

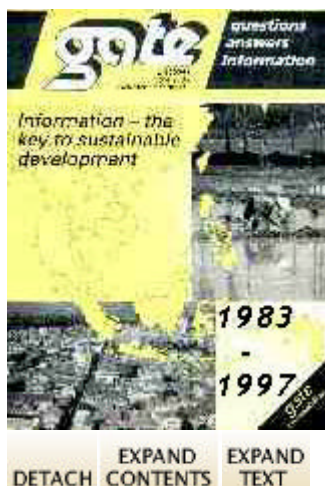
search

subjects

titles a-z

organization

how to



GATE - 4/91 - Environmental NGO's

Topics

- Sewage treatment with soil-and-plant filters
- Recycling by voluntary organisations
- Mechanization and organic agriculture
- The Chinese vertical Brick Kiln
- Biogas-Investment encouraged with public funds
- Appropriate technologies for preserving fruits and vegetables
- Development strategies for fragile lands
- Sustainable land management in the developing world

Biogas-Investment encouraged with public funds

by Hartlieb Euler and Monika Heilig-Polak

Biogas technology clearly benefits the user: it saves him the cost of the energy it replaces and in many cases working time as well. The biofertilizer produced in the fermentation process is a high-quality fertilizer that costs nothing. Hygiene improves. For women in the developing countries, in particular, biogas technology spells progress - smoke-free kitchens and more convenient cooking. For all these reasons it is often assumed that the user whose home the biogas plant is built should also bear the cost of the plant. Biogas plants are not in the same category as roads or public utilities, runs the argument, so why should the state pay for the investment.

In fact, however, biogas technology benefits the community as a whole. Sewage treatment protects water supplies and the environment, reduced deforestation helps to prevent erosion, and, in addition, biogas technology helps save foreign exchange.

In many developing countries, ignorance of the benefits to society on the one hand, and a shortage of public funds on the other prevent the state from adequately subsidizing the implementation of biogas technology.

Levels of subsidization differ widely from country to country. In the "classical" biogas countries such as India and China most of the initial investment for a biogas plant is borne by the state. These are also the countries where the technology is most widespread.

In some other developing countries hybrid forms have evolved: part of the cost is borne by the plant operator (farmers, institutions, municipalities), and part by the community (state, agricultural organization, project).

In industrialized countries, e. g. Germany, the cost is partially borne by the state, by means of a range of structural instruments - including tax benefits for investments linked to environmental protection, statutory regulations, preferential loans, direct subsidies (30 - 70%) for renewable energies, and promotion of research and training.

Less affluent states lack the financial means for such a wide-ranging system of incentives. In such

countries plant construction tends to be assisted by providing government engineers and masons. But the cumbersome state administrative apparatus often leads to inefficiency, paralyzing the initiative of private artisans, business and banks and their willingness to contribute to the investment funds needed.

This is where Technical Cooperation (TC) comes in. Its purpose is to involve the various groups in order to achieve optimum intermeshing of the contributions they can make in establishing the technology. TC projects should encourage the willingness of operators, mediators (banks, artisans, small businesses) and representatives of society (NGOs, farmers' organizations, the state) to invest.

To this end, most TC projects help the state decision-making body to take over and organize this process of mediation and cost-sharing in the longer term. In cooperation with government agencies, a whole package of measures have been developed within the framework of TC to promote the establishment of biogas technology.

Intervention in the finance market

Only few farmers or institutions can finance the relatively high initial investment out of their own funds. Loans are often beyond the reach of smaller farmers in particular, because

- the banks are reluctant to do the work involved in arranging smaller loans;
- the farmers have no collateral to offer;
- the banks have little or no experience with loans for biogas plants;
- the interest is too high;
- the banks have little or no experience with credit lines for biogas technology.

Assistance measures to counteract this include the following:

- establishment of a credit line with a development bank or rural organization;
- re-insurance of the loan (collateralization);
- contributing to the interest (reduction of interest);
- award of a single, non-repayable grant;
- drafting of guidelines for the granting of loans.

Businesses or artisans wanting to construct the plants do not always have the funds needed for transport, tools and preliminary services, either. They too can be helped with the above loan-assistance measures. However, they do not always approach the bank. Should this be the case, they are assisted by supplying tools, equipment and means of transport.

Import of materials

As a rule, biogas plants are built from locally available materials. Occasionally, however, materials have to be imported, in particular accessories such as refrigerators or lamps. Most imported materials and appliances are subject to heavy customs duties. The shortages that this results in can be reduced by the following measures:

- government permission to import materials and appliances duty-free; - establishment of a store for materials which are only occasionally available;
- centralizing imports of materials that are hard to obtain or which it is not worthwhile importing in small quantities;
- encouraging local production of materials which are in short supply; - assistance in transporting the materials in question.

Know-how

Only in a few places is the know-how that is needed to build and operate biogas plants available, adequately developed and accessible to potential plant operators. This shortfall is compensated by the following measures: - public relations/advertising;

- training artisans, technicians and engineers in plant design and construction:
- training of users in plant operation and maintenance;
- advisory services, and employment of experts in government and nongovernmental organizations;
- coordination of activities;
- research and development. A goal of Technical Cooperation is that project activities should gradually be transferred to government and nongovernmental organizations, private banks and businesses. However, this process does not always develop at the level desired, because the social institutions often suffer from a shortage of funds.

The Sun was there before You



[View this page in text format](#)