



Results-Framework Document (RFD)

For

**Central Soil & Water Conservation
Research & Training Institute,
Dehradun (Uttarakhand)**

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

Section 1: Vision, Mission, Objectives and Functions

Vision

Conservation and management of soil and water resources of the country for sustainable production.

Mission

To develop technologies for controlling land degradation and enhancing productivity on sustainable basis for ensuring food, environmental, economic and livelihood security of stakeholders.

Objectives

- Appraisal of water erosion in different agro-ecological regions.
- Development of suitable technologies for resource conservation and sustainable production.
- Evaluation of hydrological behaviour and management of watersheds for improving water regime and reducing sediment yield.
- Development of suitable technologies for special problem areas.
- Integrated watershed management through participatory approaches for livelihood security and policy development.
- Human resource development through capacity building of stakeholder engaged in natural resource management & technology transfer.

Functions

- Undertake research and develop strategies for controlling land degradation under all primary production systems and rehabilitation of degraded lands in different agro-ecological zones of the country.
- Act as a repository of information on the status of soil degradation/soil and water conservation.
- Provide leadership and co-ordinate research network with State Agricultural Universities/Institutions/NGOs/State Departments for developing location-specific technologies in the area of soil and water conservation.
- Act as a national and international centre for training in research methodologies and updated technologies in soil and water conservation, watershed development and its management.
- Provide consultancy and collaborate with national and international institutions in the field of soil and water conservation.

Section 2: Inter se priorities among key objectives, success indicators and targets

Objective	Weight	Action	Success Indicators	Unit	Weight	Target / Criteria Value				
						Excellent	V. Good	Good	Fair	Poor
Survey & characterization of degraded land	15	Delineation of degraded areas	Erosion hazard maps and reports developed	Number	15	18	15	12	9	6
Conservation of soil & water	15	Testing of conservation technologies	Technologies tested and validated for arable and non-arable lands	Number	15	4	3	2	1	0
Integrated watershed development	25	Development of model watersheds in different regions	Watersheds area treated	ha	7	1650	1500	1350	1200	1050
			DLT structures constructed	Number	5	80	70	60	50	40
			Water resource development structures constructed	Number	5	10	8	6	4	2
			Crop demonstrations laid	Number	6	600	550	500	450	400
			SHGs and UGs formed	Number	2	15	13	11	9	7
Enhancing productivity, profitability and livelihood in degraded land	14	Integrated farming systems	IFS models developed by DSS	Number	7	4	3	2	1	0
			IFS models tested and evaluated	Number	7	4	3	2	1	0
Human resource development	20	Capacity building	Training programmes organized for gazetted and non-gazetted officers	Number	20	60	50	40	30	20
* Efficient functioning of the RFD system	11	Timely submission of RFD for 2011-12	On-time submission	Date	2	June 10, 11	June 14, 11	June 16, 11	June 20, 11	June 22, 11
		Timely submission of Results for 2011-12	On-time submission	Date	1	May 1, 12	May 3, 12	May 4, 12	May 5, 12	May 6, 12
		Finalize a Strategic Plan for RC	Finalization of the Strategic Plan for next 5 years	Date	2	Dec 10, 11	Dec 15, 11	Dec 20, 11	Dec 24, 11	Dec 31, 11
		Identify potential areas of corruption related to	Finalize an action plan to mitigate potential areas of	Date	2	Dec 10, 11	Dec 15, 11	Dec 20, 11	Dec 24, 11	Dec 31, 11

		organization activities and develop an action plan to mitigate them	corruption.							
		Implementation of Sevottam	Create a Sevottam compliant system to implement, monitor and review Citizen's Charter	Date	2	Dec 10, 11	Dec 15, 11	Dec 20, 11	Dec 24, 11	Dec 31, 11
			Create a Sevottam compliant system to redress and monitor public grievances	Date	2	Dec 10, 11	Dec 15, 11	Dec 20, 11	Dec 24, 11	Dec 31, 11

Section 3: Trend Values of the success indicators

Objective	Action	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
Survey & characterization of degraded land	Delineation of degraded areas	Erosion hazard maps and reports developed	Number	1	9	15	6	-
Conservation of Soil & Water	Testing of conservation technologies	Technologies tested and validated for arable and non-arable lands	Number	4	3	3	4	4
Integrated watershed development	Development of model watersheds in different regions	Watersheds area treated	ha	990	1475	1500	1000	1000
		DLT structures constructed	Number	51	31	70	50	40
		Water resource development structures constructed	Number	10	8	8	4	2
		Demonstrations laid	Number	600	550	550	450	400
		SHGs and UGs formed	Number	15	13	13	9	7
Enhancing profitability and livelihood in degraded lands	Integrated Farming Systems	IFS models developed by DSS	Number	2	4	3	4	3
		IFS models tested and evaluated	Number	2	4	3	4	3
Human resource development	Capacity building	Training programmes organized for gazetted and non-gazetted officers	Number	107	75	50	50	50
* Efficient functioning of the RFD system	Timely submission of RFD for 2011-12	On-time submission	Date	-	-	June 14 2011	-	-
	Timely submission of Results for 2011-12	On-time submission	Date	-	-	May 3 2012	-	-
	Finalize a Strategic Plan for RC	Finalize the Strategic Plan for next 5 years	Date	-	-	Dec. 15 2011	-	-
	Identify potential areas	Finalize an action plan to	Date	-	-	Dec. 15	-	-

	of corruption related to organisation activities and develop an action plan to mitigate them	mitigate potential areas of corruption.				2011		
	Implementation of Sevottam	Create a Sevottam compliant system to implement, monitor and review Citizen's Charter	Date	-	-	Dec. 15 2011	-	-
		Create a Sevottam Compliant system to redress and monitor public Grievances	Date	-	-	Dec. 15 2011	-	-

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

- Soil erosion hazard refers to the difference between potential soil erosion rates and Soil Loss Tolerance Limit (SLTL). Higher difference indicates higher degree of hazard. Spatial layers of potential soil erosion rates and SLTL measured on 10 km x 10 km grid with same geo reference would be integrated employing ARC-GIS for developing maps.
- Package of practices proved to be effective in reducing runoff, soil loss, crop production risk with higher biomass yield, and improvement in soil quality on farmers field would be potential technology for soil and water conservation for the particular agro-ecological region. Such potential technology would be validated on farm field for their performances through field demonstration.
- The success of a watershed development project depends to a large extent upon implementation of large number of appropriate technological interventions such as construction of structures for drainage line treatment (DLT), *viz.*; gully plugs, check dams, gabion and masonry structures etc. and for water harvesting such as dug out and earthen ponds, ground water recharge filters etc., and crop improvement (tillage practices, *in situ* moisture conservation, agro-forestry systems etc.) as well as institutional interventions (*viz.*; formation of SHGs, UGs & WC). The number of such interventions to address different aspects of watershed development will be measured.
- Real farm existing and potential technologies will be integrated with farm level resource situation and his preferences in a multi-objective Decision Support model to develop an optimal farm plan having all possible land and livestock based enterprises. The mode will be tested on real farm situation and evaluated in terms of deviation from expected outputs or goals.
- A number of stakeholders involved in planning, financing, implementing and monitoring of soil and water conservation and watershed management programmes will be trained in the area of their requirement by conducting training courses. It will be measured by the number of training programmes, exposure visits etc. conducted.

Section 5: Specific performance requirements from other departments

- Central and state government commitment to fund for Research and Development, outreach programmes and capacity building.
- Timely release of funds by the sponsoring agencies.
- Policies of the National Rainfed Area Authority, Sponsoring Ministries, State Governments, support of Panchayati Raj institutions and strength of community based organization.
- Fragmented land holdings.
- Willingness to adopt new technologies by primary stakeholders, their groups and Ministry of Forest and Environment.
- Credit policies of Banking Sector for agriculture.
- Unforeseen erratic rainfall leading to severe drought or very heavy rainfall events such as cloud burst.
- Marketing, linkages and accessibility.
- Active dissemination of technologies by the state government line departments, KVKs and SAU's.

Section 6 : Outcome / Impact of Activities of the Organization

Outcome / Impact	Jointly responsible for influencing this outcome / impact with the following Organization(s) / Deptts/ Ministry(ies)	Success Indicator(s)	2009-10	2010-11	2011-12	2012-13	2013-14
Rehabilitation and utilization of degraded land for sustainable agricultural production	Ministry of Agriculture (MoA), Deptt. of Agril. & Cooperation (DAC), Ministry of Rural Development (MoRD), Ministry of Water Resources (MoWR), State level Nodal Agency (SLNA), State Departments (Soil Conservation, Agriculture), Non-Governmental Organizations (NGOs), Krishi Vigyan Kendras (KVKs), State Agricultural Universities (SAUs), National Rainfed Area Authority (NRAA)	Reduction in runoff (%)	5	6	10	12	15
		Reduction in soil loss (%)	7	10	12	17	20
		Increase in agricultural production from rainfed areas (%)	1.5	1.75	2.0	2.5	2.0
		Increase in agricultural income (%)	5	7	10	15	17
		Increase in on-farm regular employment (%)	2	3	4	5	7
		No. of officers, field functionaries trained in the area watershed management (No.)	2642	1982	1500	1500	1500