## RAJYA SABHA

Friday, the 7th April, 1967/the 17th Chaitra, 1889 (Saka).

The House met at eleven of the clock, Mr. CHAIRMAN in the Chair.

## ORAL ANSWERS TO QUESTIONS

\*344. [The questioners (Shri A. D. Mani and Sardar Ram Singh) were absent. For answer vide cols. 2730-31 infra.]

## RESEARCH TO MANUFACTURE FERTILIZERS FROM COAL

- \*345. SHRI M. C. SHAH: Will the Minister of EDUCATION be pleased to state:
- (a) whether the Central Fuel Research Institute has carried out any research to manufacture fertilisers from coal; and
  - (b) if so the details thereof?

THE MINISTER OF STATE THE MINISTRY OF EDUCATION (SHRI BHAGWAT JHA AZAD): (a) Yes, Sir,

(b) Central Fuel Research tute, Jealgora has developed a process for producing fertilizers by direct fixation of nitrogen in the coal humus by a simple technique. The process consists in subjecting the coal simultaneous oxidation and ammoniation in a fluidized bed.

SHRI M. C. SHAH: May I know whether, in view of the fact that there are large deposits of low-grade coal in India, this Institute has made any research to convert them to humus acids at comparatively inexpensive costs?

SHRI BHAGWAT JHA AZAD: Sir, this process has developed to some extent but it will still take time, another five years or even ten years, to establish the process on scientific lines. 380 RSD-1

SHRI M. C. SHAH: May I know whether the Government has assessed what will be the approximate cost of this type of fertilisers compared to the fertilisers available here in the country?

SHRI BHAGWAT JHA AZAD: That has not yet been done but we can at present compare only what we are getting. We can say that it will be cheap, but it has not yet been fully established.

SHRI M. C. SHAH: May I know whether the Government have any idea as to what will be the quantity realised in the first instalment as a result of this method?

SHRI BHAGWAT JHA AZAD: Sir, as I said, we are still trying to establish it on scientific lines. All that we can say at present is that it is a very good method. We have made an experiment in some districts of Bihar and the experiments are very promising but it is not possible for us to say anything in detail at present.

SHRI C. D. PANDE: May I know whether the hon. Minister can give any idea as to what will be the price structure, whether it will be ciently cheaper than the fertiliser manufactured otherwise?

SHRI BHAGWAT JHA AZAD: As I said before in reply to question, we hope it will be cheaper as compared to the present fertiliser because it will be from coal and that too from a cheaper type of coal. At present we cannot say anything about the cost structure.

SHRI ARJUN ARORA: In view of the great need of providing fertiliser for our agriculturists, may I know why the Government is talking of 5 years or 10 years, why the Government does not take steps to set up a pilot plant and test the commercial utility of this process at an early date, so that our Government may not have to spend valuable foreign exchange in importing fertilisers?

SHRI BHAGWAT JHA AZAD: Sir, in 1965-66 we have already a pilot plant producing about 1.5 to 2 tons per day of coal fertiliser, but that is not the point. The point is that scientific data are still being gathered on a large scale. We have established it on a small scale but unless we can produce it on a large scale, we cannot commend it for commercial use.

श्री विमलकुमार मन्नालालजी चौरड़ियाः : क्या श्रीमान यह बतायेंगे कि जो रसायन विभाग के मंत्रो हैं, उनका यह कहना है कि कोल बेस्ड फर्टिलाइजर्स के जो प्लांट होते हैं, वे नेप्या बेस्ड फर्टिलाइजर्स के प्लांट होते हैं, वे नेप्या बेस्ड फर्टिलाइजर्स के प्लांट के मुकाबिल में मंहगे पड़ते हैं ग्रीर ग्रन्य देशों के ग्रनुभव के ग्राधार पर उनका ऐसा कहना है कि इस कोल बेस्ड फर्टिलाइजर्स के प्लांट को प्राथमिकता नही दी जा रही है, तो क्या इस रिसर्च में हम ऐसी बात खोज रहे हैं कि जिन्होंने कोल बेस्ड फर्टिलाइजर्स को छोड़ना ग्रारम्भ कर दिया है, उनसे हम चीप इसको तैयार कर सकेंगे या उसके लिये हमने दूसरा मैथड निकाला है ?

श्री भागवत झा श्राजाद: ग्रापने जिस प्रश्न का उल्लेख किया है, यह ठीक है कि ग्रमेरिका जैसे देश में कोयले के आधार पर जो प्लान्ट है, उनकी जगह उन्होंने दूसरे प्लान्ट प्रारम्भ किये हैं। लेकिन ग्रभी हमारी लेबोरेंटरी में जो ग्रनुसंधान हो रहा है, उसके ग्राधार पर हम कह सकते हैं कि जहां तक हमको खबर मिली है, उसके ग्रनुसार वह उसकी तुलना में सस्ता पड़ेगा। इसलिये हम इस एक्सपेरिमेंट को जाशी रखना चाहते हैं।

श्रो तिरंजन वर्मा: क्या श्रीमान यह बताने का कष्ट करेंगे कि मध्य प्रदेश में चिरमिरी ग्रादि स्थानों में जहा कोयले की खानें ग्रधिक हैं, वहां पर इप प्रकार का कोई प्रयोग किया जा रहा है ग्रौर ग्रगर प्रयोग नही किया जा रहा है, तो क्या वहां पर भी प्रयोग किया जाने वाला है ? श्री भागवत झा श्राजाद : श्रभी तो हम इसका प्रयोग सेंट्रल प्युग्नल रिसर्च इस्टिट्यूट में कर रहे है श्रौर जो हमारे सामने खबर श्रार्ट है, उसके श्रनुसार हमने उन स्थानों पर प्रयोग किया है, जहां यह सम्भव है कि उवर्रक से लाभ होगा । श्राधिक ढंग पर जब बड़े पैमाने पर इसका बनाना सिद्ध हो जायेगा, तब हम मध्य प्रदेश या श्रौर प्रदेशों में जा सकते है ।

HINDI TEACHERS TRAINING COLLEGE IN TRIVANDRUM

\*346. SHRI M. P. BHARGAVA: Will the Minister of EDUCATION be pleased to refer to the answer to Unstarred Question No. 899 given in the Rajya Sabha on the 9th December, 1966 and state:

- (a) the progress since made in connection with the setting up of the Hindi Teachers Training College in Trivandrum in July, 1967;
- (b) whether any building for the College has now been procured; and
- (c) whether the Government of Kerala have given any assurance that the College would start functioning in July, 1967?

THE MINISTER OF STATE IN THE MINISTRY OF EDUCATION (PROF. SHER SINGH): (a) Necessary steps have been taken for the appointment of teaching and ministerial staff, purchase of Educational appliances and office equipment, books for Library etc.

- (b) The State Government is on the look out for a suitable building for the College and hopes to secure it by May or June, 1967.
  - (c) Yes, Sir.

SHRI M. P. BHARGAVA: May I know whether the Minister is in a position to assure us that this college will start in July 1967 and it will not meet the same fate as it met last year? It was to start according to the original programme, in July 1966 but the