

the Government come to the conclusion that the time factor is very important and that we cannot develop it within this time? I do not say whether this Government or the previous Government did it but I want "to know how did the Government come to the conclusion that it cannot be developed within this time? Actually one year has been wasted and we have not even been able to enter into a contract. Therefore, without consulting our technologists with regard to the time factor, how did the Government enter into this contract?

SHRI SHIVRAJ V. PATIL: Sir, I am trying to answer two questions at a time, question No. 41 and 46. With respect to question No. 41, the software technology, we were not certain whether we would be able to develop it or not but we are not going to take any pessimistic view. In the long future we would be able to develop this software technology also in our country. As far as question No. 46 is concerned, our scientists were not in a position to develop it within the foreseeable future. Sir, as far as Question No. 46 is concerned, the time factor is important. As far as Question No. 41 is concerned, this is in regard to our capacity to develop in the near future. These two things are coming together. Perhaps, because of this, some apprehension has arisen. The second question was, how we have taken a decision without consulting the Tata Institute of Fundamental Research.

SHRI P. RAMAMURTI: I asked a question about the time factor.

SHRI SHIVRAJ V. PATIL: I have answered the question. The time factor relates to Question No. 46 and our capacity to develop relates to Question No. 41. I am answering two questions. Because of this, the two things are coming together. As far as Question No. 41 is concerned, we are not in a position to say whether we would be able to develop that kind of technology in the near future. May be, after ten or fifteen or twenty years, after a long time, in the future, we may be able to develop that. Are we ready to wait

till such time? As far as the power amplifier is concerned, we could have developed it, but we could not have developed it in time. (Interruptions) The question about time factor is in relation to Question No. 46. The question had been asked, why did we not consult the Tata Institute of Fundamental Research. Our scientists in the Tata Institute of Fundamental Research do meet, do talk and do consult. They know what is the standard of development in regard to a particular technology over there also. So, having known that and having informally talked with others, they had come to the conclusion that in a matter like this, it would not be possible to wait for a long time, so that they took the decision and they accepted the assistance from outside.

SHRI P. RAMAMURTI: I must congratulate the hon. Minister for his capacity to evade the question.

MR. CHAIRMAN: The difficulty has arisen because you had asked a question which refers to two questions. The time factor in regard to two questions has been adequately answered by the hon. Minister.

\*42. [The questioners (Shri Santosh Kumar Sahu and Shri M. R. Krishna) were absent. For answer vide cols... 32-33 infra].

#### **Recommendations of the Indiaa Science Congress Associati-an**

\*43. DR. LOKESH CHANDRA:t  
SHRI BISHAMBHAR NATH  
PANDE :

Will the PRIME MINISTER be pleased to state:

(a) whether Government have considered the recommendations of the Indian Science Congress Association to utilise various alternative energy axurces, with particular emphasis on hydrogen production from water; and

The question was actually asked on the floor of the House by Dr. Lokesh Chandra.

(b) if so, the details in this regard?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY AND ELECTRONICS (SHRI C. P. N. SINGH): (a) Yes, Sir.

(b) A statement is laid on the Table of the House.

#### Statement

#### RECOMMENDATIONS OF INDIAN SCIENCE CONGRESS ASSOCIATION

The Indian Science Congress Association deals with a wide variety of scientific disciplines. The focal theme of the Sixtyseventh Session of the Indian Science Congress held at Calcutta was on "Energy Strategies for India". The main recommendations relating to utilization of alternative energy sources were as given below: —

Intense R&D programme for hydrogen production with the target that production begins in 1990/1. intense R&D Programme for fuel cell development.

Formulation of a solar energy policy for its utilization with Stirling engines in the Rural Agriculture for irrigation pumps and generally for sector for space heating and cooling, and a R & D work programme for photovoltaic converters, should be laid down.

Installation of aeolian where strong winds are available, tidal energy stations at gulf of Cambay and Kutch and the mouth of Hugly in West Bengal.

Consideration of prospects of utilization of geothermal station.

In respect of Hydrogen Energy, the position is as follows: —

The Department of Science & Technology constituted a Hydrogen Energy Task Force in 1977. The Task Force discussed the potential of using Hydrogen as fuel, and made recommendations for R & D Programmes to be initiated in the following areas:

1. Production of Hydrogen.
2. Storage, Transmission and Utilisation of Hydrogen.
3. Power Systems, Transduction and Teehno-Economic Aspects.

Some of the research projects that have been sponsored by the Department of Science and Technology and are currently being undertaken, are as under:

1. Development of solid materials for—

(a) production of hydrogen by photo-electrochemical decomposition of water using solar energy; and

(b) storage of Hydrogen.

2. Hydrogen Energy Systems Technology study for India.

3. An inter-temporal mathematical programming model of a national economy with input-output economic environmental structure.

4. Development of a national energy model and studies on the feasibility of imposing a hydrogen economy on the energy system.

Hydrogen engines have already been developed on laboratory scale. Further development relating to various aspects such as safety, storage, transportability & costs is underway.

The Department has planned to further intensify research support and is preparing coordinated programmes covering production, storage and utilisation of Hydrogen.

In respect of fuel cells, Stirling engines Photovoltaic converters, wind energy, tidal and geo-thermal energy, the Department of Science and Technology has already embarked on a coordinated programme for R & D relating to alternative energy sources, which includes the development of these technologies. During the Sixth five year Plan, a major thrust is being given to this programme, with emphasis on demonstration and field trials of various devices and systems in different areas of application.

DR. LOKESH CHANDRA: Mr. Chairman, Sir, this question is of fundamental importance for the future development of our country, I am happy that, for the first time, our intellectuals and our scientists have taken the initiative, in making detailed recommendations to the Government. The hon. Minister, in his statement, laid on the Table of the House, has not reproduced the totality of the recommendations made by Indian Science Congress Association. He has just spelt out in a very brief outline, the formulations as they have been, perhaps, accepted by the Department of Science and Technology. The one thing which is missing from this statement laid on the Table of the House is the human factor in the evolution of scientists. In India, the scientists have done a remarkable work, but at the same time, we have been plagued by some false distinctions in the field of scientific research as pure and applied. Further, I would like to cite that our scientists have been suffering from unfair deal. A Committee was appointed by the Department of Science and Technology and this Committee had emphasised the need for removing the sense of uncertainty about the future in the minds of the scientists working on different research projects. This factor was alluded to in the recommendations of the Indian Science Congress Association, but this does not find any place in the statement which has been laid on the Table of the House. From my point of view, this is an important aspect of India's scientific develop-

ment has to become effective. (*Interruptions*).

MR. CHAIRMAN: Please ask your question.

(*Interruptions*)

DR. LOKESH CHANDRA: Here, Sir, I would like to quote...

(*Interruptions*)

MR. CHAIRMAN: Dr. Lokesh Chandra, day before yesterday, I said that a question should not take more than 150 words or one minute. You have a big file before you. If you are going to read out the whole of it the question hour will be taken by it.

DR. LOKESH CHANDRA: On no occasion technical questions are taken up in the House. These the matters are of fundamental concern for the future of the country. I think, as Nominated Members we should have a right to raise these questions in a spirit of science and not in a spirit of agitation.

MR. CHAIRMAN: But be brief.

DR. LOKESH CHANDRA: I am trying to be brief. I am trying to refer to four important factors which have been emphasized... (*Interruptions*). Coming to the false, spurious distinction which has been maintained in the policy formulation, I would like to quote from the 'Patriot' of 11th November, 1960, which say:

"Our experience in the last few decades raises very serious doubts about the wisdom of concentrating on specialised problem-oriented research at the grave cost of scientific learning and pure research."

Further it says:

"Much damage might have been done unless the Government takes remedial measures in time to stop the brain-drain from the pure science to other areas."

I think this is a fundamental problem in our scientific planning.

MR. CHAIRMAN: Please, frame a question.

DR. LOKESH CHANDRA: My question to the Minister is that in the Statement laid on the Table of the House, the human factor has been totally ignored which was a very important part of the recommendations of the Indian science Congress Association and there were a number of suicides in the different...

MR. CHAIRMAN: We grant you all that there has been, a lot of material, but what is your question?

SHRI BHUPESH GUPTA: I think the fundamentals should be stated now and the question left to the next session. That will be better.

DR. LOKESH CHANDRA: I think the frustration of the scientists is an important aspect of the functioning of scientific departments. Here I would like to cite just one small paragraph. (Interruptions). Well, you make a noise every time. I am not going to sit down if you talk like this. (Interruptions). I have a right to ask.

SHRI PILOO MODY: You ask for a debate, you ask for a discussion, but this is not a way to ask a question.

SHRI DHARAMCHAND JAIN: This is a very important question.

SHRI SYED SIBTE RAZI: It is a very important and fundamental question. It is his right. He should be heard.

(Interruptions)

DR. LOKESH CHANDRA: I would take just one more minute. I am reading from the 'Indian Express' of 9th November, 1980 which says:

"Three years ago Dr. G. D. Agarwal, the senior professor in the Department of Civil Engineering IIT Kanpur, resigned from his post protesting 'in my view conditions

have deteriorated to an extent where it is no longer in the interest of my professional growth or of my mental peace to stay at this Institute. I must quit before condition-become worse and I am forced to a much more desperate alternative like suicide.' "

(Interruptions)

MR. CHAIRMAN: Dr. Lokesh Chandra, I have made a request to you again and again to be brief. We cannot have ten minutes over a question. So, please formulate your question and leave it to the hon. Minister to answer it.

SHRI LAL K. ADVANI: Sir, the objective is clear.

MR. CHAIRMAN: If you have never asked a question, it is not necessary for you to combine in one question all the questions of your whole of the term.

SHRI C. P. N. SINGH: Sir, I think the hon. Member made a very valid point and the Members of the House were not tolerant about the scientific community. He has made a point which I think, as Indians, all of us should ponder.

MR. CHAIRMAN: We do not have to ponder in the Question Hour.

SHRI C. P. N. SINGH: Sir, he made a very valid point. This is the only opportunity..

(Interruptions)

SHRI J. K. JAIN: Sir, I am on a point of order.

MR. CHAIRMAN: The hon. Minister will also observe that we are limited by time in the Question Hour and that he should be brief.

(Interruptions)

SHRI LAL K. ADVANI: Their objective is that Mr. Bhupesh Gupta's Question No. 45 should not come. This is the objective.

SEVERAL HON. MEMBERS: No, no

(Interruptions)

श्री जे. के. जैन : जनता सरकार ने ज्ञान और विज्ञान को तबाह कर दिया इस लिये उन के मन में चोर है । उन्होंने हमेशा विज्ञान की प्रगति में बाधा डाली है और इसी लिये आडावणी जी ने यह बात कही है । उन को कोई अधिकार नहीं है इस तरह का लांछन लगाने का । उन को इस बात को वापस लेना चाहिए ।

MR. CHAIRMAN: Mr. Jain, please sit down. (Interruptions). When I am...

(Interruptions)

SHRI J. K. JAIN: We are discussing a very important question.

MR. CHAIRMAN: Please sit down, Mr. Jain. Don't you see I am standing? When I am standing, please sit down.

SHRI KALYAN ROY: Have you ever seen him observing any rules?

SHRI J. K. JAIN: Are you observing any rules? (Interruptions)

MR. CHAIRMAN: I am making everybody sit down.

SHRI SYED SIBTE RAZI: He must withdraw his remarks.

(Interruptions)

SHRIMATI MONIKA DAS: He must withdraw his remarks. (Interruptions)

श्री जे. के. जैन : हम यह बर्दाश्त नहीं करेंगे । जब तक आडावणी जी ने जो लांछन लगाया है उस को वह वापस नहीं लेते, हम यह बर्दाश्त नहीं करेंगे ।

(Interruptions)

SHRI N. K. P. SALVE: Sir, I want to make one submission.

MR. CHAIRMAN: Mr. Salve, you are the Deputy Leader of the House in this party. Why can't you ask them to speak one at a time if they want to speak. Why should Mr. Jain jump up every two minutes.

SHRI N. K. P. Sir, this is very unfair. (Interruptions) Dr. Bhai Maha-vir waxed eloquent for 10 minutes. No questions were raised. Sir, it is a very unfair comment. Who is stalling this question? We are not worried about that question. Let it go on record that we are not worried about that question. Let it be asked a thousand times or a million times. But this sort of comment is exceedingly unfair. He is a senior Member of the House; he should withdraw this sort of remark.

SHRI J. K. JAIN: He should apologise for this. उन से माफी माँगाईये ।

यह उन्होंने सदन की मानहानि की है । उन को यह बात कहने का कोई अधिकार नहीं है । आप उन से निवेदन करिये कि वे सदन से ऐसी बात कहने के लिये माफी माँगे ।

MR. CHAIRMAN: Let the Minister answer the question.

SHRI C. P. N. SINGH: Sir, a Member .....

(Interruptions)

SHRI SYED SIBTE RAZI: First he should withdraw his remarks.

श्री जे. के. जैन : सभापति महोदय . . .  
(Interruptions)

MR. CHAIRMAN: Mr. Jain, please sit down. Mr. Maurya, what is your point?

श्री बुद्ध प्रिय मौर्य : पिछले पांच महीने से मैं इस सदन में एक शब्द भी नहीं बोला हूँ । मेरा निवेदन है कि जहाँ तक संसदीय प्रणाली का सवाल है, प्रश्न

आये या न आये, बहुत से तरीके हैं उस पर बहस करने के और बहस होती रहती है, सदन में भी होती रहती है और बाहर भी होती रहती है और अखबारों में भी बात आती रहती है और इस सदन में भी बहस होगी, उस से बचा नहीं जा सकता। लेकिन माननीय सदस्य आडवाणी जी ने मन में धारणा रखकर सदन की मानहानि की है। वे अपने शब्द वापस लें... (Interruptions)

MR. CHAIRMAN: Mr. Advani, you are telling them... (Interruptions). They are taking exception to your remark.

SHRI LAL K. ADVANI: I said nothing. I have made a charge against the ruling party, but I am entitled to it

(Interruptions)

MR. CHAIRMAN: Mr. Advani, I have seen the subject of Question No. 45. That subject will come up again and again and again.

(Interruptions)

SHRI LAL K. ADVANI: When Maruti is discussed in the House, it will come up. I am not worried about that. (Interruptions)

SHRI N. K. P. SALVE: It cannot go on like this. This is casting aspersions on the working of the entire party. We are not here...

(Interruptions)

श्री जे. के. जैन : आप सदन की मानहानि नहीं कर सकते। इनसे माफी मंगवाइये।

श्री बुद्ध प्रिय मोर्य : यह पूरे सदन की मानहानि है, आपकी मानहानि है।...

(Interruption)

श्री कल्पनाथ राय : इनके रिमार्क एक्सपेंज कीजिए।... (Interruptions)

SHRI N. K. P. SALVE: He is an irresponsible Member. (Interruptions)

MR. CHAIRMAN: The very purpose is frustrated. You wanted expedition. Now it is all over. (Interruptions)

श्री जे. के. जैन : देश को जिन्होंने बरवाद कर दिया, इनसे माफी मंगवाइये।...

(Interruption)

श्री बुद्ध प्रिय मोर्य : सदन की मानहानि आपकी आंखों के सामने है।

SHRI N. K. P. SALVE: Sir, it is on record. They have taken all the time. (Interruptions) He was well prepared for the question. He is one man, speaking on this side, who is not politically motivated. They are imputing motives to him and are now bringing in the entire party. The aspersion he is casting on the entire party is exceedingly unfair, exceedingly unworthy and, therefore, I leave it to you to decide whether it is fair for him to say such a thing. Unless Advaniji withdraws his remark, it is impossible for me to allow the Question Hour the way it is going on. He must withdraw this.

""SHRI KALP NATH RAI: He must withdraw.

SHRI N. K. P. SALVE: This cannot go on. Is it fair of him to cast this aspersion?

(Interruptions)

MR. CHAIRMAN: Mr. Jain, if you will only keep your voice under con-

trol... Yes, Mr. Maurya, what have you to say? (Interruptions). Is is a point of order?

श्री बुद्ध भिय भौर्य : सभापति जी, मार्च महीने से एक शब्द भी मैं इस सदन में नहीं बोला। यह सदन की मानहानि है, हमारी मानहानि है। जब तक ये अपने शब्द वापस नहीं लेते तब तक सदन की कार्यवाही नहीं चलने दी जाएगी। यह कोई तरीका नहीं है।... (Interruptions) ये कोई दुध के घुले हुए हैं क्या? ये शब्द उनसे वापस दिलवाइये।... (Interruptions)

SHRI P. RAMAMURTI: Mr. Chairman, Sir... (Interruptions).

SHRI N. K. P. SALVE: Sir, this is an aspersion cast on the working of the party. I owe some duty and responsibility to this party and, therefore, if he is casting this aspersion on us that we are trying to evade a question, it is something which we are not going to take. It affects our conduct, it shows us in very bad light before the whole country. This is a question which is going to come and we do not want to evade it. Our Minister is there. (Interruptions) Whatever we have done, we shall answer it a hundred times and we are not afraid. The crucial question is, the comment which he has made reflects very adversely on the conduct of the House and it is casting an aspersion on you yourself that you are not able to control the working of the House itself. Sir, it is very unfair. He is a responsible Member; he is a senior Member. Under this rule, under the rule of expunction, I am asking for its expunction. Therefore, unless he expresses regret, the proceedings cannot go on. You direct him.

SHRI P. RAMAMURTI: "Mr. Chairman, Sir, unfortunately... (Interruptions). Why don't you keep quiet? (Interruptions) Keep quiet. Mr. Chairman, Sir,... (Interruptions).

श्री रामेश्वर सिंह : प्रधान मंत्री की यह दिखाना चाहते हैं... (Interruptions)

श्री जे. के जैन : इन्होंने लांछन लगाया है... (Interruptions)

SHRI P. RAMAMURTI: Mr. Chairman, Sir, unfortunately, in this House aspersions against parties are common. The ruling party does it, some of our people also do it. This is a common thing, unfortunately. Therefore, Sir, If this is made a point and they are going to shout like this, let them remember that it is a game which the two sides can play. Both the sides can play the same game. Let them realise this. When the official business comes up, we can also obstruct that. Therefore, I would say that casting aspersions against the parties is a different game. You cannot make much out of that.

MR. CHAIRMAN: I have looked into Q. No. 45. I know that one section of the House is interested to put that question. There has been a sudden charge by one of the hon. Members that that question is being evaded. I do not think that that question will be evaded for ever. It will come up in ten different forms. (Interruptions). Not today, but it will come up. I do not think, Mr. Advani, you were required to make that comment. The whole thing was proceeding quite all right till Dr. Lokesh Chandra brought a huge... (Interruptions). The question came in a ballot. I do not think Dr. Lokesh Chandra is a party to such a scheming. I have known Dr. Lokesh Chandra and his father for years. I do not think that he was scheming. I think it was a very unfortunate charge. He was only asking for ... (Interruptions).

SHRI PRANAB MUKHERJEE: Sir, I would like to point out only one thing, that there is no question of evading any question. As it is the

Ordinances, the House will get the full opportunity to discuss it. It is unfortunate that they, some of the Opposition parties, have the impression that we are trying to evade that question.

MR. CHAIRMAN: I think Mr. Advani has to be congratulated in having this question not getting reached. If you had kept quiet, it might have reached. *(Interruptions)*.

SHRI LAL K. ADVANI: It only shows how nervous they are.

MR. CHAIRMAN: My own personal opinion is, what is called the contributory negligence is this. *(Interruptions)*. I know; I know. *(Interruptions)*

SHRI PILOO MODY: That unfortunate remark has received unprecedented success.

**श्री जे० के० जैन : मेरा निवेदन है इनसे माफी मंगवाइये . . .** *(Interruptions)*

MR. CHAIRMAN: The Question Hour is over. *(Interruptions)* Please sit down. The Question Hour is over.

SHRI PILOO MODY: Sir, it is one minute before time.

MR. CHAIRMAN: It will come up again. *(Interruptions)* Now we have gone over to another subject. *(Interruptions)* I know.

SHRI J. K. JAIN: It should be expunged from the proceedings. It should be expunged from the proceedings. Sir, I request that "his" remark should be expunged.

MR. CHAIRMAN: That, I will consider, whether any remark has to be expunged or not when the proceedings come to me. Mr. Jain, you are unnecessarily hurting your own throat by shouting.

श्री सोलाराम केशरी : सभापति महोदय, मुझे दुःख के साथ यह कहना पड़ता है कि आडवानी साहब ने जिस गलत ढंग से बात को सदन में रखा है उससे मालूम पड़ता है कि उनके दिल में बहुत बड़ा पाप था। सदन में श्री लोकेश चन्द्र का दूसरा क्वेश्चन आने वाला था, लेकिन उसके बाद श्री भाभड़ा बाहर चले गये। अब सदन में आए हैं, आप देख लीजिये। जब आपने क्वेश्चन आवर समाप्त कर दिया तो अब वे सदन में आए हैं। पहले वे ठीक समय पर बाहर चले गये थे। क्वेश्चन आवर खत्म होने के बाद सदन में आए हैं।

## WRITTEN ANSWERS TO QUESTIONS

### Setting up Peace Keeping Force

\*42. SHRI SANTOSH KUMAR SAHU:

SHRI M. R. KRISHNA:

Will the Minister of HOME AFFAIRS be pleased to state:

(a) the name of the expert body which has advised Government to constitute a Peace Keeping Police Force comprising of men belonging to the minority and weaker sections;

(b) the number of battalions which are going to be formed and the name of agency under which these battalions of peace keeping forces will function; and

(c) the criteria laid down for recruiting the personnel and their emoluments and promotional avenues?

THE MINISTER OF STATE IN THE MINISTRY OF HOME AFFAIRS (SHRI YOGENDRA MAKWANA): (a) to (c) The Government of India