

Committee of Legal Aid. If some money is required for the legal aid centre, I would be very happy to get it through that institution.

[Translation]

SHRI ANNA JOSHI: Proposals regarding Maharashtra for 1994 have been given. However, regarding the proposal of 1993 the Planning Commission has given the grant of Rs. 183.3 lakh instead of matching grant of Rs. 580 lakh. I would like to know the views of the Government regarding sanctioning the balance matching grant of Rs. 396.7 lakh.

SHRI H.R. BHARDWAJ: The share of the Government of Maharashtra during 1993-94 was of Rs. 2.09 crore and against it the Centre has already sanctioned Rs. 183 lakh and in response to your letter, I submitted that more funds should be sanctioned. Therefore, Rs. 10 lakh more has been sanctioned and now the share of both the Central Government and the State Government is equal. And the balance, if any will be definitely paid.

[English]

SHRI G.M.C. BALAYOGI: Mr. Speaker, Sir, seeing the statement laid on the Table of the House, the Government of Andhra Pradesh has not at all appeared in the list regarding funds allocated for construction of court buildings and all these things.

Recently, there was a very big agitation in the State of Andhra Pradesh by the lawyers for the construction of court and also for the establishment of a Bench. The courts are also facing a lot of

problems so far as buildings in Andhra Pradesh are concerned.

I want to know from the hon. Minister through you whether the Government of Andhra Pradesh has sent any proposal or has not been consulted by the Central Government.

SHRI H.R. BHARDWAJ: No, Sir. It is not correct. Andhra Pradesh has done very well in setting up of courts. Their density of courts against the population is very good. We have made them an allocation of Rs. 2.2 crore—Rs. 22,02,000—in 1993-94. Their proposals for 1994-95 are also with us. We are looking into them.

Grid Quality Power

+

*204. SHRI GEORGE
FERNANDES:

SHRI S.B. SIDNAL:

Will the PRIME MINISTER be pleased to state:

(a) whether the Government are considering to expand generation of grid quality power through renewable energy sources;

(b) whether any target has been fixed for the Eighth Plan;

(c) if so, the power produced during the Eighth Plan so far, and

(d) the efforts being made to achieve the target?

THE MINISTER OF STATE IN THE
MINISTRY OF NON-CONVENTIONAL

ENERGY SOURCES AND MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR): (a) to (d). A *Statement* is laid on the Table of the House.

STATEMENT

- (a) and (b) The original target of 600 MW for power generation from non-conventional energy sources such as wind, small hydro, bioenergy, solar energy etc., has recently been revised to nearly 2000 MW for the Eighth Plan.
- (c) A capacity of 40 MW was installed during the first year of the Plan, i.e., 1992-93.
- (d) The Programmes are being given a market orientation to make them commercially viable and sustainable. Efforts are being made to mobilise additional resources through budgetary support and through institutional finance, private sector participation and international/bilateral arrangements. Several fiscal and promotional incentives are being introduced by the Centre and States to attract private sector participation.

[*Translation*]

SHRI GEORGE FERNANDES: Mr. Speaker, Sir, the statement clearly shows that the Government is not serious because it is mentioned in the Statement that.

[*English*]

"The programmes are being given a market orientation to make them

commercially viable and sustainable."

[*Translation*]

Your Ministry has the document "Energy 2001" on non-renewable sources of energy. It is mentioned in the document that by 2001, India can generate 15,000 MW of power from non-renewable energy sources. While in the statement, you are talking of generating 40 and 50 MW. That's why I fail to notice any seriousness. I would like to know whether the Government is mentioning all these things for name sake only or whether the Government has got some concrete plans to implement 2001 document?

[*English*]

SHRI S. KRISHNA KUMAR: Mr. Speaker, Sir, I entire agree with the hon. Member that maximum possible thrust should be given to the development of renewable energy sector in the country. First I will come to the main answer. For the first decade of the programme i.e.; operations upto the end of the Seventh Plan, the total cumulative mega-wattage which was set up in the renewable energy sector was only 135 MW. That was the result in 10 years. In the first year of the Eighth Plan we have set up 40 MW. Now during the current year we have revised the strategy, prepared a new strategy and action plan taking the work of the Ministry beyond the ambit of budgetary supported schemes. Now we are involving the private sector. We give a package of incentives for renewable energy entrepreneurs and already in the year which is just going to be over, the capacity set up in the year has been doubled to around 70 MW. In 1994-95 we are going to increase it upto 250 MW. So, the new policy is taking hold and it is

growing at an exponential rate in wind energy, small hydro and across the entire spectrum of renewable energy sector. There is a tremendous movement in the country. We are reasonably certain that in the Eighth Five Year Plan we will achieve 2000 MW which is three times the original target in the Eighth Plan. The official target is still 600 MW only, but this Ministry has *suo motu* upgraded the target to 2000 MW which will make India a leading player in the renewable energy movement in the world.

[Translation]

SHRI GEORGE FERNANDES: Mr. Speaker, Sir, I can't believe the statement of the Government because the issue of renewable energy is not new and in fact it is being discussed for a number of years. Detailed mention of it was made in the last two Five Year Plans and he himself has admitted that it could not be implemented. I fail to appreciate the point of inviting foreigners in this field. It could be argued by the Government that there are vast possibilities for non-renewable sources like small hydel plants etc. I would like to know the concrete steps going to be taken immediately to explore the vast possibilities? The question of R&D is very important in this regard. I would like to quote a sentence from their own Five Year Plan document. In the Plan Outlay, it is mentioned that.

[English]

"Energy Development Agencies of the State Government which are concerned with the implementation of this whole non-renewable energy programmes are mostly functioning as intermediaries between manufacturers and users in the non-renewable sources of energy

devices instead of playing their role as technology development and technical assistance agencies."

[Translation]

When such is the scenario at present then what steps are proposed to be taken? Will the Americans be invited for everything?

[English]

SHRI S. KRISHNA KUMAR: Sir, the Ministry of Non-Conventional Energy Sources has in the past been mainly functioning as a research and development department and has been engaged also in the taking up of demonstration projects all over the country.

During the last year under the direction and guidance of our Prime Minister, who is the Cabinet Minister for this Ministry, we have enhanced our area of operation to commercialisation of some of these systems which have, after research and development, proved to be commercially viable. It is on this basis that we have launched a very major programme for wind energy. Almost 600 MW of wind energy projects are under implementation. We have launched 1000 small hydro projects for the whole of the country. We have identified 1100 MW sites and we have identified wind energy sites. We have encouraged entrepreneurs to come forward. We have set up financial packages.

[Translation]

SHRI GEORGE FERNANDES: Mr. Prime Minister, Sir, the identification work has been going on for the last several years.

[English]

MR. SPEAKER: The hon. Member wanted to know, what is it you are doing in the field of research and development.

SHRI S. KRISHNA KUMAR: We are continuing the research and development programme. Almost 30 per cent to 40 per cent of our Budget is utilised for research, not only by the Ministry directly but also in conjunction with IITs and other scientific departments. Many of these research programmes have already borne the fruit. The research has been given emphasis and it is being continued. Our effort is to become self-reliant in each of the area of renewable energy. Of course, there are some joint ventures from foreign companies which have come forward because the technologies in some of the areas are available only there, at the moment. We are continuing the research.

MR. SPEAKER: The research is available in national laboratories also.

SHRI S.B. SIDNAL: When the power is in full shortage, the factories and industries cannot be maintained properly. With this background, is the Government thinking of stopping leakage which forms one-third of the production, which is going as waste?

There is a memorandum of understanding with the U.S.A. to have a floating station of 100 MW to be set up in Tamil Nadu. Has it been signed if signed, what are the terms and conditions and when would the production commence?

Has the project for renewal of energy production from the industrial and agricultural wastes been set up? If so, what is the quantum of MW that is going to be produced?

SHRI S. KRISHNA KUMAR: The first part of the question is about efficiency in utilisation of energy. Of course, it is a very important subject. Energy efficiency and energy conservation can save upto 25 per cent of the total energy consumption in the country. But energy conservation and energy efficiency are dealt with by all the energy Departments such as the Ministries of Petroleum, Coal, Power as also Renewable Energy Sources. This is an ongoing programme.

About O.T.E.C. project in Tamil Nadu, a memorandum of understanding has been signed by the Government of Tamil Nadu State Electricity Board with a company called Ocean Solar Power in the United States for putting up a 100 MW sea thermal power plant to Kulsekaram in Tamil Nadu. It is supposed to be an ideal site. The project will cost Rs. 750 crores. The entire money is to be brought in by the collaborator. We have no risk. The Tamil Nadu Government has got in the agreement only on the purchase of power at a reasonable rate. The D.P.R. is being prepared. Various sanctions from the Government of India will be expedited.

It is hoped that the project would come into operation in about five or six years' time. This is the first project of its type in the world.

SHRIMATI MALINI BHATTACHARYA: In the answer, the hon. Minister has spoken of the commercialisation of this project. Now, one advantage of non-conventional energy is that it is economical. It can be done on small scale and can be cost effective. It can also be installed by using indigenous materials and by using indigenous technology.

I would like to know what possibilities are there for such projects

being installed on a community basis by non-profit making grassroot organisations like panchayats.

In the Seventy-third amendment, non-conventional energy has been brought within the purview of the working of the panchayat.

I would like to know what kind of priority will be given to such non-profit making organisations if they come up with targets for development of non-conventional energy.

SHRI S. KRISHNA KUMAR: The two major traditional programmes being implemented by this Ministry are the family bio-gas programme and the improved chula programme. Forty per cent of the entire Rs. 200 crore Budget of this Ministry is being utilised for these Programmes. Ten per cent of all the eligible rural households have already been covered. One hundred twenty lakhs of improved chulas and 12 lakh to 15 lakh bio-gas plants are already set up. This entire Programme is implemented basically through non-governmental agencies and village level organisations. In implementation of this mass programme, NGOs will be given almost partnership role in the working of the Ministry.

As regards the first part of the question, it is not true that all renewable energy sources are economically viable. The bio-gas programmes are viable. At this point of time, wind energy and small hydro are viable. Gasification is viable but solar thermal, solar photovoltaic and all other technologies are fast becoming viable depending on the impact which we can create on the advancement of technology. In the initial stages, a subsidy is required. The subsidy will be phased

out and these technologies will be commercialised.

I would like to emphasise that Government would like to keep this Ministry efficient. We would like to work through appropriate organisations in the field, especially the scientific and technical organisations, the other entities and the non-governmental organisations.

[Translation]

SHRI SATYNARAYAN JATIYA (Ujjain): Mr, Speaker, Sir, we have been told that sources of conventional energy have been available with us for a long time. These includes Hydel energy, thermal energy and atomic energy. From any of these sources energy can be produced but whether any efforts are being made in the country to produce electricity from the heat available in the surface of the sea?

[English]

SHRI S. KRISHNA KUMAR: I have already talked about the thermal energy in the ocean. It is utilisation of a temperature gradient of the waters in the ocean. The Eastern key-board and the Western key-board of South India are considered the ideal sites because of the underground topography and the movement of the water tides.

There is also another technology called sea wave energy i.e., the action of the waves. A proto-type is being built up at Vizhingam near Trivandrum. One MW Plant is being contemplated in the Andaman Islands. This is separate now.

SHRI SOBHANADREESWARA RAO VADDE: I would like to know whether Government has taken serious

steps to produce non-conventional energy by using bio-gas through bio-mass properly. It has been already proved by some scientists in our Bombay IIT Powai. If it can be proved successful on a commercial scale, it can meet our power requirements to a great extent and sometimes it will help sugar factories also.

I would like to know whether Government will take serious steps in this regard.

SHRI S. KRISHNA KUMAR: We have got a programme for generation of power from bagasse. It is in a stage of development. Already about 6.0 MW has been set up in relation to bagasse in sugar mills which is also bio-energy. We have launched a National programme for the 400 sugar mills in the country. Each of the sugar mills can produce about 10MW of surplus energy. The cheapest power costing only Rs. 2 crores to Rs. 3 crores per MW. We already have a programme. Ten to fifteen sugar mills have come forward. Similarly, we have programmes for bio-gas and bio-mass also in rural areas.

SHRI R. ANBARASU: I would like to know from the hon. Minister which are the States that are making use of the maximum utilisation of power by providing incentives for non-conventional sector. In particular, I would like to know whether the Government of Tamil Nadu has come forward with attractive incentives for making use of this power from non-conventional sector.

SHRI S. KRISHNA KUMAR: This Ministry has communicated detailed model guidelines for encouraging private sector participation in development of renewable energy. Some of the States have totally accepted these

recommendations and implemented them. Gujarat is probably giving best incentives followed by Punjab, Andhra Pradesh, Tamil Nadu, Kerala, Karanataka and Orissa which are also doing selectively well. The other States are yet to announce their incentive packages.

SHRI K.P. REDDAIAH YADAV: With regard to solar energy, there are two alternatives. We have to develop our research and development and then we have to achieve the target. The other way is a technical know-how available especially with Israel. They have fully utilised this technology. I would like to know whether the Government wants to opt for research and development which will take a long time or take the foreign technology which is a proven one and enrich the solar system.

SHRI S. KRISHNA KUMAR: There are two solar technologies for production of power. One is, the solar thermal and the other is the solar photovoltaic. The Government propose to put up a 30 MW commercial solar thermal plant in Jodhpur district of Rajasthan with Israeli technical know-how. The implementing agency will be BHEL. The detailed project report is under preparation. So, we are going to be one of the first countries in the world who are going to commercially exploit it through solar thermal plants. About the solar photovoltaic technology also, we have asked the entrepreneurs to come forward to put up 10 MW type of project using whatever technology they can get, the latest state-of-the-art technology in sunny States like Rajasthan. We are thinking of subject to techno-economic feasibility, a one-time subsidy to generate the programme.

DR. KRUPASINDHU BHOI: Sir, in the 1970s, Dr. Homi Bhabha had, in an

Annual General meeting, stated that the country could produce 10,000 MW of atomic energy and in the same manner, tidal energy had also got the same impetus. Basing on that, in the 1980s, Shri Chokkalingam, the then Chairman of the Tamil Nadu Electricity Board had prepared a project report for production of tidal wave energy. The main thrust of the problem is about the production of low-temperature carbonisation chemical in our country which was very less. The cost-effectiveness was more. For that reason, the project was delayed. What is the fate of that project report? What is the position in respect of production of tidal wave energy in our country?

SHRI S. KRISHNA KUMAR: We have about 10,000 MW of potential for tidal energy basically in the Gulf of Cambay, Gulf of Kutch and the Sunderbans in West Bengal. There is no identified potential in any other part of the country. We are pursuing a 900 MW tidal project in the Gulf of Kutch. A techno-economic feasibility study has been prepared. But it has been upgraded. Now, the question is how to raise the sum of Rs. 6000 crores which is required for the implementation of this project. It has been suggested by us to the Government of Gujarat that this may be taken as a Command Area Development because there will be a dam, a road and other infrastructure, fisheries etc. The communication etc. could also be developed along with the tidal plant.

[Translation]

Profitability of Public Sector Enterprises

*205. SHRI BRIJ BHUSHAN SHARAN SINGH:

SHRI SATYA DEO SINGH:

Will the PRIME MINISTER be pleased to state:

(a) whether the Government have decided to make the Public Sector Enterprises cent per cent profit earning and to run them fully on commercial basis;

(b) if so, details thereof;

(c) whether the Government now propose to lay in the Memoranda of Understanding of these undertaking more emphasis on increasing profit and efficiency so as to further improve their condition;

(d) whether the Government have formulated any incentive scheme for this purpose; and

(e) if so, the details?

THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY (DEPARTMENT OF INDUSTRIAL DEVELOPMENT AND DEPARTMENT OF HEAVY INDUSTRY) (SHRIMATI KRISHNA SAHI): (a) and (b). Government policy with respect to public sector enterprises as stated in the Industrial Policy Statement on July 1991 aims at improving their profitability and enabling them to run on commercial lines.

(c) Yes, Sir.

(d) No, Sir.

(e) Question does not arise.

SHRI BRIJBHUSHAN SHARAN SINGH: Mr. Speaker, Sir, on the one hand, the Government is saying that it is bound to make Public Sector Undertakings profitable but the way it is selling the shares of those undertakings, there is a danger that multinational will take