

(b) if so, the location of the Schemes and the total amount sanctioned so far?

THE MINISTER OF STATE IN THE MINISTRY OF WORKS AND HOUSING (SHRI H. K. L. BHAGAT): (a) Yes, Sir,

(b) Since the launching of the National Water Supply and Sanitation Programme in 1954 and upto March, 1976, the Organisation has technically approved schemes worth Rs. 775 crores in urban areas and Rs. 392 crores in rural areas in different States and Union territories.

**Production of Nitrogen Fertilizers by British Agricultural Research Council, Sussex**

3634. SHRI RAJDEO SINGH: Will the Minister of AGRICULTURE AND IRRIGATION be pleased state:

(a) whether the British Agricultural Research Council, Sussex unit scientists have developed and opened up prospects for manufacturing nitrogen fertilizers cheaply;

(b) whether their claim in developing the process that they have 'fixed' nitrogen in the laboratory for the first time is genuine; and

(c) if so, the salient features thereof and steps being taken for adopting this process?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND IRRIGATION (SHRI SHAH NAWAZ KHAN): (a) to (c). Yes, Sir, Government is aware of the successful simulation in the laboratory of nitrogen fixation by micro-organisms announced by Prof. J. Chatt and the co-workers, working at the Agricultural Research Council (ARC), Unit of Nitrogen fixation, University of Sussex, UK. A letter on the subject from these scientists has also been published in the

British weekly journal entitled, 'Nature', in its January 3, 1975 issue.

The above mentioned research unit at Sussex University is engaged in basic research into nitrogen fixation which means conversion of elementary nitrogen of the atmosphere into ammonia or other forms, easily assimilated by plants. The various aspects of nitrogen fixation, ranging from pure chemistry to microbial genetics are under study. The chemists are studying the reactions of nitrogen molecule with a view to find reactions similar to that occurring in nature of nitrogen fixation. The scientists of the ARC unit of Nitrogen fixation, Sussex University, U.K. have claimed to have achieved the successful simulation of nitrogen fixation by micro-organisms. A molecule of nitrogen has been attached to a molybdenum atom in a compound prepared in the laboratory and overloaded with electrons. In methyl alcohol, which is a protic solvent like water, this compound transfers its electrons into nitrogen molecule under the action of sulphuric acid. The nitrogen molecule is converted to ammonia giving 30-40 per cent yield. Similarly, the tungsten compound also functions even more efficiently, producing 90 per cent yield of ammonia. Both the molybdenum and tungsten compounds are, however, destroyed by the reaction with sulphuric acid to produce ammonia. Hence, unless this reaction is made catalytic, the commercial utilization of the findings looks distant at this stage.

In view of the above, the question of taking any step to adopt the process for any practical or large scale commercial use does not arise at present.

**Special pay to cashiers of Central Public Works Department**

3635. SHRI S. M. BANERJEE: Will the Minister of WORKS AND HOUSING be pleased to state:

(a) whether the cashiers of various Divisions of the Central Public Works

Department handling cash of more than seventy thousand rupees per month are allowed special pay of Rs. 30/- whereas they are entitled to Rs. 40/- as per Government of India orders;

(b) if so, the reasons therefor; and

(c) the steps taken or proposed to be taken by Government to grant them special pay according to the cash handled by them?

THE MINISTER OF WORKS AND HOUSING AND PARLIAMENTARY AFFAIRS (SHRI K. RAGHU-RAMIAH): (a) According to the existing Government orders, subject to their having furnished security, the cashiers are entitled to Rs. 30/- P.M. if the amount of average monthly cash disbursed is between Rs. 20,001/- to Rs. 50,000/- and Rs. 40/- p.m. if the Rs. 50,000/- and Rs. 1,00,000/-. These monthly disbursement is between orders are being followed in the CPWD also.

(b) and (c). Do not arise.

#### तम्बाकू का उत्पादन और निर्यात

3636. डा० लक्ष्मीनारायण पांडेय : क्या कृषि और सिंचाई मंत्री यह बताने की कृपा करेंगे कि :

(क) वर्ष 1975-76 के दौरान आन्ध्र प्रदेश, गुजरात और तमिलनाडु में विभिन्न किस्म की तम्बाकू का कितना उत्पादन हुआ;

(ख) प्रत्येक किस्म की तम्बाकू का कितनी मात्रा में निर्यात किया गया ;

(ग) निर्यात से कितनी धन राशि अर्जित की गई है ; और

(घ) उक्त राज्यों में विभिन्न किस्म की निर्यात-योग्य तम्बाकू के उत्पादन को बढ़ावा देने के लिए क्या कार्यवाही की जा रही रहें ।

कृषि और सिंचाई मंत्रालय में उप-मंत्री (श्री प्रभुदास पटेल) : (क) विभिन्न राज्यों से, जिस में आंध्र प्रदेश, गुजरात, और तमिलनाडु भी शामिल हैं, 1975-76 के तम्बाकू के उत्पादन के अनुमान अगस्त, 1976 के अन्त तक किसी समय प्राप्त होने हैं । तथापि, आंध्र प्रदेश, गुजरात और तमिलनाडु के सम्बंध में वर्ष 1974-75 के लिए तम्बाकू का किस्मवार क्षेत्र और उत्पादन नीचे दिया गया है ।

क्षेत्र—हजार हेक्टर में  
उत्पादन—हजार मीटरी  
टनों में

राज्य	किस्म	क्षेत्र	उत्पादन
आन्ध्र प्रदेश	निकोटियना टोबैकम		
	(i) वर्जीनिया	124.1	111.6
	(ii) अन्य	71.1	70.1
गुजरात	निकोटियना टोबैकम	88.5	127.4
तमिलनाडु	निकोटियना टोबैकम (पत्तियों के साथ डण्डल और तने)	11.3	10.6(0.6)