दूसरा सुझाव यह है कि क्षेत्रीय भाषाओं को तरक्की दी जाय, और हिन्दी को अगर राष्ट्र भाषा बनाना है तो उसको जनसंघ की ज़बान नहीं बल्कि आसान बनाइये ताकि सब समझ सकें।

तीसरी बात यह है कि पटना यूनिवर्सिटी, जहां पर बहुत बड़ा आन्दोलन हो रहा है, उस को अपने क्षेत्र में लीजिये। और हमारे प्रदेश के माध्यमिक शिक्षकों की मांगों को स्वीकार कीजिये, उनको तनख्वाह खजाने से दी जाय। साथ ही साथ जितना मुमकिन हो सके शिक्षा संस्थाओं को अपने हाथ में लीजिये ताकि उनकी तरक्की हो सके, और जो देश में अराजकता की स्थिति उत्पन्न हो रही है, वह बन्द हो सके।

कल प्रधान मंत्री ने कहा कि लोग नक्सलवादी हो रहे हैं। हमें डर लगता है कि अगर आपकी यही नीति चलती रही तो लोग नक्सलवादी हो जायेंगे, क्योंकि पागल आदमी नक्सलवादी ही होगा। इसलिये अगर इस देश को हिंसा, लूट से बचाना है, और देश की प्रगति करनी है तो उन किताबों पर रोक लगाइये जो कौमी नफरत फैलाती हैं। मुझे मालूम नहीं कि पुराने शासकों ने क्या किया, हिन्दू राजाओं ने क्या किया, मगर नये हिन्दुस्तान के निर्माण के लिये पुरानों को तोड़ो और उनको खत्म करो और ऐसी किताबों को देश में बन्द करो और उनमें से उन तमाम चीजों को, जो हमारे स्कूलों में पढ़ायी जाती हैं कि गऊ माता, गंगा माता, अल्लाह अकबर, इन सबको साफ कीजिये। अगर देश को सेक्यूलर बनाना है तो जनता में ऐसा प्रचार करो जिससे हमारे देश के लोगों की बुद्धि बढ़ सके, और इस तरह से शिक्षा में परिवर्तन करो ताकि हमारा देश आगे बढ़े, तरक्की करे और शिक्षा की सही माने में नीति हमारे देश में चल सके।

18.32 hrs.

HALF-AN-HOUR DISCUSSION

USE OF NUCLEAR ENGINEERING TECHNOLOGY FOR PEACEFUL PURPOSES

SHRI SAMAR GUHA (Contai) : Sir, the Atomic Energy Ministry is headed by the Prime Minister, a gracious lady who does not believe in any kind of purdah system. But, surprisingly, she is pursuing a policy of a purdah lady in respect of the atomic policy of India.

I tried during the last three years through a number of questions to get some informations on the development of atomic science in our country and also production in our nuclear fuels in our reactor. I asked a question how much plutonium is produced, a bi-product in our nuclear reactor, and how much heavy water is produced by our Nangal project. The reply given every time was that it is in the interest of the nation, it is in the national interest, not to disclose these facts. Those facts which are denied to this Parliament and to these members are not secret to the foreign countries. Firstly, as regards those foreign countries which supply nuclear fuel and also nuclear reactor technology, our government is bound under the agreement to furnish them with these informations. Not only that, I asked a question whether it is not a fact that even if we try to suppress or withhold facts from the Parliament, just by a little bit of calculation the foreign makers and suppliers of our reactor can have important facts about the productive capacity of the bi-product of plutonium by our reactor. Again, about heavy water, even though facts were denied to this Parliament, all those facts appeared in the foreign papers wherein they stated that India annually produced 14.6 tonnes of heavy water of which 6 tonnes are used for consumption in this country and the rest are exported to Belgium and Canada. In reply to my questions, the government agreed and said :

"It is also possible for such parties"—that means, the foreign countries—

"to arrive at an estimate in this regard"—that means, production of plutonium and other by-products and heavy water.

[Shri Samar Guha]

'However, it is not in the national interest to give publicity to such information.'

Sir, what is in the national interest and not —is a matter of dispute. What the Government may consider as a matter of national interest, the Opposition—even the other Members of her own party—may not consider that to be in the interest of the nation. On the contrary it is in the interests of nation that this Parliament should be furnished with all the facts, data and informations in regard to the development of atomic energy in our country so that they can arrive at a conclusion in regard to the future policy and projects that our country will undertake in regard to atomic energy.

Sir, in the consultative committee for Atomic Energy when I told the Government, what informations you have denied to the Members of Parliament are all known to the foreign countries, immediately the reply of the Prime Minister was : "we do not want to give an official seal to this data and information." Sir, I desisted that day and even today I desist to use strong words about this attitude of the Government. But I would say that if Government wants to deny this Parliament the right to have all informations, data and facts and other things in regard to atomic development, then they should legislate an Act. Only by that Act they can prevent or debar a Member of Parliament from his legitimate right to have information from the Government in regard to nuclear development in our country.

Sir, I had sent to the Government more than a dozen questions in different forms to have informations as to whether our scientists have theoretical as well as practical knowledge in regard to nuclear blast technology. Do you know what the answer was ? That is very interesting. I shall read the whole question and answer also :

> Will the Prime Minister be pleased to state :
>
> (a) whether the atomic scientists of India will be allowed to acquire experimental knowledge about nuclear blast technology as to develop Indian capacity for nuclear engineering ;
>
> (b) whether it is a fact that unless our scientists are allowed to have experimental knowledge about mass fission technology it will not be possible for them to acquire practical knowledge about the nuclear fusion technology in the future for harnessing thermo-nuclear energy ; and
>
> (c) if so, the stand taken by the Government in this direction for developing nuclear and thermonuclear blast technology in our country.
>
> The answer was ?
>
> (a) to (c). Our atomic scientists are engaged in theoretical and experimental work needed for development of entire range of peaceful use of atomic energy in the context of our economic development and consistent with our objective. The Atomic Energy Commission keeps itself abreast of the latest technological development.

Sir, here you should note two words : (a) that our atomic scientists are engaged in experimental work and (b) that they are abreast of all the latest development in regard to nuclear technology.

What does it mean ? Does it mean that our atomic scientists have already conducted or have plans to conduct experiments in nuclear blast technology ? If not, why is this answer that our scientists are engaged in experimental work ? This creates a suspicion and an enigmatic impression in the mind of the world powers and also a false hope in the minds of the people of our country that our scientists have already conducted experimental work in nuclear blast technology.

I am very glad that in this reply, perhaps inadvertently and unconsciously, they have used the sentence :—

> "Our scientists are engaged in the development of the entire range of peaceful use of atomic energy."

Please note the words "entire range of peaceful use of atomic energy".

Today I am not advocating for making a nuclear weapon.

SOME HON. MEMBERS : why ?

SHRI SAMAR GUHA : My whole approach is to develop nuclear engineering technology.

SHRI KANWAR LAL GUPTA (Delhi Sadar) : Is there some understanding with the Prime Minister ?,

SHRI SAMAR GUHA : You have no knowledge.

What is the entire range of peaceful utilisation of atomic energy ? It is, firstly, the use of radioactive isotopes for medical purposes, for preservation of food, for industrial and other purposes ; secondly, the utilisation of nuclear energy for development of nuclear power plants for electricity ; and, thirdly, the development of nuclear engineering.

What is the purpose of nuclear engineering ? It is to convert the desert into fertile land, to change the course of rivers for flood control purposes, to create roads in mountainous areas, tunnel in rocky areas and for many other purposes. Nuclear energy can be used for effective engineering purposes. In our country every year more than Rs. 700 crores worth of ordinary dynamite is used for blast purposes. If nuclear engineering is allowed a full play in our country to develop, this blasting work can be conducted at a much cheaper rate.

When I wanted to know whether Russia, America and other nuclear powers, after signing the treaty for banning nuclear weapons or non-proliferation of nuclear weapons, were conducting underground nuclear tests, it has been stated that up till now the Soviet Union has undertaken 58 underground tests and the USA 141 underground tests. I do not want to add the figures for UK, France and China. But there is one significant sentence here. Our Government admits that out of these, "20 were reported to have been for peaceful and scientific purposes"

In the USA there are two projects—Project Gnome and Project Ploughshare—which are being conducted by the USA only for the purpose of developing the technology of nuclear engineering. Not only that, even in the treaty on non-proliferation of nuclear weapons there is one clause in which it has been agreed that if any country outside these nuclear powers wanted to use nuclear devices for peaceful purposes, it will be made available to that country.

If it is so, what does it mean ? The nuclear non-proliferation treaty or the nuclear ban treaty—neither of them—does prevent India to develop the technology of nuclear engineering. Not only so, if it is the commitment of our Government to use nuclear energy for peaceful purposes, if that is the policy of the Government, what prevents the Government to develop the technology of nuclear engineering ?

Not only the Government, perhaps, inadvertently committed to this policy of developing technology of nuclear engineering, but even Shastriji, as back as in 1964, while replying to a debate raised in this House, not only supported but he said that our Atomic Energy Commission was already seized of the problem and they were developing nuclear engineering technology. I want to quote what Shastriji said, when as a Government policy, he committed himself to this House. This is what he said it was in Hindi ; I quote :

"मान लीजिए, हम एक एक्सप्लोशन करते हैं, भारी-भारी आज हमें टनल्ज बनानी हैं, बहुत बड़ा एरिया, मान लीजिए, हमें साफ करना है पहाड़ों को तोड़ना है, डिवेलेपमेंट वर्क के लिए हमें उसका इस्तेमाल करना है और उसके लिए अगर हम न्यूक्लियर डिवाइसिस की शक्ति को बढ़ाएगें, तो उससे देश को लाभ होगा, दुनिया को भी लाभ होगा । आज एटोमिक एनर्जी कमीशन हमारा उस काम को कर रहा है । उस तरफ उसका डिवेलपमेंट और विकास बढ़ता जाता है ।"

This is the commitment of another Prime Minister in this House that, for making a tunnel, for the development of a wide area,

[Sri Samar Guha]

this nuclear device should be used, and it will be for the benefit of the country and for the world as a whole. He has committed this House and this Government to the position that our Atomic Energy Commission is not only seized of the problem but they are already working on it. If it is so, our Government is also committed to use nuclear energy for peaceful purposes.

I want to ask the Prime Minister: Can not the development of nuclear engineering be used for peaceful purpose, as done in other countries? As I have already said, U. S. A., Russia and other countries have developed nuclear energy, nuclear blast technology for development of their own countries. If it is the purpose of the Government to have nuclear energy for peaceful purposes, what prevents the Government to develop nuclear engineering in our country?

The Government says that they are bound by an agreement with the foreign suppliers of nuclear fuel and nuclear reactor. Yes. Why will we be bound, and for what purposes, not to use nuclear energy for making nuclear weapons. In this debate, I am not raising the point that our Atomic Energy Commission should immediately go to make nuclear weapons. But neither the international agreement nor the international convention, nor the nuclear weapons ban-treaty, nor the non-proliferation treaty,—none of the international commitments or international treaties, or our commitment to any international treaties, debars us from developing the nuclear engineering technology in our country.

Now, the ultimate question, if it is not aginst the policy of the Government to which it is committed, is: are we capable of undetaking nuclear blast technology? Are we capable of blasting nuclear devices? I would say with all the sense of responsibility and with all knowledge that I had gathered after visiting Trombay and other areas of activities of the Atomic Energy Commission that we have nuclear fuel, we have nucleartechnology, we have the techniques and we have the components and all the necessary other reqirements for undertaking experiment in blasting of nuclear devices. It is only the question of decision of the Government. The Government has created an impression—I have already used the expression enigmatic impression—inside and outside the country that our nuclear scientists are abreast of even experimental devices and experimental knowledge of blasting nuclear devices. Then, what does stand in the way? I want to know. This House has a right to know as to what stands in the way of the Government not allowing our scientists to declare nuclear blast engineering and to make experiments with nuclear devices. That answer the Government owe to this House and the country. Unless the Government is reluctant for any other purpose, according to their policy according to their commitment, according to the necessity of the country and according to the capability of our Atomic Energy Commission, we are capable of developing nuclear engineering technology in our country. I want to know from the Government as to what stands in the way of not allowing our scientists to undertake practical knowledge of nuclear blast technology.

SHRI RANJEET SINGH (Khalilabad): If Government stands in the way, blast the Government. No violence is meant.

THE PRIME MINISTER, MINISTER OF FINANCE, MINISTER OF ATOMIC ENERGY AND MINISTER OF PLANNING (SHRIMATI INDIRA GANDHI): The hon. Member has shown fairly great interest in the subject and very persistently so for quite some time. As he has mentioned, he has raised this subject in other forms also. However, it is after some time that he is coming back to the engineering side of it. Normally his demand has been for the manufacture of an atom bomb.

If I may skip the long introduction, the main question he has asked is why we are preventing the Atomic Energy Commission from going in for nuclear blasting and for using nuclear energy for engineering; why are we opposed to it? Now, Sir, we are not at all opposed to the use of nuclear energy for peacefull purposes when a meaningful application on mere economic significance is identified. This was an important part in our opposition to the Nuclear Non-Proliferation Treaty.

The hon. Member has mentioned about some of the experiments which have taken place in USA. We know that such blasts and experiments have also taken place in the Soviet Union and perhaps few in France also. Although this wording seems to irritate the hon. Member I must say again that our scientists have tried their best to keep themselves informed of these developments and they are in the picture so far as this matter is concerned. At the present moment the peaceful use of nuclear explosives and detonators is very much in the developmental stage and a practical technology of economic value based on such uses has not yet emerged. In other words the nuclear detonator as a substitute for TNT is not yet on the market as a commercial proposition, as there are many complicated problems connected with this development which are yet to be solved.

SHRI SAMAR GUHA : The most complicated problem is the decision of the Government.

SHRIMATI INDIRA GANDHI : If the hon. Member is reading the magazines and papers which come from other countries he would have noticed that the one thing which is greatly occupying the minds of people in the West is concerned with the changes in the environment which any scientific experiment can bring about : for instance, the effects on the environment as a result of residual radioactivity. In an underground explosion there is always the danger of the contamination of ground-water. For many years many things were being done in all these countries which we all looked up to as advanced technology, of advanced country, but today these very things are being looked at with new eyes. We see how, although they have led to progress in some directions, at the same time such actions have done great harm in other directions, as well as this matter is occupying great deal of energy, money and the attention of the public. Obviously they now consider these ill-effects to be quite serious for the population.

As I said, apart from the uncertainly regarding the amount of radio-activity, such explosions would also cause serious ecological changes which will be far more significant in the long run.

SHRI SAMAR GUHA : The clean devices of atomic explosions are there and there is no radio-activity falling out ; they have developed this system in U. S. A. and Russia.

SHRIMATI INDIRA GANDHI : There is such a thing as a clean blast, but, as I said earlier, in all these countries this is still in the experimental stage. We are in touch with developments, in the sense that our scientists have attended the meeting, they have gone to the sites before the explosion took place, they have been explained the whole thing, they have seen the place after the blast—that is what we mean by saying that we are fully in touch. Yet, for a country like India, whether such experiments at this stage are economically feasible and whether they can give results which are commensurate with the expense, is a matter for consideration. As I said, should we feel that this is necessary for any particular project, we would not hesitate to do it, but we must see the problem from all aspects. As Professor Samar Guha has himself pointed out, we are going ahead in many directions. He mentioned food preservation, medicines, agriculture, etc. There is also the use of isotopes for studying the silt in the harbour and many other such things.

SHRI SAMAR GUHA : I am proud of our atomic scientists ; but unfortunately you are not allowing them to go ahead.

SHRIMATI INDIRA GANDHI : I can assure the hon. Member that we are not stopping scientists. They are in no way being stopped from making experiments. They are today engaged in gathering greater knowledge in all directions so that when it is necessary to take up any project we will be fully ready with the knowledge and experience. They are the people who will decide, in consultation with us, what is the right place, what is the right project for using such technology and in what ways it will be more useful ? Whether India can start now when even in other countries which are so much more advanced in this technology, the matter is still at an experimental stage, whether it helps us at this moment to do

[Shrimati Indira Gandhi]

some experimentation, is a matter which has to be considered.

19 hrs.

I think the hon. Member Dr. Guha raised another point with which he was very much concerned. That was with regard to our withholding information. We have never withheld any information from the House which can be given to the House. For instance, in reply to an earlier question, we have given information regarding the amount of heavy water. I think it was Dr. Guha's question.

SHRI SAMAR GUHA : I have given the figures which you deny.

SHRIMATI INDIRA GANDHI : I think we said that the Nangal Plant produces about 14 tonnes of heavy water per year. But regarding some other information, we did feel that it was not useful to give to the House.

As the hon. Member knows, there are many items of information which are guessed at by other countries. And there are some items of information which are known to some people. But, there is no reason why this information should be made available to all countries publicly.

Some matters may come up when we are discussing defence or other such matters. I am sure the House will appreciate that it is one thing for people to guess at information, and it is another thing for authoritative information being given by Government. People can always guess a certain figures. I do not think the hon. Member has asked anything else.

I have just mentioned some of the problems connected with the development of this technology—one about the effect on the environment, the contamination and so on, and the other about the actual usefulness of exploiting ores of indigenous origin by creating cavities from such blasts and reaching the ores. Reaching in Situ type of ore is economically feasible, but this may not be necessarily suitable for all types of ores and specially the types which we have in India.

श्री कंवर लाल गुप्त (दिल्ली सदर) : मैं एटम बम बनाने के पक्ष में हूं। लेकिन आज मेरा सवाल दूसरा है। प्रधान मंत्री जी ने कहा है कि इसमें कुछ कम्प्लीकेशन्ज हैं, कठिनाइयां हैं। पीसफुल यूज के लिए आगे काम करने के रास्ते में जो सबसे बड़ी कठिनाई है, वह सरकार का डिसिशन न लेना है और लैक आफ डिटर्मिनेशन है। आपको याद होगा कि 1963 में हम इस मामले में चीन से आगे थे। उस वक्त भाभा साहब यहां थे। आज चीन से हम छः सात साल पीछे हैं। इसका कारण क्या है ? कारण यह है कि भाभा साहब नहीं रहे और उनकी जगह पर एक बिलकुल बेकार आदमी श्री साराभाई को बिठा दिया गया है। यह मुझे कहना तो नहीं चाहिये लेकिन कहना पड़ता है। देश का जो इंटरेस्ट है, मैं समझता हूं कि अमरीका के दबाव में आकर उसको हमें हानि नहीं पहुंचानी चाहिये। अमरीका के दबाव में आकर हम लोगों ने भाभा साहब की सारी की सारी स्कीम को ठप्प कर दिया है। हर महीने अमरीका का ट्रिप करने से कुछ लाभ नहीं होगा।

सभापति महोदय, कंसलटेटिव कमेटी की मीटिंग हुई थी। उसमें किसी मेम्बर ने सवाल पूछा था कि आप इस प्रकार का एक्सप्लोशन क्यों नहीं करते हैं। साराभाई साहब ने जवाब दिया था कि इससे कुछ मिसअण्डरस्टैंडिंग फैल जाएगी और उसका नतीजा यह होगा कि हमें जो देश मदद करते हैं, वह हमें नहीं मिलेगी। पीसफुल यूजिज के लिये अगर एक्सप्लोशन किया जाए तो क्यों नहीं ऐसा करने दिया जाता है। इसके उत्तर में उन्होंने कहा था कि मिसअंडरस्टैंडिंग हो जायेगी। इस प्रकार की मिसअंडरस्टैंडिंग से डरने वाला हमारा एटमिक एनर्जी का चेयरमैन है। इसकी वजह से देश की सिक्योरिटी, देश का डिफेंस, देश की इकोनोमिक हालत और इंडस्ट्रियल डिवेलेपमेंट आदि रुक जाते हैं। मिसअंडरस्टैंडिंग की कोई बात

ही नहीं है । आपने ट्रीटी पर हस्ताक्षर नहीं किये तो क्या हो गया है ? कुछ भी तो नहीं हुआ है । यू० एस० ए० एक साल में तीन सौ एक्सपेरिमेंट कर रहा है । वहां पर एक्सट्रैक्सन आफ कापर इससे हो रहा है जिसकी कास्ट पचास परसेंट है, आधी है । इसके अलावा वे एक्सपेरिमेंट कर रहे हैं ।—when kerosene under the sea is subjected to the intense heat of nuclear explosion, it converts to oil.

वहां यह भी एक्सपेरिमेंट हो रहा है ।

building, canals and tunnels, extracting copper, building underground reservoirs, release of gases from right rocks.

इस तरह से कई चीजों में वे कर रहे हैं । अगर तेल के ऊपर एक्सपेरिमेंट ठीक हो जाए तो मैं कहता हूं कि मिडिल ईस्ट की जो पोजिशन है उस में काफी फर्क पड़ जायेगा । आज हम सौ करोड़ का तेल मंगाते हैं ।

अभी बताया गया है कि हम टच में हैं । लेकिन कोई भी न्यूक्लियर पावर आपको कुछ बताने वाली नहीं है इस चीज के बारे में ।

मैं सवाल करता हूं । पहला सवाल यह है कि आपके दिमाग में डिटर्मिनेशन है और क्या आप डिसिशन लेंगे कि पीसफुल मींज के लिए जितना धन चाहिये, जितना एक्सप्लोशन करना है, उसकी व्यवस्था की जायेगी और एक्सप्लोशन किया जाएगा ? इसमें मिसअंडरस्टैंडिंग की कोई बात नहीं है । उसकी आपको चिन्ता नहीं करनी चाहिये । क्या इस मामले में आप साइंटिस्ट्स को पूरी छूट्टी देंगे ? उनके रास्ते में किसी प्रकार की बाधा तो खड़ी नहीं करेंगे ?

क्या आप एक एक्सपर्ट्स की कमेटी बनाएंगे जो यह देखें कि एटामिक एनर्जी के पीसफुल यूज कौन-कौन से हो सकते हैं ? हमारे जितने मींज हैं उनके तहत या जितनी हमारी प्रगति है उसके तहत हमें किन-किन चीजों पर एक्सपेरिमेंट करना चाहिये, कमेटी इसका पता लगाये । मैं नहीं कहता कि पब्लिकली आप बतायें कि कहां तक इस क्षेत्र में हमने डिवेलेपमेंट किया है । लेकिन इस प्रकार की एक कमेटी आप बनायेंगे ?

साराभाई की वजह से और अमरीका के प्रभाव की वजह से, जो उन पर पड़ रहा है, सारा काम जो भाभा साहब ने किया था, उसको मिट्टी में मिला दिया गया है । क्या उनको हटाया जाएगा ? भाभा साहब का जो प्लान था 1963-64 का क्या उसको पूरा किया जा सकेगा ? इस प्रकार के साइंटिस्ट को जो इन चीजों को जानता हो, उनकी जगह बिठाया जाएगा ?

मैं यह भी जानना चाहता हूं कि क्या जो नान-प्रोलिफरेशन ट्रीटी है, और उसके तहत जो कंडिशंज हैं कि पीसफुल यूज के लिए कोई चीज बताने पर भी पाबन्दी है, उस पर आप साइन नहीं करेंगे, क्या यह आश्वासन भी आप देंगे ?

SHRI B. K. DASCHOWDHURY (Cooch-Behar) : We have had an interesting discussion on atomic energy and nuclear power and its peaceful uses. At the same time, the reply given by Madam Prime Minister is also not very satisfactory.

It has been clearly stated that Government are not putting any impediment in the way of better progress of research of the scientists. I would request Government to go through the budget allocations for the last few years. Without having any comparison, we can say that even Pakistan, our neighbour, has started two big projects for extraction of nuclear power and its development. One is already done near Karachi with Canadian help. Very recently another was set up in Dacca, in Rupur, under Belgian experts. For the one in Rupur, they have a scheme costing nearly 70 million dollars.

[Shri B. K. Daschowdhury]

Considering this, what is the amount budgeted even in the current year's budget for research and development?

It is only Rs. 50 to Rs. 55 lakhs more than last year. Comparatively the national budget of Pakistan is only a little more than 40 per cent of ours, but they are spending more money on this nuclear development. Therefore, I would like to draw the attention of the Prime Minister to the inadequacy of the provision and would like to know if she is going to increase this fund for the development of nuclear power for peaceful purposes.

Secondly, the projects that we have got are only in the north-western part of our country and in Madras. The eastern part is completely neglected. Why should not there be such a project there? Though we have not yet got uranium, it is possible to develop nuclear energy from thorium by certain processes according to scientists. We have enough thorium in the country.

There are two principles in the development of nuclear energy, the principle of fission and the principle of fusion. Till now the scientists and engineers have been harnessing the principle of fission and now the developing countries are making research into fusion. I would like to know from the Prime Minister whether our scientists are being authorised to do research in fusion so that there may be a new burst of power.

श्री रामावतार शास्त्री (पटना) : सभापति महोदय, परमाणु शक्ति के शान्तिपूर्ण उपयोग की हमारी जो नीति है, उसको ध्यान में रख कर मैं अपने सवाल कर रहा हूं।

बिहार के सिंहभूम जिले में जादुगुड़ा में युरैनियम माइन्ज हैं। इस बात को ध्यान में रखकर क्या सरकार की वहां पर कोई एटामिक प्लांट बनाने की योजना है या नहीं?

आज कई लोग शान्तिपूर्ण प्रयोजनों के लिए न्युक्लियर एक्सप्लोजन की बात कह रहे हैं। क्या सरकार ने ऐसा कोई अध्ययन किया है कि ऐसे एक एक्सप्लोजन पर कितना खर्चा होता है और हमारे जीवन पर आर्थिक दृष्टि से उसका क्या प्रभाव पड़ेगा; यदि हां, तो उसका ब्यौरा क्या है?

सब लोग जानते हैं कि हमारे देश में सिंचाई की व्यवस्था की बड़ी जरूरत है। हमारे देश के वैज्ञानिक इस दिशा में प्रयत्नशील भी हैं और वे कई जगह पावर स्टेशन बनाने के लिए प्रयत्न भी कर रहे हैं। मैं यह जानना चाहता हूं कि सरकार परमाणु शक्ति के माध्यम से किसानों को सिंचाई के लिए पानी देना कब से शुरू करने का विचार रखती है।

श्री शिवचन्द्र झा (मधुबनी) : प्रधान मंत्री जी ने कहा है कि मेडिसन आदि के क्षेत्रों में आइसोटोप्स के सम्बन्ध में एक्सपेरिमेंटल बेसिस पर काम चल रहा है। मैं यह जानना चाहता हूं कि किन-किन फील्ड्ज में ये एक्सपेरिमेंट चल रहे हैं और इस बारे में कितनी प्रगति हुई है।

क्या सरकार ने कोई हिसाब लगाया है कि न्युक्लियर एनर्जी को कृषि में प्रयुक्त करने से प्राडक्टिविटी कितनी बढ़ जायेगी, देश की ऐरेबल लैंड या खेती-योग्य जमीन में कितनी उपज बढ़ जायेगी?

न्युक्लियर एनर्जी के पोसफुल यूजिज के लिये जो ऐपेरेटस या टेकनालोजी है, क्या आवश्यकता पड़ने पर उसको वार परपजिज के लिए स्विच ओवर किया जा सकता है; यदि इसमें कोई दिक्कतें हैं, तो वे कौन सी हैं?

डा० खुराना जैसे जो एटामिक साइंटिस्ट्स बहुत बरसों से हिन्दुस्तान से बाहर गये हुये हैं, क्या उनको वापिस हिन्दुस्तान में बुलाने का कोई कार्यक्रम है या नहीं?

बरसों से बिहार की उपेक्षा की गई है। सभापति महोदय, आपने भी इस बारे में बिहा

की कोई मदद नहीं की है। इसी प्रकार न्युक्लियर एनर्जी के मामले में भी बिहार की उपेक्षा की गई है। मैं यह जानना चाहता हूं कि क्या बिहार में कोई न्युक्लियर प्लांट होगा या नहीं ; अगर नहीं, तो क्यों नहीं।

SHRI KARTIK ORAON (Lohardaga) : Please allow me to put a very simple question.. (*Interruptions.*)

सभापति महोदय : जिन चार सदस्यों के नाम बैलट में आए हैं, सिर्फ उन्हीं को सवाल पूछने का मौका दिया जाता है।

श्री कार्तिक उरांव : मुझे सिर्फ एक मिनट दिया जाये।

सभापति महोदय : अगर मैं आपको एक मिनट दूंगा, तो फिर दूसरों को भी मौका देना होगा।

AN HON. MEMBER : If you allow him, you will have to allow others also.

SHRI KARTIK ORAON : It relates to the development of nuclear energy in the country.. (*Interruptions.*)

MR. CHAIRMAN : You know the procedure. I am calling the Prime Minister. Only those four Members will be allowed to put questions.

SHRI KARTIK ORAON : I am a design engineer ; I have been associated with an atomic power plant in the United Kingdom, the biggest in the world. ***(*Interruptions.*)

MR. CHAIRMAN : No, please. I cannot allow this to go on record. The Prime Minister.. (*Interruptions.*)

SHRIMATI INDIRA GANDHI : I must say that I entirely agree with the hon. Member that the provision for atomic energy is not sufficient. But the hon. Member knows just as well as I do the financial limitations under which we have to function.

It is a question of seeing what item or what programme is curtailed. In this process all State plans are pruned ; and the Central plans are pruned ; the Minister of Education was just saying how much his programmes have been cut. So, this is something about which none of us can be happy. But we can only enlarge these programmes if we can enlarge our overall resources.

I am sorry that some strong words were used with regard to the Chairman of our Atomic Energy Commission. Dr. Vikram Sarabhai is a dedicated and knowledgeable scientist and it is very unfair to say that he is blocking the atomic energy programme in anyway. On the contrary, I think that he is doing his utmost to go ahead with it as fast as possible. Dr. Bhabha was a very great scientist, and it is true that he has left a void in our scientific life. But if we do not have one person to fill that void, I think the younger scientists as a community are trying their best to fill it.

SHRI M. L. SONDHI (New Delhi) : Dr. Sarabhai—is he a nuclear scientist ?

SHRIMATI INDIRA GANDHI : Well, I said that all of them are functioning together to try and work.

SHRI KANWAR LAL GUPTA : He is not a scientist at all. You ask him.

SHRI M. L. SONDHI : This is a point of fact. We would like to know from the Prime Minister.

SHRIMATI INDIRA GANDHI : The other question asked was, whether we should have an expert committee. The Atomic Energy Commission is such an expert body ; it is in touch with expert bodies, the highest expert bodies, all over the world. Therefore, it would not be possible to have another expert committee which could do more than this Commission is doing. (*Interruption*) Shri Shiva Chandra Jha's question is covered by what I have said about the budget.

***Not recorded.

श्री शिव चन्द्र झा : कुछ खास सवाल हैं मेरे ।

श्रीमती इंदिरा गांधी : खास सवाल हैं लेकिन वह बातें करने में रुपये लगते हैं ।

श्री कंवर लाल गुप्त : जो साराभाई साहब ने कहा था कि दूसरों पर गलत प्रभाव पड़ेगा इसलिए हम एक्सप्लोजन नहीं करते, इसका क्या जवाब है ? दूसरों से दबे हैं ।

श्रीमती इंदिरा गांधी : हम लोग किसी से दबे नहीं हैं और यह हम वहां भी कह चुके हैं, इस हाउस में भी कई बार कह चुके हैं ।

श्री समर गुहा : जरा अपने से दबे हुए हैं ।

श्रीमती इंदिरा गांधी : अपनी सर्कम्स्टांसेज से जरूर कभी-कभी दबे होते हैं ।

According to the circumstances and the needs of India, which is the top priority for what has to be done first, these have always to be considered. What is in the long-term interests of the country has also to be considered.

AN HON. MEMBER : Treaty.

SHRIMATI INDIRA GANDHI : The NPT bans not only nuclear weapons but also other nuclear devices, and therefore, one has to keep this in view. But, as I said earlier, the most important thing for us is to gather knowledge about all these matters. That is the only way in which we can go ahead. And as you see, today we are getting knowledge from other countries, and also help from other countries ; so much so, that the Indian component of reactor construction materials which were only 35 per cent for the Rana Pratap Sagar reactor I, are now 78 per cent for the Madras reactor. We are going ahead.

Much has been said about peaceful nuclear explosion in other countries. I find from a paper which I have that there are a great many unknown factors. A great deal of information on the properties of nuclear explosions and in fact their effects relative to conventional explosives must still be developed. This was confirmed by the conclusions reached by the Board of Governors of the IAEA after it discussed the findings of the committee established last year on the applications of nuclear explosion for peaceful purposes and the role of the Agency in this matter.

The Board concluded that—

> "In the light of the experimental status of the technology, the Agency should approach this subject on an evolutionary basis, devoting its attention initially to the exchange and dissemination of information."

That is why, since this is still at an experimental stage, I think it would not be wise for us to go into it immediately, but as I said, we should endeavour in every possible way to gain knowledge and learn from the experiments which other nations are undertaking, so that we are ourselves placed in a better position.

MR. CHAIRMAN : The House stands adjourned till 11 A. M. tomorrow.

19.26 hrs.

The Lok Sabha then adjourned till Eleven of the Clock on Tuesday, April 21, 1970/Vaisakha 1, 1892 (Saka).

Tej Kumar Press, Lucknow. 30-6-70