

RAJYA SABHA

Wednesday the 4th May, 1988¹⁴
Vaisakha, 1910 (Saka)

The House met at eleven of the clock,
The Deputy Chairman in the Chair.

ORAL ANSWERS TO QUESTIONS

Computer Literacy and Studies in Schools

*141. KUMARI SUSHILA TIRIA:†
SHRI KAPIL VERMA:

Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) when was the scheme of Computer Literacy and Studies in Schools started and what are the details thereof;

(b) what was its target and how much has been achieved so far; and

(c) what are the reasons for the slow progress of the scheme?

THE MINISTER OF STATE IN THE DEPARTMENTS OF EDUCATION AND CULTURE IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (SHRI L. P. SHAHI): (a) to (c) A statement is laid on the Table or the House.

Statement

A pilot project for Computer Literacy and Studies in Schools was started in the year 1984-85 in 248 schools with the following objectives:—

- to provide students a broad understanding of computers and their use;
- to provide hands-on experience;

- to familiarise the students with the range of computer applications in all walks of human activities and computers' potential as a controlling and information processing tool;
- to demystify computers and to develop a degree of ease and familiarity with computers which would be conducive to developing individual creativity in identifying applications relevant to their immediate environment.

The emphasis in the programme was on manipulative skills rather than on teaching computer science. After 1984-85, the project has been extended on year to year basis pending finalisation of the New Education Policy, evaluation of the project and re-consideration of programme objectives, management system etc. Simultaneously, the project has been expanded by adding 1701 more schools in 1985-86, 1986-87 and 1987-88.

Initially the programme being in the nature of a pilot project, the number of schools was modest. In subsequent years, owing to financial constraints, the coverage of the programme has been very limited.

KUMARI SUSHILA TIRIA: Madam, the Minister has stated that in the year 1984-85, in 248 schools the project was started and 1701 more were added in 1985-86, 1986-87 and 1987-88 under the Computer Literacy Programme. I would like to know the number of schools covered State-wise in those years of the Seventh Five Year Plan. I would also like to know whether this Computer Literacy Programme has been introduced only in Hindi or English or in other regional languages also and whether English language has posed any problems to the students and teachers.

Part (b) of my question is, what is the evaluation system or method in this Programme and what is the application system?

SHRI L. P. SHAHI: Madam, so far as the list of schools Statewise is concerned, I can read that out.

†The question was actually asked on the floor of the House by Kumari Sushila Tiria.

	1984-85	1985-86	1986-87	1987-88	Total
Andhra Pradesh	11	25	38	44	118
Arunachal Pradesh	2	3	2	2	9
Assam	10	21	18	34	83
Bihar	11	31	31	41	114
Gujarat	15	27	29	42	113
Haryana	5	3	15	16	49
Himachal Pradesh	6	6	9	11	32
Jammu and Kashmir	5	8	9	16	38
Karnataka	10	20	28	42	100
Kerala	10	18	17	30	75
Madhya Pradesh	15	44	23	33	115
Maharashtra	18	44	46	66	174
Manipur	2	4	3	5	14
Meghalaya	2	4	3	2	11
Mizoram	1	2	2	3	8
Nagaland	2	4	3	2	11

AN HON. MEMBER: He could have laid it on the Table.

THE DEPUTY CHAIRMAN: She has asked for the State-wise list. Therefore he

is giving it.

SHRI L. P. SHAHI: What can I do, Madam? She has asked for it.

	1984-85	1985-86	1986-87	1987-88	Total
Orissa	10	19	25	36	90
Panjab	10	24	22	31	87
Rajasthan	10	24	25	32	91
Sikkim	2	4	2	2	10
Tamil Nadu	16	27	30	42	115
Tripura	2	2	2	3	9
Uttar Pradesh	27	63	51	67	208
West Bengal	20	39	42	65	166
Goa, Daman and Diu	2	2	2	4	10
Andaman & Nicobar Islands		3	2	2	7
Chandigarh Admn.	3	2	3	2	10
Dadra Nagar Haveli		2	2	2	6
Delhi Admn.	20	12	12	19	63
Lakshdweep		2	2	2	6
Pondicherry	1	2	2	2	7

This is the State-wise list. So far as script is concerned up till now it is Roman but we are trying to introduce Indian language in the computers. That will take some time.

KUMARI SUSHILA TIRIA: Madam, is there any priority gives to the schools which are situated in the backward, interior and hilly areas which have no communication facilities? How many teachers have to be trained from each school under this Computer Literacy Programme? Is there any reservation or priority given for lady teachers in this training?

SHRI L. P. SHAHI: Madam, there is a system of Resource Centre for training in the States. Some of the institutions which are in a better position provide training facilities to others. There is no hard and fast rule in the selection of teachers but, generally, it has been seen that teachers with science and mathematics opt for this training and they come for training. A regular training programme is carried on and teachers are trained in it every year.

SHRI KAPIL VERMA: Madam, part (b) of the question is about targets fixed for the various years and their achievement. The Government has not replied to it. But the physical achievement, which has actually been given in the statement, adds only up to 1,949 in four years. But the Government has given out reports in newspapers saying that there was a proposal—not finalized yet—for covering 13,000 higher secondary schools by 1990. Obviously it can never be achieved, going by the physical achievements so far. I am told that the Government is cutting down the figures. I want to know what exactly is the figure up to 1990. In part (b), the statement ascribes financial constraint for the very limited progress, as the Minister says. In my opinion, the problem is very different. It may be due to financial constraint also, but the main problem is that the BBC Accord model, which was originally received as a gift by India and which is being locally manufactured, does not actually suit our local conditions and is presenting a lot of technical problems. Secondly, the software is also based on the British Model and so it is not suiting our

schools. Therefore, will the Government develop an indigenous model for the computers which may be proper and suitable to our conditions and also frame a software programme suitable to our schools?

SHRI L. P. SHAHI: Madam, so far as selection of computers is concerned, that was done by the Department of Electronics and the cost also was borne by them at that stage. So far as software is concerned, in the first phase we had imported software, about 20 in number, and it is our feeling also that we should develop software indigenously so that it suits the conditions prevalent here. The NCERT was asked to develop software and it has so far been able to develop nearly 20 such for being used in these Computer Centres. The other part of the question is about coverage. The number has already been stated by the Member himself. But it is our target to reach 13,000 by the end of the year 1990.

SHRI KAPIL VERMA: Going by the present rate of progress which is so low, in four years you do not reach even 2,000. Then, in one or two years how can you reach 13,000?

SHRI L. P. SHAHI: Well, it depends upon availability of funds. It is not only a question of getting computers but also of getting funds for that, and also creating the infrastructure for training of teachers. Now that we have been able to create the infrastructure for training of teachers, if we are able to get funds we will be able to cover it... *(Interruptions)* . . .

SHRI KALIP VERMA: You say there is financial constraint and so the poor performance... *(Interruptions)* . . .

SHRI L. P. SHAHI: Please let me complete. Madam, for providing 13,000 higher secondary schools with computers will cost us Rs. 196 crores. That is the estimate so far. We have also looked into the other aspect of it, as to what has to be provided.

SHRI KAPIL VERMA: How would you reach the target?

THE DEPUTY CHAIRMAN: Please, no interruption. This is not the way.

SHRI L. P. SHAHI: It is now dependent upon the availability of funds. We feel that if we have a good year, we are spared of the drought situations, we shall be able to get funds to cover it up.

SHRI YASHWANT SINHA: Madam, the Department of Electronics had entrusted the evaluation of this project to the Space Application Centre, Ahmedabad. This Centre had given its report. This report mentions that demystification of computers which was the main object of this pilot project, has been only partially achieved. This I am quoting from the Annual Report of the Ministry of Education itself. In the light of this only partial achievement of the objective with which this project was taken up, is the Minister the Government justified in expanding it in the next two years of the Seventh Plan and taking it to 13,000 schools?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI P. V. NARASIMHA RAO): Madam when they said it was partially achieved, they did not mean that there was anything wrong in the demystification itself. They have given figures to show that because a lesser number of units were given to a school, only a part of the students could be covered and whatever programme there was, the coverage has been not to the fullest extent. In view of that, we have now decided, after having another committee to look into it, that instead of two units we have to give five or six or even 8 depending on the total number of students to be covered. This has been made more flexible. So, when they say, "partially achieved", it in terms of numbers. This is what they said. We can also say that partially achieved could also mean that, as one Member has pointed, today all the computers have software only in English. Now the RAMs are being prepared. Most of the RAMs are available today in Indian languages. They have to be fixed, and the software has to be prepared in Indian languages also. That work is going on. We are intensifying it. For the last one year it has been possible for us, instead of one or two languages which were covered two years ago, within one

year another nine or ten languages have been covered already. So, in view of the report given by the Space Centre, we are taking all possible steps to see that the deficiencies are removed.

The greatest bottleneck of course, is one of resources. In a matter like this, it is not simply linear expansion. If you have the money, they can give you all the units you need. In fact, we had to change the configuration of the units. Also we had to change the design of the disc drive. We had to change the design of the manner in which the peripherals are connected. There are so many technical things. We have gone into it in great detail. I am sure, the programme which has been now amended as compared to the original programme, is much more realistic to suit our conditions, and I am sure it will be a success.

So far as 13,000 schools are concerned, I am not quite sure whether we are going to reach that target. That is absolutely right. I am giving you the reason straight away. The reason is, we are not going to have Rs. 196 crores for this. We have so many other priorities like Operation Blackboard etc. We did not normally expect that kind of money to be available within the next one year. Perhaps, if you change the number of units also as we want to, the money also would go up considerably. So, I am not sure, I cannot give an undertaking that all the 13,000 higher secondary schools will be covered before 1990. It will naturally spill over to the next year.

SHRI BIR BHADRA PRATAP SINGH: Madam Deputy Chairman, in the name of computer literacy programme several hundred computers have been imported into the country. They may be of any model suitable or not suitable. But my information goes that these computers are yet to be used for the purpose for which they were imported. They are also being used for business and commercial purposes. This is my first point.

The second part of my query is that at a time when the Government is considering to introduce sophisticated and costly computers into the schools, will the Gov-

ernment consider helping millions of school children who cannot afford buying simple text-books to be provided with the text-books free of cost first and then to be provided these computers for getting a training on it.

SHRI P. V. NARASIMHA RAO: In this country we have several levels and at all the levels work has to go on. One cannot be stopped waiting for the other. This is very clear and is equally clear in matters of education also. We have the Operation Blackboard and we have the most sophisticated institutions in the IITs. We cannot stop one for the other. It is quite clear. The business standard machines in India and in many other countries are that of the IBM. The standard machine for education is Acorn BBC. Our experts have gone and made a study. They have found that for education purposes this is very very suitable. The other thing which we found was that the configuration, as I said, of the peripherals as used in England may not be suitable for India because we have conditions for dust etc. So, we have changed the design of the disc drive. The disc drive is the thing which is most susceptible to dust. That has been changed to make it dust-proof. After that we do not expect any great difficulty. If there is a difficulty, there will be a difficulty with any computer. One member said that this is not at all suitable. I do not see any other computer which can be more suitable here.

AN HON. MEMBER: I said the earlier design was more suitable.

SHRI P. V. NARASIMHA RAO: The earlier design or the earlier hardware design was not the point. It was only the design of the disc drive. There are two disc drive. One is 5-1/4 inch disc; the other is 3-1/2 inch disc, which is a hard disc. The hard disc is a little more sturdy, but it costs more. So, we have gone into it and have now changed the disc drive. They have agreed to supply the new disc drives in the numbers required, but they will have either to import it or have facilities to manufacture it here. That will take time. Since we do not want to stop

the programme in the meanwhile; we are carrying on. But from this year we are insisting that the new disc drive should be supplied.

SHRI BIR BHADRA PRATAP SINGH: My second part of the question was about the priority. I wanted to know whether you prefer textbooks before providing training.

SHRI P. V. NARASIMHA RAO: Priority will be according to the money available and also according to what priority we should give to a particular part of the programme. We are not giving first priority to computers. The class programme for it starts at the higher-secondary stage. The Operation Blackboard starts at the kindergarten stage, at the class I stage. So, that is the priority. That is absolutely self-evident.

SHRI SUBRAMANIAN SWAMY: The programme, of course, is a good one and it should be encouraged. But the demystification that is required is of the way the Government is working. May I ask the Minister whether he is aware that a large number of complaints are there because the Budget has made not adequate provision for the maintenance part, for the regular supply of electricity and the availability of engineers to correct the fault? Along with it, may I ask the Minister whether he is aware that the researchers in the United States and reported in the world famous journal, "Artificial Intelligence" in the spring issue of 1986, say that the best language for computers and storing knowledge is Sanskrit? They are going to adopt it in the United States. What are you doing about it here?

SHRI P. V. NARASIMHA RAO: The question on piling up complaints has not yet come. That stage is still to come. Naturally, when we give computers to thousands and thousands and tens of thousand of schools, some complaints are bound to come. That stage is yet to be reached. I am not saying that there will be no complaints, because in any programme like this there are bound to be complaints and we are bound to look into the complaints as they come. Some we can anticipate, some we cannot. Sir, this is the position in regard to the complaints.

In regard to Sanskrit, it is well-known that the grammar of Sanskrit has a logic and that logic is very very amenable to computerisation. This is what we have come to know through research. In fact, we know about it. Those who know Sanskrit also know about it. Those who are knowing Sanskrit for the first time, but know computers already, they are discovering it for the first time there. So, there is no difference of opinion on that. There is nothing for us to do. But we will certainly see how the computers can be made use of in the teaching of languages starting from Sanskrit. But that is a little way down the road.

Construction of Airports at Salem and Tuticorin

*142. SHRI K. GOPALAN;

SHRI V. GOPALSAMY:†

Will the Minister of CIVIL AVIATION be pleased to state;

(a) whether any decision has been taken for the construction of airports at Salem and Tuticorin; and

(b) if so, what are the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF LABOUR (SHRI JAGDISH TYTLER): (a) and (b) A proposal for construction of airports at Salem and Tuticorin, in consultation with the National Airports Authority, has been initiated by the Government of Tamil Nadu. The proposal is, at present, at a preliminary stage.

SHRI V. GOPALSAMY: It is a very misleading statement to suppress the truth. To make a political capital for the ruling party here and to hoodwink the people of Tamil Nadu, the statement goes to create an impression as if the proposal has been initiated by the Tamil Nadu Government recently under the stewardship of the agent of

the Central Government, i.e. the Governor of Tamil Nadu. This proposal is there for more than ten years. In the year 1980, the then Civil Aviation Minister gave an assurance on the floor of this House and also gave an assurance in Tuticorin itself, when he met the press, that the runway would be constructed before the end of 1980 and the airport would be ready before the end of 1981. Eight years have passed since then. Now the Government says that it is at a preliminary stage and the Government of Tamil Nadu has initiated the proposal recently. Is it a fact that the Central Government is not prepared to spend any amount for this project and it expects the State Government to meet it through their expenses?

THE DEPUTY CHAIRMAN: Put your question please.

SHRI V. GOPALSAMY: I would like to know from the hon. Minister for what reasons does he expect the State Government to meet the expenses when his Government has constructed many airports in Calicut and in other places with its own funds. I would like to ask on one more point. Ten days back a delegation visited Tuticorin. The head of the delegation has stated the length of the runway even if it is constructed would be restricted only for the landing of AVROs and the Tuticorin airport may not get the distinction of receiving Boeings from the first day of its operation, which the newly opened Calicut airport has got. Therefore, I would like to know from the hon. minister whether the statement of this delegation is a final decision of the Government or a runway for the Boeings will be constructed. I would like to know from the hon. Minister about the funds aspect also.

SHRI JAGDISH TYTLER: I would like to inform the hon. Member that the reason why the projects which are taken up by the National Airports Authority and which could not

†The question was actually asked on the floor of the House by Shri V. Gopalsamy.