

**Dam Over River Bagmati at Nunthar**

2483. SHRI BHOGENDRA JHA: Will the Minister of IRRIGATION be pleased to refer to the reply given on 7 December, 1981 to Unstarred Question No. 2351 regarding construction of Dam on Nunthar and state:

(a) whether any specific proposal has ever been made to H.M.G. Nepal for multi-purpose Dam over river Bagmati at Nunthar or any proposal to that effect considered to solve the problems of drought floods power etc., if so, details thereabout, if not, reasons for the same; and

(b) whether Dhons Bagmati and Khirori form integral part of the Adhwara group of rivers; if so, specific projects for the same?

THE MINISTER OF STATE IN THE MINISTRY OF IRRIGATION (SHRI Z. R. ANSARI): (a) During the recent official level meeting held at New Delhi in February, 1982, the question of building a multipurpose reservoir on River Bagmati in Nepal was raised by Indian side. It was informed by the Nepalese delegation that the study of a high dam on River Bagmati had not yet been completed by H.M.G. Nepal

(b) Yes, Sir. Bihar Government, in their Action Programme (6-7 years) for Flood Control and Drainage in the Bagmati-Adhwara basin have included the following schemes:

- (1) Adhwara Group Flood Control Scheme.
- (2) Embankment on Darbhanga Bagmati from Sauli Ghat to Nabbi and embankment on Bachraja Kamla from Carseum to Pasetn.
- (3) Channelisation of river Lakhanlihi.
- (4) Raising, widening and providing anti-erosion works for 44 miles of Adhwara embankment, and providing pucca service road on the top.

(5) Raising and widening of 59 miles at Khirohi embankment and providing protection works.

**Potential Arable land under Pulses and Oil Seeds in Gujarat**

2484. SHRI MOHANLAL PATEL:

SHRI NAVIN RAVANI:

Will the Minister of AGRICULTURE be pleased to state:

(a) whether All India Research Project on dryland agriculture has identified certain areas which offered Potential for additional production of Pulses and oil seeds;

(b) if so, the details of that area State-wise and particularly in "ujara" State; and

(c) how Government propose to develop them?

THE MINISTER OF STATE IN THE MINISTRIES OF AGRICULTURE AND RURAL DEVELOPMENT: (SHRI R. V. SWAMINATHAN) (a) and (b). According to the research information available with the All India Coordinated Research Project on Dryland Agriculture introduction of pulses and oilseeds in non-traditional areas in the country offer potential for additional production. The exact extent of such new areas in different states has, however, not yet been assessed. The different regions where new areas offer such potential to introduce pulses and oilseeds, are given below:

(i) Groundnut can be introduced in high rainfall areas of Chotanagpur region and Santhal paraganas in Bihar. Purulia and Bankura districts in West Bengal, uplands of Bhubaneswar region, uplands of Coastal Alluvial and coastal Andhra Pradesh.

(ii) Yellow soyabean has been introduced medium black soils of Malwa Plateau and medium deep black soils of Narmada Valley western and north-western parts of Vidarbha region.

(iii) Double crop system of green gram and safflower can be popularised in medium to deep black soils of eastern and central Vidarbha region. Sunflower and red gram inter-crop system could be introduced also in this region.

(iv) Safflower can taken up instead of rainfed wheat in black soils of Malwa Plateau and Vidarbha and Marathawada regions of Maharashtra.

(v) Red gram as a pure crop can be taken in the districts of Bangalore, Mandya, Mysore, Tunkur and Kolar in Karnataka and as an intercrop in (a) North and north eastern parts of Telengana, (b) Vidarbha region, (c) western parts of Marathawada region and (d) north western parts of Madhya Pradesh

(c) The dryland technology for suitable crops and crop sequences including cereals, pulses, oilseeds etc., has been published as a technical guide for extension work. The same was supplied to State officials who attended the recent National Workshop on Agricultural Development held in New Delhi on 26th & 27th February, 1982.

### Boosting Paddy Production

2485. SHR G. NARASIMHA REDDY: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that with almost equal size of land under cultivation, China is producing 3 tonnes of Paddy per hectare whereas the pro-

duction per hectare in our country is only 1.9 tonnes;

(b) whether ICAR has been constantly trying to improve the quantity and yield of Paddy in the country and if so, to what extent their efforts have borne the fruit; and

(c) whether Government have taken steps to bring the production rate of Paddy at par with China if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT: (SHRI R. V. SWAMINATHAN): (a) Yes, Sir. The average productivity of paddy in India is lower as compared to that of China. For example in 1980-81 the average yield per hectare of paddy in India was 2049 kgs as compared to 4163 kgs of China. The high yield in China is due to larger area (80-90 per cent) being under irrigation as compared to only 38 per cent in India. The average application of fertilizer in China is estimated at 129 kgs/ha of NPK as compared to only 29.6 kgs in India. Besides, large areas of rice in India are under flood prone-deep water low lands, rainfed uplands and saline-alkaline soils. However, under good management and irrigated conditions, the yields in Punjab, Haryana and the delta areas of the South and North are comparable to those of China.

(b) Yes, Sir. As a result of the R&D efforts there has been tangible improvement in rice productivity and production as evidenced from the following statistics:

|                             | 1950—51 | 1965—66 | 1978—79 |
|-----------------------------|---------|---------|---------|
| Area (Million hectare)      | 30.8    | 35.4    | 40.2    |
| Production (Million tonnes) | 20.5    | 30.5    | 53.8    |
| Yield (Kg/ha)               | 668     | 862     | 1339    |