

A STUDY ON AGRICULTURAL MARKETING WITH SPECIAL REFERENCE TO CHHATTISGARH STATE

A. K. MISHRA¹ & PARIDHI BHANDARI²

¹Associate Professor & Head, Department of Commerce, St. Thomas College, Ruabandha, Bhilai, Chhattisgarh, India

²Assistant Professor, Department of Commerce, G. D. Rungta College of Science & Technology,
Bhilai, Chhattisgarh, India

ABSTRACT

Indian economy is primarily an agricultural economy. The very existence of economic activities of the entire people is bound up with the state and health of this sector. Chhattisgarh is the 26th state of India. The total geographical area of Chhattisgarh is 137.9 lakh hac. Out of which cultivated area is 46.77 lakh hac[1]. Agriculture is the primary occupation of the people of Chhattisgarh. According to a government estimate, net sown area of the state is 4.828 million hectares and the gross sown area is 5.788 million hectares. About 80% of the population of the state is rural and the main livelihood of the villagers is agriculture and agriculture-based small industry. In the state out of 32.5 Lakh farmers households, 76% comes under small & marginal class. At present, 29% of Land is having irrigation facility considering all source of irrigation, out of all irrigation facility available, highest 66% of land are irrigated from reservoirs and canals, 55% arable land is having less water retention power for which second crop is not possible from this land without irrigation facility. Agriculture production had recorded a minus growth in 2011-12. The survey report said 6.88 Million Tonnes (MT) of foodgrains was produced in 2011-12 that was less by two per cent as compared to previous year's production.[2] An improvement in agriculture and its allied sectors would help raise the income levels of the people dependent on this sector in Chhattisgarh. This paper is concentrating on the problems agriculture is facing in Chhattisgarh and some suggestions as solutions of the problems.

KEYWORDS: Agricultural Marketing, GDP (Gross Domestic Product), MANREGA (Mahatma Gandhi National Rural Employment Guarantee Act), Co-Operative Marketing, Pisciculture

INTRODUCTION

Indian economy is primarily an agricultural economy. The very existence of economic activities of the entire people is bound up with the state and health of this sector. Agriculture is an important sector of Indian economy as it contributes about 17% to the total GDP and provides employment to over 60% of the population. Agriculture is a critical sector of the Indian economy. Though its contribution to the overall Gross Domestic Product (GDP) of the country has fallen from about 30 percent in 1990-91 to less than 15 percent in 2011-12, a trend that is expected in the development process of any economy, agriculture yet forms the backbone of development.[3] An average Indian still spends almost half of his/her total expenditure on food, while roughly half of India's work force is still engaged in agriculture for its livelihood. Being both a source of livelihood and food security for a vast majority of low income, poor and vulnerable sections of society, its performance assumes greater significance in view of the proposed National Food Security Bill and the ongoing Mahatma Gandhi National Rural Employment Guarantee Act (MANREGA) scheme. In India Agriculture was practiced formerly on a subsistence basis; the villages were self sufficient, people exchanged their goods, and services within the village on a barter basis. With the development of means of transport and storage facilities, agriculture has become commercial in character; the farmer grows those crops that fetch a better price. Marketing of agricultural produce

is considered as an integral part of agriculture, since an agriculturist is encouraged to make more investment and to increase production. Thus there is an increasing awareness that it is not enough to produce a crop or animal product; it must be marketed as well.

Agricultural marketing involves in its simplest form the buying and selling of agricultural produce. This definition of agricultural marketing may be accepted in olden days, when the village economy was more or less self-sufficient, when the marketing of agricultural produce presented no difficulty, as the farmer sold his produce directly to the consumer on a cash or barter basis. But, in modern times, marketing of agricultural produce is different from that of olden days. In modern marketing, agricultural produce has to undergo a series of transfers or exchanges from one hand to another before it finally reaches the consumer. The marketing of agricultural produce was no difficulty in the earlier days as the farmers sold their produce to the consumer on a cash or barter basis. But today the scenario has changed completely. The selling of the produce is a function of different factors like its demand, price and the availability of post harvest infrastructure. If the produce is in demand and farmer is getting a remunerative price he will immediately go for selling of the produce, but if the conditions are otherwise the farmers will wait for some time before the price picks up. Agricultural marketing has changed conspicuously during the last fifty years. The main reasons for this change are increased marketable surplus, increase in urbanization and income levels and consequent changes in the pattern of demand for marketing services, increase in linkages with distant and overseas markets, and changes in the form and degree of government intervention.[4]

Agriculture Marketing in Chhattisgarh

Agriculture is the primary occupation of the people of Chhattisgarh. According to a government estimate, net sown area of the state is 4.828 million hectares and the gross sown area is 5.788 million hectares. About 80% of the population of the state is rural and the main livelihood of the villagers is agriculture and agriculture-based small industry. The majority of the farmers are still practicing the traditional methods of cultivation, resulting in low growth rates and productivity. The farmers have to be made aware of modern technologies suitable to their holdings. Agricultural products. After the formation of the state, highest priority is being given to Agriculture development. The sustained effort of the state govt. towards agriculture oriented plan/schemes resulted in the higher pace of growth in the agriculture. The state govt. has been making effective and continuous stride for the economic development of the ferment. After the formation of the state, highest priority is being given to Agriculture development. The sustained effort of the state govt. towards agriculture oriented plan/schemes resulted in the higher pace of growth in the agriculture. The state govt. has been making effective and continuous stride for the economic development of the ferment. In Chhattisgarh agricultural marketing is done through different sources like sale to money lenders, through haat and bazaar, through mandis, through co-operative societies and a large part is sold through the government's minimum support price scheme.

Table 1: Crop Production (Kharif) (Unit – Thousand m.ton)

Sr.No	Crop	2010-11	2011-12	Growth/Decline%	2012-13 Target
1	Paddy	6159.21	6095.45	-1	6479.99
2	Maize	324.65	322.07	-1	342.16
3	Tur	85.74	85.64	0	99.00
4	Moong	9.67	8.56	-11	9.88
5	Urad	73.51	77.27	5	81.94
6	Groundnut	79.09	68.29	-14	81.00
7	Soyabean	174.35	137.35	-21	190.00
8	RamTil	28.09	25.18	-10	25.76
	Grant Total	6934.31	6819.81	2	7309.73

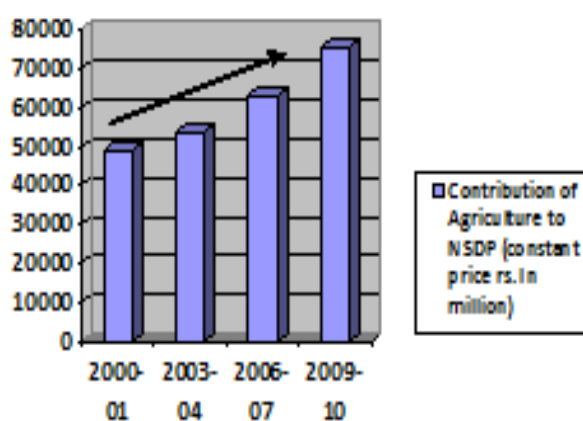
Table 2: Crop Production (Rabi) (Unit – Thousand m.ton)

Sr.No	Crop	2010-11	2011-12	Growth/Decline %	2012-13 Target
1	Wheat	215.91	233.50	8	252.98
2	Maize	34.29	50.18	46	57.75
3	Paddy	640.52	668.23	4	691.13
4	Gram	341.26	369.40	8	410.40
5	Peas	25.30	26.45	5	29.12
6	Tiwra	231.19	238.40	3	257.18
7	RaiSarso	81.96	84.90	4	90.68
8	Alsi	33.35	33.74	1	35.25
	Grant Total	1603.78	1704.8	6	1824.49

Data Source: Government of Chhattisgarh Economic Survey Year 2012-2013 [5]

The main crops are rice, maize *kodo-kutki* and other small millets and pulses (*tuar* and *kulthi*); oilseeds, such as groundnuts (peanuts), soybeans¹ and sunflowers, are also grown. In the mid-1990s, most of Chhattisgarh was still a monocrop belt. Only one-fourth to one-fifth of the sown area was double-cropped. When a very substantial portion of the population is dependent on agriculture, a situation where nearly 80% of a state's area is covered only by one crop, immediate attention to turn them into double crop areas is needed. Also, very few cash crops are grown in Chhattisgarh, so there is a need to diversify the agriculture produce towards oilseeds and other cash crops. Chhattisgarh is also called the "rice bowl of central India".

Providing adequate knowledge to the farmers is essential for better implementation of the agricultural development plans and to improve the productivity. Considering this and a very limited irrigated area, the productivity of not only rice but also other crops is low, hence the farmers are unable to obtain economic benefits from agriculture and it has remained as subsistence agriculture till now. It is thus vital to the economy of the State, and any initiatives undertaken in this sector would have a lasting impact on the economy. Chhattisgarh has sufficient water resources, but this resource largely remains untapped. An improvement in agriculture and its allied sectors would help raise the income levels of the people dependent on this sector. This would thus create a large market within the State that would spur and sustain the economic growth in other sectors.[6]

**Figure 1**

In 2000-01 contribution of agriculture to NSDP was 48695, in 2003-04 it was 53467, in 2006-07 it was 63079 and in 2009-10 the contribution to NSDP was 75128(constant price Rs. in Million) In order to improve the fortunes of agriculture and allied sectors, the State has set the following targets for itself:

- Reorient the current cropping pattern in the State.
- Increase the contribution of agriculture to the State NSDP by over 50% over the next 10 years.

- Increased yield in line with the increase in cropping intensity.
- Move from single cropping to multiple cropping with focus on cash crops.
- Greater emphasis on development of the allied sectors, especially animal husbandry.

Current Major Problems in Agriculture

In order to meet these targets, the State has also prepared a time bound action plan. This action plan is based on a comprehensive understanding and analysis of the current situation captured in an Issue – Root Cause – Impact analysis presented in Exhibit V.3 overleaf. The illustration highlights the present situation of the agricultural sector.

- **Low Productivity of Land under Cultivation** – Agricultural yield in Chhattisgarh is lower than the all India figures and compares poorly with states like Punjab. The low level of agricultural produce negatively impacts the contribution of the agricultural sector towards the State's economy. Currently, farming techniques prevalent in the region are outdated. Technology, best practices, better implements, etc. have yet to change the lives of most farmers in the State.
- **Complete Dependence on Monsoons** – The limited irrigation network in the State has made the farmers completely dependent on rainfall. The vagaries of nature coupled with an ignorance of modern weather tracking techniques have culminated in the farmers being left to the mercy of nature. Further, since most of the farmers currently follow a single crop pattern, total dependence on the monsoons threatens productivity and as a result, their economic situation. Low number of irrigation pump sets in the State further compounds the problem. The regular occurrence of drought in the rice bowl of India is a serious concern for the State. It has already started a new scheme called "Indira Gaon Ganga Yojana", to provide assured water supply to every village by pumping up the available ground water and augmenting traditional water resources.
- **Low Intensity of Cropping** – The cropping intensity in the State is on the lower side. Considering that the cropping intensity of Punjab is 183% as compared to that of Chhattisgarh's 117%, it is evident that the State would have to make a concerted effort to increase the same.
- **Inadequate Market Information** – Most of the farmers of Chhattisgarh are illiterate. Because of this problem the farmers don't understand the complicated market and price strategies. And they accept whatever price the dealer or broker tells them of their product. Today government of Chhattisgarh is using internet, news papers, radio, cell phone message, television as medium of spreading information related to every aspect of agriculture. But because of lack of knowledge and illiteracy farmers of Chhattisgarh get inadequate information.[7]
- **Lack of Proper Storing Facility** – Inadequate storage arrangements are the cause of heavy losses to farmers. This results in serious wastage of agricultural produce and increased price.

Action Plan for Improvement in the Status of Chhattisgarh Agriculture

As already discussed, in order to meet the targets and address the issues facing this sector, the State has prepared an action plan which is explained below: Improving productivity through extension services About 30% of the farmers own 70% of the agricultural and the State would immediately focus on them to maximize the impact of its schemes. In this regard the State would:

Provide Access to Information

Information would be the most precious commodity in the years to come, more so in a State dependent on a single crop. It is essential to provide increased access to market information, insect and weather forecasts, latest soil management information, post-harvest technology with technical inputs, competitively priced farm machinery, seed development and production, and funds for farm animal breeding. This would require capacity building of Directorate of Agriculture and institutions such as Mandi Boards, etc. The State would attempt to match the success of a large country like China, in using extension programs to demonstrate new technologies and methods to the farmers.

Agriculture Biotechnology

Modern biotechnology helps create combinations of genes to emphasize certain traits. Various techniques like animal vaccine production, pest control etc., are already in use. The judicious use of the various technologies available would be an effective means to the end of maximizing productivity. For instance, the use of biotechnology to develop plants that are inherently more pest resistant would enable the farmers to reduce the use of chemicals and contribute in their own way to the global fight against environmental degradation. In addition, bio-engineered crops are being designed to increase yields. Israel, remains the leader as far as agricultural biotechnology is concerned and is spawning radical business models on the back of original research in genome technology. Non-government spending on R&D in Israel as a percentage of its GDP is also among the highest in the world at 2.6% (Japan is the leader with 3%). Given the large share of agriculture in the domestic product of the state and the significant forest cover, the Government will promote Biotechnology as a service industry to further enhance the potential of the State. Government will encourage research organizations, service providers as well as companies involved in commercial production of these new products. Raipur will be promoted as the center for Biotechnology development for the state given the existence of Indira Gandhi Krishi Vishva Vidyalaya, which would provide the necessary trained workforce. It would cater to the core infrastructure needs of individual enterprises, which develop and commercialize products and patents.

Education and Training, Research and Development

The presence of institutions concentrating on the dissemination of agriculture focused education would be a foundation upon which the State can capitalize its strengths in the primary sector. The State has already decided to set up three agriculture colleges and sixteen agricultural polytechnics during 2001-02. The State would also introduce various vocational courses to ensure that the farmers are capable of repairing and maintaining their own implements, and are in a position to make an educated and need based choice regarding purchase of new equipment. The industry-education linkage would be strengthened to benefit the farmer as well as further develop agricultural education in the State. The farmers would benefit monetarily from training with an industry focus. The State would also explore the possibilities of introducing agriculture-based courses in the school curriculum to disseminate information on modern farming techniques. Training landless laborers would equip them with professional skills leading to their empowerment as well as an increase in the yield of land they work on. The State would invest a substantial amount of capital towards researching new methods and techniques, keeping in mind the local needs and environment.

Improving Physical Infrastructure Pertaining to the Irrigation System, Transportation and Cold Storage Irrigation and Water Management

In a State with poor irrigation network, water conservation and optimum usage techniques are vital. Watershed development and rainwater conservation are important factors contributing to the increase in agricultural output. With water table levels going down in many places, awareness of the above assumes significance. With the development of

a well-designed canal network complemented by a system of dams, the State would be able to move towards a multi-cropping system eventually. The relevance and utility of check dams would also be explored, to provide solace to a large spectrum of farmers at a considerably reduced cost. The low level of created irrigation potential in the State is a cause of serious concern. Water available in the State currently can be successfully harnessed to irrigate percent of the cropped area. The actual irrigation potential that has been created covers just about 23 percent of the net sown area, against which the actual utilization is only 16 percent. The irrigation management experiment in Indonesia is based on the participatory model. Participatory programs enable changes like more equitable block-level water distribution, quality and appropriateness of construction, etc. It has resulted in improvements in planning operations, optimization of resources and local cost sharing. Since it is an interactive process, the farmers have a stake in the outcome. For example, the laborers of the Berla sub-division of Durg district have set a precedent by contributing a part of their income to help dig four tube-wells, consequently raising the water level. This is a part of the works being undertaken under the Rajiv Gandhi Watershed Mission program me.

Transportation and Storage Facilities

Efficient transportation and storage systems are important to a State focusing on the primary sector. The ease of transfer of goods from the area of production to the place of consumption would determine its final value. In the absence of good storage systems, the produce may be unfit for consumption thus negating the production efforts. Sanitation levels and the method of cold storage would be monitored periodically. The network of warehouses across the State would be scientifically mapped based on production and marketing centers in the state to enable the optimum utilization of the existing as well as the establishment of new ones if needed. Insurance facility to the farmers is also very essential in transportation and storage. Shivraj S Thangadagi, state minister for agricultural marketing and sugar, said the government plans to increase farmers' insurance and provide loans for them through agriculture produce marketing companies (APMC).

Encouraging Contract and Corporate Farming

The introduction of corporate and contract farming in the state, would be a step towards making farming more professional and organised. It would also be an indication that the State is willing to move ahead with the changing times. The new systems of organising labour and small to marginal farmers would help in improving productivity. Along with the professionalism that such practices breed, the farmers would also be exposed to the successes and failures of new technologies. Corporate farming would involve the interaction of different sets of people all working towards the goal of maximising the yield from the land. Contract farming on the other hand would enable the landless and small farmers to sustain their livelihood, at the same time drawing upon local know-how to maximise produce. Encouraging crop rotation New-cropping techniques – The low intensity of cropping in the State could have a serious impact on the economy of the State owing to the large number of people engaged in agriculture or related practices. The State would explore innovative methods of cropping techniques viz. breeding of crop varieties that can withstand adverse conditions like drought resistant sorghums and millets, and soil nutrient cycling through crop rotation.

Also care would be taken to implement integrated crop management strategies to control pests and diseases and maintain soil fertility. The State would also pay special attention to upgrading the existing post harvest practices. For example, for thrashing paddy, bullock drawn stone rollers are still in use. It has been estimated that in rice, the post harvest losses account for about 20% of the total production. The need for applying relevant technology would be addressed so as to maximise the benefit of the produce. The State would also take steps to prevent the common and basic

problem of open grazing. Most of the damage done to standing crops is due to the ineffective management of cattle. A clear demarcation of grazing land would also be effective in safeguarding the crops.

Encouraging Allied Sectors

The allied sectors of horticulture, floriculture, sericulture, pisciculture, poultry farming and dairy products constitute an attractive option to develop the allied sector. This would serve as an effective source of income, without shifting the focus from the primary occupation. The allied sector has been developed in many countries to strengthen the rural economy. For example, the British government's long-term policy to promote the allied sector is to secure a more competitive and sustainable agricultural industry with a strong market orientation. In keeping with the above, the State would encourage and support farmers to develop sustainable business enterprises contributing to the rural economy and environment. Intensive pisciculture techniques like pond cultivation as well as re-circulation of water would be employed to develop this sector in the State. Intensive pisciculture has been practiced in canals, ditches, abandoned mines and quarries, etc., the world over. Success has been reported from China. Israel and Egypt among others are actively exploring new avenues. The State would explore the option of setting up herbal villages in suitable locations. It would be a feasible option due to the increase in demand for herbal derivatives in the manufacture of cosmetics, skin care products, protein supporting food products. The State would also encourage allied activities like agro-processing, cattle rearing, mushroom farming, bee keeping, etc. However, the potential of dairy products cannot be realised without a substantial amount of investment to improve the cattle breed as well as the quality of cattle fodder. Since the climate in the State is ideally suited for promoting horticulture on a large scale, a horticulture master plan has already been prepared. Implementation of the master plan would provide additional income to 2.5 million people in the State, for which the proposal worth Rs 2450 million has already been sent to the Union Government. The region is suited to the growth of mango, banana, guava, papaya, custard apple, pomegranate, tomato, brinjal, okra, cabbage, cauliflower, potato, leafy vegetables, etc. Since mangoes grown in the region tend to mature 2-3 weeks earlier than in Northern India, there exists a tremendous potential in using this advantage to gain market share. Strengthening the supplementary network.

Markets for the Produce

Chhattisgarh was facing the problem of direct marketing of agricultural products. As solution of this problem the State would improve the existing infrastructure of 'haats' and 'mandis'. Conglomerations of well planned trading spots all over the State would enable farmers across the spectrum to have access to an organised market. This will obtain the best market price for their produce. The long distances that farmers have to traverse to sell their produce would also be shortened resulting in a better price. The security of obtaining a fair market driven price for the produce would also act as an incentive to follow better practices.

Credit Facilities

Farmers would be supported by credit schemes initiated by the government. There is a provision of providing krishi creditcard to near about 75% farmers in 12th five year plan.[8] Providing tailor-made agriculture credit policies would give a choice to every farmer in the State. A free and fair market would ensure competitive pricing and an incentive to improve the quality and quantity of the yield. The Minimum Support Price offered by the government would be security for the farmers, and the potential to gain a better price would drive farmers to employ better farming practices.

Institutional Mechanisms

The State would strive to position Chhattisgarh as a potential leader in the primary sector. The orientation of the

target markets would be moving outwards after the initial consolidation. Institutionalized attention to this would enable the setting up of marketing bodies, agro-finance institutions, and the promotion of wasteland development and agro/ food based industries. The State would take steps to integrate the working of the various bodies in the sector to achieve

CONCLUSIONS

Many people in Chhattisgarh state to a great extent depend on agriculture for their living. Agriculture income is having large contribution in the Chhattisgarh states total income. But because of some problems as mentioned above Chhattisgarh state is not getting the speed of progress which it should get. By spreading awareness among the farmers, giving importance to education of every age group, technological advancement, credit facilities suitable for farmers, proper arrangements of irrigation etc. Chhattisgarh state can get a respectable position in Indian economy.

REFERENCES

1. http://agridept.cg.gov.in/agriculture/intro_of_agri.htm.
2. http://www.business-standard.com/article/economy-policy/chhattisgarh-s-growth-at-8-57-survey-113022300028_1.html.
3. <http://pib.nic.in/archieve/others/2012/mar/d2012031302.pdf>.
4. Acharya S. S., Agricultural Marketing and Rural Credit for Strengthening Indian Agriculture, Asian Development Bank India Resident Mission (INRM) 4 San Martin Marg Chanakyapuri New Delhi 110021, 2006.
5. Government of Chhattisgarh Economic Survey Year 2012-2013.
6. <http://chhattisgarh.nic.in/vision/new/chp%205%20%20unlocking%20natural%20wealth.pdf>.
7. Singh Hardeep, Goel Manoj and, Singhal Amit, Challenges in Rural & Agriculture Market, VSRD-IJBMR, Vol. 2 (6), 2012, 299-304.
8. Chhattisgarh rajya krishi niti 2012.