

यह जरूरी है कि सारे कामकाज के लिए हिन्दी ही ।

श्री शिव नाथ सिन्हा (झंझु) : राजस्थानी को संविधान के आठवें शैड्यूल में स्थान देने की मांग को मैं उचित ही समझता हूँ । वैसे हमारी राष्ट्र भाषा हिन्दी है । कहीं भी हिन्दी पर आंच आती ही तो राजस्थानी उसके आगे अपना मस्तक झुकाएगी । लेकिन राजस्थानी भाषा एक बहुत बड़ी हिस्से में बोलੀ जाती है और उसके एक इतिहास है, उसका अपना साहित्य है जो बहुत ही समृद्ध है । पुराने जमाने से यह साहित्य चला आ रहा है और समृद्ध होता जा रहा है । हिन्दी से इसका कोई कम्पीटीशन नहीं है । हिन्दी राष्ट्र भाषा ही, फलफूल, यह हम चाहते हैं । हम यह भी चाहते हैं कि हिन्दी को छत्रछाया में राजस्थानी आगे पंने । आठवें शैड्यूल में आने से किसी भी भाषा को कई फायदे होते हैं । राजस्थानी उन फायदों से वंचित क्यों रहे ? राजस्थान में बहुत से लड़के ऐसे हैं जो राजस्थानी सीखना चाहते हैं लेकिन चूँकि वह आठवें शैड्यूल में नहीं है इस वास्तु उसको सरकार का प्रोटेक्शन नहीं मिलता है । जैसा एक माननीय सदस्य ने कहा कोई भी भाषा सरकारी प्रोटेक्शन के बिना आगे बढ़ नहीं सकती है । डी एम के के साथी ने कहा कि राजस्थान में राजस्थानी बोलने वालों की संख्या कम हो रही है । लेकिन उनका ऐसा कहने का मंशा यह था कि हिन्दी का जो केस बन रहा है उसको डिफीट किया जाए । उन्होंने अंग्रेजी के लिए केस बनाने की चेष्टा की । मैं आप की जानकारी के लिए निवेदन करना चाहता हूँ कि राजस्थान में राजस्थानी बोलने वालों की संख्या कम नहीं हो रही है । राजस्थान में ऐसे लोग बढ रहे हैं, जो हिन्दी, राजस्थानी और अंग्रेजी तीनों भाषाएँ बोलते हैं । जो हिन्दी भी जानने वाले हैं, वे अपनी भाषा को हिन्दी भी कहते हैं ।

MR. CHAIRMAN: The hon. Member may continue on the next day.

17.31 hrs.

HALF-AN-HOUR DISCUSSION

Experimental Nuclear Explosion for Peaceful Purposes

MR. CHAIRMAN: Now, Shri Samar Guha may raise his half-an-hour discussion. I have one request to make to him. At 6 p.m. we have to take up the discussion on student unrest. If he wants the hon. Minister to reply and he wants his other colleagues also to participate in the discussion, then he should be very brief. I would like to know how much time he wants.

SHRI SAMAR GUHA (Contai): About ten to twelve minutes.

MR. CHAIRMAN: Then, I shall not disturb him for 12 minutes.

SHRI SAMAR GUHA: Today, I am not raising the issue of whether India will have nuclear weapons, tactical or strategic or nuclear missiles. Today, the whole debate that I want to raise is on the issue of the use of nuclear technology for peaceful and constructive purposes.

We are already using nuclear energy for health purposes, for preservation of food, and also for generation of power. But, of late, a new development has taken place in the international world about nuclear engineering or nuclear technology. The areas for which nuclear technology or nuclear engineering can be utilised have also been identified, as in the case of deep mining or surface-mining, particularly in our country in the case of copper, and non-ferrous type of mining such as for copper, zinc and lead of which there is a dearth, and also for Uranium finding and for exploration of underground gas and oil resources, and for the purpose of converting desert into a fertile land having cavity and irrigation facilities there and also

[Shri Samar Guha]

for diverting the course of river for irrigation and navigation facilities and also for construction of dams. It is also possible to use it in mountainous areas to have rock-melting for making our highways. It is also possible to use it for making harbour and also for having canals.

There are other areas of large-scale use for civil purposes also. I have been raising this question for the last four or five years, and I should say that fortunately, on 20th April, 1970, in the course of the half-an-hour discussion which I had raised, Government had made a break-through, I should say, in their nuclear policy. They had accepted that if required, India would develop nuclear technology in the sense of nuclear blast technology for peaceful purposes. I would like to quote what Government has stated:

"We are not at all opposed to the use of nuclear energy for peaceful purposes when a meaningful application of real economic significance is identified. This was an important part of our opposition to the nuclear non-proliferation treaty."

This was almost, I should say, a breakthrough. That was the reason why we did not subscribe to that treaty; we wanted to preserve our freedom and our option as to whether and how we shall use nuclear technology for constructive and peaceful purposes.

This decision was taken by Government in 1970. It is almost two years since then. Why have Government not used nuclear technology or nuclear engineering for any peaceful or constructive purposes? The first reason given by Government is that the application of nuclear technology or nuclear engineering involves certain hazards, firstly, ecological hazards, secondly radio-active-fall-out which may endanger the life of the people. Thirdly, if we experiment in the rocky area, there may be rock melting or some kind of earthquake and there may be some change in the geophysical structure of that area where experiments may be made. What is the objective? For which purpose shall

we use nuclear technology? We have got to identify and see whether we can find oil reserve or metal reserves such as copper or uranium. We have not yet identified the area or objective or purpose for which nuclear technology or engineering can be used.

I quite understand the question of hazards. I have already said about identification of the objectives for which we shall use it. There is one most vital part. How would you use it? Suppose we have surmounted the problems or hazards that would follow the nuclear blast and we have identified certain objectives for which we shall use it. It is not like ordinary engineering technology, or expertise or know-how technology where we can purchase it. For our industrial development, metallurgy fertilizer, various purposes, etc. we can have our technology. But here is a case where no power in the world, Russia, China or France or any other country will give us any clue and expertise or technology, blast technology. Unless we develop our own technology for blasting its use for industrial purpose or constructive purpose does not arise. You take a decision. Two years have already passed. Why should you not try to develop the nuclear blast technology, know-how and expertise? What does it mean? If you have to develop it at least a few experimental blasts have to be undertaken. You have to design the apparatus and have fuel and also mark out certain areas where you can do it. The planning of it is known; design also is known. In Tarapur we have our own reactor; theoretically it is known. The nuclear fuel that will be required is the critical state. The minimum amount of nuclear fuel that will be required is also known. We have islands; we have deserts and we have mountainous areas where we can undertake the work. We have the indigenous know-how the stockpile of fuel and moderator and heavy water and all the necessary things as far as I could gather as a member of the consultative committee on atomic energy—all the essential requirements for undertaking experimental nuclear blasts. Strangely the Government is

not doing or atomic energy has not undertaken a single nuclear blast. What is the reason? I do not understand it. If you want to cook, even if you have all the other materials, if you have no stove or oven, you cannot cook. You cannot develop metallurgy unless you have a furnace. You cannot have propulsion into the air or sea or on land unless you have an engine. Similarly, if you are really serious about developing nuclear technology and nuclear engineering for constructive purposes, you cannot do it unless you have a series of preliminary nuclear experimental blasts.

Even today for deep copper mining, for tapping the uranium and lead reserves, for exploration of underground gas, for diverting some water channel, for converting desert into fertile land, etc., you do not have the know-how and technology. We have to develop that expertise ourselves. How will we surmount these hazards? We very badly need this technology for oil or gas exploration. Seismic surveys have shown we have got immense resources of oil and gas. Within a month or two, we have to explore them. How will you do it unless you know the technology? For that, you will have to undertake a series of nuclear blasts. Unfortunately that is not done.

If it is a question of expenditure, according to international calculations, for blasting a crude type of nuclear device, we shall require only Rs. 30 lakhs, for one preliminary nuclear testing. In our conditions, the cost will be still less. We have enough fuel—mostly plutonium and less of uranium. We have many engineering and industrial and other commitments. But we have not got the key with us to enter and implement those commitments. This key is to master the know-how and technology of nuclear engineering. For that purpose, a series of experimental nuclear blasts are absolutely necessary. I want to know from the Government why this preliminary experimentation for mastering this

technology has not been undertaken and what stands in the way.

श्री रामावतार शास्त्री (पटना) :

सभापति महोदय, मैं दो सवाल आपके मार्फत करना चाहता हूँ। पहला सवाल इस प्रकार है। क्या सरकार ने शांतिपूर्ण कार्यों के लिए परीक्षाणात्मक आण्विक विस्फोट की कोई पंच वर्षीय योजना निर्धारित की है? यदि हाँ, तो उस की मुख्य मुख्य बातें क्या हैं? यदि नहीं तो क्या सरकार इस प्रकार की कोई योजना तैयार करने का विचार रखती है?

(ख) आण्विक विस्फोट के परीक्षण को क्या उत्पादन वृद्धि के लिए उपयोग में लाने का विचार सरकार ने किया है? यदि हाँ, तो उस का स्वरूप क्या है?

SHRI D. K. PANDA (Bhanjangai): We are already utilising electrical and thermal power, which has become very costly and which is difficult to get during times of crisis or war. So, why not we take to generation and use of nuclear power for peaceful purposes like treatment of cancer, running of locomotives and propelling big cargo ships? For such purposes we can associate ourselves with such countries which have already produced and utilized it for peaceful purposes. What effective steps are being taken to have some such collaboration with countries like the Soviet Union, where they have already been utilizing it for peaceful purposes?

श्री विभक्ति मिश्र (भोतीहारी) :

सभापति महोदय, मैं सरकार को धन्यवाद देता हूँ कि यह सरकार अब पीसफूल परपञ्ज के लिए बनाने को तैयार हुई है हालांकि इस सवाल को जवाहर लाल जी की जिन्दगी में मैंने शुरू किया और आज इंदिरा जी के जमाने में यह सरकार पीसफूल

[श्री विभूति मिश्र]

परपञ्च के लिए आ गई है। दूसरी बात यह है कि पंत जी आज मंत्री हैं। पंत जी इससे पहले दूसरे परंपञ्च के लिए बंकालत करते थे कि इस का इस्तेमाल दूसरे परंपञ्च के लिए होना चाहिए। आज तो वह मंत्री हैं। मैं आशा करूँगा कि जो इन का पुराना भाषण है दूसरे परंपञ्च के लिए इस्तेमाल करने का, उस पर ये कार्यम रहेंगे। एक अभी किताब निकली है जिसे मैं लिखा है कि चाइना 15 वर्षों में अतंरिक से पानक न्यूक्लियर पावर से तगड़ा हो जायगा। यह किताब है चाइना एंड न्यूक्लियर पावर इन वर्ल्ड पालिटिक्स वाइ ल्यू यूह यून लियू। यह 1972 में छपी है और 25 पृष्ठ में है। अब सवाल यह है कि हमारे पड़ोस का देश चाइना न्यूक्लियर पावर में जबर्दस्त हो गया। हम अपनी सुरक्षा के लिए अगर उसका इस्तेमाल करें क्योंकि हमारे ऊपर कोई हमला करने के लिए आता है तो हम बचाव करते हैं तो यह भी एक पीसफल परपञ्च है, हम लड़ाई बचाते हैं, आप के पास छड़ी है, और मेरे पास भी छड़ी है तो न आप चलायेंगे न मैं चलाऊँगा क्योंकि दोनों को भय रहेगा, इसलिए यह भी पीसफुल परपञ्च है, पीसफल परपञ्च नहर खोदना है, पीसफुल परपञ्च पहाड़ खोद कर खानों में से धातुएं निकालना भी है, तो मैं जानना चाहता हूँ कि सरकार इस का ब्लास्ट कब तक करेगी? ताकि लोगों को भरोसा हो कि यह सरकार ताकत रखती है और ताकत रखती है तो उसका सरकार प्रदर्शन करे। जब तक सरकार इस का प्रदर्शन नहीं करती है तब तक लोगों को विश्वास नहीं होगा।

एक बात यह भी है कि हमारे पास साइटिस्ट्स हैं। लेकिन हमारी सरकार साइटिस्टों पर गैद लगाए हुए है। साइटिस्ट कहते हैं कि सरकार आज्ञा दे तो हम बचायें। भाभा साहब ये, जब मैंने पूछा

तो भाभा साहब ने पंडित जी के सामने कहा कि हम को हुकम दें तो हम बनायें। अब सरकार की पीसफुल परंपञ्च में क्या दिक्कत है? एक दिक्कत मैंने सुनी है कि सरकार को अभी जमीन का अन्दाजो नहीं लग रहा है कि कहाँ ब्लास्ट करें। चाइना को जमीन मिलती है, यू.एस.ए. का ब्लास्ट हो ही रहा है। तो हम को जमीन ढूँढने में कितना समय लगेगा? हमारे यहां कहावत है कि पुण्य दौड़े दौड़े तब तक पाप हम को खा जायेंगा। जब तक ब्लास्ट की बात सोचते रहेंगे तब तक चाइना आगे बढ़ जायेगा। उस किताब में लिखा है कि चाइना साउथ ईस्ट एशिया में प्रीडामिनेंस चाहता है इसलिए वह तेजी से जा रहा है। तो मैं सरकार से जानना चाहता हूँ कि सरकार कब तक आगे बढ़ेगी और मान लीजिए आप आगे नहीं बढ़ें और किसी दिन चाइना आगे तगड़ा हो गया, चाइना के प्रभाव में आ गए तो आगे आने वाली जनता हम लोगों को और सारे संसद सदस्यों की कोसेगी कि ये लोक देश को चाइना के मातहत करने के जिम्मेदार हैं। इस लिए मैं चाहता हूँ कि यह सरकार और कुछ नहीं तो पीसफुल परपञ्च के लिए ही कब तक ब्लास्ट करने की बात सोच रही है, ताकि हिन्दुस्तान की जनता को भरोसा हो कि यह सरकार कुछ करने जा रही है?

SHRI S. M. BANERJEE: (Kanpur): Sir, the hon. Member, Shri Bibhuti Mishra, is pleading with the Government that we should have atom bomb even for peaceful purposes. I do not know how atom bomb can be used for peaceful purposes.

MR. CHAIRMAN: Please formulate your question.

SHRI S. M. BANERJEE: My question is whether the Government is aware that the people of Vietnam, the people of North Korea, fought the

American imperialists without atom bomb....

MR. CHAIRMAN: That is not strictly relevant to the discussion. Please confine yourself at least to the subject under discussion.

SHRI S. M. BANERJEE: I want an assurance from the Government that they will not use the atomic energy for manufacture of atom bomb which is not needed in this country. We believe in the use of atomic energy for peaceful purposes. I want to know whether any help from friendly country will be sought for the development of nuclear energy for peaceful purposes in this country.

17.52 hrs.

[**SHRI K. N. TIWARY** in the Chair]

THE MINISTER OF STATE IN THE MINISTRY OF HOME AFFAIRS (SHRI K. C. PANT): Mr. Chairman, Sir, from time to time, Shri Samar Guha has raised this question of the utilisation of nuclear energy for peaceful purposes in the House and we have also had some debates in the House, as far as I know, on the subject.

He referred in particular to what the Prime Minister said in the course of a Half-An-Hour Discussion on the subject on 20th April, 1970. That spells out the policy of the Government. The policy of the Government is well known. We are not in favour of going in for nuclear weapons but we are not opposed at all to the use of nuclear energy for peaceful purposes. This policy was spelt out very clearly by the Prime Minister. Now, my hon. friend, Shri Samar Guha, quoted her, where she has said that we are not opposed to the peaceful application of nuclear energy provided we can find proper use for it. She has also said that this is one of the important reasons why we signed a Nuclear Non-proliferation Treaty. She went on to say that in a country like India, at our stage of development, we should examine carefully

the economic feasibility of any application we make of nuclear energy for peaceful purposes and to examine whether the results achieved are commensurate with the effort and the cost put in and also to take into account the hazards, the radiation hazards, etc. to which Shri Samar Guha himself referred. Taking all these things into account, she said, and I quote:

“Should we feel that it is necessary for any particular project, we should not hesitate to do. But we must see the problem from all aspects.”

Then, I think, towards the end somebody asked a question as to what purposes we can use this atomic energy. I think, Shri Ram Avtar Shastri asked that. We can use it for power; we are using it, even now, for power generation. We can use it for health purposes like treatment of cancer to which reference has been made by Mr. Panda. That is already used. We can use radio isotopes for other purposes also, in agriculture, for various scientific purposes, for various diagnostic purposes in medicine; and even for scientific experimentation, radio isotopes can be used and are being used. There is a very important field, and that is the field of food preservation where radiation can be used. The Bhabha Atomic Research Centre scientists have actually carried on research in this field and have done considerable amount of work, I would say, successfully. In fact, they feel they have reached a stage where they can go ahead and use radiation for preservation of food-stuffs. But we have been going a little carefully. There have been discussions between the Health Ministry and the Department of Atomic Energy. The Health Ministry has said that further experimentation is better before large scale radiated food-stuffs are permitted, and the basic reason is that the nutrition levels in India are so low and in these levels, it is necessary to carry on large

[Shri K. C. Pant]

scale experiments before one is sure that the population which consumes these radiated foodstuffs do not suffer from deleterious effects....

SHRI SAMAR GUHA: The discussion is pinpointed to 'experimental nuclear explosion for peaceful purposes'.

SHRI K. C. PANT: I am coming to that. I should try to meet some of the other points also.

Why I said all this was particularly to assure my hon. friend, Shri Samar Guha, that the Atomic Energy Commission is in touch with all the developments that are taking place in the world in the progress of technology, in the peaceful uses of atomic energy, nuclear energy, along with underground explosion and underground nuclear explosion, to which his question pointedly referred. They have been in touch with all these developments, both in the theoretical and in the experimental aspects. Both the aspects have been under review. He has taken great pains to clarify that, even though one may have theoretical knowledge, unless one experiments it is not possible to be sure that the theoretical knowledge can be applied successfully. This is quite true. But the economic angle which I referred to earlier, the question of the economic value of these explosions has to be studied in respect of the particular use to which it is put and the economic benefits that will flow, and the possible effect on the environment and the ecological aspects—all these have to be studied. Particularly he referred to near surface mining as one of the possible uses. Much of the radiation that will emanate due to such an explosion may be trapped in molten mass and in the rocks round about. But, he knows, if it is near the surface, a certain amount of radio activity can be released, can escape into the environment and, therefore, that certainly has to be taken into account and the full-out has to be measured;

one cannot take a big risk unless one is quite sure of what one is doing. So, problems like these have to be studied and it is only after satisfactory answers to all these questions have been obtained that one can go ahead with an actual underground explosion.

18 hrs.

My hon. friend knows that underground explosions have been carried out in different parts of the world, but it is very difficult to say whether an explosion is related to the development of weaponry or it is devoted purely to peaceful purposes. One cannot know this only by gathering information about a test. But, by and large, one can say that the whole technology as yet is at the developmental stage and practical technology on economic values based on such uses has not quite emerged. He knows it very well. He follows the subject. He knows what is being done in other countries and it is not as though to-day we know of any country where rivers are being moved, where harbours are being created and where irrigation has been facilitated and where high-ways are being built and where large-scale civil engineering works are being done and dams are being constructed. All these uses have been referred to as actual uses of nuclear explosion. Now, he can point out the cases where this has been used in practice, either for recovery of oil or gas or for recovery of non-ferrous metals or either for leaching purposes underground or also for creating storage capacity underground, the various uses to which undoubtedly this explosion could be put, theoretically, because a nuclear explosion is nothing but an ordinary explosion on a much larger scale. Therefore, in engineering terms, certainly all these things are possible and these things can be done. But he knows nobody actually is doing any of these things because the technology is being developed. Our scientists are certainly keeping themselves informed about developments

in the world and about the possible applications of this technology to our conditions. My friend possibly knows that India has been taking an active part in international conferences dealing with this subject. There was a meeting held in connection with the Gas Buggy Test explosion in December 1967. India was represented in that. Another test explosion called Relison, took place in September 1969. Again India was associated with that. There was a Panel meeting....

SHRI SAMAR GUHA: In the report it is not clear. I want to know from you....

SHRI K. C. PANT: Let me finish.

SHRI SAMAR GUHA rose.

MR. CHAIRMAN: No, Mr. Guha, it is very bad. Any time you get up.

SHRI SAMAR GUHA: It is very difficult....

MR. CHAIRMAN: Not difficult. You get up and without taking my permission you begin to speak. This is a very peculiar thing in this House. Let him finish.

SHRI SAMAR GUHA: It is our fate that we have to be guided by such, what could I say

MR. CHAIRMAN: I am not allowing you. The hon. Minister.

SHRI SAMAR GUHA: If the hon. Chairman takes this position, I also know (*Interruptions*)

MR. CHAIRMAN: Let the Minister speak.

SHRI SAMAR GUHA: What is this type of House....*

MR. CHAIRMAN: Nothing will go on record. You should take the permission of the Chair and you can put the question only when I allow you. Let the hon. Minister please continue.

You should take my permission if you want to speak.

SHRI SAMAR GUHA: I seek your permission, Sir.

MR. CHAIRMAN: Yes, now you put the question.

SHRI SAMAR GUHA: There is a report about the meeting of the tests—Gas Buggy and Relison. There were two test explosions. When these experiments took place were we present? I want to know whether India's representative was represented at the time of the test or not.

SHRI K. C. PANT: Our representative was there at the meeting held in connection with these tests.

SHRI SAMAR GUHA: I said, at the time of the test..

SHRI K. C. PANT: Usually countries are reluctant to allow other scientists from other countries to be present at the time of the actual explosions. But I will check up. There is an international body, the I.A.E.A. in Vienna and they held a meeting on peaceful uses of nuclear explosions and there also India was represented. This meeting was planned to ensure the fullest possible exchange and dissemination of information in this field. So, I would like to assure the hon. Member that we are in touch with the situation, with the various developments in this field and we shall continue to be so and we are vitally interested in this field. And, the reason for our interest is that there are certain applications which are of interest to us. He has also spelt out a number of applications. I do not want to repeat them.

Sir, I have just got information that we were present at the site of this explosion, the Gasbuggy experiment. Some distance away; they have to be some distance away, otherwise they would be blown up!

*Not recorded.

[Shri K. C. Pant]

I was referring to the interest of India. Among all these applications the one which is of obvious interest to us is the potential use of these explosions for mining operations in non-ferrous metals such as copper, zinc and lead. Now these are of interest to us. I may say, we have been following what other countries have been doing in this matter.

I do not want to go into the question of cost. He has raised the question of cost also. On the question of cost, one has to consider, whether one considers the actual cost of nuclear explosions or the cost of plants, or the nuclear material, the kind of research and development, etc. Costing in these things is a difficult thing. Even taking that into consideration, it is a point whether this would be beneficial or worthwhile, and that is what we have to see. The economic feasibility of peaceful nuclear explosions for any specific application requires a comprehensive and careful assessment of various factors, viz.,

- (i) the comparative costs of production and manufacture of nuclear vs. conventional explosives;
- (ii) the technical problems and cost implications of emplacing, mounting and firing the explosives;
- (iii) the cost of the pre-shot geological, hydrological, and ecological surveys; and
- (iv) the prospects of economically working the rubble left by an explosion.

These are some of the aspects which have to be studied before you actually go in for experimentation.

श्री विभूति मिश्र : एक बात में पूछना चाहता हूँ। इंदिरा जी ने बयान दिया कि पीसफुल पर्यवेक्षण के लिए कर सकते हैं तो कितना संशय लगीगा इसकी कास्ट को फाइन्ड आउट करने में ? अनन्त काल तक तो नहीं चलेगा, कोई टारगेट होमा चाहिए कि फलाने समय में हो जायेगा ।

श्री क० सी० पंत : अनन्त काल तक तो नहीं चलेगा, लेकिन इन चीजों में तारीख देना मुश्किल है ।

SHRI K. C. PANT: It is very difficult to say that by such and such a date, the explosion will take place, nor is it in the interests of this House to know by which date we shall carry out an explosion or not, because these are things...

SHRI S. M. BANERJEE: I was going to suggest that nothing should go to the press today about this discussion, because these are all secret matters.

SHRI SAMAR GUHA: Secret in the head of Shri S. M. Banerjee only or in Shri S. M. Banerjee's laboratory only.

SHRI K. C. PANT: I think more secrets are attempted to be given out by friends opposite than by me....

SHRI S. M. BANERJEE: Not always opposite.

SHRI K. C. PANT: I am trying to spell out the difficulties in arriving at a quick decision, and I cannot really give a time-limit or a date, and I think that hon. Members who have taken interest in this subject not only understand that I cannot give the date but perhaps will appreciate it that I am refusing to give a date.

SHRI SAMAR GUHA: I want to be sure that it would not be inordinately delayed.

SHRI K. C. PANT: The only point which one has to remember in this is whether we are alive to the possibilities and alive to the potential usefulness and alive to the need to keep in touch with what is happening in the world and prepared to make use of whatever technology is offered by this technique or by this process for the benefit of our developmental programmes.

I can assure the House that we are alive to all these things, and that our scientists are actively engaged in making the best use of nuclear science in all its aspects for peaceful purposes. I stress peaceful purposes because my position has been made somewhat difficult by the intervention of Shri Bibhuti Mishra who had referred to certain views of mine in the past.

Shri Ramavatar Shastri had asked about a five-year plan. There is a five year plan for everything but that is not enough; we have a ten-year plan for this. In fact, there is a ten-year profile which I think he may have seen if he were interested in this subject, which spells out in detail what the plans are and have been, and in fact, we are now engaged in reviewing the progress made under the ten-year profile and how far we have succeeded in achieving the targets which have been set out in the plan.

My hon. friend Shri D. K. Panda had asked about marine propulsion. That is again one of the subjects which we are studying and which is under study, but again it is a subject on which I would request him not to make me say anything more.

I would like to end only by referring to one other point which does need a comment on my part, and that is in regard to the point made by Shri Bibhuti Mishra that Government are not letting the scientists have their way or they are not allowing the scientists to have their head or they are somehow suppressing them and not allowing them to progress. That is absolutely not correct. Government and the very brilliant set of scientists who are working in this field have in the past years constructed a structure in the field of nuclear science of which we can well be proud, and which is one of the finest of its kind in any developing country, and I would say one of the good scientific communities and structure in the world in the nuclear field. We

have to congratulate them, and we have to thank them, and I can assure my hon. friends that they and the Government work together; they are a part of the Government. We certainly do not restrict them in any sense, any sense of the term. Our policy is to use nuclear science for peaceful purposes and within that overall policy, whatever facilities they require, if they require additional allocation of funds, etc., in all these things the Government takes as liberal a view as it can consistent with the resources of the economy and we are all very much mindful of the fact that the good start which the country has made in the nuclear field, one of the modern fields of science should be kept up and should progress and we should try to keep in the forefront of this science which has great potentialities for the future.

18.16 hrs.

DISCUSSION ON STUDENT UNREST
IN THE COUNTRY AND INCIDENTS
IN DELHI UNIVERSITY ON DECEMBER 6, 1972—Contd.

MR. CHAIRMAN: We shall now take up further discussion on the increasing student unrest in the country, items 16 and 17 in the Order Paper today. Shri Jyotirmoy Bosu may continue his speech.

SHRI JYOTIRMOY BOSU (Diamond Harbour): In the front page of the Hindustan Times there is a photo which shows what deal the present students are getting from this Government. In this photo you can see a student lying on the ground, being beaten by eight constables and a magistrate is trying to stop it. This is the deal he is getting today. You get the news headline, one inch, on the front page: many hurt in police student clashes: Delhi university had been made a battle ground.

The trouble today is that they never try to go deep into the matter and this Government unfortunately lacks an analytical mind. Students have a