

Percentage Contribution of Scientific and Technological Research in Gross National Product

*768, SHRI A. K. ROY: Will the Minister of PLANNING be pleased to lay a statement showing:

(a) percentage contribution of scientific and technological research in the Gross National Product for the last two years;

(b) percentage expenditure on that;

(c) whether there has been any decline in both the contribution and expenditure after the Janata Party came to power; and

(d) if so, steps taken in the matter?

THE MINISTER OF STATE IN THE MINISTRY OF PLANNING (SHRI FAZLUR RAHMAN): (a) It is not feasible to segregate the contribution of scientific and technological research to the Gross National Product.

(b) Data regarding S&T investment in 1977-78 and 1978-79 in the State and the private sectors are being compiled. In 1976-77, investment on S&T constituted 0.63% of GNP; of this, the investment in the Central sector accounted for 0.51%. In 1977-78 and 1978-79, Central S&T investment is estimated to have been 0.57% and 0.62% respectively of GNP.

(c) and (d). No, Sir. The investment on S&T (Plan plus Non-Plan) in the Central sector increased from Rs. 361 crores in 1976-77 to Rs. 513 crores as estimated in 1978-79.

SHRI A. K. ROY: If you read the answer of the Minister, it is most distressing and disappointing. It shows the Government does not know where it stands regarding science and technology. There is a growing apprehension in the country that this Janata Government is anti-science, anti-organisation and anti....

MR. SPEAKER: Mr. Roy, please come to the question.

SHRI A. K. ROY: Not only that: there is a deliberate attempt to distort the Science Policy Resolution of 1958 passed by the Parliament.

MR. SPEAKER: You are on a question: please come to the question.

SHRI A. K. ROY: This is a very vital thing.

MR. SPEAKER: Every question is vital.

SHRI A. K. ROY: You have seen that some time back one hon. Member Mr. Chavan also wrote to the Prime Minister regarding his apprehension....

MR. SPEAKER: Please don't enter into a debate: try to come to the question.

SHRI A. K. ROY: What question should I ask? It does not deserve a question. In (a) he says he does not know what contribution to the gross national product the entire science and technology makes. It is an insult to our science and technology. You know that we have got a five year Science and Technology plan and every plan has got a performance project. I would like to know from the Minister, if he does not know the contribution of science and technology to our gross national product, how he is making his performance project in science and technology and how he is going to have checks and balances on the entire investment in science and technology that he is making.

SHRI FAZLUR RAHMAN: So far as his challenge is concerned, I cannot give any reply in regard to his apprehension: nobody can cure that disease of apprehension. I have never said what he says I have said: I have only said that it is very difficult to segregate the percentage of contribution of science and technology, as

science and technology includes many subjects. The actual contribution to our production is very difficult to find out.

SHRI A. K. ROY: As for the aim of science and technology, there are two criteria laid down. One is the removal of poverty and another is self-reliance. In view of the fact that there is growing reliance on foreign co.laboration, like Siemens by BHEL, United Macon and reliance on an American company for making fertilizers etc. and under-utilisation of funds for science and technology I would like to know whether the Government has reviewed, with the help of a Science body, the utility of all these collaborations and whether it is not affecting our aim of self-reliance in science and technology.

The second point is that we have got—I do not know whether you know it o. not—thousands of patents rotting in different laboratories of CSIR. Will the Government create a body to review the utility of these patents and put them into commercial utilisation?

Will the Government have scientific bodies for a review in regard to these two points?

THE PRIME MINISTER (SHRI MORARJI DESAI): May I say that the Hon. Member takes delight in making unjustified criticism? I do not know how much he knows about science and technology. If he is an engineer, then he ought to know that everything cannot be engineered in the manner in which he wants to engineer. There cannot be a quantification for this at all. Let any scientist suggest such quantification and I shall bow down to him. But we are trying to see that in regard to science and technology, whatever we are doing is properly utilised in all places. It has made a contribution to it and to say that thousands of patents are lying unutilised, I do not know from where he gets such figures. There

may be some which may not be utilised but we are trying to see that all discoveries made in science and technological laboratories are introduced into actual practice. Then again he says there is collaboration with foreigners even when we have the technology. This is totally wrong. Where we have the technology, we do rely on our own. But where we do not have, we certainly take the help of other people.

SHRI SAUGATA ROY: Though the Prime Minister and the Planning Minister denied that there has been any decline in the importance of science and technology, it is clear that there is a decision not to have peaceful nuclear explosion, as also the decision to restructure the C.S.I.R., as also the decision by BHEL to enter into collaboration with the Siemens for technical know-how. These are indications that the Government is not going in for self-reliance and is giving less importance to self-reliance and scientific advancement. But my specific question is that in the last 30 years, the infrastructure has been built up in the country where India has the third largest scientific and technological manpower in the world, after the U.S.A. and the U.S.S.R. and these are the countries which have come forward using their scientific and technological know-how. What is the specific plan of the Government which had been taken into account for utilising this very large scientific and technological manpower for the improvement of the living standards of the people and for increasing the gross national product? Because now the 6th Plan is in progress I believe they will be able to give some outline of what the plans are.

SHRI MORARJI DESAI: The hon. Member has indulged in many innuendoes. Of what he has spoken I do not want to refer to them. But when he says that the restructuring of C.S.I.R. was done without reference to science, I do not know how

he comes to this conclusion. It was done by scientists. It was not done by non-scientists. That he must understand. (Interruptions). I do understand science more than he does. Perhaps he does not know that. But he may say anything he likes. The restructuring is done to make it more usable, more utilisable and to see that the results of science and technological advances are utilised. That was not done before. But now it is done. Then, he referred to Siemens. Even that was not yet been finalised. But what will be finalised will be in relation to technology which we do not possess. Where we have technology there is no question of collaboration with somebody else.

SHRI SAUGATA ROY: My question was in relation to plan for utilising scientific manpower. He did not refer to that at all.

SHRI MORARJI DESAI: When he says this is the third nation behest in scientific and technological personnel, that is true. But he forgets that it is the first nation in all those areas and therefore that comparison of third nation is not quite right. We are utilising all the personnel that is there.

SHRI SAUGATA ROY: Scientists are going away ...

SHRI MORARJI DESAI: That is not only in the case of scientists, but people like him are also going away. They are attracted by money elsewhere. It is not only scientific people who are going but there are others also who are going and if they go why should he be sorry about it.

PROF. R. K. AMIN: May I know from the hon Prime Minister what is the expenditure and arrangement made in order to find out the proper technology for increasing the employment potential in this country?

SHRI MORARJI DESAI: All the laboratories and scientists have been asked to apply this technology for rural areas properly and that is be-

ing done. It is going on and whatever expenditure is required for that purpose we have sanctioned.

Setting up of Husk-fed Cement Factory in Haryana

*769. **SHRI DHARMAVIR VASISHT)** Will the Minister of INDUSTRY be pleased to state:

(a) the number and names of cement factories working or likely to work (State-wise) using non-traditional raw material for production, including paddy husk,

(b) whether a plan of husk-fed cement factory had remained on paper for years in Haryana, and

(c) if so, the reasons therefor with its present prospects?

THE MINISTER OF INDUSTRY (SHRI GEORGE FERNANDES) (a) The Indian Institute of Technology, Kanpur has developed a process for the manufacture of a variety of cement from paddy husk. There is at present one unit in production. Production and testing of the cement made from this process have been carried out by a private sector firm of consultants at Shimoga, Karnataka.

(b) and (c) Surveys have been conducted at selected sites in Haryana and Karnataka to establish the availability of rice husk, its distribution, modes of disposal in the area and the viability of setting up more units to produce cement out of rice husk.

Since I approved of this reply, I have, this morning, received some more information which I need to share with the House. This information has come to me from the Indian Institute of Technology, Kanpur, which first produced ashmo cement out of rice husk. The reply is as follows:

"Haryana Agro-Industrial Corporation was interested in setting up a rice husk ash based cement plant in