

# BIOGAS

## The Indian NGO Experience

A FPRO-CHF Network  
Programme

Soma Dutta  
Ibrahim H Rehman  
Preeti Malhotra  
Venkata Ramana P



FPRO

teri



CHF



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# PREFACE

The National Project on Biogas Development (NPBD) has been one of the most prominent renewable energy programmes in India. Introduced in 1981/82, the programme has made significant contributions in terms of providing clean and convenient cooking fuel and fertilizer for rural families, bringing about, at the same time, an improvement in the quality of life of the people, especially, the women. However, compared to the magnitude of rural energy requirements, its impact has been small, and the rate of penetration has been slow. The 2.5 million biogas plants installed during the last 16 years are expected to save about 6–8 million tonnes (mt) of fuelwood whereas the total wood consumption in the rural domestic sector is estimated at over 200 mt. A number of institutional and other factors appear to be responsible for such a low scale of operation. However, considering the appropriateness of biogas technology for meeting rural energy requirements, it is imperative to make it broad-based by involving stakeholders at the grassroots level on a large scale. It is in this context that the involvement of non-governmental organizations (NGOs) assumes significance, as they will, given their proximity and commitment to grassroots-level development, be able to perform the role of implementors effectively. The experience of NGOs who have been associated with NPBD amply illustrates this pattern.

The Action for Food Production–Canadian Hunger Foundation (AFFPRO–CHF) network, comprising a total of over 100 NGOs, has been a unique experiment in involving the non-governmental/voluntary sector in the dissemination of biogas technology. By installing over 97 000 biogas plants in different parts of the country over a decade, this network has enabled a wider reach of the technology. This publication is an outcome of a study conducted by the Tata Energy Research Institute to assess the impact of the biogas programme implemented by the AFFPRO–CHF network. The study was conducted for six months from December 1996 to May 1997. In-depth case studies of 12 NGOs were conducted to document the experiences of the network and to share them with other organizations and institutions. The broad objectives of conducting and publishing this study are: to share experiences and learnings from the biogas technology promotion programme with other development organizations; assist in shaping the energy and environment related policies of the government and national and international development organizations; and assist in the planning, design, and implementation of future rural energy programmes.

The first part of the book introduces the AFPRO—CHF programme and its achievements over the years. This is followed by the presentation of findings, in terms of performance of the installed biogas plants and the impacts on the users. The performance of the plants deals with both hardware aspects like the quality of the material used and software aspects like the back-up support for maintenance. The impact of the programme has been analysed in terms of the direct and indirect benefits accruing to user households. An attempt has also been made to give particular emphasis on women's involvement in the programme.

The strategy adopted for implementation is a crucial factor for the success of any developmental programme. While the strategies adopted by various NGOs may be situation-specific, some basic elements, however, have to be common across NGOs essential for effective programme implementation. The final part of the book deals with this aspect, and analyses the implementation approach in terms of motivation, women's involvement, financial arrangements, technology innovations, etc. Finally, these findings have been synthesized in the form of strengths and weaknesses of the network, the threats faced, and the opportunities ahead. It is hoped that the experience shared in this book will serve as a starting point of a dialogue among stakeholders on the future strategies for promoting biogas and other rural energy programmes.



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Mr Tom Taylor, Deputy Director, CHF (now called Partners in Rural Development), Ottawa initiated this project idea in 1995 and took keen interest in its progress. We thank Mr Robert Granke, CHF for his contributions.

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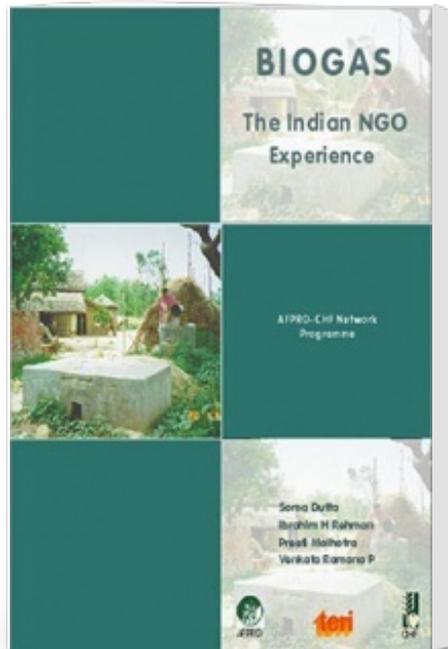
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### **TERI project team**

<i>Venkata Ramana P</i>	Dean, RRM Division
<i>Soma Dutta</i>	Research Associate
<i>Ibrahim H Rehman</i>	Research Associate
<i>Preeti Malhotra</i>	Research Associate
<i>Ram Chandra Pal</i>	Research Assistant
<i>Phool Badan Singh</i>	Research Assistant
<i>Asim Mirza</i>	Research Assistant
<i>Anjali Mohan Bhatia</i>	Research Associate
<i>Kaushik Bhattacharjee</i>	Research Associate

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Author : **Soma Dutta, I H  
Rehman, Preeti Malhotra,  
Venkata Ramana P**

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