# Agriculture Market Reforms and Marketing Infrastructure Management in Post-Liberalization – An Empirical Study

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**Abstract**

This paper studies India's Agriculture Market reforms and marketing infrastructure Management in Post Liberalization period. In his address to the nation on May 11, Prime Minister Narendra Modi called for an Atmanirbhar Bharat. Actually, self-reliance was the stated goal of economic policy in India in the early years after 1947. The architect of this plan was Jawaharlal Nehru, whose record as prime minister – especially economic – intellectuals associated with this government have trashed relentlessly. Now, over half a century after his death, the fulcrum of his vision for India has been ceremoniously brought back with nary an acknowledgement. However, while we know that the 1950s were literally path-breaking, we also know that the performance of India's economy has for far too long left much to be desired. This is apparent when we look to our east, where all countries have surged ahead of us, raising national income and spreading it widely. We also know exactly how this has been achieved. Even as they had accumulated physical capital, our East Asian counterparts developed their human resources. The question staring at us is why a society with a highly educated elite in power failed to observe this as development played out over decades. **Atmanirbhar Bharat Abhiyan (ABA)**, which translates to 'self-reliant India' or 'self-sufficient India ' and it's Socio Economic development of India.. **Atmanirbhar Bharat** is the vision of the Prime Minister of India Narendra Modi of making India "a bigger and more important part of the global economy", pursuing policies that are efficient, competitive and resilient, and being self-sustaining and self-generating. Atmanirbhar Bharat does not mean "self-containment", "isolating away from the world" or being "protectionist" The people of India have by now come to expect the announcement of a new programme from the government at periodic intervals. Thus in the past six years, we have had Make in India, Swachch Bharat and Less Cash. Now there is something larger, a goal. Both the facts of economic development across the world and advances in the methodology of empirical research would help us make sense of the economic policies of early independent India. History suggests that India did not pursue a strategy entirely out of line with what was adopted elsewhere. More importantly, we have evidence that growth here first accelerated in the early 1960s. This could only have been a consequence of the policies adopted in the earlier decade, notably the 'Nehru-Mahalanobis Strategy' of investing in capital goods production via newly formed public enterprises. This evidence cannot be jettisoned easily. It is based on a statistical procedure that is free from the predilections of the practitioner

*Key words: Atmanirbhar Bharat, economy, Strategy, model, capital, growth*

## Introduction

In a striking demonstration of what can go wrong if we do not keep our own counsel, today India finds herself saddled with an economic model of unbounded growth that destroys natural capital and a political model based on the vision of a majoritarian nation-state that promises endless social turmoil. It is not clear that a course correction will emerge from India's political parties competing for power. Only a collective effort can achieve it. However, India is severely challenged in doing so, and this stems from the absence of self-determination in the realm of ideas. It has meant that we are unable to see the intrinsic strengths that have served us so well for so long. From a narrow economic point of view, it is easy to see that the failure to spread education has led India to the cul-de-sac where she finds herself. But the answer does not lie in expanding a flawed model unsuited to India. In his book Constructive Programme, Gandhi had already pointed this out when he said: Gandhi was able to identify the immediate consequence of adopting imported ideas without assessing their intrinsic worth, leave alone their suitability to India. An area in which India has had to pay a high price for following this practice is the economy. It conclusively disposes of the stance that nothing really changed in India after 1947, a view once held at both ends of the political spectrum but now the preserve of the right-wing. The same procedure also reveals that growth did not accelerate after the Modi government has come to power.

"Foreign rule has unconsciously, though none the less surely, begun with the children in the field of education. Primary education is a farce designed without regard to the wants of the India of the villages and for that matter even of the cities. Basic education links the children, whether of the cities or the villages, to all that is best and lasting in India. It develops both the body and the mind, and keeps the child rooted to the soil with a glorious vision of the future in the realization of which he or she begins to take his or her share from the very commencement of his or her career in school."

## Objective:

This paper intends to explore India's Agriculture Market reforms and marketing infrastructure Management in Post Liberalization period. Bringing about soci-ecomoc change to very section of society

## Agriculture Market Reforms

The ABA proposes to reform the agriculture markets by formulating a central law to provide (i) adequate choices to farmer to sell produce at attractive price, (ii) barrier-free interstate trade, and (iii) framework for e-trading of agriculture produce. Three ordinances3 are promulgated to make the proposals a reality.

Currently, agriculture markets in India are regulated through the legal framework of Agricultural Produce Market Regulation Act (APMRA). One of the stated objectives of regulated wholesale markets (mandis) is to protect farmers, through a mechanism for fair price discovery, from exploitation from intermediaries. Sale of produces happens through auction (either a public outcry or a tender system) under the supervision of Agriculture Produce Market Committee (APMC). The act mandates sale/purchase of agricultural commodities notified under it to be carried out on specified market areas, yards or sub-yards. The APMC system is criticised for its inability to deliver on the objectives of controlling prices (Lele 1968) or addressing market imperfections (Harriss 1980) as they do not have transparency in price formation process (Palaskas and Harriss–White 1993) and create virtual monopsonies (Chatterjee and Kapur 2014). The mandis are largely controlled by commission agents (Minten et al 2012) and have instances of collusion among large buyers (Banerji and Meenakshi 2004) to artificially depress prices. APMC mandis are also criticised for rampant corruption. There is wide variation in the effectiveness with which regulated markets perform in the country (Purohit 2014). Part of the inefficiencies of mandis originate from the fact that they are highly fragmented and put restriction on free movement of produces.

In view of the inefficiencies of mandis,4 several free market proponents argued for structural and legislative changes to promote private investment and participation in agriculture (Debroy and Khan 2003) to enable better engagement of farmers with markets. A landmark policy in this direction was the Model APMC Act, 2003 which liberalised agricultural marketing in the country by providing more opportunities for the farmers to sell their produces. Except three5, all the major states adopted Model Act 2003, though there were variations in the extent of adoption. The Model Act legalised new marketing channels such as direct sales, private markets, and contract farming. Further, great impetus was given to promoting farmer producer organisations (FPOs), which were believed to reduce transaction costs for small and marginal farmers. FPOs were also perceived to have the potential to compensate, to a great extent, for the poor endowments of smallholder farmers by providing economies of scale. Later, electronic National Agriculture Market (e-NAM) was launched by creating a nationwide, unified market to mitigate information asymmetry in traditional markets. These policies, except FPOs, are re-emphasised in the reform proposals in ABA. The restrictive nature of mandis that hinder remunerative price realisation for farmers is highlighted.

**Alternate marketing channels**

FPOs and e-NAM, which together expected to change the face of agricultural marketing in the country and help farmers earn better prices for their produces, have not delivered anywhere close to what was anticipated of them. Barring a few successes such as ITC's e-Choupal, there are not many reported instances of well performing private markets. Many commentators have deemed contract farming as a failure. There is a general tendency to exclude small and marginal farmers from contract farming (Singh 2012) as the contractors prefer large tracts of land to achieve scale economies. The awful performance of alternate marketing channels may partly be attributed to the failure of states to properly adopt provisions of Model Act 2003. However, the effect of weak marketing infrastructure cannot be ignored. The much-hyped e-NAM is criticised for its high technology orientation, cumbersome process, and imperfections in implementation (Aggarwal et al 2014). It is also noted that the success of e-NAM depends on better assaying facilities and produce handling at mandis (Chand 2014). -Despite active state support, successful FPOs are few and far in between. They suffer from poor management capabilities and financial health. Till date, around 4.3 million producers, cumulatively, have contributed an amount of `8.6 billion towards share capital in 7,374 producer companies, yet, at individual level majority of them remain undercapitalised (Neti et al 2014).

Doubtlessly, agriculture marketing in the country needs reforms. But the question is: What should be the nature of reforms? The dominant view is to deregulate agricultural markets. The arguments in favour of this view are that mandis constrain choices for farmers to choose sale outlet, deregulation would give them “freedom” to sell wherever they want and farmers would end up with higher prices determined by market forces. The deregulation argument is often packaged as a solution for farmers to earn higher prices for their produces. The key underlying assumption of this argument is that a fair deal may be negotiated outside mandis, regardless of the crop and farmer characteristics. The truth is far from that.

The experience of Bihar is a case in point. The state of Bihar repealed APMC Act in 2006. Field studies find that the regulatory change hardly made any difference to the way farmers sold their produce; both before and after the abolition of the act, the farmers continued to sell their surplus wheat and rice to local traders (Kapur and Krishnamurthy 2014). This persisted even in the absence of any interlinked transactions and despite availability of transportation facilities. In several other states, mandis continue to exist as the predominant outlet for sales of agricultural output, including for government procurement of foodgrains.

**The persistence of mandis**

Despite them being highly exclusive6 and inefficient, indicates that they indeed perform important marketing functions. It is argued that mandis have facilitated, to some extent, a fairer deal to the farmers and reduced exploitation by traders (Acharya 2004). However, the mandis have benefited only a small proportion of farmers; large majority of smallholder farmers sell their produce to local traders, at terms favouring the latter.More recent empirical evidence shows that farmers who sell in informal markets receive significantly lower prices compared to those who sell in mandis (Negi et al 2014). This may be an artifact of the systematic difference between those who choose to sell in mandis and those who do not. Nonetheless, mandis do provide a platform for the farmers to sell their produces under a defined legal framework and to aggregate demand and supply. They provide opportunity for price discovery, though with distortions, and price information. In the absence of them, getting a reference price will be difficult. This gives credence to the argument that well-regulated agriculture markets are important to address market failures (Purohit et al 2014). Yet, the present status and organisation of agriculture markets demand drastic reforms to make them inclusive and efficient. And these reforms are long overdue.

In November 2014, the NITI Aayog released the ‘Strategy for New India @ 75’ which is founded on the clarion call given by the Prime Minister: ‘New India by 2022’. It captures three messages from the Prime Minister (as stated in the document) which include balanced development across all regions and states and across sectors along with collective effort and resolve, and effective governance. The strategy covered as many as 41 sectors for balanced growth with few strategic priorities and set the target of $4-trillion economy by 2022 (additional $1 trillion of GDP in three years). In 2014, the Prime Minister, after beginning his second term, gave a new call of a $5-trillion economy by 2024, which means the further addition of $1 trillion in 2023-24 and 2024-25.

This became a new strategic vision for policymakers even though it was not accompanied by any roadmap. Recently, the Prime Minister gave yet another call of Atmanirbhar Bharat (self-reliant India) movement supported by the 'vocal for local' campaign. The new slogan diverted the attention of policymakers from the vision of a $5-trillion economy to a self-reliant India and its possible interpretations. The intense debate has ensued focus on the relevance, feasibility and sustainability of 'self-reliance', and the vision of $5-trillion economy is relegated to the background. In a nutshell, the development policy agenda seems to be in perpetual transition with leadership slogans, resulting in numerous strategic visions, programmes, projects, campaigns and schemes, with few follow-ups.

**The policy hyper-activism**

This government is in compete contrast to the policy paralysis of the UPA-2. The outcome is a crowded policy landscape with multiplicity of financial inclusion programmes, and campaigns and projects including Skill India, Make in India, Start-up India, Digital India, Clean India, and so on and so forth. But what are the impacts or the final outcomes of these initiatives on the economy?

While examining the key macro indicators, one thing is clear that not only have these initiatives failed to catapult the economy to a high growth trajectory, but also could not help the economy escape the downturn. In January 2014, when the government revised GDP estimates downwards to 5% (lowest since 2009) for the year 2014-20 from 6.8%, RBI called it a cyclical slowdown rather than a structural one.

However, the secular trends depicted in the accompanying charts narrate a different story. None of the growth indicators show an upward trend. Indeed, under the Make in India initiative, India has moved to the 63rd place among 190 countries, according to the World Bank's Ease of Doing Business 2014 report. Yet it could not be translated into increased gross capital formation as percentage of GDP or share of private investment in capital formation. The fact of the matter is that the unprecedented growth episode of 2003-04 to 2007-08 was an outcome of the global boom which India managed to leverage riding on the wave of IT outsourcing. Subsequently, the domestic stimulus pushed the economy upwards in 2010 and 2011, but the effects of these cyclical factors are not sustainable because the structural deficiencies keep pulling the economy down.

A recent study by Goldar et al published in the Indian Economic Review based on India KLEMS Dataset shows acceleration in total factor productivity (TFP) growth to 1.8% per year over a decade-long period of 2003-14 and attributes it to acceleration in the rate of TFP growth achieved by manufacturing, services and agriculture sectors, in that order. These achievements should have been reflected in improved capital formation, industrial production and/or export performance. However, the secular monthly growth trends in industrial production and the share of manufactures in total merchandise exports do not quite conform to the findings.

It is high time the government adopted a well-informed policy approach based on a well-crafted strategic framework rather than populist leadership slogans. The strategic framework should involve not only a vision, but also objectives, targets and strategic approach underpinned by strategic tools, time frames, and implementation and monitoring and evaluation strategies. In my view, the only route to a $5-trillion economy or balanced growth across sectors and regions or even self-reliant India is through competitiveness and innovativeness. We need to identify our manifested and latent competitive strengths, set our priorities and identify the tools with a focus on competitiveness. The Southeast Asian countries, for instance, have adopted a high-density agglomeration approach to target Industry 4.0 through export-oriented industrialisation, which they are prepared to leverage to grab most US FDI diverted from China. Further, the programmes, projects and campaigns should be critically assessed and evaluated on the basis of factual evidence and reliable statistical data which is made accessible to the general public. However, monitoring and evaluation is worthwhile only to the extent it is actually used by decision-makers for follow-up actions. To ensure this, monitoring and updating the status of evaluation follow-up actions must

**Marketing infrastructure in the post-liberalisation**

Despite huge public investments in agriculture-specific market infrastructure and broader development infrastructure, such as rural roads and electricity, following the green revolution, there was a decline in the importance attached to infrastructure in agriculture sector (Chand 2004). Gradual state withdrawal from investment in marketing infrastructure in the post-liberalisation period was also evident (Chatterjee and Kapur 2014). National Agriculture Policy in 2000 attempted to correct this course to a certain extent. Yet, the availability of infrastructure remained poor.

Take the case of agriculture storage and warehousing. Recent empirical evidence suggests that access to storage facilities has a positive effect on the commercialisation of agriculture in India (Kumar and Das 2014) which is an important determinant of farm income and livelihood conditions of farmers. Currently access of farmers to warehouse facilities in India is limited. A study by the National Institute of Public Finance and Policy found that traders were the main users of warehouses (NIPFP 2014). A very small proportion of farmers used warehouses; and all of them were large farmers. Access to warehouses largely depends on availability, location, quality, and storage capacity. However, comprehensive reliable database on nationwide capacity and accessibility of warehouses is not available. According to the latest estimates, organised warehousing capacity in the country is 155.42 million tonnes. Close to 50% of the warehousing capacity is in the private sector (Table 1). This is plausibly the result of various schemes initiated by the state to attract private investment. Notwithstanding the policy- and market-driven approaches, there still exists a wide gap between the availability and requirement for warehouses. The warehousing requirement, by 2014–21, is projected as 196 million tonnes (about 70% of production).

Similarly, there is a huge gap in the availability of cold-chain infrastructure (NCCD 2014), particularly pack-houses, reefer vehicles and ripening chambers

Besides the inadequate availability, distribution of warehouse capacity is highly skewed with excess or unutilised capacity in many states (Chatterjee and Kapur 2014; GoI 2014). It is noted that more than 68% of the capacity with Food Corporation of India is in the north zone. Within that around 90% (and around 61% of overall capacity) is in just three states—Punjab, Haryana, and Uttar Pradesh. Poor adoption of modern technology (for both storage and handling), poor availability of quality assessment facilities and lack of trained manpower are some of the other prominent challenges in agri-warehousing sector.

Whether stored or not, farmers need access to physical markets to dispose of their agriculture produces. There are more than 6,600 regulated wholesale markets (mandis) and 22,000 rural periodical markets in the country (GoI 2014). These do not seem to be adequate to meet the requirements. Average area served by mandis in the country is 434.48 sq km as against the recommendation of one mandi per 80 sq km made by National Commission for Farmers in 2004. There is a huge variation in area served by mandis across states; it varies from 118 sq km in Punjab to 11,214 sq km in Meghalaya (GoI 2014). There is an urgent need to create more marketplaces. A step in the right direction is already taken with the introduction of warehouse-based sales,1 which will encourage scientific management of warehouses and facilitate remote purchase of produces. However, the current state of warehouse-based sales is extremely poor on account of the inadequate availability of warehouses and poor quality of the available ones.

**ABA : rural internet and telecom connectivity**

An effective way to overcome the constraints posed by limited physical markets is to create complementing virtual markets. Good internet infrastructure in rural areas can help farmers/farmer

organisations reach retail chains, and facilitate direct sales, particularly for fruits and vegetables and small volume commodities. It can also mitigate information asymmetry to a great extent and can help farmers provide with expert advisory. Availability and quality of rural internet and telecom connectivity assume great importance with the growth of e-commerce and state-driven electronic trade platforms for agriculture commodities. How-ever, the present status is not encouraging. According to the latest available estimates, rural teledensity (per 100 inhabitants) in India is as low as 57.50 (GoI 2014). Bharatnet (previously, National Optical Fibre Network), the project that planned to connect 2.5 lakh gram panchayats in the country in a span of two years is lagging in its implementation. As of January 2014, only 1,25,886 gram panchayats had the fibres laid, equipment installed but proper services are not available to people.In both physical and virtual markets, lack of credible assaying facilities and market infrastructure deter fair price discovery. Where assaying is implemented, neither traders nor farmers trust quality based on assaying; while traders feel that current assaying methods do not capture all aspects of quality, farmers feel that assaying can reduce their price realisation (NABARD 2014). Clarity on grades, standards and transparency in assaying are critical for objective price discovery that benefits both parties. Similarly, an efficient system of logistics is essential to enable farmers to take their produce to alternate markets or -directly to consumers, to facilitate remote purchase and to reduce post-harvest wastage.In sum, there is a dire need to create accessible, scientific, and quality warehouses with modern facilities, spatially distributed across the country. Along with that, various other agri-logistics elements, including marketplaces, market-level infrastructure, quality assessment facilities and transport, need to be strengthened. The liability of inadequacies of agri-infrastructure falls more severely on smallholder farmers. In this context, financing facility of `1 lakh crore announced as part of ABA for developing farm-gate level infrastructure is a welcome step. The specific areas of investment and modalities of the fund utilisation are yet to be spelt out. A careful and comprehensive approach is needed to make sure that the benefits reach all categories of farmers.

**The Washington Consensus**

At the implosion of the Soviet Union and the end of its East European empire, the view that the world has arrived at the end of history triumphed. While Francis Fukuyama, the author of this view, had had in mind the installation of liberal democracy as the sole model of governance, he could not have imagined the sea change that was to come in the sphere of the economic architecture of societies. There occurred at that stage a wholesale shift to a set of economic ideas termed the Washington Consensus, eponymous with the centre of global power.

Public policy now came to be interpreted almost exclusively as macroeconomic policy, and among its tenets were the avoidance of budget deficits, flexible exchange rates and the pursuit of low inflation. The absence of microeconomic goals was not an accident, it merely followed from the view that there should be no interference with market forces represented by the actions of individuals. From the Washington Consensus emerged the idea of inflation targeting underpinned by central bank autonomy, which meant that there would be explicit inflation targets but none for employment. This implies that monetary policy must remain tight out of fear of stoking inflation even if a more accommodative stance can increase employment. It is not easily seen that this in effect privileges the owners of financial wealth, set to lose from inflation, over the aspiration of workers, who would gain from an expansion in output.

For fiscal policy, the Washington Consensus recommended low budget deficits, though the idea of fiscal deficit caps appears to have come from the architecture of the European Union. By the mid-90s, these ideas had reached India's shores but it is the government of Narendra Modi that has adhered to them most closely by championing fiscal consolidation, the reduction of deficit, and institutionalising inflation targeting through an act of parliament.While the US has shown itself to be willing to re-look at the tenets of the Washington Consensus when it faced a financial crisis in 2008 and now in the face of the COVID-19 pandemic, India is locked into them. The principal indicator of this is the unwillingness to budge from a previously announced fiscal deficit target. It is, of course, difficult to conclude from this whether the government is motivated by the desire to adhere to the pre-announced fiscal deficit target on economic grounds or if it uses this arrangement as a convenient alibi for adhering to a non-interventionist stance that is its ideological lodestar. In any case, the so-called stimulus announced by the PM and detailed by finance minister Nirmala Sitharaman reflects the ideas contained in the Washington Consensus.

## Conclusion

Quite appropriately, the ABA proposals have acknowledged some of the most urgent concerns of agriculture sector and they have come at an opportune time. The ordinances that followed ABA proposals have several steps in the right direction—amendments to Essential Commodities Act, reforms to ease the sale and movement of agriculture produce and measures to reduce price and quality uncertainties in contract farming. Trade and Commerce ordinance has provisions for greater flexibility in establishing trade areas for sale and purchase of agricultural produces, removing barriers to interstate and intrastate trade, and doing away with cess/levy for farmers and licences for traders aimed to benefit both farmers and traders.

Dispute settlement mechanism included in the ordinances will certainly help in encouraging interstate trading and contract farming. The fact that the three ordinances are promulgated together signals the right intent for reforms and is indeed reassuring.

Unfortunately, in the current form, the reform measures are inadequate to improve the prospects of smallholder farmers as the basic issues remain unresolved. They do not address the poor capability and lack of endowments of smallholder farmers which are at the root of the market participation constraints. Instead, the reforms rest on the implicit assumption that all categories of farmers will be able to take advantage of the new “free” opportunities. The evidences before us clearly show that even with regulations in place, smallholders largely operate in a “deregulated” environment.

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