A Proposed Model for Agricultural Marketing in Odisha, India

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Abstract: Indian agriculture is known for its historic capacity and reliance on agricultural produce. Though, this sector has seen downs in the 1960s and then for a few years in the 1980s; at present it is one of the growing sectors in India. Thanks to the initiatives taken by the Central and the State Governments from time to time to motivate the farmers through various activities and policies. A few such initiatives are The Pradhan Mantri Fasal Bima Yojna (Corp insurance) in June 2016, Approval of Blue Revolution, and Government Investment to improve milk productivity (Rupees 221 Crores), Energy Efficient Irrigation Systems, Launch of Parikrama Krishi Vikas Yojna (to address critical importance of soil and water for improving agricultural production) at central level and the Kalia Yojna, Waiver of interest on crop loans, Minimum Support Price (MSP) at the state level. Despite such initiatives, Indian agriculture that contributed to 51% to the GDP in the 1950s presently stands at an all time low at 14% in the year 2018. The problem relating to the agricultural sector is not productivity, but it is the lack of interest and motivation on the part of farmers to cultivate due to insufficient and scarce incomes generated by cultivation.

This article suggests a model that could be used by the Government in the state of Odisha to motivate farmers produce more and at the same time help revenue generation and employment in the agricultural sector as well.

Key Words: Farming, Farmer Income, Employment, Extra Produce, Processed food, Food Processing Units, Wastage

I. INTRODUCTION

Odisha as a state has been well known for the production of Rice, Sugarcane, Wheat, Jowar, Maize, Coconut, Groundnut, etc; rice being the primary agricultural product. The produce of rice in the pre and early post independence in Odisha was the 3rd largest in India. But at present the state ranks 8th in terms of rice production in India. Similarly, there has been a substantial decrease in the production of all related agricultural products respectively, since independence.

This has been the case not only in Odisha but with most of the Indian states, except the states of Haryana, Punjab, Uttar Pradesh, Madhya Pradesh and Andhra Pradesh, where, there has been a continuous growth in the production of agricultural crops. Figure 1 depicts the production and yield rate of food grains in Orissa from 1950 to 2009 as evident from the Odisha Agricultural Statistics.

| Year  | Area ( in lakh ha.) | Production (in lakh MT) | Productivity (kgs/ha.) |
|-------|---------------------|-------------------------|------------------------|
|       | Cereals | Pulses | Total | Cereals | Pulses | Total | Cereals | Pulses | Total |
| 1950-51 | 40 | 4 | 44 | 21 | 2 | 24 | 510 | 520 | 546 |
| 1960-61 | 40 | 5 | 45 | 38 | 2 | 40 | 943 | 443 | 906 |
| 1970-71 | 49 | 8 | 57 | 44 | 5 | 49 | 898 | 552 | 847 |
| 1980-81 | 52 | 17 | 69 | 51 | 9 | 60 | 982 | 514 | 865 |
| 1990- 91 | 50 | 21 | 71 | 59 | 11 | 70 | 1181 | 551 | 992 |
| 1999- 98 | 49 | 16 | 65 | 58 | 6 | 64 | 1180 | 391 | 989 |
| 1999- 99 | 51 | 16 | 67 | 56 | 7 | 63 | 1108 | 403 | 937 |
| 2000- 01 | 49 | 14 | 63 | 50 | 5 | 55 | 1032 | 365 | 884 |
| 2001- 02 | 49 | 17 | 66 | 75 | 7 | 82 | 1526 | 400 | 1232 |
| 2002- 03 | 47 | 13 | 60 | 36 | 4 | 40 | 767 | 349 | 675 |
| 2003- 04 | 49 | 16 | 65 | 71 | 6 | 77 | 1444 | 379 | 1178 |
| 2004- 05 | 49 | 17 | 66 | 70 | 6 | 76 | 1414 | 378 | 1154 |
| 2005- 06 | 49 | 19 | 68 | 74 | 8 | 82 | 1513 | 422 | 1211 |
| 2006- 07 | 49 | 19 | 68 | 74 | 9 | 83 | 1520 | 444 | 1213 |
| 2007- 08 | 49 | 20 | 69 | 83 | 9 | 92 | 1702 | 458 | 1344 |
| 2008- 09 | 49 | 20 | 69 | 76 | 10 | 86 | 1556 | 497 | 1249 |

Figure 1: the area, production & yield rate of food grains since 1950-51

The problem does not seem to be production; it is perhaps the procurement and distribution of the produce that has resulted in the farmers being unhappy with the misery of bad returns from the market for their produce. Since the farmers do not get adequate returns on their hard labour and time invested on the fields for growing the crops, they seem to be disinterested in agriculture and hence there is a continuous movement of farmers from agriculture to the various sectors for jobs.

Let us analyze and find out how this problem can be sorted out for the mutual benefit of the farmers, government and the consumers of agricultural produce. The model proposed hereunder would help us achieve a four folded benefit through it. These benefits could be listed as:

a) Increasing Farmer Income
b) Uniform Price of each produce irrespective of the geography of production
c) Utilization of unsold or extra produce
d) Generating employment

Revised Manuscript Received on January 15, 2020

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II. INCREASING FARMER INCOME

What else other than a handsome return could motivate more and more farmers to concentrate on agriculture? As already discussed the government (both central and state) needs to be appreciated for efforts made in the recent years to facilitate better productivity of crops through provisions such as crop insurance, lowering the interest rates on crop loans, waivers on interest on loans for spoil crops, free supply of high Yield Seeds, Minimum Support Price, better irrigation facilities, better communication systems, farmer training and assistance centers, etc. Figure 2 shows the distribution of different agricultural crops grown in Odisha along its geographical landscape.

Let us take ITC’s E-Choupal as the base model. ITC entered the agriculture business in 1971 as part of its diversification initiative. It decided to enter the business of exporting food grains like feed ingredients, edible nuts, food grains, marine products and processed fruits. But in the process ITC faced great deal of challenges in the form of:

1. No direct control on the quality of products.
2. Blockage of market and price information by middlemen and other intermediaries.
3. Insufficient control on supply chain.
4. Lack of infrastructure for storage, handling and transport of produce.

These problems initiated the need for designing a procurement process that could help ITC to have complete control on all the above mentioned challenges. The resultant was the formation of E-Choupal, which was initiated by ITC’s International Business Division. This was the first time that illiterate farmers were introduced to e-commerce transactions, even though they previously lacked knowledge of Information Technology. ITC through E-Choupal started an information centre regarding crop demand, market prices, etc. IT tools were used to network villages and internet was used to share real-time information to the farmers. At the same time ITC dis-intermediated the intermediaries from flow of information and market signals. It had processing and collection centers (Hubs) and Sanchalaks (Conveners).

Such conveners were chosen from among the farmers and were trained through personal computers. Information shared with the farmers included daily mandi practices, global prices, weather forecasts, best practices for farming, water and soil test processes, etc. Farmers used to sell produce directly at the collection centers for cash, which resulted in realizing much better prices by the farmers than what they received from middlemen.
dalals and other intermediaries. The process collection of crops by ITC is depicted in Figure 3.

![Figure 4 - E-Choupal Supply Chain]

On the other hand ITC benefited from reduction of its sourcing costs and enhancing wider reach and networks. Due to huge success in this process extended the same to FMCG products such as packaged vegetable oil, salt, wheat flour and sugar. By the end of 2011, ITC was covering 40,000 villages in 10 states through 65,000 E-Choupals, and most importantly empowering 4 million farmers. In order to make the system more robust, ITC also introduced telephonic data and information centers. The supply chain functioning is depicted in Figure 5.

States such as Punjab, Haryana, Uttar Pradesh, Madhya Pradesh and Andhra Pradesh which have around 80% of the total number of E-Choupals, are the ones that are considered to be having increased productivity of food grains and at the same time an enormous increase of the standards of living of its farmers, due to the better price realization out of their produce.

If ITC being a private company could bring cheers to the farmers of 10 states, it is highly suggested that Government of Odisha should adopt a similar process if not the same, and bring in happiness and satisfaction to its farmers. But in the process the Government needs to take care for successful implementation of the programme by doing the following:

1. Educate the farmers
2. Train farmers to use the internet and telephones to gather information.
3. Facilitate corruption free collection centers.
4. Design a base price for mutual benefits
5. Direct intermediaries into other sectors
6. Help farmers with farming assistance

It is easier said than done. So, it is suggested to be pilot tested first at few places in the state and then on success implement it on a larger scale to help the farmers of Odisha grow.

III. UNIFORM PRICE

Since Government would collect crops from all corners of the state, it should do so by implementing uniformity of prices paid in cash to the farmers through the collection centers for similar crops of same quality for the same quantities. This would help the farmers feel satisfied by proper realization of prices for their produce and motivate them to produce even more in the future. To add to, the selling price of the produce after procurement, grading and packaging should be the same at all places within the state as well as outside the state. This would help a balanced demand and supply of all the farm produce of the state. The margins should be such that the cost of the entire system of collection, procurement and sales are covered from the margins received from sales. This will help the government remove the burden of the extra cost that would have been incurred otherwise.

IV. UTILIZATION OF UNSOLD OR EXTRA PRODUCE

It has been discussed in various articles and forums that the amount of grains wasted or dumped or even eaten away by pests and mice during storing in the godowns, due to enormous amounts of stocks or absence of demand, which can actually feed a state as big as Maharashtra for over a period of one month, to be precise. The government is already aware that Odisha does not produce all necessary crops or agricultural outputs used in households of Odisha on a day to day basis. Odisha purchases onion from Maharashtra and Potatoes from west Bengal for example. Instead of purchasing Potatoes and Onion from these two states, the government could think of barter (exchange); in which it could sell paddy to West Bengal and Maharashtra for Potatoes and Onion respectively. The only cost that would be incurred is transportation, which could again be shared between the states in business on mutual terms; hence, benefiting both states.
V. EMPLOYMENT GENERATION

Again, there are numerous examples of fruits and vegetables being thrown out or dumped due to non-selling and as wastage. These fruits and vegetables that are not sold can be utilized to produce pickles, jelly, sauce, cattle feed, etc. This could add to the revenues of the state through business from food Processing Units.

As part of startup India initiative the government can open up Food Processing Units around the periphery of local mandis, fruits and vegetable markets, godowns, etc. this could act as a potential area for unemployed people to join, learn, process, sell and finally earn a living from such units. Hence, this step would help reduce the ever growing problem of unemployment to some extent. Besides, in case the government proactively starts crop procurement and distribution, it can provide employment to the young unemployed mass by utilizing their services in the newly adopted sector of agricultural marketing. Figure 5 is a blue print of the agricultural model suggested for Odisha that could help enhancing farmer income, providing employment to the unemployed and help stabilization and standardization of prices.

VI. CONCLUSION

This model of crop utilization, procurement, distribution and employment if implemented through properly planned strategies, may be very successful to shape the future agricultural productivity and income from agriculture. Though it may face certain challenges to begin with, like-intermediary unrest, non-acceptance and agitation from certain farmers, possible corruption and malpractices by the representatives of the government in the network, etc; but in the long run this would definitely provide motivation to the farmers to continue with the age old practice of cultivation and increase their income levels and standard of living and at the same time allow the state of Odisha to be self sufficient in terms of vegetables, cereals, pulses, fruits and nuts, oil seeds and much more.

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