CONSULTANCY SERVICES FOR AGRICULTURE & FOREST MANAGEMENT

Key Differentiators

- Leading global GIS company with extensive domain expertise in Natural Resource Management (NRM)
- End to end integrated solutions in agriculture and forestry
- In house experts including agriculturists, foresters, geologists, environmentalists, soil and water resources experts, reservoir engineers and remote sensing & GIS experts
- Vast project experience in India, Africa, South East Asia, Europe and Middle East
- Dedicated pool of internationally acclaimed consultants and strategic partners

RMSI Private Limited is the strategic partner of Rural Consult, Ltda, from Mozambique, in charge for all GIS/Mapping work, for the Agro-Ecological Zoning of Mozambique in 1:250,000 scale. By using the most advanced GIS tools, RMSI’s role in this project has been instrumental for all stages and components of the project. The level of professionalism displayed by the RMSI team has been critical to the acclaimed success of the project.

Jacinto Mutemba
Managing Director
Rural Consult Ltda, Mozambique

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Consultancy services and solutions for sustainable agriculture development and food security

RMSI provides technical and consulting solutions to government and private enterprises involved in agriculture, forestry and biodiversity conservation. We provide integrated agri-intelligence solutions for the agri-value chain and address impending issues like food security, sustainable livelihood development and climate smart agriculture. We have a multi-disciplinary group comprising of agronomists, pedologists, entomologists, plantation experts, agri-economists, agri-statisticians, and livelihood experts.

RMSI adopts a conjunctive approach of using geospatial technology and statistical methods coupled with field surveys to deliver agri-solutions in quick turnaround time while maintaining the highest quality standards. Thus, translating into optimal cost savings for the client.

RMSI Solutions

**Natural Resource Information and Management**
- Soil survey, mapping and quality assessment
- Crop survey and spatial distribution mapping
- Detailed land use and land cover mapping
- Cropping pattern and change detection analysis

**Feasibility and Planning Studies**
- Baseline survey and mapping
- Crop production improvement planning
- Water resource development planning
- Land use development planning

**Agri-Information for Supply Chain Management**
- Crop acreage estimation
- Crop yield modeling and production estimation
- Crop health monitoring

**Training and Capability Development**
- Crop, soil and land use survey
- RS and GIS techniques for agri-information
- Statistical Methods in NRM

Pulses and Oilseeds Acreage & Production Estimation

The study objective was crop acreage and production estimation using satellite imagery, remote sensing, GIS technology along with field survey. The study involved collection of real time information on yield and production of pulses and oilseeds (soyabean, groundnut and sesame) in 100 districts of India. Additional parameters such as GPS based field survey data collection and farmers' interviews were used in forecasting the production estimates.

The methodology adopted by RMSI helped in covering and analyzing large area estimates in a short turnaround time.

Agro-Ecological Zonation, Mozambique

The client wanted suitability zonation of 9 provinces in Mozambique for 19 crops, forestry and livestock. Urban, social and ecological parameters were also to be considered. The study involved a national level agro-ecological zoning for characterization, evaluation and rating for different types of the agrarian use in 1: 250 000 scale. Province wise thematic maps for land use, soil and climate were prepared using medium resolution satellite imagery. RMSI developed a customized application for integrated GIS analysis which helped in land evaluation and suitability zonation. Thus, addressing the challenges of food security.

The scientific approach adopted by RMSI facilitated planning and decision making in a short turnaround time.

Geospatial consultancy for sustainable forest management (SFM) & livelihood development and (REDD+)

RMSI offers geospatial solutions to government, multilateral funding agencies, public and private enterprises engaged in forestry applications. RMSI has demonstrable experience in a variety of forestry applications including resource conservation planning, sustainable development, livelihood planning, prioritisation of biodiversity conservation areas and development of forest information systems. We specialise in providing effective decision support for conservation, development, and carbon credit mechanisms.

We have successfully executed projects for clients such as FAO, Government of Mozambique, Government of Tripura, INBAR, IUCN, Lanworth and other organisations across the world.

RMSI Solutions

**Forest Resource Information System**
- Forest mensuration and classification
- Mapping forest degradation and deforestation
- Temporal forest change monitoring

**Analytical Services for Forest Management**
- Sustainable forest management
- Biodiversity, productivity and carbon stock assessment
- Carbon based forest management models
- Landscape change analysis
- Sustainable livelihood development planning
- Environmental sustainability modeling

**Biodiversity Enumeration Studies**
- Forest resource assessment and valuation
- Flora and fauna assessment through diversity indices

**REDD+ Services**
- Forest inventory & baseline data preparation
- Conservation & enhancement of carbon stock
- Monitoring and verification

**Training and Capability Development**
- Forest survey and sampling
- RS, GIS & GPS techniques for forest inventory and mapping
- Spatial representation of forest resources
- Data integration, modeling and analytics for forest conservation and management

Success Stories

**Bamboo Resource Mapping, INBAR Tanzania**

The main objective was to prepare a detailed bamboo resource map in the study area. The map was required for assistance in developing livelihood development options for the local communities.

The study helped in reducing the time required and providing near accurate maps using space science and technologies.

**Development of Climate Change integrated Information Systems for Community Forestry**

The objective of the project was to develop a cost effective, integrated project baseline and combined methodologies for forest, biomass, bamboo, natural resources and agriculture inventories by using high resolution imageries. Forest Change Detection Analysis (CDA) was also carried out for a period of 20 years at 5 year intervals.

The project helped in the development of a cost effective integrated project baseline for monitoring community forestry initiatives at local and national level. It also helped in effective decision making for livelihood development planning.
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CONSULTANCY SERVICES
FOR AGRICULTURE &
FOREST MANAGEMENT

Latin America
Brazil
Peru

Africa and Middle-East
Botswana
Congo
Djibouti
Iran
Mauritania
Mozambique
Oman
Saudi Arabia
South Africa
Sudan
Tanzania
Turkey
Yemen

South Asia
Afghanistan
Bhutan
Cambodia
India
Indonesia
Lao
Nepal
North Korea
Pakistan
Philippines
Vietnam

RMSI Global Natural Resource Management (NRM) Experience

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