

(a) whether Scientific studies conducted in Philippines, Thailand and Japan have shown that use of biofertilisers for paddy and other crops is replacing/substituting chemical fertilisers ;

(b) if so, the steps taken in this direction in the country to reduce dependence on chemical fertilisers ; and

(c) whether a national project on bio-fertilisers was started in March, 1983 and if so, the target set and achievements made thereunder ?

THE MINISTER OF STATE IN THE DEPARTMENT OF AGRICULTURE AND COOPERATION IN THE MINISTRY OF AGRICULTURE (SHRI YOGENDRA MAKWANA) : (a) and (b) It is not a fact that biofertilisers used for paddy and other crops in Philippines, Thailand and Japan are entirely replacing/substituting chemical fertilisers. However, Azolla a non-symbiotic biofertiliser, is used as a green manure for rice on a large scale only in a few countries like China and Vietnam. Realising the importance of biofertilisers in supplementing the nitrogen requirement of specific crops the Government has sanctioned a National Project on Development and use of Biofertilisers.

(c) Yes, Sir. A National Project on Development and use of Bio-fertilisers was sanctioned in March, 1983. The production target of the project has been fixed at 600 tonnes each of Rhizobium culture and Blue green Algae per annum. The estimated production of Blue green algae (BGA) during 1984-85 and 1985-86 through BGA sub-centres have been of the order of 75 tonnes and 125 tonnes respectively.

#### Development of Bio-fertilizers

6643. SHRI C. MADHAV REDDI : Will the Minister of AGRICULTURE be pleased to state :

(a) whether a great stress has been laid on development of biofertilisers—both symbiotic and non-symbiotic during the Seventh Plan period ;

(b) if so, details thereof and the work undertaken in this direction ;

(c) the results achieved so far ;

(d) whether it is a fact that experiments have shown that biofertilisers can reduce the use of chemical fertilisers by 40 per cent ;

(e) the details of field trials conducted ; and

(f) the time by which the results are likely to be implemented ?

THE MINISTER OF STATE IN THE DEPARTMENT OF AGRICULTURE AND COOPERATION IN THE MINISTRY OF AGRICULTURE (SHRI YOGENDRA MAKWANA) : (a) to (c) Yes, Sir. With the continuation of the National Project on development and use of biofertilisers, stress has been laid on development of both symbiotic and non-symbiotic biofertilisers during the Seventh Five Year Plan. Under the National Project sanctioned by the Government, it is proposed to produce 600 tonnes of rhizobium culture and 600 tonnes of Blue Green Algae per annum through the establishment of one National, 8 Regional and 60 Blue Green Algae sub-centres. The estimated production of Blue Green Algae during 1984-85 and 1985-86 through these sub-centres has been of the order of 75 tonnes and 125 tonnes respectively. The production of rhizobium culture could not be taken up due to the delay in the establishment of National and Regional centres.

(d) to (f) The experiments conducted have shown that application of effective strains of 500 grams of rhizobium culture add about 60-65 kilograms of nitrogen per hectare in pulses and legume-oilseeds. Application of 10 kilograms of Blue Green Algae to wetland paddy adds about 25-30 kilograms of nitrogen per hectare. These biofertilisers are soil and crops specific and will augment the nitrogen supply depending on the effectiveness of the strains and specific crop. However, their large scale

adoption is yet to take place. The National Project has a component to popularise their use among farmers through demonstration and training programme.

[*Translatto*]

#### Steel Stockyard in Bharatpur

6644. SHRI SHANTI DHARIWAL : Will the Minister of STEEL AND MINES be pleased to state :

(a) whether Steel Authority of India Limited had decided to set up a steel stockyard in Bharatpur; Rajasthan ;

(b) if so, whether SAIL had invited tenders for handling, storage and transportation for this stockyard in October, 1985, and if so, the details thereof ; and

(c) the decision taken to run the Bharatpur steel stockyard on the lines of other steel stockyards of SAIL functioning in the country by providing all the facilities there ?

THE MINISTER OF STEEL AND MINES (SHRI K.C. PANT) : (a) No, Sir. SAIL had decided to open a transit-cum-consignment agency yard at Bharatpur in Rajasthan.

(b) and (c) SAIL had invited tenders for this consignment agency in March, 1986 against which 4 tender quotations were received. A letter of intent was issued to the lowest tenderer awarding the contract for handling, storage and transportation of

iron and steel for this consignment agency. The awardee, however, failed to fulfil the terms of contract resulting in cancellation of the contract. The contract was thereafter awarded to another party. The consignment agency-cum-transit yard has since become operational with effect from 22nd February, 1987.

[*English*]

#### Amount to States for Anti-Poverty Programmes

6645. SHRI VIJAY KUMAR YADAV: Will the Minister of AGRICULTURE be pleased to state :

(a) the amount given to each State/ Union Territory for poverty alleviation programmes during 1984-85, 1985-86 and 1986-87 ; and

(b) the amount spent by each State/ Union Territory during this period ?

THE MINISTER OF STATE IN THE DEPARTMENT OF RURAL DEVELOPMENT IN THE MINISTRY OF AGRICULTURE (SHRI RAMANAND YADAV) : (a) and (b) The three major anti-poverty programmes are Integrated Rural Development Programme (IRDP), National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEGP). Statements showing central share released and total amount utilised are given in the Statements I, II and III given below.