



**AgEcon** SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## **DOCUMENTATION**

---

In this section on DOCUMENTATION, it is proposed to print summaries of important reports of ad hoc committees, set up by the Central or State Government, relating to agriculture, forestry and fishery economy of Indian Union as well as the individual states. Obviously, this section will appear only when such reports are summarised. Readers are requested to bring to the notice of the Editor such reports, as and when they become available.

### **Report of the High Level Committee on Re-orienting the Role and Re-Structuring of Food Corporation of India**

(Chairman: Shanta Kumar), Ministry of Consumer Affairs, Food and Public Distribution, Government of India, New Delhi, 2015. Pp.80.

[This Report includes five chapters and 10 Annexures. The summary presented here consists of extracts of the passages from the chapters and summary of recommendations of the Report]. Full text of the Report of HLC is available on [http://fciweb.nic.in/app/webroot/upload/News/Report%20of%20the%20High%20Level%20Committee%20on%20Reorienting%20the%20Role%20and%20Restructuring%20of%20FCI\\_English\\_1.pdf](http://fciweb.nic.in/app/webroot/upload/News/Report%20of%20the%20High%20Level%20Committee%20on%20Reorienting%20the%20Role%20and%20Restructuring%20of%20FCI_English_1.pdf).

The Ministry of Consumer Affairs, Food and Public Distribution constituted in August 2014 a High Level Committee (HLC) on Restructuring of Food Corporation of India (FCI) under the chairmanship of Shri Shanta Kumar. The committee submitted its full Report in 2014. The terms of reference of the High Level Committee are the following:

- (i) To examine the present day administrative, functional and financial structure of FCI, and modus operandi of its various operations.
- (ii) To study various models of restructuring or unbundling of and to suggest a best suited model for restructuring or unbundling of FCI to improve its operational efficiency and financial management.
- (iii) To suggest measures for overall improvement in management of foodgrains by FCI.
- (iv) To define or give suggestions to reorient the role and functions of FCI in MSP operations, storage and distribution of foodgrains and food security systems of the country.
- (v) To suggest a way forward for strengthening and integration of supply chain of foodgrains in the country.

- (vi) To suggest most efficient and cost effective model from the point of view of storage and least cost option of moving grains.
- (vii) To recommend scientific model of storage.
- (viii) To recommend rationalised mode of moving grains including tracking of carriage.
- (ix) To suggest the up-gradation of technology in management of foodgrains.

#### CHAPTER II: PERFORMANCE EVALUATION OF FCI

##### *Objectives and Performance*

Performance of any institution should be judged against the objectives it was supposed to perform. As elucidated in the last chapter, The Food Corporation of India came into existence in 1965 under the Food Corporation's Act of 1964 to fulfill the following objectives of the food policy:

1. provide effective price support operations to safeguard the interests of the farmers;
2. to distribute foodgrains through-out the country for public distribution system(PDS);
3. to maintain satisfactory level of operational and buffer stocks of foodgrains to ensure National Food Security [2.1]

##### *Commendable Role of FCI in late 1960's*

It may be worth recalling India's situation on cereal front when FCI was created. In 1964 -65, India's wheat production was 12.26 million metric tonnes (MMT), while India imported 6.57 MMT of wheat that year (primarily under PL 480). Imports of wheat amounted to almost 54 per cent of domestic production and 35 percent of overall availability of wheat in the country (domestic production plus imports). The total foreign exchange reserves of the country that year were only US \$524 million and the price of wheat in the international market was \$66.81/MT (fob US gulf). If one adds to this fob price, minimum shipping freight costs at the rate of 15 percent of the price, the landed price in India would have been US \$76.83/MT. At this price, if India had spent its entire foreign exchange reserves in importing just wheat, India could have imported maximum 6.8 MMT of wheat. Obviously, that was not feasible, and therefore country had to rely on imports under PL 480, which was more like an aid (against rupee payments) but had its own political repercussions. The year 1965-66 was even worse. Production of wheat dropped from 12.26 MMT in 1964-65 to 10.40 MMT in 1965-66, a drop of about 15 percent. Imports of wheat increased further from 6.57 MMT to 7.83 MMT, an increase by 19 percent.

It was against this backdrop that India's food policy took a drastic turn for the better. In January 1965, the Agricultural Prices Commission was rolled out to give a

boost to positive price policy, recommending minimum support prices (MSPs) for basic staples, especially wheat and paddy (rice). The FCI was to ensure that farmer's get this MSP so that they are encouraged to increase the production of basic staples.

In 1966, GoI also imported about 18,000 tonnes of high yielding variety seeds of wheat from Mexico and distributed amongst farmers to encourage their production. It is this combination of new technology and positive price policy, which ushered in the famous green revolution in India. FCI played a commendable role in wheat growing areas of Punjab and Haryana, especially from 1967-68 to 1971-72 by procuring wheat and providing effective price support operations.

But in October 1972, Government of India (GoI) announced taking over the wholesale trade in wheat from the ensuing marketing season, and the following year of rice. This was part of the belief that private sector cannot be relied upon and state must take over the wholesale trade in basic staples, presumably part of the socialist policies of that time. This turned out to be a major miscalculation in procurement policy, which was compounded by international price crisis of 1973-74.

GoI realised the wrong move it had taken in procurement policy of taking over the wholesale trade in wheat and rice, and finally gave up that policy in 1975 for the better. There was a subtle policy message in all these events: don't try to take over the markets, let the markets function competitively, wherever they can, and state should enter only where markets fail, and provide an effective floor price to farmers. This message would be worth remembering as we evaluate FCI's performance against its objectives [2.2].

### *The Backdrop has Changed Dramatically*

There is a paradigm shift on food (cereal) front, between the time when FCI was created and today. The production has increased substantially; India has emerged as net exporter of cereals; with more than comfortable stocks with public agencies; and reasonably good foreign exchange reserves, giving ample cushion to leverage global markets for imports, as and when the need arises.

On top of all this, consumption patterns are shifting away from cereals; the per capita consumption of cereals is falling over time, and this is now happening even in the lowest expenditure decile groups. With rising incomes, as one would expect, people are consuming more of non-cereals food products, ranging from oils and fats, to fruits and vegetables, milk and milk products, and eggs, fish and meat [2.3].

### *Performance of FCI with Respect to Three Objectives*

Given the three main objectives of FCI within the ambit of food policy, namely, giving an effective price support to farmers, to provide foodgrains for PDS and to maintain satisfactory level of buffer stocks to ensure food security of the country, the results are somewhat as follows: The direct benefit of procurement of wheat and rice

does not go to more than 6 percent of 90.2 million agricultural households, indirectly how many farmers gain remains a question of guess and debate; PDS suffers from large leakage, ranging between 40-50 percent raising a question why should FCI keep pouring grains in this broken system, breeding corruption; and finally, quite often the stocks maintained by public agencies have been way above the norms, inflicting thousands of crores of unproductive expenditure without serving any cause.

Of course, FCI is not directly responsible for many of these things as its hands are tied. It does not have much say in policy, but it is part of the system of grain management. So, a desirable solution to FCI's restructuring cannot be found unless one looks at this issue of food security somewhat holistically [2.4].

#### CHAPTER III: REDEFINING THE ROLE AND FUNCTIONS OF FCI WITHIN THE CONTEXT OF OVERALL FOOD SECURITY SYSTEM

##### *ToR of HCL and Concept of Food Security*

Food security, widely defined by FAO, has basically four pillars: (1) Availability: food should be available in sufficient quantity at all times and at all places; (2) Affordability: food should be affordable, i.e., people should have economic access (ample income) to buy food; (3) Absorption: food should be safe and nutritious that body can absorb for a healthy life; and finally (4) Stability: food system should be reasonably stable, as high volatility in food systems impacts adversely not only the poor but also endangers the stability of political and social systems.

The policy instruments to achieve various components of this concept of food security have differed from country to country and within the same country over a period of time. In India, price support policies, e.g., be they are in the form of MSPs for outputs or subsidised prices for inputs (like fertilisers, power, irrigation, etc) are basically to encourage farmers to increase production, and thereby "availability" of food.

The policy of giving highly subsidised wheat and rice to some sections of society through TPDS, including as envisaged under National Food Security Act (NFSA), is an instrument to provide "economic access" to food, the other pillar of food security.

About "absorption" pillar of food security, GoI follows several programs ranging from Integrated Child Development Scheme to food safety to immunisation, etc. FCI's role is basically to supply wheat and rice for "other welfare schemes" to states, which are being covered under NFSA. Many other schemes relevant for "absorption", especially those of safe drinking water and girl child's education go beyond the scope of this Committee.

The instrument of buffer stocking (beyond the needs of PDS), especially strategic reserves, is primarily to provide stability to food system [3.1].

### *Streamlining Procurement and Reorienting Role of FCI*

For the last 5-7 years, our public stocks are overflowing above buffer stock norms, giving a "problem of plenty", and our exports have been record high. So, if any changes in the role and functions of FCI, and associated policies of the Department of Food and Public Distribution (DFPD), are to be designed, the window of opportunity is now.

What are the changes needed in procurement sphere (both policy and operations) so that the country moves towards higher efficiency and lower losses with respect to food management, while ensuring food security of the country? HLC notes that the current situation of "excessive stocks" costing thousands of crores of rupees to the country without serving any purpose whatsoever is a result of some policies and some operational matters, and they must be streamlined to bring efficiency, and reduce costs and also food subsidy.

While HLC appreciates the pro-farmer attitude of these states, it must be noted that such bonuses distort the market, encouraging farmers to produce and sell more of wheat and rice to the government agencies, crowding out private sector from that state. In some states, the procurement by government agencies goes to 60-80 percent of marketed surplus. HLC therefore advises that these states can encourage their farmers by giving them assistance on per hectare basis, which is crop neutral. But if any state still gives bonus on wheat and rice, HLC recommends that DFPD/FCI should not accept from that state any quantities more than what is entitled to that state under NFSA. All the excessive quantities beyond this commitment, and their associated costs, would be full responsibility of the state concerned, from procurement to its liquidation. HLC notes and commends that some beginning is already made in this direction by DFPD, and recommends that it should be put out as the basic rule of operation for streamlining the food management system.

HLC also notes that private sector has been crowded out not only in states that give extra bonus but also those that charge very high statutory levies and commissions, which vary from 3.6 per cent in Rajasthan to 14.5 per cent in Punjab in case of wheat in 2012-13. In Gujarat and West Bengal it comes to even less than 2 per cent.

While HLC hopes that this issue will be finally dealt with under the rationalization of GST. But in the meantime, HLC recommends that DFPD/FCI should restrict the payment of these levies and commissions to 3 percent, or maximum 4 percent. In due course, this should be incorporated in the procurement price itself. This will bring back the private sector to market, and lessen the burden of excessive stocks on the government.

HLC also recommends fast ramping up of Negotiable Warehouse Receipt System (NWRS) under the National Warehouse Development Authority (NWDA) to get out of the monopolistic situation in procurement operations.

A centralized electronic system to monitor the quantities of these stocks (deposits/sales/carry forward) on real time basis needs to be developed.

HLC notes that currently, GoI announces MSPs for 23 crops (primarily food crops but also some non-food crops like cotton and jute) with a view to give farmers a remunerative price.

HLC recommends that at least in states which have gained sufficient experience in procurement and stocking, and those that have taken major strides in that direction lately should be fully handed over the procurement and stocking functions of wheat, paddy as well as rice. These states could be Punjab, Haryana, Andhra Pradesh, Madhya Pradesh, Chhattisgarh and Odisha. Once the states have done full procurement, including receiving rice from millers, they can 'hand over' the surplus (after taking out the state's requirements under NFSA) to FCI to get it transported to deficit states.

FCI should move on to States where market prices often go well below MSPs, especially eastern Uttar Pradesh, Bihar, West Bengal, and Assam.

#### *Direct Transfer of Input Subsidies to Farmers*

In order to make the deal still better for farmers, HLC recommends that input subsidies being given by GoI be directly transferred to farmers on per hectare basis.

HLC would like to emphasise that the "availability pillar" of food security in a large country like India cannot be achieved unless farmers' get due incentives to raise their productivity and augment incomes [3.2].

#### *Towards Cost Effective Storage and Movement*

In order to keep quality and reduce storage and transit losses, HLC recommends:

- FCI should gradually outsource this function of storage to central warehousing corporation (CWC), state warehousing corporation (SWC), and private sector (such as under Private Entrepreneur Guaranty (PEG) Scheme) purely based on cost efficiency by inviting competitive bids.
- Modernize storage towards bulk handling.
- Invite FDI in construction of modern silos and grain movement through containers.
- Each state, especially the deficit ones in difficult terrain (like hilly areas of north-east, Jammu and Kashmir, etc), must have storage of grains for at least three months of their consumption requirement. Surplus states should be able to transport much of their procured stocks to deficit states within 3 months of procurement [3.3].

### *Providing Stability through Buffer Stocking and Trade Policy*

An optimal combination of strategic reserves at home and some reliance on trade (imports) is needed to ensure stability of food system in a cost effective manner. Currently, India holds 5 MMT of strategic reserves, beyond the operational need for PDS.

This entire outsourcing of procurement, stocking and movement to other stakeholders (state agencies and private sector) would need a total change in the functioning and structure of FCI, with more managerial, innovative, supervisory and directional role [3.5].

### *Issues Related to Labour*

The new role and structure of FCI, raises a question of what would happen to large number of workers currently working with FCI, directly or indirectly.

The contract labour can easily be absorbed by state governments or private sector, which ever agency takes over the functions of FCI with respect to procurement, stocking and movement. HLC recommends that their conditions be improved by offering them better facilities.

However, there is an issue of departmental labour of FCI for loading/unloading etc., which gets an average salary of more than Rs 79,000/per month (in 2014). With transfer of much of storage and movement functions to states, this departmental labour of FCI will become 'surplus'. HLC recommends that they be offered suitable VRS and this cadre be gradually phased out.

With this new role of FCI, HLC believes that it can play a pivotal role in ensuring that benefits of grain management policies (from procurement to PDS) reach larger number of farmers and consumers in a more cost effective and sustainable manner, and food security is guaranteed in a sustainable manner [3.6]

## CHAPTER 4: STREAMLINING SUPPLY CHAIN OF FOOD GRAINS FOR COST EFFICIENCY

The restructuring model of FCI should build into it mechanisms by which the concerned stakeholders will have incentives for continuous improvement of the supply chain, especially in working towards cost efficiency in storage and movement, scientific model of storage and rationalised mode of movement.

It is with this objective in mind that HLC has carefully looked at the existing supply chain of food grains in the country, what factors will drive it in near future and how to make it more cost effective, while maintaining the quality of grain, and minimising storage and transit losses.

Grain supply chain efficiency depends primarily on two things: (a) what is the overall volume (scale) of grain to be procured, stored and moved; and (b) at each



segment of the supply chain, what technology is adopted to handle grain so that per unit cost is reduced.

Efficiency of the entire logistics of grain-chain depends upon how fast one can move around grains from surplus to consuming areas. And this necessitates bulk handling systems in grain supply chain [4.1].

The storage and movement requirements can also be brought down if states in the Eastern belt, especially Eastern UP, Bihar, West Bengal, Assam, etc, where market prices go below MSP, start procuring under DCP mode and reduce their reliance on grains coming from northwest. Streamlining distortions in procurement (like state specific bonus/high taxation, etc) will also help in reducing the need for excessive storage and its movement.

Better service levels towards NFSA, other welfare schemes (OWS) and Strategic Reserve can be achieved through decentralized storage, preferably at a district level, with well thought out locations taking into account the needs of that area (demand), rail transport availability, and risk of being disaster prone [4.2]

For a streamlined supply chain, bulk storage and bulk movement, with packaging just before the retail/consumer end would be the way to go. The international best practices handle food grains in bulk. It is also important to minimize the number of stages of handling.

HLC is of the view that outsourcing storage and movement through Public Private Partnerships (PPPs) on a competitive bidding basis would provide the required investments and managerial competence for effectively managing the supply chain. Where required, existing land/facilities can be provided to the PPPs [4.3]. In the medium term, physical supply towards NFSA and OWS can be gradually replaced by Direct Benefits Transfer (DBT), which would bring down significantly the major activity of FCI [4.4].

#### *Towards Cost Efficiency in Storage and Movement*

The logistics cost for FCI are broken down into two components:

- (i) Distribution cost, which involves all physical activities, and considered part of FCI's 'economic cost', and
- (ii) Buffer cost, which includes the financing cost of the food grains held.

The total costs incurred by FCI including procurement, but net of sales realization is the total gross subsidy, charged to the Government of India (GoI).

In general, offtake is consistently less than procurement, leading to excess stocks for FCI, until a decision on disposal is taken. From the data given by FCI for 2013-14, offtake has been 82% of the allotment. These reflect inefficiencies in the larger planning process [4.5].

As per FCI's data, the third category is negligible

The factors contributing to the storage loss are: (i) Loss in moisture (ii) Prolonged storage (iii) Poor texture of gunnies, accentuated by use of iron hooks (iv) Improper storage practices

The factors contributing to the transit loss are: (i) Multiple handling (ii) Poor texture of gunnies, accentuated by use of iron hooks (iii) Poor quality wagons (iv) En route pilferages (v) Inadequate security at rail points, especially during night working and BG/MG transshipment [4.6].

The buffer cost consists of two heads, namely, carrying cost of buffer and carry over charges paid to State Government Agencies (SGAs) [4.7].

Between the distribution and buffer costs (of approximately Rs 25,000 crores) we can attribute:

- (i) Storage, part of handling and shortages, and buffer as direct costs to the storage related activity (approximately Rs 10,000 crores including Rs 6,600 crores of buffer financing),
- (ii) Freight, and part of handling and shortages as direct costs to the movement related activity (approximately Rs 9,000 crores), and
- (iii) Interest and administrative overheads as indirect costs, due to borrowings for investments and supervision, respectively (approximately Rs 6,000 crores) [4.8].

Given the above, HLC is of the considered view that it is important to take the following steps to bring in cost efficiency:

- (i) Reduce the need for storage by streamlining distortions in procurement (bonus/taxation, etc.) and gradually introducing DBT (as already explained in detail in previous chapter);
- (ii) Improve storage management practices by
  - Outsourcing the management of storage and handling
  - Focusing on bulk rather than bagged
  - Even to the extent bagged storage has to continue, better quality material like HDPE rather than jute should be used.
  - The possibility of having 'ears' to a bag to eliminate hook based handling should be considered
  - The possibility of palletisation and usage of forklifts should be explored.
- (iii) Reduce the number of stages of handling at procurement end
  - Rationalize the mandis for procurement
  - Ensure bulk storage capacity at such mandis
  - Rail connectivity to be provided at such mandis
- (iv) Bulk rail movement from mandis to distribution end
- (v) Reduce the number of stages of handling at distribution end
  - District-wise storage towards NFSA, OWS and Strategic Reserve
  - Ensure bulk storage capacity at such locations
  - Rail connectivity to be provided at such locations

- Packaging facility to be provided at such locations
- Direct movement from district-wise storage to the retail outlets/schemes consumers [4.9].

### *Scientific Model of Storage*

HLC notes that FCI has already moved into the domain of hiring godowns from private parties through a Private Entrepreneur Guarantee Scheme (PEG) scheme, where private parties construct godowns. Apart from a rent based on quantity stored, they are also offered a guarantee. The rental rates have varied across states ranging from Rs 33.10 per tonne per month and Rs 106.20 per tonne per month. HLC views this as a positive development. But the real challenge would be to outsource the existing FCI storage for modernization and increased efficiency. However, based on the PEG experience, and what is being experimented in Madhya Pradesh, where state has given land to the private parties to build silos, HLC's view is that appropriate contracts both for new storage and existing storage can be developed in the overall interest of efficiency in storage of grains with much better facilities [4.11]

In terms of technology of storage, HLC's view is that the future is through silos. There appears to be a difference in the requirements of silo technology between wheat and rice. The approach should be to bring in appropriate silo technology for bulk storage for both rice and wheat. The FCI has experimented with bulk storage and bulk movement through a PPP model. The silo technology should be part of the larger supply chain of handling wheat and rice in bulk until the last step of movement to retail from the district storage where bagging needs to happen [4.12].

The benefits for silo would be best realised if movement is direct from farm to silo in procurement areas. Further savings are possible due to reduced losses in storage, reduced handling and losses during transportation to silos near demand centres.

**While there is need to work out specific quantity and what places it needs to be through a more detailed study, HLC's overall assessment is that given the overall production in the country, and drought prone nature of many regions, a silo capacity of about 10 MMT (together for wheat and rice) should be created in the next 3-5 years.**

Given the need for bulk storage through silos, much of the future storage development should be silo based. This should also apply while outsourcing existing locations for modernizations [4.13].

### *Rationalized Mode of Movement*

The month-wise distribution of rail and total mode of movement shows variation [4.14].

The mode-wise movement shows that the average lead (and therefore the cost) is on the higher side, given that a significant share of the movement is from the North. HLC, therefore, is of view that it is important to procure from states spread across the country, to balance the movement requirements, and consequently minimize the movement cost [4.15].

HLC is also of the view that there is the possibility of moving food grain by containers.

A linear programming (LP) model, as a joint exercise between FCI and Indian Railways (IR), should be developed and used for planning and execution.

To wrap up, based on the analysis above, HLC recommends that FCI and associated state agencies need to move towards bulk handling in procurement, storage, and movement. There is need to upgrade the mandis in the north-west for bulk procurement, storage, and movement to other locations. Much of storage and movement can be outsourced.

The whole system of grain management is lagging behind with technology of 1960s and 1970s, with thousands of workers carrying sacks on their backs, which need to be upgraded to conveyor belts, forklifts, containers and silos. A major modernization drive of this grain supply chains will need lot of investments which should be leveraged by inviting private sector and FCI offering its existing lands with conventional storages, wherever possible. A shift from 'human back' to 'machine back' will promote dignity of labour, will save on time and resources, and be in line with best international practices in storage and movement [4.16].

#### CHAPTER 5: RESTRUCTURING/UNBUNDLING OF FCI

Of the three major functions that FCI had been involved, namely procurement, stocking and distribution from surplus to deficit states, HLC has already recommended in earlier chapters that procurement of wheat, paddy and rice be totally outsourced to states, at least in those ones that have sufficient experience or have recently scaled up their procurement operations (Punjab, Haryana, Andhra Pradesh, Chhattisgarh, Madhya Pradesh and Odisha), and FCI should move on to help states in the eastern belt to build innovative procurement systems that are suitable to small holders.

On stocking and movement functions also, HLC recommends outsourcing to states/CWC/SWC/private sector on competitive bidding basis. The whole effort has to be to move towards bulk handling facilities, with an eye on bringing cost efficiency in the entire supply chain of foodgrains, as is emphasised in previous chapter [5.4].

With its major functions outsourced to states and other agencies, FCI will not require its expanded organisational structure.

So the new face and structure of FCI will not be of large procurer of grains in established States, but it would be an organisation that will explore new vistas. It will

venture in those areas, where farmers, even after 50 years of procurement operations have often not been able to receive MSPs, where entire supply chain of grains needs major modernisation towards bulk handling, from silos to grain trains, where entire grain movement from farmer to godowns to rails to final consumers in deficit states can be integrated through an end to end computerisation, and is made available on real time basis. It will be a challenge, but FCI can rise to this challenge, and once again play that commendable role it did once in late 1960s. But this time it is in modernising the whole grain management system, reducing losses and increasing efficiency. In order to realise this vision, a part of FCI can be carved into an Agency for Innovations in Foodgrain Management Systems with its sole objective of modernisation towards bulk handling and cutting costs. This is the need of the hour [5.5].