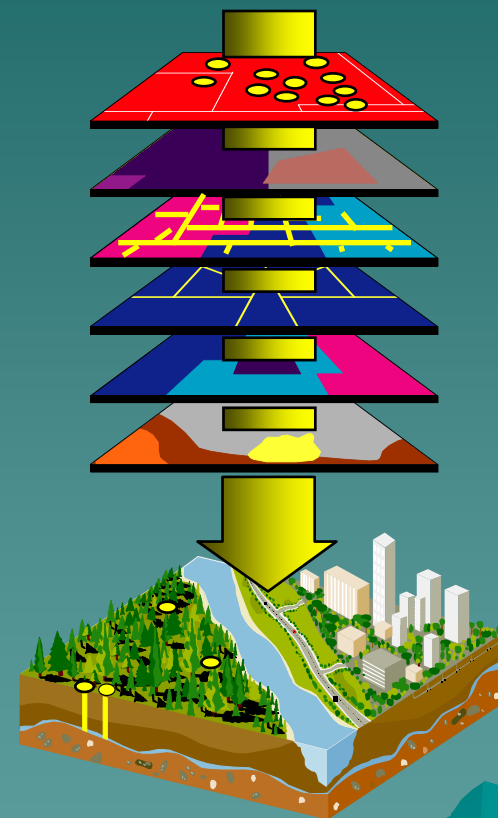


SERVIR Platform: User Perspective



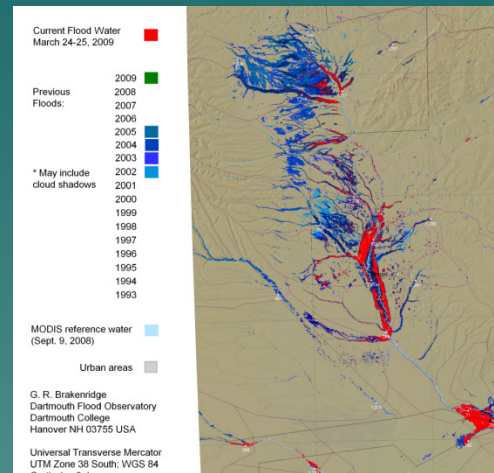
Data and Information Dissemination

- **Geonetwork (FAO Node)**
Data and metadata uploading and dissemination
Agricultural data
- **WFP Node**
Data on food security vulnerability assessment
- **DDS (Data Dissemination System)**
MERIS and ASAR data (every six hours)
- **GEONETCAST**
MSG data and Products such as NDVI, fPAR,
- **SERVIR-Africa**
 - Web-Portal Service
 - Archiving, dissemination and handling



Flood Mapping

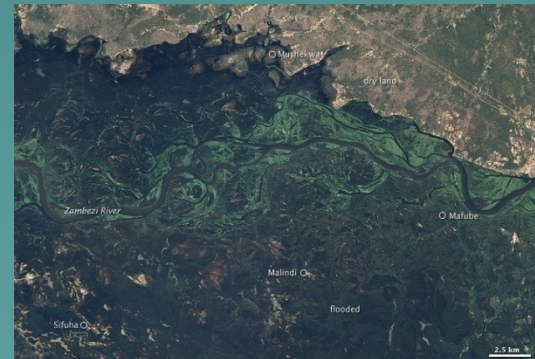
Flood Event Mapping



Before



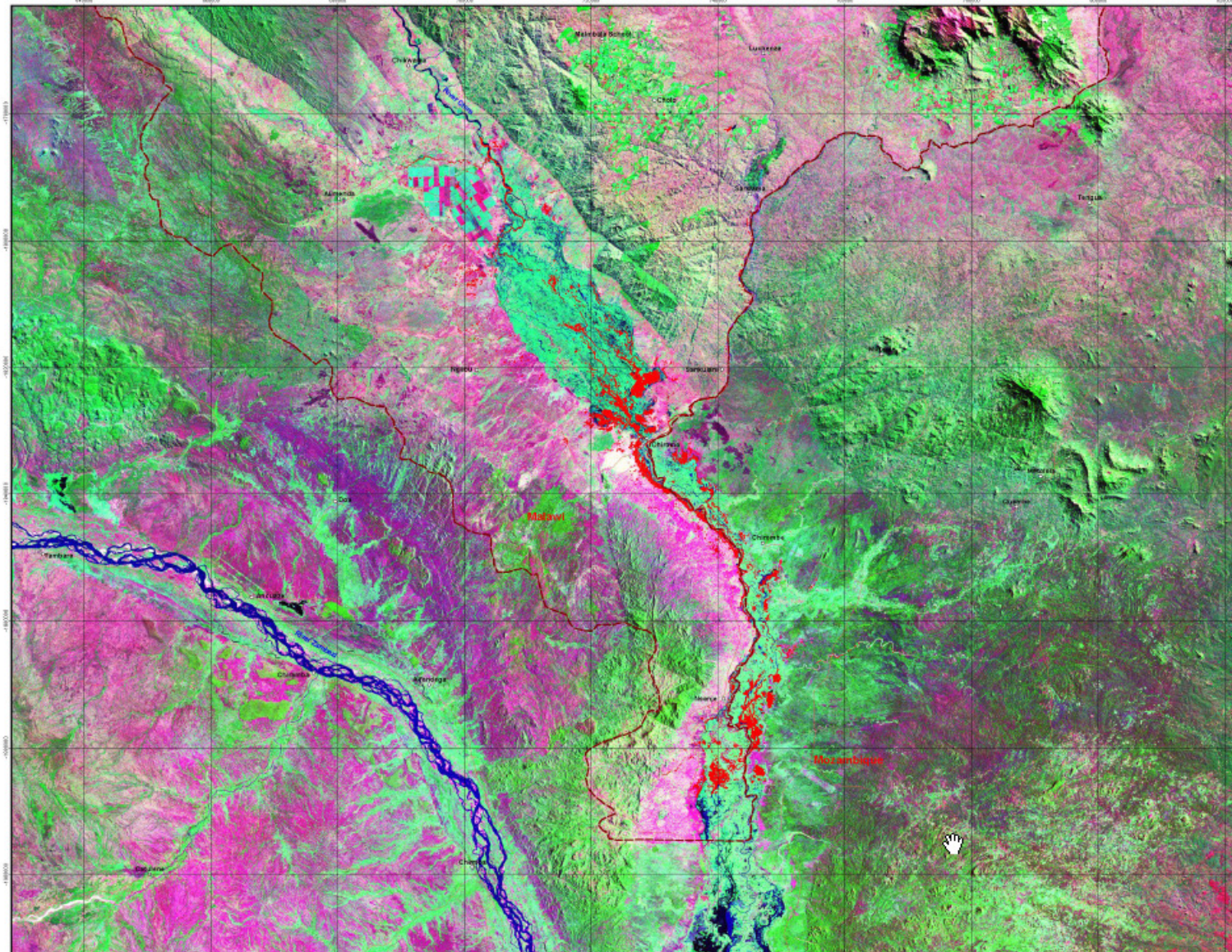
Flooding



Regional Centre for Mapping of Resources
for Development
(RCMRD)

International Charter and Disaster Management

FLOODING EVENTS ON 07TH FEBRUARY 2008 AS INTERPRETED FROM RADARSAT IMAGE (MALAWI, MOZAMBIQUE)



CHARTER CALL ID 190

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Web: www.rcmrd.org



MAP INFORMATION

This map illustrates satellite-detected flood waters over the affected areas in Malawi, and Mozambique. Red areas represent flood affected areas identified on 7th February 2008. Image data source: Radarsat. Roads and towns data source: Africa Data Sampler.

MAP LEGEND

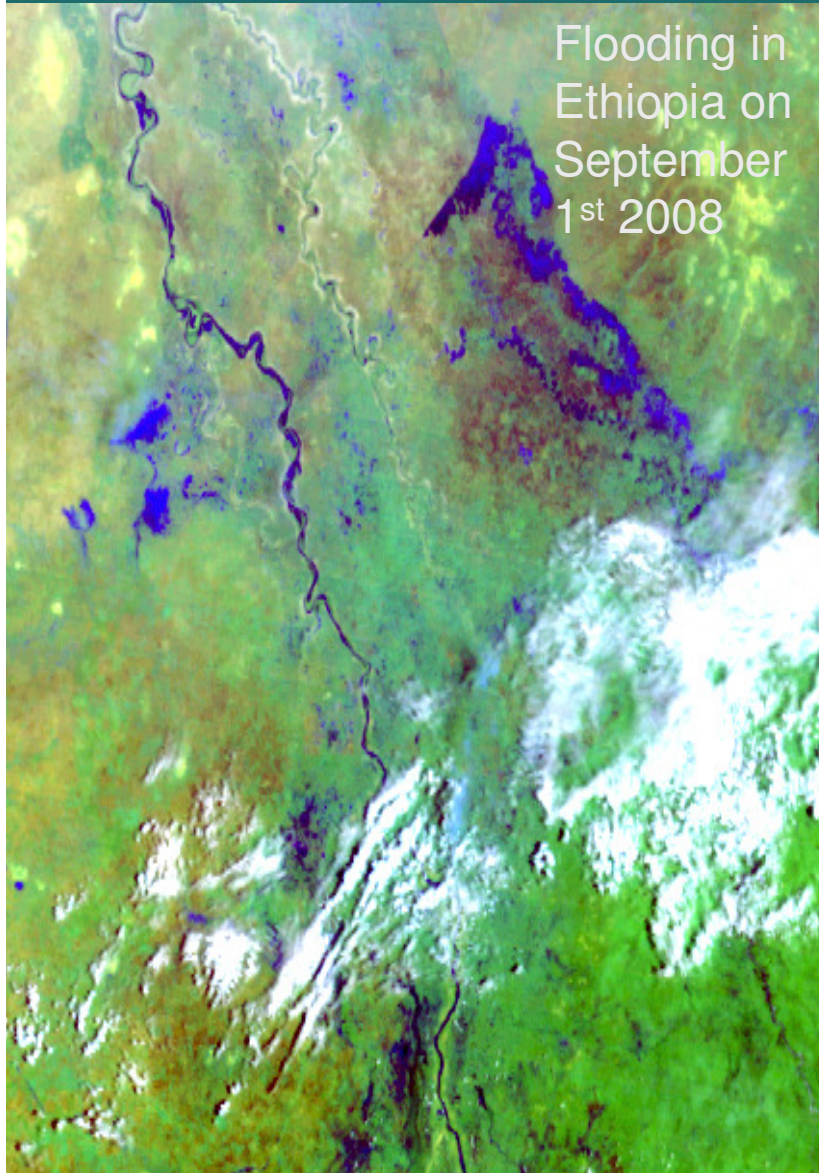
- Bare land
- Forest
- Farms
- Water bodies
- Major Towns
- Other Towns
- Roads
- Rivers
- International Boundary
- Flooded areas

Map Scale 1:300,000

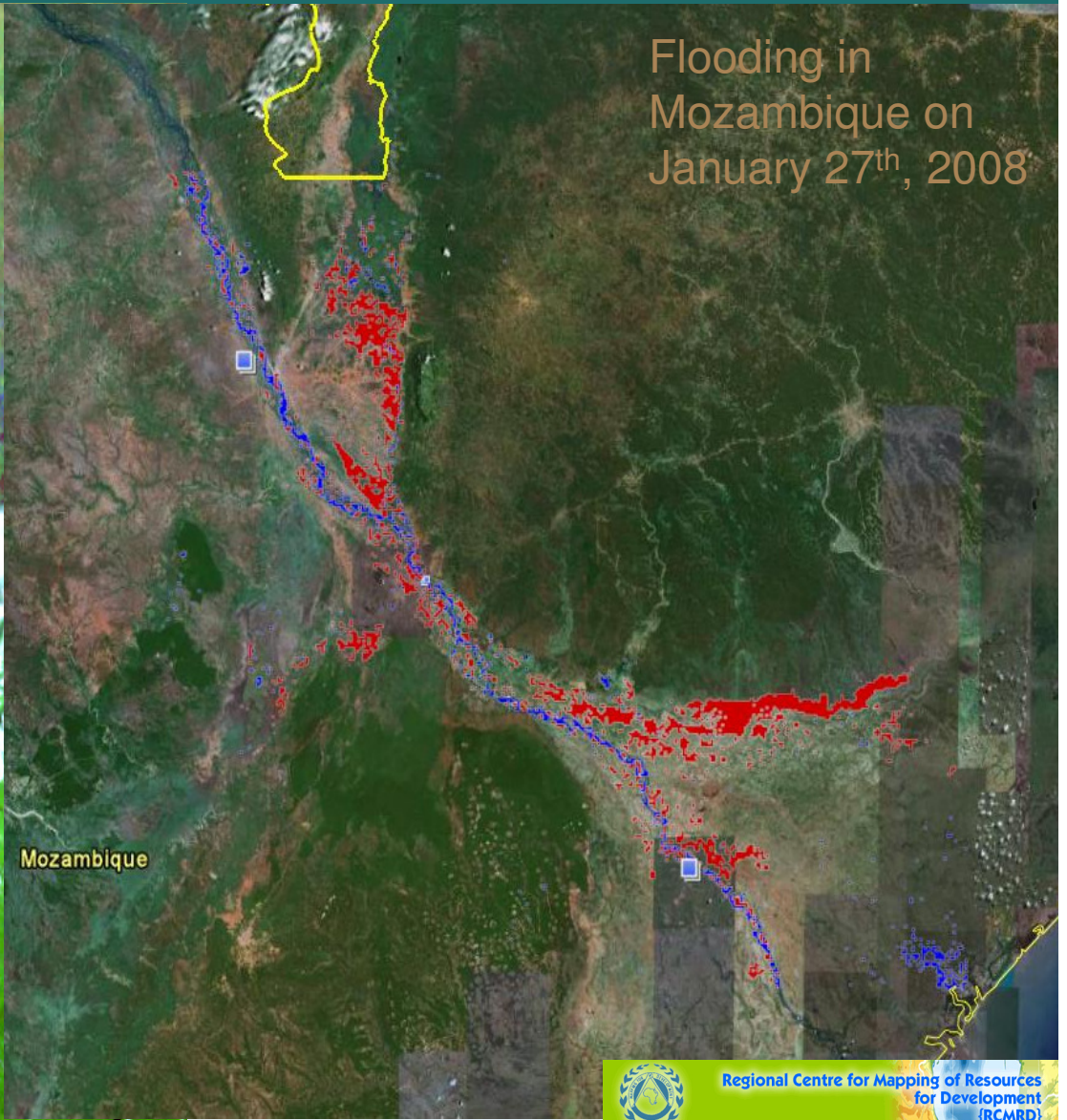
Satellite Data.....Radarsat
Date series.....7th Feb 2008
Other GIS Data.....Africa
Data sampler
Projection.....U.T.M Zone 36
Datum.....WGS 84

Flood Mapping

Flooding in
Ethiopia on
September
1st 2008

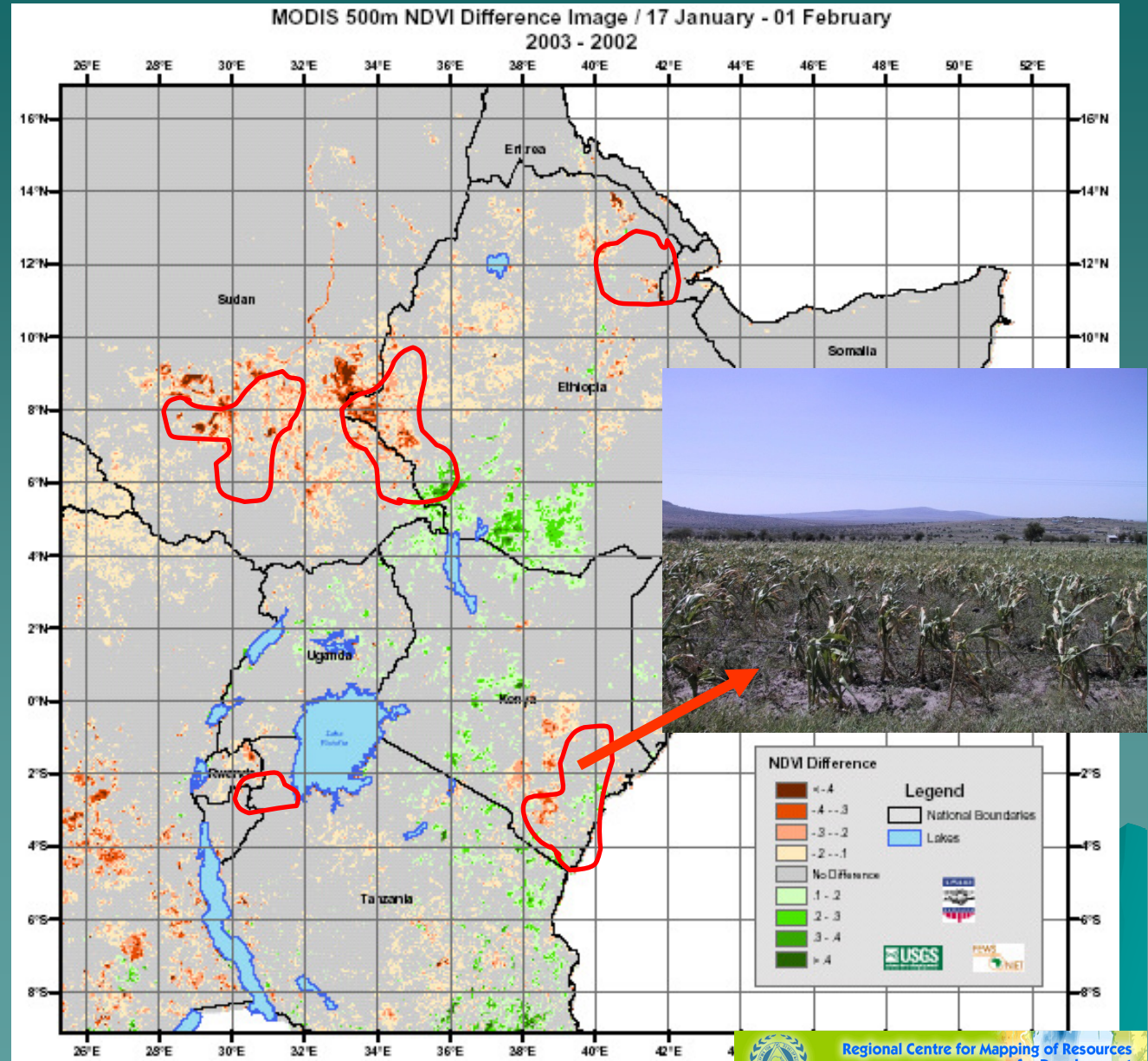
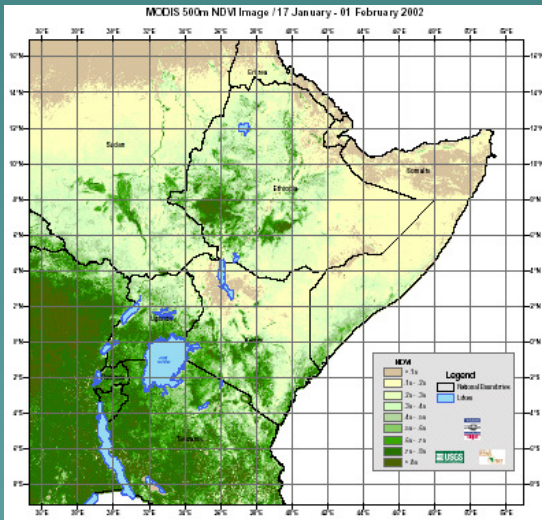
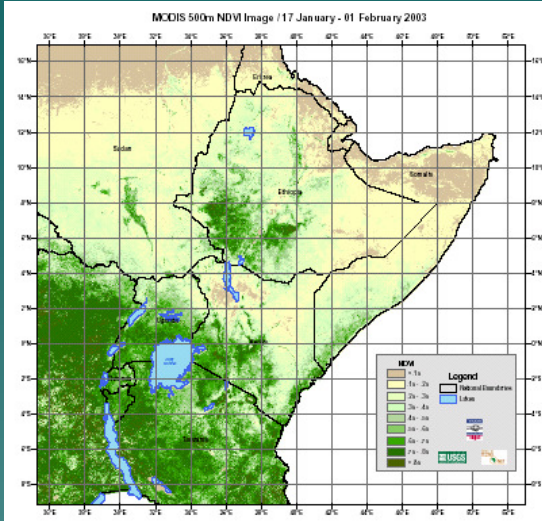


Flooding in
Mozambique on
January 27th, 2008



Regional Centre for Mapping of Resources
for Development
(RCMRD)

Drought Forecasting





REGIONAL CENTRE FOR MAPPING OF RESOURCES FOR DEVELOPMENT



Thank You!

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