



Self-Reliance in Food

This editorial is based on [“Budgeting for a well-fed, self-reliant India”](#) which was published in The Indian Express on 28/03/2022. It talks about the need for India to be self-reliant not just in missiles (defence equipment) but also in meals (food).

For Prelims: Atmanirbhar Bharat Abhiyan, Green Revolution, MGNREGA, Edible Oil Import in India

For Mains: Atma Nirbhar Bharat Abhiyan in food sector, challenges associated with agriculture products export, measures to make India self-reliant in food (including Edible oil seeds)

In the backdrop of the ongoing war between Russia and Ukraine, Prime Minister has emphasised the need for India to be Atmanirbhar (self-reliant) in defence equipment. However, we need to be **self-reliant not just in missiles (defence equipment) but also in meals (food)**.

As the old proverb goes, no army can march on an empty stomach. “Jai jawan, jai kisan” (salutation to the soldier and salutation to the farmer) was the slogan given by Late Lal Bahadur Shastri, and Atal Bihari Vajpayee added “jai vigyan” (salutation to the scientist) to that. Focusing on science and scientists is critical for attaining self-reliance in meals to missiles.

What is the Meaning of India Becoming Self-Reliant in Food ?

- Self-reliance in food does not mean that we have to produce everything ourselves at home, irrespective of the cost. Its true meaning lies in specialising in commodities in which we have a **comparative advantage**, exporting them, and importing those in which we don't have a significant comparative advantage.
- This is not an either/or situation — it is about the degree of self-reliance a country wants to have following the principles of comparative advantage. If some protection is needed for new areas to develop (infant industry argument), that may be okay. But one should not aspire to be self-sufficient behind high tariff walls. That would only breed inefficient and high-cost structures that cannot compete globally.
- **What is it that gives a country an edge over others in attaining comparative advantage?**
 - In the area of agriculture and food, researches reveal that it is the efforts and resources that a country puts in agri-research and development (agri-R&D), its extension from lab to land, investing in irrigation to boost yields, efficiency in marketing and processing the produce, and taking it from farmers' fields to consumers' table or export destinations.

What are the Challenges to Self-Reliance in Food?

- **High Dependence on Edible Oil Import:** India has achieved self-reliance in agriculture by producing a reasonably large amount of food, and also being a net exporter of agri-produce. The high dependence on imports for edible oils — hovering around 55 to 60% of consumption —

however, remains a concern. India's potential to emerge as a significant exporter of agri-produce remains untapped.

- **Low-Value Exports:** Further, most processing in India can be classified as primary processing, which has lower value-addition compared to secondary processing.
 - Due to this, despite India being one of the largest producers of agricultural commodities in the world, agricultural exports as a share of GDP are fairly low in India relative to the rest of the world.
 - The same proportion is around 4% for Brazil, 7% for Argentina, 9% for Thailand, while for India it is just 2%.
- **Lack of Effective Decentralised:** The real promise of a decentralised system — of experimentation, of learning from each other, and the adoption of best-practices and policies — has largely failed to materialise.
 - Instead, Indian agriculture since Independence has remained highly fragmented.
- **Low-Value Exports:** Further, most processing in India can be classified as primary processing, which has lower value-addition compared to secondary processing.
 - Due to this, despite India being one of the largest producers of agricultural commodities in the world, agricultural exports as a share of GDP are fairly low in India relative to the rest of the world.
 - The same proportion is around 4% for Brazil, 7% for Argentina, 9% for Thailand, while for India it is just 2%.

What is to Should be Done to Make India Self-reliant in Meal?

- **Focus on agri-R&D:** There is ample literature to show that agri-R&D raises total factor productivity and makes agriculture more competitive globally. Sometimes, the basic R&D to develop “miracle seeds” is done outside the country, but those seeds can be imported and adapted to local conditions with in-country R&D and scaled up for adoption at farmers' fields. The [Green Revolution](#) was such a case.
 - The [Economic Survey \(2021-22\)](#) explicitly highlighted the correlation between spending on agri-R&D and agricultural growth. Many research also shows that every rupee spent on agri-R&D yields much better returns (11.2), compared to returns on every rupee spent on say fertiliser subsidy (0.88), power subsidy (0.79), etc.
 - Yet, the competitive populism in Indian democracy leads to suboptimal choices in the allocation of scarce resources. More on safety nets like food subsidy and [MGNREGA](#) or on income support and subsidies for farmers, but very little for agri-R&D
 - **Increase the Investment in Agri Sector:** If India wants to be fully self-reliant in food, it is generally agreed that it **must invest at least 1% of its agri-GDP in agri-R&D**. But the budgets of both the Union government and the states put together reveal that this expenditure on agri-R&D and education hovers around 0.6% of agri-GDP, with a roughly equal share of the Centre and all states put together.
 - This is way below the minimum cut off point of 1% and government policy must urgently work towards raising this substantially.
 - **Private Sector Involvement:** In addition to this, the government should come out with policies that incentivise private companies to expand their R&D programmes and invest more financial resources on development projects, which have the potential to overcome the challenges of the current agrarian setup of India.
 - There are some global and local companies like Bayer, Syngenta, MAHYCO, Jain Irrigation, and Mahindra and Mahindra that spend a considerable amount of their turnover on R&D programmes and developing high-tech inputs.
 - The USP of these companies is that they develop technology that increases productivity while addressing the current challenges of limited net sown area, depleting water resources, vulnerability to climate change, and the need to produce nutrient-rich food.
 - India's budget allocations in the agri-food space should thrive on **creating “more from less”**. The financing should focus on altering the current atmosphere of a high incidence of hunger and malnutrition, keep a check on the mismanagement of natural resources and mitigate climate change issues.
 - There is a need to work on **building long-term sustainable solutions** that have an aggressive approach to implementing relevant policies and developing new ones.
-

Drishti Mains Question

There is a need to be self-reliant not just in missiles but also in meals. Discuss.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Q. Consider the following statements: (2018)

1. The quantity of imported edible oils is more than the domestic production of edible oils in the last five years.
2. The Government does not impose any customs duty on all the imported edible oils as a special case.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (a)