Results-Framework Document (RFD)

for

Natural Resource Management Division

(1st April, 2011- 31st March, 2012)

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

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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

- Inventorization, characterization and monitoring of natural resources using modern tools and techniques.
- Development of sustainable land use plans for different agro-ecological sub-regions in the country.
- Devising cost effective methods of resource conservation and reclamation.
- Enhancing fertilizer, water and other inputs use efficiency through monetary and non-monetary measures.
- Integrated plant nutrient management combining inorganic fertilizers, organic manures/composts and bio-fertilizers for sustained soil health and crop productivity.
- Multiple uses of water to enhance productivity and livelihood.
- On-farm water management to enhance water-use efficiency.
- Standardization of micro-irrigation and fertigation systems.
- Utilization of poor and marginal quality waters for agriculture.
- Development of location specific model watersheds in various agro ecological zones of the rainfed areas for resource conservation, enhancing productivity and livelihood generation.
- Development of weather-based expert systems for enhanced production and improvement in agro met advisory services.
- Monitoring of climate change and adaptation to mitigate its adverse effects on agricultural production systems.

Function

- To plan, coordinate, implement and monitor R & D programmes for sustainable agricultural production and resource conservation and 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	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
Improving Natural Resource Management and input use efficiency	89	Integrated Nutrient Management	Developing GIS based district/block level soil fertility maps	No.	13	17	15	12	10	9
			Developing INM packages for different AER of the country	No.	13	6	5	3	2	1
			Organising training & demonstrations	No.	8.5	22	20	16	14	12
		Integrated Water Management	Technologies for enhancing water use efficiencies	No.	8.5	6	5	3	2	1
			Technologies for water harvesting storage and groundwater recharge	No.	8.5	7	6	4	3	2
			Models/DSS for multiple uses of water	No.	7.5	4	3	1	0	-
			Organising training & demonstrations	No.	8.5	17	15	12	10	9
		Climate Resilient Agriculture	Awareness building amongst stakeholders through training/ demonstrations	No.	8.5	30	28	24	22	20
			Human resource development and capacity building	No.	8.0	8	7	5	4	3
			Testing crop varieties for climate resilience at various locations	No.	5.0	72	65	50	45	40

Mandatory Success Indicators

Objective	Actions	Success Indicators	Unit	Weight	Target / Criteria Value				
					Excellent	Very Good	Good	Fair	Poor
					100%	90%	80%	70%	60%
Efficient Functioning of the RFD System	Timely submission of RFD for 2011-12	On-time submission	Date	2%	March 31 2011	April 3 2011	April 4 2011	April l 5 2011	April 6 2011
	Timely submission of Results for 2011-12	On-time submission	Date	1%	May 1 2012	May 3 2012	May 4 2012	May 5 2012	May 6 2012
	Finalize a Strategic Plan for RC	Finalize the Strategic Plan for next 5 years	Date	2%	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
	Identify potential areas of corruption related to organisation activities and develop an action plan to mitigate them	Finalize an action plan to mitigate potential areas of corruption.	Date	2%	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
	Implementation of Sevottam	Create a Sevottam compliant system to implement, monitor and review Citizen's Charter	Date	2%	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
		Create a Sevottam Compliant system to redress and monitor public grievances	Date	2%	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
TOTAL WEIGHT				11%					

Section 3. Trend values of the success indicators

Objectives	Actions	Success Indicators	Unit	Actual Value for FY 09-10	Actual Value for FY 10-11	Target Value for FY 11-12	Projected Value for FY 12-13	Projected Value for FY 13-14
1. Improving Natural Resource Management and input use efficiency	Integrated Nutrient Management	Developing GIS based district/block level soil fertility maps	No.	8	10	15	20	20
		Developing INM packages for different AER of the country	No.	4	4	5	5	5
		Organising training & demonstrations	No.	20	15	20	20	25
	Integrated Water Management	Technologies for enhancing water use efficiencies	No.	4	4	5	5	5
		Technologies for water harvesting storage and groundwater recharge	No.	4	5	6	5	5
		Models/DSS for multiple uses of water	No.	1	2	3	3	3
		Organising training & demonstrations	No.	10	10	15	15	20
	Climate Resilient Agriculture	Awareness building amongst stakeholders through training/ demonstrations	No.	-	-	28	-	-
		Human resource development and capacity building	No.	-	-	7	-	-
		Testing crop varieties for climate resilience at various locations	No.	-	-	65	-	-

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	09-10	10-11	11-12	12-13	13-14
1.	Better soil health, higher production/ productivity and input use efficiency	DAC/ SAUs/ Deptt. of Fertilizers/ MoRD/ State line departments / KVKs/ MoWR.	Increase in production	-	-	3%	-	-
			Higher agricultural growth	-	-	3%	-	-
			Enhanced water productivity	-	-	4%	-	-
			Increased fertiliser response ratio due to balanced fertilization (kg grain/kg nutrient).	-	-	2 Kg.	-	-