Employability of engineering students

*82. SHRI A. ELAVARASAN: Will the Minister of HUMAN RESOURCE DEVELOPMENT be pleased to state:

(a) whether it is a fact that 6.5 lakh engineering graduates pass out from college every year, but only 25 per cent are employable and nearly two-thirds need to be re-skilled to get jobs;

(b) if so, the details thereof;

(c) whether in an effort to improve the students' employability, technical institutions, including IITs and NITs, are resorting to external employability tests to help the students to select their career paths; and

(d) if so, the details thereof?

THE MINISTER OF HUMAN RESOURCE DEVELOPMENT (SHRI KAPIL SIBAL): (a) to (d) A Statement is laid on the Table of the House.

Statement

(a) to (b) The data on employability of engineering graduates are not maintained in the Ministry. However, as per the sample data available with Lead Centers for all India of the National Technical Manpower Information System (NTMIS) of Institute of Applied Manpower Research for 2007 batch, 61% of the graduate engineers were employed.

(c) to (d) To enhance the employability of engineering graduates, a programme of Finishing School for Engineering Graduates was conducted by Ministry of Human Resource Development on pilot basis during 2007 in IIT, Roorkee and six NITs (Calicut, Durgapur, Jaipur, Surathkal, Thiruchirapally and Warangal). Based on the pilot programme, the Ministry in 2008 asked all Centrally Funded Technical Institutions to conduct the programme. A review was conducted in 2010 and found that the desired results were not fully met by the Scheme. All India Council for Technical Education (AICTE) was asked to constitute a Committee and suggest measures to redesign the programme of Finishing School throughout the country. The report of AICTE Committee is awaited.

Also, as a long term measure to enhance the employability of engineering graduates, AICTE is taking steps to update the syllabus of engineering courses.

SHRI A. ELAVARASAN: Sir, according to the Survey conducted by a global Institute, India is producing 3.6 lakh engineering graduates, but only 10 per cent of them are employable. This is an alarming situation. I would like to know from the hon. Minister as to what steps the Government has taken to ensure that a large number of engineering graduates are employed after their graduation.

SHRI KAPIL SIBAL: Sir, the reference to the Report about 25 per cent employability is to a NASSCOM-McKinsey Report of 2005. And the NASSCOM-McKinsey Report related to the multi-nationals in India, who were looking at employment of engineers into the multinationals, carried a survey only in the Information Technology and Information Technology-enabled sector. This does not apply to all engineering graduates in India. It is only the Information Technology sector that the survey said that 25 per cent of the engineers are employable. And also, if you remember, this was at a time when the IT sector was booming, and the IT sector needed, especially the multi-nationals needed, a large number of employees. So, they were actually looking at other disciplines in engineering, and seeking to employ those children who were in other disciplines, into the IT sector, including persons who have graduated in the humanities. There was a mismatch between demand and supply; therefore, this NASSCOM-McKinsey Report came. So, Sir, this does not reflect the true picture in respect of all engineering graduates in India. But it is true; it is a fact. Sir, if you really look at that Report, if you compare that Report, because that Report gives a description of the state of affairs in China, in Brazil and in Russia... there, the figure of employability is around 10 per cent, even in 2005. So, we must not be dismayed by reports carried out by multi-nationals with reference to the IT sector. But, yes, Sir, it is true that a large number of engineering graduates need a lot of skills for the purposes of employment into the engineering sector and we have started a testing programme which we initiated in 2007 to improve those skills. This we did with NAC where multi-nationals are involved. We tried to move away in 2008 to spread it to all the Central educational institutions but the results have not been very good. So, on the 22nd of April, 2010, AICTE set up a Committee to actually look at this whole issue in a holistic manner and the Report of that Committee has not yet come, but, Sir, as soon as that comes, we will actually take further steps to improve the employability of our engineering graduates. But there is an Institute of Applied Manpower Research which conducted a study, Sir, which said that 61 per cent of engineering graduates actually were employed in India. Sixty one per cent of those who graduated were employed in India. That is the report in 2011 and I have the figures with me.

SHRI A. ELAVARASAN: Sir, my second supplementary question is: Is there any training scheme provided by the Government or has the Central Government urged the State Government to conduct apprenticeship training for engineering graduates after their graduation in the country?

SHRI KAPIL SIBAL: Sir, the attempt, in fact, is to prepare them with soft skills. The real problem is, Sir, they have core competencies in the Engineering sector, but what they lack is soft skills. So, what we are trying to do is, within the institutes in India there should be a training programme so that by the time they graduate, they improve their soft skills and are ready for employment, but there is no training programme by the Government after graduation.

SHRIMATI SHOBHANA BHARTIA: Sir, though the Minister is correct that the NASSCOM figures reflect only the IT sector, but it is a known fact that the employability of engineering graduates is much lower than what is desirable, and this is also due to regulatory failure because AICTE which approves the engineering colleges often lacks and often gives accreditation to colleges of dubious quality. Sir, I want to ask the Minister: by lowering the eligibility criteria to 45 per cent, don't you think that it is going to adversely impact the quality of raw stock going in and therefore, the quality of engineers that you actually churn out and the employability factor? And also, what is being done to ensure the maintenance of quality, on an ongoing basis after AICTE gives accreditation? Do you, then, have counter-checks?

SHRI KAPIL SIBAL: I think, the distinguished Member has raised a very important question which I wish to address through you, Sir, to the hon. Members of this House. Sir, we have noticed that in States where quantity grows, quality reduces, and that seems to be a national trend. Wherever there are fewer institutions of engineering, the quality is high. Now, I was looking at the figures, for example, in Karnataka. In Karnataka, Sir, the children employed from institutions — and I am giving you 2007 figures were 12,541 and those who were unemployed were 16,270. So, the rate of employment is 37 per cent. Why? It is because Karnataka has a host of institutions. We don't have the figures for Andhra Pradesh and Tamil Nadu, but, I suspect, Sir, that you will get the same results. The problem is that the State Governments grant NOCs for setting up institutions. Institutions come to the AICTE and say, 'Now give us recognition.' Now, it is very difficult for us to say that, 'look, we can't give you recognition because you should not set up an institution without proper infrastructure.' Therefore, we have to look at the infrastructure and give them recognition and, then, the AICTE is blamed. So, it is a very difficult situation. The other problem is that if we higher the standards for admission, because we have lowered them from 50 to 45 per cent and from 45 to 40 per cent for SCs/STs, if we increase the standards, then there is a whole rush on our saying that because of this our seats cannot be filled; so please reduce the qualification. So, this is a very big problem. Sir, I must tell you, Sir, that in Andhra Pradesh, today, there are over three lakhs seats and there are only two lakh twenty thousand students.

The whole one lakh seats are not filled! And, we are getting pressure to further reduce it from 40 per cent to 35 per cent. So, this is a very difficult situation. I request various State Governments, when they grant NOC, to see what the projections are for the sector and then ensure that NOC is not granted so that AICTE is not under pressure. But, the distinguished Member is right the problem is very complex. I request the State Governments to collaborate with us.

श्री परवेज़ हाशमी: सभापति जी, ऑनरेबल मिनिस्टर साहब ने अभी कहा कि 61 परसेंट इंजीनियर्स को employment मिलता है। मैं उनसे जानना चाहता हूं कि पिछले 3 सालों में AICTE ने कितने इंस्टीट्यूशंस को approval दिया है और कितने नए स्टूडेंट्स को employment दिया है?

श्री **कपिल सिब्बल**: मैं अभी यह जानकारी नहीं दे सकता। मैं यह जानकारी आपको भिजवा दूंगा।

SHRI PARVEZ HASHMI: It is related to the question. The hon. Minister can send me the reply in writing.

श्री **कपिल सिब्बल**: अभी मुझे आंकड़े याद नहीं हैं।

MR. CHAIRMAN: Now, Shri Tiruchi Siva. I believe you are internally displaced.

SHRI TIRUCHI SIVA: Sir, the hon. Minister encroached upon my seat. So, I may be permitted to ask my supplementary from here.

Sir, the question is not related to the employment; it is relating to the employability of the students.

SHRI D. RAJA: You mike is not working, Mr. Siva.

SHRI TIRUCHI SIVA: Yes, yes. I will come to my seat.

MR. CHAIRMAN: Situation is rectified.

SHRI TIRUCHI SIVA: Sir, the question is relating to the employability of the passed out engineering graduates. This observation was made by the ISRO Chairman in one of the public meetings. It appeared in all the newspapers. It is not an evasive statement by any layman. Sir, out of the total passed out graduates, only 26 per cent are employable. The hon. Minister said that increase in quantity reflects in the quality of education. I don't think that it is correct. I just would like to know from the hon. Minister whether the Government would like to establish a monitoring mechanism to study the quality of education being imparted in the self-financing institutions which have come out in a large number. Sir, immediately a student is graduated, he is appointed as a teaching faculty. That reflects the quality of education. So, would the Ministry think of mooting a monitoring mechanism to study the quality of education in the self-financing educational institutions?

SHRI KAPIL SIBAL: Sir, it is very, very difficult for the Government of India to set up a monitoring mechanism to monitor every institute which grants a degree in engineering. But, Sir, the distinguished Member is right that there is a problem of employability. What we are trying to do is the following. I would like to share, through you, with the House what the Ministry is trying to do. We are, actually, trying to integrate vocation into education system now. What we have done is: We have held meetings with the automobile sector, meetings with the telecom sector, with the entertainment sector, with the hospitality sector, with the transportation sector, with the tourism sector, with the infrastructure sector, etc. I have, actually, had round table conferences with the distinguished representatives of these sectors. And, we are, actually, creating syllabi from class IX, X, XI and XII, into the polytechnic and into the university system and we call it NVEQF. Now, what we are trying to do is: have the industry prepare the syllabus for us and then

introduce it into the school, polytechnic system, so that when graduates emerge either from polytechnics or engineering colleges, since the syllabi is prepared in collaboration with the industry, they can be easily absorbed and the employability can become better. This is the only way through which we can workout the on absorption. But, we have no system of actually monitoring every institution and it will be only impracticable.

SHRI TIRUCHI SIVA: We can lay down some norms.

MR. CHAIRMAN: Would there be engineering degrees in this?

SHRI KAPIL SIBAL: Yes, Sir.

Sir, we are going to have B.Sc. (Vocational Engineering) and in the CBSC System we are going to have Class XII (Academic) and Class XII (Vocational), so that the child can decide, at any given point in time, in Class XI and XII, not IX and X, as to which area he wanted to opt. And, there are about 150 courses in automobile engineering. So, he can choose any particular line and he can get himself absorbed into the sector. We launch this scheme, hopefully, during the course of this year, but certainly by next year.

MR. CHAIRMAN: Now, Question No. 83. ...(Interruptions)...

श्री प्रकाश जावडेकर: सर, मेरा एक व्यवस्था का प्रश्न है।...(व्यवधान)...

श्री नरेश चन्द्र अग्रवाल: सर, मुझे भी एक प्रश्न पूछना था।

श्री सभापति: नरेश जी, तीन सवाल हो गए हैं।

श्री नरेश चन्द्र अग्रवाल: सर, यह बहुत जिम्मेदारी का सवाल है। उत्तर प्रदेश में...(व्यवधान)...

श्री सभापति: नरेश जी, प्लीज़... तीन सप्लीमेंटरी ही होंगे।

Please go ahead.

Coach factory at Kanjikode, Kerala

*83. SHRI T.K. RANGARAJAN: Will the Minister of RAILWAYS be pleased to state:

(a)   whether land acquisition for the proposed coach factory at Kanjikode in Kerala has been completed;

(b)   if so, whether the land has since been handed over to the Railways;

(c)   if so, the details thereof alongwith the total land handed over;

(d)   whether work on the project has commenced;

(e)   if so, the details thereof; and

(f)   the details of funds allocated and released for the project, so far?