

United Mission to Nepal. **Biogas: Challenges and Experience from Nepal. Volume I.** First Edition 1985. 129.p. BSP Lib Temp No. 114.

### **Abstract**

For the last 30 years, the United Mission to Nepal (UMN) has sought to meet the basic needs of people in Nepal. Related to the areas of medical, educational and economic development. Its personnel have come from many different lands with various qualifications and skills, working towards enabling people by offering opportunity and training. There has been a mutual learning and sharing experiences, resulting in projects and programmes, which emphasises service towards others and the equitable sharing of benefits among the less advantaged and privileged.

Biogas is one area of the development and sharing of appropriate technology, which is geared to making renewable energy resources available to those, who need them. For the past 7 years, the Development Consulting Services (DCS) of UMN, at Butwal, has assigned and supervised the research and development of improved biogas plants and DCS engineers and technicians in the laboratory and workshops, as well as in the field, has closely monitored appliances. Testing of the performances of installed biogas plants and related equipment has been oriented to the customers on the farms of Nepal and it has been carefully monitored to ensure not only quality control, but also quality of operation.

This book describes the concept, purposes, implementation, constant revision, and implicates whole process and its history. Amply illustrated and informative, the book records the achievements (and failure) of a dedicated task force, which has persisted in a quest for advancing a technology, despite limited facilities. They have also gone beyond the mere mechanics and technicalities to address the economic, social and management aspects of biogas technology in the context of Nepal as a culture and society seeking development goals.

*Biogas- Challenges and Experience from Nepal* comprises two volumes: Volume I is a practical guide for the field workers, Volume I deals basically with theory and research work.

Volume I, written and compiled by reputed experts in biogas technology, is divided into 14 chapters as presented below:

<b>Chapter No.</b>	<b>Title</b>	<b>Author</b>
1.	Usefulness of Biogas Technology	David Fulford
2.	Floating Steel Drum Design	John Finely
3.	Fixed Concrete Dome Design	David Fulford
4.	Tunnel Design	John Finely
5.	Selection of Design, Size, Materials, and Site	John Finely
6.	Gas Piping and Accessories	John Finely
7.	Household Gas Appliances	John Finely
8.	Commercial Uses of Biogas	David Fulford
9.	Starting, Operating, Servicing, and Safety	John Finely
10.	Improvements in Biogas Performance	Mamie Lau-Wong
11.	The Economics of Biogas Systems	Mamie Lau-Wong
12.	A Practical Guide to Community Biogas	Andrew Bulmer
13.	Biogas Extension	David Fulford
14.	Further Ideas for Biogas in Nepal	David Fulford