

Logframe of Soil Conservation and Watershed Management Programme

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I Background

Soil Conservation and Watershed Management (SCWM) programme was for the first time recognized as an important programme by the Government in 1974 when a new department, Department of Soil and Water Conservation was established under the umbrella of the Ministry of Forests. Later the name of the department was changed to Department of Soil Conservation and Watershed Management (DSCWM). In the Initial stage the Department implemented the programme by having a few Watershed Management Projects such as Phewatal, Bering, Khorke Itram, Kulekhani, and Bagmati Watersheds. Later soil conservation offices were established in a district basis. At present DSCWM is providing SCWM service to 55 out of the 75 districts of Nepal through District Soil Conservation Offices (DSCO).

Recently an Organisation and Management Study was conducted and the study recommended for switching to the Basin Approach from the existing political boundary approach for the implementation of the SCWM programme.

In June 2002 the Ministry of Forests and Soil Conservation formulated a monitoring and evaluation strategy in which there is strong recommendation for developing a Management Information System (MIS) by each department under the ministry including the DSCWM. Logframe can be regarded as a main ingredient of a MIS but the DSCWM had no comprehensive Logframe developed yet.

In this context the Department decided to prepare a logframe for SCWM programme in the Fiscal Year 2063/64.

II Definition of Logframe

Logical Framework Approach, nicknamed as Logframe, is an analytical tool which helps to identify programme/project goals, purposes, outputs, activities, and their cause and effect relationship. It also identifies the indicators which can be monitored to know if objectives have been met. In addition, it pre-estimates the external forces which could have an influence over the programme/project success and failure.

It is presented in a four by four matrix in which first column is written with objective hierarchies (goal, purpose, outputs, activities), the second column is written with the respective "Objective Hierarchies" indicators, the third column is written with means and methods of verifying the achievements on the indicators, and the fourth column with the assumptions or the risk factors which should be considered for the logic to work. The logic is that if input be given and the identified activities carried out, and the assumptions prevail, then it results to the output; if the outputs result and the assumptions still hold good, then in due course of time, the purpose will be met; and if purpose is met and the assumptions prevail, then it is very likely that the goal will be achieved.

III Methodology for the Development of the Logframe

Two workshops were organized for the development of the logframe. The first workshop of three days was participated by the officers of the DSCWM including chiefs of some District Soil Conservation Offices. The second workshop was participated by all participants of the first workshop and most of District Soil Conservation Officers, Representatives of the Ministry of Forests and Soil Conservation, National Planning Commission (NPC), Ministry of Water Resources, Department of Water Induced Disaster Prevention, Department of Forest, Department of Agriculture, Department of Livestock Development, Department of Roads, Department of Electricity, Water Forum, CARE Nepal, and International Centre for Integrated Mountain Development (ICIMOD) also participated in the second workshop. Different relevant papers were presented by the experts. Working Paper on Logframe was presented and discussed thoroughly. Groups were formed to discuss the working paper and to provide input for the development of the logframe. For details, refer to Proceedings of the Workshop for Preparing the Logframe of Soil Conservation and Watershed Management Programme published by DSCWM in June 2007.

At the concluding session of the second workshop, a task force under the coordination of Mr Govinda Prasad Kandel was formed to develop the logframe of the SCWM in a comprehensive manner. In about a month time the task force developed a comprehensive logframe based on the inputs given by the participants of the workshop including the group works outputs. The draft logframe was circulated to the section chiefs of the DSCWM for final comment. A presentation of the draft logframe was made in a meeting of the officers of the DSCWM and final comments were collected and the logframe was improved based on the comments from the participants.

IV Summary of the SCWM Programme Logframe Matrix

One Goal, one purpose subdivided into five components, 39 outputs, 77 indicators, and 116 activities have been identified in the logframe. Means of verification of each indicator have been determined and important assumptions, whenever necessary, for the following logic to work have been identified. Logic is, if activities are carried out then outputs results, if outputs results then purpose is met, if purpose met then goal will be achieved. (Refer the main table of the logframe page 7 to 20)

The following goal, purpose and its components, outputs, activities, indicators, means of verification, and important assumptions have been identified.

Goal

To contribute to the livelihood and well-being of the people through sustainable watershed management of the river basins.

Purpose

To increase the productivity and utility of land and water and to prolong the services of the development infrastructures leading towards livelihood improvement on an equitable and sustainable basis through integrated soil conservation and watershed management.

Component purposes (P)**Component 1 Water and Sediment yield**

P1 To improve the water regime and water quality and to reduce sedimentation of lakes, reservoirs, and rivers in the nationally important and critical watersheds

Component 2 Land Productivity

P2 To increase the productivity of land and to increase the biodiversity through participatory soil conservation and watershed management

Component 3 Protection of Infrastructure against erosion

P3 To protect the development infrastructures from erosion hazards promoting people's participation and collaboration

Component 4 Institutional Development

P4 To develop and strengthen the SCWM related institutions of government, non-government, community, and private sectors

Component 5 Programme Management

P5 To manage soil conservation and watershed management programmes effectively

Some of the “Outputs” are as follows: (For details refer main table of logframe page 7 to 20)

P1O1 Increased ground coverage of the watershed

P1O2 Increased crown coverage of the watershed

P1O3 Increased conservation farming practices

P1O4 Increased adoption of proper land use practices as per land capability classification

P1O5 Increased the number of stabilized landslides and gullies

Some of the “Activities” are as follows: (For details refer main table of logframe page 7 to 20)

- Plant mainly conservation oriented grasses, shrubs and trees on *Parti* land and degraded land
- Protect the degraded forest and grass land against grazing, lopping, felling of green trees, and forest fires
- Establish conservation farmers networks
- Demonstrate the conservation cropping practices
- Make the farmers aware of the conservation farming practices

Some of the “Indicators” are as follows (For details refer main table of logframe page 7 to 20)

- By 2025 the average ground coverage of the *Parti* land of the intervened national watershed increased by x percent
- By 2025 the average ground coverage of the degraded forest land of the intervened national watershed increased by x percent
- By 2025 the average ground coverage of the *Parti* land of the intervened national watershed increased by x percent
- By 2025 x percent of the farmers adopt conservation farming practices
- Number of farmers adopting proper land use practices increased

Some of the “Means of verification” are as follows: (For details refer main table of the logframe page 7 to 20)

- Study report on landuse and vegetation status (DSCWM in collaboration with Department of Forests (DOF) and Village Development Committee (VDCs)
- Forest status report of Department of Forest Research and Survey (DOFRS) /DOF
- Study report of DSCWM on conservation farming
- PRA study on the adoption of proper land use practices
- DSCWM monitoring reports and landslide/gully stabilization status reports

Some of the “Important Assumptions” are as follows (For details refer main table of the logframe page 7 to 20)

- The desired plant species will not be suppressed by unwanted species

- Intense forest fire will not occur
- Severe crown fire will not occur
- Farmers continuously adopt conservation farming practices
- Natural calamities like drought do not occur

V Using Logframe

i. Limitations

There is no such thing as a perfect logframe matrix. The best results come from considerable discussion among key stakeholders, guided by facilitators who have a good understanding of the programme/project context and logframe planning. Different people, including those very experienced with logframes, will often have different ideas and opinions about how to structure a programme/project. Therefore, to develop a good logframe requires several rounds of discussion and revision. For the development of the SCWM logframe efforts have been made to include as many stakeholders as possible but practically it was not possible to include all stakeholders. Similarly the interest and degree of active participation in the workshop for developing the logframe was varying a lot. In spite of a scrupulous examination of the text of the logframe there might be several shortcomings which could be improved in future if pointed out.

Most commonly the logframes have been used for the project. Unlike projects, Programmes are of vast nature. Due to this reason preparing a proper logframe for a national level programme is very difficult. However it has been found that with some limitations logframe for national programme can also be used for the following three areas of uses

ii. Uses of Logframe

There are three distinct areas of use of the logframe

- Providing a general overview of the programme
- Providing the basis for programme implementation, including the development of annual work plans and budget
- Providing an overview of how programme performance will be monitored and evaluated

iii. Some guidelines for the use of the logframe

- Read thoroughly from the very beginning of the report before jumping to the main table of logframe. While doing this, refer the main table as and when indicated in the text before the main table of logframe.

- Try to understand the goal, purpose, outputs, and activities, their logic and cause effect relationship.
- You may not personally agree on some of the cause effect relationship. It should be taken as normal because as already pointed out different people may have different ideas.
- After thorough reading and understanding the concept, you may go to the main text to read it thoroughly.
- It is advised that you start from first column top down to understand the logic of objective hierarchies identified in the logframe.
- Move to second column and understand the indicator(s) identified for each objective hierarchy.
- After finishing the second column, move to the third column and understand the means/methods of monitoring the indicators.
- After finishing the third column go to the fourth column to understand the assumptions that should prevail for the cause effect logic to work. It should be noted that continuous monitoring and taking corrective measures or flagging it to the concerned agency is necessary whenever it is likely to have a risk.
- Take the logframe as a main framework of the SCWM programme and try to visualize it for using as a framework for preparing plans (Periodic Plans, Management Plans, etc).
- It can be used as a tool for providing a general overview of SCWM programme.
- It can also be used as a tool for explaining the SCWM programme to the general people and advocating the SCWM programme to relevant personnel or institution.
- Similarly, try to visualize it as a main framework for monitoring and evaluation of the programmes you implement.
- At this stage, at the departmental level, it is not possible to quantify the changes targeted by the indicators. So a value like x is being given. The value of x for each indicator is to be determined in due course of time for the national as well as for the local level.
- A time frame of 18 years is being envisioned for the logframe. This time frame is just an arbitrary value which is being calculated based on what status for each indicator is being expected by 2025 AD.
- The number of indicators for each objective hierarchy is determined based on the present knowledge. The number may increase or decrease depending on the local situation.

Main Table of Logframe of Soil Conservation and Watershed Management Programme (Timeframe: 2007 to 2025)

Narrative Summary	Indicators	Means of verification	Important Assumptions
<p>Goal: To contribute to the livelihood and well-being of the people through sustainable watershed management of river basins¹</p>	<p>National Planning Commission (NPC) recognizes SCWM programme's significant contribution to the overall development</p>	<p>Reports of NPC and Central Bureau of Statistics (CBS)</p>	<p>-</p>
<p>Purpose: To increase the productivity and utility of land and water, and to prolong the services of physical development infrastructures² leading towards livelihood improvement on an equitable and sustainable basis through integrated soil conservation and watershed management.</p>	<p>Production per unit area of intervened watersheds increased significantly</p> <p>Availability of water for different purposes increased significantly</p> <p>Availability of good quality water increased significantly</p> <p>Utility of development infrastructure increased significantly</p> <p>The poor, women and vulnerable groups of people benefited from SCWM programme</p>	<p>Specific production study of the concerned agency</p> <p>Water use study reports of the Ministry of Water Resources, Water and Energy Commission, Department of Hydrology and Meteorology</p> <p>-do-</p> <p>Infrastructure Support Benefits evaluation report of DSCWM in collaboration with concerned agencies</p> <p>Monitoring reports of DSCWM</p>	<p>Sustained management of natural resources applied continuously and SCWM programme will not be adversely affected by other development works SCWM programme continues to be a national priority programme</p> <p>Environmental Impact Assessment is strictly followed by all development agencies from central to local level</p> <p>Additional policies favourable for SCWM will be formulated timely</p> <p>Adequate financial resources will be made available for SCWM programme</p> <p>Adequate human resources will be made available for SCWM programme</p>

¹ Koshi, Narayani, Karnali, and Mahakali basins

² roads, bridges, trails, irrigation schemes, drinking water schemes, settlements, etc

Component Purposes (P):

Component 1 Water and Sediment yield

P1 To improve the water regime and water quality, and to reduce sedimentation of lakes, reservoirs and rivers in the nationally important and critical watersheds³

Component 2 Land Productivity

P2 To increase the productivity of land and to increase biodiversity through participatory soil conservation and watershed management

Component 3 Protection of Infrastructure against Erosion

P3 To protect development infrastructures from erosion hazards promoting peoples participation and collaboration

Component 4 Institutional Development

P4 To develop and strengthen the SCWM related institutions of government, non-government, community, and private sectors

Component 5 Programme Management

P5 To manage soil conservation and watershed management programmes effectively

³ Watersheds as identified by DSCWM or Government of Nepal as nationally important and critical.
(Potential Nationally Important Watersheds: Kulekhani, Phewa, Shivapuri, Melamchi, etc.)

Narrative Summary	Indicator	Means of verification	Important Assumptions
Outputs (O)			
P1O1 Increased ground coverage of the watershed	By 2025, the average ground coverage of the <i>Parti</i> land of the intervened watershed increased by x percent By 2025, the average ground coverage of the degraded forest land of the intervened watershed increased by x percent	Study report on landuse and vegetation status (DSCWM in collaboration with Department of Forests (DOF) and Village Development Committee (VDCs) Forest status report of Department of Forest Research and Survey (DOFRS)/DOF	The desired plant species will not be suppressed by unwanted species Intense forest fire will not occur
P1O2 Increased crown coverage of the watershed	By 2025, the average crown coverage of the degraded forest of the intervened watershed increased by x percent	-do-	Severe crown fire will not occur
P1O3 Increased conservation farming practices	By 2025, x percent of the farmers adopt conservation farming practices	Study report of DSCWM on conservation farming	Farmers continuously adopt conservation farming practices Natural calamities like drought do not occur
P1O4 Increased adoption of proper land use practices as per land capability classification	Number of farmers adopting proper land use practices increased	PRA study on the adoption of proper land use practices	People will adopt proper land use practices
P1O5 Increased the number of stabilized landslides and gullies	By 2025, x percent of the human induced landslides and gullies will be stabilized	DSCWM monitoring reports and landslide/gully stabilization status report	Unusual rainfall will not occur
P1O6 Increased the length of stabilized river banks	By 2025, x percent of the vulnerable segments of river/stream bank will be stabilized	DSCWM monitoring reports and river/stream bank stabilization status report	Unusual rainfall will not occur
P1O7 Increased the number of tamed torrents	By 2025, x percent of the vulnerable segments of the torrents will be tamed	DSCWM monitoring reports torrent stabilization status report	Unusual rainfall will not occur
P1O8 Increased water holding capacity in the watersheds	Water yield in dry season increased by x percent	Specific water regime change status report in collaboration with academic institutions	

Narrative Summary	Indicator	Means of verification	Important Assumptions
P1O9 Prevented landslides/ gullies formation and river/stream bank cutting	Occurrence of landslides and gullies reduced by x percent	DSCWM monitoring reports combined with specific erosion stabilization status	
P1O10 Trapped sediments upstream	Sediments deposited upstream increased to x percent Downstream sedimentation reduced by x percent	Specific study on sediments trapped upstream and sediment discharge downstream	
P1O11 Increased water yield through water harvesting	Water yield obtained through water harvesting programme increased	Study on water use in dry season	
P2O1 Increased ground coverage of the watershed	By 2025, the average ground coverage of <i>Parti</i> land increased by x percent By 2025, the average ground coverage of degraded land increased by x percent	Study report on landuse and vegetation status (DSCWM in collaboration with DOF and VDCs) Forest status report of DOFRS/DOF	The desired plant species will not be suppressed by unwanted species Intense forest fire will not occur
P2O2 Improved land husbandry of upland areas	Surface runoff reduced significantly Number of species used for cultivation increased The yield of the treated area increased by x percent Soil fertility enhanced Soil structure improved Erosion reduced significantly	Specific study on land husbandry status to be done by DSCWM in collaboration with Academic institutions, Nepal Agriculture Research Council	Markets for the products will be favourable People are willing to change the traditional habits Marketing support by the concern agency exists

Narrative Summary	Indicator	Means of verification	Important Assumptions
P2O3 Increased diversification of income generating crops including medicinal and aromatic plants	Types of medicinal and aromatic plants used for plantation increased Production of raw materials for Ayurvedic medicine increased Production of the cash crops increased Number of farmers adopting crop diversification increased	Study on diversification: (to be done by DSCWM in collaboration with research / academic institutions and other related Non Government Organizations NGOs)	People are willing to adopt the Income Generation Activities (IGAs)
P2O4 Increased adoption of proper land use practices according to the land capability classification	Number of farmers adopting proper land use practices increased	PRA study on the adoption of proper land use practices	
P2O5 Promoted income generation opportunities	Number of people adopting IGAs increased Number of entrepreneurship developed increased	PRA study on income generation in collaboration with District cottage industries, DDC, Ministry of Industry and commerce	
P2O6 Increased biomass production of flood plains and <i>Parti</i> land	Sustainable harvesting of grass, fodder, fuelwood, and other plant products increased	Biomass productivity study report in collaboration with academic institutions	People actively participate in biomass production programme
P2O7 Promoted soil conservation friendly plants	Number of soil conservation friendly species used for conservation purposes increased	Study report on type of plant species used for soil conservation	
P2O8 Promoted conservation based Indigenous Technology and Knowledge (ITK)	Number of ITK adopted and disseminated increased	Study report on use of ITK in soil conservation	People will be adopting the ITK

Narrative Summary	Indicator	Means of verification	Important Assumptions
P2O9 Rehabilitated erosion Hot Spots (severely eroded land)	Number of Hot Spots rehabilitated Hectares of Hot Spots rehabilitated	DSCWM Physical Progress Report (PPR)	
P3O1 Increased the length of stabilized/protected road slopes and trails	Number of road segments stabilized/protected Km of trails stabilized	PPR PPR	Concerned agencies take care of maintenance
P3O2 Increased the number of stabilized /protected irrigation schemes, drainage, and water source	Number of Irrigation schemes stabilized/protected Number of water source protected Number of drainage channels stabilized	PPR PPR PPR	Local beneficiaries continue the maintenance work
P3O3 Increased the number of stabilized/protected public buildings and settlements	Number of public buildings protected Number of settlements protected	PPR PPR	Concerned local organizations/groups continue the maintenance work
P3O4 Increased the number of stabilized/protected national heritage site	Number of national heritage sites protected	PPR	Concerned local organizations/groups continue the maintenance work

Narrative Summary	Indicator	Means of verification	Important Assumptions
P3O5 Increased the number of stabilized/protected important sites and other development infrastructures	Number of other development infrastructures protected PPR Number of important sites protected	PPR Concerned local organizations/groups continue the maintenance work	
P4O1 Established a well functioning central, regional (Basin based) and sub-regional (Watershed based) soil conservation and watershed management organization	Central, regional (Basin based) and sub-regional (Watershed based) SCWM organization established and functional	Annual report of DSCWM	Continuity given to the organization established
P4O2 Strengthened the capacity of central, regional, and sub-regional SCWM offices	All staff with revised job descriptions, performance targets, and work plans Management structures, equipment, and facilities in place to enable staff to carry out responsibilities adequately Staff adequately carrying out their work plans to meet performance targets	<i>Karyabidhi</i> (Working procedure), Annual work plan of the staff Management structure, equipment, and facilities survey report Staff performance evaluation report	
P4O3 Increased linkages/networks of DSCWM with national and international organizations	Number of organizations sharing knowledge and experience with DSCWM increased	Meeting minutes, MOU, Agreements, reports of knowledge and experience sharing with other organizations	

Narrative Summary	Indicator	Means of verification	Important Assumptions
P4O4 Established self reliant and well functioning SCWM related Community Based Organizations (CBOs) and Civil Societies Organizations (CSOs)	Specific study on CBOs status Number of CBOs financially/institutionally independent to carry out the basic works and actively participating in the SCWM programme increased	SCWM policies, plans, sub-plans, and guidelines Permanency is given to the CBOs	
P4O5 Established local, national, and international networks of SCWM and related organizations.	Number of organizations sharing knowledge and experience with DSCWM increased	Meeting minutes, MOU, Agreements, reports of knowledge and experience sharing with other organizations	Continuity of the networks
P5O1 Formulated SCWM policies, plans, sub-plans, and guidelines	SCWM policies, plans, sub-plans, and guidelines formulated according to the targeted number and time	Plan, <i>Jinsikhata, Jinsi Nirichhan Pratibedan</i>	
P5O2 Established functional monitoring and evaluation system	Baseline information documented Status of logframe indicators available in monitoring reports Recommendations made in the monitoring reports used for planning purposes Number of timely, regular, and qualitative monitoring and evaluation reports increased	Baseline study report DSCWM monitoring report DSCWM monitoring reports and post monitoring Plans DSCWM monitoring reports	Functional monitoring and evaluation mechanism established

Narrative Summary	Indicator	Means of verification	Important Assumptions
P5O3 Developed appropriate, scientific, and indigenous SCWM technologies	Number of technologies developed and implemented increased Number of SCWM demonstration plots increased Number of technologies adopted increased Number of users adopting technologies increased Specific study reports on use of SCWM technologies	PPR	Specific study report on use of SCWM technologies Specific study report on use of SCWM technologies Developed technologies are accepted by the users
P5O4 Documented SCWM related status and baseline information	Status of erosion, sedimentation, soil fertility, water quality/quantity obtained regularly	Soil and water monitoring reports	
P5O5 Delivered effective SCWM extension services	Number of people aware of SCWM increased Number of people's participation in SCWM increased Number of people demanding SCWM services increased Number of people adopting SCWM increased Area covered by SCWM programme increased	Specific study report on peoples' awareness on SCWM PPR, DSCWM monitoring reports -do- -do- -do-	
P5O6 Established effective co-ordination mechanism with related line agencies at the central regional and sub-regional level	Functional and effective co-ordination mechanism established and number of line agencies sharing information and supporting SCWM programme at different levels and increased	SCWM services demand in districts and department Specific study report on adoption of SCWM by the people DSCWM monitoring reports Meeting minutes, MOU at district and department level	The culture of co-ordination accepted by the concerned agencies

Narrative Summary	Indicator	Means of verification	Important Assumptions
P5O7 Developed SCWM Human Resources	Number of staff with career development opportunity increased Training record of staff at district and department Number of trained staff increased	Study report on career development opportunities of the staff at district and department	
P5O8 Enforced functional SCWM Acts and Directives	Number of legal CBOs formed increased Number of CSOs established and functional Number of watersheds declared under the Act increased Provisions of SCWM laws enforced Directives followed in preparation and implementation of plans	DSCWM monitoring reports -do- -do- -do- -do-	
P5O9 Enhanced peoples participation in SCWM	Number of people participating in SCWM increased Percentage of financial contribution of the people in SCWM programme increased Role/access of target beneficiaries in planning, monitoring, decision making, and benefit sharing increased	DSCWM monitoring reports -do- -do-	
Activities Shown separately No input indicators developed			

Activities:

For Output P1O1

1. Plant mainly conservation oriented grasses, shrubs and trees on *Parti* land and degraded land
2. Protect degraded forest and grass land against grazing, lopping, felling of green trees, and forest fires

For Output P1O2

3. Establish conservation farmers networks

For Output P1O3

4. Demonstrate conservation cropping practices
5. Make farmers aware of the conservation farming practices
6. Provide seeds, plants, and other materials to the farmers in a subsidized rate
7. Provide training on conservation farming to farmers
8. Provide appropriate conservation farming technologies

For Output P1O4

9. Prepare land capability classification
10. Make communities aware and train them on appropriate landuse practices
11. Support the communities to adopt appropriate landuse practices with appropriate subsidy and incentive packages
12. Demonstrate proper landuse practices with appropriate technologies

For Output P1O5

13. Treat landslides and gullies

For Output P1O6

14. Construct embankment on the vulnerable sides of the river/stream banks
15. Plant trees and grasses on river/stream banks and dry beds.
16. Construct spurs to divert the flow of water from vulnerable sides to safe sides
17. Canalize river/stream flow

For Output P1O7

18. Construct check dams on torrent beds
19. Plant trees and bamboos on torrent sides
20. Construct protection wall and spurs on torrent sides
21. Rehabilitate torrent catchment

For Output P1O8

22. Construct and improve multipurpose conservation ponds
23. Construct contour trenches, bunds, and terraces
24. Construct run off harvesting dams
25. Improve/promote ground cover (mulch, grass plantation, nettings, etc)

For Output P1O9

26. Prepare landslide and flood hazard maps
27. Construct diversion channels to divert water flow from vulnerable areas to safe sites
28. Plant grass and trees on eroded slopes
29. Construct brushwood retaining structures on the rills and vulnerable slopes
30. Construct spurs and embankments on the vulnerable segments of river/stream sides
31. Construct spurs and embankments on the vulnerable segments of torrent sides

For Output P1O10

32. Construct sediment trap dams and de-silting structures
33. Construct /Develop buffer strips and hedge rows on the eroding slopes

For Output P1O11

34. Construct run off harvesting system
35. Construct roof water harvesting system
36. Construct ground water recharge structures

For Output P2O1

37. Plant both conservation oriented and income generating grasses, shrubs and trees

For Output P2O2

38. Construct/improve terraces
39. Promote SALT farming
40. Promote on farm conservation
41. Improve moisture condition of agriculture land
42. Promote conservation farming
43. Promote conservation tillage (zero/minimum tillage)
44. Enhance soil fertility
45. Rehabilitate degraded farm land

For Output P2O3

46. Make the farmers aware of the importance of crop diversification for the improvement of soil fertility and soil conservation
47. Provide the diverse agriculture seeds and plants to farmers in a subsidized rate
48. Provide technology packages to farmers for diversified cropping practices
49. Provide marketing information on medicinal and aromatic plants

For Output P2O4

50. Prepare land capability classification
51. Make communities aware and train them on appropriate land use practices
52. Support the communities to adopt appropriate land use practices with appropriate subsidy and incentive packages
53. Demonstrate proper land use practices with appropriate technologies.

For Output P2O5

54. Identify the poor and socially excluded communities
55. Provide training to the group
56. Support the group for access to implement IGAs

For Output P2O6

57. Plant trees, shrubs, and herbs on flood plains and *Parti* land
58. Support the local users for the management of flood plains and *Parti* plantation

For Output P2O7

59. Documentation and registration of soil conservation friendly species
60. Integrate soil conservation friendly plants in the conservation measures

For Output P2O8

61. Document and register conservation based ITKs
62. Use and adopt ITKs
63. Disseminate the adopted ITKs

For Output P2O9

64. Identify Hot Spots
65. Implement intensive conservation measures to rehabilitate the Hot Spots

For Output P3O1

66. Identify and prioritize vulnerable road slopes and trails
67. Implement the stabilization measures in collaboration with concerned agencies

- For Output P3O2
68. Identify and prioritize vulnerable irrigation schemes, drainage, and water source
 69. Implement the stabilization measures in collaboration with concerned agencies
- For Output P3O3
70. Identify and prioritize vulnerable public buildings and settlements
 71. Implement the stabilization measures in collaboration with concerned agencies
- For Output P3O4
72. Identify and prioritize vulnerable national heritage sites
 73. Implement the stabilization measures in collaboration with concerned agencies
- For Output P3O5
74. Identify and prioritize vulnerable important sites and development infrastructures
 75. Implement the stabilization measures in collaboration with concerned agencies
- For Output P4O1
76. Reform the organizational structure of DSCWM in compatibility with basin approach
- For Output P4O2
77. Conduct organizational assessment and design organizational capacity building strategy
 78. Introduce performance incentives
 79. Install and upgrade facilities and equipment
- For Output P4O3
80. Identify relevant related institution
 81. Establish experience sharing and collaboration mechanism
- For Output P4O4
82. Identify, register, and develop Civil Societies Organization (CSOs) and CBOs Networks
 83. Facilitate and strengthen CBOs for self reliance
 84. Mobilize the CBOs in SCWM programmes
- For Output P4O5
85. Make inventory of related local, national, and international organizations
 86. Organise annual meetings for furthering relationship and sharing experiences
 87. Identify common interest to work together in specific field
- For Output P5O1
88. Review SCWM policies
 89. Review SCWM periodic plans (Master, five year, Three Year, and Annual Plans)
 90. Review SCWM guidelines
- For Output P5O2
91. Review the SCWM M&E system
 92. Prepare MIS framework for SCWM programme in compatible with the logframe
 93. Implement MIS framework at all levels
 94. Conduct SCWM impact studies in line with the logframe
- For Output P5O3
95. Identify research needs for technology development
 96. Promote action research
 97. Conduct technology testing and demonstration
 98. Conduct collaborative research with academic, research and other related organizations
- For Output P5O4
99. Conduct studies to generate and update baseline information focusing on the logframe indicators

For Output P5O5

100. Identify and assess different extension tools
101. Develop adequate extension tools for extension and advocacy to planners, policy makers, and local beneficiaries
102. Conduct advocacy of SCWM programme to policy makers and planners
103. Conduct advocacy of SCWM programme at local levels
104. Disseminate SCWM extension packages to the stakeholders
105. Implement school education, study tours, training, and demonstration programme, for users.

For Output P5O6

106. Formulate co-ordination policies and guidelines
107. Develop effective co-ordination mechanism at different levels
108. Identify related organizations for co-ordination and collaboration

For Output P5O7

109. Assess the HRD needs
110. Review SCWM HRD policies, programmes, and strategies
111. Conduct follow-up, and refresher training.

For Output P5O8

112. Update and review Acts
113. Update and review SCWM by laws and guidelines

For Output P5O9

114. Identify the needs of people with respect to SCWM Programme
115. Identify the hazards of water induced disasters
116. Support the preparation of SCWM operational plans to include the provision of equitable benefit sharing and decision making by all sections of the communities