

ABSTRACT

Agriculture plays an important and vital role in any economy generally, for developing countries particularly and for a country like India especially. Basically India is an agricultural country with 143 million hectares of land as net sown area, the highest percentage of land under cultivation in the world. The country accounts for 17 percent of world's population and ranks at second largest populated country. The country has about 69 percent of population living in its rural areas and villages and the sole source of their livelihood is agriculture and allied activities. Cereal and many ground crop production in agriculture has beset many problems and many scholars have admitted that agricultural diversification towards high value commodities will strengthen agriculture growth in future and will result high remunerative returns to farmers. Again the horticulture and other allied activities have lot of backward and forward linkages which resulted wide employment opportunities and income flow, equally distributed to all in these rural areas hence helps in the development of rural India. The paper will enshrine role of agriculture in rural development and role of diversification to develop agriculture sector itself and is based on secondary data sources, NSSO, Census data is being used in the paper.

Key Words: Agriculture, Rural Development, High Value Commodities

Introduction

Long before saying of Mahatma Gandhi that India lives in its villages (rural areas) still holds true. As per 2011 census sixty nine percent i.e. 833 million people live in rural areas of India. The growth rate of rural population has declined substantially to about 1.2 per cent during 2001–11 from 1.7 per cent per year during 1991–2001. Urban population growth, in contrast, was about 2.8 per cent per year during both periods (Census 1991; 2001; 2011). The mean reason behind this growth variation is large scale migration from rural to urban areas. Agriculture lies at the heart core of rural livelihoods. Despite its declining share in the total GDP, agriculture continues to engage around half the country's total workforce and over two-thirds of the rural workforce. Most of India's poor also depend on agriculture, making the agricultural sector a vital focus area in attempts at

alleviating poverty and rural development.

Peeping to the poverty and rural under-development in India, one of major and open reason seems to be that the share of gross domestic product originating from agriculture is continuously coming down and has reached from 50 percent at the time of independence to about 14 percent in 2013-14. Although this is good sign for growth of country but situation on the other side is worse that is work force engaged in agriculture declines marginally standing at 70 percent in 1950's and came down to just about 52 percent currently. This has created miseries among rural masses and widens gap between income in agricultural and non- agricultural sector and persistent poverty in the country generally and rural India particularly. The one factor which seems to be of critical importance was shift of labour force towards industrial and services sectors which were

growing at a reasonably high growth rate of about 8-10 percent during past decade except a few years. But these sectors were not in a position to provide jobs and employment to unemployed persons hence termed as jobless growth.

There are only two parameters at major, through which rural poverty and development can be addressed; one is development of agriculture sector, as land (agriculture) is only source of earning or living to vast majority of rural population. Second is human labour at their disposal which can be tapped by providing gainful, productive and remunerative employment. Both these parameters can be well addressed via agricultural diversification towards horticulture and high value crops which are high remunerative and labour intensive in nature hence will lead to agricultural development and upliftment of rural masses.

The paper will discuss the common role that agriculture sector is playing and can play for rural development and will present a case show of various linkages through which agricultural growth can be transformed to rural development and overall economic growth. Almost all the studies related to agriculture and development enshrines that agriculture sector has prime hand in the growth and development transformation of any country. The paper will like to describe how agriculture sector will lead to rural growth and development but for that it is mandatory that agriculture sector itself must grow and develop at a steady and consistent reasonable growth.

After mid 1990s the agriculture sector in India starts to decelerate in terms of productivity of various cereals and overall agricultural growth. This was due to stagnancy of demand for staples and somewhat fatigue of Green Revolution. Further the demand pattern was shifting towards high value commodities like fruits vegetables, milk, meat etc. (Birthal et al. 2007). So to sustain the growth rate of agriculture in the future it was emphasized that agriculture sector should be diversified towards the high value commodities for its role in high income generation and employment creation (Joshi et al. 2004; Barghouti et al. 2005). The fruit and vegetable -

led diversification in the recent period has been presumed as a precondition for achieving the four percent rate of growth in agriculture (Jha Brajash et al. 2009).

Agriculture and Rural Development

T. Shultz in 1979 has shared in his Nobel Prize speech "Most of the people in the world are poor, so if we knew the economics of being poor we would know much of the economics that really matters. Most of the world's poor people earn their living from agriculture, so if we knew the economics of agriculture we would know much of the economics of being poor" (Godoy & Dewbre, 2010).

Agriculture plays an important and vital role in any economy. It is directly and indirectly linked with the economic activity, growth and development of other sectors in an economy and to overall welfare and development of an economy. India is an agrarian economy and agriculture sector has still lot of bearings on the overall growth and development of the country generally and rural development particularly. Although, the economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth, still agriculture is demographically the broadest economic sector and plays a significant role in the overall socio-economic fabric of India. Agriculture, with its allied sectors, is unquestionably the largest livelihood provider in India, more so in the vast rural areas. 69% of India's population lives in rural areas, and three-fourths of the people making up these rural populations depend on agriculture and allied activities for their livelihoods.

The role of agriculture in economic development has been viewed as passive and supportive. Looking to the historical experience of western countries, economic development was seen as mechanism requiring a rapid structural transformation of the economy from one predominantly focused on agriculture activities to a more complex modern industrial and service sector. As a result, the primary role of agriculture was to provide sufficient low priced food and man power to the expanding industrial economy, which was thought to be a dynamic and leading sector in the overall strategy of

economic development. Agriculture sector plays an indispensable part in any strategy of economic progress, especially for low income developing countries.

Urban-rural relationships are multi-dimensional and evolving. The farm sector has long been providing food for the urban population but the composition of agricultural produce has been changing in response to changing urban consumption patterns. Agricultural surplus is sold through commodity markets which, while always central to India's rural economy, have undergone rapid transformation in recent years. New commodities, the modernization of markets through commodity exchanges, future trading and the emergence of organized retail strongly linked to farming, have brought the rural and urban closer. Agriculture remains at the heart of rural livelihoods even though the agrarian economy has changed in several fundamental ways.

A World Bank review concludes that higher agricultural and rural growth rates are likely to have a 'strong, immediate, and favourable impact' on poverty and rural development (World Bank, 2007). Agriculture has a role to play in the poverty reduction, upliftment of standard of living of low and middle class people and to the development of rural areas because most poor lives in rural and far flung areas which have agriculture as the only source of living (Malik, 2014). It has been found that poverty in most developing countries is concentrated in rural areas; growth in agriculture sector and in the rural economy has been highly beneficial to reduce poverty (Iqbal & Sen, 2014). Agricultural growth is essential to ensure national food security, alleviate poverty and reduce rural-urban disparities. About 70% of India's population lives in rural areas and 69% of them depend on agriculture and allied activities including animal husbandry and fisheries for their livelihood (Birtal & Negi, 2012). The rural areas are still home to some percent of the India's billion people, a large number of whom are poor. Most of the rural poor depend on rain-fed agriculture and fragile forests for their livelihoods.

Agricultural Diversification towards High Value Commodities and Rural Development

The gap between the number of new rural workers and the number of new job opportunities created in agriculture is enlarging. Therefore, the rural employment diversification within agriculture towards high value enterprises and towards non-agricultural sector has gained critical importance over time. The Government of India is deeply recognized and is concerned with the widespread poverty and unemployment in the rural areas and has taken several initiatives including the implementation of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). The rural sector in India is undergoing a transformation and the contribution of rural non-farm sector to the rural income and employment is growing (Kumar et al. 2011).

High value commodities engulfs in its domain all fruits and vegetables, poultry, meat, fishing, animal husbandry, livestock etc. In other terms it can be referred all such agricultural enterprises which enables a farmer to generate higher income and employment, bearing little bit of risk and taking market signal under its consideration. So agricultural diversification refers to cultivate more and more crops on the same plot of land or shift of cultivation from traditional subsistence farming to modern commercial and market oriented crops and commodities to widen employment and income avenues round the year.

Diversification of rural agriculture towards high value crops or horticulture means high proportion of population engagement in horticulture or other activities and its high role in agricultural production. This will push up rural income and employment, will reduce disguised unemployment and will transform subsidiary agriculture into a commercial and market oriented one. The animal husbandry enterprises, dairy, poultry and other livestock are considered more pro-poor than crops sector. It is due to the fact that landless, marginal and small farmers usually own livestock and development of this sector will generate employment for them and will boost their

income (Kumar et al. 2011). Diversification of agriculture can be viewed as intensification and efficient use of agriculture which will increase demand for rural labour that will raise rural wages and decline in food prices altogether these will lead to rural poverty reduction as experienced during 1970's and 1980's as a spillover effect of Green Revolution (Golmohammadi et al. 2014). During the period 2000s, diversification alone contributed around 40 per cent to agricultural growth India, excluding the northern states (Birthal et al. 2013).

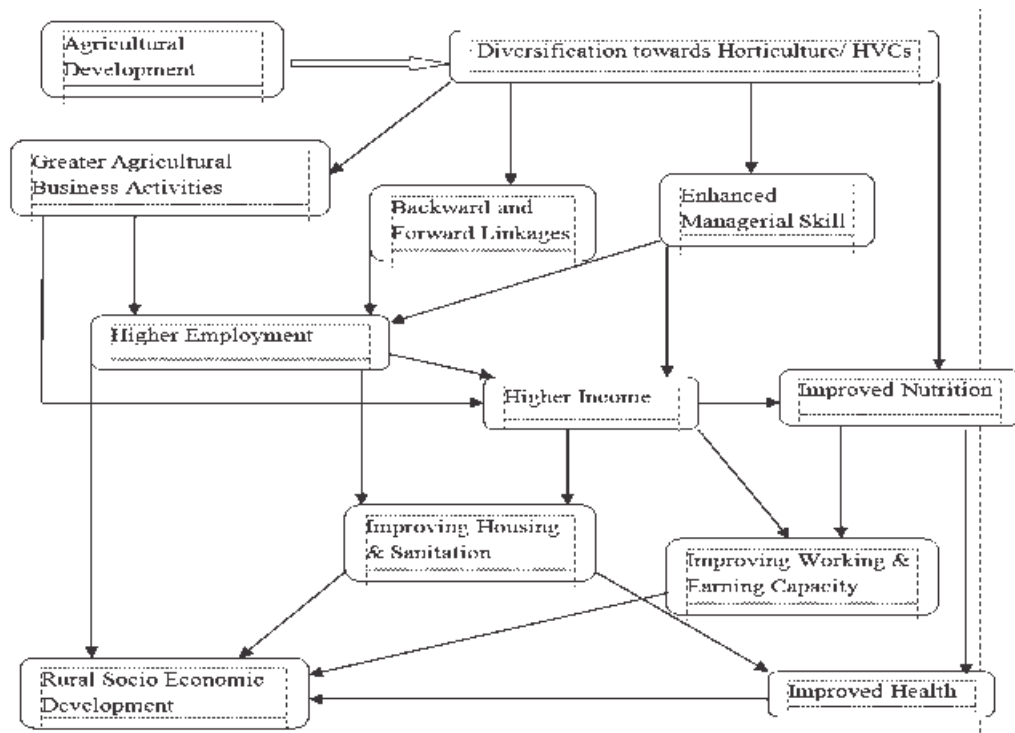
Generation of additional employment opportunities in rural areas where labour is abundant is critical for achieving widespread and equitable growth. The horticulture sector can contribute to poverty reduction by providing employment and wages to labourers. Diversification of agriculture can affect both the structure and the level of employment. Family labour may be substituted by hired labour, and changes may also take place in the level of labour input as well as the distribution of labour by gender (Von Braun, 1995; Weinberger & Lumpkin, 2007). Further the production of horticultural products offers opportunities for poverty alleviation, because it is usually more labor intensive than the production of staple crops. Often, horticultural production

requires twice as much, sometimes up to four times as much labor than the production of cereal crops. The average labour requirement for fruit production is 860 man days per hectare per annum as against 143 man days for cereal crops. Crops like grapes, bananas and pineapple generate much larger employment roughly from 1000-2500 man days per hectare per annum (NHB, 2010).

Since horticultural producers are better integrated into markets, the production of horticultural crops contributes to commercialization of the rural economy, which is characterized by increased trade and marketing. Studies show that commercialization stimulates the rural economy and contributes to the growth and development process (Pingali & Rosegrant, 1995; Von Braun, 1995). Commercialization benefits the poor both through generation of employment and increasing agricultural productivity (Weinberger & Lumpkin 2007).

The complex role that agriculture is playing in rural development can be exhibited by a diagram mentioned below;

Diagram 1: Agricultural Development through Diversification and Rural Development

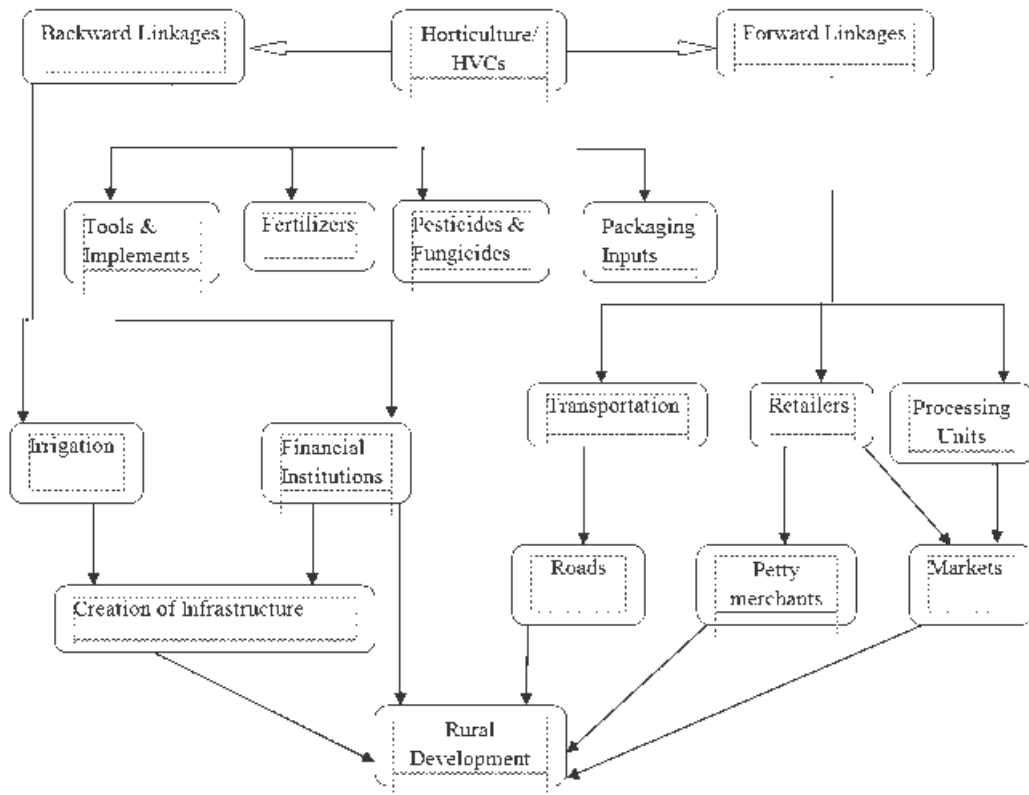


Livestock can provide not only nutritional and food security, but it acts as a buffer against risk factors during drought, crop failure and natural calamities in rural areas. It also provides manure to regain soil fertility, helps to balance employment in between men and women and also helps to accumulate wealth among rural masses (Pell et al., 2010; Swanepoel et al., 2010)

Horticulture sector has lot of backward and forward linkages, development and strengthening of this sub

sector will lead to the development in all other sectors which are related with this sector directly or indirectly. This will result into the employment diversification towards Non- farm agricultural sectors which has got critical importance in the poverty reduction and rural development (Visaria, 1995; Kumar, 2009; Kumar et al. 2011).

Diagram 2: Horticulture/ High Value Commodities Linkages and Rural Development



Livelihood Perspectives

Rural population has mainly two things i.e. land and labour services at the disposal for their better survival and to improve their economic and social status. Land can be efficiently and intensively cultivated by diversifying more and more area towards high value commodities along with cereals and allocating lot of resources to allied sectors so that employment and income channels in the rural areas can be widened and enhanced. Labour services can be pooled to various diversified enterprises both farm and non- farm for yielding better livelihood perspectives among rural masses. Livelihood

perspectives have been central to rural development (Scoones, 2009). The livelihood perspective opportunities has to be augmented both in farm and non- farm sector. In farm sector different sub- sector like livestock, animal husbandry, fishery, horticulture, sericulture etc. all such enterprises have their due role to play in the employment generation. Further non- farm sector will grow side by side as it has greater linkages with agriculture sector in terms of supply of inputs, processing, and transportation, trading and different other services. The nature of livelihood and employment in rural India is depicted by the help of table 1.

Table 1: Livelihood & Employment of Rural Work Force in Farm and Non-Farm Sectors (Millions)

	Male				Female				Persons			
	1993-94	1999-2000	2004-05	2009-10	1993-94	1999-2000	2004-05	2009-10	1993-94	1999-2000	2004-05	2009-10
Agriculture	139 (74)	142 (71)	146 (67)	146 (63)	90 (86)	90 (85)	103 (83)	83 (79)	229 (78)	232 (76)	249 (73)	229 (68)
Non-agriculture	49 (26)	57 (29)	73 (33)	86 (37)	14 (14)	15 (15)	21 (17)	22 (21)	63 (22)	74 (24)	92 (27)	108 (32)
Total employed	188	199	219	232	105	106	124	105	294	304	343	337

Source: NSSO (2001, 2006b, 2011); IDFC, India Rural Development Report 2012-13.

Note: figures in parentheses are percentages of total employment.

Farm sector includes activities like crop, fruit and vegetable production, plantation, animal husbandry, fishery, forestry and logging etc. While as non-farm sector includes activities includes agro-processing activities, wholesale and retail trading, transportation and communication, storage, cottage industries and related services (Mehta, 2002). Over the time economies have transformed and rural areas are diversifying both horizontally and vertically as shown by above data. The diversification of agriculture within its sub-sectors (horizontal diversification) pay way for development and

employment generation in non-farm sectors because of its diverse linkages which leads to vertical diversification of agriculture.

Now it is pertinent to present the employment diversification within agriculture sub-sector to describe the diversification of agriculture towards high value crops and livelihood perspective in rural area. Both the demand and consumption pattern has shifted towards high value crops in both rural as well as in urban area (Mahendra et al. 2004 and Rao et al. 2008). So the agriculture has shifted and diversified towards the production of such crops so is employment pattern in rural area. The employment shift from cereal production towards high value crops is shown in table 2.

Table 2: Employment Diversification within Agricultural Sub-sectors

Period	Cereals and Pulses	Horticulture & Cash Crops	Agricultural Services
1983	93.7	6.2	0.1
1993-94	92.0	7.3	0.7
2004-05	84.1	15.4	0.5

Source: NSSO (38th, 50th, 61st round); Kumar Anjani et al. 2011.

The employment diversification within agriculture sector among the various states is also stated in table 3. It is clear from the table that various states have diversified the nature of agriculture from coarse

cereals towards food cereals and now towards high value crops.

Table 3: State wise Employment Diversification Pattern within Agriculture Sector

States	1983			2009-10		
	Cereals & pulses	Horticulture & cash crops	Agriculture services	Cereals & pulses	Horticulture & cash crops	Agriculture services
Andhra Pradesh	92.0	7.7	0.3	75.6	24.0	0.4
H. P.	98.6	1.4	0.0	71.9	28.0	0.1
J&K	99.2	0.5	0.3	76.9	22.8	0.3
Jharkhand	99.7	0.2	0.1	96.9	2.3	0.8
Maharashtra	87.2	12.6	0.2	68.2	31.7	0.1
Bihar	99.8	0.2	0.0	88.6	11.3	0.1
Karnataka	92.4	7.4	0.2	82.6	17.4	0.1
Kerala	34.0	65.7	0.2	15.6	83.9	0.5
M. P.	99.2	0.7	0.1	90.3	9.5	0.2
Odisha	99.8	0.1	0.0	99.3	0.7	0.0
Rajasthan	99.7	0.3	0.0	98.7	1.1	0.2
U. P.	96.8	3.1	0.0	95.5	4.4	0.1

Source: Estimation based on NSSO 38TH and 66th round.

So it is easily assessed that employment has shifted almost in all states towards horticulture and other high value commodities but the proportion varies state over. In certain states farmers have shifted more towards horticulture due to climate and temperature conditions and soil nature. It can be generalized that agriculture in India has indeed transformed and shifted towards high value crop production and nature has changed and is still changing from traditional subsistence farming towards market oriented and commercial one but certain issues and concerns still needed to be taken into account for proper agricultural development and rural farmer upliftment.

1. Efficiency in marketing of agricultural products: Agricultural marketing needs to focus on four goals; first, the farmers should

get the fair and remunerative prices clearly emerging out of market forces and not managed by cartels of traders. Second, market margins and price spread should be within the acceptable limits of the farmers and there should be check on excessive exploitation of small and marginal farmers in case of marketing commission. Third, the entire process of marketing should be farmer oriented and provide the producer required marketing freedom as envisaged in the new APMC Act. Finally, market infrastructure both in terms of spread and quality should be the focus of coming decade.

2. Proper infrastructure development: As the nature of farming has changed from subsistence to market oriented so the demand for infrastructure like roads, nearby markets, cold stores etc. will increase and is of immense importance. It is estimated by National

Horticulture Board that about 30 percent of fruits and vegetables got wasted due to lack of good infrastructure in India, hence increases plight of farm class and sterns rural class in the grip of poverty.

3. Financial and credit availability: Farmers need money in advance to hire certain inputs like fertilizer, labour and other inputs which banks hardly provide to them because of certain hard and fast preconditions to be fulfilled before lending by institutions like banks. This necessitates the farmers to go to local money lenders which charge higher and exorbitant interest to them and later also distort marketing regime of small and marginal farmers. Further farmers who produce horticulture and other high value commodities need a bit larger credit so easy and timely credit availability will enhance the agriculture productivity and will develop economy of both farmers and rural areas.
4. Counselling and other facilities: The facilities like animal husbandry veterinary facilities, vaccination, check on spurious fertilizers and chemicals should be made common to all rural areas and certain oriental programmes should be launched to aware the farmers how they can shift from traditional farming to modern profitable and employment oriented agriculture with scientific way.

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