

year-wise allocation as such. All other projects and schemes are included in the Plan. Now the Plan formulations are going on. It will be advisable if this matter is taken up with the Ministry of Railways who can put forward the proposal.

SHRI CHITTA BASU: Sir, as far as I know, the Government of West Bengal was assured of Central Plan assistance amounting to Rs. 835 crores for the year 1991-92 by the then Deputy Chairman of the Planning Commission, Shri Mohan Dharia. Now, with the change of the Government, the Central assistance to the West Bengal Plan for the year 1991-92 has been reduced to Rs. 620 crores. The Government of West Bengal have fired up their own Plan for 1991-92 on the basis of the assurance given by the then Deputy Chairman of the Planning Commission Shri Mohan Dharia. In view of the fact that this reduction has taken place, may I know from the hon. Minister whether the request of the Government of West Bengal to give them the remaining amount of Rs. 215 crores towards Plan assistance for the current year 1991-92 will be considered? Would the Government consider it favourably and allow the Government of West Bengal to proceed along with the Plan of 1991-92 as scheduled by them earlier? The second part of my question is....

MR. SPEAKER: There should be one question. You have already taken much time.

SHRI CHITTA BASU: Sir, it is about the freight equalisation scheme in connection with west Bengal.

(Interruptions)

SHRI H.R. BHARDWAJ: Sir, it will be seen that this question is with regard to projects. So far as Plan assistance for 1991-92 is concerned, it has already been determined. We are now at the stage of formulating the Eighth Plan. The National Development Council is meeting on 23rd and 24th of this month. All discussions with regard to Central assistance and Plan allocations will be held threadbare in that meeting with the

Chief Ministers and the Prime Minister and the Planning Commission. I personally feel that these are premature questions at this stage for me to answer. Let us await the ultimate decision of the National Development Council.

Utilisation of Ancient Texts for Development of Modern Technology

*183. **SHRI RAM KAPSE:** Will the PRIME MINISTER be pleased to state:

(a) whether the Government are planning to utilise/explore our ancient texts for the development of modern technology;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRIMATI MARGARET ALVA): (a) to (c). A statement is laid on the Table of the House.

STATEMENT

(a) to (b). Efforts have been made in the country to utilize ancient texts for the development of modern technology, for example in the areas of Medicine & Health (Drug based on Guggulu for hyperlipidaemia) & Metallurgy (precision casting of aeroengine blades). Although modern developments may not directly be evolving from our ancient literature, inspiration is certainly drawn from the work of ancient India even in the most modern fields like the Space Sciences.

The following activities are a part of the ongoing endeavour in this direction:

Compilations:

- (1) A concise History of Science in India published by the Indian National Science Academy 1971.

- (2) **History of Science and Technology in Ancient India in two volumes (1986 and 1991)**

Project sponsored by the National Institute of Science and Technology and Development Studies of CSIR.

Specific Studies:

Two specific studies have recently been sponsored by the Government:

- (i) Coordinated programmes related to technology development in the Indian languages, particularly Role of Indian Sanskrit tradition in evolving Artificial Intelligence Systems.
- (ii) Foundations and methodologies of theoretical sciences (logic, linguistics, mathematics, cognitive science). in Indian tradition.

SHRI RAM KAPSE: Sir, there are institutions in the country which are empirically investigating the various Indian ancient texts, as for example, the Viman Shastra of Maharshi Bharadwaj. There are institutions working in Bombay, Hyderabad and other places. (a) Will the government undertake investigation and application of ancient science and technology in a systematic and scientific manner? (b) Have the Government any plan to encourage and support private institutions working in this direction?

SHRIMATI MARGARET ALVA: Sir, the main problem that we face is bringing together the experts who are able to decipher the ancient language script and then bring them in contact with modern scientific knowledge so that the two can be brought together for the purpose of finding answers to some problems. This process has started, in fact, seminars have been going on for five years to bring these two groups together under various institutions and under various projects. Some of the ancient scripts have been translated and compiled while basic studies in certain specific subjects are already being

initiated and funded by Government through various institutions and I.I.Ts. in the country.

SHRI RAM KAPSE: Sir, the Government has said about the difficulty. But actually the Birla institution in Hyderabad and the AERO Agencies Private Limited in Bombay could do individually or through the institution whatever little work they could do. I was asking whether the Government has any plan to investigate into the matter or will it help the institutions which are working in that direction. But there was no reply on what government wants to do in this direction.

SHRIMATI MARGARET ALVA: Sir, as I mentioned, we have been funding and we have already initiated programmes. I can mention the two compilations — one is "A Concise History of Science in India" published by the Indian National Science Academy, in 1971, and "History of Science and Technology in Ancient India" in two volumes published in 1986 and 1991. Both of these have been sponsored by the National Institute of Science and Technology and Development Studies of CSIR. These have been started, as I said, over 5-6 years back. Special emphasis is being laid on development, as I said, the capacity to decipher the ancient texts and to make them relevant to modern science and technology. And there are two specific studies which have been recently sponsored by the Government. One is coordinated programmes related to technology development in the Indian languages, particularly the Role of Indian Sanskrit tradition in evolving Artificial Intelligence Systems and the second is foundations and methodologies of theoretical sciences, i.e., logic, linguistics, mathematics, cognitive science, in Indian tradition.

(Interruptions)

SHRI RAM KAPSE: My question was not replied. Therefore, I will ask again. I will not ask a second question.

(interruptions)

[*Translation*]

SHRI SUNIL DUTT: Mr. Speaker, Sir, I would like put a question which is different from the main question.

MR. SPEAKER: No, nothing other than the main question would be allowed.

SHRI SUNIL DUTT: I am very happy that a studio like strange atmosphere has been created in the House, by lights.

(*Interruptions*)

[*English*]

SHRI RAM NAIK: Now he is feeling at home:

[*Translation*]

SHRI SUNIL DUTT: Cameramen must know that the shadow of this light is falling on the Hon. Speaker..

(*Interruptions*)

AN HON. MEMBER: Mr. Speaker, Sir, whenever he puts a question different from the main question, he is swayed away by some craziness.

(*Interruptions*)

[*English*]

SHRI SUNIL DUTT: Shri Ram Kapse who is my colleague has asked a very beautiful question. I am very grateful to him. I admire him. But sometimes when we admire them, they must admire us also so that we can do some good thing.

This allopathic medicine was introduced in the last century and Mr. Hehne Mann, a German coined the word Allopathy for this medicine system in 1755-1843. But Ayurvedic medicines have been found much earlier. Ayurvedic medicines are more scientific medicines in the history.

I want to know from the hon. Minister

that if Ayurvedic medicines in those days were so effective in the field of curing cancer AIDS polio TB whether experiments have been done on Ayurvedic medicines so that those medicines can be made useful because they are much cheaper than the Allopathic medicines.

SHRIMATI MARGARET ALVA: I do agree that Ayurvedic medicine need to be popularised even more and we have various projects for the development of indigenous medical system. The Government is funding the projects on this line and one of them where we had real success is the development of a particular medicine called *guglu* which is being used.

(*Interruptions*)

AN HON. MEMBER: Is it "huglu"?

MR. SPEAKER: It is certainly not Hooghly:

SHRIMATI MARGARET ALVA: It is a gum resin extract which is used particularly for the treatment of cholesterol reduction. It has now been marketed commercially and has been found to be very effective. This has been developed out of an indigenous system of medicine.

[*Translation*]

SHRILAL K. ADVANI: Mr. Speaker, Sir, Computer Science is the most modern branch of science. According to computer experts all over the World, of all the languages. Sanskrit is most suitable for computers. I would like to know the steps the Government has taken in this regard after the above information was available. All kinds of research in this regard should be conducted in our country only.

[*English*]

SHRIMATI MARGARET ALVA: The hon. Member is aware that we had a special presentation of what had been done up to now for developing Sanskrit as a computer

language both internationally and at home.

SHRI NIRMAL KANTI CHATTERJEE: Is it developing computer language for Sanskrit?

MR. SPEAKER: She is very correct in her language. Do not confuse her.

SHRIMATI MARGARET ALVA: I am sorry. May-be, I have used a wrong....

MR. SPEAKER: No. You have used the correct language.

SHRIMATI MARGARET ALVA: We had a special presentation for Members of Parliament which the hon. Prime Minister had wanted. Many Members who are interested did come and see what is being done along this line. We are standardising the code under the Technology Development for Indian languages. It has now reached the final stage. We are hopeful that the development will lead to the acceptance of Sanskrit as a computer language in the not too distant future.

SHRI BUTA SINGH: Sir there is acute power shortage in our country especially in the rural areas. Fortunately, in fact some of our ancient literatures especially the sacred Vedas contain prescriptions for generation of electricity outside the hydro-electric and thermal systems. Fortunately, we have a Prime Minister who is a great authority on Vedas.

May I know from the hon. Prime Minister; has the Government made any effort to find out from the Vedas as to what are the alternative sources of energy?

Will the Energy Minister and the government make efforts to exploit those sources which are contained in the sacred Vedas?

THE PRIME MINISTER (SHRI P.V. NARASIMHA RAO): When you read the ancient texts, what we can glean is the fact that those who wrote those texts or conceived those texts, had some kind of knowledge, prescience, call it what you will, they

had a knowledge of all these natural phenomena. That is a clear evidence you can find from the texts. The technology part of it, that we do not find in such abundance in the ancient texts except in case of medicine which started with the Atharva Veda and architecture of which we have abundant standing evidence in the country everywhere. We have the old excavations where you can find advanced facilities like underground drainage and other things existing even today. So, we have some monuments. But one has to go deeper into the texts to decipher them to find out, if a particular technique has been clearly stated there. You see mostly our scientists, our architects, went by trail and error. We know many of the other standing monuments, for instance. Some have stood for more than a thousand years. Some have caved in within 200 years. Why? Because they were trying to experiment with several things. Some succeeded. Some did not succeed. So, it is very difficult to go into all those things and find out which was the technology, which was the technique which succeeded, which did not succeed. But this requires a lot of effort. That effort is going on and Government are prepared to assist any one institution or individual who is willing to go into it because it is sometimes a life-long process and he may not really stumble into anything useful. This is a process which requires a long time.

I would like to say on behalf of the Government that we are prepared to help. We are as much intent on ferreting out the secrets from the old texts. Probably they will be useful for other countries also. Sometimes it happens that what we bring out is not found anywhere and there are some examples like that in astronomy and so on. I will not go into details but this is an activity which Government would like to encourage in all ways.

Retail Outlets Under Public Distribution System

184. **SHRI SYED SHAHABUDDIN:** Will the PRIME MINISTER be pleased to state: