

कानून बना है उसमें टैरीटोरियल वाटर, इकानोमिक जोन और ओपन-सी आता है। टैरीटोरियल वाटर में पूरी तरह से हमारी सोवैरेन्टी रहती है। इकानोमिक जोन में जो कुछ भी मिलता है, उसका उपयोग कर सकते हैं। ओपन-सी के उपयोग के बारे में यूनाइटेड नेशन की तरफ से कन्वेंशन बनाकर कानून बनाए जा रहे हैं। यदि हम लोगों को पता चलता है कि कुछ जगह पर धातु मिल रहे हैं तो उसके लिए यूनाइटेड नेशन को एप्लीकेशन देनी पड़ती है। तब उस जगह से नोड्रयूल्स निकालकर उसका उपयोग करते हैं। नोड्रयूल्स निकालने की टेक्नोलाजी अभी सप्ताह में पूरी तरह से बनी नहीं है। सिर्फ हिन्दुस्तान की ही बात नहीं कर रहा हूँ। लेबोरेटरी स्केल पर टेक्नोलाजी है, इन्डस्ट्रियल स्केल पर नहीं है। हमारे वैज्ञानिकों ने समुद्र में जाकर नोड्रयूल्स निकाले हैं। उसमें से मैटल भी निकाला गया और उसका मंडेलियन बनाकर प्राइम मिनिस्टर को भी प्रेजेंट किया है, कैपेसिटी बताने के लिए। इस प्रक्रिया के लिए संसार में बहुत काम करना पड़ेगा और हम भी बहुत तेजी से काम कर रहे हैं।

SHRI KRISHNA CHANDRA HALDER: The Minister in his reply stated that only one-third of our territorial sea bed has been surveyed. What are the metals which have been detected and what is their quantum, according to the survey made by the different agencies mentioned by the hon. Member?

SHRI SHIVRAJ V. PATIL: As I have already mentioned, ilmenite, rutile and such rare metals are found in our continental shelf at Konkan, Kerala and near the Orissa Coast. As to the quantity available, in the ocean, it would be hazardous to guess.

Import of Micro Computers for Schools

*456. **SHRIMATI JAYANTI PATNAIK:**

SHRI DIGAMBER SINGH:

Will the PRIME MINISTER be pleased to state:

(a) whether the Department of Electronics propose to import large number of micro computers for schools under a pilot project;

(b) if so, the number of micro computers proposed to be imported by the Department of Electronics;

(c) the year by which those micro computers are proposed to be imported;

(d) the cost of the project; and

(e) the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ATOMIC ENERGY, SPACE, ELECTRONICS AND OCEAN DEVELOPMENT. (SHRI SHIVRAJ V. PATIL): (a) to (e) A Statement is laid on the Table of the House.

STATEMENT

(a) Department of Electronics (DOE) has formulated a pilot project to introduce computer literacy/education in 250 Higher Secondary Schools in 1984-85. A Committee of Experts has been set up to evaluate various systems—indigenous and foreign—for selection of the most appropriate computer system for the pilot project.

(b) and (c) Do not arise.

(d) The estimated cost of the pilot project is Rs. 2.2 crores.

(e) The Department of Electronic's plan is to introduce computer literacy/education in schools in a phased manner with the following objectives:—

(i) To provide students with a broad undertaking of computers and their use.

(ii) To provide hands—on experience.

(iii) To familiarise students with the range of computer applications in all walks of human activity and the computer's potential as a controlling and information processing tool.

(iv) To demystify computers and to develop a degree of ease and

familiarity with computers, which would be conducive to encourage individual creativity in identifying and developing applications relevant to their immediate environment.

The emphasis in this programme will be on manipulative skills rather than on teaching principles of computer science.

The initial proposal is for a pilot project to introduce computer literacy/education in about 250 higher secondary schools in the year 1984-85. In this pilot project, the effort will be to give maximum coverage in terms of geographical distribution. The composition of the schools will be decided in such a manner that the project encompasses a range of types of schools, including central, local Government and private schools, which constitute a representative sample of our secondary school population as a whole.

The covering of 2,50,000 schools by 1990 is being considered as a target, but the exact extent of coverage during the Seventh Plan (1985-1989) will be decided only after assessing the lessons of the pilot project and taking other relevant factors into consideration.

SHRIMATI JAYANTI PATNAIK : I am glad that the Government has taken steps to launch a pilot project under which the micro computers are going to be installed in schools. May I know from the Hon. Minister what specific steps are proposed to be taken up to step up the indigenous production of these micro computers ?

SHRI SHIVRAJ V. PATIL : We are getting the technology and giving it to the organisations which would be producing these units. The SCL at Punjab is likely to manufacture the micro-computers and we are encouraging other manufacturers of computers to manufacture the computers and make them available to us.

SHRIMATI JAYANTI PATNAIK : Sir, I would like to draw the attention of the Hon. Minister to a press report which appeared in Business Standard of 5th March, 1984 stating that the Secretary of the Department has said that the computers would be important from BBC Micro-Computers, the British firm. Though he did not name the firm, yet he said it was

likely from a UK firm, which, of course, is the only country which has effectively set up a network of computers for schools. I would request the Hon. Minister to throw some light on this.

Sir, the Hon. Minister has said that some schools, including the Central, local government and private schools are included in this Project. I would like to know from the Hon. Minister how the criteria will be fixed to include the schools of the States. In this connection I would also like to know whether the backwardness of a State will also be taken in view while including the schools of the State in this project. I am asking this because in 1984-85, only 250 schools will be taken up in this project. Therefore, I would like to know specifically how this criteria at least for the year 1984-85 will be fixed ?

SHRI SHIVRAJ V. PATIL : Sir, under the pilot project, we are proposing to provide this facility to 250 higher secondary schools. By 1990, we are proposing that two lakh fifty thousand schools may be covered. That is our plan. So, in order to implement this pilot project it has become necessary for us to prepare a scheme and then to get the instruments and to have instructors who can help us in this respect. Now, what we are trying to do at the initial stage is to get the micro-computers for some of the schools in our country and then to adopt the scheme which they have prepared. On the basis of the scheme prepared over here, we will have our own schemes and implement them.

The criteria we are going to adopt for selecting the schools will be to see that this pilot project succeeds. If the pilot project does not succeed, then the very purpose will not have its roots and it will become difficult to implement that concept. So, we are trying to see as to what kind of schools are there; whether the schools are located at a place where the necessary facilities are provided. In other words, in order to see that the project succeeds, a criteria for the selection of the schools to participate in the project has been evolved jointly by the Ministry of Education and Culture. This criteria will be followed while selecting the schools. For the purpose the State Governments and the Kendriya Vidyalaya Sangathan have been asked to send a list of school

which may meet the criteria laid down for the selection. Therefore, I may state, that one of the main thrusts of our scheme is to see that this pilot project succeeds.

PROF. RUP CHAND PAL : Sir, may I know from the Hon. Minister, whether the Government is aware that the Department of Electronics of the Jadavpur University, Calcutta, has developed a very good computer model, which has been described as Vidyasagar. And it has been claimed that this Vidyasagar model produced by the Department of Electronics, Jadavpur University, has great potential for being put to various uses—educational literacy, translation and various others. If so, what steps have been taken by the Government to provide all necessary help including financial help to perfect the model and whether this model will be considered at the time of selection for the pilot project ?

SHRI SHIVRAJ V. PATIL : Sir, the policy of the Department is to give assistance to those organisations and institutions which come forward to develop the instruments of this nature and we have been giving it.

As far as the manufacturing or making of the computer by the Jadavpur University is concerned. I do not have the particular information with me, but I am sure that if they have done it and if it can be used, it can be looked at. But as the thing stand today, we are trying to take the computers to the schools for a specific scheme with specific inputs in it, the software and all those things, so that we can acquaint the students with the skill of using the computers and it is not meant for different kinds of operation. But first, we want to acquaint them with the computer use, and then we want to give them more instructions so that they can use it. I do not know whether this computer can be used for this purpose or not but it can be certainly looked into.

SHRI A. E. T. BARROW : In view of the fact that these imported computers are only in the Roman script and in view of the fact that lakhs of schools do not have teachers, nor do they have blackboards—the NCERT in their Report said that there are lakhs of schools without teachers and blackboards and for many years teaching is going to be 'chalk and talk'—I would like to

know whether the priorities in this will be considered. I am glad the Prime Minister is here, and it is because this is not going to succeed specially when these computers that are made have only the Roman script.

SHRI SHIVRAJ V. PATIL : Sir, of course, some of the computers which will be used will have the Roman script, but we are not confining ourselves to Roman script alone. We are thinking of introducing the computers with Hindi language and also other languages as the time passes and it becomes possible to do so. The most important question which was raised by the hon. Member is whether we should introduce the computers at his stage or not. The Government is aware that we have two kinds of interest—one is to take our youngsters on levels where they will be able to compete with the students from outside and the second is to provide education to all our young girls and boys in our country. If we do not give them instruction in using the computers, they will be lagging behind the students coming from outside. At the same time we are very well aware that we shall have to provide more and more facilities to all the boys and girls who can attend the schools. Our policy would be to see that both these interests are served and we would like to do it in a balanced manner as not to affect our capacity to compete with the people in the world, at the same time with a view to see that social justice is done and the schools and others facilities are provided to them. This becomes a very difficult question, but we intend to solve it in the manner we can.

Export made by Indian Rare Earth Limited

*459. **SHRI N. DENNIS :** Will the Prime Minister be pleased to state whether the Indian Rare Earth Limited has explored the possibilities of exporting the by-products extracted at Manavalakurichi in Kanyakumari District ?

THE MINISTER OF STATE IN THE DEPARTMENTS OF SCIENCE AND TECHNOLOGY, ATOMIC ENERGY, SPACE, ELECTRONICS AND OCEAN DEVELOPMENT (SHRI SHIVRAJ V. PATIL) : Yes, Sir. Surplus of some minerals after meeting domestic demand is being exported.