



Agriculture in india has never been smooth sailing, as it is always confronted with one or the other problems: a study on the problems of marginal and small farmers in telangana state.

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Abstract

This paper examines A Study on The problems of marginal and small farmers in Telangana state of small holding agriculture in India. It covers trends in agricultural growth, cultivation patterns, participation of small holding agriculture, productivity performance of small holders, linking small holders with markets including value chains, role of small holders in enhancing food security and employment generation, differential policies and institutional support for small holders and, challenges and future options for small holding agriculture including information needs. It also provides lessons from the experience of India on small holding agriculture for other countries.

Keywords: Small and marginal farmers, food security, livelihoods, value chains, institutions

INTRODUCTION AND BACKGROUND

Agriculture plays a pivotal role in the Indian economy. Although its contribution to gross domestic product (GDP) is now around one sixth, it provides employment to 56 per cent of the Indian workforce. Also, the forward and backward linkage effects of agriculture growth increase the incomes in the non-agriculture sector. The growth of some commercial crops has significant potential for promoting exports of agricultural commodities and bringing about faster development of agro-based industries. Thus agriculture not only contributes to overall growth of the economy but also reduces poverty by providing employment and food security to the majority of the population in the country and thus it is the most inclusive growth sectors of the Indian economy. The 12th Five Year Plan Approach Paper also indicates that agricultural development is an important component of faster, more inclusive sustainable growth approach.

The structural reforms and stabilization policies introduced in India in 1991 initially focused on industry, tax reforms, foreign trade and investment, banking and capital markets. The economic reforms did not include any specific package specifically designed for agriculture. In the post-reform (since 1991) period, India has done well in some indicators such as economic growth, exports, balance of payments, resilience to external shocks, service sector growth, significant accumulation of foreign exchange, Information technology (IT) and stock market, improvements in telecommunications etc. GDP growth was around 8 to 9% per annum in the period 2004-05 to 2007-08. India is now 2 trillion dollar economy. Investment and savings rates were quite high 32 to 36%.

However, there have been exclusion problems in the country. In other words, real development in terms of growth shared by all sections of the population has not taken place. We have problems of poverty, unemployment, inequalities in access to health and education and poor performance of agriculture sector. One of the excluded sector during the reform period was agriculture which showed low growth and experienced more farmers' suicides. There are serious concerns on the performance of agriculture sector in the country. The post-reform growth was led by services. Commodity sector growth (agriculture+industry) has not been higher in the post-reform period as compared to that of 1980s. Particular worry is agriculture sector which showed lower than 2% per annum in the decade of mid-1990s to mid-2000s. There are also concerns on food security and livelihoods.

Small holdings agriculture which is the focus of this paper is important for raising agriculture growth, food security and livelihoods in India. It may be noted that Indian agriculture is the home of small and marginal farmers (80%). Therefore, the future of sustainable agriculture growth and food security in India depends on the performance of small and marginal farmers.

The role of small farms in development and poverty reduction is well recognized (Lipton, 2006). The global experience of growth and poverty reduction shows that GDP growth originating in agriculture is at least twice as effective in reducing poverty as GDP growth originating outside agriculture (WDR, 2008). Small holdings play important role in raising agricultural development and poverty reduction.

Review of literature

Ashwinikulkarni, Sudha Narayan (2015) this study reports on the survey of 4.881 users of more than 4.100 works created under the mahatma Gandhi national Rural Employment Guarantee schemes.

Varun Gandhi (2013) The working Group on marginal farmer recommended that marginal cultivators could be encouraged to join farmer producer organizations (FPOS), such organization can be provide interest subvention on loan for a five year period and exempted from the agricultural produce market committees, procurement from small and marginal farmers should be protected particularly though regulation for multi-brand retail.

Thapa and Gaiha (2011) It may noted that agricultural technologies are; scale neutral; but not resource neutral' (singh et al.2002) small holder –oriented research and extension should give importance to cost reduction without reduction in yields.

Chand (2011) reveals that the structure of land holdings India is a land of small farmers. According to Agricultural Census 2000- 01, there were an estimated 98 million small and marginal holdings out of around 120 million total land households in the country.

Swaminathan (2010) the need for adopting the methods of an evergreen revolution has become very urgent now. As Swami Nathan (2010) mentions. Among other things .there are two major pathways to fostering an evergreen revolution.

Ch. Radhika Rani and P. Praveen (2008) the small farmers are at production risk of crops like maize, sunflower, groundnut and red gram is more than the area risk. Whereas the production risk is more in case of oil seed crops like groundnut and castor for medium and large farmers. The financial risk in terms of decrease in marketed surplus is also observed in the case of all crops in their study by Ch. Radhika Rani and P. Praveen. They are of the opinion that land leasing proved to be an important instrument to 23 augment the production base and enhance the income level for the small and medium farmers.

Objectives of the Study:

- To explain the concept evolution and status of small farmers.
- To understand and identify the socio- economic conditions of the selected small farmer in Karimnagar District.
- To explain and find out the issues and challenges of the factors responsible small and marginal farmers in selected study area.

Role of Small Holding Agriculture

Structure of land holdings: India is a land of small farmers. According to Agricultural Census 2000-01, there were an estimated 98 million small and marginal holdings out of around 120 million total land households in the country.

Access to Irrigation: The access to irrigation has increased for all categories of farmers. It is the highest for marginal farmers followed by small farmers.

Access to Fertilizers and Area under HYV: The fertilizer per hectare is inversely related to farm size for both irrigated and unirrigated areas. It increased from marginal farmers in irrigated areas from 100 kgs. in 2020-2021 to 252 kgs. in 2021-22. Similarly, the percentage of area under high yielding varieties (HYV) is also inversely related to farm size (Table 7). In the irrigated areas, the coverage of area under HYV was 89%, 86% and 78% respectively in marginal, small and large farmers in 2021-22.

Cropping Intensity: Multiple cropping index is higher for marginal and small farmers than that for medium and large farmers. For marginal farmers, cropping intensity increased from 134 in 2020 to 139 in 2021 (Table 8). In the case of large farmer, it rose from 116 to 121 during the same period. The differences across farm sizes persisted over time.

Cropping Patterns: Do small and marginal farmers grow high value crops? Table 9 shows cropping patterns by size of farms. BIRTHAL et al (2011) provide four conclusions from these cropping patterns: (a) small and marginal farmers allocate larger proportion of their cultivated land to high value crops like fruits, and vegetables ; (b) small and marginal farmers seem to have comparative advantage in growing vegetables than fruits because of quick returns in the former; (c) small and marginal farmers allocate larger proportion of rice and wheat than other farmers; (d) small and marginal farmers allocate lower proportion of land to pulses and oilseeds.

Farm Size, output and productivity: The contribution to output is higher for marginal and small farmers as compared to their share in area. The share of these farmers was 46.1% in land possessed but they contribute 51.2% to the total output of the country at all India level in 2020.

Issues and Challenges for Small Holders

Role of women: The importance of women in agriculture has been increasing. The share of rural females in agriculture was around 83 per cent in 2004-05 as compared to 67% among rural men, showing the importance of women in agriculture in rural areas. Percentage of women among marginal farmers (38.7%) is higher than that for large farmers (34.5%) in 2020.

Social Groups: The proportion of socially disadvantaged groups such as Scheduled Castes (SCs) and Scheduled Tribes (STs) is higher among marginal and small farmers than that of medium and large farmers.

Land Issues: Land and tenancy security: National Commission on Enterprises for Unorganized Sector argued that there is a strong evidence that relatively successful implementation of even a modest package of land reforms dramatically improve the prospect of the poor. Regarding small and marginal farmers, they own and cultivate some land but it is a limiting factor for getting resources. Therefore, tenancy security is important for small holding farmers.

Low level of formal education and skills: Education and skills are important for improving farming practices, investment and productivity. It gives literacy levels and mean years of education for unorganized self employed agriculture workers by farm size. It shows that literacy and mean years of education are lower for small holding farmers compared to medium and large farmers.

Credit and Indebtedness: Small holdings need credit for both consumption and investment purposes. Increasing indebtedness is one of the reasons for indebtedness among these farmers in recent years.

Globalization challenges: Increasing globalization has added to the problems faced by the small holding agriculture. The policies of huge subsidies and protection policies by developed countries have negative effects on small holding farmers in developing countries.

Impact of climate change: Climate change is a major challenge for agriculture, food security and rural livelihoods for millions of people including the poor in India. Adverse impact will be more on small holding farmers. Climate change is expected to have adverse impact on the living conditions of farmers, fishers and forest-dependent people who are already vulnerable and food insecure. Rural communities, particularly those living in already fragile environments, face an immediate and ever-growing risk of increased crop failure, loss of livestock, and reduced availability of marine, aquaculture and forest products. They would have adverse effects on food security and livelihoods of small farmers in particular. In order to have climate change sensitive and pro-poor policies, there is a need to focus on small farmers. Agriculture adaptation and mitigation could provide benefits for small farmers. The coping strategies would be useful to have long term adaptation strategies. There is a significant potential for small farmers to sequester soil carbon if appropriate policy reforms are implemented. The importance of collective action in climate change adaptation and mitigation is recognized. Research and practice have shown that collective action institutions are very important for technology transfer in agriculture and natural resource management among small holders and resource dependent communities.

Water problems: Water is the leading input in agriculture. Development of irrigation and water management are crucial for raising levels of living in rural areas. Agriculture has to compete for water with urbanization, drinking water and industrialization. As mentioned above, small holding agriculture depend more on ground water compared to large farmers who has more access on canal water. Ground water is depleting in many areas of India. Marginal and small farmers are going to face more problems regarding water in future. Therefore, water management is going to be crucial for these farmers.

Diversification: There has been diversification of Indian diets away from foodgrains to high value products like milk and meat products and vegetables and fruits. The increasing middle-class due to rapid urbanization, increasing per-capita income, increased participation of women in urban jobs and impact of globalization has been largely responsible for the diet diversification in India. Hi-value products have caught the fancy of the expanding middle class and the result is visible in the growing demand for hi-value processed products. There is growing demand for non-foodgrain items in India. The expenditure elasticity for non-cereal food items is still quite high in India. It is thrice as high when compared to cereals in the rural areas and over ten times as high in urban areas. Per capita consumption of fruits and vegetables showed the highest growth followed by edible oils. Diversification to high value crops and allied activities is one of the important sources for raising agricultural growth. Since risk is high for diversification, necessary support in infrastructure and marketing are needed. Price policy should also encourage diversification. Small and marginal farmers can get higher incomes with diversification. But,

there are risks in shifting to diversification as the support systems are more for food grains. There is a need for support systems for diversification to help the small holder farmers.

Risk and vulnerability: There is enough evidence to suggest that poor and poorest of the poor households are vulnerable to a range of risks affecting individuals, households or whole communities which can have a devastating affect on their livelihoods and well being. They have higher exposure to a variety of risks at individual or household level. Some of them are (a) health shocks: illness, injury, accidents, disability; (b) labour market risk: many work in informal sector and have high risk of unemployment and underemployment; (c) harvest risks, life cycle risks, social risk and special risks for vulnerable groups. In addition, they have community risks such as droughts, floods, cyclones, structural adjustment policies etc. Small and marginal farmers are vulnerable to all these risks. Most of the coping mechanisms followed by households are: borrowing, sale of assets, spending from savings, assistance from relatives and govt., expanded labour supply, child labour, bonded labour, reducing consumption, migration etc. Comprehensive social protection programmes are required to address the negative effects due risks and vulnerabilities. India has many social protection programmes. The present major schemes for the poor in India fall into four broad categories: (i) food transfer like public distribution system (PDS) and supplementary nutrition (ii) self employment (iii) wage employment and (iv) social security programmes for unorganized workers. The effectiveness of these programmes have to be improved so that small and marginal farmers can also benefit from these programmes. Crop insurance programmes and future markets have to be strengthened to reduce risks in price and yields.

Solutions to the problem:

- **Multiple crops:** Cultivation of multi crops such as coconut, turmeric, pine apple, banana, apple, papaya, ginger will yield profitable results to the farmers.
- **Special agricultural zone:** Just like industrial zone, there is an urgent need to establish special agricultural zones, where only farming and agriculture related activity should be allowed. By introducing farm techniques which guarantee a definite success, an increase in youth participation on agricultural fields is economically possible. This can be attained only by implementing new technologies. Research efforts should continue for the production of crops with higher yield potential and better resistance to pests.
- **Technological advancement in agriculture should be passed down to the small farmers.**
- Where the existing crops would not do well under drought and weather conditions, the farmers should be helped to shift to cultivating crops that would be easy and economical to cultivate.
- **Educate the farmers:** Many farmers in India are not aware of crop rotation. Though education in urban areas has improved a lot, the government has ignored the same in rural areas in general and in agriculture sector in particular. This is the reason why farmers are not adequately aware of the various schemes provided by the government.
- **Clubbing of small fields may help:** Several farmers who own small piece of land can join together and combine all small fields into one large chunk. This may help in variety of ways.
- **Need for meaningful crop insurance policies:** Traditional crop insurance depends on the direct measurement of the damage suffered by a farmer to determine his/her payout. However, field loss assessment is often not feasible or expensive, since most of our farmers are small holders. Index
- **Need for better water management:** Irrigation facilities that are currently available do not cover the entire cultivable land. Apart from the areas where perennial rivers flow, most of the agricultural fields do not have irrigation facility.
- **Alternate source of income for farmers:** Small farmers should encouraged to develop alternative sources of income and the government should take up the responsibility for providing training to the farmers to acquire new skills.

- **Need for national weather risk management system/disease alert system:** Facilitating national weather risk management system that alerts farmers when there is a danger of extreme weather, would go a long way in reducing losses in agriculture.

Conclusion

Agriculture plays a pivotal role in the Indian economy. Although its contribution to gross domestic product (GDP) is now around one sixth, it provides employment to 56 per cent of the Indian workforce. Also, the forward and backward linkage effects of agriculture growth increase the incomes in the non-agriculture sector. The growth of some commercial crops has significant potential for promoting exports of agricultural commodities and bringing about faster development of agro-based industries. Thus agriculture not only contributes to overall growth of the economy but also reduces poverty by providing employment and food security to the majority of the population in the country and thus it is the most inclusive growth sectors of the Indian economy.

Agriculture in India has never been smooth sailing, as it is always confronted with one or the other problems. The life of the peasants being largely dependent upon agriculture has never been easy as his livelihood is determined by several social and environmental factors. Exploitation of the peasants by the merchants, middleman, money lenders etc., gamble with monsoon and inadequate irrigation, crop diseases, costly agricultural inputs, fluctuating and unremunerated agricultural inputs, smallholdings, low yield from land are some of the important problems of agriculture. Above all, a dualistic kind of development model, and ineffective implementation of the government policies and Programmes have deepened the miseries of the peasants and widened the gap between rich, middle, small and marginal peasants and landless peasants.

Suggestions:

- Educated to sample respondents are to be improve in the rural areas,
- The rural areas people develop in the social awareness.
- Agriculture is to be given a new thrust in the rural areas people in their activity,
- developed the institutional facilities in the rural areas,
- The government encourages to multi-crops, irrigation, facilities in their agriculture activities,
- Government should be provide crop insurance policies.

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