

Socio Economic Impact of Biogas Plants

(A Case Study of Bungkot VDC Gorkha District)

A Thesis

Submitted to

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Humanities and Social Sciences Tribhuvan University,
Kirtipur**

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By

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RECOMMENDATION

This Thesis entitled "**Socio-economic Impact of Biogas Plants: A Case Study of Bungkot VDC of Gorkha District**" has been prepared by Kalpana Bhandari under my guidance and supervision for the partial requirement of Degree of Master of Arts in Rural Development. Therefore this thesis is recommended the evaluation committee for approval.

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APPROVAL SHEET

This is certified that this thesis submitted by Kalpana Bhandari entitled "Socio-economic Impact of Biogas Plants: A Case Study of Bungkot VDC of Gorkha District" has been approved by the evaluation committee of the central department of Rural Development in prescribed format of the faculty of Humanities and Social Sciences.

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ABSTRACT

Nepal has one of the lowest per capita energy consumption in the world of just 15 GJ, in which the traditional sources of energy shared the largest proportion of the total energy consumption in the country. The residential sector is the largest consumer sector of the total energy. The rural residential sector highly depends on the fuel wood energy which is the major cause of deforestation. The deforestation rate can be minimized if the dependency on fuel-wood energy is reduced. For, this biogas technology has become an important alternative.

This study entitled "Socio-economic Impact of Biogas Plants (A Case Study of Bungkot VDC of Gorkha District) was conducted with the objectives of findings, capacity utilization of biogas plants, socio economic impact on work load of men and women health, sanitation, time saving, firewood saved, biogas production, gender involvement, slurry management, agriculture, economic benefit of biogas plants, at Bungkot VDC of Gorkha District. This study is mainly based on the primary information and the data were collected using the techniques of field survey with the help of structured questionnaire, field visit, observation, unstructured interviews.

Majority of the households 61.764% have 5-7 members in their family whereas the number of households engaged in agriculture and service sector are 70.588% and 20.588% respectively.

During the study, it was found that Newars (50%) were main beneficiaries of the biogas plants. The economic condition of the biogas users household was found good and most of the biogas plants (91.176%) were toilet connected. Even though the plants were found underfed, the gas production was sufficient in summer but it was much less in the winter. Biogas energy was used only for cooking foods.

The land holding size on this study area population have 21 ropanies above which is the 60% of total population. The people of this study area mostly reared buffaloes study as the reliable source of cowdung raw materials for providing biogas in household affairs.

All the surveyed biogas plants were in good condition and well functioning. Biogas user households were satisfied with the performance of biogas plants because it had positive impact on social, economic, environmental, educational and health aspects and many benefits for them. Comparatively, women had experienced much improvement in their health status after the installation of biogas plants then men.

People perceptions about biogas plants were found positive. Biogas has made easy for cooking and maintaining clean environment. The biogas plant made the provision of toilet and also reduced the workload of people. Also biogas plants raised the having started and social prestize of them. Thus, both male and female were equally happy with biogas plants.

CONTENTS

	Page
Recommendation Letter	i
Approval Sheet	ii
Acknowledgement	iii
Abstract	iv
Table of Contents	v
List of Tables	viii
Abbreviations/Acronyms	ix
CHAPTER I INTRODUCTION	
1.1 Background of the study	1- 7
1.2 Statement of the problem	3
1.3 significance of the study	5
1.4 objective of the study	6
1.5 Limitation of the study	6
1.6 Origination of the study	7
CHAPTER II : LITERATURE REVIEW	8-
2.1 Conceptual framework	8
2.1.1 Alternative sources of Energy	8
2.1.2 Biogas in General	10
2.2 Empirical framework	12
2.2.1 Biogas in Nepalese Situation	12
CHAPTER III : RESERCH METHODOLOGY	20-
3.1 Research Design	20
3.2 Nature and source of data	20
3.2.1 Primary Sources	20
3.2.2 Secondary sources	21
3.3 Sample size	21
3.4 Data collection tools and techniques	21
3.4.1 Structured Questionnaire	21
3.4.2 Unstructured interviews	22
3.4.3 Field visit and observation	22
3.5 Data processing and analysis	23

CHAPTER - I

1

INTRODUCTION

1.1 Background of the Study

1.2 Statement of the Problem

1.3 Significance of the Study

1.4 Objective of the Study

1.5 Limitation of the Study

1.6 Organization of the Study

CHPATER - II**LITERATURE REVIEW**

2.1 Conceptual Framework

2.1.1 Alternative Sources of Energy

2.1.2 Biogas in General

2.2 Empirical Framework

2.2.1 Biogas in Nepalese Situation

CHPATER - III**RESEARCH METHODOLOGY**

3.1 Research Design

3.2 Nature and Source of Data

3.2.1 Primary Sources

3.2.2 Secondary Sources

3.3 Sample Size

3.4 Data Collection Tools and Techniques

3.4.1 Structured Questionnaire

3.4.2 Unstructured Interviews

3.4.3 Field Visit and Observation

3.5 Data Processing and Analysis

CHAPTER - IV

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EVOLUTION OF BIO-GAS ENERGY IN NEPAL Error! Bookmark not defined.

) Energy Situation in Nepal **Error! Bookmark not defined.**

) Introduction of Biogas and Biogas Plants **Error! Bookmark not defined.**

) Brief History of Biogas and Its Potential in Nepal **Error! Bookmark not defined.**

) Biogas as Rural Alternative/Renewable Energy **Error! Bookmark not defined.**

CHAPTER - V Error! Bookmark not defined.

SOCIO ECONOMIC STATUS OF BIOGAS USERS Error! Bookmark not defined.

5.1 Ethnic/Caste **Error! Bookmark not defined.**

5.2 Occupation **Error! Bookmark not defined.**

5.3 Family Size **Error! Bookmark not defined.**

5.4 Educational Status **Error! Bookmark not defined.**

5.5 Land Holding **Error! Bookmark not defined.**

5.6 Livestock **Error! Bookmark not defined.**

5.7 Size of Biogas **Error! Bookmark not defined.**

5.8 Reason for Biogas Installation **Error! Bookmark not defined.**

5.9 Source of Information for Installation Biogas Plants **Error! Bookmark not defined.**

CHAPTER VI Error! Bookmark not defined.

SOCIAL BENEFIT OF BIOGAS PLANTS OWNERS Error! Bookmark not defined.

6.1 Reduction in Workloads and Saving of Time **Error! Bookmark not defined.**

6.2 Use of Surplus Time **Error! Bookmark not defined.**

6.3 Health and Sanitation **Error! Bookmark not defined.**

6.3.1 Toilet Attachment with Biogas Plant **Error! Bookmark not defined.**

6.3.2 Reduction in Disease **Error! Bookmark not defined.**

6.3.3 Sources of Drinking Water **Error! Bookmark not defined.**

CHAPTER - VII Error! Bookmark not defined.
ECONOMIC BENEFITS OF BIOGAS PLANTS OWNERS Error!

Bookmark not defined.

7.1 Saving of Firewood **Error! Bookmark not defined.**

7.2 Saving of Money **Error! Bookmark not defined.**

7.3 Specific Benefits from the Saving **Error! Bookmark not defined.**

7.4 Slurry and Agriculture **Error! Bookmark not defined.**

7.4.1 Increment in Agriculture Production **Error! Bookmark not defined.**

7.5 Operation and Maintenance **Error! Bookmark not defined.**

7.6 User's Perception and Suggestions **Error! Bookmark not defined.**

7.6.1 Perceptions **Error! Bookmark not defined.**

7.6.2 Suggestions **Error! Bookmark not defined.**

CHAPTER VIII Error! Bookmark not defined.

SUMMARY, CONCLUSION AND RECOMMENDATIONS Error!

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8.1 Summary **Error! Bookmark not defined.**

8.2 Conclusion **Error! Bookmark not defined.**

8.3 Recommendations **Error! Bookmark not defined.**

References

Questionnaire

Map

LIST OF TABLES

Table 5.1: Ethnicity/Caste of Households	30
Table 5.2: Occupation of the Respondent	31
Table 5.3: Distribution of Family Size	32
Table 5.4: Educational Status	32
Table 5.5: Land Holding Status of Biogas HHs	33
Table 5.6: Livestock Population	34
Table 5.7: Size of Biogas Plants	34
Table 5.8: Reason for Biogas Installation	35
Table 5.9: Source of Information	36
Table 6.1: Reduction in Workloads and Saving of Time	37
Table 6.2: Specific Benefit of Surplus Time	38
Table 6.3.1: Toilet Attachment with Biogas Plant	39
Table 6.3.2: Reduction in Disease	40
Table 6.3.3 : Sources of Drinking Water	40
Table 7.1: Saving of Firewood	41
Table 7.2: Saving of Money	42
Table 7.3: Specific Benefits Made from Saving	43
Table 7.4: Slurry and Production Increment	44

ABBREVIATIONS/ACRONYMS

ADB/N	- Agriculture Development Bank of Nepal
AEPC	- Alternative Energy Promotion Centre
BSP	- Biogas Support Programme
CBS	- Central Bureau of Statistics
CDM	- Clean Development Mechanism
CEN	- Clean Energy Nepal
CEDA	- Centre for Economic Development and Administration
CEDECON	- Central Department of Economics
Dr.	- Doctor
Devt.	- Development
DCS	- Development and Consorting Service
FY	- Fiscal Year
GDP	- Gross Domestic Product
GGC	- Gobar Gas Company
GJ	- Giga Joule
HH	- Household
HR	- Hour
HMG/N	- His Majesty's Government of Nepal
INGO	- International Government Organization
KG	- Kilogram
KM	- Kilometer

KVIC	- Khadi and Village Industries Commission
LPG	- Liquefied Petroleum Gas
MOA	- Ministry of Agriculture
MOF	- Ministry of Finance
MOST	- Ministry of Science and Technology
MT	- Metric Ton
MU	- Megha Watt
NPC	- National Planning Commission
No	- Number
NOV	- November
NTFP	- Research and Development
PV	- Photo Volatic
RD	- Research and Development
RET	- Renewable Energy Technology
Rs	- Rupees
SLC	- School Living Certificate
TU	- Tribhuvan University
TV	- Television
UMN	- United Mission of Nepal
UN	- United Nation
VDC	- Village Development Committee
WB	- World Bank
WECS	- Water and Energy Commission Secretariat

Map

