

Results-Framework Document (RFD)

for

Central Soil & Water Conservation Research & Training Institute (2013 - 2014)

Address: 218-Kaulagarh Road,

Dehradun

Website: 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 and enhancing productivity on sustainable basis for ensuring food, environmental, economic and livelihood security of stakeholders.

Objectives

- Generation of suitable resource conservation technologies for controlling land degradation and sustaining production from rehabilitated degraded lands
- Evaluation of hydrological behavior and management of watersheds for improving water regime and reducing sediment yield
- Human resource development and capacity building

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 technology 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

| S. | Objectives | Weight | Actions | Success Indicators | Unit | Weight | | Target/Criteria Values | | | |
|-----|---|--------|---|---|------|--------|----------------|------------------------|-------------|-------------|-------------|
| No. | | | | | | | Excellent 100% | Very good 90% | Good 80% | Fair 70% | Poor 60% |
| 1. | Generation of suitable resource | 30 | Assessment of natural resources status | GIS based thematic maps prepared / database created | No. | 10 | 6 | 5 | 4 | 3 | 2 |
| | conservation technologies for controlling land | | Developing resource conserving technologies | Resource conserving technologies / products / farm plans for arable lands developed | | 10 | 5 | 4 | 3 | 2 | 1 |
| | degradation and sustainable production from rehabilitated degraded lands | | | Resource conserving technologies / plans/ products for non-arable lands developed | No. | 10 | 4 | 3 | 2 | 1 | 0 |
| 2. | Evaluation of hydrological behaviour and management of watersheds for improving water | 29 | water conservation | Technologies / products for SWC and surface and ground water harvesting and recycling developed | | 12 | 4 | 3 | 2 | 1 | 0 |
| | regime and reducing sediment yield | | Creation of live models on Integrated Watershed Development (IWD) | Watershed area planned / treated | ha | 17 | 555 | 500 | 444 | 388 | 333 |
| 3 | Human resource | 30 | Creation of awareness & | Trainings organized | No. | 5 | 100 | 90 | 80 | 70 | 60 |
| | development and capacity building | | skill sharpening | Seminar / symposium / workshop / in-plant training for graduate & post-graduate students / summer & winter school, etc. organized | | 5 | 24 | 21 | 18 | 15 | 12 |
| | | | | Extension material developed/ published | No. | 5 | 18 | 15 | 12 | 9 | 6 |
| | | | conserving technologies | Demonstrations conducted on resource conservation technologies | No. | 15 | 65 | 60 | 55 | 50 | 45 |

| Efficient functioning of the RFD system | | Timely submission of draft RFD 2013-14 for approval | On-time submission | Date | 2 | 15 May, 2013 | 16 May, 2013 | 17 May, 2013 | 20 May, 2013 | 21 May, 2013 |
|---|---|---|--|------|---|------------------|------------------|------------------|------------------|-------------------|
| | | Timely submission of results for RFD 2012-13 | On-time submission | Date | 1 | 1 May, 2013 | 2 May, 2013 | 5 May, 2013 | 6 May, 2013 | 7 May, 2013 |
| Administrative reforms | 4 | Implement ISO 9001 as per the approved action plan | - | % | 2 | 100 | 95 | 90 | 85 | 80 |
| | | Prepare an action plan for innovation | On-time submission | Date | 2 | 30 July, 2013 | 10 Aug., 2013 | 20 Aug., 2013 | 30 Aug., 2013 | 10 Sept., 2013 |
| Improving internal efficiency / responsiveness/ | 4 | | 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

| S. No. | Objective | Action(s) | Success Indicator(s) | Unit | Actual value of FY 11/12 | Actual value of FY 12/13 | Target Value for FY 13/14 | Projected value of FY 14/15 | Projected Value for FY 15/16 |
|-----------|---|---|--|--------|--------------------------|--------------------------|---------------------------------|-----------------------------------|------------------------------------|
| 1 | resource conservation | Assessment of natural resources status | GIS based thematic maps prepared / database created | Number | 22 | 6 | 5 | 5 | 6 |
| | controlling land degradation and | Developing resource conserving technologies | Resource conserving technologies / products / farm plans for arable lands developed | Number | 4 | 4 | 4 | 5 | 6 |
| | sustainable production from rehabilitated degraded lands | | Resource conserving technologies / plans/ products for non-arable lands developed | | 1 | 1 | 3 | 4 | 4 |
| 2 | behavior and management of watersheds for improving water regime and reducing sediment | water conservation (SWC) | Technologies / products for SWC and surface and ground water harvesting and recycling developed | | 1 | 1 | 3 | 3 | 4 |
| | yield | Creation of live models on Integrated Watershed Development (IWD) | Watershed area planned / treated | ha | 1200 | 529.9 | 500 | 550 | 600 |
| 3 | Human resource | Creation of awareness & | Trainings organized | Number | 102 | 120 | 90 | 95 | 100 |
| | development and capacity building | skill sharpening | Seminar / symposium / workshop / in- plant training for graduate & post- graduate students / summer & winter school, etc. organized | | 6 | 22 | 21 | 26 | 28 |
| | | | Extension material developed/ published | Number | 15 | 16 | 15 | 18 | 20 |
| | | | Demonstrations conducted on resource conservation technologies | Number | 600 | 354 | 60 | 65 | 70 |
| | RFD System | Timely submission of Draft RFD (2013-14) for approval | | Date | - | - | 16 May, 2013 | - | - |

| | Timely submission of Results for RFD (2012-13) | On-time submission | Date | - | - | 2 May, 2013 | - | - |
|--|--|--|------|---|---|------------------|---|---|
| | Implement ISO 9001 as per the approved action plan | % implementation | % | - | - | 95 | - | - |
| | Prepare an action plan for Innovation | On-time submission | Date | - | - | 10 Aug., 2013 | 1 | - |
| Improving internal efficiency/responsiveness/s | Implementation of Sevottam | Independent Audit of Implementation of Citizen's Charter | % | - | - | 95 | - | - |
| ervices delivery of Ministry/Department | | Independent Audit of implementation of public grievance redressal system | % | - | 1 | 95 | - | ı |

Section 4 : Acronyms

| S. | Acronym | Description |
|-----|---------|--------------------------------------|
| No. | | |
| 1. | DRDA | District Rural Development Agency |
| 2. | GIS | Geographic Information System |
| 3. | ICAR | Indian Council Agricultural Research |
| 4. | IWD | Integrated Watershed Development |
| 5. | NGO | Non-Government Organization |
| 6. | NRAA | National Rainfed Area Authority |
| 7. | PRI | Panchayati Raj Institution |
| 8. | RS | Remote Sensing |
| 9. | SAUs | State Agricultural Universities |
| 10. | SLNA | State Level Nodal Agency |
| 11. | SWC | Soil and Water Conservation |
| 12. | IWM | Integrated Water Management |

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 are the record of land units delineated on the basis of similar degradation problems in a readable format | | bases/reports generated will ensure effective monitoring and judicious |
| 2. | technologies / products | technologies / farm plans have proven to be effective in mitigating production risk | A technology that reduces soil loss and runoff from arable land leading to increase input use efficiency, productivity and profitability | The number of such technologies / plans / products / software used and validated in real field situations | Generation of such technologies 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 | technologies have proven to be effective in checking | soil loss and runoff from | The number of such technologies / products / plan / software validated in field situations | 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 SWC and surface and ground water harvesting and recycling developed | development programmes depends on efficient | | developed leading to tangible and intangible benefit to farmer's and | Growing concern of the climatic uncertainty, coupled with competing demands for water among agriculture and other allied sectors calls for environment friendly and rigorously tested and |

| S. No. | Success Indicator | Description | Definition | Measurement | General Comments |
|-----------|--|--|---|---|---|
| | | underground water harvesting, utilization and recycling technologies. | | farmers' field | validated water harvesting and recycling technologies to combat future water scarcity problems. |
| 5. | Watershed area planned / treated | now considered to be the drivers for conservation of natural resources, improve | technologies for demonstration for enhancing | Watershed area treated | These areas will serve as models for replication in other similar areas by implementing agencies |
| 6. | 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 management technologies | Number of trainings | Skill enhancement of primary and secondary stakeholders |
| 7. | Seminar / symposium / workshop / in-plant training for graduate & post-graduate students / summer & winter school, etc. organized | researchers and technocrats, implementers and | Create awareness, identification of widely adoptable technologies and future areas in research and development in the field of soil and water conservation and watershed management | Number of events / programmes organized | Enhanced knowledge domain and policy advocacy for technology dissemination |
| 8. | Extension material developed/published | Documentation of successful resource conservation technologies for enhancing the skill of user groups | Presentation of successful technologies in simple understandable and adoptable literature / electronic form | Number of publications | Documentation and dissemination of resource conservation technologies in the form of policy briefs, pamphlets, brochures, bulletins, popular articles etc |
| 9. | Demonstrations conducted on resource conservation technologies | Validation of technologies on farmers' fields | Demonstration of proven technologies for validation at farmers field | | Wider dissemination and upscaling of resource conservation technologies |

Section 5: Specific Performance Requirements from other Departments

| Location Type | State | Organiza tion Type | Organiza tion 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. | Outcome / Impact of | • • | Success Indicator (s) | Unit | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|-----|--|---|--|------|---------|---------|---------|---------|---------|
| No. | organization | influencing this outcome / impact with the following department(s)/ | | | | | | | |
| | | ministry(ies) | | | | | | | |
| 1. | capacity in implementation of integrated watershed | NRAA, SLNA, Agri. Deptt., | and competence of watershed stakeholders | % | 20 | 20 | 22 | 22 | 25 |
| | programme | ND 14 GINIA 1 : D 11 | D 1 | 64 | 1.7 | 20 | 20 | 2.5 | 20 |
| 2. | Water and soil conserved | Departments, Primary stakeholders, user groups (community based | and soil loss from integrated watershed | | 15 | 20 | 20 | 25 | 30 |
| 3. | Increase in family income through watershed management programme | NRAA, SLNA, Agri. Deptt., DRDA, other State-line Departments, Primary stakeholders, user groups (community based organization), PRI and NGO's | income from agriculture and allied | | 5 | 6 | 8 | 10 | 12 |