

An Overview on Socio-economic Impact of Soil Conservation and Watershed Management Program

A case study of Gurmikhola Sub-watershed
In Siraha District

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Letter of Recommendation

This thesis entitled "**An overview on socio-economic Impact of Soil Conservation and watershed management programs**: A case study of Ghurmikhola sub-watershed in Siraha District" has been prepared by **Mr Dipesh Kumar Singh** under my supervision and guidance. He has conducted this research in 2020 AD.

Therefore, I recommend this dissertation on evaluation committee for its final approval.

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Acronyms

DSCWM	District Soil Conservation and Watershed Management
SCWM	Soil Conservation and Watershed Management
CDG	Community Development Group
RM	Rural Municipality
MC	Municipality
HH	Household
IGA	Income Generating Activities
DSCO	District Soil Conservation Office
CDO	Chief District Officer
CBS	Central Bureau of Statistics
F/Y	Fiscal Year
GDP	Gross Domestic Product
GO	Government Organization
NGO	Non Government Organization
INGO	International Non Government Organization
IWOP	Integrated Watershed Development Programme
DDP	District Development Programme
DPAP	Drought Prone Area Programme
VSHGS	Village Self-help Groups
VWCs	Village Watershed Committees
PNP	Participatory Net Planning
APRLP	Andra Pradesh Rural Livelihoods Program
NGP	Gross National Production
SALT	Sloping Agricultural Land Technology
ICIMOD	International Centre for Integrated Mountain Development
IGCEDP	Indo-German Change Eco-development Project
CDCC	Community Development Conservation Committee
PP	People's Participation
SWCS	Soil and Water Conservation Society
CEAP	Conservation Effects Assessment Project
PARDYP	People and Resource Dynamic Project
RCC	Re-inforcement Cement Concrete
SLC	School Leaving Certificate
NTFP	Non Timber Forest Products
DWIDP	Department of Water Induced Disaster Prevention

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Abstract

Nepal is situated in between China and India. It is a mountainous country where most of the people are under the poverty line. The country is divided into various watersheds. Soil conservation and watershed management program are launched under the Department of Soil Conservation and Watershed Management on these watersheds. I/N/GOs have supported on this program through DSCWM. Soil conservation program is launched in 55 district of Nepal through DSCOs. Various activities are implemented but none have tried to analyze the impact and influence of such program. The purpose of the study was to analyze the socio-economic impact of SCWM program implemented within the Ghurmikhola sub-watershed. For this, 55 respondents were taken randomly applying random sampling method, necessary data for analyzing SCWM program were gathered through interview, group discussion and field observation methods. The data are tabulated, presented and analyzed concurrently. It is found that 253 activities were implemented under physical & IGA activities and 48 found more succeeded giving good impact. Furthermore, people of that watershed are eager to implement such types of activities knowing the importance of them. IGA activities have raised the income level of people, extension and awareness activities have raised the knowledge of people in SCWM program. Similarly plantation has added the greenery and helped in yielding the water sources every year. People participation in implementation of program is increasing. Deprived, dalit and women are involved in CDG's meeting and decision making process. They involved from the very beginning of planning, implementation, benefit sharing and maintenance works. People of the watershed seem to be cheerful and proud on the DSCWM program. They have understood the importance of DSCWM program and its activities.

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Questionnaire for Data Collection

Date:.....

Name of the respondent:

Age:-..... sex:- Male/Female Total members in family:-

.....

Ethnic Group/caste:

Address:- RM /MC Ward No: Tole :

1. Family Type:

- a) Nuclear
- b) Joint
- c) Extended

2. Family size:

Total		Under15 yrs		16-45 yrs		above 45 yrs	
M	F	M	F	M	F	M	F

3. What social events occurred in your family during last 5 years?

Events	Birth	Death	Marriage	Migration	Divorce
Number					

4. Types of house:

- a. Rcc roofing house
- b. CGI sheet roofing house
- c. Thased roof house
- d. Simple hut

5. Name your festivals:

--	--	--	--	--

6. Religion:

- a. Hindu
- b. Buddhist
- c. Muslim
- d. Christian

e. Others

7. Marital status:

a. Married

b. Unmarried

if married ,number of children:

a. One

b. Two

c. Three

d. Four

8. Level of education:

a. Illiterate

b. Literate

If literate,

a. Just literate

b. Primary level

c. Secondary level

d. Higher level(above SLC)

9. Occupation:

a. Agriculture

b. Service

c. Business

d. Others

10. Status of land ownership:

Land Type	Khet	Bari	Kharbari
Area (in)			

11. Which animal do you raise ?

Name	Cow/Oxen	Bullock/Buffalo	Goat/Sheep	Pig	Others
Numbers					

12. Was the production from farming and livestock sufficient meet the annual family requirements in last years ?

a. Yes

b. No

If no, or how many months, the production was sufficient for your family?

- a. 1-3 months
- b. 4-6 months
- c. 7-9 months
- d. Full year

13. What is your monthly income?

- a. below 1000 rupees
- b. 1000-2000 rupees
- c. 3000-5000 rupees
- d. above 5000

14. Caste/ethnicity?

- a. Mahato
- b. Mandal
- c. Yadav
- d. Dalit

15. Monthly expenditure of your family?

- a. below 1000 rupees
- b. 1000-2000 rupees
- c. 3000-5000 rupees
- d. above 5000

16. Is there equal wage for men and women?

- a. Yes
- b. No

If

no,why?.....

17. Hausing facilities ?

- a. Television
- b. Radio
- c. Telephone
- d. latrine
- e. bathroom

18. What is your mother tongue?

- a. Nepali
- b. Maithaili
- c. Tharu
- d. Magar
- e. Other

19. Crop description on farmland?

Land type	Khet	Bari	Kharbari
Name of crops			
Season			

20. Livestock feeding system:

- a. Stall feeding
- b. Grazing

If grazing, where ?

- a. Private land
- b. National forest
- c. Open grazing land

21. What type of soil conservation programs have implemented in your community ?

- a. Infrastructer protection(Trail,irrigation canal)
- b. Income generating activities(Fruit,vegetable,nursery)
- c. Plantation(Tree, fodder,grass)
- d. Water source protection
- e. Natural Hazard prevention(land slide,gully,torrent,stream bank)

22. How was eroded area within your community before lunched SCWM programs?

- a. One ha
- b. Two ha
- c. Three ha
- d. Above Three ha

How much area is protected now?

- a. One ha

- b. Two ha
- c. Three ha
- d. Above Three ha

23. Have you seen any spring source increasing its yield?

- a. Yes
- b. No

If yes,how increased its yield?

Mention:

.....

24. Are you satisfied with SCWM programs implemented by DSCO?

- a. if yes,why ?

.....

- b. if not why

?.....

25. What types of social beneficial works are there during 5 years period?

- a. Mill(no.)
- b. Saw mill(no.)
- c. Cottage industries(Basnigalo ko items in number.....)
- d. Animal breeding(in hh.....)
- e. Sahakari(no.)

26. What can we do for sustainable development ?

Mention:.....

.....

27. Are there any local measures to minimize the soil degradation from the community side ?

If yes,mentioin

.....

28. When did you know about the importance of conservation of natural resources?

- a. Since 10 years
- b. Since 5 years
- c. Since 1 year

d. None

29. Why do you think people participation is an essential tool for sustaining community ?

Mention.....

30. Participation of dalit and deprived people in leadership and decision making in the community in comparison of last 5 years is

- a. Highly increasing
- b. Increasing
- c. Constant
- d. Decreasing

31. Participation of women in the implementation of programs is

- a. High (if women involves in the stages of planning, implementation & benefit sharing)
- b. Medium (if only participate in implementation and benefit sharing)
- c. Low (if participate in any one of these three stages)
- d. Not at all

32. What kinds of changes have you seen regarding socio-economic and enviromental field in your community due to the implementation of SCWM programs?

- a.
- b.
- c.
- d.

33. Are you participate in meeting organized by your community?

- a. Yes (if yes,how many days in a year?.....)
- b. No (if no,why?.....)
- c. I don't know at all

34. What is your experience about the community development works?

Mention.....

35. Have you got any training regarding Soil Conservation and Watershed Management?

If yes, name:

36. What type of support are provided by the GO/INGO/NGO?

- a. Technical
- b. Financial
- c. Both

37. Do you want to tell any more about the SCWM programs?

Photographs



Photograph 1: Vegetative Measures to Control degraded Land at Siraha



Photograph 2: Gully Protection Work at Ghurmi



Photograph 2: Gully Protection Work at Bataha



Photograph 2: Vegetative Measures to Control degraded Land at Bataha