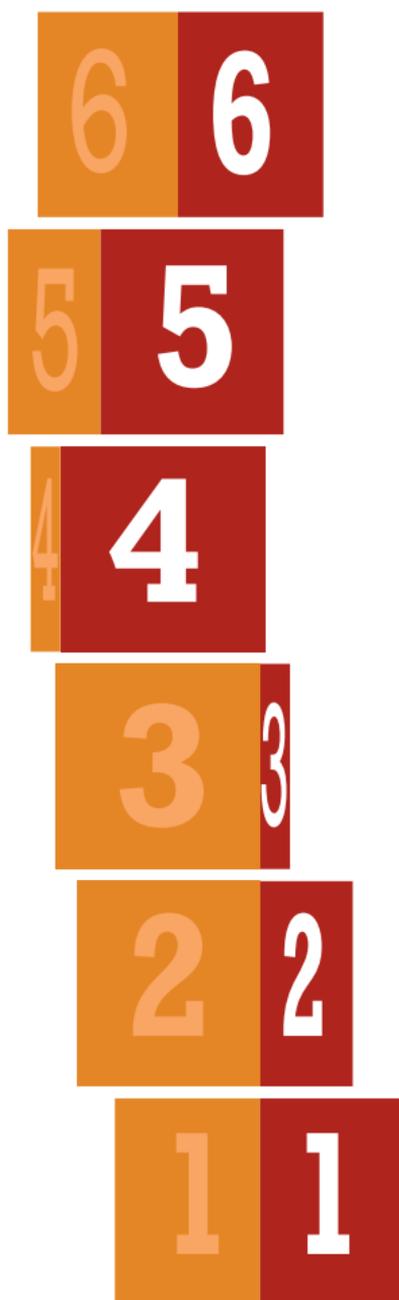


# INDIA 2039

## Transforming Agriculture



# **A Vision of Indian Agriculture in 2039**

**Agricultural production will be driven by consumer demand for a diverse basket of high-value products.**

**The private sector will drive progress in value chains and in agricultural services.**

**Public agricultural and rural programs will be consolidated and significantly decentralized.**

**Irrigation will have become an efficient modern sector.**

**Remaining constraints in the marketing of agricultural commodities will have been eliminated.**

# **Four Necessary Subtransformations for Indian Agriculture**

**From traditional grains  
to high-value crops  
and livestock products.**

**From production based on low  
labor costs to efficiency and  
productivity-driven growth.**

**From wasteful to efficient  
water use.**

**From public support and  
protection to an even greater  
involvement of the private  
sector in the value chain.**

## BUILDING BLOCK 1



### **Make public programs much more focused and effective**

- Sharply reduce the number of centrally sponsored schemes and public programs.
- Convert the current fragmented silo approach into block grants.
- Decentralize the implementation of the public programs with increased accountability for results at all levels.
- Use the independent evaluation bodies, such as the newly established Evaluation Office of the Planning Commission, to monitor and evaluate impacts.

## BUILDING BLOCK 2

### **Recognize water as a critical, long-term constraint to Indian agricultural growth and give top priority to significantly improving the efficiency of water use**



- Shift the emphasis from open surface irrigation (such as canals) to more efficient, sustainable groundwater-based irrigation (including underground pipelines).
- Promote the emergence of water markets and greater involvement of private wholesale providers.
- Actively promote measures to artificially recharge groundwater aquifers.
- Phase out electricity subsidies, as part of broader subsidy reforms; provide electricity for fixed hours for electricity feeders for groundwater extraction (separate from domestic electric supply).
- Support expansion of micro-irrigation and drip irrigation.



### **BUILDING BLOCK 3**

## **Promote new high-yield seeds and related technologies, including mechanization, to improve yields and productivity**

- Promote more and better seeds, including Bt and other GM seeds.
- Tackle regulatory bottlenecks that restrict the availability of improved seeds, while keeping strong safeguards to protect public health and safety.
- Move to market-based output and input prices.
- Adopt banking practices that promote financial inclusion and the availability of needed credit, particularly to poor, marginalized farmers and others active in the rural economy.
- Encourage the private sector to step up investments in developing and marketing new technologies.

### **BUILDING BLOCK 4**



## **Improve the effectiveness of agricultural research and extension**

- Step up the investment in agricultural research from 0.7% of agricultural GDP to 2% (as envisioned in 12th Five Year Plan).
- Review and implement the recommendations of the Swaminathan and Mashelkar Committees to restructure the Indian Council of Agricultural Research (ICAR).
- Build and better exploit synergies between public and private sectors in agricultural research, including through public-private partnerships.

- Accelerate the scaling up of the Agricultural Technology Management Agency (ATMA) and the Krishi Vigyan Kendras (KVKs), replicating successes in selected states across the country.
- Encourage participation of the private sector in extension, including by leveraging information technology, and e- and mobile- (m-) applications.
- Support NGOs in providing extension services— with a strong focus on the small farmer and remote areas.



## BUILDING BLOCK 5

### **Support further improvements of the farm-to market value chain**

- Remove remaining regulatory barriers to private sector expansion in transport, storage, and marketing—by accelerating the adoption and implementation of the Agricultural Produce Marketing Committee (APMC) Model Act in all states.
- Encourage higher investments by the private sector to improve productivity and competition throughout the value chain, and permit farmers to retain a larger share of their output prices while simultaneously lowering consumer prices.
- Open retailing to foreign direct investment to bring in additional capital, technology and management know-how to enhance competition and improve supply chains.
- Reform food grain policy and institutions.
- Replace subsidized food distribution with conditional cash transfers that can be used for a broad set of foods rather than just food grains, using newly introduced Aadhar cards (along the lines of food stamps), and adopt a system that excludes the identifiable well-off.

- Shift the procurement, imports, and storage of most agricultural products to the private sector.
- Refocus the Food Corporation of India (FCI) on managing buffer stocks.

## BUILDING BLOCK 6



### **Improve markets and incentives related to agriculture through reforms of prices, trade, and subsidies**

- Remove regulatory and administrative barriers to achieve markets for agricultural inputs and outputs.
- Phase out subsidies for environmentally damaging inputs (such as fertilizers).
- Eliminate remaining restrictions on land rental and lease markets, and further improve rural land administration to improve the land sales markets, and the ability of farmers to use land as collateral for loans.
- Integrate Indian agriculture into the global economy well before 2039.



**The highlights here are drawn from a study aimed at key opinion makers to foster debate on a vision of—and strategy for—the transformation of Indian agriculture between now and 2039:**

**<http://www.centennial-group.com/downloads/IndianAgricultureForWeb.pdf>**

**PRODUCTIVITY**

**MARKETS**

**INSTITUTIONS**