

Kanyari D., Farah H.<sup>1</sup>, Mtaroni V.<sup>1</sup>, Mugo R.<sup>1</sup>, Wahome A.<sup>1</sup>, Macharia D.<sup>1</sup>, Mitheu F.<sup>1</sup>, Okello L.<sup>1</sup>, Ndungu L.<sup>1</sup>, Oduor P.<sup>1</sup>

1 – Regional Center For Mapping Resources for Development

## 1. Rationale

SERVIR's training and capacity building program is designed to enable key stakeholders and end-users, via training and other support, to maximize the benefits offered by SERVIR. The program is made up of activities targeted to and customized for different audiences and implemented at levels ranging from customized training plans, hub exchanges to national and regional-level workshops.

## 3. Approach

This is realized through user needs assessment across the member states which seeks to ;

- ▶ Identify potential users of Earth observation and geospatial data and applications and understand their needs for Earth Observation data and products;
- ▶ Prioritize identified needs into an action plan for RCRMD capacity building and service activities;
- ▶ Obtain an overview of the current state of Information and Communications Technology (ICT) infrastructure that support geo-databases, geo-information flow, web-services and data portals, within member States.
- ▶ Identify opportunities for further support and collaboration with RCMRD. The findings as applicable to SERVIR form the basis for preparing training activities.



Figure 2: Training in Namibia



Figure 3: Satellite-Based Lake Water Quality Data Processing Using SeaDAS Trainees Touring and learning about the SERVIR project



Figure 4: Web Mapping training workshop in South Africa in May 2015



Figure 1: SERVIR staff demonstrating SERVIR disaster applications to workshop participants

## 4. Results

### Trainings per Country

Country	Training Activity
Kenya	National Web mapping training
	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	Regional training on water quality mapping and monitoring using SeaDAS software and MODIS data.
	Regional Training on crop modelling to end users
Uganda	Training on CREST tool validation and calibration& hydrological modelling
	Regional training on water quality mapping and monitoring using SeaDAS software and MODIS data.
	Development of land cover maps for GHG emissions inventories
Tanzania	Regional Training on crop modelling to end users
	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	Regional training on water quality mapping and monitoring using SeaDAS software and MODIS data.
Ethiopia	Development of land cover maps for GHG emissions inventories
	National training on data management
Malawi	Regional Training on crop modelling to end users
	National trainings on the application of geospatial technologies in disaster risk reduction
Zambia	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	National trainings on the application of geospatial technologies in disaster risk reduction
Botswana	Regional Training on crop modelling to end users
	National training on data management
Namibia	National Web mapping training
	Development of land cover maps for GHG emissions inventories
Rwanda	National Web mapping training
	National trainings on the application of geospatial technologies in disaster risk reduction
South Africa	Development of land cover maps for GHG emissions inventories
	National training on data management
Mauritius	National Web mapping training
	Development of land cover maps for GHG emissions inventories
Swaziland	National training on data management
	Development of land cover maps for GHG emissions inventories
Lesotho	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	Development of land cover maps for GHG emissions inventories
Mozambique	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	Development of land cover maps for GHG emissions inventories
Madagascar	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	Development of land cover maps for GHG emissions inventories
South Sudan	Regional training on application of remote sensing and GIS in coastal and marine ecosystems management
	National training on data management

More than 750 external experts have been trained by SERVIR in using earth observation data in the member states and beyond.

### Staff Training

Type	No of Staff
Conferences & Workshops	20
Post graduate studies	8
Specialized expert Training	8
Short courses	3
Other e.g. Hub exchange	20

## 2. Objectives

- ▶ To ensure agencies in the member states are empowered to uptake geospatial tools, products and services.
- ▶ To enhance RCMRD/SERVIR-Africa capacity to efficiently and successfully transfer knowledge and skills to the user community in the member states and beyond
- ▶ Identify the training needs and understand the training capacity in the member States

## 5. Outcomes/Anticipated Impacts

- ▶ Increased and better uptake of SERVIR tools and products in the member states
- ▶ Increased capacity in use of Geoinformation technologies and earth observation data in the member states.
- ▶ Enhanced internal staff capacity through advanced specialized trainings, short courses and postgraduate courses.

## 6. Target End Users

Government ministries, agencies and institutions in the member countries dealing with;

- ▶ Environment & Climate change adaptation
- ▶ Disasters
- ▶ Agriculture
- ▶ Health
- ▶ Water resources
- ▶ Geo-information



Figure 5: SERVIR Hub Exchange at Arusha, Tanzania in April 2015