

Data Dissemination, Sharing and Access through Web Applications



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1 - Regional Centre for Mapping of Resources Development, 2 - USAID, 3 - DAI 4 - The SERVIR Coordination Office

1. Rationale

The hub is producing wide range of geospatial data on areas of ecosystems, agriculture, biodiversity, ecosystems, disasters. The data should be shared to the different member countries governmental, non-governmental agencies, and the wider public.

Despite the fact that internet penetration is the lowest in Africa, it is the best way to share data to large number of users in a short time. Accordingly, the hub has developed and launched several data visualization, data portals and web services.

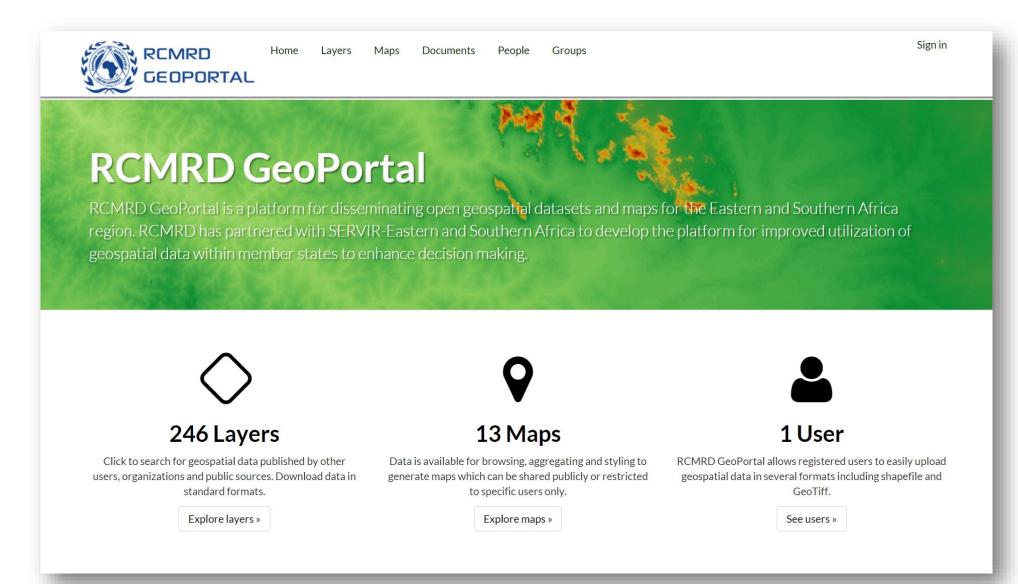


Figure 1: RCMRD Geo-portal

3. Approach/Project Activities

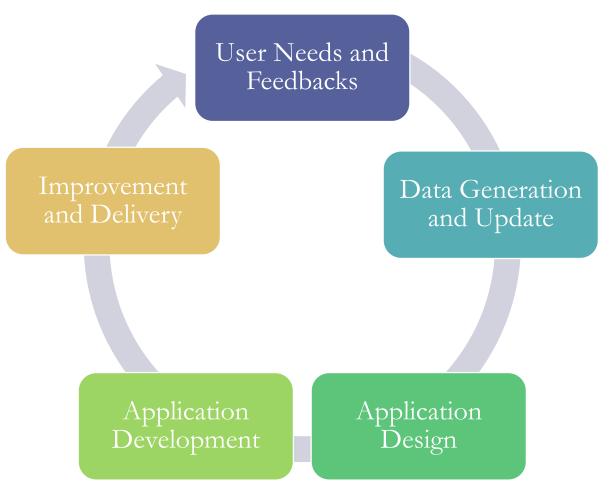


Figure 2: User - Application development cycle

Application Deployment Planning User interface design Backend Development and Data Integration

Figure 3: Application development activities

Climate Disasters Ecosystems Health

Figure 1: RCMRD Apps Portal

4. Results

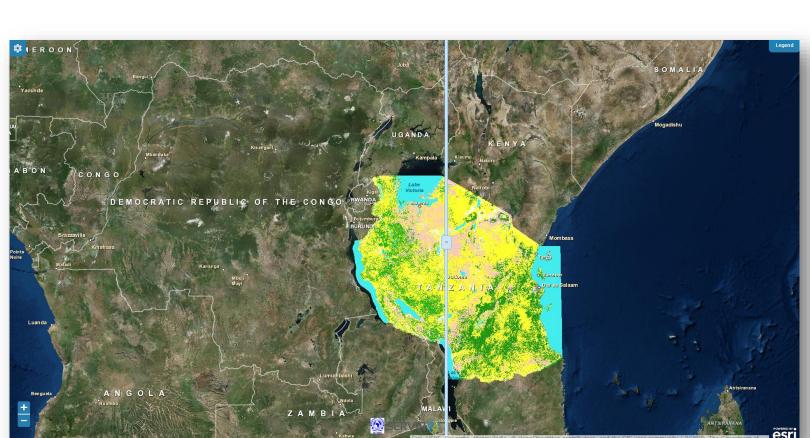


Figure 5: Green House Gas Land Cover Viewer

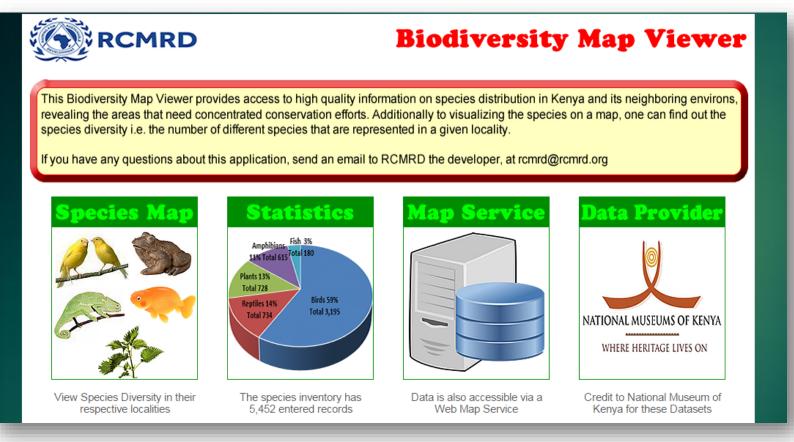


Figure 7: Biodiversity Map Viewer

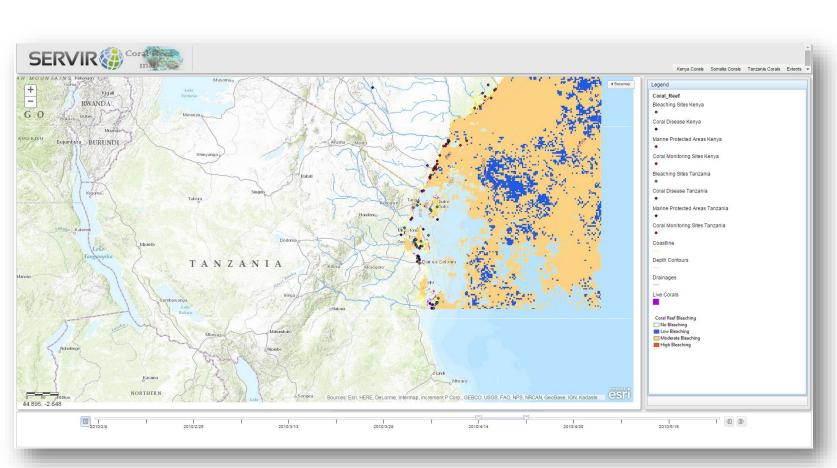


Figure 4: Coral Reef Bleaching Occurrences Viewer

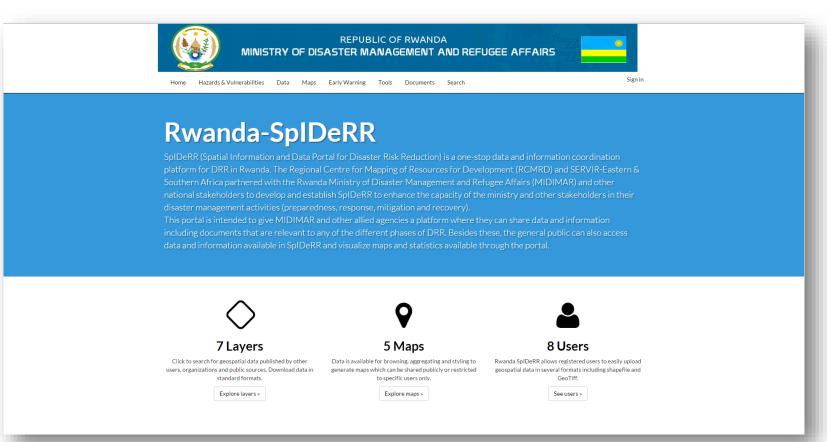


Figure 6: Rwanda Spatial Information and Data Portal for Disaster Risk Reduction

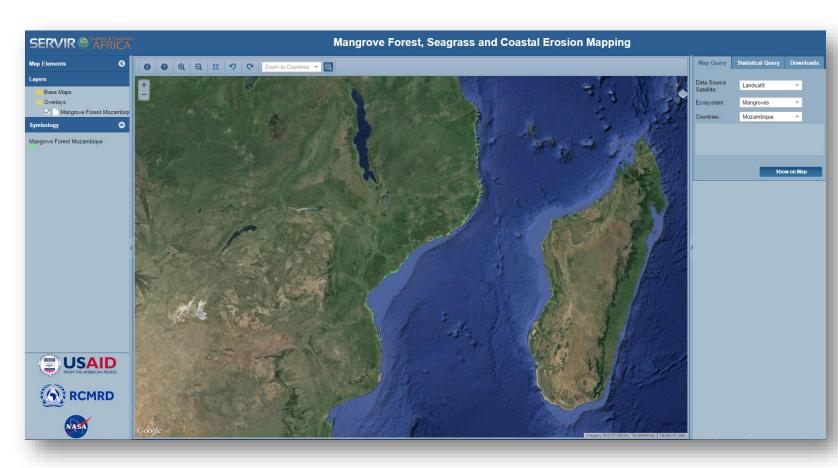


Figure 8: Mangrove Forest, Seagrass and Coastal Erosion Mapping

2. Objectives

- To improve the availability of geospatial data in the region
- To enhance the capacity of data sharing through web mapping trainings
- To enable users visualize geospatial data
- To enable users query geospatial data

5. Outcomes/Anticipated Impacts

- Improved availability of geospatial data in the region
- Improved capacity in web mapping application development
- Increased awareness on the importance of data sharing
- ▶ Simplified and cheaper data visualization without the need for a desktop applications

6. Project Partners & End Users

- Government institutions and departments in all sectors
- ▶ NGOs
- Academic institutions
- Private institutions
- General public

Application Name	URL	Status
RCMRD Geo-portal	http://geoportal.rcmrd .org/	Complete
Apps Portal	http://apps.rcmrd.org	Complete
Rwanda Spatial Information and Data Portal for Disaster Risk Reduction	http://41.74.166.109/	Complete
Malawi Hazards and Vulnerability Modelling Tool	http://52.3.210.28/vul nerabilitytool/	Complete
Kenya Biodiversity Map Viewer	http://apps.rcmrd.org/biodiversity/	Complete
Coral Reef Bleaching Occurrences Viewer	http://apps.rcmrd.org/coralreef/	Complete
RCMRD WMS	http://maps.rcmrd.org /ArcGIS/rest/services	Complete
Eastern and Southern Africa Fire Information System	http://apps.rcmrd.org/esafis/	Working Prototype
GeoN etwork Meta-Catalog	http://metacatalog.rcm rd.org:8080/geonetwor k/srv/eng/main.home	In Development
Lake Water Quality Visualization Tool	http://41.215.39.118/ waterquality/	Working Prototype
Green House Gas Land Cover Viewer	http://apps.rcmrd.org/landcoverviewer/	Working Prototype
Mangrove Forest, Seagrass and Coastal Erosion Mapping	http://apps.rcmrd.org/coastaleco/	Working Prototype

Figure 9: List of Applications, URL and development status



