- (b) If so, the details thereof;
- (c) the factors that contribute to these disparities,
- (d) the steps being taken by the Government to end these disparities,
- (e) whether uneven water supply is a major contributing factor for the disparities, and
- (f) if so, the steps taken to remsdy the unevenness in water supply?

The Minister of Agriculture (Shir Balram Jakhar): (a) There are Inter-State and Inter-District variations in foodgrains productivity per hectare

- (b) Yield of foodgrains per hectare ranged from as low as 607 Kgs in Rajasthan to as high as 3683 Kgs in Punjab during 1993-94 Similar variations in foodgrains productivity per hectare exist at the district level
- (c) The yield per hectare of various foodgrains varies from state to state and district to district depending upon differences in soil fertility rainfall and weather conditions, irrigation facilities, use of yield increasing inputs like chemical fertilisers, high yielding variety seeds, pesticides and other agro and socio-economic factors
- (d) The Government is implementing various crop production oriented programmes including Integrated Cereal Development Programme (ICDP)— rice, wheat end coarse-cereals and National Pulses Development Programme (NPDP) with a view to raise productivity per hectare of various foodgrains in low yielding districts Besides, programmes for increasing the use of fertilisers in low-consumption districts/areas and extension of irrigation facilities are being implemented to improve the productivity of foodgrains in low yielding areas and reduce disparities
- (e) Uneven rainfall and irrigation facility, in different States/Districts may be attributed as one of the important factors contributing to yield disparities
- (f) Extension of irrigation facilities in relatively less developed areas and implementation of National Water Shed Development Programme to harness the rain water are some of the programmes to improve the unevenness of water availability

[Translation]

## **BIO-FERTILIZERS**

- \*774 Shri Ramashray Prasad Singh: Will the Minister of Agriculture be pleased to state.
- (a) the Regions and the Agricultural Universities where experiments are being carned out on bio-fertilizers and vaccines are being developed for protection of important crops,
- (b) the total quantity of bio-fertilizers being produced and disposed of in the country, annually;

- (c) whether bio-fertilizers have proved effective in increasing the fertility of land and controlling the pollution,
  - (d) If so, the details in this regard, and
- (e) the effective steps being taken by the Government to increase the production and propagate the use of bio-fertilizers?

The Minister of Agriculture (Shri Balram Jakhar): (a) In the National Agricultural Research System, experiments on Bio-fertilizers are carned out under the aegis of All India Coordinated Research Project (AICRP) on Biological Nitrogen Fixation and AICRP on Pulses, Groundnut and Soybean with various centres located in different State Agricultural Universities (SAU) and the ICAR Institutes Vaccines are not relevant for the protection of crops

- (b) The total estimated annual production and distribution of bio-fertilizers is about 3,200 tonnes (Rhizobium nearly 2,800 tonnes and BGA nearly 400 tonnes)
- (c) and (d) Yes, Sir Nitrogen build up in the soils dre to use of bio-fertilizers ranges from 30—100 Kg N/ha per crop season. Bio- fertilizers are eco-friendly and do not pollute the environment
- (e) The production of bio-fertilizers is done both under government agencies. SAUs and co-operative federations and agro-industries in order to increase production and propagate the use of bio-fertilizers Ministry of Agriculture is implementing the schemes on
  - (1) National Project on Development and Use of bio-fertilizers
  - (2) Development of fertilizer use in low consumption rainfed areas
  - (3) Balanced and Integrated use of fertilizers
  - (4) Oilseed Production programme and,
  - (5) National Pulse Development Project

Through these schemes the use of bio-fertilizers is promoted amongst the farmers. These schemes have components of education of the farmers for promoting the use of bio-fertilizers.

## ALLOCATION OF EDIBLE OIL

- \*775 Shri Surajbhanu Solanki : Will the Minister of Civil Supplies, Consumer Affairs and Public Distribution be pleased to state
- (a) the demand of edible oils of each State at present;
- (b) the extent to which the quota of these oils was actually supplied during the last three years, year-wise State-wise,
  - (c) whether the requests have been received to