



GREEN REVOLUTION AND ITS CURRENT SCENARIO

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ABSTRACT :

The term "Green Revolution" refers to the rapid increases in wheat and rice yields that have occurred in developing nations as a result of improved varieties and an increased use of fertilizers and other chemical inputs. In many developing nations, this has had a significant impact on incomes and food supplies.

KEY WORDS: Green Revolution, High Yielding Varieties (HYV), Mechanization of Agriculture.

INTRODUCTION:-

The term green upheaval was first utilized by William Gaud and Norman Borlaug is the Dad of the Green Unrest.

In the year 1965, the public authority of India sent off the Green Unrest with the assistance of a geneticist, presently known as the dad of the Green upheaval (India) M.S. Swaminathan. The green revolution was a huge success, elevating the nation's status from one of the world's leading agricultural nations to one with a food-deficient economy. It began in 1967 and continued until 1978.

India's Green Revolution

The Green Revolution boosted agricultural production, particularly in Haryana, Punjab, and Uttar Pradesh.

Major milestones in this undertaking were the development of a high-yielding variety of seeds of wheat and rust-resistant strains of wheat.

Aspects of Green Revolution in India

- High Yielding Varieties (HYV)
- Mechanization of Agriculture
- Use of Chemical Fertilizers and Pesticides
- Irrigation

Green Revolution

The Green Revolution is referred to as the process of increasing agricultural production by incorporating modern tools and techniques. Green Revolution is associated with agricultural production. It is the period when agriculture of the country was converted into an industrial system due to the adoption of modern methods and techniques like the use of high yielding variety seeds, tractors,

irrigation facilities, pesticides, and fertilizers. Until 1967, the public authority significantly focused on extending the cultivating regions. However, the Green Revolution was prompted by a need for drastic and immediate action to increase yield due to the rapid increase in population and food production. The method of green revolution focused on three basic elements that are:

1. Using seeds with improved genetics (High Yielding Variety seeds).
2. Double cropping in the existing farmland and,
3. The continuing expansion of farming areas

Impact of Green Revolution in India

Advantages

1. Green Revolution has remarkably increased Agricultural Production. Foodgrains in India saw a great rise in output. The biggest beneficiary of the revolution was the Wheat Grain. The production increased to 55 million tonnes in the early stage of the plan itself.
2. Not just limited to agricultural output the revolution also increased per Acre yield. Green Revolution increased the per hectare yield in the case of wheat from 850 kg per hectare to an incredible 2281 kg/hectare in its early stage.
3. With the introduction of the Green revolution, India reached its way to self-sufficiency and was less dependent on imports. The production in the country was sufficient to meet the demand of the rising population and to stock it for emergencies. Rather than depending on the import of food grains from other countries India started exporting its agricultural produce.
4. The introduction of the revolution inhibited a fear among the masses that commercial farming would lead to unemployment and leave a lot of the labour force jobless. But the result seen was totally different there was a rise in rural employment. The tertiary industries such as transportation, irrigation, food processing, marketing, etc created employment opportunities for the workforce.
5. The Green Revolution in India majorly benefited the farmers of the country. Farmers not only survived but also prospered during the revolution their income saw a significant rise which enabled them to shift from sustenance farming to commercial farming.

Disadvantages

Besides the positive impact, the revolution had a gloomy side too. Some of the negative effects of the Green Revolution are stated below:

- Retardation of agricultural growth due to inadequate irrigation cover, shrinking farm size, failure to evolve new technologies, inadequate use of technology, declining plan outlay, unbalanced use of inputs, and weaknesses in credit delivery system.
- Regional dispersal of the evolution created regional inequalities. The benefits of the green revolution remained concentrated in the areas where the new technology was used. Moreover, since the revolution for the number of years remained limited to wheat production, its benefits were mostly accrued only to wheat-growing areas.
- Interpersonal inequalities between large and small scale farmers. The new technologies introduced during the revolution called for substantial investments which were beyond the means of a majority of small farmers. Farmers having large farmlands continued to make greater absolute gains in income by reinvesting the earnings in farm and non-farm assets, purchasing land from the smaller cultivators, etc.

Schemes Under Green Revolution (India)

Prime Minister Narendra Modi approved the Umbrella Scheme Green Revolution – 'KrishonnatiYojana' in the agriculture sector for the period of three years from 2017 to 2020 with the Central Share of Rs. 33,269.976 crore. The Umbrella scheme Green revolution- KrishonnatiYojana comprises 11 Schemes under it and all these schemes look to develop the agriculture and allied sector in a scientific and holistic manner so as to increase the income of farmers by increasing productivity,

production, and better returns on produce, strengthening production infrastructure, reducing the cost of production and marketing of agriculture and allied produce. The 11 schemes that are part of the Umbrella Schemes under the Green revolution are:

1. **MIDH** - The Mission for Integrated Development of Horticulture, or MIDH, stands for the Mission for Integrated Development of Horticulture. Its goals are to boost production, increase nutritional security, and provide household farms with more income support.
2. **NFSM** - The National Mission on Oil Seeds and Oil Palm (NMOOP) is included in the National Food Security Mission (NFSM). The point of this plan is to build the creation of wheat beats, rice, coarse cereals and business crops, efficiency upgrade, and region extension in a reasonable way, improving ranch level economy, reestablishing soil richness and efficiency at the singular homestead level. It also aims to cut down on imports and make edible oils and vegetable oils more readily available in the country.
3. **NMSA** - The National Mission for Sustainable Agriculture (NMSA) aims to promote sustainable farming methods that are best suited to the particular agro-ecology, with an emphasis on integrated farming, appropriate soil health management, and synergistic technology for resource conservation.
4. **SMAE – Submission on Agriculture Extension** – this scheme aims to strengthen the ongoing extension mechanism of State Governments, local bodies, etc. achieving food security and socio-economic empowerment of farmers, to forge effective linkages and synergy amongst various stakeholders, to institutionalize program planning and implementation mechanism, support HRD interventions, promote pervasive and innovative use of electronic and print media, interpersonal communication, and ICT tools, etc.
5. **SMSP** - Sub-Mission on Seeds and Establishing Material - This plans to expand the development of value seed, update the nature of ranch saved seeds and increment SRR, fortify the seed duplication chain, and advance new strategies and advances in seed creation, handling, testing, and so forth., to modernize and strengthen seed production, storage, quality, and certification infrastructure, among other things.
6. **SMAM – Sub-Mission on Agricultural Mechanisation** – aims to increase the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low, to promote 'Custom Hiring Centres' to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership, to create hubs for hi-tech and high-value farm equipment, to create awareness among stakeholders through demonstration and capacity building activities, and to ensure performance testing and certification at designated testing centres located all over the country.
7. **SMPPQ – Sub Mission on Plant Protection and Plan Quarantine** – the aim of this scheme is to minimize loss to quality and yield of agricultural crops from insects, pests, weeds, etc., to shield our agricultural bio-security from the incursions and spread of alien species, to facilitate exports of Indian agricultural commodities to global markets, and to promote good agricultural practices, particularly with respect to plant protection strategies and strategies.
8. **ISACES – Integrated Scheme on Agriculture Census, Economics, and Statistics** – this aims to undertake the agriculture census, undertake research studies on agro-economic problems of the country, study the cost of cultivation of principal crops, fund conferences, workshops, and seminars involving eminent agricultural scientists, economists, experts so as to bring out papers to conduct short term studies, improve agricultural statistics methodology and to create a hierarchical information system on crop condition and crop production from sowing to harvest.
9. **ISAC – Integrated Scheme on Agricultural Cooperation** aims to provide financial assistance for improving the economic conditions of cooperatives, remove regional imbalances, to speed up cooperative development in agricultural processing, storage, marketing, computerization, and weaker section programs; ensuring the supply of quality yarn at reasonable rates to the decentralized weavers and help cotton growers fetch a remunerative price for their produce through value addition.

10. **ISAM – Integrated Scheme on Agricultural Marketing** – this scheme aims to develop agricultural marketing infrastructure; to promote innovative technologies and competitive alternatives in agriculture marketing infrastructure; to provide infrastructure facilities for grading, standardization, and quality certification of agricultural produce; to establish a nationwide marketing information network; to integrate markets through a common online market platform to facilitate pan-India trade in agricultural commodities, etc.

And, NeGP-A – National e-Governance Plan aims to bring farmer-centric & service-oriented programs; to improve access of farmers to information and services throughout the crop-cycle and enhance the reach and impact of extension services; to build upon, enhance and integrate the existing ICT initiatives of the Centre and States; to enhance efficiency and effectiveness of programs through providing timely and relevant information to the farmers.

CONCLUSION

India has made a huge achievement in term of the Green Revolution, as it has provided an unprecedented level of food security. It has helped many non-poor people avoid the poverty and hunger they would have experienced if the green revolution had not occurred. It has also helped many poor people escape poverty.

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