# BIOGAS: An Alternative Source of Energy (A Case Study of Bardibas VDC, Mahottary District, Nepal)

#### A Thesis

Submitted to the Central Department of Economics,

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In partial Fulfillment of the Requirements for the Degree of

Master of Arts

In

**Economics** 

By

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#### **RECOMMENDATION LETTER**

This thesis entitled "Bio-GAS: An Alternative Source of Energy in Mahottary District: A Case Study of Bardibas, VDC of Mahottary District, Nepal" has been prepared by Mr. Damodar K.C under my guidance and supervision. I hereby recommend this thesis for examination by the Thesis Committee as a partial fulfillment of the requirements for the Degree of MASTER OF ARTS IN ECONOMICS.

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Dr. Neelam	Kumar Sharma

Thesis Supervisor

Date:

#### APPROVAL SHEET

We cerify that this thesis entitled "bio-Gas: An Alternative Source of energy in mahottary District: A case study of Bardibas VDC of Mahottary District, Nepal "Submitted by Mr Damodar K.C to the center Department od Economics, Faculty Humanities and Social Science, Tribhuwan University, in part fulfillment of the requirement for the Degree of MASTER OF ARTS IN ECONOMICS has been fond satisfactory in scope and quality. Therefore, we accept this thesis as a part of the said degree.

This thesis entitled Masters of Arts in Economics has been approved.

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#### **ACRONYMS**

AEPC Alternative Energy Promotion Center

BAED Biogas and Agriculture Equipment Development

BG Biogas

ADB Agricultural Development Bank

BHH Biogas Household

BOP Balance of Payment

BSP/N Biogas Support Program/Nepal

CDM Clean Development Mechanism

CMS Consolidated Management Services Nepal (p) Ltd.

MOST Ministry of Science and Technology

FY Fiscal Year

GGC Gobar Gas Company

IRR Internal Rate of Returns

KFW Kreditanstalt Fur Wiederaufbau

LPG Liquid Petroleum Gas

MOAC Ministry of Agriculture and Cooperative

NOC Nepal Oil Cooperation

MOF Ministry of Finance

NPC National Planning Commission

BOD Biological Oxygen Demand

COD Chemical Oxygen Demand

MCDA Multi- Criteria Decision Aiding

DEA Data Envelopment Analysis

NPV Net Present Value

AEPC Alternative Energy Promotion Center

NBL Nepal Bank Limited

NPK Nitrogen Phosphorus Potash

VDC Village Development Committee