# SOCIO-ECONOMIC IMPACT OF BIOGAS PLANT ON USERS:

## A Case Study of Dharampur VDC, Jhapa District

**A**
**THESIS**
**Submitted to**
Central Department of Rural Development
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# RECOMMENDATION LETTER

This is to certify that **Bed Nath Giri** has prepared this Thesis on ***Socio-Economic Impact of Biogas Plant on Users***: A Case Study of Dharampur VDC, Jhapa District, under my guidance and supervision. He has successfully completed the Thesis in the form as required by the Faculty/Department.

I forward this Thesis for examination and also recommend for acceptance.

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Dr. Prem Sharma

Date: 2063/04/03 (19 July, 2006)

## APPROVAL LETTER

This is certified that the Thesis Work submitted by Bed Nath Giri entitled ***Socio-Economic Impact of Biogas Plant on Users***: A Case Study of Dharampur VDC, Jhapa District, has been accepted in partial fulfillment of the requirements for Degree of Master of Arts in Rural Development by this Department in the prescribed format of the Faculty of Humanities and Social Sciences and is forwarded for the evaluation.

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## ABSTRACT

This research was conducted in Dharampur VDC of Jhapa district. The title of the study was Socio-Economic Impact of Biogas Plant on Users. necessary information data were gathered from 26 respondents household of Biogas Plant users using interview schedule. The study has presented a description and assessment of various Socio-Economic Impact of Biogas Plant Users in the study area. The study has focused on particular attention to advantages of utilization of Biogas Plant, energy, time and financial advantages, improvement of health sanitation and environment and advantages of slurry in agricultural production after utilization of Biogas Plant.

From the field survey, it is found that the majority of respondent household use the Biogas only for easy cooking not for lighting and found satisfied with their Biogas Plants. Agriculture is the main occupation of the Biogas Plant users. Respondent households about 84.61 percent respondents were engaged in agriculture. Due to the installation of Biogas Plant in the households, required money for buying firewood, Kerosene and required time for collecting firewood and cooking was highly saved and that saving money is utilized 65.38 percent household for educational activities, and the saving time is utilized agricultural as well as income generating activities.

Majority of the Biogas Plant users household had realized that there were substantially changes: improved indoor health condition through smokeless cooking, improved in sanitation and reducing burning firewood, agricultural residue, Cow dung directly helped to improved clean outdoor environment.

Slurry is highly used for agricultural production. More than 90 percent sampled respondents household were used the slurry in agriculture and of the total respondent 42.30 percent responded that the slurry is more fertile than dung. They were highly satisfied with slurry and 69.23 percent Biogas users household have used slurry for agro crops.

It is found in the study area that, overall positive Socio-Economic Impact of Biogas Plant on Users household. It also has helped to save money, time, energy and also helped to clean health, sanitation and environment. And the slurry is highly accepted by the users in their agriculture that significantly improved the agricultural production.

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## ACRONYMS

| | | |
|---|---|---|
| AEPC | : | Alternative Energy Promotion Center |
| ADB/N | : | Agriculture Development Bank Nepal |
| BS | : | Bikram Sambat |
| BSP | : | Bio-gas Support Programme |
| BDC | : | Biogas Development Committee |
| CBS | : | Central Bureau **O**f Statistics |
| CDM | : | Clean Development Mechanism |
| ERDG | : | Energy Research & Development Group |
| FIG | : | Figure |
| GDP | : | Gross Domestic Product |
| GNP | : | Gross National Product |
| GJ | : | Giga Joule |
| GGC | : | Gobar Gas Company |
| HMG/N | : | His Majesty's Government of Nepal |
| KVIC | : | Khadi and Village Development Committee |
| MJ | : | Mega Joule |
| NFC | : | National Fuel Corporation |
| UMN | : | United Mission to Nepal |
| VDC | : | Village Development Committee |