

Green Revolution in India

The term green revolution was first used by William Guad and Norman Borlaug is the Father of the Green Revolution.

In the year 1965, the government of India launched the Green Revolution with the help of a geneticist, now known as the father of the Green revolution (India) M.S. Swaminathan. The movement of green revolution was a great success and changed the country's status from a food-deficient economy to one of the world's leading agricultural nations. It started from 1967 and lasted till 1978.

To know more about [M S Swaminathan](#), the father of Green Revolution in India, kindly check the linked article.

The Green Revolution within India led to an increase in agricultural production, especially in Haryana, Punjab, and Uttar Pradesh. Major milestones in this undertaking were the development of high-yielding variety 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 government majorly concentrated on expanding the farming areas. But the rapidly increasing population than the food production called for a drastic and immediate action to increase yield which came in the form of Green Revolution.

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. Continuing expansion of farming areas

Schemes Under Green Revolution (India)

Prime Minister Narendra Modi approved the Umbrella Scheme Green Revolution - 'Krishonnati Yojana' 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- Krishonnati Yojana 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 cost of production and marketing of agriculture and allied produce. The 11 schemes that are part of the Umbrella Schemes under Green revolution are:

1. **MIDH - Mission for Integrated Development of Horticulture** - It aims to promote the comprehensive growth of horticulture sector, enhance the production of the sector, improve nutritional security and increase income support to household farms.
2. **NFSM - National Food Security Mission** - This includes NMOOP - National Mission on Oil Seeds and Oil Palm. The aim of this scheme is to increase the production of wheat pulses, rice, coarse cereals and commercial crops, productivity enhancement and area expansion in a suitable manner, enhancing farm level economy, restoring soil fertility and productivity at the individual farm level. It further aims to reduce imports and increase the availability of vegetable oils and edible oils in the country.
3. **NMSA - National Mission for Sustainable Agriculture** - the aim is to promote sustainable agriculture practices that are best suitable to the specific agro-ecology focusing on integrated farming, appropriate soil health management, and synergizing resource conservation technology.
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 stake-holders, to institutionalise 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 Planting Material** - This aims to increase the production of quality seed, to upgrade the quality of farm-saved seeds and increase SRR, strengthen the seed multiplication chain and promote new methods and technologies in seed production, processing, testing, etc., to strengthen and modernizing infrastructure for seed production, storage, quality, and certification, etc.
6. **SMAM - Sub-Mission on Agricultural Mechanisation** - aims to increase the reach of farm mechanisation 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 centers located all over the country.
7. **SMPPQ - Sub Mission on Plant Protection and Plant 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 supply of quality yarn at reasonable rates to the decentralized weavers and help cotton growers fetch 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.
11. 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 crop-cycle and enhance reach and impact of extension services; to build upon, enhance and integrate the existing ICT initiatives of Centre and States; to enhance efficiency and effectiveness of programs through providing timely and relevant information to the farmers for increasing their agriculture productivity.

Green Revolution - Features

1. Introduced High Yielding Variety seeds in Indian agriculture.
2. The HYV seeds were highly effective in regions that had rich irrigation facilities and was more successful with the wheat crop. Therefore, Green Revolution at first focused on states with better infrastructure such as Tamil Nadu and Punjab.
3. During the second phase, the high yielding variety seeds were given to other states and crops other than wheat were also included into the plan.
4. The most important requirement for the high yielding variety seeds is proper irrigation. Crops grown from HYV seeds need good amounts of water supply and farmers could not depend on monsoon. Hence, Green Revolution has improved the irrigation systems around farms in India.
5. Commercial crops and cash crops such as cotton, jute, oilseeds etc were not a part of the plan. Green revolution in India mainly emphasised on food grains such as wheat and rice.
6. To enhance farm productivity green revolution increased the availability and use of fertilizers, weedicides and pesticides to reduce any damage or loss to the crops.
7. It also helped in promoting commercial farming in the country with the introduction of machinery and technology like harvesters, drills, tractors, etc.

You can also know in detail about the following:

Blue Revolution	Pink Revolution	Golden Revolution
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Impact of Green Revolution in India

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 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

rising population and to stock it for emergencies. Rather than depending on 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 raise which enabled them to shift from sustenance farming to commercial farming.

Knowledge of the Green revolution, its aspects, features, and impact is important for various exams especially the most coveted UPSC exam.

UPSC Books	UPSC Syllabus	Government Schemes
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Aspirants of any competitive exams can check the important links given below to boost their preparation:

Current Affairs	Online Quizzes	NCERT Notes	Static GK
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