

de Castro J. F. M.; Kanel N. R. and Jha, P. SNV/N. **Mid-Term Review of the Biogas Support Programme. Part of Phase III. Final Report.** Biogas Support Programme. June 1999. 72p. BSP Lib Temp No. 16.

### **Objectives**

According to the TOR the aims of the evaluation were: (a) to assess the progress towards the programme's objectives; (b) to assess the effectiveness and efficiency of the strategies applied to reach the programme's objectives; and (c) to indicate how the current BSP programme can be progressively integrated into Nepalese organisational set-up.

### **Approach and Methodology**

BSP III effectively started on March 1, 1997 and Part I of this phase will last up to July 15, 1999. Up to the end of March 1999, the number of biogas plants constructed under BSP III was 20,686. This represents a lag of 3,018 plants related to the target number. It is clear that the programme unless there is a quick recovery will not achieve its stated numeric objective. BSP management is not to be blamed for this delay, as the programme continued establishing the prerequisites for its expansion.

The methodological approach consisted of (a) studying the several documents available on the biogas situation in Nepal; (b) holding meetings and discussions with all actors involved; (c) organising a field trip in the districts of Dhankuta, Morang, Sunsari and Tehrathum where biogas plants were visited and users were interviewed and activity on quality control was observed. During this trip meetings were held with construction companies, Non-governmental organisations (NGOs) and local branch offices involved in BSP III.

### **Main Findings**

#### *Recommendations for Market Development*

Most of the plant owners are either the rich or medium-level farmers with some education and exposure and collateral for loans. Future market penetration will mean increasingly targeting the less well off and credit facilities need also to be provided through community loan schemes or group collateral mechanism.

In an attempt of BSP to integrate their programme with the MOA, livestock development programmes must be continued. At the same time, more collaboration with other programmes like PPP and REDP will lead to increase in the market size. Linkages with health programmes especially those focusing on women and children should be piloted, reviewed periodically, fine-tuned and replicated to a wide scale.

In the remaining period of the current phase, training for bank staff and partner NGOs must be done with the overall objective of promotion and marketing of the biogas technology.

#### *Quality Control and the Future*

The actual quality control system works well but it is intrinsically expensive. Among many possible options, the Mission recommends the introduction of the so-called "Biogas Servicing Companies". Such companies would get the "franchise" from the AEPC to service biogas plants in a certain geographical area. The immediate objection to this system is that this Servicing Company would have to pay the costs for all mistakes of the construction companies. Giving the servicing company the right to do the quality control of every plant that they would take over a servicing easily solves this. Biogas plant becomes in this case a "turn-key" technology.

#### *Subsidy*

According to the agreements between HMG/N and donors, the subsidy will have to be reduced across the board by NRs. 1,000 by July 16, 1999 as suggested in Table 1 of the Report. It is possible that after 2002 there would be no subsidy to finance the capital investment on biogas plants.

### *Research*

The Mission is of the opinion that the volume of the on-going biogas programmes and the estimated potential for the application of this technology in Nepal do not justify initiation of research work of basic nature. Possible areas of research for BSP III could be the use of a simple and cheap gas pressure regulator and increase of the efficiency of the gas burning stoves.

### *Promotion*

The actual efforts related to the publication by BSP of brochures, posters, videos, etc. should be maintained. A future strategy for promotion and national scale would be to using radio to emphasis more the health aspects of the use of biogas (including attaching toilet). Another aspect that could be emphasised a subtle way is the prestige that it gives for the family as owner of a biogas plant.

### *Institutional Aspects*

The BSP office should look into the possibility to establish branch/regional offices. This will reduce some of the transport time and cost. Another recommendation that needs to be looked into is the need for continuous learning for the senior staff with managerial responsibilities.

The Mission recommends considering the establishment of a small autonomous organisation (BSO – Biogas Support Organisation). This organisation will work with very few professionals responsible for reporting and documentation, monitoring of the quality assurance system, liaison with HMG/N, banks, NBPG and NGOs and some co-ordination with other donors and INGOs in the alternative energy sector. BSO will have a small board/advisory committee with the representation of the private sector (construction companies and service centres), AEPC and NGOs, which will meet periodically to review progress and give policy guidelines. HMG/N has recently approved and supported the formation of a similar “venture” for the micro-credit sector.

The role of AEPC no matter which institutional option is eventually selected, will be: overall policy formulation; monitoring and evaluation; interface with HMG/N for policy changes; and linkages with donors and INGOs