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## **A STUDY OF RURAL DEVELOPMENT IN INDIA THROUGH SMALL FARMS DIVERSIFICATION**

**WITH SPECIAL REFERENCE TO STATE 'BIHAR'**

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***Abstract:*** *The rural economy still plays a predominant role in fostering development in our country. The rural economy primarily encompasses small and marginal holdings which accounts for about three-fourth of the total operational holdings in India, operating over one-fourth of total cultivated area in our country. Majority of small and marginal farmers cultivate mainly low value, **subsistence** crops and in absence of adequate employment opportunities, whether in field or off the field, they are forced to live below poverty line. Their condition has worsened due to growing pressure of population on land and limited scope of increase in additional production in subsistence farming. The basic **objective of this research paper** is to highlight the need for diversification and commercialization of small farms within and outside agriculture and their proper linkages with local and global markets. This is needed not only to liberate small and marginal farmers from vicious circle of poverty but also to meet the growing demands for fruits, vegetables, flowers, milk and milk products, meat, fish, eggs etc. which generally shows rising trends with increasing levels of per-capita income in the economy. Thus, this paper suggests diversification of small farms as a means of rapid rural development in India. **Nature and Extent of Agricultural Diversification:** The agricultural census data and number of micro level studies conducted in different regions of the country indicate that small and marginal farms are not averse to diversification. Various studies conducted on the issue clearly show that within the country also, the pace of agricultural diversification varied widely from region to region. **Diversification of Agricultural Sector in Bihar:** We find in the calculation based on data of Central Statistical Organisation (CSO), National Accounts Division that diversification of agriculture in state of Bihar is varied and extensive however; they do not provide sustenance to small and marginal farmers in most cases. **Policy Initiatives:** However, the traditional agricultural development policies in India have not been favourable to diversified agricultural growth particularly in the context of small*



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*farms and backward regions. Therefore, if our objective is to promote small farm diversification in various agro-climatic regions of the country, the existing policies may have to be partly modified. We also need to keep in view the various socio-economic, physical, institutional, technological and infrastructural constrains and obstructions, these policies have to face while forcing the wave of agro-diversification. We may safely conclude that there exists a glaring income disparity between agricultural and non-agricultural households which must be removed through appropriate policy changes for horizontal as well as vertical diversification in rural areas. "Indeed, the prospects of small farm diversification in India are quite high," as revealed by data generated by the Agro-climatic Regional Planning Unit of the erstwhile Planning Commission of India.*

**Keywords:** Economy, subsistence, farms, agricultural, development, diversification, policy-initiatives.

Economic development in India would remain incomplete unless we develop our rural sectors. The Small farm diversification implies that small land holders due to economic pressure and incentives would:

- (i) Shift from subsistence farming to commercial farming.
- (ii) Shift from low value food / non-food crops to high value food / non-food crops and switch over from local to high yielding plant varieties.
- (iii) The diversification would also mean that small farms would not only undertake seasonal crop farming but would also take up animal husbandry, fishing, agro-forestry, horticulture etc.
- (iv) Small farmers would also participate in industrial and other non-farm economic activities as either self-employed or wage earners for supplementing their incomes.
- (v) Diversification of agriculture would help farmers to take advantage of production complementaries and supplementaries and thereby reap the benefits of synergism through appropriate choice of crop combinations or other economic activities.
- (vi) This also enables farmers to maximize efficiency of resource usage, through.



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- (a) Multi-dimensional use of limited land.
  - (b) Multi-dimensional use of time
  - (c) Enterprise symbiosis
  - (d) Use of products of one enterprise as inputs to another enterprise on the same farm.
  - (e) Intensive use of fixed family labour involving integration of farm and non-farm activities.
- (vii) Diversified farm generally have high growth and stability of farm income as the risks due to fluctuating production and market prices would be minimum as all crops/enterprises on the same farm would not face adverse weather condition, pest/insect attack or price uncertainties.
- (viii) Diversified farming provides, through crop rotations and relay cropping, natural defence mechanism for controlling pests, weeds, insects and diseases.
- (ix) Diversified crop-livestock farms can make more efficient use of forages, crop residues and other low value components of crop rotations and enjoy the benefits of manure, the application of which can build up soil nutrients, organic matter, filth and other dimensions of soil fertility.
- (x) From national or social point of view, diversified farming can be helpful in protecting the agricultural environment from the loss of natural 'bio-diversity' for sustainable development. A country, which produces and markets only a few specialised crops, is more vulnerable to price instability, low income risks and natural disasters. Hence, it is generally agreed that diversified farming system, if adopted in a planned manner, may lead to greater individual as well as social gains. It is in the interest of both individual small farmers and the nation as a whole to plan for horizontal diversification within agriculture as well as vertical diversification, involving income earning activities by small farms outside agriculture.
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### **Nature and Extent of Agricultural Diversification:**

In India the pace of agricultural diversification has been very slow in comparison to most of the other countries where the pace of non-farm diversification has been much more rapid there by enabling the growing labour force to be absorbed outside agriculture. In most of the developed countries, contribution to GDP from agricultural sector accounts for less than 5% and percentage of labour force employed in agriculture accounts for less than 8%. However, India is one of the Asiatic countries with still high contribution of agricultural sector in GDP (14.4% in 2018-19) and providing employment to 52% of workforce. Various studies conducted on the issue clearly show that within the country also, the pace of agricultural diversification varied widely from region to region. Although crop production accounts for the lion's share in net domestic product of the agricultural sector in all the states, in recent years, there has been a phenomenal growth in the contributions of animal husbandry and poultry to the net aggregate domestic product of the agricultural sector in states like Andhra Pradesh, Bihar, Gujrat, H.P, Karnatka, Kerela, M.P, Rajasthan and U.P. The percentage share of fishing also increased significantly in states including Andhra Pradesh, Bihar, Gujrat and West Bengal. The share of agro industries in total GDP of the rural sector has also increased to 5.3%. In the last decade there has been renewed emphasis on promotion of diversified agricultural growth in favour of fruits and vegetable in horticulture (with a share of 31.2 % of fruits, 59.2% vegetables in a total of 311.7ml.tones of horticulture production in 2017-18).

The agricultural census data and number of micro level studies conducted in different regions of the country indicate that small and marginal farms are not averse to diversification. A large number of studies (IJAE 1987, IJAE 1988, A.J Singh et. al, IJAE,) show that small farmers too adopt multi-diversified farming, involving allocation of area under seasonal fruits, vegetables, dairy etc. for maximizing their household income and employment, in almost all regions of the country.

### **Diversification of Agricultural Sector in Bihar:**

Bihar is primarily an agricultural state with approximately 85% of rural population out of which share of small and marginal farmers is 82%. Hence, the development of this state is possible only if some agro based model of growth is followed. Here, model like Integrated Farming System (IFS) can be

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suggested for diversification and development of agricultural sector. This model incorporates carrying on crop farming, horticulture, poultry farming, dairy, goatary, pisciculture etc. in one small farm thereby enhancing agro productivity, ensuring increased regular income to farmers and thus fostering diversification.

Analysis of diversification of agriculture in Bihar with sector wise value of output in agriculture and allied activities in percentage terms (T.E 2006-07) reveal clearly that the share of value of output from livestock's is the highest (31.32%) followed closely by that of crop production excluding horticulture (30.34%) and horticulture (28.77%). The share of value of output from forestry and fisheries is quite low 5.14% and 4.43% respectively.

Amongst all the districts of Bihar the share of value of output from crop production was highest in district of West Champaran 51.47%. Horticulture showed highest share in Araria 66.20%. The highest share for livestock was seen in Patna 50.20% for forestry highest share was seen in Jamui 41.34% and for fisheries highest share was seen in Saharsa 30.90%. Thus, we find in the calculation based on data of Central Statistical Organisation (CSO), National Accounts Division that diversification of agriculture in Bihar is varied and extensive however, they do not provide sustenance to small and marginal farmers in most cases (T. Haque, 1992).

### **Policy Initiatives for Diversification of Small Farms Fostering Rural Development:**

As envisaged above, in India, almost all the small farmers practice multi-diversified farming and grow a number of crops even on small acreage and fragmented plots. But this kind of farming does not necessarily yield enough returns for the sustenance and upward movement of small farm families. Therefore, what is important for real diversification is that small farmers just do not grow a large number of less productive, subsistence crops and undertake traditional livestock farming. Instead, they should cultivate a few selected high yielding, high income generating and eco friendly crops and livestock enterprises which fit well into the agro-climatic environment of each region.

The traditional agricultural development policies in India have not been favourable to diversified agricultural growth particularly in the context of small farms and backward regions.



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Therefore, if our objective is to promote small farm diversification in various agro-climatic regions of the country, the existing policies may have to be partly modified. We also need to keep in view the various socio-economic, physical, institutional, technological and infrastructural constrains and obstructions, these policies have to face while forcing the wave of agro-diversification. The following strategies may be helpful in formulating policies for small farm diversification:

Firstly, the agricultural price policy does not provide adequate protection in terms of procurement and minimum support prices to fruits and vegetable crops. Since the production and prices of these commodities fluctuate widely, small farmers would find it difficult to grow these crops unless price protection is available.

Secondly, small farmers, particularly in backward regions do not have access to cold storage, market and transportation facilities. There is also lack of power supply which makes activities like agro-processing unthinkable. Primarily, it should be the responsibility of the government to develop these infrastructural facilities, although, willing private entrepreneurs could also be involved.

Thirdly, tenancy laws of most of the states may have to be modified to allow the large farmers to take up non-farm activities and to enable the small and marginal farmers to have greater access to land through lease market. This would enhance their economic viability and also promote diversified agricultural growth.

Fourthly, technology generation policy would need greater support in terms of investment in research, extension and on the field training in favour of those crops and enterprises which are being considered for diversification.

Fifthly, in view of high fluctuation in prices, production and income, the possibility of crop insurance coverage for some agricultural commodities, which are perishable but of great social value due to their nutritional potentials and foreign exchange earning capacity, may be considered.

Finally, the future direction of small farm diversification in India would largely depend on the direction and effectiveness of government policy that could influence the creation of appropriate socio-



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economic environment for diversified farming through necessary technological, infrastructural, institutional and administrative changes.

We may safely conclude that there exists a glaring income disparity between agricultural and non-agricultural households which must be removed through appropriate policy changes for horizontal as well as vertical diversification in rural areas. "Indeed, the prospects of small farm diversification in India are quite high," as revealed by data generated by the Agro-climatic Regional Planning Unit of the Planning Commission of India," for which agricultural scientists, extension workers, administrators, planners, farmers' representatives and NGO's may have to work together to make small farm diversification a feasible and viable proposition."



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