

Overarching Contours of Agriculture



By Ashok Vishandass

Professor (Applied Economics)
Indian Institute of Public Administration
New Delhi

July, 2020

Context

- ❖ Agriculture is the life blood of Indian economy
- ❖ At one level, India's agri-strategy has been successful in the sense that the country moved from import-dependence to self-sufficiency and then to a net food exporting country
- ❖ At another level, the strategy by-passed farmers' welfare as reflected in their low income levels
- ❖ Clearly, something is missing in our agriculture
- ❖ Seek to figure out the crucial missing link that has potential to take our agriculture to new heights



Criticality of Agriculture (1/4)

Food Security

- To feed 1.35 billion population, that is still growing and likely to cross China's population by 2027
- Importance of agriculture to be viewed not from the perspective of just food security but it goes far beyond this
- Dependence on imports of key staple supplies on other countries has the ramification on National sovereignty



Criticality of Agriculture (2/4)

- ❖ Wheat aid to India by US in mid-1960s, just as an example, was sought to be used as an instrument to arm twist India to support them in their war against a third country
- ❖ This example amply illustrates the possibility of National interest getting compromised in the event of food dependence



Criticality of Agriculture (3/4)

Economic Access to food

- An average Indian household still spends more than half of its expenditure (MPCE) on food and bottom 30% of the population spends more than 60% on food;
- to contain food inflation on long term basis

Poverty

- 26% of the rural population is BPL and 43% of children under 5 years being underweight



Criticality of Agriculture (4/4)

Labour Productivity

- 43% of India's work-force contributes 15% of GVA;
- Issues of labour productivity and livelihood



Journey from...

Ship to Mouth (1/3)

- ❖ The cornerstone for development of the agriculture sector since mid-1960s was Increasing agriculture output
- ❖ Prior to this, the foodgrains in the country were made available mainly through imports of wheat under Public Law 480 (PL 480) food aid from the US
- ❖ The country's position was akin to 'ship to mouth', given the country's heavy dependence on imports of key staple food supplies



Journey from...

Ship to Mouth (2/3)

- The set of innovations in terms of high-yielding varieties (HYV) of seeds, along with associated innovations in agricultural practices and marketing, often encapsulated in the term Green Revolution
- This strategy has been successful in the sense that India moved from import-dependence to self-sufficiency and then to a net food exporting country



Journey from... Ship to Mouth (3/3)

- The strategy of Green Revolution did not explicitly promote farmers' welfare with the result that their income remained low
- India's foodgrains production increased 3.9 times during last 54 years (1965-66 to 2019-20).
- Huge disparities between income levels in agriculture and non-agriculture sectors



Five Transitory Phases of Indian Agriculture (1/10)

Phase-I: Pre-Green Revolution Period (1950-65)

- Characterized by deficit in foodgrains production
- Approach adopted to deal with it was to design Marketing system to handle deficit, regulate trade and manage food security
- Made food available through imports, and large scale investment in irrigation and power
- ECA, 1955
- Some reforms like enactment of Zamindari Abolition Act (1950)
- Initiation of organisation of agriculture and animal husbandry on modern-scientific lines



Five Transitory Phases of Indian Agriculture (2/10)

Phase-II : Green Revolution Period (1965-80)

- India realised how vulnerable a country can be, consequent upon heavy dependence on imports of key staple commodities
- Learnt her lessons hard way
- Self sufficiency in foodgrains placed in the centre of development agenda
- Emphasis put on 'Operation Flood'



Five Transitory Phases of Indian Agriculture (3/10)

Phase-II : Green Revolution Period (1965-80)

- Birth of 'twin Institutions' namely APC (Commission on Agriculture Costs and Prices) and FCI in January 1965
- Ushered the period of fixation of Minimum Support prices (MSP) and public procurement of agri-commodities
- Sought to assure farmers of floor price and guaranteed buyer and went a long way to instill confidence amongst farmers.
- In essence, approach adopted during this period was putting Marketing system in place to incentivise output and manage its distribution through public procurement



Five Transitory Phases of Indian Agriculture (4/10)

Phase-II : Green Revolution Period (1965-80)

Policy framework employed to obtain Food security was three pronged:

- Subsidy on inputs (e.g. seeds, fertilisers, electricity) and output (MSP)
- Public storage, procurement and distribution of food grains
- Trade protection measures and regulation of markets (to avert situations of deficit)



Five Transitory Phases of Indian Agriculture (5/10)

Phase-III: Post-Green Revolution Period (1980-91)

- Emphasis laid on diversification towards high value produce by expanding adoption of technology to other produces such as commercial horticulture
- Established during this period:
 - ❖ Coconut Development Board; and
 - ❖ National Horticulture Board



Five Transitory Phases of Indian Agriculture (6/10)

Phase-IV: Economic Reforms Period (1991-2015)

- In the wake of surplus production of foodgrains, approach was oriented to gaining greater international market access and liberalisation of agriculture trade
- Functioning of markets was sought to be improved
- India opened up its economy in 1991—Industry and service sectors liberalised
- Reforms of 1991 era bypassed agriculture



Five Transitory Phases of Indian Agriculture (7/10)

Phase-IV: Economic Reforms Period (1991-2015)

- Model APMC Act, 2003 created to increase private sector participation in marketing and processing
- India signed AoA under WTO on January 1, 1995



Five Transitory Phases of Indian Agriculture (8/10)

Phase V (2015 onwards)

- ❖ One nation, One market, One tax, ICT enabled marketing
- ❖ Problem of plenty : after attaining Food Security and after being net food exporting country
- ❖ Approach during this period was towards a National unified market
- ❖ Electronic National Agricultural Market (e-NAM)
- ❖ Model APML Act, 2017 allowing for operation of alternate markets and unified national markets



Five Transitory Phases of Indian Agriculture (9/10)

Phase-V (2015 onwards)

- GST roll out, streamline inter-state trade
- Model contract farming and services Act
- Agricultural export policy
- Gramin agriculture markets (GrAMs)



Five Transitory Phases of Indian Agriculture (10/10)

Phase-V (2015 onwards)

- ❖ Agricultural sector cuts across domains and all socio-economic backdrops
- ❖ The approach to it cannot remain in a narrow prism of a traditional farmers' discipline
- ❖ Farming must be treated as an enterprise
- ❖ Future agricultural development will have the returns and not just the output as its prime objective
- ❖ A multitude of cross-domain considerations in bringing a holistic and long lasting strategy to the agricultural domain



Opportunities (1/2)

- ❖ Rising demand for high value commodities such as cheese, apples, pears may be of interest to both the EU and India
- ❖ EU is the one of the biggest destinations for India's agricultural exports
- ❖ Growth of the organized market for milk and certain milk products is hovering around 20 percent
- ❖ India has not attained its full production/export potential and there is strong demand



Opportunities (2/2)

- ❖ Opportunities exist for technology transfer (food processing and certification); and
- ❖ High demand for knowledge and financial resources to ramp up primary production towards food processing and retail sector



Challenges (1/2)

- Indian agriculture predominantly rainfed, high probability of exogenous shocks
- Aberrant weather conditions cause huge Crop damages
- Agriculture subsidies tend to promote both excessive use of water and GHG emissions through a number of related channels



Challenges (2/2)

Policy induced inefficiencies:

- Power subsidies, just as an example, stimulate both high power consumption and high GHG emissions
- causes excessive drawdown of ground water and depletion of water tables

Strengthening resilience to Climate Change, Adaptation and Mitigation



Way Forward (1/3)

- ❖ Agri-work-force needs to be schooled and skilled to augment their productivity
- ❖ Then they can move to high-productivity jobs in urban areas
- ❖ Eventually, share of agri-work-force may come down, say to less than 20%
- ❖ Increase land productivity to help freeing up of scarce land which can be utilised for an alternative use such as rural industrialisation



Way Forward (2/3)

- ❖ Rocket is to be fired from the bottom when it is launched
- ❖ Visualize Indian economy as a rocket comprising of three tiers: agriculture at the bottom, manufacturing in the middle and services sector at the top
- ❖ If reforms are like launching the rocket, these need to be initiated (fired) from the bottom
- ❖ What India sought to do until 2014 was to fire the rocket from the top *i.e.* reforms were introduced in tertiary and secondary sectors of the economy but kept the primary sector (agriculture) away from those reforms



Way Forward (3/3)

- ❖ In post-2014 era, reforms are being introduced in agriculture sector *i.e.* rocket is being fired from the bottom
- ❖ Agriculture is now being placed in the right orbit
- ❖ Presents a credible hope that farmers welfare and their incomes will be on higher trajectory of growth



Quiz (1/3)

Quiz Question-1

How many times (approximately) did foodgrains production in India increase during 1965-66 to 2019-20?

- (a) 2 times
- (b) 4 times
- (c) 6 times
- (d) 8 times



Quiz (2/3)

Quiz Question-2

Transition of Indian Agriculture can be broadly divided into how many phases?

- (a) 2 phases
- (b) 3 phases
- (c) 4 phases
- (d) 5 phases



Quiz (3/3)

Quiz Question-3

Did the reforms of 1990s benefit agriculture sector?

- (a) Yes
- (b) No
- (c) somewhat
- (d) doesn't arise as the reforms bypassed the agriculture sector



References

1. Government of India (2017), 'Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017, Ministry of Agriculture and Farmers Welfare, New Delhi. Available : [http://agricoop.nic.in/sites/default/files/APLM ACT 2017 1.pdf](http://agricoop.nic.in/sites/default/files/APLM_ACT_2017_1.pdf)<http://www.fao.org/3/y4671e/y4671e06.htm>
2. Rinku Murgai (1999), 'The Green Revolution And The Productivity Paradox'. Available <https://elibrary.worldbank.org/doi/abs/10.1093/wbro/16.2.199>
3. Tanvi Deshpande (2017), 'State of Agriculture in India', Available: <https://www.prsindia.org/policy/discussion-papers/state-agriculture-india>





Thank you