



White Model For Green Revolution

This article is based on [“A white touch to a refreshed green revolution”](#) which was published in The Hindu on 03/12/2021. It talks about how the success model of the white revolution can be implemented in the Green Revolution.

Recently, India celebrated the **100th birth anniversary of Verghese Kurien**, the leader of **India's 'white revolution'**. With the white revolution, he launched [Operation Flood](#), which became the **world's largest dairy development programme**.

Within 30 years, **Operation Flood helped double milk available per person in India**, making dairy farming **India's largest self-sustainable rural employment generator**.

This success of the White revolution can be attributed to the **cooperative or Amul model**. The Amul Model gave farmers direct control over the resources they create, **helping them direct their own development and market**.

However, the conditions of farmers belonging to the [Green Revolution](#) or growing food grains are not so bright. If lessons learnt from the White revolution are implemented in the Green revolution, it can surely help in **achieving the goal of [doubling the farmer's income](#)**.

Associated Concerns With Green Revolution

- **Mono-Cropping:** Green Revolution is primarily focused on food grains including wheat, rice, jowar, bajra and maize, etc. However, it is **wheat and rice which has benefited the most**.
 - It has wrested areas from coarse cereals, pulses and oilseeds.
 - This has resulted in **excess production** of wheat and rice and **shortages in most others** today prevail side by side.
 - Further, **major commercial crops like** cotton, jute, tea and sugarcane are also almost **untouched by the Green Revolution**.
- **Regional Disparities:** Green Revolution technology has given birth to growing disparities in **economic development at inter and intra regional levels**.
 - The most benefited areas are Punjab, Haryana and western Uttar Pradesh in the north and Andhra Pradesh and Tamil Nadu in the south.
 - However, it has hardly touched the Eastern region and arid and semi-arid areas of Western and Southern India.
- **Benefiting Big Farmers:** Green revolution's aim was to increase outputs by applying scientific breakthroughs with methods of management to obtain **economies through scale**.
 - Green Revolution has benefited the big farmers as they have the financial resources to purchase farm implements, better seeds, fertilizers and can arrange for regular supply of irrigation water to the crops.
- **Disguised Unemployment:** Farm mechanization under Green Revolution has created **widespread unemployment** among agricultural labourers in the rural areas.
 - The worst-hit are the poor and the landless people.
- **Environmental Degradation:** Green Revolution has led to degradation of the planet's natural environment that has taken place with the **application of modern technological solutions and**

management methods for the pursuit of economic growth.

Way Forward: Lessons Learnt From White Revolution

- **Local Systems' Approach:** Rather than '**global (or national) scale' solutions, the 'local systems' solutions** as practised in the white revolution can be practised. For example:
 - The resources in the local environment must be the principal resources of the farming enterprise.
- **Cooperative Farming:** The principles of **cooperative management in "natural farming"** will result in better economic policies and better management methods to increase inclusion and improve environmental sustainability.
- **Promoting Food Processing Industries:** Milk is the **least volatile** because of the higher processing-to-production share.
 - The AMUL model is based on large procurement of milk from farmers' cooperatives, processing, storing of excess milk in skimmed milk powder form during the flush season and using it during the lean season, and distributing milk through an organized retail network.
 - Thus, the government needs to promote the food processing units in agriculture.
 - In this context, the announcement by the government to create an additional **10,000 Farmer Processing Organisations** along with the **Agriculture Infrastructure Fund** is all promising but needs to be implemented fast.
- **Need for Market Reforms:** The success of operation flood shows that there is a need for **market reforms in APMC**, overhauling the infrastructure of existing APMC mandis contract farming, etc.

Conclusion

The essence of the success of the white revolution lies in its democratic economic governance. According to which enterprise must be of the people, for the people, and governed by the people too.

In this context, it is important that lessons learnt from the white revolution should be deployed to regreen the green revolution.

Drishti Mains Question

The lessons learnt from the success of the white revolution should be deployed to regreen the green revolution. Discuss.