

Conventional sources like coal and oil do entail some difficulties, ; apart from taking steps to meet these difficulties, Government has been working on research, development and utilisation of non-conventional renewable sources of energy, including energy from the sea. Investigations and feasibility studies for a 600 MWe tidal power project in the Gulf of Kutch are being carried out. Research and Development studies on Ocean Thermal Energy Conversion and wave energy are also being conducted and a feasibility study for a 1 MWe OTEC plant at Lakshadweep (Kavarati) is being undertaken. The question of setting up plants on these principles from sea water will depend on the economics and the financial allocations available.

**SHRI P. KOLANDAIVELU :** Even in the Statement he has given details of energy and to improve the efficiency of power generation through solar, wind, biogas, biomass, small hydro and ocean systems.

I put to the Minister that with regard to the solar system only in the day time we can have energy. But supposing we want to preserve the energy for the night time, we have to spend a lot of money for preservation. That is with regard to storage facilities. And even with regard to coal, as far as India is concerned, it is highly expensive and dangerous and we are highly backward in mining coal also. When compared to Canada and other countries we are far back even in mining the coal. Even in regard to the cost of production it is higher than the hydel and atomic energy.

I want to ask the hon. Minister whether the Government is thinking of any alternative proposals other than these, that is, non-conventional systems by which sea water can be converted into energy.

**SHRI VASANT SATHE :** We are at present aware of the conventional sources including hydel, coal and nuclear. That have been established. But non-conventional sources are also being used all over the world although economically they are not yet established on a commercial footing as far as our country is concerned. But yet windmill farms are therein other countries generating substantial energy. Solar systems are also in vogue and sea tidal energy also is being utilised. We are trying out all these

three systems in our country as an alternative source of energy.

**SHRI P. KOLANDAIVELU :** Sir, I am not satisfied with the answer of the hon. Minister. I want to put it to the Minister again that even with regard to sea tidal energy, we cannot do it. We can have the enregy, only where the tidal energy is enough. Recently, in Japan, they have come forward with a sophisticated technology in installing sea thermal energy plants. I do not know whether the Minister is aware of the fact. Anyhow I put it to the Minister, there is sea thermal power plant as big as oil drilling rig. With regard to the capacity of this plant is concerned, to start with it will be 100 mega watt, it is highly economical and it costs 250 million dollars and it may go up to 350 million dollar and over a period of five years, we can get the amount that we invest. It is cheaper than tidal power also. I would like to know whether Government of India will come forward to install such plants because we are actually 25 degrees south and being 25th degrees south. India is lucky. In that area we can get abundance supply of sea water. We can convert the sea water into energy.

**SHRI VASANT SATHE :** This technology on Ocean Thermal Energy Conversion (OTEC) works on the principle of utilising the temperature different to sea water between the surface and at depths of 500 to 1000 metres. The temperature difference is of the order of 20 degree Centigrade or more. Warm sea water of about 28 degree celsius is used for vapourising fluids and low volatile chemicals like ammonia etc. This is a new technology. As I said, all these technologies are welcome. We would use them provided they are established on commercial footings. We have no objection to utilising any technology provided someone produces and proves its commercial use.

#### Allotment of cement and M.S. Rods to Kerala

\*329. **PROF. K. V. THOMAS :** Will the Minister of INDUSTRY be pleased to state :

(a) whether Government of Kerala have requested for special allotment of cement and mild steel rods for irrigation, water supply and sewage scheme ;

(b) if so, the quantity asked for ; and

(c) the action taken thereon ?

THE MINISTER OF STATE IN THE DEPARTMENT OF INDUSTRIAL DEVELOPMENT (SHRI M. ARUNACHALAM) : (a) to (c). A Statment is given below.

#### STATEMENT

1. In regard to Cement, Government of Kerala had made two requests. In August, 1985 the State Government had indicated that the supplies of cement requirements for Water Supply and Sewarage Schemes were not adequate and they requested for special allotment of cement for Kerala Water and Waste Water Authority. It was indicated by them that the minimum requirement of cement for the Authority was 5000MT per quarter. In a further request made in October, 1985 they had asked for extra allotment of 5,000 MTs. of cement in 4th quarter of 1985 and 15,000 tonnes in the first quarter of 1986 for Kallada Irrigation Project.

As regards the requirements for Water Supply and Sewarage Schemes, these are part of State's own allocations and, therefore, it is for the State Government to earmark appropriate quantity for these schemes out of the State quota. However, the Central Government had been allotting a quantity of 1210 tonnes per quarter to the Kerala State under the International Water Supply and Sanitation Decade Programme. As regards additional allocation for Kallada project, the procedure is that allotment for irrigation projects is made by the Central Water Commission from the bulk allotment placed at their disposal every quarter. The Central Water Commission had made an allotment of 20,000 MT for the first quarter of 1986.

In regard to Steel the request was received from the Government of Kerala in October, 1985 asking for allotment of 5,000 tonnes of Steel for Kallada Irrigation Project for the 4th quarter, 1985 and first quarter, 1986. The State Government were informed that the requirements of the irrigation projects are projected by the Central Water Commission to the Joint Plant Committee at Calcutta, which makes bulk allocations to the Commission. Thereafter, the Commission

makes special allocations in favour of various irrigation projects. The State Government were, therefore, advised to get in touch with the Central Water Commission and indicate to them the specific items of steel and their sizes, etc. They were also informed that in case their requirements was for bars and rods these could be procured directly from the rerolling units as availability of these items with SAIL, IISCO and TISCO were limited.

PROF. K.V. THOMAS : Sir the statement given, clearly shows that the Kerala Government has asked for 5000 MTs of cement in the fourth quarter for the implementation of the water supply and sewage schemes. But actually, the Central Government has allotted only 1210 tonnes per quarter. This clearly shows how the Central Government is going to meet the needs of States like Kerala, where we are implementing the water supply scheme in a big way. Even by the end of 20th Century, we will not be able to supply drinking water to our problem villages. In this connection, I would like to know whether the Government of India will supply us adequate cement, as Kerala is one of the States which does not have a major cement plant, so that we can complete our water supply and sewage scheme in time.

SHRI M. ARUNACHALAM: It would be seen that the supplies in the fourth quarter of 1985 have been increased significantly. Enquiries made with the Central Water Commission also indicate that the Central Water Commission have no serious complaints to make about supply of cement to Kerala Irrigation Projects. In the year 1984, Kerala has been allotted 2,82,000 tonnes and out of this, 95 per cent of the allocated cement has been despatched. In 1985 3,04,000 tonnes of cement were allotted out of which 72 per cent cement has been despatched.

PROF. K.V. THOMAS : My question is regarding the cement that has to be supplied for our water supply and sewage schemes and not other schemes like electricity generation, etc. This a specific question for the cement that has to be allotted for water supply and sewage schemes. The hon. Minister has said we have been giving 2,500 tonnes per quarter for this scheme,

**SHRI M. ARUNACHALAM:** As far as allotment of cement is concerned we are doing it. Specific allocation is made by the State Government.

**PROF K.V. THOMAS :** This is a general answer. We have been asking for cement for specific purpose. If the things proceed this way we will not be able to complete any project. Water supply scheme is a very important scheme. We have got many problem villages.

**MR. SPEAKER:** Why can't you provide cement to them?

**SHRI M. ARUNACHALAM:** As far as we are concerned we are giving cement. For specific projects it has to be allotted by the State Government.

[Translation]

#### Black-Marketing In LPG Connections

\*330. **DR. CHANDRA SHEKHAR TRIPATHI:** Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state :

(a) whether complaints regarding black-marketing in cooking gas connections in different parts of the country are increasing day by day;

(b) if so, the main reasons thereof and whether Government have inquired into the reasons ;

(c) whether Government propose to take any steps to check the black-Marketing and if so, the details thereof ;

(d) whether Government propose to allot more gas agencies in the country keeping in view the demand for gas connections ; and

(e) if so, when and if not, the reasons therefor ?

**THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI CHANDRA SHEKHAR SINGH):** (a) to (e). A statement is given below

#### STATEMENT

(a) In the normal course of business oil companies receive complaints also regarding black marketing in LPG connections by

distributors. These are investigated and appropriate action is taken ranging from issue of warning letters to termination of distributorships.

(b) The main reason for such cases is the desire of some unscrupulous distributors to take undue advantage of the keen demand for new LPG connections in most parts of the country.

(c) The oil marketing companies carry out periodical and surprise inspections of LPG distributorships under the Marketing Discipline Guidelines and take action in terms thereof in appropriate cases.

(d) Yes, Sir.

(e) LPG distributorships are being continuously set-up in terms of the oil industry's annual marketing plans at various locations all over the country.

**DR. CHANDRA SHEKHAR TRIPATHI :** The hon. Minister deserves congratulations for admitting that black marketing does take place, because upto now an effort was always being made to cover up the facts, which was not a good thing.

For the time being, I would like to know the number of complaints received against the distributors in Uttar Pradesh, how many of them were issue warning and in how many cases the dealership was terminated ? What were the reasons for not terminating the dealership of the rest ?

**SHRI CHANDRA SHEKHAR SINGH :** I do not have figures relating to the various states at the moment. I had tried to collect this information. There is no arrangement of collating such figures again and bringing them before the House. However, at different places, from where such complaints were received, action was taken ranging from issue of warning letters to termination of dealership. I do not want to quote these figures because their number is not very high and they may not reflect the actual position, but we are trying to ensure that periodic inspections are made and wherever such complaints are received, stringent action ranging from issue of warning letters to termination of dealership is taken.

**DR. CHANDRA SHEKHAR TRIPATHI :** Generally, complaints are received from all over the country that L.P.G. dealers also keep hot plates and gas chullahs and