

STRATEGIES FOR DOUBLING OF FARMER'S INCOME: AN RESEARCH INITIATIVE IN RAJASTHAN

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ABSTRACT

Indian agriculture is passing through crucial situation due to consecutive drought situations in several parts of the country, thereby primarily on raising agricultural output and improving food security & did not specifically recognize the need to raise farmers' income and did not mention any direct measure to encourage farmers welfare. The overall result has been that farmers income remained very low, which is obvious from the incidence of poverty among farm households. Extremely low level of absolute income as well as large and deteriorating incongruity between income of a farmer and non-agricultural worker resulting into extensive distress among farmers. Past government strategies for the development of the agriculture sector in India has focused in constituting an important reason for the farmers' suicides during 1995 to 2004, and is also forcing more and more cultivators, particularly younger age group, to depart from farming. This can cause adverse effect on the future of agriculture in the country. To provide a solution for all these problems central and state government introduced various strategies.

Keywords: Agriculture, Doubling Farmers Income, Diversification, Policy, Government of India.

Introduction

Agriculture is irrefutably the potential harbinger of prosperity in rural India. Though considered a less remunerative enterprise by many good government initiatives and progressive farmer practices have beaten such opinion at times. Rajasthan is an exemplary state because of its concerted efforts to uplift the agrarian economy. In Rajasthan, agriculture and allied activities provide livelihood to more than 60% of the population. At present, the average farmer income in the state is INR 7,349 per month, which is greater than the national average of INR 6,247 per month. However it is below the desired minimum level of INR 10,000 per month. The low proportion of such households in Rajasthan, when compared to other states, reflects the state successful efforts in helping farmers.

Further agricultural growth rate and the productivity remains low due to the factors like reduction of natural resource base, rising fragmentation of holdings, recurring climatic variations, rising input cost and post-harvest losses. Decreasing farm productivity and income of farmers have serious intimation on rural prosperity and overall growth of economy. The agrarian distress in recent years is the result of a complex interplay of these factors. These factors act as hinderance in the growth of agriculture to achieve sustainable development. This agrarian distress cannot be tackled until and unless farmers income increases substantially.

The agroclimatic conditions of Rajasthan pose serious challenges in the production of crops and livestock resulting in low productivity and lesser income of farmers. However, there exist certain strength and opportunities in the agrarian sector of the state. Rajasthan has sub-tropical climate and more than 80% of annual rainfall is received during monsoon (June-September). Rainfall decreases from south-east to north-west direction. In arid north western parts, average rainfall ranges from 100mm in extreme west

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to over 450mm, where in south eastern parts rainfall ranges from 450mm to over 870 mm. However, there is high variability in seasonal and annual rainfall, and droughts of varying intensities occur once in 3-8 years in different areas.

The state has very limited water resources and it has only 1.16% of the total surface water available in the country. There are 14 river basins in the state and it has 118 major and medium irrigation projects. Most of the rivers are rainfed. Mahi, Chambal and Banas are three major rivers of the state and Chambal and Mahi are the only perennial rivers. More than 50% of the state surface water resources are from interstate transfers.

Dependence on agriculture, either direct or indirect, will remain constant. Improving literacy level and spending ability of farmers will be critical for improving the adoption of information and technology. A holistic approach is thus required to transform agriculture enterprises to a profit-making venture. An integrated approach should thus include a mix of strategies with active participation by farmers and the state government, viz.

Cost effective and simple means of increased returns per unit area viz. increase in productivity, cropping intensity, diversification to suitable crops, etc.

- Reformation in policies related to farming and agriculture marketing
- Large scale adoption of ICT by farmers
- Simple practices and technologies for better price realization.
- Affordable and improved storage facilities
- Livestock farming as an integrated component of farming systems, and
- Dissemination of information and innovations
- By increasing cropping intensity
- Diversification of cropping system with high value crops
- Subsidy on farm inputs
- Application of balance dose of fertilizer on the basis of soil health card
- Use of organic fertilizers and manures
- conversion of manual land records into digital records
- Regular region wise weather forecasting
- Construction of water harvesting structures
- Risk management to cope up with climate change, through Climate Smart Agriculture

The efforts of Rajasthan government mean to double farm level income in this direction. Since the solutions don't require huge investments from farmers pockets and government of Rajasthan government has been proactive in agriculture sector, a boost to farmers income may not be a distant dream.

Objectives of the Study

To enhance the productivity and profitability of cropping system through interventions in irrigation; Seed replacement rate (SRR); optimum fertilizer application; reducing cost of human labor through mechanization; and value addition through post-harvest technology.

Evaluate the enhancement of income and employment by all these interventions

Scope of the Study

- As the Per capita availability of land is getting reduced progressively, horizontal growth in agriculture has very limited scope in future. Further, crop production which is subjected to a high degree of uncertainty in income. Animal Husbandry activities require much lesser space in comparison to Crop farming.
- A prudent mix of Agri-allied sector like dairy, poultry, piggery, pisciculture, sericulture etc. suited to the given Agricultural climatic conditions and socio-economic position of the farmers would help increase their income.
- Cultivation of fodder crops as inter and border cropping will result in the availability of sufficient nutritious fodder for animal components like milch cow, goat / sheep, pigs etc.

- Sustainable agriculture practices like rain water harvesting, integrated farming and adaptation of scientific and modern method of animal husbandry helps to increase the farmers' income, and to secure the farms, need for food, feed, fodder and fuel.
- In these circumstances, assimilation of several agriculture enterprises viz. agriculture, animal husbandry, fishery, horticulture, forestry etc. have great probability in the agriculture economy to facilitate doubling of farmers income.

Technical Feasibility

The Objective of Doubling the farmer income can be achieved by following steps:

- By reducing the cost of cultivation through:
 - Better and efficient Irrigation Systems
 - Balanced Use of Fertilizers
 - Mechanization
- By increasing the productivity of land and other enterprises:
 - Increasing the seed replacement ratio (SRR)
 - Better grading and packaging of produce
 - Promoting Local level processing
 - Better Drying and storage

Various Schemes and Programs Initiated by the Government to Achieve the Target of Doubling of Farmers Income

- Pradhan Mantri Krishi Sinchai Yojana's
- Pradhan Mantri Fasal Bima Yojana,
- Paramparagat Krishi Vikas Yojana,
- Soil Health Card,
- Neem-Coated Urea and e-NAM (National Agriculture Market) Schemes

Database and Methodology

The study is basically exploratory in nature. The data have been collected from various secondary sources like books, journals, websites, and reports by government organizations, newspaper articles, etc. The present study is divided into two parts, the first part has discussed the structure of farmers' income in the country and the sources of growth in farmers' income and the second part has highlighted the prospects of the programmes

- Step -1 Selection of two villages from districts Sikar and Jhunjhunu.
- Step -2 only those farm household will be selected whose farm income contributes more than 65 percent of their total income.
- Step -3 Bench mark survey to capture baseline data so that the increase in income can be measured correctly. It will also help study the existing farming practices and crops in the village with reference to type of crops, method of irrigation, energy utilization, level of mechanization, fertility management, seed material used and post- harvest processes.
- Step- 4 Selecting and implementing activities options, with reference to the objectives of the project suitable for farmers of different socio-economic groups.
- Step -5 Impact and data analysis.

Observations

The main item of observations is to be recorded, Benchmark survey of changes in different component and how the interventions have resulted in:

- Change in cropping pattern
- Change in cost-input: benefit ratio
- Changes in productivity
- Changes in income

Conclusion

The lower level of farmers income and fluctuations in it are a major source of agricultural distress. This distress is widening and getting various overtime influencing almost half of the population of the state that is dependent on farming for livelihood. Continuous lower level of farmers income can also cause unpropitious effect on the future of agriculture in the state. To protect future of agriculture and to improve livelihood of half of population, requisite attention needs to be given to improve the welfare of farmers and uplift agricultural income.

Bringing of these goals will decrease persistent imbalance between farm and non- farm income, relieve agrarian distress, assist inclusive growth and infuse the dynamism in the agriculture sector. Reputable income in farm sector will also fascinate youth towards farming profession and mitigate the pressure on non-farm jobs, which are not growing as per the expectations. Three-pronged strategy focused on development initiatives, technology and policy reforms in agriculture are required to double farmers income.

The Rural areas are facing food and livelihood crisis, more specifically the shortage of fodder and drinking water. Government needs to carefully mark the situation and make more long- term farmers-oriented policies related to irrigation, farm variegation, farm desirability to socially and economically empower farmers.

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