

# **Results-Framework Document (RFD)**

### for

# Central Soil & Water Conservation Research & Training Institute (2012 - 2013)

Address: 218-Kaulagarh Road,

Dehradun

Website: <a href="http://www.cswcrtiweb.org">http://www.cswcrtiweb.org</a>

#### 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**

- Survey & characterization of degraded land
- Conservation of soil & water
- Integrated watershed development
- Enhancing productivity, profitability and livelihood in degraded land
- Human resource development

#### **Functions**

- Undertake research and develop strategies for controlling land degradation under all
  primary production systems and rehabilitation of degraded lands in different agroecological 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

Objectives	Weig	eig Actions	<b>Success Indicators</b>	Unit	Weight		Target	/ Criteria	Criteria Value			
· ·	ht (%)				(%)	Excellent 100%	V. Good 90%	Good 80%	Fair 70%	Poor 60%		
Survey & characterization of degraded land	15	Delineation of degraded areas	Erosion hazard maps and reports developed	Number	15	7	6	5	4	3		
Conservation of soil & water	15	Testing of conservation technologies	validated for arable and non-arable lands	Number	15	5	4	3	2	1		
Integrated	24		Watersheds area treated	ha	6	555	500	444	388	333		
watershed			DLT structures constructed	Number	5	40	30	20	10	5		
development		regions	Water resource development structures constructed	Number	5	5	4	3	2	1		
			Crop demonstrations laid	Number	6	333	300	266	233	200		
			SHGs and UGs formed	Number	2	4	3	2	1	0		
Enhancing productivity,	14	Integrated farming systems	IFS models developed by DSS	Number	7	5	4	2	1	0		
profitability and livelihood in degraded land			IFS models tested and evaluated	Number	7	10	8	6	4	2		
Human resource development	20	Capacity building	Training programmes organized for gazetted and non-gazetted officers	Number	20	90	80	70	60	50		
Efficient	3	]	On-time submission	Date	2	Mar. 23	Mar. 26	Mar. 27	Mar. 28	Mar. 29		
Functioning of the		RFD for 2012-13				2012	2012	2012	2012	2012		
RFD System		Timely submission of Results for 2012-13		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 25 2013	Mar. 26 2013	Mar. 27 2013	Mar. 28 2013	Mar. 29 2013
		Implement mitigating strategies for reducing potential risk of corruption	% of implementation	%	2	100	95	90	85	80
Improving Internal Efficiency / responsiveness /	4	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter		2	100	95	90	85	80
service delivery of Ministry / Department			Independent Audit of implementation of public grievance redressal system		2	100	95	90	85	80

**Section 3: Trend values of the success indicators** 

Objectives	Actions	Success Indicators	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
Survey & characterization of degraded land	Delineation of degraded areas	Erosion hazard maps and reports developed	Number	9	17	6	-	-
Conservation of Soil & Water	Testing of conservation technologies	Technologies tested and validated for arable and non-arable lands	Number	3	5	4	4	4
Integrated	L **	Watersheds area treated	ha	1475	1750	500	800	1000
watershed	watersheds in different	DLT structures constructed	Number	231	86	30	50	70
development	regions	Water resource development structures constructed	Number	8	11	4	2	8
		Crop demonstrations laid	Number	550	605	300	400	600
		SHGs and UGs formed	Number	13	13	3	5	7
Enhancing	Integrated Farming	IFS models developed by DSS	Number	4	6	4	3	-
productivity, profitability and livelihood in degraded land	Systems	IFS models tested and evaluated	Number	4	4	8	11	11
Human resource development	Capacity building	Training programmes organized for gazetted and non-gazetted officers	Number	75	110	80	120	100
Efficient Functioning of	Timely submission of RFD for 2012-13	On-time submission	Date	-	-	Mar. 26 2012	-	-
the RFD System	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	-	-	June 5 2012	-	-
		Implementation of ISO 9001	Date	-	-	March 26	-	-

		action plan				2013		
	Implement mitigating	% of implementation	%	-	-	95	-	-
	strategies for reducing							
	potential risk of							
	corruption							
Improving	Implementation of	Independent Audit of	%	-	-	95	-	-
Internal	Sevottam	Implementation of Citizen's						
Efficiency /		Charter						
responsiveness		Independent Audit of		-	-	95	-	-
/ service		implementation of public	%					
delivery of		grievance redressal system						
Ministry /								
Department								

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

**Objective 1**: 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 gird with same geo reference would be integrated employing ARC-GIS for developing maps.

**Objective 2**: 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 agroecological region. Such potential technology would be validated on farm field for their performances through field demonstration.

**Objective 3**: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.

**Objective 4**: 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.

**Objective 5**: 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.
- Consolidation of small 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		Success Indicator(s)	Unit	2010-11	2011-12	2012-13	2013-14	2014-15
	influencing this outcome /							
	impact with the following							
	Organization(s) / Deptts/ Ministry(ies)							
Rehabilitation and	Ministry of Agriculture (MoA),	Reduction in runoff	%	6	10	12	15	17
	Deptt. of Agril. & Cooperation		%	10	12	17	20	24
degraded land for		Increase in agricultural production	%	1.75	2.0	2.5	2.0	2.0
sustainable	Ministry of Rural Development	from rainfed areas						
agricultural	(MoRD), Ministry of Water	Increase in agricultural income	%	7	10	15	17	20
production		Increase in on-farm regular	%	3	4	5	7	9
	Nodal Agency (SLNA),	employment						
	State Departments (Soil	No. of officers, field functionaries	No.	1982	1900	1100	1700	1600
	Conservation, Agriculture),	trained in the area watershed						
	Non-Governmental Organizations (NGOs),	management						
	Krishi Vigyan Kendras (KVKs),							
	State Agricultural Universities							
	(SAUs), National Rainfed Area							
	Authority (NRAA)							