- (iii) Double crop system of green gram and safflower can be popularised in medium to deep black soils of eastern and central Vidarbha Sunflower and red gram inter-crop system could be introduced also 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 Mathya 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 National Workshop on the recent Agricultural Development held in New Delhi on 26th & 27th February, 1982.

## **Boosting Paddy Production**

2485 SHR G. NARASIMHA RED-DY: Will the Minister of AGRICUL-TURE 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 1980-81 the China. For example in 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 salinealkaline 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		
2-1				Alt v	A1 140 E	<u> </u>		
Area (Million hectare)				30.8	35.4	40.2		
Production (Million tonnes)	٠			20.5	30.5	53.8		
Yield (Kg/ha)	٠	10.	7 - LT	668	862	1339		

(c) The Government is taking necessary steps to increase rice productivity to bring it on par with some of the World's high rice producing countries like Japan and China. Some of the improved varieties of rice tested in Farmers' field have given 7 tonnes and more in National demonstrations under irrigated conditions. Research and developmental efforts are underway to develop and adopt improved varieties and production technology not only for the well managed lands but also for the problem areas which pose the major constraint. These efforts are expected to produce more and more rice in future.

## Imported refined Oil for Delhi

2486. SHRI G. NARSIMHA REDDY: SHRI BHIKU RAM JAIN: SHRI NAVIN RAVANI: SHRI MOHANLAL PATEL:

Will the Minister of CIVIL SUP-PLIES be pleased to state:

- (a) whether it is a fact that Covernment are going to cater in Dellu imported refined oil is a supplement to Vanaspati;
- (b) what is the base for production for this oil and whether this is already in use in West and if so, the countries where it is in vogue;
- (c) whether in addition to imports Government have taken step to augment production of oil seed within the country; and
- (d) what quality control methods will be used to ensure that utiliser are not able to adulterate it?

THE DEPUTY MINISTER IN THE MINISTRIES OF AGRICULTURE AND CIVIL SUPPLIES (SHRI MOHAM-MED USMAN ARIF): (a) and (b). 2 Kg and 4 Kg. consumer packs of RBM palmolein and refined rapeseed.

oil are being sold by M/s. Ganesh Flour Mills a company taken over by Government for management under the Industries (Development and Regulation Act) through the Super Bazar cooperative societies in Delhi. These oils are based respectively on palm fruit and rapeseed. They are used in many countries including the western countries

- (c) Yes Sir.
- (d) Adulteration of any oil with vanaspati is an offence under the Prevention of Food Adulteration Act, 1954.

## Consumption of Fertilizers

2487. SHRI S. M. KRISHNA: Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the use of fertilizers in the country has declined considerably during the last two years;
  - (b) if so, the reasons for the same;
- (c) if not, what was the consumption of fertilizer in 1977-78 and 1978-79; and
- (d) the percentage of increase or decline in the use of fertilizers both in 1979-80 and 1980-81?

THE MINISTER OF STATE IN THE MINISTRIES OF AGRICULTURE AND RURAL DEVELOPMENT (SHRI R. V. SWAMINATHAN): (a) No. Sir.

- (b) Does not arise.
- (c) The consumption of fertilizers in 1977-78 and 1978-79 was 42.85 lakh tonnes and 51.16 lakh tonnes of nutrients respectively.
- (d) The percentage increase in fertiliser consumption in 1979-80 and 1980-81 was 2.7 and 4.9 per cent respectively over the relevant previous year.