



VAJIRAO & REDDY INSTITUTE

India's Top Potential Training Institute for IAS

+918171181080



+919068806410

www.vajiraoinstitute.com



info@vajiraoinstitute.com

YOJANA MAGAZINE ANALYSIS

(August 2023)

(Part 2/3)

TOPICS TO BE COVERED

- ATAL INNOVATION MISSION
- AGRICULTURE : FROM SHORTAGE TO SURPLUS



ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



ATAL INNOVATION MISSION

Innovation is the process of creating value by **applying novel solutions to meaningful problems.**

ON AGENDA:

Building a **holistic innovation ecosystem in India** to foster **innovation and entrepreneurship, solve societal challenges, and contribute to the country's economic growth.**

INNOVATION'S ROLE IN ECONOMIC GROWTH

- **Pre Industrial era:** Early GDP growth was tied to consumption due to population increase, with limited real growth (0.1% annually) until 1700 AD.
- **GDP after the industrial revolution:** Post-1750s, the industrial revolution triggered exponential GDP growth through technology and innovation-driven changes.
- **Technology-led innovation:** Technological innovation fueled economic progress by enhancing productivity, and efficiency, and creating opportunities in various sectors.
- **Total Factor Productivity's significance in GDP growth:** Total Factor Productivity (TFP) significantly impacts GDP growth by improving output efficiency through innovation and technological advancement.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



What is Total Factor Productivity?

Total factor productivity is a **measure of productive efficiency** in that it measures **how much output can be produced from a certain amount of inputs.**

- **Leading nations' focus on technological innovation:** Technologically advanced nations e.g., USA, UK, Germany, Japan have driven GDP growth through substantial investments in research and innovation.

STEPS TAKEN BY THE GOVERNMENT

- **State-sponsored initiatives** have contributed to the development of new technologies and industries. For example, **Israel and the USA** showcase effective government-led innovation initiatives that have yielded significant results.
- **National Innovation Foundation (NIF):** India established NIF to empower grassroots technological innovations and preserve traditional knowledge.
- **Science, Technology, and Innovation Policy:** This policy aims to position India as a global scientific leader and establish a robust Science, Research, and Innovation system (SRISHTI).
- **Supporting Innovation Culture:** In a diverse country like India, government support is pivotal in cultivating an innovation culture.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



- **Atal Innovation Mission (AIM):** AIM was **initiated** by the Government of India in **2016**. AIM's primary objective is to **cultivate innovation and entrepreneurship** and it aims to create an environment conducive to generating and implementing innovative ideas.

PROGRAMS UNDER AIM

- **Atal Tinkering Labs (ATLs):**
Establishes tinkering labs in schools to encourage innovative thinking among students. Nurtures creativity, problem-solving, and hands-on learning from an early age.
- **Atal Incubation Centres (AICs):**
Focuses on supporting innovators during the transition from idea to prototype to market. Provides necessary infrastructure, mentoring, and resources to foster start-up growth.
- **Atal Community Innovation Centres (ACICs):**
Aims to expand innovation beyond major cities to tier-2 & tier-3 locations. Promotes innovation within local communities by providing resources and guidance.
- **Atal New India Challenge (ANIC):**
Offers a platform for startups to solve pressing national challenges through innovation. Provides funding, mentorship, and resources for the development and implementation of solutions.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



AGRICULTURE : A JOURNEY FROM SHORTAGE TO SURPLUS

From time immemorial, the **Indian society** has been characterised as an **Agrarian society**.

Major portion of our workforce, today also, is employed in agriculture & related activities.

When the Britishers left us, they **left the agri sector in dire straits** as they seldom invested on agricultural land development. We had to resort to **foreign food aid**. (Despite being a 'krishi pradhan desh')

In the past 75 years, we have done phenomenal progress. **Green Revolution** can be called as the defining factor among other factors & has enabled India not only to be **self sufficient**, but also an **exporter of food grains** to the global market.

GREEN REVOLUTION : FROM SCARCITY TO SURPLUS

- Green Revolution, catalyzed by the introduction of **high-yielding and disease-resistant crop varieties**.
- The government also focussed on **procuring the food grains at a predetermined price** from the farmers & thus introduced MSP in **1967**. (recommended by **LK Jha Food grain price committee**)

ADDRESS:

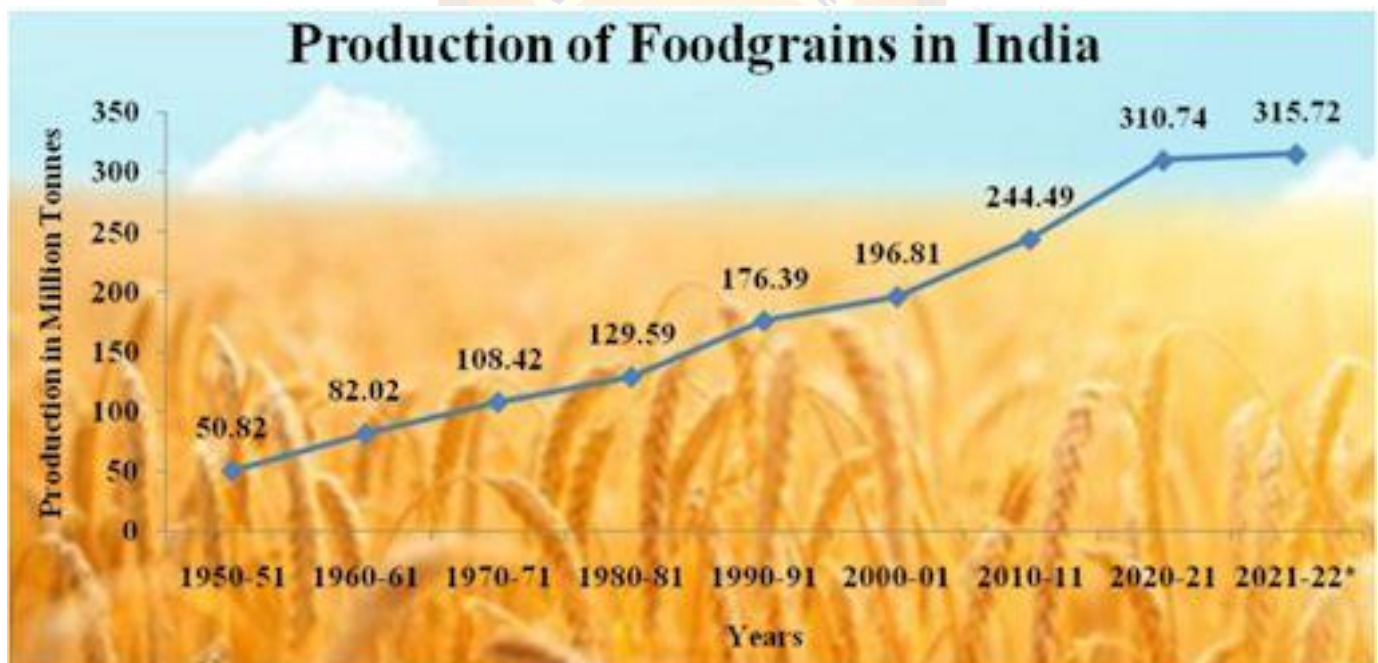
19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



Who was the brain behind Green Revolution?

- Scientist **Dr. Norman Borlaug's** innovations in wheat varieties boosted yields, and coupled with government support under the leadership of doctor **MS Swaminathan**, led to record-breaking harvests.

This surge in productivity not only ensured food security but also paved the way for self-sufficiency and agricultural exports.



ACHIEVEMENTS OF INDIA

- India leads in **sugar**.
- Leading producer of **millets**.
- Ranks **2nd in rice (after China)**.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



VAJIRAO & REDDY INSTITUTE

India's Top Potential Training Institute for IAS

+918171181080
+919068806410



www.vajiraoinstitute.com
info@vajiraoinstitute.com



- Holds **14.14% global wheat production share in 2020**.
- **India leads** in Milk Production.
- India is the **second largest fish producer** in the world.
- India is the 3rd highest Egg Producer in the world.

MILLETS : A NUTRITIONAL RESURGENCE

Recognizing the significance of millets, India celebrated the **International Year of Millets in 2023**, rebranding them as '**Shree Anna**'.

With targeted strategies and government support, **millet production has surged, aiding nutritional security**.

The cultivation of millets has soared, setting the stage for **India to become a global hub** for these nutrient-rich grains.

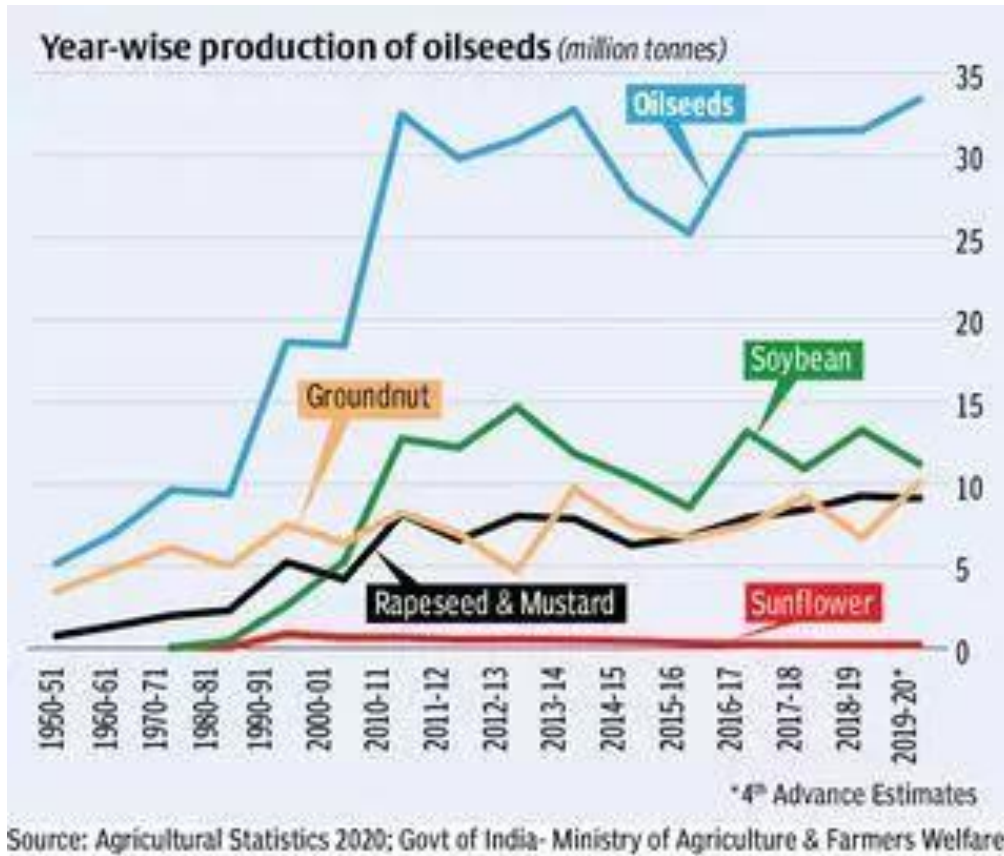
OILSEEDS PRODUCTION : YELLOW REVOLUTION

The Yellow Revolution marked a breakthrough in oilseed production. **Innovative cultivation practices and the introduction of advanced crop production technologies** led to a dramatic increase in oilseeds output.

India's oilseed production grew from **108.30 lakh metric tons in 1985-86** to an impressive **400,000 million tons in 2022-23**, establishing self-reliance in this crucial sector.

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



MILK PRODUCTION : WHITE REVOLUTION

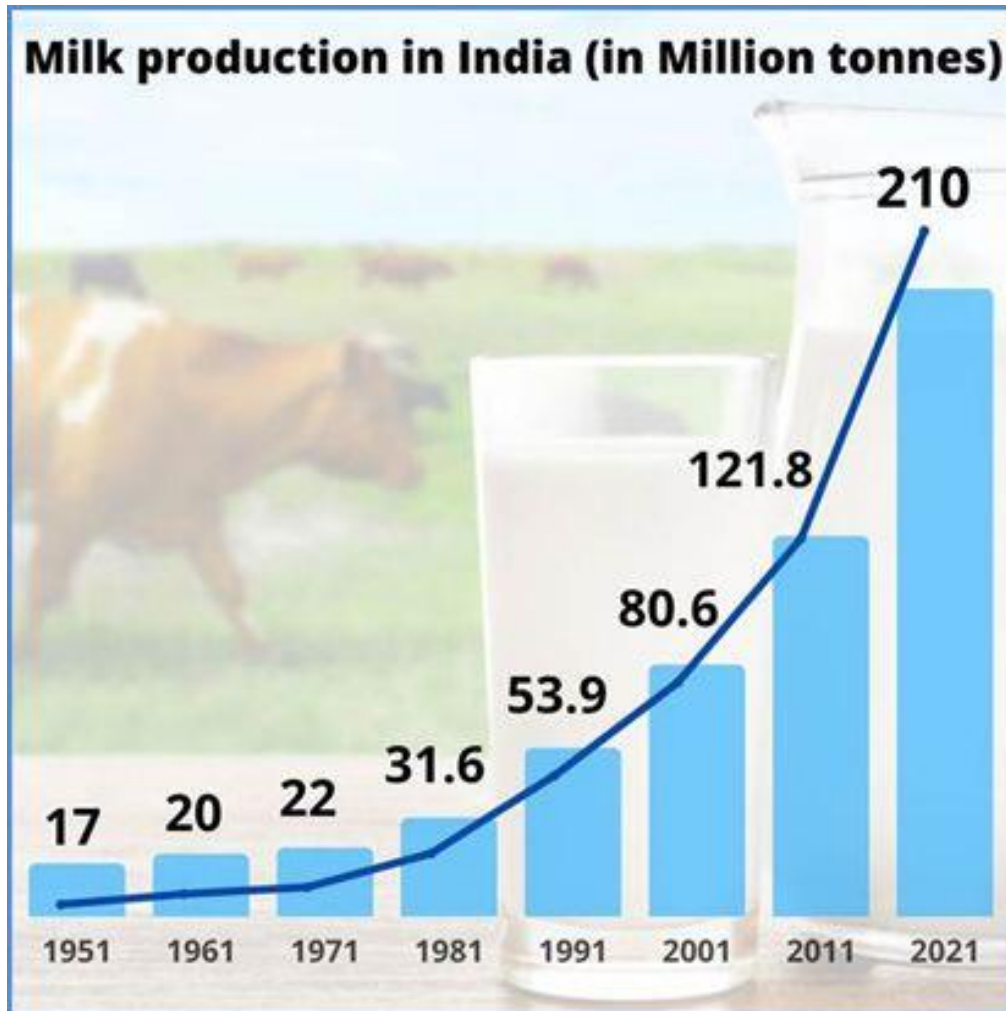
In a similar vein, the **White Revolution** addressed India's milk crisis. With per capita milk availability dwindling, the **National Dairy Development Board (NDDB)** chaired by **Vergheese Kurien** launched **Operation Flood** in the 1970s.

This initiative **established a network of village-level milk cooperatives, modern processing plants, and a seamless supply chain.**

India has been a global leader in milk production for over a decade, with a total production of around **222 million tonnes in the year 2022-23.**

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



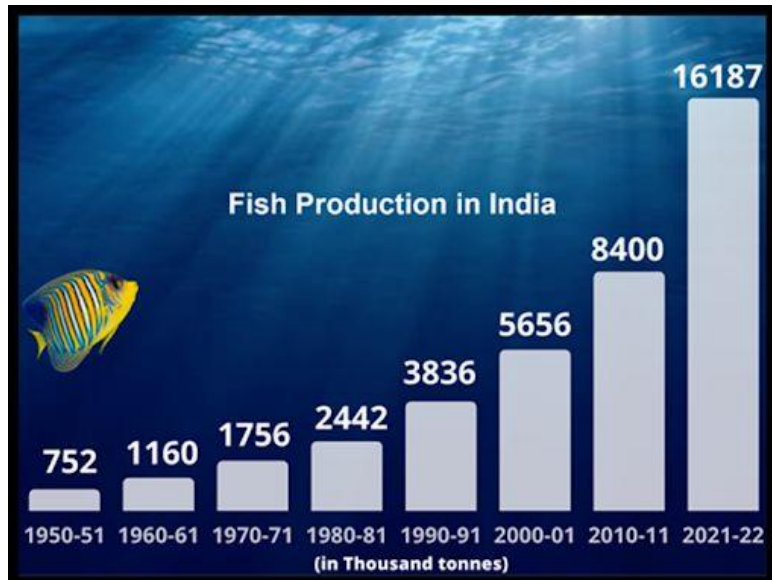
FISHERIES PRODUCTION : BLUE REVOLUTION

Post-independence efforts in the fisheries sector resulted in the **Blue Revolution**. India transformed into the **second-largest fish-producing country globally**, with policies promoting both marine and inland fisheries.

The **Blue Revolution** not only boosted fish production but also elevated India's status as a leading seafood exporter.

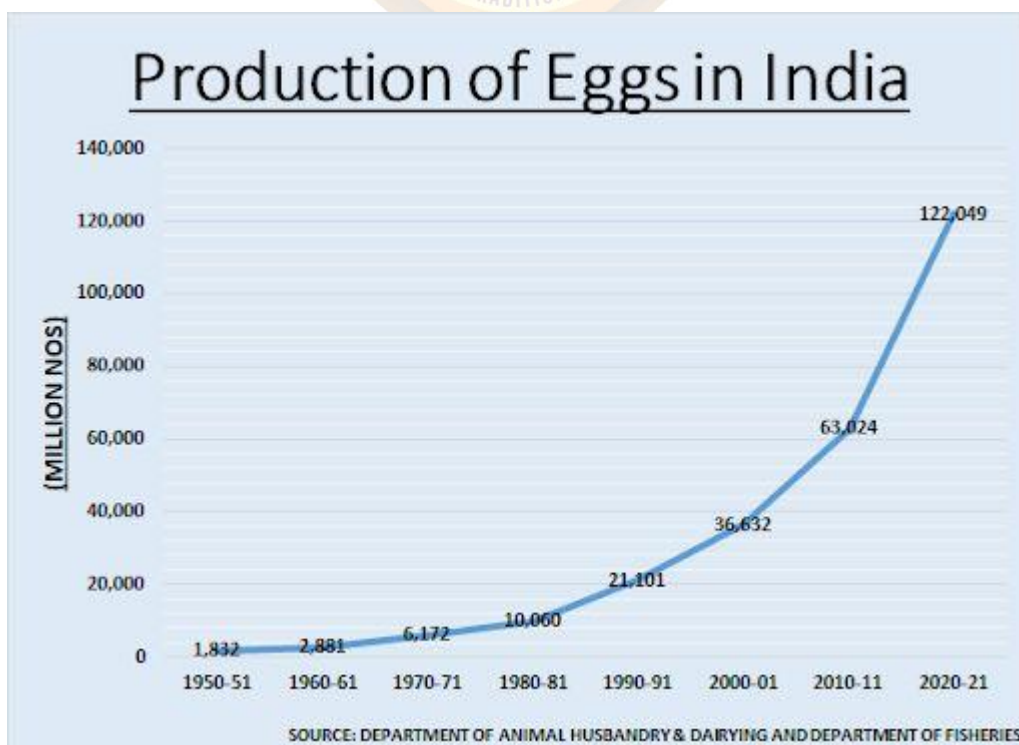
ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)



POULTRY PRODUCTION : SILVER REVOLUTION

Rising to become the **third-largest egg producer globally**, India's poultry industry has added another feather to its agricultural cap.





VAJIRAO & REDDY INSTITUTE

India's Top Potential Training Institute for IAS

+918171181080



+919068806410

www.vajiraoinstitute.com



info@vajiraoinstitute.com

WAY FORWARD

- Challenges such as **climate change, resource depletion, and productivity constraints** must be addressed.
- Initiatives like the **National Mission on Sustainable Agriculture** and **Agri-Tech Infrastructure Fund** focus on sustainable practices and technology integration.
- **Digital tools, precision agriculture, and market linkages** are redefining modern farming.
- From **financial support** to **crop insurance and institutional credit**, these initiatives empower farmers.
- The **National Agriculture Market (e-NAM)** is revolutionizing agricultural marketing, ensuring fair prices and market access.

India's agricultural journey is a testament to **scientific innovation, political will, and the unwavering toil of farmers.**

ADDRESS:

19/1A Shakti Nagar, Nagiya Park Near Delhi University, New Delhi - 110007 (India)