GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO.2307
TO BE ANSWERED ON THE 10TH DECEMBER, 2024

SIGNIFICANCE OF GREEN REVOLUTION

2307. Shri Y S Avinash Reddy:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री be pleased to state:

(a) whether the significance of the Green Revolution India has rich experience in this area, having engineered a Green Revolution in the 1960s, but it is not being tapped and if so, the details thereof/reasons therefor;

(b) whether the Government orchestrated a supply-side response by providing farmers with high-yielding seeds, cheap credit and assured prices through procurement and if so, the details thereof and steps being taken/results yielded during the last 5 years; and

(c) the steps being taken among them the rampant use of chemical fertilizer, fuelled by subsidy, which degraded the soil and if so, the details thereof and steps being taken in this regard?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि और किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) to (c) : The Green Revolution in India was initiated in the 1960's by introducing high-yielding varieties of rice and wheat to increase food grain production. Food grain production increased from **72.3 million MT (metric tons) in 1961 to 332.30 million MT (metric tons) in 2023-24.**

India is continuing its Green Revolution program by adopting Schemes promoting components of Green Revolution like plant breeding, irrigation development, and financing of agrochemicals.

The positive effects of the green revolution are:

- **Increase in crop production:** The crop area under high-yielding varieties of wheat and rice grew considerably making India one of the world's biggest agricultural producers.
- **Self-sufficiency:** The import of food grains reduced as India became self-sufficient in food grains, rather India started exporting at times.
- **Availability:** The per capita net availability of food grains has increased.
- **Benefits to farmers:** The level of income of farmers increased as agricultural productivity improved. It promoted capitalist farming as big land owners profited the most.
- **Industrialization:** The large-scale mechanization of farms created a demand for machinery like tractors, harvesters, threshers, combines, diesel engines, electric motors, pumping sets, etc. Demand for chemical fertilizers, pesticides, insecticides, weedicides, etc. also increased considerably.
- **Agro industries:** Several agricultural products came to be used as raw materials in various industries giving rise to agro-based industries.
- **Employment:** The demand for labor force increased rural employment, and the industrial workforce at the same time.

The Department of Agriculture and Farmers Welfare (DA&FW) is of the view that tapping the benefits of Green Revolution is a continuous process. The Ministry is providing support to the states under two umbrella schemes - Krishonnati Yojana and Rashtriya Krishi Vikas Yojna, which include components of Green Revolution. The Schemes are National Food Security Mission, National Project on Organic Farming, Organic Value Chain Development for North East Region, National Project on Soil Health and Fertility, Rainfed Area Development and Climate Change, Paramparagat Krishi VikasYojana, National Project on Agro-Forestry, National Mission on Horticulture, Sub-Mission on Seed and Planting Material, Sub-Mission on Plant Protection and Plant Quarantine, Sub-Mission on Agriculture Extension, Information Technology, Sub-Mission on Agriculture Mechanization, Integrated Scheme on Agriculture Census and Statistics, Integrated Scheme on Agricultural Cooperation, Integrated Scheme on Agriculture Marketing and National Bamboo Mission.

Under these programs, assistance is being provided to the farmers for organizing cluster demonstrations on rice and wheat, seed production and distribution, nutrient management and soil ameliorants, integrated pest management, cropping system-based training, asset building such as farm machineries & implements, irrigation devices, site specific activities and post harvest & marketing support, etc.

Agriculture being a State Subject, the State Governments take appropriate measures for development of agriculture and welfare of farmers in the States. Fertilizer related matter is dealt by Ministry of Chemical and fertilizer. However, Ministry of Agriculture and Farmers' Welfare supplements the efforts of States and welfare of farmers through appropriate policy measures and budgetary support and various schemes/ programmes. In the year 2013-14 the budget allocation of Ministry of Cooperation, Department of Animal Husbandry and Dairying, and Department of Fisheries were integral parts of the Ministry of Agriculture and Farmers' Welfare was only 30,223.88 crore. The budget of Ministry of Agriculture & Farmers Welfare is ***Rs. 1,32,469.86*** **crore in 2024-25.**

There is no harmful effect of fertilizers on soil fertility, if applied in a balanced and judicious manner. Government of India is recommending soil test based balanced and integrated nutrient management through conjunctive use of both inorganic and organic sources (manure, biofertilizers, green manuring, in-situ crop residue recycling etc.) of plant nutrients with 4Rs approach i.e right quantity, right time, right mode and right type of fertilizer for judicious use of chemical fertilizers and to reduce use of chemical fertilizers. In addition, split application, use of slow releasing fertilizers including neem coated urea and growing leguminous crops are also advocated.

The Government of India is implementing various schemes in order to promote the use of organic fertilizers by the farmers, the details of the schemes are as under:

(i) Market Development Assistance (MDA) to Compressed Bio Gas Plants for sale of Fermented Organic Manure (FOM)/Liquid Fermented Organic Manure (LFOM) & Phosphate Rich Organic Manure (PROM).

(ii) Parampragat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain development in North East Region (MOVCDNER).

ICAR has developed improved and efficient strains of biofertilizers specific to different crops and soil types to reduce the use of chemical fertilizers in agricultural production. In addition, split application and placement of fertilizers, use of slow releasing N-fertilizers and nitrification inhibitors, growing leguminous crops and use of Resource Conservation Technologies (RCTs) are also advocated. ICAR also imparts trainings to different stakeholders, organizes front-line demonstrations, awareness programs etc. to educate farmers on all these aspects.

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