# RURAL DEVELOPMENT THROUGH FARMERS' MANAGED IRRIGATION SYSTEM:

## A Case Study Panchakanya Nahar Ratna Nagar Municipality, Chitwan

### A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Arts in Rural Development

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#### **LETTER OF RECOMMENDATION**

This is to certified that the thesis submitted by Samjhana Pathak entitled Rural Development through Farmers' Managed Irrigation System: A Case Study of Panchakanya Nahar, Ratna Nagar Municipality, Chitwan prepared under my supervision and guidance as a partial fulfillment of the requirements for Degree of Masters of Arts (MA) in Rural Development. Therefore, this is recommended for the final evaluation and approval.

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2016-04-08 AD
(2072-12-26 BS)

**APPROVAL SHEET** 

We certify that this thesis entitled Rural Development through Farmers' Managed

Irrigation System: A Case Study of Panchakanya Nahar, Ratna Nagar Municipality,

Chitwan has been examined and found satisfactory of the requirements for the the

Degree of Master of Arts in Rural Development.

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ii

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#### **ABSTRACT**

The Panchakanya Nahar Irrigation System of Ratna Nagar Municipality-9 & 10, Chitwan had been innovated by the government in F/Y 2032/33 along with the local peoples participation. It was completed in 2054 BS and transferred to the local farmers. After then, the local levels of farmers have theirselves managed to operate, manage, maintain and utilize it in their own effort. This system has tried to solve the problems of local people regarding irrigation and made their livelihood easier then it was before.

The main objective of this FMIS (Farmer managed Irrigation System) is to analyses the living standard of people of the Ratna Nagar Municipality 9 & 10, Chitwan and analyze the interrelation between different institution in that field.

Interview, questionnaire and observation methods were applied to take out the result of FMIS in the respective field. The research has carried out the fact that people are getting the facility of irrigation in equal ratio. The living standard as well as agricultural products has increased and people are feeling good about FMIS.

The FMIS has fully helped to grow both the seasonal and non-seasonal crops, vegitables, fruits. Not only that this has indirectly helped to conduct other agro-based activities such as poultry farming, cow farming, buffallo farming, fishery etc. It has increased productivity and production of the crops. On the other hand it has increased the sense of co-operation, and gaining the collective goal collectively. After the implementation of FMIS, farmer begun to grow the inter-crop farming. Similarly, it has increased the self participation and decision making capability of the local level of people.

The system is originally user designed, constructed and maintained by the people so that the government load has found to be less regarding to that specific location. Local level of unskilled and simi-skilled males and female people are found to be engaged in agricultural activities through the FMIS.

In a nutshell, it can be said that this FMIS has brought a drastic change in the livelihood of the inhabitants of Ratna Nagar, Chitwan and expected that it may surely fill the vacuum of unemployment which is prevalent in rural area, especially in Ratna Nagar Municipality, Chitwan.

#### **Table of Contents**

Letter of Recommendation	i
Approval Sheet	ii
Acknowledgements	iii
Abstract	iv
Acronyms	v
CHAPTER - I : INTRODUCTION	Error! Bookmark not defined.
1.1 Background of the Study	Error! Bookmark not defined.
1.2. Statement of the Problem	Error! Bookmark not defined.
1.3. Limitations of the Study	Error! Bookmark not defined.
1.4. Singificance of the Study	Error! Bookmark not defined.
1.5. Rationale of the Study	Error! Bookmark not defined.
1.6. Methodology of the Study	Error! Bookmark not defined.
1.6.1. Research Design	Error! Bookmark not defined.
1.6.2. Study Area	Error! Bookmark not defined.
1.6.3. Nature of Data	Error! Bookmark not defined.
1.6.4. Universe and Sampling	Error! Bookmark not defined.
1.6.5. Techniques of Data Collection	Error! Bookmark not defined.
1.6.5.1. Interview Schedule	Error! Bookmark not defined.
1.6.5.2. Observation	Error! Bookmark not defined.
1.6.5.3. Questionnaire	Error! Bookmark not defined.

1.6.5.4. Field Visit Error! Bookmark not defined.
1.6.6. Data Analysis and Interpretation Error! Bookmark not defined.
1.7. Organization of the Study Error! Bookmark not defined.
1.8. Review of the Literature Error! Bookmark not defined.
1.8.1. Theoretical Perspective Error! Bookmark not defined.
1.8.2. Indigenous Knowledge and Irrigation Error! Bookmark not defined.
1.8.3. Farmers Managed Irrigation System in Nepal Error! Bookmark not defined.
1.8.4. Institutional and Organizational Aspect of IrrigationError! Bookmark not defined.
1.8.5 Conceptual Framework Error! Bookmark not defined.
CHAPTER - II : PROFILE OF THE STUDY AREA Error! Bookmark not defined.
2.1. Physical Setting Error! Bookmark not defined.
2.2 Settlement Pattern Error! Bookmark not defined.
2.3 The Village Assembly Error! Bookmark not defined.
2.3.1 Public Work Programmes Error! Bookmark not defined.
CHAPTER - III : DATA PRESENTATION AND ANALYSIS Error! Bookmark not defined.
3.1. Existance and Construction of Ratna Nagar Nahar Irrigation System Error!  Bookmark not defined.
3.2. Population Composition Error! Bookmark not defined.
3.3. Irrigation Coverage Facility Error! Bookmark not defined.
3.4. Animal Husbandry Error! Bookmark not defined.

3.4.1. Occupational Status	Error! Bookmark not defined.
3.4.2 Production of Crops	Error! Bookmark not defined.
3.4.3. Land Irrigable before FMIS in Ratna Nag <b>Bookmark not defined.</b>	gar-9 & 10, Chitwan <b>Error!</b>
3.4.4 People's Participation in FMIS	Error! Bookmark not defined.
3.4.5. Attending the Meeting	Error! Bookmark not defined.
3.4.6. Contribution from the People	Error! Bookmark not defined.
3.4.7. Monthly Income of the People	Error! Bookmark not defined.
3.4.8. Monthly Deposit	Error! Bookmark not defined.
3.4.9. Children Studying in Government or Priv	ate Schools Error! Bookmark
3.5. Rights to Irrigation water	Error! Bookmark not defined.
3.6. Organization	Error! Bookmark not defined.
3.7. Water Allocation and Distribution	Error! Bookmark not defined.
3.8. Operation and Maintenance	Error! Bookmark not defined.
3.9. Resource Mobilization	Error! Bookmark not defined.
3.10. Decision Making	Error! Bookmark not defined.
3.11. Dispute Management	Error! Bookmark not defined.
CHAPTER - IV : SUMMARY, FINDINGS, CONCLUSIO	
4.1. Summary	Error! Bookmark not defined.

4.2. Findings	Error! Bookmark not defined.
4.3. Conclusion	Error! Bookmark not defined.
4.4. Recommendations & Suggestions	Error! Bookmark not defined.

#### **ACRONYMS**

CBS Central Bureau of Stastistics

DOI Department of Irrigation

FMIS Farmer Managed Irrigation System

F/Y Fiscal Year

GoN Governmet of Nepal MOI Ministry of Irrigation

TU Tribhuwan University

WUA Water Users Association