Prantik Gabeshana Patrika
Multidisciplinary-Multilingual- Peer Reviewed-Bi-Annual
Digital Research Journal
Website : santiniketansahityapath.org.in
Volume-2 Issue-2 January 2024
ISSN 2583-6706 (Online)

Agricultural Marketing Infrastructure in India
A brief Overview

Link : https://bit.ly/47LNABG

Moumita Maitra

Dr. Hemanta Sarkar

Abstract : Indian Agriculture has witnessed a massive structural change in respect of production and productivity of the principal agricultural commodities produced in the country since the mid-sixties to the current date. But this bumper growth in production and yield of agricultural commodities was not observed to be translated to a higher income for the agricultural households of the country at large. One of the most important factors contributing to this fate of the Indian farmers receiving a lower level of income in spite of an increased production was unremunerative price received by the farmers for their produce chiefly owing to a poorly developed agricultural marketing infrastructure in the country and its states.

The number of regulated markets in the country under the APMC act was barely adequate to accommodate the 90.2 millions of agricultural households in the country for marketing their produce. Besides that, markets, devoid of basic infrastructural facilities, are highly fragmented with entry barriers through licenses and a high incidence of market taxes and fees, which make the markets extremely inefficient. A well-coordinated development of the rural Hats which can cater to the needs of the huge number of agricultural farmers in India including the small and marginal farmers, keeps the hope for resolving the long pending agricultural marketing issues facing the country, alive.

The current paper analyses the status of agricultural marketing infrastructure in India and its states in the plan period, the constraints of the existing agri-marketing set up and also the initiatives of the Government of India in resolving the issues.

Key-Words : Agricultural Marketing, APMC Act, NAM, GrAM Scheme

1. Introduction :

Agriculture in India has witnessed remarkable changes since the onset of planned economic development in the country in 1951 not only structurally but also in terms of production and yield of various agricultural commodities. Large scale transformation in the agricultural sector in terms of technology adoption since the time of green revolution in the country in the mid-sixties has essentially marked the beginning of a new era in the history of Indian agriculture which paved way for a bumper increase in the production of principal crops in the country, thereby securing food security issues facing the country in the early years of the plan period. Growth in the production of food grains and oilseeds in the country in the period from 1950-51 to 2020-21 has been more than 6 times whereas production of non-food grains crops like cotton and sugarcane (both being commercial crops) also recorded almost 12 times and 7 times growth respectively in the referred period. (Govt. of India, 2017; 2021). This huge growth in the production of almost all agricultural commodities (food grains, non-food grains, cash crops etc.) in the country in the period from 1965-66 to the present date not only made India food-secure but

also helped the country increase its forex reserves through export of various agricultural commodities like Rice, Sugar etc.

Despite such huge increments in the production of the principal commodities, farmers' income in the country couldn't be improved much in the plan period. An average Indian Farmer's monthly income from cultivation and animal farming was estimated to be only Rs 3844 in 2012-13 and Rs 5380 in 2018-19. (NSS, Govt. of India, 2016 and 2021). As observed by the National Commission of Farmers (NCF), 2006 and National Commission of Agriculture (NCA), 1976, higher quantity of produce in the country in the period since the mid-1960s didn't ensure higher income to the farmers as the produce was not marketed well. The Pathetically low figures of farmers' income in the country as enumerated above were primarily due to the limited marketing platforms and hegemony of the market intermediaries in the grain mandis leading to low prices for the commodities produced by the farmers. (Lok Sabha Secretariat, New Delhi, 2019). Absence of adequate and transparent marketing platforms compel the farmers to sell their produce at alarmingly low prices in the periods of glut or over production of agricultural commodities. Ensuring remunerative prices for the Indian farmers for their agricultural produce therefore necessitates development of efficient and competitive marketing avenues for them with adequate marketing infrastructure which can work for stabilizing the prices received by the farmers at large, irrespective of whether there is a glut or a situation of less production of principal agricultural commodities. This prompts us to go for a review of the alternative marketing channels available to the Indian farmers for selling of various agricultural commodities produced by them.

2. Alternative marketing channels available to the cultivators in India:

We can hereby enumerate the following marketing platforms most commonly used by the Indian cultivators at large for selling their agricultural produce across different seasons.

i) Village Traders or Aggregators
ii) Kisan Mandis
iii) Processors
iv) Co-operative marketing Societies
v) Rural Hats

Village Traders or Aggregators:

We have observed the Indian cultivators to sell their produce traditionally to the local village traders (Aggregators) where marketable surplus is not that enough for carrying the same to the mandis or other markets in the towns. Local traders in the villages buy small to medium quantities of agricultural produce from various small and marginal cultivators at a price much lower than the existing market prices, stock them in their private ware houses and sell them to the mandis or processors or other markets in the nearby towns at the ongoing market prices. (Sarkar, 2023). These traders collect the agricultural produce right at the production point or at the residence of the cultivators and instantly make payment for their produce in most of the cases and this, the small and marginal farmers find to be of less hassles, than carrying the produce to the distant town markets for selling them. These traders work as the primary markets for the agricultural produce where the transactions take place between the farmers or the producers of agricultural commodities and such primary traders. According to some estimates, 85% of Wheat and 75% of Oilseeds in U.P, 90% of Jute in West Bengal and 60% of Wheat, 70% of Oilseeds and 35% of Cotton in Punjab are transacted by these village traders. (Jabeen, A and Jabeen, S, 2021).

Kisan Mandis:

A majority of the cultivators having higher amount of marketable surplus try to sell their produce through Kisan Mandis located in the nearby towns instead of selling them to the private village traders. These are essentially secondary wholesale markets where transactions take place between the primary traders as above and the retail consumers. Whereas a major part of these mandis are operated under private

management, some mandis also function under the direct control of the concerned state governments in the country where agricultural products are procured by the government in such mandis at the govt. regulated prices.

Processors:

Processors (Rice millers and other food processors) are another form of marketing source that purchase agricultural produce from the primary traders and rarely from the farmers directly either through a marketing contract or otherwise. Though, contract farming and involvement of processors in the purchase of agricultural produce is getting popularized with the advent of modernization of agricultural marketing institutions, it still forms a meagre part of the total marketing infrastructure in the country. (Kahlon and George, 2011)

Co-operative Marketing Societies:

Co-operative Marketing Societies are another trading platform where the farmers form co-operatives and try to sell their produce collectively. This enables the farmers to enjoy some collective bargaining advantages and end up selling their output at somewhat better price. Development of Co-operative marketing societies can therefore save the farmers from the exploitation of the middlemen operating in the markets and can ensure a better price for their output.

Rural Hats:

Rural hats are also one of the most popular marketing platforms available to the agricultural farmers for trading their agricultural products. There exists approximately 22000 Rural Hats across the country where retail trading of agricultural and other commodities takes place in 95% of the cases whereas wholesale trades take place in nearly 1% cases and Wholesale-cum-retail trading is done in 4 % cases (Govt. of India, 2019).

3. Infrastructure of Agriculture marketing in India under APMC

Marketing infrastructure for wholesale trading of agricultural products in India is mainly controlled under Agricultural Produce Marketing Committee (APMC) Act. In the independent India, most of the states framed Agricultural Produce Markets Regulation Acts in the sixties and seventies after bringing all the primary wholesale assembling markets under the ambit of such acts. Well-structured market yards and sub-market yards were constructed and one Agricultural Produce Market committee was constituted for each market area for framing and enforcing necessary rules. Therefore, the organized agricultural marketing set up that controls the principal market yards, sub-market yards and purchase centres in the states in India today came into existence through the functioning of the APMC acts.

3.1: Regulated markets in India: State/UT wise number and market density

As the first point of discussing issues related to agricultural marketing infrastructure in the country, we can see the distribution of regulated markets functioning under the APMC acts in the states and UTs of India. To judge the availability of markets in respect of area under agricultural operation in the states, we can also examine the market density expressed as number of markets per lakh hectare of Gross cropped area in the respective states/UTs and also the average distance between the two markets in such states and UTs. The following table (Table No-3.1.1) can provide us with all these requisite information.

We can see from the table that Maharashtra tops the list with a total of 902 regulated markets in the country followed by Uttar Pradesh with 623 markets and Madhya Pradesh with 545 regulated markets. Chandigarh being a state with very limited area under agriculture has only a single Primary market yard in the state and therefore ranks last in the country.

This however gives us only the nominal figures pertaining to the number of regulated markets in the states and UTs and therefore doesn't depict the true picture of market density. For a fairer assessment of state wise availability of market infrastructure, we need to see the number of markets available in the states in respect of gross area cultivated within such states.

In column no 6 of the concerned table, we get density of regulated markets in the states/UTs in the country per lakh hectare of Gross Cropped area (GCA) which gives us some idea about the availability of marketing infrastructure as compared to the area under cultivation in the states. We have got sufficiently high values of market density for the UTs like Chandigarh, Puducherry and Delhi with the figures of no of regulated markets per lakh hectare of GCA of the UTs being 100, 30.76 and 15.51 respectively. But we would consider here that the average values of the parameters in the noted UTs were calculated to be quite big due to very small amount of GCA in the concerned places. Therefore, it won't be wise to consider these UTs while comparing the performance of states and UTs in terms of marketing infrastructure estimated per GCA.

Table 3.1.1: Regulated markets in the states of India and market density in 2018-19

Sl. No	Name of the State/UT	No of regulated PMYs	No of regulated SMYs	Total No of regulated markets	Total No of regulated markets per lakh ha of GCA	Distance between the two APMC markets (in Km)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Andhra Pradesh	22	169	191	4.3	16.48
2	Arunachal Pradesh	13	0	13	4.31	45.29
3	Assam	20	206	226	5.5	10.51
4	Chandigarh	1	0	1	100	6.03
5	Chhattisgarh	69	118	187	3.3	15.22
6	Goa	1	7	8	5.1	12.14
7	Gujrat	224	176	400	3.2	12.49
8	Haryana	108	173	281	4.3	7.07
9	Himachal Pradesh	10	46	56	5.7	17.79
10	Jammu & Kashmir	5	20	25	1	53.21
11	Jharkhand	17	173	190	12	11.57
12	Karnataka	162	351	513	4.2	10.91
13	Madhya Pradesh	257	288	545	2.2	13.41
14	Maharashtra	306	596	902	3.9	10.42
15	Meghalaya	2	0	2	0.6	59.76
16	Nagaland	19	0	19	3.6	16.67
17	Delhi	7	2	9	15.51	7.25
18	Odisha	54	382	436	8.4	10.66
19	Puducherry	3	5	8	30.76	0.00
20	Punjab	151	284	435	5.4	6.08
21	Rajasthan	139	315	454	1.7	15.50
22	Tamil Nadu	277	6	283	4.8	12.10
23	Telangana	150	110	260	4.1	11.86
24	Tripura	21	0	21	4.32	12.62
25	Uttar Pradesh	251	372	623	2.4	11.10
26	Uttarakhand	23	44	67	5.3	15.94
27	West Bengal	20	455	475	5	7.72
Total		2332	4298	6630		

Note: Amongst the States, there is no APMC markets in Bihar, Kerala, Manipur, Mizoram and Sikkim whereas amongst the Union Territories, there is no APMC markets in Andaman and Nicobar Islands, Lakshadweep, Daman & Diu and Dadra & Nagar Haveli.

Source: Ministry of Agriculture and Farmers Welfare, DAC&FW, Loksabha Secretariat (62nd Report), 2019, Govt. of India, Department of Economic Analysis and Research, NABARD, Mumbai, 2020-21

Barring these areas, we could see from the concerned table and Figure No-3.1.2 below that the market density per lakh hectare of GCA was comparatively better in the states like Jharkhand (12), Odisha (8.4), Assam (5.5) and Punjab (5.4). Agricultural farmers must have received better marketing infrastructure in these states and faced comparatively lesser hassles for marketing their produce. States

like Rajasthan (1.7), Madhya Pradesh (2.2) and Uttar Pradesh (2.4) on the other hand fared pretty badly in terms of availability of marketing infrastructure in such states.

Figure 3.1.1: Total No of regulated markets in the States and UTs of India in 2018-19

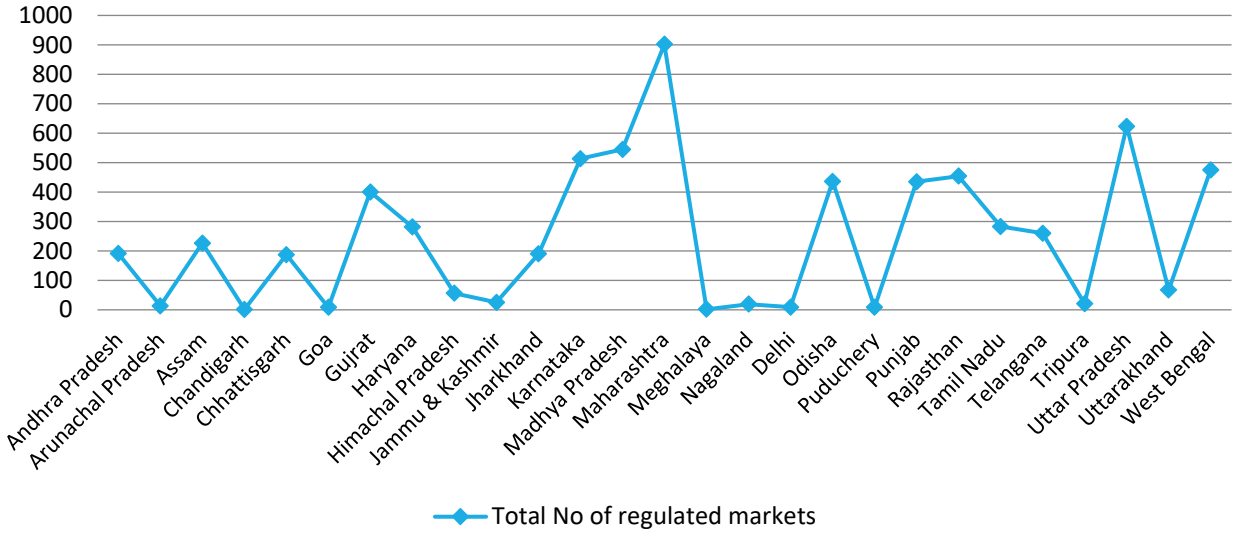


Figure 3.1.2: Total No of regulated markets per lakh ha of GCA in the States and UTs of India in 2018-19

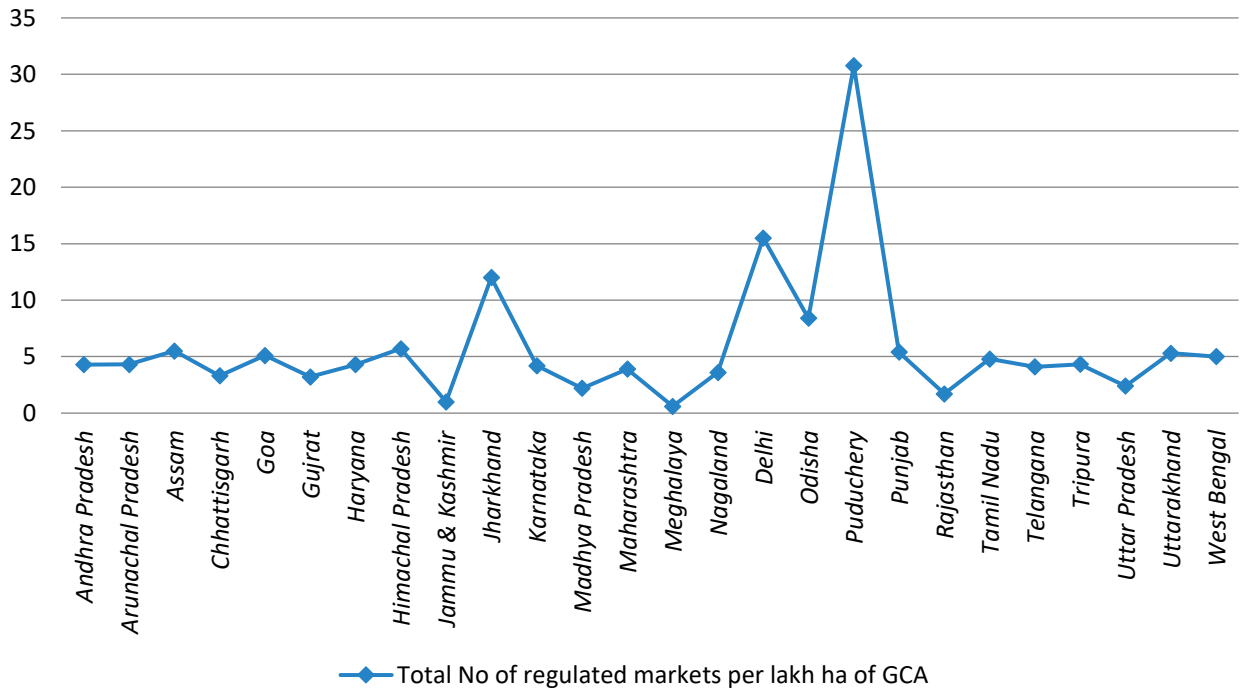
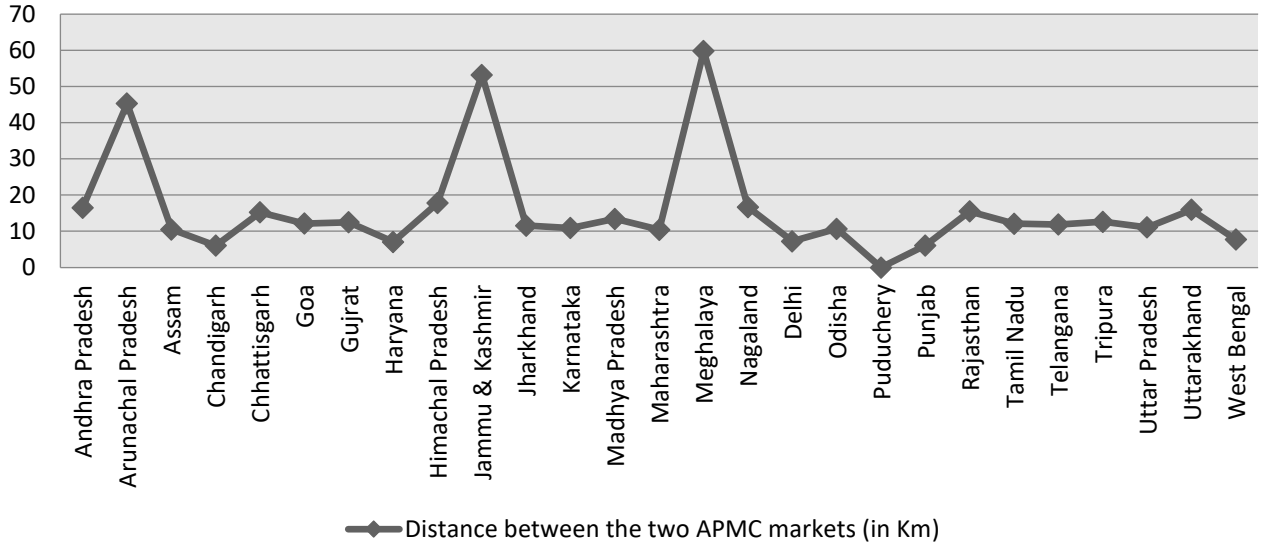


Figure 3.1.3: Distance between the two APMC markets (in Km) in the States and UTs of India in 2018-19



Let us now come to another parameter that can explain the extent of difficulties faced by the farmers across the states/UTs in marketing their produce as measured by the average distance between two APMC markets in the concerned states/UTs in the referred period. Column 7 of Table 3.1.1 and the diagram in Figure 3.1.3 above depicts the picture in the states/UTs in respect of the referred parameter.

Higher is the average distance between the two APMC markets in a state/UT, greater is the difficulty of the farmers in marketing their produce in the concerned state/UT and vice versa. Here, the average distance between the two APMC markets was found to be the highest in the Hilly states like Meghalaya (59.76 km), J &K (53.21 km) and Arunachal Pradesh (45.29 km) due to the accessibility issues and topographical conditions there. In respect of states/UTs other than the Hilly regions, situation in Punjab was found to be the best amongst states, the average distance between the two APMC markets in the state being 6km. Out of the UTs in the country, Puducherry had the best marketing infrastructure as per this parameter, the average distance between the two APMC markets being less than 1km followed by Chandigarh (6.03 km), and Delhi (7 km) and then Haryana (7.07 km) amongst states. Other than Puducherry, we couldn't find any single state/UT in the country where there existed a 2nd APMC market within 5kms which is really alarming, a situation. In the states like Andhra Pradesh (16.48km), Uttarakhand (15.94 km), Rajasthan (15.5 kms) and Chhattisgarh (15.22 kms), the farmers didn't have a 2nd APMC market within a radius of 15kms. West Bengal with an average distance of 7.72 km between the two APMC markets in the state was found to be much better placed as compared to the aforementioned states.

We could see from the above that there was huge infrastructural gap in terms of availability of agricultural produce markets across the states and UTs in the country where the APMC Acts were in force. Out of the states/UTs where, APMC acts were not in operation, agricultural marketing infrastructure was also in a poor condition in the states like Bihar, Manipur, Mizoram and A&N Islands. Only in Kerala, in spite of not having the APMC act in force, the agricultural marketing infrastructure is good in terms of product wise coverage of markets and availability of markets/purchase centres (coconut collection centres, rubber purchase shops etc.) in the vicinity of producing centres. Besides that, there exists spices boards, Tea Boards and vegetable fruits promotion council etc. for facilitating marketing of agricultural produce like cardamom, tea and fruits and vegetables respectively. (Govt. of India, 2019)

3.2: Facilities available in the regulated markets of India

Now, that we could see that there is a huge dearth of agricultural markets across the states/UTs in the country making it very difficult for the agricultural farmers in India to sell their produce, it might be of some interest to know the facilities available in the existing markets in the states and UTs and whether the trading platforms there are efficient enough to carry out trade transactions in such markets at the desired scale. The following table (Table no 3.2.1) gives us a detailed state wise distribution of the requisite agricultural marketing facilities in the country and it also includes the states/UTs where either the APMC act has been repealed or the same has never been implemented.

Let us now discuss the agricultural marketing infrastructure facilities available in the markets item wise from the following table. As we can see, there are only a few states like Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur and J&K where more than 90% of the existing markets were having Godown facility whereas in 80% or more markets in states like Andhra Pradesh, Tamilnadu and Meghalaya, there were facilities of Godown. What was found to be very shocking is that the agriculturally developed state like Punjab had only 43% markets with Godown facilities. Category of States having less than 50% markets with Godown facilities also included Tripura (24.35%), Rajasthan (28.22%), Mizoram (42.85%), Haryana (38.29%) and Gujarat (33.91%) which is a matter of great concern. Godown facility which is considered to be a basic minimum for the agricultural markets was found to be absent in around 30% markets in the agriculturally progressive states like Uttar Pradesh, Uttarakhand (erstwhile Uttaranchal) and Karnataka. This does not reflect a promising picture so far as the facilities available in the agricultural markets in the states/UTs in the country are concerned.

Now, we can focus on the availability of cold storage facilities in the agricultural markets existing in the states and UTs of India. Considering the perishable nature of the agricultural commodities, existence of cold storage facilities in the agricultural markets and in the vicinity of the agricultural commodity producing centres in the states/UTs are of immense importance as this facility can save the farmers from hasty trades and incurring losses particularly in the times of bounty of production. As we can see from the following table that other than Bihar (33%), no state/UT in the country had 30% or more markets with the cold storage facilities whereas 20% or more markets with the cold storage facilities could be seen only in U.P (22.74%) and Kerala (26%). Agriculturally advanced state like Punjab had only 16.62% markets (behind West Bengal with 18.4% markets with the facility) in the state having cold storage facility which is not at all an encouraging situation.

Rajasthan was found to be at the bottom of the table in respect of the noted parameter with only 1.61% of its markets having the facilities of cold storage (except the Hilly states like Arunachal Pradesh, Nagaland and Chhattisgarh) followed by Tripura with 2.56% and M.P with 2.96% of its markets having the noted facility. In fact, none of the states/UTs other than those mentioned herein above, could show more than 10% of the markets where the agricultural producers in the concerned areas could avail the cold storage facility for storing their produce.

As regards the commercial grading facility in the markets existing in the states/UTs in the country, the situation was observed to be even worse. No commercial grading facility was found in any of the wholesale markets existing in as many as 11 states like Bihar, Chhattisgarh, and the hilly states and in none of the UTs. Haryana topped the table on this count with 99% of its markets having commercial grading facility followed by Assam (73.45%), Maharashtra (57.27%) and Uttarakhand (the erstwhile Uttaranchal with 47%). Punjab and Tamilnadu, both being agriculturally progressive states could arrange for commercial grading facilities in around 15.5% of their markets. In Karnataka and Rajasthan, there was commercial grading facility in around 25% of the markets. Other than in U.P (8.62%) and in West Bengal (6.74%), other states/UTs had commercial grading facility in less than 5% of the markets existed in the said states.

States and UTs in India were therefore found to have a moderately poor agricultural marketing infrastructure in terms of the parameters discussed like number of APMC markets, no of Godown

facilities, cold storage facilities or commercial grading facilities in the markets existing in such states/UTs. Even in the agriculturally developed states like Punjab, U.P etc., we didn't get any promising picture in terms of the discussed. agricultural marketing facilities in the markets available to the farmers as judged by the parameters discussed.

Table 3.2.1: State wise distribution of Wholesale Markets along with basic infrastructure facilities in India

Sl. No	Name of the State/UT	% of markets with Godown facilities	% of markets with Cold storage facilities	% of markets with Commercial grading facilities	% of markets with distance from the nearest Rly Station less than 1km	% of markets with distance from the nearest Rly Station 1km to 5km	% of markets with distance from the nearest Rly Station more than 5km
1	ANDHRA PRADESH	80.65	3.93	3.93	6.82	34.47	58.02
2	ARUNACHAL PRADESH	100	0	0	0	0	100
3	ASSAM	97.34	3.53	73.45	0	18.58	81.41
4	BIHAR	93.13	33	0	5.2	46.24	46.82
5	CHATTISGARH	53.24	0	0	0	22.55	77.44
6	GUJRAT	33.91	8.04	0.25	23.17	34	44
7	HARYANA	38.29	4.6	99.64	0	50.91	49.45
8	HIMACHAL PRADESH	69.56	17.39	0	7.89	18.42	71.05
9	JAMMU & KASHMIR	95.45	4.54	0	0	18.18	81.81
10	JHARKHAND	95.89	5.02	0.45	0	56.14	43.85
11	KARNATAKA	69.54	5.07	24.87	0	43.18	55.3
12	KERALA	73.33	26.19	0.47	1.9	31.42	66.67
13	MADHYA PRADESH	54.44	2.96	1.9	2.43	21.28	76.05
14	MAHARASHTRA	56.73	4.62	57.27	0	23.14	76.72
15	MANIPUR	100	9.09	0	0	0	100
16	MEGHALAYA	80	10	0	0	0	100
17	MIZORZM	42.85	7.14	0	7.14	0	92.85
18	NAGALAND	77.27	0	0	0	0	100
19	ORISSA	63.4	5.76	3.75	0.251	13.81	85.929
20	PUNJAB	43.23	16.62	15.52	9.31	25.94	64.3
21	RAJASTHAN	28.22	1.61	25	6.45	71.77	21.77
22	SIKKIM	71.42	7.14	0	0	0	100
23	TAMILNADU	81.18	3.3	15.51	4.3	43.04	52.64
24	TRIPURA	24.35	2.56	0	0	1.28	98.71
25	UTTARANCHAL	70.58	5.88	47.05	5.88	64.7	29.41
26	UTTAR PRADESH	68.62	22.74	8.62	8.87	47.53	42.6
27	WEST BENGAL	65.43	18.4	6.74	14.41	29.69	55.89
28	Group of UT	41.07	7.14	0	10.9	38.18	49.09

Source: Computed by the authors from the database of the Ministry of Agriculture, Department of Agriculture and Cooperation, Directorate of Marketing and Inspection, Govt. of India, 2004

Figure 3.2.1: State/UT wise distribution of markets with Godown facilities in India

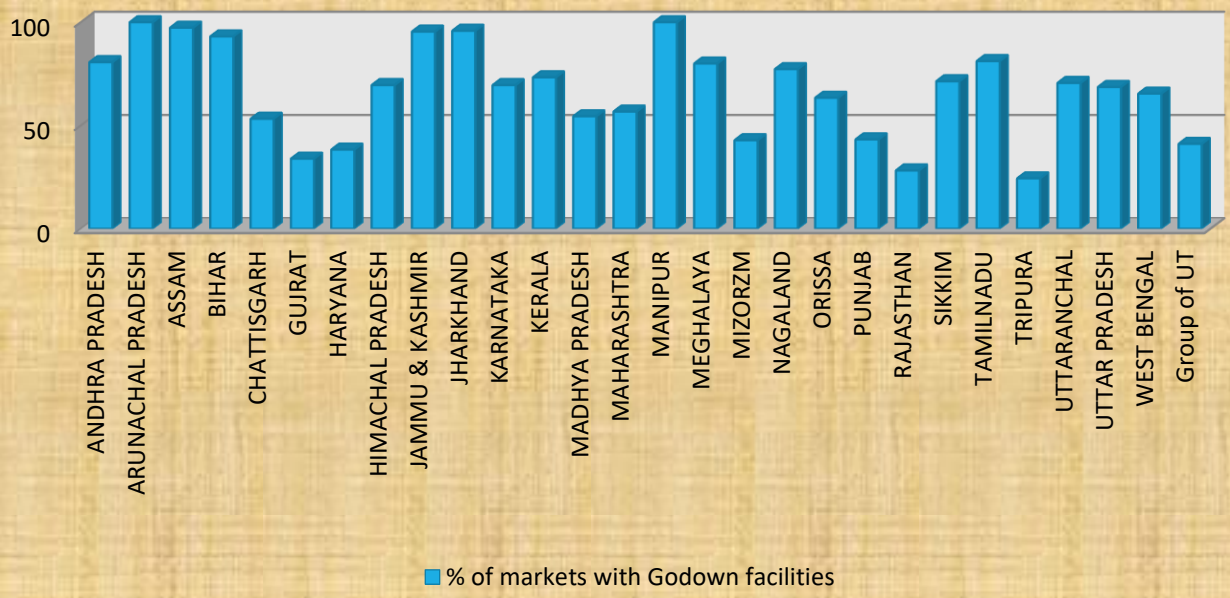


Figure 3.2.2: State/UT wise distribution of markets with Cold storage facilities in India

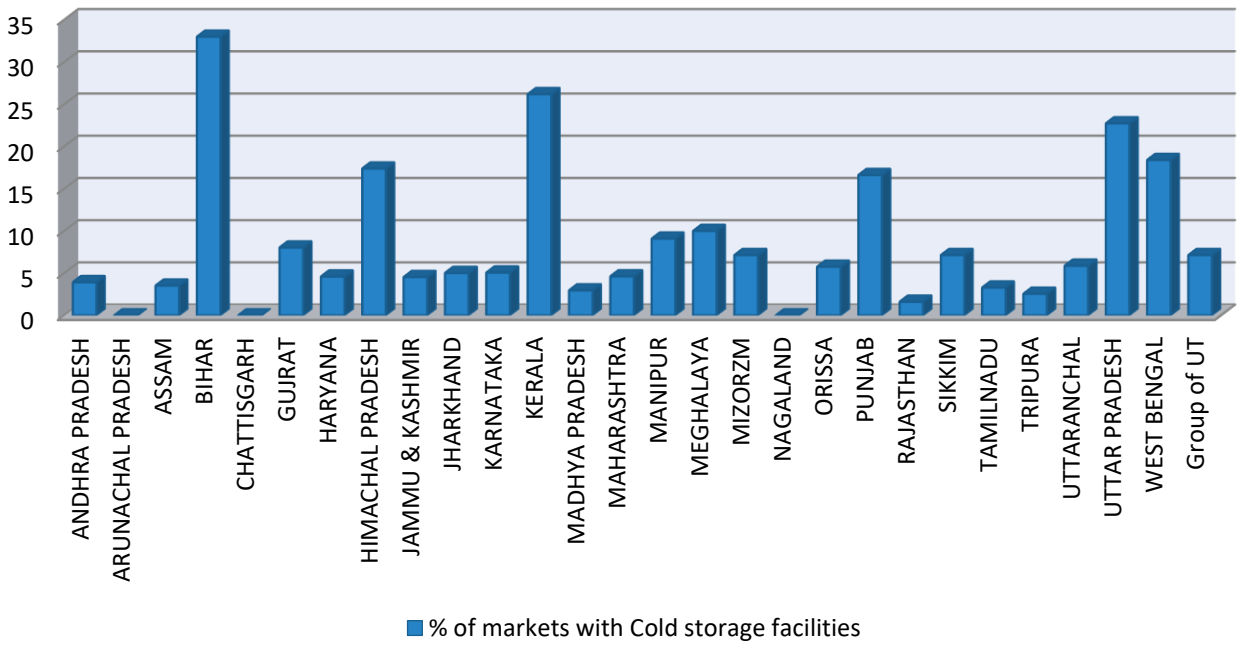
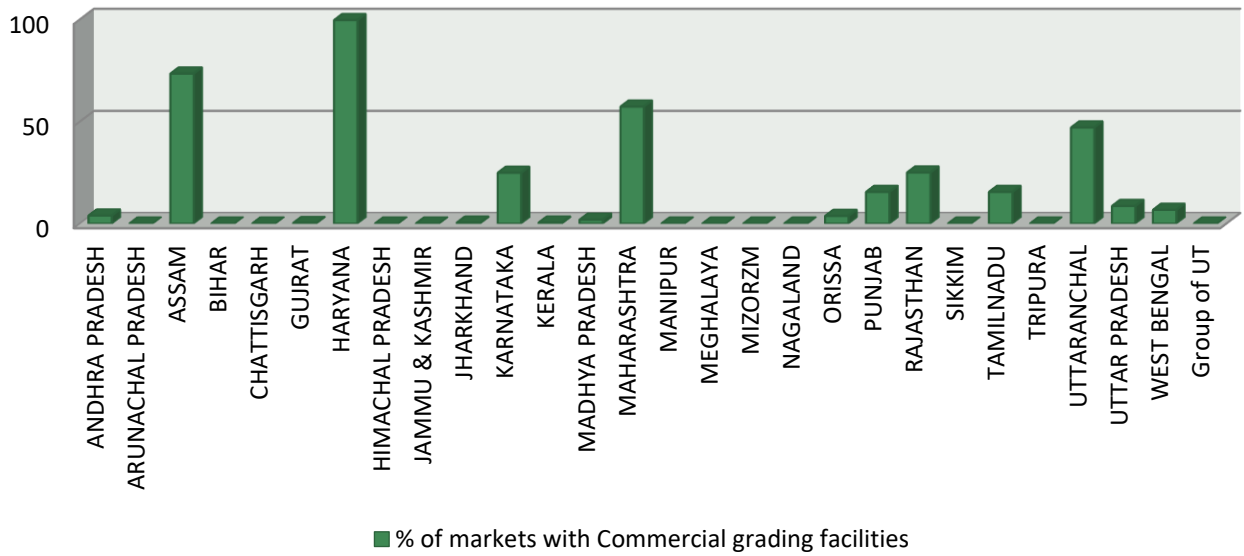


Figure 3.2.3: State/UT wise distribution of markets with Commercial Grading facilities in India



Proximity to the nearest railway station is often considered as a parameter for judging the efficiency of the agricultural markets available for trading of agricultural commodities in various states/UTs in the country. As we can see from Table 2, no state/UT in the entire country had 20% or more markets where there exists a railway station within the radius of less than 1 km except in Gujarat. There were as many as 13 states where there is no market within the radius of less than 1km of the nearest Railway station. Except Gujarat (23.17%) and West Bengal (14.41%), we didn't find a single state where there was 10% or more wholesale markets in the radius of less than 1 km from the nearest railway station. Except a few states like Bihar, Gujarat, Jharkhand, Rajasthan, U.P and Uttaranchal, in more than 50% markets in the states and UTs in the entire country, there does not exist any railway station in the radius of 5 kms. This reflects a very difficult situation for the agricultural commodities producers, farmers, traders etc. in transportation of the agri-products to the nearest markets for trading.

4. Factors constraining the efficiency of APMC markets in India

Agricultural marketing system in India has over time failed to address the basic issues faced by the farmers of the country at large, to protect them from the exploitation of intermediaries and traders and to ensure better prices and timely payment for their produce. Markets under the APMC acts, instead of creating a smooth and competitive marketing platform for the producers of agri-commodities including the small and marginal farmers, have become a place, where farmers get restricted from entering into any direct contract with the processors, manufacturers and the like and don't get the competitive environment for earning a profitable bargain for their produce. Several factors, as discussed herein below, have worked for making these APMC markets inefficient.

4.1: Market fragmentation

From the preceding discussions, we see a situation of extremely fragmented markets spread over the states and UTs in the country which are grossly inadequate in numbers and are facing serious infrastructural issues, be it the availability of go downs, cold storage or commercial grading facilities or their distance from nearest railway station. APMC act in a particular state divides the entire area of the concerned state into different notified market committee areas and administration, regulation and management of the trading and agricultural marketing practices of that concerned area is given to the specified APMC of that area. This leads to fragmentation of agricultural produce market across the state

which works as a hindrance for proper development of infrastructure in such markets.

4.2: Exorbitant rates of market fees and taxes

There are certain other issues that further constrain the development of required marketing infrastructure in the country like high incidence of market cess, taxes and other charges. Incidence of market rates and taxes in the states and UTs of the country can be seen from the following tables (Table no-4.2.1 and 4.2.2)

As we can clearly see from the following table (Table no 4.2.2) that in most of the states, APMCs are charging around 1-2% market fees from the buyers/traders on the sale of notified agricultural commodities which seems to be reasonably high. In the states like Punjab, Haryana, U.P, Uttarakhand, Tripura, Arunachal Pradesh and Madhya Pradesh, a flat 2% market fee is charged on all the agricultural commodities traded in the APMC markets. An additional 2% rural development cess is also charged in Punjab and Haryana whereas the same cess of 0.5% is charged in UP and Uttarakhand. Punjab charges as high as 3% market fees on the primary trade of agricultural commodities. Amongst the other states, 1% market fee is charged on the trade of agricultural commodities in agriculturally progressive states like Andhra Pradesh, Tamilnadu, and Telengana, in the mediocre states like Assam, Jharkhand, Rajasthan and also in the hilly states like Himachal Pradesh, Meghalaya etc. In all such states, no additional cess is charged over and above the stipulated market fees. In almost all the states, fruits and vegetable items and other perishable commodities are charged at a discounted rate, to the tune of 0-1% of the traded value. West Bengal charges only 0.5% market fees for all agricultural commodities except Paddy (with 1% market fee) whereas in Maharashtra, 0.5-1% is charged on all agricultural commodities.

In table no 4.2.1, we see that, out of the Union Territories of India, market fees are collected only in Chandigarh, Delhi and Puducherry, whereas APMC act is not in force in the others. Out of these 3 UTs, market fee is high at 2% in Chandigarh in case of all agricultural commodities except maize crop (with 1% market fee) with an additional Rural Development cess of 2% whereas in Delhi and Puducherry, a flat rate of 1% market fee is charged on all agricultural commodities with no additional cess.

It was therefore observed from the discussion that the states and UTs impose various types of fees, taxes and cesses on the trades of agricultural commodities, which are exorbitant in a good number of cases. These taxes, market fees/charges and cess levied on the trades conducted in the markets, as notified under the APMC Act and as enumerated in the following tables essentially result in higher transaction costs of the agricultural and allied commodities traded and lower price realizations by the farmers in such markets. In addition, commission agents charge commission fees on transactions between buyers and farmers.

All such market charges, levies and tax, VAT etc. add up to hefty amounts which in turn create market distortions with cascading effects and strong entry barriers for the agricultural commodity producers. The market fees, levies, tax and Cess which are supposed to be collected by the states/UTs for providing better services to the market functionaries, to ensure better prices and timely payment to the farmers/traders for their produce through the auctions in the APMC area, essentially start working for enhancing the transaction costs and in the process work as an impediment to the creation of a national common market and that actually betrays the very purpose of creation of the APMCs.

Table 4.2.1: Market fees and Cess imposed by the APMCs on the sale of Agricultural Produce in the Union Territories of India

Sl. No	Name of the UT	Rate of market fees (in % advalorem)		Percentage of Cess		Remarks
		Type of Produce	Market Fees	Type of Cess	% of Cess	
1	Chandigarh	Agl. Commodities	2.0	RD Cess	2.0	
		Maize	1.0			
2	Delhi	Agl. Commodities	1.0	NIL	NIL	
3	Puduchery	Agl. Commodities	1.0	NIL	NIL	

Source for Table 4.2.1 and 4.2.2: Ministry of Agriculture and Farmers Welfare, DAC&FW, Loksabha Secretariat (62nd Report), 2019, Govt. of India

In J & K, Market fee is not collected. However, gate entry fee is collected from the selected markets of Narwal ,Parimpora , Sopore , Kulgram , Shopian and Pulwama.

In Mizoram, Ground rent of Rs. 5.0 per sq. ft is only charged.

In Delhi, entry Fee is charged depending upon the type of vehicle

Table 4.2.2: Market fees and Cess imposed by the APMCs on the sale of Agricultural Produce in the states of India

Sl. No	Name of the State	Rate of market fees (in % advalorem)		Percentage of Cess		Remarks
		Type of Produce	Market Fees	Type of Cess	% of Cess	
1	Andhra Pradesh	Agl. Commodities	1.0	NIL	NIL	
		Fish	0.5			
		Prawn	0.25			
2	Arunachal Pradesh	Agl. Commodities	2.0	NIL	NIL	
3	Assam	Agl. Commodities	1.0	NIL	NIL	
4	Chhattisgarh	Fruits and Veg	NIL	NIL	NIL	
		Paddy	2.0			
		Other Commodities	1.0			
5	Goa	Agl. Commodities	1.0	NIL	NIL	
6	Gujrat	Perishables	0.5-1.0	NIL	NIL	
		Food Grains	0.3-2.0			
7	Haryana	Fruits and Veg	NIL	RD Fund Cess	1.0	
		Other Commodities	2.0	RD Fund Cess	2.0	
		Cotton	0.8	Auction Fee	0.08	
8	Himachal Pradesh	Agl. Commodities	1.0	NIL	NIL	
9	Jharkhand	Agl. Commodities	1.0	NIL	NIL	
10	Karnataka	Perishables	1.0-1.5	NIL	NIL	Service Charge
		Others	1.5			
11	Madhya Pradesh	Agl. Commodities	2.0	Nirashrit Shulk	0.2	
		Orange and Banana	1.0			
12	Maharashtra	Agl. Commodities	0.5-1.0	Supervision Fee	0.05	
13	Meghalaya	Agl. Commodities	1.0	NIL	NIL	
14	Nagaland	Agl. Commodities	Rs.2.0/Quintal	NIL	NIL	service charge
15	Odisha	Perishables	1.0	NIL	NIL	
		Paddy	2.0			
		Other food grains	1.0			
16	Punjab	Agl. Commodities	2.0	RD Cess	2.0	3% charged on primary trade
		Cotton	1.0			
17	Rajasthan	Jowar , Bajra , Maize, Isabgole , Cumin	1.0	NIL	NIL	User charge is taken for Fruits and Veg
		Other Commodities	1.6			
18	Tamilnadu	Agl. Commodities	1.0	NIL	NIL	
19	Telangana	Agl. Commodities	1.0	NIL	NIL	
		Fish	0.5			
		Prawn	0.25			
20	Tripura	Agl. Commodities	2.0	NIL	NIL	
21	Uttar Pradesh	Agl. Commodities	2.0	Dev Cess	0.5	
22	Uttarakhand	Fruits and Vegetables	1.0	Dev Cess	0.5	
		Others	2.0			
23	West Bengal	Perishables	NIL	NIL	NIL	* 6% for specific buyers
		Paddy	1.0*			
		Other than Paddy	0.5			

4.3: Restrictions on the issue of fresh Licenses

Licensing of commission agents in the regulated markets under APMC is another issue that works as a deterrent for development of marketing system under APMC. This poses an entry barrier for the new entrepreneurs seeking opportunities in trading of agricultural commodities. Existing licensed traders, commission agents and other functionaries in the market organize themselves into associations and most often they do not allow entry of new persons, in the excuse of non-availability of adequate space for shop construction etc. and that ultimately throttles the very spirit of competitive functioning in the APMC markets. This forming of cartel with the existing traders and commission agents gives birth to a monopsony situation where the APMCs get compelled to procure agricultural produce at a price decided by the traders' cartel and are sold at a much higher price. This supresses the regulatory role of the APMC and its market role becomes dominant and that ultimately defeats the very purpose of the APMCs, which are meant for preventing distress sale by farmers to their creditors and protecting them from the exploitation of intermediaries and traders in the market.

In the above set up, Agri-processors, retail chain operators or exporters of agricultural commodities can't understandably procure the agri-produce from the farmers directly as the same are routed through regulated markets and licensed traders. State controlled markets have always discouraged setting up of private markets, retail market hubs, direct marketing and farmer-centric approaches like contract farming and that eventually disallow competition in the agri-business. APMC markets in the process become inefficient both for the agri-producers as well for the potential traders.

5. Model APMC Act, 2003

Considering the inefficiency in the agricultural marketing system as described in the preceding section and realizing the need for bringing in a platform that incentivizes increased production and contributes to the commercialization of subsistence farmers, Ministry of Agriculture in the Govt. of India formulated a model law on agricultural marketing, named State Agricultural Produce Marketing (Development and Regulation) Act, 2003.The model act kept scope for the farmers to sell their produce directly to the contract-sponsors or in the private markets set up by individuals or small Govt. /Private agencies or to the consumers or end users of commodities. This act therefore made provision for infusing competitiveness in the market of agricultural produce by allowing common registration of market intermediaries.

The state governments were requested to suitably amend their respective APMC Acts for deregulation of the marketing system in India with the aim of promoting investment in marketing infrastructure, thereby motivating the corporate sector to undertake direct marketing and to facilitate a national market, as the Governments across the globe started recognizing the importance of liberalized agriculture markets. Repeated advisories were sent to the states with the request to reform their marketing regulations and align them with the provisions of the model act of 2003.

The pace of reforms in the states in line with the model act of 2003 was however far from being satisfactory. Till January, 2013, only 16 states had amended their state APMC Act and only six of them had notified the amended Rules since the promulgation of the model APMC act of 2003. (*Final report of the Committee of State Ministers, in-charge of Agriculture Marketing to Promote Reforms, 2013).* Some states partially amended their acts.

The Model APMC Act couldn't do away with the mandatory requirement of the buyers having to pay APMC charges (even when the produce is sold directly outside the APMC area). Therefore, in the private markets (creation of which was recommended in the model act of 2003) also, the owners had to collect fees/taxes on behalf of the APMC in addition to their own charges. This debarred enough competition to get infused in the system. As a result of that, the model APMC act of 2003 couldn't go far enough to create a national or even state level common market for agriculture commodities.

6. National Agriculture Market (NAM)

Problems of huge fragmentation in the markets, hindering free flow of Agricultural commodities from one place to the other and multiple handling of the agri-produce at multiple entry points and that attracting multiple Mandi charges was being felt for a pretty long time. Need for easing out of the restrictions in the regulated markets under APMC act, which was rendering sub-optimal results for both the producers and consumers in the agricultural commodity markets, was also being discussed in different forums.

Govt. of India, in July, 2015, brought forward a plan of creation of a National Agriculture Market (NAM), conceptualised as a Pan-India electronic trading portal that seeks to network the existing APMCs and other market yards to create a unified national market for agricultural commodities. (Union Budget, 2014-15 and 2015-16). E-NAM, in spite of being a virtual market, was proposed to have a physical market (mandi) at the back end. Initially, a total number of 585 APMCs selected by the states were proposed to be linked with the common e-market platform where states would get free software from the Centre and an additional grant of Rs 30 Lakhs per Mandi as onetime payment for purchase of related equipment and infrastructure requirements by the states. The plan had also made provision for bringing in private markets in the fold of interlinked markets in the NAM with free software access to them but without any financial grant.

6.1: Progress of registration in the e-NAM platform in the states and UTs of India

After more than 8 years from the inception of the e-NAM platform in the country, we have a natural query to see the standing of the states and UTs of India in regard to the registration of the mandis and its traders with the e-NAM web platform and their functionality status in such states/UTs. We can see from the following table (Table no-6.1.1) that in the two-and-a-half-year period from June, 2021 to Nov, 2023, there has been around 39% growth in the number of Mandi registered in the e-NAM portal with a 45% increase in the number of registered traders. Number of unified License issued by the states in India has nearly doubled in the referred period, which shows a pretty positive shift in the mind-set of the respective state governments in making the trading of agricultural commodities transparent and the agricultural marketing sector more competitive.

However, this growth has not been even across the states, as is evident from the referred table and the diagram (Figure-6.1.1). Whereas states like Tamilnadu, Rajasthan, Gujarat and Madhya Pradesh showed remarkable advancement in the registration of mandis in the web portal, each contributing more than 10% of the total number of registered mandis in the country, states like Assam, Karnataka, Kerala, Goa and Tripura and UTs like A &N Islands and Puducherry displayed a pretty dismal picture of growth in the registration of mandis in the e-NAM portal, each having less than 1% share in the total number of mandis registered in the whole country in Nov,2023.

Progress in the registration of mandis in e-NAM portal was also excellent in the states like Maharashtra (9.58%), U.P (9%), Haryana (7.78%) and Punjab (5.69%). Other states observed a poor to low growth in the concerned parameter except Telengana (4.10%), registering a good growth. In respect of registration of traders in the portal, Rajasthan topped the list with a hoping 33.67% of the total traders registered nationally, followed by U.P (15.62%) and M.P & Maharashtra, both having around 9% contribution in the total traders registered in the country.

Coming to the question of issuing of unified License across the states/UTs in the country, we could see the state of U.P to lead with a 23.12% contribution of all licenses issued nationally, followed by Gujarat (5.97%), Odisha (5.24%), Tamilnadu (4.16%) and Telengana (3.39%). Agriculturally most advanced states like Punjab or Haryana couldn't display much progress in this regard, however.

Table 6.1.1: State wise distribution of Mandis registered on the e-NAM portal as on 30.11.2023

Sl.No.	Name of State /UT	Mandis registered on e-NAM	% of Mandis registered on e-NAM	No of Registered Traders on e-NAM	% of Registered Traders on e-NAM	No. of Unified licenses issued by State	% of Unified licenses issued by State
1	A &N ISLANDS	1	0.07	4	0.00	0	0.00
2	ANDHRA PRADESH	33	2.38	3,732	1.49	3,732	2.20
3	ASSAM	3	0.22	8	0.00	0	0.00
4	BIHAR	20	1.44	45	0.02	0	0.00
5	CHANDIGARH	1	0.07	121	0.05	0	0.00
6	CHATTISGARH	20	1.44	3,294	1.31	53	0.03
7	GOA	7	0.50	867	0.35	850	0.50
8	GUJRAT	144	10.37	10,125	4.04	10,124	5.97
9	HARYANA	108	7.78	16,733	6.67	33	0.02
10	HIMACHAL PRADESH	38	2.74	2,148	0.86	6	0.00
11	JAMMU & KASHMIR	17	1.22	2,373	0.95	1,054	0.62
12	JHARKHAND	19	1.37	2,483	0.99	99	0.06
13	KARNATAKA	5	0.36	727	0.29	727	0.43
14	KERALA	6	0.43	429	0.17	61	0.04
15	MADHYA PRADESH	139	10.01	22,639	9.02	1,074	0.63
16	MAHARASHTRA	133	9.58	22,166	8.83	0	0.00
17	NAGALAND	19	1.37	94	0.04	94	0.06
18	ODISHA	66	4.75	8,890	3.54	8,890	5.24
19	PUDUCHERY	2	0.14	215	0.09	0	0.00
20	PUNJAB	79	5.69	2,874	1.15	1	0.00
21	RAJASTHAN	145	10.44	84,487	33.67	84.487	0.05
22	TAMIL NADU	157	11.30	10,503	4.19	7,048	4.16
23	TELANGANA	57	4.10	6,190	2.47	6,190	3.65
24	TRIPURA	7	0.50	12	0.00	0	0.00
25	UTTAR PRADESH	125	9.00	39,203	15.62	39,203	23.12
26	UTTARAKHAND	20	1.44	5,755	2.29	5,755	3.39
27	WEST BENGAL	18	1.30	4,798	1.91	46	0.03
TOTAL		1,389		2,50,915		1,69,527	
Growth (%)#		38.9		45		189.11	

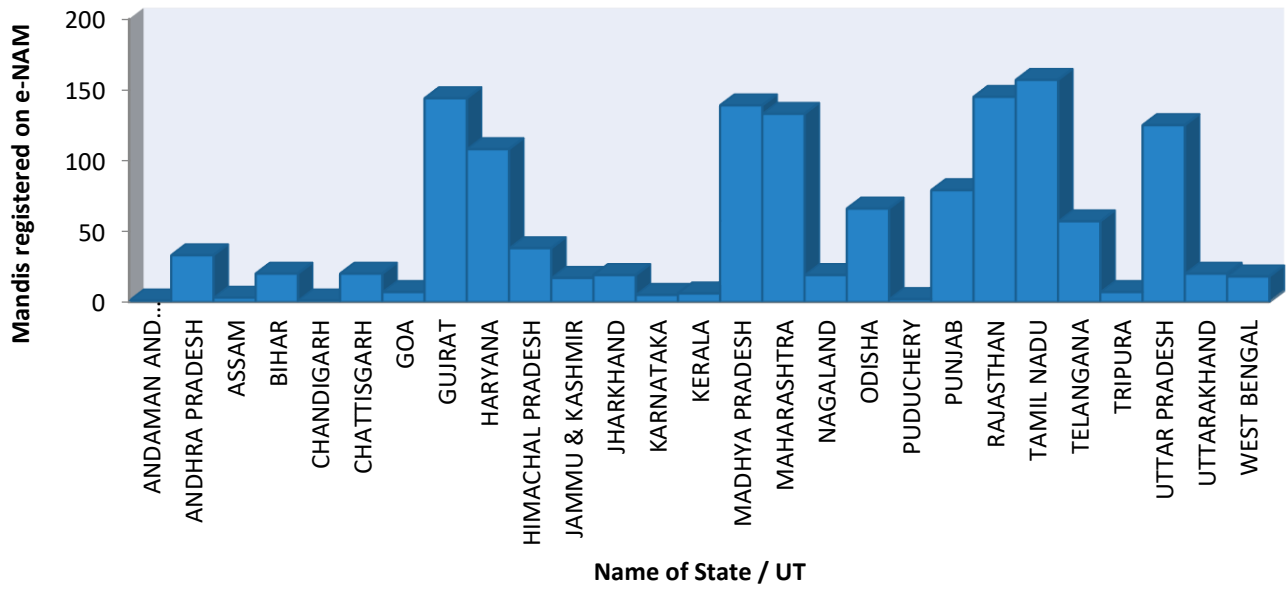
Source: Website of National Agriculture Market, Govt. of India-https://enam.gov.in

Figures in the last row indicates percentage rate of growth in the parameters in the period from 30th June, 2021 to Nov, 2023 (both figures taken from the e-NAM portal)

7. Relevance of Rural Hats as Platform for agricultural marketing in India:

In a country like India, where there is an acute shortage of regulated markets that too with poor infrastructural facilities in most of the cases and where the agricultural producers most of whom are small and marginal farmers, can't access due to high fragmentation in the markets, restrictive licensing opportunities and a high incidence of market fees and taxes/Cesses, need for creation of rural markets nearer to the production points with free access to all the classes of farmers becomes an issue of paramount importance.

Figure 6.1.1: Mandis registered on e-NAM portal in the states of India in Nov, 2023



7.1: Fact Check about availability of Rural Hats in the states/UTs of India

Apart from the regulated markets under APMC act in the states/UTs and other markets beyond the purview of the APMC acts, there exists around 23000 Rural Hats in the Country. (Govt. of India, 2019) These rural hats are known by different name in different parts of the country like rural periodicals markets, hats, shandies or fair etc. Large number of small and marginal farmers spread across the states of India use these markets not only for selling their produce but also to purchase their daily needs from such markets. These rural hats are the lone trading points for the farmers in the remote rural areas for transaction of agricultural commodities, especially for the majority of small and marginal farmers who can't gather adequate marketable surplus of their agricultural produce and cannot stand a chance of making a profitable bargain in the registered APMC markets or other urban market centres at far-away places.

We can see the State/UT wise distribution of the Rural Hats in the country along with the list of agencies under which the Hats are being operated in the following table (Table no-5). As we can see from the table that a good number of rural hats are getting operated under APMC in the states like Assam (405), Odisha (398), Bihar (325) and also some rural hats are there in the hilly states of Arunachal Pradesh, Meghalaya and Mizoram and some in Tripura.

Table 7.1.1: State/UT wise distribution of Rural Hats under the management of various agencies in India

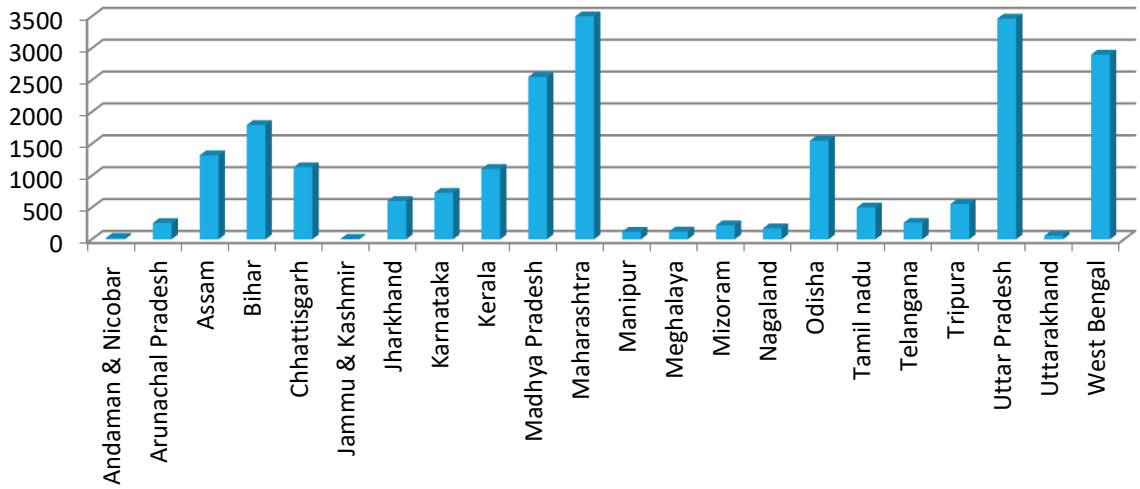
Sl. No	State / UT	Under the management of			
		APMC	Panchayati Raj	Others	Total
1	Andaman & Nicobar	0	23	0	23
2	Arunachal Pradesh	66	175	15	256
3	Assam	405	908	6	1319
4	Bihar	325	0	1469	1794
5	Chhattisgarh	0	1132	0	1132
6	Jammu &Kashmir	0	8	0	8
7	Jharkhand	0	602	0	602
8	Karnataka	0	730	0	730
9	Kerala	0	6	1100	1106
10	Madhya Pradesh	0	0	2550	2550
11	Maharashtra	0	0	3500	3500
12	Manipur	0	95	24	119
13	Meghalaya	35	89	0	124
14	Mizoram	24	196	0	220
15	Nagaland	0	0	174	174
16	Odisha	398	132	1018	1548
17	Tamil nadu	0	501	0	501
18	Telangana	0	261	0	261
19	Tripura	21	533	0	554
20	Uttar Pradesh	0	3464	0	3464
21	Uttarakhand	0	56	0	56
22	West Bengal	0	2900	0	2900
	Total	1274	11811	9856	22941

Source: Ministry of Agriculture and Farmers Welfare, DAC&FW, Lok Sabha Secretariat (62nd Report), 2019, Govt. of India

More than 50% of the rural hats are functioning under the control of the village Panchayats and all the states except Madhya Pradesh, Maharashtra and Nagaland were found to have such rural hats under the Panchayats. There was a high concentration of Gram Panchayet managed rural hats in the states of Uttar Pradesh (3464), West Bengal (2900), Chhattisgarh (1132) and Assam (908). Such Panchayet managed rural markets were also found in good numbers in the states like Karnataka, Jharkhand, Tripura and Tamilnadu. Apart from the rural hats managed under the APMC acts (1274) and the Gram Panchayats (11811), as many as 9856 (nearly 43% of the All-India figure) number of rural hats were found in the country which were mostly found to be operated under private ownerships and some of them under urban civic authorities and the like.

In the state wise distribution of the rural markets, Maharashtra was found to top the table with 3500 number of Hats and the rural markets in the state was managed by the urban local bodies or private entities. The next came Uttar Pradesh and West Bengal where all the rural hats were under the management of Gram Panchayats.

Figure 7.1.1: State wise distribution of Rural Hats under the management of various agencies in India



7.2: Implementation of GrAM scheme

The rural hats located in rural and interior areas can serve as the first meeting points for a large number of farmers and as these markets are normally located nearer to the production centres, transit losses and transportation cost of agricultural commodities from the production centre to the market gets sufficiently reduced, when transacted in such markets. The village merchants or aggregators also use these periodic markets as primary assembling points where from they collect the produce and sell in the secondary markets.

In due recognition of the fact that these rural hats can work as a link in the marketing chain having positive impact on crop diversification and resources allocation by the farmers and also can bridge the gap of market inadequacy, information asymmetry and other issues facing the APMC markets, the Govt. of India, in the union budget of 2018-19 announced the scheme of Gramin Agricultural Markets (GrAMs) for development and upgradation of these rural hats.

In the said scheme, the Govt. of India proposed for exempting the rural hats from regulation of APMC and to upgrade their physical infrastructure by using MGNREGA and other government schemes and to link them to e-NAM. Initially, 4600 number of rural Hats (out of the total of 22941 Hats in the country) were picked for infrastructure upgradation in those markets like construction of sheds, storage facilities for agricultural produce, making road connectivity for the bazars through PMGSY, provision of basic civic facilities like drinking water, toilets etc. Successful implementation of this scheme can go a long way in ensuring a fair and efficient marketing platform for the agricultural farmers of India, especially the small and marginal farmers who fail to reach the regulated markets due to distance, lack of proper transport facilities, dominance of the market intermediaries etc. in the APMC markets.

8. Concluding observations

Indian agriculture has witnessed a steady growth in the production and yield of the principal agricultural commodities since the mid-sixties to the current date and the country, after meeting the domestic demand for food grains and other commodities, has turned out to be net exporters of a good number of commodities in all these years. But the effects of these increased production didn't pass on to the average farmers of India chiefly on account of unremunerative prices received by the farmers for their products owing to an underdeveloped agricultural marketing infrastructure of the country.

As observed from the available reports, there is a serious dearth of markets for transactions of agricultural produce in the country. When National Commission of Farmers (NCF, 2006) suggested that a market for the agricultural farmers should be available for regular trade transactions within a radius of 5 kms from the production points that can ideally cover 80 sq. kms, we got an average market in India covering an

average area of 487 sq. kms, which itself describes the story. Picture of inter-state market density was also found to be diverse. Against a total of 12 markets per lakh hectare of gross cropped area in Jharkhand, we got as low as 1 market in J&K or 1.7 markets in Rajasthan in every lakh hectare of cultivated area in the concerned states.

APMC markets were not only scanty in numbers, they were highly fragmented and devoid of basic minimum facilities like availability of Godown, cold storage, commercial grading facilities etc. Besides that, high incidence of market fees and Tax/Cess etc. charged in the APMC markets and restrictions in the issue of fresh licenses in the markets made entry of small and marginal farmers in the regulated markets very difficult. Implementation of model APMC act envisaged by the Govt. of India in 2003, aiming at overcoming the constraints faced in the existing APMC Act also couldn't provide with any effective solution to the issues, partly due to the passive response of the state governments in enacting laws in line with the model act of 2003 and partly due to some inherent weaknesses also in the model act like failure to discontinue APMC charges even in the private markets or outside the boundaries of the APMC area.

Considering the constraints in the APMC markets delivering sub-optimal results in regard to providence of services to the agricultural farmers of the country at large, Govt. of India floated the plan of National Agricultural Markets which aspired to link the APMC markets and other regulated markets in a PAN-India electronic trading portal and there has also been some progress in the programme with nearly 1400 markets already linked to the system with over 2.5 lakhs of active traders in the NAM portal so far. But as for other all India schemes, here also, agriculturally advanced states like UP, Punjab, Haryana, Maharashtra and the like could avail more benefit from the online trading portal with maximum number of registered APMC mandis and active traders in the NAM portal, whereas other states lagged much behind in terms of the given parameters.

It was adequately felt by the Govt. agencies as well as the researchers across the country that APMC markets which were so small in numbers in the entire country in comparison to the requirement, even if linked to the NAM portal, can't properly resolve the marketing issues for the large section of small and marginal farmers in India who don't have sizeable marketable surplus with them and who can't, in most of the cases, access the regulated markets for different reasons. So, the only places of trade where these large numbers of farmers could transact their agricultural produce with ease are the rural Hats spread across the country. Judging the importance of these rural markets, Govt. of India had initiated the infrastructural development of the rural markets in a phased manner through the Gramin Agricultural Markets (GRaM) scheme since 2018-19. If properly implemented, this scheme can go a long way in resolving the long pending issues of inadequate markets, lack of transparency in the transactions in the regulated markets and lack of infrastructural facilities etc.

To address the issues of a poorly developed agricultural marketing infrastructure of the country as well its states and UTs, Government at the centre and also the respective state governments should therefore put adequate emphasis in liberating the APMC markets from the clutches of the existing restrictions in respect of licensing, market fees/taxes and infusing some element of competition in the trading activities and to allow access to the small and marginal producers in the markets. Agriculture being a state subject, the state governments should come to a consensus in extending all sorts of cooperation in successful implementation of the central schemes that targets all round development of the agricultural infrastructure of the country, be it development of online trading portal like NAM or developing infrastructure of rural markets through the GrAM scheme.

Bibliography :

Government of India, 2004, "Directory of Wholesale Agricultural Produce Assembling Markets in India", Ministry of Agriculture, Department of Agriculture & Co-operation, Directorate of Marketing & Inspection, Nagpur

Government of India, 2005, NSSO (National Sample Survey Office). *Situation Assessment Survey of Farmers: Some Aspects of Farming*. Ministry of Statistics & Programme Implementation, Report No. 496. New Delhi

Government of India, 2005. NSSO (National Sample Survey Office). *Situation Assessment Survey of Farmers: Income, Expenditure and Productive Assets of Farmer Households*. Ministry of Statistics & Programme Implementation, Report No. 497. New Delhi

Government of India, 2006. NCF (National Commission on Farmers). *Serving Farmers and Saving Farming*, (Report V Excerpts). Ministry of Agriculture, New Delhi

Government of India, 2013, *Final report of the Committee of State Ministers in-charge of Agriculture Marketing to Promote Reforms,* New Delhi

Government of India, Union Budget, 2014-15, Section – G, Fiscal Policy Strategy Statement for the Financial Year

Government of India, Union Budget, 2015-16, Section–G, Fiscal Policy Strategy Statement for the Financial Year

Government of India. 2016. *Agricultural Statistics at a Glance*, Ministry of Agriculture, Department of Agriculture and Co-operation, Directorate of Economics and Statistics, New Delhi

Government of India. 2016a, *All India report on Input Survey 2011-12*, Ministry of Agriculture & Farmers Welfare, Department of Agriculture, Cooperation and Farmers welfare, New Delhi

Government of India. 2016b. NSSO (National Sample Survey Office). *Income, Expenditure, Productive assets and indebtedness of agricultural households in India*. Ministry of Statistics & Programme Implementation, Report No. 576. New Delhi

Government of India, 2017,*Agricultural Statistics at a Glance ,* Ministry of Agriculture, Department of Agriculture and Co-operation, Directorate of Economics and Statistics, New Delhi

Government of India, 2019, *All India report on number and area of operational Holdings*, Agricultural Census, 2015-16 (Phase-I) Ministry of Agriculture & Farmers Welfare, Department of Agriculture, Cooperation and Farmers welfare, New Delhi

Government of India, 2019. *Agricultural Statistics at a Glance*, Ministry of Agriculture, Department of Agriculture and Co-operation, Directorate of Economics and Statistics, New Delhi

Government of India, 2019,"Agricultural Marketing and Role of Weekly Gramin Haats", Ministry of Agriculture and Farmers Welfare, DAC&FW, Lok Sabha Secretariat (62nd Report), New Delhi

Government of India, 2021a. NSSO (National Sample Survey Office). *Situation Assessment of Agricultural Households and Land and Holdings of Households in Rural India 2019*. Ministry of Statistics & Programme Implementation, Report No. 587. New Delhi

Government of India, 2021b. *Annual Report 2019-20*, Ministry of Agriculture & Farmers Welfare, Department of Agriculture, Cooperation and Farmers welfare, New Delhi

Jabeen. A, Jabeen. S (2021), *"Agricultural Marketing in India-An Overview"*; EPRA International Journal of Agriculture and Rural Economic Research; Vol.9, Issue: 11; ISSN: 2321-7847, pp. 6-10

Kahlon, A.S; George, M.V (2011),"*The Role of Processing Industries in Agricultural Marketing Integration*", Indian Society of Agricultural Economics

NABARD, 2020-2021, "Farmers' Welfare in India", A state-wise analysis, Department of Economic Analysis and Research, Mumbai

Sarkar. H (2023), "*Situation Assessment of Agricultural households in West Bengal-A case Study in Birbhum District*" ; Doctoral Thesis ;October 2023; Visva-Bharati

About the authors :

Author 1 : Dr. Hemanta Sarkar is a Senior Civil Servant in the constituted State Services of Government of West Bengal and currently working as Joint Director, Department of Planning and Statistics, Govt. of West Bengal.

Author 2 : Moumita Maitra is working as Lecturer (State Aided College Teacher) in Raja Peary Mohan College, Uttarpara, Hooghly.