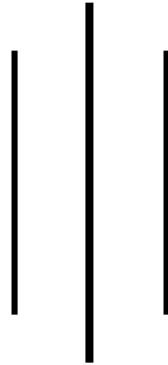
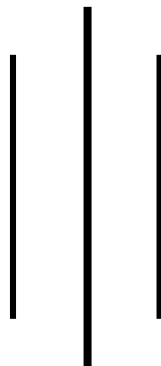


Socio- Economic Impact of Bio-Gas Plant
(A case study of Dhikurpokhari VDC; Kaski, District)



PROJECT REPORT:
SUBMITTED TO THE CENTRAL DEPARTMENT OF RURAL
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KIRTIPUR, KATHMANDU



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RECOMMENDATION LETTER

This project report entitled “**Socio – Economic Impact of Bio – Gas Plant: A Case Study of Dhikurpokhari V.D.C. Kaski District**” has been prepared by Bishwa Raj Subedi under my supervision and guidance. This work is the out come of his own intensive and independent research work and has been prepared in the format as required by faculty. I here by recommend this project report for approval and acceptance.

Associate Prof. Rhiddi Bir Singh

(Supervisor)

Central Department of Rural Development

Approval Sheet

We certify that project report entitled “Socio-economic impact of Bio-gas plant. A case study of Dhikurpokhari V.D.C. Kaski district” Submitted by Mr. Bishwaraj Subedi in partial fulfillment for the requirements of the degree of master of Arts in Rural Development has been approved by this department.

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EXECUTIVE SUMMARY

Biogas technology is clean energy technology and popular now a days. Biogas is more popular in rural areas where each and every household keep buffalo and cattle. The popularity of biogas in rural areas lies mainly in the fact that it enables an effective utilization of locally available resources. Realizing the existing problem of energy, government has started the biogas installation programme in seventh plan (1985-90) (NPC: 1985:90). After restoration of democracy in Nepal, the importance of the rural energy has been felt at the policy level.

Socio-economic impact of biogas in Dhikurpokhari VDC has been chosen as a special topic to address the problem of energy in the study area and to provide the scope for the dissemination of the biogas technology which seems to be potential for future development. Raising concern over firewood and kerosene as a fuel has led to the installation of biogas in the study area, Nepal is heavily based on agriculture and it is suffering from the low productivity, So, its productivity has to be maintained for overall development. An immediate solution of their problem is to maintain the soil fertility which is possible by the application of bio-slurry on the farm instead of chemical fertilizer. As biogas technology does not require procurement of raw material from outside and the rural people can set up it utilizing their and keep clean environment as well, biogas is seen as the major effective technology for the upliftment of the energy economy. Due to higher productivity, less workload for women and reduced, pressure on the traditional fuel resources, This technology may maintain ecological balance in the study area as well as in the nation as whole.

The present study discuss the benefits of the biogas technology which accrue the level of individual family. Biogas is making significant contribution in meeting the cooking energy requirement in the study area. Higher standard of living higher productivity, reduces pressure on traditional natural fuel resources are the main benefit of biogas generation system.

Dhikurpokhari V.D.C of Kaski district has been taken as the study area. Out of the total of 120 biogas households 30 household (25%) has been taken as the sample households using simple random sampling.

Before selecting a topic, a brief review of the literature related to the impact study of biogas on users has been studied. Primary as well as secondary data have been used in this study.

The main objective of this study is to find out socio-economic impact of biogas plant on users, impacts of slurry on production and to study the impact of forest resources.

Household Survey threw Interview, field observation has been taken as a method of data collection and collected data has been analyzed using simple statistical tool such as, average, percentage table. Biogas seems to have succeeded in substituting traditional biomass and fossil fuels. However, it has not completely substituted the traditional energy. The users of biogas has brought the significant improvement in the quality of life of the family members and reduction on the work load of women who are the sole manager in kitchen and take the responsibility of household cooking.

Where talking about the plant ownership Brahmans are ahead in installing the plant and most of the plant owners have the occupation of agriculture.

Education is not found to effect the installation of the biogas plant. It is because even the uneducated people have been found to install the biogas plant.

Small farmers who fall in the category of 10-20 Ropani land has the highest ratio out of total biogas plant owners. Every family has some livestock. The number of livestock above four is about 60 percent where keeping buffalo is found to be in most of the households

Toilet attached biogas plant seen in most of the households. Those who have toilet attached plant is found to maintain the clean and healthy environment.

Introduction of biogas technology has been one of the successful and one of the effective renewable source of energy so far because of number of reasons namely in terms of production increment, protecting environment from pollution, checking the rate of deforestation, providing the ease to the women in the study area observation shows in this study, there is a increasing trend to depend on biogas which seems to be a good indicator for forest resource conservation.

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ABBREVIATIONS/ACRONYMS

V.D.C.	-	Village Development Committee
\$	-	American Dollar
G.D.P	-	Gross Domestic Product
MOF	-	Ministry of finance
HMG	-	His Majesty's Government
BSP	-	Bio-gas support programme
NPC	-	National planning commission
MT	-	Mega Ton
MW	-	Mega watt
RETRUD	-	Rural Energy Technology for Rural urban
development		
CES	-	Centre for Energy studies
KVIC	-	Khadi and Village Industries Commission
ADB/N	-	Agriculture Development Bank Nepal.
FCN	-	Fuel corporation of Nepal
UMN	-	United Mission to Nepal
DCS	-	Development and consorting services
GGC	-	Gobar Gas company
NBPG	-	Nepal bio-gas promotion group
AEPC	-	Alternative Energy Promotion Centre
MOST	-	Ministry of Science and Technology
WECS	-	Water Energy Commission Secretarial
Co ₂	-	Carbon dioxide gas
LPG	-	Liquified Petroleum gas
NICE	-	Nepal India conservation
UN	-	United Nation
FYM	-	Farm Yard Manure
RET	-	Renewable Energy Technology
LAC	-	Lumle Agriculture Centre
CBS	-	Central Bureau of static
CRT	-	Centre for Rural Technology