



Results-Framework Document (RFD)

for

National Bureau of Soil Survey and Land Use Planning (2013-2014)

Address:

Amravati Road, Nagpur-440 033

Website ID:

<http://www.nbsslup.in>

Section 1: Vision, Mission, Objectives and Functions

Vision

To be the National Custodian of country's land and soil resources and land use related database and to support scientific and judicious land use planning at various levels to ensure food and income security.

Mission

- To spread the knowledge/awareness on land and soil resources of the country for its preservation, conservation, increasing productivity and ensuring sustainable agricultural production.
- To monitor the state of health of soil resources in the country and subsequent need based corrective measures.

Objectives

- Soil survey, characterisation and mapping at different scales
- Land use planning at different scales
- Creation of awareness and knowledge

Functions

- To conduct soil resource inventory at various scales and develop scientific and optimal land use plans.
- To execute research programmes on applied and basic research in pedology, remote sensing applications and land use planning.
- To conduct training and P.G teaching in the fields of soil survey, mapping, land evaluation and land use planning and land resource management.

Section 2: Inter se priorities among Key Objectives, Success indicators and Targets

S. No.	Objectives	Weight	Actions	Success Indicators	Unit	Weight	Target / Criteria Value				
							Excellent 100%	Very Good 90%	Good 80%	Fair 70%	Poor 60%
1.	Soil survey, characterisation and mapping at different scales	45	Soil survey field work and laboratory analysis	Soil resource maps developed at different scales	No.	25	8	7	6	5	4
				Benchmark soils identified/established	No.	12	12	10	9	8	7
				Thematic maps developed at different scales	No.	8	14	12	10	9	8
2.	Land use planning at different scales	30	Bio-physical and socio-economic resource characterisation, analysis and their integration	Land use plans developed at different scales	No.	30	8	7	6	5	4
3.	Creation of awareness and knowledge	14	HRD & capacity building	Trainings conducted	No.	14	5	4	3	2	1
	Efficient Functioning of the RFD System	3	Timely submission of draft RFD (2013-14) for approval	On-time submission	Date	2	May 15, 2013	May 16, 2013	May 17, 2013	May 20, 2013	May 21, 2013
			Timely submission of Results for RFD (2012-13)	On-time submission	Date	1	May 1, 2013	May 2, 2013	May 5, 2013	May 6, 2013	May 7, 2013
	Administrative Reforms	4	Implement ISO 9001 as per the approved action plan	% implementation	%	2	100	95	90	85	80

			Prepare an action plan for innovation	On-time submission	Date	2	Jul 30, 2013	Aug 10, 2013	Aug, 20, 2013	Aug, 30, 2013	Sep. 10, 2013
	Improving internal efficiency / responsiveness / service delivery of Ministry / Department	4	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	2	100	95	90	85	80
				Independent Audit of implementation of public grievance redressal system	%	2	100	95	90	85	80

Section 3: Trends Values of the Success Indicators

S. No.	Objectives	Actions	Success Indicators	Unit	Actual value for FY 11-12	Actual value for FY 12-13	Target value for FY 13-14	Projected value for FY 14-15	Projected value for FY 15-16
1	Soil survey, characterisation and mapping at different scales	Soil survey field work and laboratory analysis	Soil resource maps developed at different scales	No.	18 [#]	5	7	9	9
			Benchmark soils identified/ established	No.	10	10	10	12	12
			Thematic maps developed at different scales	No.	-	15	12	13	13
2	Land use planning at different scales	Biophysical and socioeconomic resource characterisation, analysis and their integration	Land use plans developed at different scales	No.	2	2	7	8	8
3	Creation of awareness and knowledge	HRD & capacity building	Trainings conducted	No.	5	4	4	5	5
	Efficient Functioning of the RFD System	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	-	-	May 16, 2013	-	-
		Timely submission of Results for RFD (2012-13)	On-time submission	Date	-	-	May 2, 2013	-	-
	Administrative Reforms	Implement ISO 9001 as per the approved action plan	% Implementation	%	-	-	95	-	-
		Prepare an action plan for Innovation	On-time submission	Date	-	-	Aug 10, 2013	-	-
	Improving internal efficiency /responsiveness /	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	-	-	95	-	-

	service delivery of Ministry / Department		Independent Audit of implementation of public grievance redressal system	%	-	-	95	-	-
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Section 4: Acronyms

S. No.	Acronym	Description
1.	GIS	Geographic information system
2.	MLRA	Major Land Resource Areas
3.	DoAC	Department of Agriculture and Cooperation
4.	NRSC	National Remote Sensing Centre
5.	RRSSC	Regional Remote Sensing Service Centre
6.	SAU	State Agricultural Universities
7.	ISRO	Indian Space Research Organisation
8.	DST	Department of Science and Technology
9.	RSC	Responsible Sub-Centre
10.	ISRO	Indian Space Research Organisation

Section 4: Description and definition of success indicators and proposed measurement methodology

SI. No.	Success Indicator	Description	Definition	Measurement	General Comments
1	Soil resource maps developed at different scales	The soil resource maps generate information on nature, extent and distribution of soils and serve as base for resource planning.	Soil resource maps are the records of soil units in a readable format delineated on the basis of similar properties.	Soil resource mapping will be done using remote sensing , GIS and pedometrics	This will ensure effective and efficient use of soil resources for land use planning
2	Benchmark soils identified/ established	Benchmark soil series act as 'management unit' for facilitating transfer of agro-technologies to soils under similar agro-eco environment.	A benchmark soil is one of large extent within one or more major land resource areas (MLRA), one that holds a key position in the soil classification system, one for which there is a large amount of data, one that has special importance to one or more significant	Benchmark soil series will be identified and established through soil correlation	They will facilitate transfer of agro-technology to soils under similar agro eco environment.

			land uses, or one that is of significant ecological importance.		
3	Thematic maps developed at different scales	Thematic maps, to be precise soil nutrient maps are of mammoth importance to guiding fertilizer management in soils which, in turn, is an essential pre-requisite to ensuring country's agricultural production.	Thematic maps viz. soil nutrient maps, soil degradation maps etc, are the record of nature, extent and spatial distribution of various themes (viz. climatic information, soil properties etc.) in readable format.	Soil nutrient mapping will be done using data on soil micro and macro nutrients.	Soil nutrient mapping provides guidance for efficient fertility management.
4	Land use plans developed at different scales	Land use planning will be carried out at different levels by integrating bio-physical and socio-economic parameters	Land use planning is the systematic assessment of land and water potential, alternatives for land use and economic and social conditions in order to select and adopt the best land use options.	Land use planning will be accomplished at different scales using suitable approaches, such as, land management units and linear programming approach at district level and participatory rural appraisal at watershed /village/farm level	This will generate informed land use decisions.
5	Trainings conducted	This will consist of deputing staff of the institute in various national and international trainings in its various mandate - related fields. Besides, the institute will also create awareness and knowledge among stakeholders through imparting trainings in soil survey, land use planning and allied fields.	Training in soil survey, land use planning and allied fields is organised activity aimed at equipping the recipients with a required level of knowledge and improved skills in the said fields.	Creation of awareness and knowledge will be facilitated through trainings conducted for equipping the recipients with latest tools, techniques and knowhow in soil survey, land use planning and allied fields.	This will generate qualified and skilled manpower in soil survey, land use planning and allied fields.

Section 5 : Specific performance requirements from other departments

Location Type	State	Organization Type	Organization Name	Relevant Success Indicator	What is your requirement from this organization	Justification for this requirement	Please quantify your requirement from this Organization	What happens if your requirement is not met
Central Government	Andhra Pradesh	Research Development and Extension	National Remote Sensing Centre (NRSC), Hyderabad	Soil resource maps developed at different scales	Satellite data products	Satellite imagery of various scales used for preparation of base maps, the essential prerequisite to undertake soil survey work.	Ten satellite imagery of areas of interest (at different scales)	It may lead to inordinate delay in achieving the targeted success indicators and also increased expenditure.
State Government	Assam, Rajasthan, West Bengal, Odisha, Himachal Pradesh, Delhi, Jharkhand, Sikkim, Nagaland, Karnataka, Kerala	Research Development and Extension	Department of Agriculture, Govt. of Assam, Rajasthan, Gujarat, West Bengal, Odisha, Himachal Pradesh, Delhi, Jharkhand, Sikkim, Nagaland, Karnataka, Kerala.	Soil resource maps developed at different scales	Manpower and logistic support	For timely accomplishing the task.	As per the requirement of soil survey work	It may lead to inordinate delay in achieving the targeted success indicators.
State Government	Goa, Rajasthan, UP, Haryana, Uttarakhand, Odisha	Soil survey and conservation	State soil survey Departments of Goa, Rajasthan, UP, Haryana, Uttarakhand, Odisha state	Benchmark soils identified/ and established	Involvement of their personnel in soil correlation process	Harmonization of soil survey information collected by the RSC and various state soil survey departments to identify and establish benchmark soil series.	5-6 person from each state	Establishment of benchmark soil series will be held up.

Location Type	State	Organization Type	Organization Name	Relevant Success Indicator	What is your requirement from this organization	Justification for this requirement	Please quantify your requirement from this Organization	What happens if your requirement is not met
State Agricultural Universities and State Governments	Assam, West Bengal, Jharkhand	Research and Development	Assam Agricultural University, Jorhat, Assam; Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia; Birsa Agricultural University, Ranchi, Jharkhand; Department of Agriculture, Govt of Assam, West Bengal, Jharkhand	Thematic maps developed at different scales	Funds to carry out soil survey for nutrient mapping.	Financial support	At negotiation stage	It will not be possible to undertake the said activity due to financial compulsions
State Government	Rajasthan, West Bengal, Haryana, Delhi, Uttar Pradesh, Assam, Gujarat, Karnataka	Research Development and Extension	District Agriculture Department of Chittorgarh district (Rajasthan) and Almorah district (U.P.), Agriculture Development Officers of Chatta tehsil, Mathura district, U.P., Neemode village, Jhalwar district, Rajasthan and Bhomoraguri village, Jorhat district, Assam	Land use plans developed at different scales	Involvement of their personnel (Manpower) in development of land use plans and their implementation	The stakeholders' involvement is to be ensured while developing land use plan of an area as well as at their implementation stage to make them (the land use plans) socially relevant and acceptable.	5-6 person from each state	Land use planning will not be realistic and effective without the involvement of stakeholders

Location Type	State	Organization Type	Organization Name	Relevant Success Indicator	What is your requirement from this organization	Justification for this requirement	Please quantify your requirement from this Organization	What happens if your requirement is not met
Central Government	Karnataka	Research and Development (National level)	Indian Space Research Organisation (ISRO), Bangalore	Trainings conducted	Funds to carry out 5 training programmes	Funds will be required to meet expenditure on logistics and other miscellaneous items.	Total fund required = Rs. 18.75 lakhs @Rs. 3.75 lakhs per training	Without the funds, the institute will not in a position to conduct the training programmes.

Section 6: Outcome / Impact of activities of organization.

S. No.	Outcome/ impact of organization	Jointly responsible for influencing the outcome/impact with the following organisation(s)/ departments/ ministries	Success Indicator(s)	Unit	2011-12	2012-13	2013-14	2014-15	2015-16
1	Facilitation of judicious utilization of soil resources for optimum land use planning for enhancing agricultural production	Department of Agriculture and Cooperation (DoAC), National Remote Sensing Centre (NRSC), Regional Remote Sensing Service Centre (RRSSC), State Agricultural Universities (SAUs), State Department of Agriculture and State Soil Survey Departments.	Soil resource maps and land use plans procured by State Govts/ Central Govts./ SAUs/ State Departments of Agriculture and other stakeholders.	No.	20	22	30	31	31
2	Generation of skilled and quality human resources in the field of soil survey and land use planning	State Department of Agriculture , SAUs, ISRO and DST	Resource persons generated in the field of soil survey and land use planning	No.	89	90	95	95	95