Appendix – 3

Results-Framework Document (RFD) for Central Soil & Water Conservation Research & Training Institute (2014-2015) (Presently ICAR – Indian Institute of Soil & Water Conservation, Dehradun

218-Kaulagarh Road, Dehradun (Website ID: http://www.cswcrtiweb.org)

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 due to water erosion and enhancing productivity on sustainable basis for ensuring food, environmental, economic and livelihood security of stakeholders.

Objectives

- Development of suitable resource conservation technologies for controlling rain induced land degradation, sustaining production and its' repository thereof.
- Evaluation of hydrological behaviour and watershed management for sustaining eco-system services (ESS).
- Human resource development trough capacity building and transfer of technology.

Functions

- Act as a repository on the status of land degradation/soil and water conservation practices.
- Provide leadership in coordinating research, develop strategies in collaboration with Universities and Institutions in the field of soil and water conservation.
- Act as a national and international centre for higher education and training in soil and water conservation and watershed management.
- Provide consultancy and collaboration with state, national and international organizations in the field of natural 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 Values				
							Excellent 100%	Very good 90%	Good 80%	Fair 70%	Poor 60%
1.	Generation of suitable resource conservation technolo gies for controlling land degradation and sustainable production from rehabilitated degraded lands	27	Assessment of natural resources status	GIS based thematic maps prepared / database created	No.	9	9	8	7	6	5
			Developing resource conserving technologies	Resource conserving technologies / products / farm plans for arable lands developed	No.	9	5	4	3	2	1
				Resource conserving technologies / plans/ products for non-arable lands developed	No.	9	5	4	3	2	1
2.	Evaluation of hydrological behaviour and management of watersheds for improving water regime and reducing sediment yield	26	Development of soil & water conservation (SWC) and water harvesting (surface and ground water) technologies / products	Technologies / products for surface and ground water recycling developed	No.	7	5	4	3	2	1
			Creation of live models on Integrated Watershed Development (IWD)	Watershed area planned / treated	ha	10	720	600	480	360	240
				Organize awareness camps	No.	9	24	20	16	12	8
3	Human resource development and capacity building	27	Creation of awareness & skill sharpening	Trainings organized	No.	9	120	100	80	60	40
				Seminar / symposium / workshop / in -plant training / summer & winter school, etc. organized	No.	3	30	25	20	15	10
				Extension material developed/ published	No.	6	24	20	16	12	8
			Transfer of resource conserving technologies in farmers fields	Demonstrations conducted on resource conservation technologies	No.	9	456	380	304	228	152
4	Publication/Documentation	5	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	3	38	32	26	20	14

Section 3 : Trend values of the Success Indicators for RFD 2015-16

S. No.	Objectives	Actions	Success Indicators	Unit	Actual values of FY 13-14	Actual values of FY 14-15	Target value of FY 15-16	Projected Value for FY 16-17	Projected Value for FY 17-18
1.	Generation of suitable resource conservation technologies for controlling land degradation and sustainable production from rehabilitated degraded lands	Assessment of natural resources status	GIS based thematic maps prepared/ database created	No.	5	7	8	8	8
		Developing resource conserving technologies	Resource conserving technologies/ products/ farm plans for arable lands developed	No.	4	4	4	4	4
			Resource conserving technologies/ plans/ products for non-arable lands developed	No.	3	3	4	4	4
2.	Evaluation of hydrological behaviour and management of watersheds for improving water regime and reducing sediment yield	Development of soil & water conservation (SWC) and water harvesting (surface and groundwater) technologies / products	Technologies / products for SWC and surface and ground water harvesting and recycling developed	No.	3	3	4	4	4
		Creation of live models on Integrated Watershed Development (IWD)	Watershed area planned / treated	ha	500	533	600	700	770
			Organize awareness camps	No.	18	18	20	22	22
3	Human resource development and capacity building	Creation of awareness & skill sharpening	Trainings organized	No.	90	97	100	100	100
			Seminar / symposium / workshop / in-plant training for graduate & post-graduate students/ summer & winter school, etc. organized	No.	21	23	25	25	25
			Extension material developed/ published	No.	15	17	20	22	22
		Transfer of resource conserving technologies in farmers fields	Farmer's covered for demonstrations conducted on resource conservation technologies	No.	360	405	380	400	400
	Publication/Documentation	Publication of the research articles in the journals having the NAAS rating of 6.0 and above	Research articles published	No.	37	30	32	34	36

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

S. No.	Success Indicator	Description	Definition	Measurement	General Comments
1.	GIS based thematic maps prepared / database created	Natural resources characterization & assessment is a prerequisite for mitigation of degradation impact.	Natural resources (land water & vegetation) maps and reports are the data base for addressing the problem of land degradation.	Maps /reports prepared using RS/GIS, field surveys and research experiments.	A number of maps/data bases/reports generated will ensure effective monitoring and guide for judicious use of our land and water resources.
2.	Resource conserving technologies/products/ farm plans for rainfed arable lands developed	Soil and water conservation technologies / farm plans have proven to be effective in mitigating production risk through improvement in soil quality, biomass productivity, carbon sequestration and employment from arable lands.	A technology that reduces soil loss and runoff from arable land leading to increase resource use efficiency, productivity and profitability.	The number of such technologies / plans / products / software developed.	Generation of such tech nologies for adoption by stakeholders will lead to augmentation and sustenance of agricultural production from rainfed arable lands of the country.
3.	Resource conserving technologies / plans/ products for non-arable lands developed	Soil and water conservat ion technologies have proven to be effective in checking soil erodibility and improving land productivity.	A technology that reduces soil loss and runoff from non -arable land and enhance land production base.	The number of such technologies / products / plan / software validated in field situations and brought out for adoption.	Generation of such technologies for adoption by stakeholders will lead to resource conservation, improved biomass and environmental security from non - arable lands of the country.
4.	Technologies / products for surface and ground water recycling developed	Success of watershed development programmes depends on efficient management and utilization of rainwater through appropriate surface/ ground water harvesting and utilization technologies.	A technology that effectively harvests rainwater and enhanced & water use efficiency.	The number of technologies / products developed leading to tangible and intangible benefits in terms of eco - system services (ESS).	Growing concern of the cl imatic uncertainty coupled with competing demands for water among agriculture and other allied sectors calls for environment friendly and rigorously tested and validated water harvesting and recycling technologies to combat future water scarcity problems.
5.	Watershed area planned/ treated	Watershed programmes are now considered to be the drivers for conservation of natural resources, improve land production base and livelihood security.	Watershed area treated with resource conservation and production technologies that enhanced livelihood security.	Area treated with integration of resource conservation and production technologies.	These areas will serve as models for replication in other similar areas by implementing agencies.
6.	Organize awareness camps	Creation of awareness among all the stakeholders holds the key for conservation of natural resources.	Create general awareness among the masses for conservation of natural resources through watershed.	Number of programmes organized for masses.	General awareness among different sections of the society.
7.	Trainings organized	Enhancement of knowledge and skills of primary and secondary stakeholders on natural resource conservation and management	Knowledge and skill development in the field of natural resource conserving and production technologies	Number of trainings conducted	Skill enhancement of primary and secondary stakeholders

S. No	Success Indicator	Description	Definition	Measurement	General Comments
8.	Seminar / symposium / workshop/ in-plant training / summer and winter school, etc. organized	Sharing of knowledge and expertise with other researchers , technocrats, educationists and farmers by organizing seminar / symposium / workshop etc.	Creation of awareness, identification of doable technologies and future areas of research and skill development in the area of natural resources management	Number of programmes organized	Enhanced knowledge domain and policy advocacy for technology dissemination
9.	Extension material developed / published	Documentation of successful resource conservation technologies / case studies for enhancing the skill of user groups	Presentation of successful technologies/case studies in simple understandable and adoptable literature in print / electronic form	Number of publications brought out	Documentation and dissemination of resource conservation technologies in the form of policy briefs, pamphlets, brochures, bulletins, popular articles etc
10.	Demonstrations conducted on resource conservation technologies	Validation of technologies in farmers' fields	Demonstration of proven technologies for validation in farmers field	Number of farmers covered	Wider dissemination and up -scaling of resource conservation technologies

Section 5: Specific Performance Requirements from other Departments

Location Type		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
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Section 6: Outcome / Impact* of the activities of the organizations

S. No.	Outcome / Impact of organization	Jointly responsible for influencing this outcome / impact with the following department(s)/ ministry(ies)	Success Indicator (s)	Unit	2013-14	2014-15	2015-16	2016-17	2017-18
1.	Human resource development	NRAA, SLNA, Agri. Deptt., DRDA, other State-line Departments, Primary stakeholders, their groups (community based organization) , PRI and NGO's.	Number of officials trained under certificate course in Soil and Watershed Conservation and Watershed Management to increase in knowledge and competence	No.	22	38	32	35	
			Stakeholders trained	No.	3219	3250	3300	3300	
2.	Better utilization of natural resources	State-line Departments, Primary stakeholders, their groups, PRI and NGO's.	Maps/reports/database on land degradation	No.	6	7	8	8	8
			Farmers covered for demonstration of resource conservation technologies	No.	7	405	380	400	400
			Technologies developed for improving soil health, input use efficiency and water productivity	No.	7	7	8	8	8