IJRAR.ORG E-ISSN: 2348-1269, P-ISSN: 2349-5138

INTERNATIONAL JOURNAL OF RESEARCH AND ANALYTICAL REVIEWS (IJRAR) | IJRAR.ORG

An International Open Access, Peer-reviewed, Refereed Journal

" STUDY ON MARKETING OF COMPLEX FERTILIZER (GROMOR 28-28-0) IN VIZIANAGARAM DISTRICT OF ANDHRA PRADESH"

Palaka Dinesh kumar 1, Dr. Nitin Barker 2, Dr. Ramchandra 3, Mr. Jayanth Zechariah 4, Dr. Anupriya Paul 5,

1 P.G. Student MBA(ABM), Department of Agriculture Economics, Sam Higgin Bottom University of Agriculture Science and Technology, Prayagraj, Uttar Pradesh, India

2,3,4 Assistant Professor, Department of Agriculture Economics, Sam Higgin Bottom University of Agriculture Science and Technology, Prayagraj, Uttar Pradesh, India

5 Assistant Professor, Department of Mathematics and Statistics, Sam Higgin Bottom University of Agriculture, Technology and Sciences, Prayagraj, Uttar Pradesh, India.

Abstract

The present study entitled " **STUDY ON MARKETING OF COMPLEX FERTILIZER (GROMOR 28-28-0) IN VIZIANAGARAM DISTRICT OF ANDHRA PRADESH** " was intended to examine the farmer marketing of complex fertilizer and analysis of factors influencing of the respondents towards GROMOR 28-28-0 and to find out the information about the source of GROMOR 28-28-0 product by respondents in Vizianagram district of Andhra Pradesh, constraints faced by farmers during buying fertilizers.

Presently NPK balance is precariously poised particularly in respect to K. Even after making allowance for possible K additions through natural sources, a deficit of 8 mt of K per annum may persist. This situation demands on evolving strategies and policies to boost K supplies. Therefore farmers' buying decision of fertilizers is very important for crop production. The present study has been taken up with this background. Though usage of fertilizer in agriculture cannot be completely removed, optimum usage of the same can be made practical. Farmers understanding on the optimum usage of fertilizer reduce the soil contamination, increase the yield and reduce the hazardous diseases.

Key Words: : Farmers, Fertilizers, Marketing of complex fertilizer, Paddy.

INTRODUCTION

In a densely populated country like India with long history of civilization, man has been exploiting the reserves of nutrients in soil from time immemorial. In 1951—52 the food grain production was merely 52 MT with the fertilizer consumption of only 70,000 t, whereas the food grain production has increased to an all-time high of 211.5 MT during 2001—02 with fertilizer consumption of about 17.5 MT to feed more than a billion. For the present level of production the estimated NPK removal is about 28 MT resulting in a net negative balance of about 10.5 MT. Organic manures and bio fertilizers contribute about 4.5 MT which means that about 6 MT negative balance has been replenished by soil. This is a serious soil health hazard. The Government of India has announced the target of doubling of food production within 10 years. It implies that for doubling the productivity, the nutrient removal could be more than double of the present level to about 56 MT, since nutrition requirement, for incremental production would be higher.

India is the third largest producer and consumer of fertilizers in the world. The total turnover of Indian fertilizer industry during 2000-01 was about 35,000 crores. The Indian fertilizer industry has been consistently meeting a substantial portion of the ever increasing demand of fertilizers. It started as a small industry with a capacity of 89,000 t of nitrogen and 28.000 t of P205 which has now grown to a capacity of 11.08 MT of nitrogen and 3.93 MT of P205 in '2000-01. At the same time the consumption increased from 0.065 MT (1951-52) to 17.5 MT (2001-02). India, however does not have any production capacity for potash and hence the requirement is met by imports.

In order to provide fertilizers to farmers at affordable prices, the fertilizer policy in India was based on state subsidy, where till 1992, production of N+P+K fertilizers was covered under Retention Price Scheme. The movement and distribution was also controlled by the Government under ECA allocation.

Coromandel Fertilizers Limited incorporated in 1964, was the result of the synergistic efforts of EID Parry India Limited, now belonging to the Rs 4200 crore (USES 435 million) Murugappa group, one of the leading business houses in India and two major US corporations — Cherry Chemical Company and International Minerals and Chemical Corporation (IMC). This brought to India world class technology, for the production of high analysis fertilizers. In 1995 Chervon Chemical Company disinvested their stake in favour of EID parry and IMC in end 1998. After effecting buy—back of 20% of CFL‘s total shares in which the promoters did not participate, the Group's stake has gone upto 78.59%. The Indian Financial Institutions hold about 7.59% equity, the remaining 14.07% being held by the public.

Complex Phosphatic fertilizers are manufactured at the company's integrated plant at Visakhapatnam in Andhra Pradesh using Rock phosphate imported from Africa, the Pacific and China. Sulphur is imported from Japan and the Middle East.

1. MATERIALS AND METHODS

2.1 Sample and sampling procedures

In the present study the sample were drawn through application of multi-stage sampling.

2.2 Selection of district

The study will be selected in Vizianagaram district of Andhra Pradesh. Vizianagaram district was purposively selected to study the market potential and buying behaviour of farmers towards fertilizers, as the district occupies due to a pride of place of consumption of fertilizers, and also area and production of paddy in the state of Andhra Pradesh is higher than other districts. Researcher hails from the area and had the familiarity with climatic conditions, local language and culture of the people, which could help in building good rapport with the respondents.

2.3 Selection of blocks and villages

A list of 34 blocks of Vizianagaram district along with the total area under paddy was procured from current official record available in the district agriculture officer, Vizianagaram. Two blocks namely Komarada and Parvathipuram was selected purposively based on the highest area under paddy cultivation. In the selected blocks, the list of villages out of which having maximum average of paddy was listed out of which maximum two villages from each block viz., Ulipiri, and Chollapadam from Komarada block. Venkampeta, and Narsipuram from Parvathipuram block was selected purposively.

2.4 Selection of respondents

A list of paddy growers of each selected village was prepared with the help of DAO, Vizianagaram. Thirty paddy growers were taken from each selected villages. Thus, a total number of 120 paddy growers were constituted as the sample for the study.

3. RESULTS AND DISCUSSION

3.1 Market share

The share of different complex fertilizers in terms of nutrients in Vizianagaram district was presented.

S. No.	Year	Quanity of complex fertilizer marketed in Komarada (Tonnes)	Quanity of complex fertilizer marketed in Parvathipuram (Tonnes)
1.	2014-15	20972	20250
2.	2015-16	22856	20456
3.	2016-17	20333	18320
4.	2017-18	21083	20112
5.	2018-19	19034	20112
6.	2019-20	20916	19991
7.	2020-21	21517	22918

The total complex fertilizer consumption in the year 2020-21 was 21517 tonnes in Komarada block of Vizianagaram. Over the period of seven years, there has been gradual increase in consumption of complex fertilizer for paddy crop. In 2020-21, the consumption of complex fertilizers increased to 22918 tonnes in Parvathipuram block of Vizianagaram district.

3.2 Market Potential

For estimation of market potential of fertilizer for paddy crop, recommended dose and area under paddy crop in particular block were required.

$$\textbf{Average Consumption of complex fertilizer} = \frac{\text{Total Consumption of complex fertilizer}}{\text{Total cultivated area}}$$

Here, Total Consumption & Total Area was according to the sample farmers in the survey

Market Potential of complex fertilizer = {Average Consumption of complex fertilizer}

X

{Average Cultivated area of region}

The block wise market potential of NPK nutrient for paddy crop has been given below

Table : Market Potential of complex fertilizer in the study area

S. No.	Name of the block	Recommended dose kg/ha	Area under Paddy(in ha.)	Market potential of complex fertilizers in Tonnes
1.	Komarada	120:60:40	10107	22235
2.	Pavathipuram	120:60:40	10413	22908
	Total		20520	45143

So, the estimated market potential for complex fertilizers for paddy crop in Komarada block was 22235 tonnes, and in Parvathipuram block was 22908 tonnes. Total estimated market potential of complex fertilizers (Tonnes) for Vizianagaram district was 45143 tonnes approximately for year 2021-22. The findings of the study was parallel to Sheeja (2018), Bal and Bal (2019) and Uma et.al (2020),

3.3 Market cost

The market price of different products of fertilizers, manufacturing by different companies were shown below.

Table: Market Cost of complex fertilizer in the study area

S. No.	Company name	Product	Brand name	Market cost	Per Unit
1.	Coromandal Fertilizer	NPK Complex	GROMOR 14:35:14	529.71	50 kg
			GROMOR Insta 20:20:00:13	430.49	50 Kg
			GROMOR 28:28:0	408.44	50 kg
2.	GSFC	Urea	Sardar Urea	353.58	50 Kg
		DAP	Sardar DAP	590.88	50 Kg
		Ammonium Sulphate	Sardar Ammonium sulphate	430.00	50 Kg
3.	NFL	Urea	Kisan Urea	353.58	50 kg
			Neem coated urea	366.25	50 Kg
4.	Chambal Fertilizer	Urea	Uttam veer Urea	253.58	50 kg
		Uttam neem coated urea	266.25	50 kg	
		DAP	Uttam DAP	490.88	50 Kg
		MoP	Uttam MoP	333.89	50 Kg
5.	Nagarjuna fertilizer	Urea	Nagarjuna Urea	353.58	50 Kg
		DAP	Nagarjuna DAP	590.88	50 Kg
		MoP	Nagarjuna MoP	333.90	50 Kg
6.	IPL	MoP	IPL Muriate of potash	333.90	50 kg
		DAP	IPL Diammonium phosphate	590.00	50 kg

Sources –Dealers/distributors

The table shows the market prices of different fertilizer products of the selected companies in Vizianagaram district. The market price is according to particular weight of the bag of the fertilizer products of the companies. It revealed from the table that the market price was very according to the company product. Although different company of fertilizer produces urea but they considered own brand name in the same way other same type of fertilizers also manufactured by different companies. Over all it could be concluded that there was less variation in the market price of same type of fertilizer product of different companies in the study area.

3.4 Market margin,

Market margin, and efficiency of complex fertilizers for Paddy crop

Table : Market margin and efficiency of the existing channel (Rs/Kg)

I	**Marketing margin**		
2.1	Producer	258.40	
2.2	i)Wholesaler	318.40	
	ii)Wholesaler	300.20	
2.3	Retailer	408.44	
II	**Total marketing margin**		
	i)Channel I	48.00	
	ii)Channel II	48.44	
	iii)Channel III	32.10	
	iv)Channel IV	32.10	
3	**Marketing efficiency**	**Acharya Method**	**Shepherd's Method**
	i)Channel I	08.80	0.982
	ii)Channel II	0.43	0.995

Source: Researcher's Calculation

Table, summarizes of all calculations for the existing channel, including total marketing costs, marketing margins, producer's share in consumer rupee, price spread, and marketing efficiency.

4.Conclusion

The emphasis in future programs should be focused on balanced application of macro, micro and secondary nutrients, fertilizer use efficiency, soil testing, IPNS, Natural Resource Management and Environment friendly practices for sustainable agriculture. The programs will have linkages with the sale of fertilizers particularly in

areas with low fertilizer consumption. Several problems were faced by the dealers with regard to fertilizer shortage and risky investments. This clearly indicates that there is immediate needs to provide them with sufficient quantity of fertilizers to encourage dealers to continue in business which in turn will help the dealers solve their problems. Farmers are not getting required quantities of fertilizer in right time. Government can take measures to set up new fertilizer plants in the state itself so that the farmer can get right quantity at right time at reasonable prices. The trend would be towards low analysis complex fertilizers. This would become a real challenge and it becomes necessary to popularize fertilizers based on per unit cost rather than per bag cost consideration. As the fertilizer prices would become prohibitive, there will be greater awareness about mode of application, method of application and use of optimum doses, resulting in economic and efficient use of crop nutrients by the farmers. The ability to increase the market share is also critically dependent on how accomplished a fertilizer manufacturer is in optimally stocking the distribution network. So the company must pay more attention on timely availability of products in all markets. The fertilizer promotion programs should be carried out and fertilizer use efficiency should be stressed in all communications to the farmers. Fertilizer use efficiency and balanced use of fertilizers are inter-dependent and considered to be the two sides of the same coin.

5. REFERENCE

- **Choudhury, B. K. and Ojha,G., 2019**, A Study of high yielding varieties programs with reference of hybrid maize in Saran district of Bihar. Agro-economics Res. Center, Vishwabharati, Shantinikeatan. (Mimeographed).
- **Gopal Swamy. (2013).** A study on Cooperative Marketing with Reference of Chhattisgarh MARKFED Limited. International Journal of Sales & Marketing Management Research and Development (IJSMMRD). 3(1), 35-44
- **Low, G. and Lamb, J., 2020,** The measurement and dimensionality of the brand associations. J. Product Brand Managt., 9 (6): 350-368.
- **Sharma and Tiwari (2011).** Performance of fertilizer Industry in India. Excel International Journal of Multidisciplinary Management Studies. 2(3) :233- 249.http://zenithresearch.org.in/
- **Yeledhalli, R. A., 2021,** Agricultural input marketing in Karnataka – A sectorial analysis. Ph.D. Thesis, Univ. Agric. Sci., Dharwad (India).