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PERFORMANCE EVALUATION OFAGRICULTURAL REGULATED MARKETS IN CHITTOOR DISTRICT, A.P.

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Abstract : *Present paper seeks to evaluate the performance of regulated markets under the control of Agricultural Marketing Committees (AMCs) in the Chittoor District of the state of Andhra Pradesh. This paper also throws light on the problems faced by AMCs in their operations. Chittoor District in Andhra Pradesh is considered as a drought-prone area, where the drought condition prevail throughout the year. The effective functioning of regulated markets is a must for ensuring fair deal to the farmers. The study is based on the secondary data, collected from the office of Assistant Director of Marketing, Chittoor. Books, Journals, Publications, Websites were also referred to. In Chittoor District there are 19 Agricultural Market Committees (AMCs) with 45 notified markets. 10 market yards are functioning seasonally and 9 are non- functional markets. The Tomato and Mango trade is centralized in all 10 market yards. Out of the 10 functional markets, 6 markets have been chosen for the study.*

KEYWORDS: *Agricultural Markets, Functional and Non- functional Markets, AMCs, Arrivals and Market fee.*

1. PROLOGUE

Agriculture is the back bone of Indian economy. Despite of the progress made on the industrial front, agriculture continues to play a vital role in the economic progress of the country. As agriculture contributes largely to national income and output, it has vast potentialities for substantial capital formation. In India, agriculture was done formerly on a subsistence basis. In those days villages were self-sufficient, people used to exchange their goods with in the village under barter system. Agriculture has become commercial with the development of means of transport and storage facilities. Now-a- days, the farmers are growing those crops which fetch them a better price. The development of agriculture depends not only on the productivity but also on the existing system of marketing in the country. Hence, marketing of agricultural produce is considered as an integral part of agriculture.

2. SITUATION OF AGRICULTURAL MARKETING IN INDIA

The agricultural situation in India has undergone a rapid change in last two decades. Investment in agricultural sector, both in public and private sectors, has risen. Agricultural production, in general has achieved reasonable growth rate. But the growth rate has not only to be maintained, but accelerated and fluctuations in agricultural production are to be minimized. The efforts are already under way to evolve locationspecific technologies, transfer them to farmers' fields and assure input supply to farmers in right time, place and quality. The rate at which new technology and yield increasing inputs are adopted by farmers is affected by the prices of input and output. Simultaneously, consumers also expect the availability of goods at reasonable prices. For achieving these conflicting objectives, marketing system for agricultural commodities and inputs has to play a very crucial role.

As revealed by earlier studies, Agricultural marketing system in India is highly exploitative. Hence, the farmers are deprived of getting fair prices for their produce. The number of middlemen between the farmers and final consumers are too many and the margin going to them is too large. The available means of transportation is inadequate and miserable. Most of the farmers in the villages are not possessing sufficient storage facilities to store their products. Usually, perishable goods require cold storages. Moreover, the quality of agricultural produce deteriorates. Consequently, the farmers are compelled to sell their products soon after harvest, even at lower prices. In this context, middlemen play a strategic role to exploit the farmers.

3. NEED FOR REGULATED MARKETS

Under the traditional system of marketing of the agricultural products, producer sellers incurred a high marketing cost, and suffer from unauthorized deductions of marketing charges and the prevalence of various malpractices. To improve marketing conditions and with a view to creating fair competitive conditions, the increase in the bargaining power of producer-sellers was considered to be the most important prerequisite of orderly marketing. Most of the defects of, and malpractices under, the then existing marketing system of agricultural products have been more or less removed by the exercise of public control over markets, i.e., by the establishment of regulated markets in the country. Regulated markets have been started with view to ensure remunerative price to the products of the peasants, narrow down the price spread between the producers and consumers and to reduce the non-functional margin of the commission agents. The regulated markets check all unfair practices prevalent in the marketing of farm produce. In most of the states Act of Agricultural Marketing has been passed. In 1951, more than 200 regulated markets were started in India. By the end of December, 2014 the number of regulated markets increased up to 7114.Regulated market Committee consists of representatives of the state government, the Local Bodies, the farmers, the traders and the commission Agents.

4. PROGRESS OF AGRICULTURAL REGULATED MARKETS IN INDIA

The state- wise status of regulated markets and the area served by the regulated markets in India as on 31st December, 2014 is presented in Table -1. The progress of regulated markets is not uniform in all the States. There is appreciable number of regulated markets in the States of Andhra Pradesh, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Maharashtra, Rajasthan, Odisha, Punjab, Tamil Nadu, Uttar Pradesh and West Bengal. The number of regulated markets is negligible in the states of Arunachal Pradesh, Manipur, Meghalaya, Nagaland and Sikkim.

Market regulation has not been enacted in two States (Jammu & Kashmir and Manipur) and three Union territories (Andaman & Nicobar Islands, Dadra & Nagar Haveli and Lakshadweep).

In the State of Kerala, four regulated markets in the Malabar area were established by the then Madras State under the Madras Commercial Crops Act, 1933. Bihar has repealed the Act in 2006. On an average, each regulated market serves an area of 459 sq. km. The situation varies from State to State in terms of area covered as per regulated market. The average area covered by a regulated market in north-east and hill states is large. In this connection, it may be mentioned that the National Commission on Agriculture (1976) had recommended that the facility of a regulated market should be available, in general, with a radius of 5 km.

5. PROGRESS OF REGULATED MARKETS IN ANDHRA PRADESH

The progress of regulated markets before independence was not encouraging. From the table-2, it is clear that prior to Independence only 14 regulated markets were established. The progress appeared to have gained momentum between 1962-69, mainly because of the separation of marketing from the Agricultural Directorate and starting, an independent directorate called the Directorate of Marketing, and also because of the passing of the Agricultural Produce and Live Stock Markets Act, 1966, an integrated market legislation, and Agriculture Produce and Livestock Market Rules framed during 1969.Since then there has been a rapid growth in the regulated agricultural markets in the state of Andhra Pradesh. As shown in table-2, the number of regulated agricultural markets was increased sharply from 14 in 1930-47 to 905 by 2013-14. Tremendous growth was noticed during 1962-69, accounting for 185.23 percent of growth rate. The number which was 251 in 1962-69 reached to 905 by the end of the period 2013-14.

7. SAMPLE DESIGN

In Chittoor District there are 19 Agricultural Market Committees (AMCs) with 45 notified markets. Out of 45 notified markets, 18 markets are having market yards. 10 market yards are functioning seasonally and 9 are non-functional markets. The Tomato and Mango trade is centralized in all 10 market yards. Out of the 10 functional markets, 6 markets have been chosen for the study. The six markets include Chittoor, Punganur, Madanapalli, Valmikipuram, Piler, and Mulakalacheruvu.

8. METHODOLOGY

The study is based on the secondary data, collected from the office of Assistant Director of Marketing, Chittoor. Books, Journals, Publications, Websites were also referred to .Appropriate statistical tools viz., mean, standard deviation, CAGR, regression analysis were employed so as to arrive at meaningful references.

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Table - 1

State- wise Details of Area Served by Regulated Markets as on 31st December, 2014						
S.No	States/ Union territories	Area in sq.kms.	Total population	Total Regulated Markets	Area covered by each Market(col.3/5)	Population served by each Market (col.4/5)
1	2	3	4	5	6	7
1	Andhra Pradesh	275069	84665533	905	303.94	93553
2	Arunachal Pradesh	83743	1382611	131	639.26	10554
3	Assam	78438	31169272	226	347.07	137917
4	Bihar	94163	103804637	0	0	0
5	Jharkhand	79714	32966238	201	369.59	164011
6	Goa	3702	1457723	8	462.75	182215
7	Gujarat	196024	60383628	400	490.06	150959
8	Haryana	44212	25353081	281	157.34	90224
9	Himachal Pradesh	55673	6856509	54	1030.98	126972
10	Jammu& Kashmir	222236	12548926	12	0	0
11	Karnataka	191791	61130704	512	374.59	119396
12	Kerala	38863	33387677	0	0	0
13	Madhya Pradesh	308144	72597565	536	574.9	135443
14	Chhattisgarh	136034	25540196	184	739.32	138805
15	Maharashtra	307713	112372972	881	349.28	127552
16	Manipur	22327	2721756	0	0	0

17	Meghalaya	22429	2964007	2	11214.5	1482004
18	Mizoram	21081	1091014	0	0	0
19	Nagaland	16579	1980602	18	921.06	110033
20	Odisha	155707	41947358	436	357.13	96210
21	Punjab	50362	27704236	424	118.78	65340
22	Rajasthan	342240	68621012	443	772.55	154901
23	Sikkim	7096	607688	1	7096	607688
24	Tamilnadu	130058	72138958	283	459.57	254908
25	Tripura	10493	3671032	21	499.67	174811
26	Uttar Pradesh	240928	199581477	615	391.75	324523
27	Uttarakhand	53484	10116752	58	922.14	174427
28	West Bengal	88752	91347736	457	194.21	199886
29	A & N Islands	8249	379944	NIL	0	0
30	Chandigarh	114	1054686	1	114	1054686
31	D & N Haveli	491	342853	0	0	0
32	Daman & Diu	112	242911	0	0	0
33	Delhi	1483	16753235	15	98.87	1116882
34	Lakshadweep	32	64429	0	0	0
35	Puducherry	479	1244464	9	53.22	138274
36	Total	3288015	1210193422	7114	462.19	170114

Source: Census Report 2011 Published by RG & Census Commissioner of India website.

Table-2

Progress of Regulated Markets in Andhra Pradesh

Years	Number of regulated Markets	% increase
1930-47	14	-
1947-55	49	250
1956-61	88	79.59
1962-69	251	185.23
1970-77	477	90.04
1978-85	600	25.79
1986-1993	817	36.17
1994-2006	867	6.12
2013-2014	905	4.38

Source: *Directorate of Marketing, Government of Andhra Pradesh, Hyderabad.*

9. AMCs in Chittoor District

There are 19 AMCs (Agricultural Market Committees) in Chittoor district. They are: Chittoor, Punganur, Madanapalli, Valmikipuram, Piler, Palamaneru,Puttur, Mulakalacheruvu, Tiruchanuru, Bangarupalem, Srikalahasti, Thottambedu, Pakala, Nagalapuram, Nagari, Somala, Kuppam, Vepanjeri, Rompicherla. Out of them 10 are functional markets and 9 are non- functional markets.

9.1 Evolution of regulated markets in Chittoor District

Regulated markets in Chittoor district were established in the year 1970 with the Andhra Pradesh Gazette publication dated January 20th, 1970. In the first instance, 7 markets were established at Chittoor, Pakala, Piler, Madanapalle, Palamaner, Srikalahasti and Puttur. Later, 7 more markets were established at Vayalpad, Bangarupalem, Punganur, Nagalapuram (Satyavedu), Thottambedu, Tirupati and Kuppam. In the third phase, 5 more markets were established at Mulakalacheruvu, Nagari, Rompicherla,Somala and Vepanjeri. Hence, there are 19 markets in Chittoor District.

10. PERFORMANCE EVALUATION OF AGRICULTURAL REGULATED MARKETS IN CHITTOOR DISTRICT- AN ANALYSIS

Marketing efficiency of the Regulated Markets depends upon technical efficiency in terms of procedure, technique and scale of operations and also economic efficiency as well. Physical efficiency on the other hand can be known in terms of scientific method of storage, handling, grading, and standardization, transportation which will have bearing on reducing waste and increase the quality of product.

Table- 3

The arrivals of major commodities of the selected AMCs in Chittoor District during the 10 year period (2007-08 to 2016-17)

S.No	Year	Quantity of Arrivals (Quantity- in Quintals)
1	2007-08	2699845
2	2008-09	2687992
3	2009-10	4851103
4	2010-11	3740410
5	2011-12	1847913
6	2012-13	4211557
7	2013-14	42613109
8	2014-15	164438608
9	2015-16	80337558
10	2016-17	89947533
	Total	397375628
	Mean	**39737562.8**
	STD	**55460763.04**
	CAGR	**0.476329781**

Source: *Data are compiled from the records of Assistant Directorate of Marketing Office, Chittoor.*

As revealed by the table-3, the total arrivals were estimated to 39, 73, 75,628 quintals from 2007-08 to 2016-17. The arrivals in the regulated markets are fluctuating from year to year till 2012-13. Rise and fall in the quantity of arrivals from year to year is noticed till 2013-14.Greater improvement is noticed in terms of arrivals in the year 2014-15 with quantity of 16,44,38,608 quintals. This growth is due to favorable rainfall in district. The quantity of arrivals were decreased to 8,03,37,558 quintals in year 2015-16 due to drought conditions. Again the growth is noticed in 2016-17.

Inference: Over the 10 years of study, the mean value of arrivals is 39737562.8 with standard deviation of 55460763.04.This represents a large variability over the years. Very good compound annual growth rate of 47.63% was recorded.

Regression Statistics	
Multiple R	0.742997
R Square	0.552044
Adjusted R Square	0.496049
Standard Error	39371309
Observations	10
Regression line:	Quantity of Arrivals=year*13610275.2-35118951.2

Inference: From the regression analysis, it can be observed that a good linear growth was observed in arrivals over the years. From the regression line the forecasted value of quantity of arrivals for the year 2019-20 would be about: 13*13610275.2-35118951.2=141814626.4.

11. FINANCIAL PERFORMANCE OF AMCS

Finance is one of the important ingredients for smooth and effective functioning of any organization in general and Regulated Agricultural Markets in particular. Regulated Agricultural Markets and their financial performance is measured in terms of income from market fee, license fee, expenditure pattern and the treasury balances being maintained by them.

Table- 4 portrays the details of sources of income of selected regulated markets in Chittoor District over a period of 10 years i.e., 2017-08 to 2016-17. The market fee has increased by 3.2 times from Rs.281.89 lakhs to Rs. 899.65 lakhs during the ten years period. Over the ten years of study, the mean value of the market fee is Rs. 550.606 lakhs. The table shows the gradual increase in market fee in ten years. Except in the year 2013-14, a positive growth rate is observed from year to year. The value of market fee is decreased from Rs.617.62 lakhs in 2012-13 to Rs.517.58 lakhs in 2013-14 due to various reasons.

Table-4

The market fee collected from the selected AMCs in Chittoor District during the period from 2007-08 to 2016-17.

S.No	Year	Market fee (in Lakhs)
1	2007-08	281.89
2	2008-09	321.01
3	2009-10	382.09
4	2010-11	500.65
5	2011-12	561.6
6	2012-13	617.62
7	2013-14	571.58
8	2014-15	645.69
9	2015-16	724.28
10	2016-17	899.65
Total		5506.06
	Mean	**550.606**
	STD	**189.1216094**
	CAGR	**0.137625515**

Source: *Data are compiled from the records of Assistant Directorate of Marketing Office, Chittoor.*

Inference: Over the 10 years of study, the mean value of market fee is 550.606 with standard deviation of 189.121.This represents a large variability over the years. A good compound annual growth rate of 13.76% was observed.

Regression Statistics	
Multiple R	0.967288
R Square	0.935646
Adjusted R Square	0.927602
Standard Error	50.88688
Observations	10
Regression line:	Quantity of market Fee=year*60.42145+218.288

Inference: From the regression statistics it can be observed that a good linear growth was observed in market fee over the years. From the regression line the forecasted value of market fee for the year 2019-20 would be about: 13*60.42145+218.288=**1003.76.**

Correlation:

	Arrivals	***Market Fee***
Arrivals	1	
Market Fee	0.633828	1

Inference: High correlation was observed between the quantity of arrivals and the market fee over the years.

12. PROBLEMS CONFRONTED BY AGRICULTURAL REGULATED MARKETS IN CHITTOOR DISTRICT

The agricultural regulated markets in Chittoor District have been facing following problems in their operations.

- The scheme of Rythu Bazars could not be taken forward due to withdrawal of Horticulture Consultants from Rythu Bazars who used to distribute the seed and provide extension services to the farmers.
- The Rythu Mitra Scheme of sale of seeds, fertilizers and pesticides could not be taken forward due to heavy losses incurred in the transactions due to non-professionalism in marketing strategies in Agricultural Market Committees. The practice of sale of inputs was discontinued.
- The Soil Testing Laboratories became nonfunctional in certain Market yards due to withdrawal of staff by the Agriculture Department.
- Farmers training programmes were discontinued .
- The Gramin Bhandaran Yojan Scheme could not be utilized by Agricultural Market Committees because it was linked up with institutional credit and Government decided not to stand guarantee for availing this credit facility by the Agricultural Market Committees from NABARD. Moreover, lack of awareness on the lengthy procedures involved in obtaining credit facility also was a big obstacle.
- The Government did not permit to take up the link roads. The dissemination of prices through KIOSKS which were established previously was discontinued at present.

13. SUGGESTIONS

To overcome the problems of AMCs and their effective functioning the following suggestions have been offered.

- Strengthening the existing Rythu bazars and establishing new Rythu bazars where ever feasible with Cold storage facility, to be managed by Farmers Producers Processors Organizations (FPPO).Ensure fair price to the farming community by creating competitive marketing scenario and the mission of achieving this by enforcing Act and Rules more effectively and also implementing new technologies aimed at reducing post-harvest losses through appropriate methods and encourage value addition.

- Ensuring daily updating of prices in agmarknet and department website, which enable farmers to negotiate with traders and also facilitates spatial distribution of products from rural areas to towns and between markets. Developing modern communication technologies for market information services to improve information delivery through SMS, voice mails and FM radio channels.
- Developing new marketing linkages between agro business, large retailers and farmers gradually through contract farming etc.,
- Shaping Agricultural Market Committees into integrated supply chain centers with a view to minimize post-harvest losses to provide scientific storage facility, provide post-harvest credit through Warehousing receipt financing.
- Creation of additional storage facility up to 5,000 MTs Capacity in Agricultural Market committees.
- Computerization of Agricultural Market Committees to facilitate E-trading and online issue of E-permits to enable traders to transport produce to processing place without hassle.

14. EPILOGUE

"Agricultural Production, Processing and Marketing" are three pillars of the agricultural economy. Agricultural marketing infrastructure plays a unique role in the fostering and sustaining the tempo of rural economic development. Marketing is critical for better performance of the agriculture sector as a whole. Effective marketing infrastructure is essential for cost effective marketing, to minimize post-harvest losses. Successful marketing requires learning new skills, new techniques and new ways of obtaining market price information. In order to provide dynamism and efficiency into the marketing system, large investments are required for the development of post-harvest and cold chain infrastructure nearer to the farmers' field. A major portion of these investments is expected from private sectors, for which Model Act of the Govt. of India was adopted in A.P. which provides scope for establishment of private markets. The department intends to come to the rescue of farmers in terms of getting remunerative prices, reducing post-harvest losses by adopting various modern techniques.

REFERENCES

1. Acharya,S.S. and Agarwal, N.L., Agricultural Marketing In India, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 2014.
2. Tripathi, A. and Prasad, A.R. (2009) "Agricultural Development in India Since in Determinants: A Study on Progress, Performance and Determinants", Journal of Emerging Knowledge on Emerging Markets, Vol. 1 (1).
3. Agricultural Marketing Reforms: Amendments in State APMC Acts/Rules, State Agriculture/Agricultural Marketing Ministers Conference, August 2008.
4. The Andhra Pradesh (Agricultural Produce and Livestock) Markets Manual, 1966 and Rules 1969, Rule No.28, Department of Marketing, Government of Andhra Pradesh, Hyderabad.
5. www.agmarknet.nic.in
6. www.agicoop.nic.in