# 4. Self-Reliance in Pulses - Economy

NITI Aayog releases report on "Strategies and Pathways for Accelerating Growth in Pulses towards the Goal of Atmanirbharta".NITI Aayog has released a strategic roadmap to make India self-reliant ('Atmanirbhar') in pulses, addressing its status as the world's largest producer, consumer, and importer. The plan aims to boost production by increasing both the cultivation area and crop productivity to cut down on import dependency.

## NITI Aayog's Report - A Roadmap for Self-Reliance in Pulses

NITI Aayog has released a pivotal report titled "Strategies and Pathways for Accelerating Growth in Pulses towards the Goal of Atmanirbharta". This report underscores the critical role of pulses in India's national objectives, including food security, nutritional well-being, sustainable agriculture, and farmer livelihoods, and lays out a comprehensive strategy to achieve self-reliance.

## Current Status of Pulses in India

### Global Position and Domestic Importance

**Largest Producer, Consumer & Importer** - India holds a unique and dominant position in the global pulses market. It is the world's largest producer (accounting for 25% of global production), the largest consumer (consuming 27% of the world's pulses), and the largest importer (bringing in 14% of global imports).

**Crucial Nutritional Role** - Pulses are the most affordable source of plant-based protein, making them indispensable in the effort to combat malnutrition and ensure a balanced diet for millions.

**Foundation of Livelihoods** - The cultivation of pulses supports over 5 crore farmers and their families, serving as a vital source of income, particularly for those in rainfed and marginal agricultural regions.

### Production Patterns and Vulnerabilities

**Predominantly Rainfed Agriculture** - Nearly 80% of pulse cultivation in India is dependent on rainfall, which makes the sector highly vulnerable to climate variability, erratic monsoons, and droughts.

**High Regional Concentration** - Production is heavily concentrated in a few states. Madhya Pradesh, Maharashtra, and Rajasthan collectively contribute about 55% of the national output. The top 10 states are responsible for over 91% of the total production.

**Implication of Concentration** - This heavy reliance on a limited number of states makes the national pulse supply regionally skewed and extremely sensitive to climatic shocks in those specific areas.

### Recent Progress and Achievements

**Significant Production Growth** - India has made substantial progress in increasing its pulse output, which rose by 59.4% from 16.35 million tonnes (MT) in 2015–16 to 26.06 MT in 2022–23.

**Enhanced Productivity** - There has been a 38% increase in productivity over the same period, driven by the adoption of improved crop varieties and the effective implementation of government schemes.

**Reduced Import Dependence** - As a result of higher domestic production, the country's dependence on imports has declined sharply, falling from 29% in 2015–16 to just 10.4% in 2022–23.

### NITI Aayog's Key Recommendations

The report outlines a comprehensive strategic framework designed to bridge the projected demand-supply gap and ensure the long-term sustainability of pulse production.

### Two-Pillar Strategic Framework

The strategy is anchored on two core pillars for expansion -

1. **Horizontal Expansion** - This pillar aims to increase the total area under pulse cultivation. It focuses on utilizing untapped land resources, such as rice fallow lands, for planting high-yielding pulse crops and promoting efficient intercropping with other major crops.
2. **Vertical Expansion** - This pillar is focused on enhancing crop yields and productivity through technology-led interventions and improved farming practices. Key measures include -

1. Adoption of improved varieties and hybrids.
2. Emphasis on seed treatment and quality assurance.
3. Value addition through better processing and storage.
4. Promotion of timely and scientific sowing practices.
5. Integrated approaches to nutrient, pest, weed, and water management.

## Targeted Implementation Strategies

**'District-wise Quadrant Approach'** - A micro-level strategy to identify district clusters for implementing crop-specific interventions. This allows for targeted resource allocation to high-potential zones to maximize impact.

**Area Retention and Diversification** - Policies to ensure that farmers do not shift away from pulse cultivation due to price volatility, along with the promotion of region-specific crop clusters to optimize cultivation practices.

**Proposed Mission for Atmanirbharta in Pulses** - A dedicated, focused six-year program proposed for the Budget of 2025–26. It will prioritize crops where import dependency remains high - pigeonpea (arhar), black gram (urad), and lentil (masoor). The mission's primary goals are to boost production, further reduce imports, and stabilize prices for both farmers and consumers.

## Customized Technologies and Seed Systems

**Tailored Practices** - Develop and promote cultivation practices tailored to specific agro-ecological sub-regions, such as using drought-resistant varieties in arid zones.

**Strategic Seed Distribution** - A focused seed strategy on providing high-quality, treated seed kits with widespread distribution, particularly in the 111 high-potential districts that contribute 75% of the national output.

**Cluster-Based Seed Production** - Implement a "One Block – One Seed Village" model, supported by Farmer Producer Organizations (FPOs), to strengthen local seed systems and ensure quality.

**Climate Adaptation** - Promote the development and adoption of pulse varieties that are resilient to climate change impacts like heat, drought, and erratic rainfall.

**Data-Driven Monitoring** - Utilize real-time decision-support systems to provide actionable intelligence to farmers and policymakers.

## Significance of the Report

Achieving the goals outlined in the report will have far-reaching benefits for India -

**Food Security** - It directly addresses the rising protein demand of India's large and growing population.

**Farmer Welfare** - A thriving pulse sector provides crucial economic support to marginal and small farmers in rainfed agricultural zones.

**Import Substitution** - Reducing reliance on imports leads to significant savings in foreign exchange.

**Nutrition Security** - It is a key step toward addressing the national challenge of malnutrition and bridging dietary protein gaps.

**Environmental Sustainability** - Pulses are environmentally friendly crops. They improve soil fertility through nitrogen fixation, which reduces the dependence on chemical fertilizers, making agriculture more sustainable.

Source - https - //www.pib.gov.in/PressReleasePage.aspx?PRID=2163828