## Irrigation Projects of West Bengal Pending Clearance

## 19. DR. BIJOY MONDAL: SHRI SUDHIR GHOSAL:

Will the Minister of AGRICULTURE AND IRRIGATION be pleased to state:

- (a) whether it is a fact that a number of Irrigation projects submitted by the Government of West Bengal are pending clearance of the Central Water Commission for long;
- (b) if so, details of the projects submitted by the State Government date-wise; and
- (c) what specific steps have been taken or proposed to expedite clearance of these proposals submitted by the State Government?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND IRRIGATION (SHRI BHANU PRA-TAP SINGH); (a) and (b), No, Sir. Only one medium irrigation project is at present pending in the Central Water Commission for scrutiny. This was received only in January, Six other projects-two of them major-which were received in CWC during the years 1973 to 1976 are now pending with the Government of West Bengal for sending replies to the comments of the Central Water Commission

(c) In addition to the normal correspondence with the State Governments for sending their clarification/replies to comments of Central Water Commission, periodical meetings are also held in the Central Water Commission with the State officers for expediting these cases.

## Study of Bio-gas Plants by Indian Council of Agricultural Research

- 20. SHRI SUDHIR GHOSAL: With the Minister of AGRICULTURE AND IRRIGATION be pleased to state:
- (a) whether the Indian Council for Agricultural Research made any

- study about the clean, cheap and efficient model of Bio-gas plants;
- (b) if so, the details of the research thereof and the names of the Scientists participated in this work and the result achieved;
- (c) whether any action was taken by the Ministry up-to-date to popularise the result achieved by these Scientists; and
  - (d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND IRRIGATION (SHRI BHANU PRATAP SINGH): (a) The Indian Council of Agricultural Research has initiated a coordinated Research Programme on Bio-gas Technology in May, 1977 at the seven centres viz., (1) IARI, New Delhi, (2) Punjab Agricultural University, Ludhiana, (3) G.B. Pant University of Agriculture and Technology, Pantnagar, (4) Haryana Agricultural University Hissar (5) University of Agricultural Sciences, College of Agriculture, Dharwar, (6) Sri Parashakthi College for Women Courtallam, (7) Tamil Nadu Agricultural University, Coimbatore with the Coordinating Centre at IARI. In this scheme, studies are underway to develop more efficient and less expensive bio-gas plants.

- (b) The research thereof is concerned mainly with the organisms, their efficiency, their reaction on different organic wastes, seasonal fluctuation in gas production, reduction of contaminants; manurial value of residue and the cost-benefit ratio of Gobargus plants. The names of the Chief Investigators at different research centres are:—
  - 1. IARI, New **Delhi—Dr. T.** D. Biswas, Head, Division of Soil Science and Agricultural Chemistry.
  - 2. PAU, Ludhiána—Dr. M. S Grewal, Associate Professor, Civil Engineering.
  - 3. G. B.Pant University of Agri. & Tech., Pantnagar—Shri S. P. Kul-

shreshtha, Associate Professor, Deptt. of Agril, Engg.

- 4. HAU, Hissar—Dr. P. Tauro, Professor & Head, Deptt. of Microbiology.
- 5. University of Agril. Sciences, College of Agriculture, Dharwar—Dr. T. K. Ramachandra Reddy, Professor, Agricultural Microbiology.
- 6. Shri Parashakthi College for Women, Courtallam—Selvi S. Jana-ki—Lecturer, Bio-Chemistry.
- 7. TNAU—Coimbatore—Shri K. R. Swaminathan, Professor & Head, Department of Farm Machinery.
- (c) Improvement is being made in the design and efficient working of the plants and in reducing the cost of production. Work has been done on the suitability of the materials for gas production, measures to prevent lowering of gas production during winter months and efficient handling and storage of residual slurry for crop production. It is observed that sawdust supplementation at 5 per cent level increased gas production upto 40 per cent. Work is in progress to assess the fuel and manurial values. In addition to the above, the Khadhi and Village Industries Commission has done pioneering work in the design and installation of Bio-gas plants. Also, a simple and cheap model called "Janata" Bio-gas plant has been developed by the Gobar Gas Research Station, Ajitmal, Etawah District, U.P.
- (d) The popularisation work was done by the Farm Information Unit, Directorate of Extension of the Ministry of Agriculture and Irrigation, which published an illustrated booklet entitled "Instal a cow-dung gas plant."

Under a Central Sector Scheme for setting up of gobar gas plants, over 59,000 gas plants were installed during 1974 to 78.

## Installation of Bio-gas Plants

- 21. SHRI SAKTI KUMAR SAR-KAR: Will the Minister of AGRICUL-TURE AND IRRIGATION be pleased to state:
- (a) whether so far only 60,000 biogas plants have so far been installed in the country out of the target of 10,00,000 bio-gas plants during the fifth plan period;
  - (b) if so, the reasons thereof; and
- (c) action taken up-to-date to popularise bio-gas plants?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND IRRIGATION (SHRI BHANU PRATAP SINGH); (a) The target for setting up of bio-gas plants for Fifth Plan was 1,00,000 plants. Against this, about 60,000 plants have been installed upto 1977-78.

- (b) The programme was well received in certain States; however, in others the slow progress is due mainly to unfavourable climatic conditions, higher cost of the plant, and lack of felt-need amongst farmers especially who have few cattle heads.
- (c) Steps adopted for popularisation of bio-gas plants include provision of central subsidy, loan facilities from nationalised banks, technical guidance to farmers and publicity through extension workers, published material in local languages and mass media. Presently, the rate of central subsidy is 50 per cent of the capital cost for plants set up in hilly and tribal areas: and in other areas, 25 per cent for plants of 2 and 3 cu. m. size to small and marginal farmers and 20 per cent for all sizes to remaining farmers. Besides, 33 per cent of capital cost is being given for community plants and 100 per cent for plants based on nightsoil to be set upon pilot basis.