



Results-Framework Document (RFD)
for
Natural Resource Management Division
(1st April, 2012- 31st March, 2013)

INDIAN COUNCIL OF AGRICULTURAL RESEARCH
KRISHI BHAWAN, NEW DELHI – 110 001

Section 1: Vision, Mission, Objectives and Functions

Vision

Sustainable management of natural resources for achieving food, nutritional, environmental and livelihood security in the country

Mission

Developing location specific, cost effective, eco-friendly conservation and management technologies for higher input use efficiency, agricultural productivity & profitability without deteriorating the natural resource base

Objectives

- Soil resource characterization and mapping for efficient land use planning
- Improving soil health & input use efficiency in different production system
- Enhancing water productivity through multiple uses of water, waste water utilization and efficient irrigation practices
- Enhancing productivity, profitability and livelihoods in different ecosystems
- Abiotic stress management including climate resilient agriculture

Functions

- To plan, coordinate, implement and monitor R & D programmes for sustainable agricultural production and resource conservation
- To serve as knowledge repository in the field of natural resource management

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

Objective	Weight	Actions	Success Indicators	Unit	Weight	Target/Criteria Values				
						Excellent	V. Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
Soil resource characterization and mapping for efficient land use planning	13	Undertaking soil survey, preparation of GIS maps and developing land use plans.	Soil resource and land degradation maps/report	Number	4	5	4	3	2	1
			Benchmark soil series	Number	3	10	9	8	7	6
			District level land use plan (model)	Number	3	2	1	-	-	-
			Training /workshops	Number	3	4	3	2	1	-
Improving soil health & Input use efficiency in different production system	20	Integrated Nutrient Management (INM)	Developing GIS based district/block level soil fertility maps	Number	8	110	100	88	77	66
			Developing technologies for INM packages for different AER of the country	Number	7	8	7	6	5	4
			Organising training & demonstrations	Number	5	28	25	23	21	19
Enhancing water productivity through multiple uses of water, waste water utilization and efficient irrigation practices	20	Integrated Water Management (IWM)	Technologies for enhancing water use efficiencies	Number	6	3	2	1	-	-
			Technologies for water harvesting storage and groundwater recharge	Number	5	4	3	2	1	-
			Models/DSS for multiple uses of water	Number	3	2	1	-	-	-
			Watershed area treated	hectare	2	555	500	444	388	333
			Organising training & demonstration	Number	4	17	15	13	11	9

Enhancing productivity, profitability and livelihoods in different ecosystems	20	Improved package of practices for farming/crop ping system	Development of efficient agronomic practices including agroforestry	Number	8	11	10	9	8	7
			Development of integrated farming systems	Number	7	12	11	9	8	7
			Training and demonstration	Number	5	38	35	32	28	24
Abiotic stress management including climate resilient agriculture	15	Climate resilient agriculture	Awareness building amongst stakeholders through training/ demonstrations	Number	5	175	150	125	120	115
			Human resource development and capacity building	Number	3	55	50	44	38	33
			Testing crop varieties for climate resilience	Number	2	11	10	9	6	-
		Rehabilitation of acid, salt affected and degraded soils	Development of technology package	Number	3	9	8	7	6	5
			Training & demonstration	Number	2	7	6	5	4	3
Efficient Functioning of the RFD System	3%	Timely submission of RFD for 2012-13	On-time submission	Date	2%	Mar. 23 2012	Mar. 26 2012	Mar. 27 2012	Mar. 28 2012	Mar. 29 2012
		Timely submission of Results for 2012-13	On-time submission	Date	1%	May 1 2013	May 2 2013	May 3 2013	May 6 2013	May 7 2013
Administrative Reforms	5%	Implement ISO 9001	Prepare ISO 9001 action plan	Date	1%	June 4 2012	June 5 2012	June 6 2012	June 7 2012	June 8 2012
			Implementation of ISO 9001 action plan	Date	2%	March	March	Marc	Marc	Marc

						25 2013	26 2013	h 27 2013	h 28 2013	h 29 2013
		Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	2%	100	95	90	85	80
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. Trend values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 10-11	Actual Value for FY 11-12	Target Value for FY 12-13	Projected Value for FY 13-14	Projected Value for FY 14-15
Soil resource characterization and mapping for efficient land use planning	Undertaking soil survey, preparation of GIS maps and developing land use plans	Soil resource and land degradation maps/reports	Number	6	8	4	6	6
		Benchmark soil series	Number	10	10	9	10	10
		District level land use plan (model)	Number	0	2	1	2	2
		Training /workshops	Number	5	5	3	5	5
Improving soil health & Input use efficiency in different production system	Integrated Nutrient Management (INM)	Developing GIS based district/block level soil fertility maps	Number	18	20	100	70	15
		Developing technologies for INM packages for different AER of the country	Number	05	05	7	6	8
		Organising training & demonstrations	Number	20	20	25	25	25
Enhancing water productivity through multiple uses of water, waste water utilization and efficient irrigation practices	Integrated Water Management (IWM)	Technologies for enhancing water use efficiencies	Number	3	2	2	2	2
		Technologies for water harvesting storage and groundwater recharge	Number	4	3	3	3	3
		Models/DSS for multiple uses of water	Number	1	1	1	1	1
		Watershed area treated	hectare	1475	1750	500	800	1000
		Organising training & demonstration	Number	12	15	15	16	16
Enhancing productivity, profitability and	Improved package of practices for	Development of efficient agronomic practices including	Number	7	9	10	10	10

livelihoods in different ecosystems	farming/cropping system	agroforestry						
		Development of integrated farming system models	Number	10	10	11	9	10
		Training and demonstration	Number	30	35	35	45	45
Abiotic stress management including climate resilient agriculture	Climate resilient agriculture	Awareness building amongst stakeholders through training/ demonstrations	Number	0	100	150	100	100
		Human resource development and capacity building	Number	0	100	50	50	100
		Testing crop varieties for climate resilience	Number	-	7	10	10	10
	Rehabilitation of acid, salt affected and degraded soils	Development of technology package	Number	6	6	8	8	7
		Training & demonstration	Number	5	5	6	6	7
Efficient Functioning of the RFD System	Timely submission of RFD for 2012-13	On-time submission	Date	-	-	Mar. 26 2012	-	-
	Timely submission of Results for 2012-13	On-time submission	Date	-	-	May 2 2013	-	-
Administrative Reforms	Implement ISO 9001	Prepare ISO 9001 action plan	Date	-	-	May 2 2013	-	-
		Implementation of ISO 9001 action plan	Date	-	-	March 26 2013	-	-
	Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	-	-	95	-	-
Improving Internal	Implementation of	Independent Audit of	%	-	-	95	-	-

Efficiency / responsiveness / service delivery of Ministry / Department	Sevottam	Implementation of Citizen's Charter						
		Independent Audit of implementation of public grievance redressal system	%	-	-	95	-	-

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

For addressing the issues related to conservation, improvement and efficient utilisation of natural resources, updating of soil and water resource database, improving soil health and water productivity, integrated nutrient and water management are essential. The action points/ success indicators for INM cover developing GIS based soil fertility maps, macro/micro-level land use plans, developing and disseminating integrated nutrient management packages, technologies for improving the productivity of problem soils, IFS models etc. For facilitating IWM, enhancing water storage and ground water recharge, multiple uses of water, precision/micro-irrigation systems, recycling of wastewater and other on-farm management issues like resource conservation technologies, deficit irrigation, tools and models to support decision making are planned. For mitigating adverse impact of climate change on crops, livestock, horticulture and fisheries, emphasis will specifically be on climate resilient agriculture through identifying the vulnerable zones and mitigating measures through basic and strategic research. In order to improve the capacity of research and developmental organizations and their staff, provision has been made for strengthening them with state of the art technologies through training programmes/field demonstrations etc.

Section 5: Specific performance requirement from other departments that are critical for delivering agreed results.

Support from the associated line departments/SAU's for promoting adoption of developed technologies.

Section 6. Outcome/Impact of activities of organisation/ministry

S. No.	Outcome/Impact of organisation /RCs	Jointly responsible for influencing this outcome/impact with the following organisation(s)/ departments/ ministry(s)	Success Indicators	Unit	2010-11	2011-12	2012-13	2013-14	2014-15
1.	Better soil health, input use efficiency, risk management due to adverse climatic situations will ensure balance nutrition, higher water productivity, minimize crop failure vis-a-vis higher production/ productivity in the country	DAC/ SAUs/ Deptt. of Fertilizers/ MoRD/ State line departments / KVKs/ MoWR	Increase in production	%	2	2	3	3	2
			NRM technology developed	Number	5	7	10	10	12
			Location specific IFS model developed for profitability and livelihood generation	Number	5	10	11	9	10
			Farmers training/ demonstrations organized on various NRM interventions	Number	150	200	250	300	300