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Marketing Management of Crops and Sustainability of agriculture in Narmada Basin of Madhya Pradesh: A Geographical Study

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ABSTRACT

Agriculture is an essential occupation for survive life of people of any country it is also an important occupation of the study area-Narmada Basin in Madhya Pradesh. It is covered 24 districts of Madhya Pradesh. The aim to present paper is to analysis the method of marketing of crops and its impact on economic development in study area. In this paper, primary and secondary sources of data have been applied.

The aim of presented paper is to assess the impact of marketing system on the financial condition of farmers and to review the impact on sustainability of agriculture. The study revealed that the farmers were actively engaged in various activities which enhanced their agricultural knowledge and skills and also developed their critical thinking abilities enabling them to analyze complex issues related to sustainable agriculture.

Keywords: Marketing Management, Agricultural Systems, Cropping Pattern, Conventional Agriculture, Sustainable agriculture.

Introduction:

Any work can recognize as occupation by its marketing value. Marketing management of any crop plays an important role in economic development. Well marketing management can be the key point of sustainability of agriculture. This is found that the main agricultural systems of Narmada Basin of Madhya Pradesh are subsistence, intensive and commercial plantation. In another way conventional agriculture and Sustainable Agricultural both methods are prevalent here. Conventional agricultural method is a form of method which farmers use chemical fertilizers and other synthetics for heaving more production. Sustainable agriculture is a form of agriculture that aims to protect so many factors of environment like soil, water, air and forest. Modern mechanism is playing an important role in agricultural activity in study area and they also play an important role in sustainability of agriculture.

Methodology

In this research paper primary and secondary sources have been used for data collection. Secondary sources, data are collected from IPT report,[1] NMSA 2[2], District Handbook and from related government

[1] Indian Independent Peoples Tribunal Report on SSP, Canals of Indira Sagar, Omkareshwar and Jobat Project

Departments, published research papers, books and official government sites.

Objectives

- To study the cropping pattern of study Area.
- To review the Marketing management of crops in study area.
- To assess the impact of marketing management of crops on sustainability of agriculture in study area.
- To examine the overall impact of marketing management on the financial condition of farmer.

Study Area: In this paper The Narmada Basin of Madhya Pradesh has been taken as Study Area. It is lying between $21^0$20' north to $23^0$45' N and latitude $72^0$32' E to $74^0$21 ' E. Total geographical area of the basin in Madhya Pradesh is 78155.97 Sq. Kilometer. 24 district of Madhya Pradesh contribute its deferent percentage of geographical area under Narmada basin. such districts whose contributed more then 15 % of geographical area under Narmada Basin are included in study. Anuppur contribute only 13% of geographical area under the basin but it has been taken under the list of studding and surveying districts, because it is an origin place of river Narmada. Nearly 57 % of area is found under Narmada Basin out of total geographical area of all district included in the basin. (Table no. 1) The Narmada is the fifth largest river of Indian subcontinent**.** in fig. 2 it is reveals that it is divided in to three sub region like 1. Upper Narmada Basin 2. Middle Narmada Basin and 3. Lower Narmada Basin. It flows through the Madhya Pradesh (1077km) in Maharashtra (74km) (35km) border between Madhya Pradesh to Maharashtra and (39km) between Madhya Pradesh and Gujarat and(161km) in Gujarat. Madhya Pradesh comprises upper, middle and some part of lower Narmada basin.

Material & Discussions

Cropping Pattern: Cropping pattern is the key of sustainability, because every crop needs deferent types of soil, nutrient, and quantity of water. If cropping pattern is accordingly there would no need to use any other artificial fertilizers, compost etc. Basin has seasonal cropping pattern with 3 major crops seasons like- Kharif, Rabi and Zaaid, these all pattern of cropping grown in the basin with some variation in space and time.

Kharif season start with the onset monsoons and continue till the beginning of winter. Major crops of this season are rice, maize , jowar, bajara, Kodo Kutki, moong, urad, soyabean and castor. *Rabi* season start at the beginning of winter and continue till the end of winter or beginning of summer. Major crops of this season are wheat, barley, gram, masur (lentil), mustard and oilseed.*Zaaid* is summer cropping season in which vegetable and fruits are grown. Main characteristics of this cropping season are, these are grown only those area where the personal irrigation facilities are available because in summer season all the source of irrigation like ponds, canal, and other source of irrigation get dried.

Trough the table no. 2 it may be observed that study area has three types of seasons - rabi, Kharif and Zaaid. This is the main cropping pattern of study area. According to the table it may be cleared that maximum duration have been taken by sugarcane crop till 18 months, while most of the crops have a lifespan of 6 to 8 months. Each and every place changes the cropping pattern according to these seasons.

Mixed Cropping or Intercropping Pattern: Mixed cropping is the method for growing of two or more crops simultaneously on the same piece of land. Either it is sown or after the seeds of the crops

[2] National Mission for Sustainable Agriculture

intended to be grown mixed or sowing alternate rows in various replacement ratios. This may or may not have distinct row arrangement and the mixed plant community faces inter and intra row competition with a different type of plant.

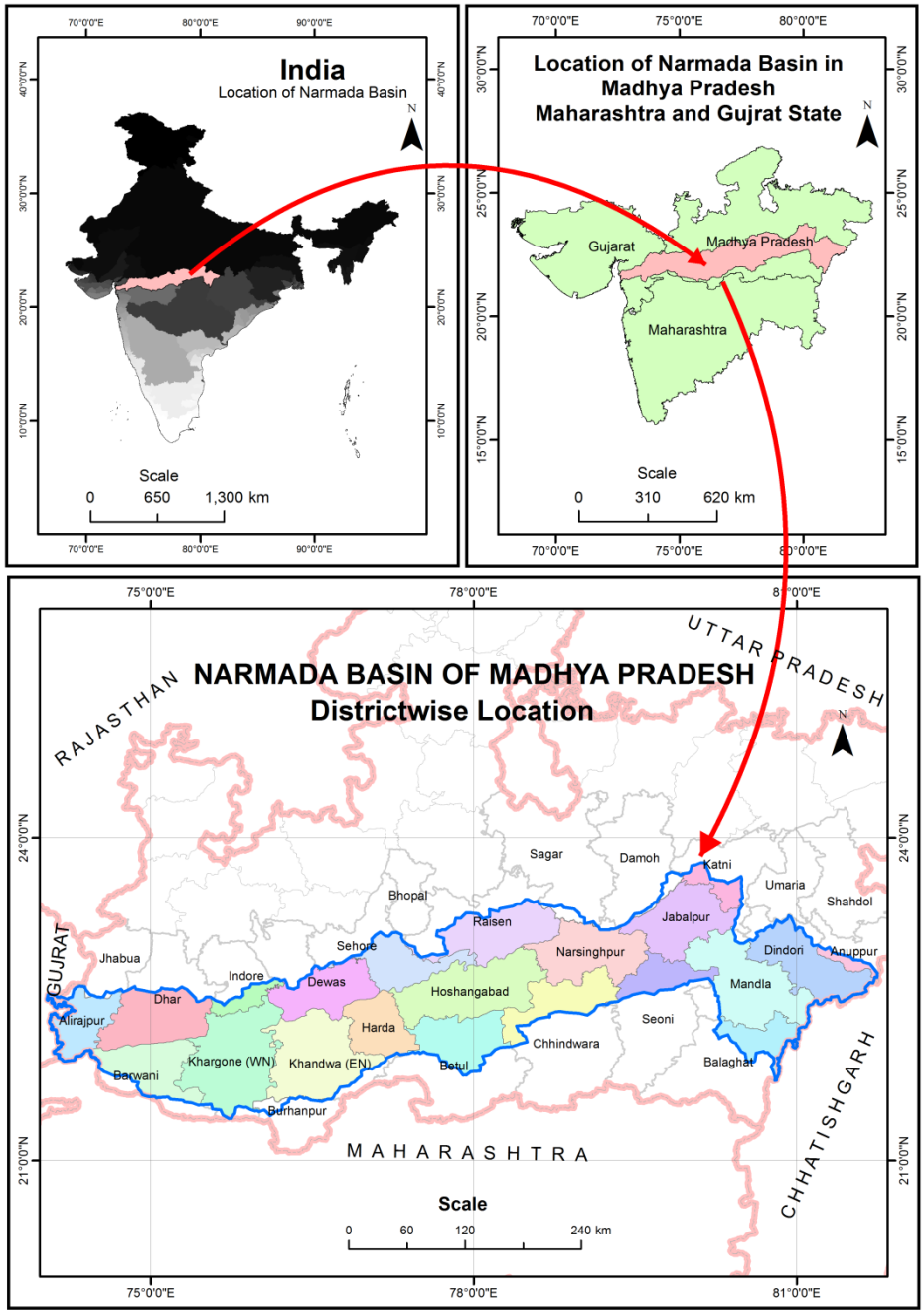


Table no-2 may clear that study area has well planed mixed cropping or intercropping pattern. It has been observed that mustard is such a crop that can be grown with many crops. Also vegetables are grown along with almost all types of crops.

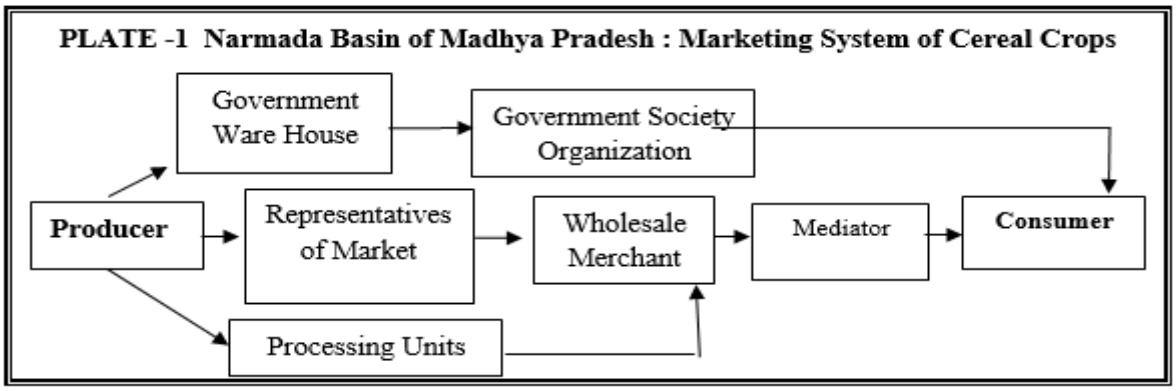
The basic objective in mixed cropping is minimization of risk and insurance against crop failure due to aberrant weather conditions. In inter-cropping systems, pressure of plant and density per unit is more than sole cropping system, while in mixed cropping the plant pressure is generally equal to sole cropping and in some cases it may even be less than sole cropping system.

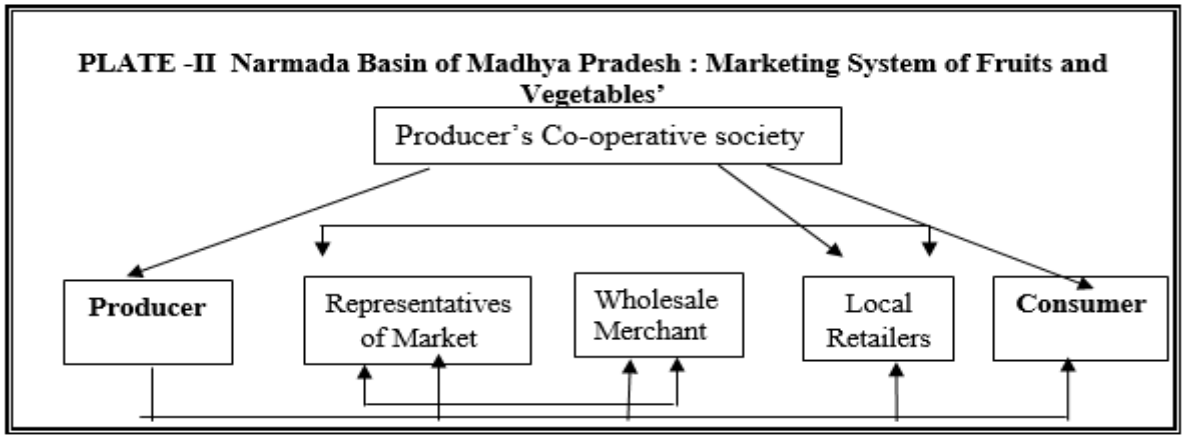
Marketing Management:

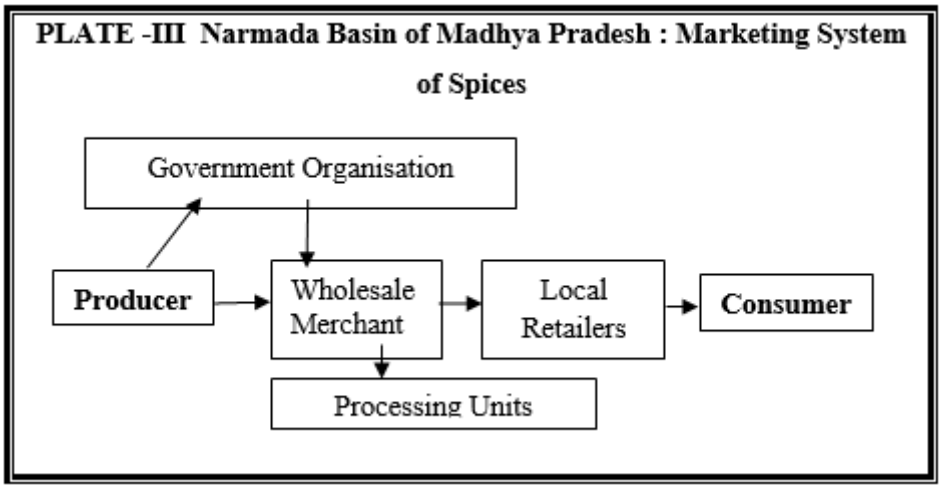
Efficient market management is also a part of sustainable agriculture, so it has been included in the study. The accessibility to the market is a major consideration in the decision making of the farmer. So now an attention must be pay to the marketing system of the study area. Some cereal crops of the region have national market like Wheat and Rice because these are convenient to handle even though these are bulky commodity. The size of market may be an important factor because a market may encourage transport and handling innovation together with economic scale (Shafi 2010). Marketing and storage facilities are crucial for successful cultivation. A good and nearby market serves the formers get remunerate price for their produce. Proper storage facility is also not sufficient in the region. Marketing system of Study region is divided according to crops –

Marketing Systems of Cereal Crops :- The marketing system of cereal crop is described with plate - 1 in the diagram it is cleared that there is too long chain between producer and consumer. Most of the factors affecting the price of crops, like storage of crops, transportation cost, time spend in selling of produce, quality of produce, demand of produce, etc. if transportation cost is more than cost of crops so villagers sell their production to the Ex-crops producer or representatives of market then they sell it to wholesaler or mediator then, finally production able to reach to the consumer. This type of chain is found with small and marginal farmers. Large farmers have the capacity to stock their production in ware houses so they sell it in high return. Medium and large farmers are selling their production in government organization and other processing units. Chief minister of Madhya Pradesh has recently announced sweeping reform to the Agriculture

Produce Marketing Committee (APMC) in this marketing structure farmers are allow to sell their production to any individuals or entity willing to bay them







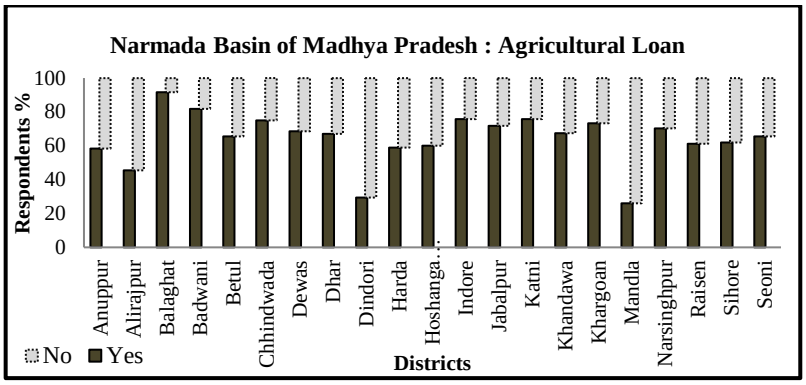
Marketing Systems of Fruits and Vegetables :- Plate - 2 presents the marketing of fruits and vegetables are depend on demand and supply theory, because these type of products soon starts to rot and requires preservation to stock. Due to less preservation system farmers want to sell it in the market soon. they sell their production mostly in local market wholesalers or representatives of market. Large farmers sell their production to producer's co-operative society.

Marketing System of Spices:- Marketing system of spices is presented in the Plate – 3. Marketing of these products chain between producers of consumer is sorter then other. So the cost of crop is also average. Farmers sell their production to the government organization and wholesaler then it is transferred to the local retailers with add-on price. Then it is reached to consumer.

Prices / backward and forward linkages : All types of oilseeds like Groundnut, Soybean, Niger, and castor are covered under Minimum Support Price (MSP), which is announced well before the harvesting of crop. National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED) is the Nodal agency to undertake procurement of soybean under Price Support Scheme (PSS). The price of the crops never falls below MSP mainly because of large demand of raw material by Solvent Extraction. If we discuss about the main oilseed like soybean, so Plants and global completion for export of soybean de-oiled cakes, Occupies 2nd position after groundnut as far as exports of oilseeds are concerned.

Agricultural Credit : In total flow of credit, the share of crop loan was found more as compared to term loan. The commercial banks, district cooperative banks and regional rural banks played an important role in disbursement of total agricultural credit from different institutional sources in the Study area. Madhya Pradesh is the first state in India to make available credit to farmers at 0 % interest by cooperative bank in rural area. And according to central bank of India so many scheme are running to the farmers for better agriculture and reduce agricultural problems. KCC is very famous scheme in study area.

Graph no.1



Credit system is totally based on awareness and education also. It may be cleared through the table 3 that farmers of the Basin are interested to have loan from government or non government sources. Mainly farmers take loan from bank by so many schemes given in the table. It has been seen by field survey that most of the farmers have loan from government or rural bank through KCC or NABARD. It is cleared by the above graph that more than 60% of Farmers who are having this type of benefits found in Balaghat, Indore and Jabalpur district. While Mandla and Dindori district has less than 30% farmers. It means hilly regions of the basin are not enough aware with these types of benefits. Overall 66.42% respondents are benefitted with it and 33.57% respondents are haven't perhaps lack of awareness or illiteracy.

Agriculture labour and wage rates : In primary survey it is found that Wages of agriculture labour were to be varied from Rs. 200 (2020) to Rs. 250 (January 2021). The prevailing labour charges of agriculture operations were varied with the operations of cultivations of crops i.e. ploughing, leveling, weeding, transplanting, harvesting and winnowing. The actual wage rates of agriculture labour varied from Rs. 200 to 250 per man in a day in different operations of the crops. The rates were found to be higher in peak operation period (ploughing of seeds and harvesting of crops). After the implementation of MNREGA in 2006 the availability of agricultural labour was found to be reduced considerably at the time of peak operation period of crop cultivation. With the result of that the wage rates of agriculture labour of various agricultural operations have remarkably increased, which increased the cost of production of crops cultivated in the region.

Conclusion:

During the study it is found that some districts in study area like Balaghat, Jabalpur, Narsinghpur are more robust in term of marketing than other district. Farmers of these areas have more knowledge about the availability and process of loan so that most of them agricultural problem going to less, but most of the agricultural area of the basin such where even today due to lake of storage facility, preservation facility, market, transportation system, farmers are facing so many agricultural problems. If we talk about sustainable agriculture then there is a need to keep the benefit of both the environment and the farmer in center. In this extra labour, extra money and extra patience are required in which most of the farmers failed and prefer to do unsustainable of chemical agriculture. So somewhere for this work wide publicity about sustainable agriculture and financial assistance are needed.

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