Economic development is a process whereby an economy’s real national income as well as per capita income increases over a long period of time. Here, the process implies the impact of certain forces that operate over a long period and embody changes in dynamic elements. It contains changes in supply of resources, capital formation, demographic composition, technology, skill and efficiency as well as the institutional and organizational set-up. It also implies respective changes in the structure of demand, level and pattern of income distribution, consumption habits, living standards, and in the pattern of social relationships and religious dogmas, ideas and institutions. In nutshell, economic development is a process consisting of a long chain of inter-related changes in fundamental factors of supply as well as in the structure of demand, leading to a rise in the Net National Product (NNP) of a country in the long run.¹

A.G.B. Fisher introduced the concepts of primary, secondary and tertiary sectors. The primary sector includes agricultural, pastoral production and mining whereas secondary sector includes manufacturing and construction. The tertiary sector consists of transport and communication, trade and commerce, government, personal and domestic services. This classification has been quite helpful in the analysis of structural changes over a period of time as it indicates changes in the pattern of resource possession and resource use in an economy.²

Structural changes imply the transition from a traditional agricultural society to a modern industrial economy involving a radical transformation of existing institutions, social attitudes, and motivations. Such structural changes lead to increasing employment opportunities, higher labour productivity and stock of capital exploitation of new resources and improvement in technology.
Structural changes involve the expansion of the non-agricultural sector so that the proportion of population in the agricultural sector is progressively reduced. It implies reduction in the percentage contribution of agricultural sector to the Net National Product. But a decline in the share of agricultural sector to the Net National Product does not mean a fall in the agricultural output, rather agricultural output must increase in absolute terms. In order to increase agricultural output, radical changes will have to be made in the form of land reforms, improved agricultural techniques and inputs, agricultural diversification, better marketing organization, new credit institutions etc.³

The relative decline in the magnitude of employment of labour in the agricultural sector does not indicate the decline in the significance of agriculture in an economy. This decline has been associated with a quantitative transformation of agricultural activity, converting agriculture from a merely empirical, mechanical and self perpetuating process employed by the least developed part of society into the conscious scientific application of agronomy in other words during the development process, the labour intensive agriculture is converted into the capital intensive and technological intensive agriculture.⁴

In the developing countries, the largest proportion of income is derived from agriculture, a smaller proportion from industry and the smallest from service sector. With economic development, the share of agriculture falls, in case of industry firstly increases at a higher rate, and then at a lower rate, while that of services firstly increases at a slower rate and then at a higher rate. The study of the composition of Gross Domestic Product (GDP) is thus important to study the structural changes in the economy and hence helps in determining the stage of economic growth of economy.

Quantitative studies of economic growth have shown that the process development is accompanied by a progressive decline in agriculture’s share in national product and labour force. There has been the view that the surplus of investible resources generated in agriculture gets transferred to nonagricultural sectors. One of the crucial problems of modern economic growth is how to
extract the agricultural surplus for capital formation, necessary for industrial growth without, hindering the growth of agricultural sector.  

Agriculture development is not only helpful in the development of industrial sector, but also provides lot of employment opportunities to the people. Since 1951 onwards, Indian economy witnessed structural transformation in the process of economic development. In this process, agricultural sector contributed significantly in the national income, output and employment. The most important fact of the Indian agriculture is that it has large potential for development. Technological changes, new and superior resources in the mode of cultivation viz. new and better machines, improved seeds and better irrigation facilities have helped in the fast growth of agricultural sector. It is important to mention here that in India, the small and marginal farmers, who are resource poor, are not in a position to meet out their basic requirements of the life. Even in favourable conditions, where facilities like irrigation, HYV’s, fertilizers and institutional credit are available; these resource poor farmers are unable to overcome the poverty trap due to social, technical and economic constraints.

The land, out of all factors of production, being scarce which needs to increase the returns to scale by changing the structure of farming in which due to element of risk, cost- benefit ratio should be optimum. The labour is the only abundant factor which is free to the farmers, the best way to bring out the required cost- benefit ratio and to make proper use of surplus labour along with crop cultivation is by choosing such an enterprise which becomes complimentary and supplementary to crop enterprise. Poverty is the outstanding characteristic of traditional agriculture. The main causes of poverty are resource constraints and technological stagnation, both of which limit the development of agriculture sector. While labour is generally abundant, land is scarce due to population pressure and the farming methods and equipments are primitive by western standard. The technological progress is hampered by barriers to the spread of technological information, the risk of technology adoption and input supply bottlenecks.
The scarcity of land encourages the intensive use of labour, especially family labour, to obtain high crop yields but the productivity of labour is reduced. The problem of low labour productivity in traditional agriculture is made worse by technological stagnation. The distribution of land in Less Developed Countries (LDCs) tends to be in favour of landlords and large farmers. Most of the rural households are restricted to only a very small plot of land or they are landless labourers. The distribution of wealth and income in the rural sector is directly correlated with the distribution of land.

The main problem of Indian agriculture are low production and productivity, natural obstacles, lack of inputs, absence of improved implements, poor quality of livestock, lack of finance, lack of productive investments, defective land tenure system, small units of cultivation, inadequate land use, surplus population, defective crop pattern, conservative outlook of cultivators, lack of desire and incentive to produce more, inefficiency organization, defective marketing conditions, uncertainty of prices, inadequate research, lack of human capital and administrative obstacles.

The traditional agriculture of our country failed to provide enough remuneration to the majority of persons engaged in its pursuits. Our agriculture remains low-income occupation, which follows low savings, low investments and low agriculture income. This has created a ‘vicious circle of poverty’. The vicious circle of poverty starts with low agricultural production, low marketable surplus, low bargaining power, low incomes, low savings, low investments for land improvement and ultimately ends in low agricultural production.8

Agricultural progress is normally regarded as a pre-requisite of economic development. It is the foundation on which the entire superstructure of growth of Industrial and other sectors of the economy has to stand. Agriculture has been the major source of livelihood in Indian economy. Notwithstanding major diversification in the structure of economy over the last few decades, the dependence on agriculture continues unabated. During the era of economic
planning, agricultural output has recorded a steady growth alongside growth of the other sectors of the economy.

Agricultural sector, at present, provides livelihood to about 62 per cent of the total population. This sector provides employment to 58.4 per cent of the country’s work force and is the single largest private sector occupation. Diversification of agriculture refers to bring about a desirable change in the existing cropping pattern towards more balanced cropping for cereals, pulses, vegetables, fruits etc. It is to create opportunities for achieving higher and more stable income through more efficient use of resources and exploration of comparative advantage. The concept of diversification refers to a move away from foodgrains to vegetables and to horticulture. The diversification within agriculture means a shift from one crop to another crop.\(^9\)

The diversification process may include both changes in cropping pattern as well farming system including agro-based enterprises. The crop diversification refers to the addition of new crops with a view to minimize crop risk, value addition, stable and sustainable agriculture in any area. For example the diversification of crops in terms of fruits, vegetables, mushrooms flowers and agro-forestry are important value added crops inclusion in existing cropping system of India. Such type of diversification is known as horizontal diversification. The diversification in the farming system like dairy, sericulture, aquaculture, bee-keeping etc. have been emerging up recently in the country with a view to increase employment, income and to develop an integrated farming system which may be proved as economic viable and socio-economic acceptable and sustainable and ecological balanced in a given area. This type of diversification is known as vertical diversification.\(^10\)

The main catalysts for crop diversification are demand, supply, price market mechanism, competitiveness, response for effective resource use and policy stimulants. The crop diversification is intended to give a wider choice in the production of variety of crops in a given area so as to expand production related activities of various crops and also to lessen risk. The crop
diversification in India is generally viewed as a shift from traditionally grown less remunerative crops to more remunerative commercial crops. Diversification means that due to economic pressure and incentives, landholders 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 (iii) switch over from local to high yielding plant varieties. Diversification means the shift or desirable change in existing system which contributes more towards the productivity or monetary gains annually in the system. The diversification is considered desirable and sometimes essential to meet out the emerging needs under the existing farming situations which may be necessary by the new opportunities in the area due to various external and internal factors.\textsuperscript{11}

The level of diversification of crop enterprise reflects the extent of economic development in rural sector. For the rural economy, crop diversification has largely been considered as a ray of hope for its economic uplift. The diversification in agriculture is also practiced with a view to avoid risk and uncertainty due to climatic and biological vagaries. In the early stage of development, the farmers generally used to grow subsistence crops and with the increase in human population, they tried to produce more to maximize total farm output and finally agricultural diversification has been practiced in order to further strengthen the existing level of development.\textsuperscript{12}

The production and productivity of agricultural sector can be increased through agricultural diversification. Diversification in agriculture can be broadly defined as producing increased variety of agricultural commodities. Diversification becomes necessary for developing countries since growing of basic staples such as cereals cannot alone support economic development, notwithstanding the need to ensure food security to the people. The agricultural diversification to commercial crops/commodities becomes an essential strategy that can increase income in agriculture, minimize risks due to crop failures and above all earn foreign exchange. Further, diversification can be designed to
help poverty alleviation, employment planning and environmental conservation and a planned diversification increases both individual and social gains.\textsuperscript{13}

Though, during the process of economic development, the share of farm sector in the national income tends to decline. It continues to be of vital importance for providing food and fiber for growing population with rising purchasing power as a result of rise in per capita income. The fixity of land and limited scope for diversification are the two main constraints, which affect the growth of his sector. Therefore, increase in output in the farm sector depends mainly on augmenting the productivity of land and labour, which differ significantly from country to country and even in the same country over different periods. In poor agrarian economies, where credit and insurance markets are not fully developed, diversification of crop enterprises and sources of off-farm income and employment are the most important strategies adopted by rural households to combat the crop risk and stabilize their income and consumption. Further, diversification is also considered essential to reap scale economies arising out of complementary and supplementary enterprises or inter-enterprises growth linkages, boost the employment opportunities for rural economy in particular and the economy as a whole in general has been accorded very high priority. In the Eighth Five Year Plan emphasis has been laid down on the effective programme of diversification of cropping pattern through cultivation of agriculture, horticulture and exotic crops. Among allied activities, the plan underscore the need to accelerate agro-based activities, like sericulture, fish farming, animal husbandry and silvi pastoral system constituting the basic elements of an employment oriented growth strategy. Due to seasonal nature of crop production processes and heavy dependence on crop production activity, seasonal unemployment and disguised unemployment are the serious problems faced by those dependent on agricultural sector for their livelihood. Specifically, the term agricultural diversification has been used to connote the changes in crop mix and enterprise mix and / or activity mix at household level. It may not necessarily involve increase in number of
production choices: on the contrary in some cases it may lead to specialization and thus reduction in the number of production choices.¹⁴

A move away from agriculture to industries and services denotes inter-sectoral diversification at the macro level. But there is a lack of clarity when it comes to diversification within agriculture. There could be changes, which are in the nature of shift from one crop (say, rice) to another crop (say, oilseeds) or from one enterprise (say, crop rising) to another enterprise (say, livestock). The other type of diversification may express itself in an addition of a complementary enterprise to the main enterprise. Thus diversification could suggest any one, or all, of the three situations; (i) shift from farm to non-farm activities, (ii) shift from less profitable crop or enterprise to more profitable crop or enterprise, and (iii) use of resources in diverse but complementary activities. The first type of diversification is essentially the diversification of the rural economies, rather than diversification of agriculture per se. the second type exemplifies farmers’ response to price signals, and their efforts to adjust to changes in market conditions. The third type assumes that there is a slack in the system and exploitation of the unemployed or under-employed resources would raise the income frontiers.¹⁵

The expansion of farm sector through the increase in production and productivity is necessitated due to the fact that in most of the developing economies, farm sector contributes nearly 50 percent share to the national income and employs about 40 to 70 percent of labour force, being the single most important industry. Secondly due to agricultural products being a basic necessity of life, a minimum supply has to be ensured at any point of time. Though there is a possibility of adjusting the desired level of food stocks through imports and exports, yet this is possible only if the total production of farm products in the world available is adequate. Thirdly, there is limited scope for substitution of farm products, especially of food products, as the replacement of certain agricultural food products by suitable animal products is constrained by their demand being more complementary than competitive.
Fourthly, the demand for farm products is ever increasing because of growing population and income, which necessitates a continuous and increasing supply of food products.\footnote{16}

The term agricultural diversification implies the process of change in agricultural production scenario, including allied activities, with a view to attain specified household and economy wise short run and long run objectives. The specific goals of agricultural diversification are, increase in household income, to attain gainful employment opportunities and improvement in living standard of the family and in the some cases reduction in production and income risks. The economy-wise goals of agricultural diversification are to increase direct gainful employment (labour absorption in agriculture) as well as indirect gainful employment in non-farm activities, reduction in incidence of poverty, growth of sectoral and total output and other macro objectives like earning foreign exchange. The basic objectives of agricultural diversification are to attain growth in income, output and employment during the short run and to achieve the sustainable use of natural resources and check on ecological degradation during the long run.\footnote{17}

Diversification is an integral part of the process of structural transformation of an economy. In India, as in other developing countries, the economy is diversifying at the macro level with the secondary and tertiary sectors becoming progressively more important in terms of contribution to national income as well as in disposition of the workforce. Within agriculture, some of the sub-sectors like animal husbandry, forestry and fisheries progressively occupy a more significant place compared to crop production. And within the crop-mix the so-called ‘superior cereals’ (i.e. wheat and rice) progress faster compared to the ‘inferior cereals’ (e.g., sorghum or pearl millet or minor cereals). However, the factors prompting diversification and the speed with which the changes occur vary in different situations.\footnote{18}

In the context of Indian agriculture, diversification has occurred both across and within crop, livestock, forestry and fishery sectors. Besides the
initiative of the individual farmer to diversify his farm enterprises for meeting cash needs of agriculture as well as to combat risk associated with monocropping, technological changes and deliberate Government policies are the other factors that accelerated diversification.\textsuperscript{19}

It would be difficult to achieve sustained growth of rural production, income and employment unless the base of rural economic activities gets expanded and extended beyond agriculture to cover agriculture-allied activities and, further, non-agricultural production and service activities. While farming itself offers room for intensive cultivation of land and diversification of enterprises, it would seem prudent to assume that, as the general case, rural growth in India would need a balanced strategy looking for growth opportunities in the farm as well as non-farm sectors of the rural economy. Secondly, in regions experiencing rapid agricultural growth, concurrent measures for diversification would enable the sections not having access to and to participate in growth. Thirdly, in regions with modest potential for agricultural growth, diversification would be important as a process helping the regions to soften the constraints on growth imposed by agriculture. Fourthly, the emphasis in the Sixth Five Year Plan onwards on Integrated Rural Development Programme (IRDP) as the principal anti-poverty measures indicative of the crucial role that diversification has to play in inter-rating the peripheral groups of rural poor with the main stream economy.\textsuperscript{20}

The other side to be borne in mind is the set of factors inhibiting and distorting the process of rural diversification. The situation with respect to rural industries is disheartening. It would be a fair generalization to say that the success stories in this area have been few and far between and thoroughly unimpressive as compared to those in agricultural growth. Also, in the Indian context, agricultural growth and the forward and backward linkages activated by it seem to have only modest spillover effects in its rural hinterland. This has an implication particularly worrisome for the strategy seeking to promote rural diversification by balancing at the local level the supply of and demand for a
wide range of goods and services. The Integrated Rural Development Programme (IRDP) experiences – excessive reliance on milch animals and in fructuous Training for Rural Youths and Self employment Scheme (TRYSEM) – seem to raise doubts underlining the need for an objective assessment of the prevailing policy perspectives on rural diversification.21

The diversification of rural economy is often suggested as one of the means for rapid economic development in India. Having achieved some success in raising crop production through various technological and institutional changes, the country is now said to be poised for white and blue evolutions involving substantial increases in livestock and fish output. In view of the growing pressure of population and the limited scope of increasing additional income through crop production beyond a point, such a diversification is considered essential not only for the liberation of the rural masses from the squalor of poverty, but also for meeting the demands for milk end milk products, meat, fish, eggs etc., which generally show rising trends with increasing levels of per capita income in the economy. Since the late sixties (under special development programmes), various State Governments have spent huge sums of money on animal husbandry, poultry, forestry, logging and fishing particularly with a view to improve the economic condition of the relatively weaker section of the rural population.22

The introduction of high-yielding varieties (HYVs) and new technology not only leads to intensification of farming but also results in the growth of diversified farming leading to spillover benefits to the whole farming community. The level of crop diversification varies from region to region because of varied agro-climatic conditions and resource endowment of the farmers.

The new economic policy set in motion since mid 1991 has progressively started posing new challenges as well as creating new opportunities for the Indian economy. Direct and indirect impact of these policies changes is bound to affect the agricultural sector of Indian economy. It
is argued that the impact of overall liberalization of economy would be higher investments and growth in agriculture induced by favourable terms of trade. In all these arguments, dominant role of market forces, both domestic and international is visualized to be of crucial importance. In keeping with these policy changes, therefore, Indian agriculture not only has to become cost-effective but also competitive internationally as well as in domestic market.23

AGRICULTURAL DIVERSIFICATION IN HIMACHAL PRADESH:

The State of Himachal Pradesh has achieved the distinction of being regarded as a model of Hill development. Agriculture and allied activities continue to be the mainstay of a majority of the population as they provide livelihood to about 71 percent of the population. These activities contribute about 22 percent to the Gross State Domestic Product (GSDP). Due to topographical constrains, the area under plough is restricted to 10.3 percent of the total geographical area. Only about 17.2 percent of the net sown area is irrigated which is mainly in the form of snow feed gravity flow channels. About 8 percent of the gross cropped area is under food grains. The average holding size comes to 1.2 hectares while 84.5 percent of the total holdings are small and marginal. The State receives an average annual rainfall of 152 cm. Rice, wheat and Maize are important cereal crops of the State. Urd, Bean, moong, rajmash in Kharif season and gram and lentil in Rabi season are the important pulse crops of the State. The agro-climatic conditions are congenial for the production of cash crops like apple, peas, almonds, vegetables etc.24

In the late 1960’s and early 1970’s Green Revolution Technology provided strong motivation to diversify crop sector. About 80 percent population of Himachal Pradesh depends on agriculture. So, diversification of agriculture in Himachal Pradesh is very essential to provide more employment opportunities, to increase income and standard of living by reducing poverty, ensuring better use of land and water resources, and to achieve sustainable agricultural development.25
Agriculture is the mainstay of the State’s economy. As a matter of fact, agriculture here is not merely an occupation, but an established tradition and an accepted way of life. Agriculture happens to be the premier source of the State’s income. With such a large percentage of population depending upon agriculture, there is naturally an excessive pressure on land and consequently marginal land is also brought under the plough. The menacing problem of soil erosion is rampant and every year an un-estimated volume of valuable soil is washed away by rains. The per capita holding of arable land is less than one hectare. Under these circumstances return from agriculture to the farmer is meagre.26

In Himachal Pradesh with abundant rainfall and about a half of its area covered with forests, there is only a limited scope for extensive cultivation. The cultivated fields have mostly been carved out on sloping hill sides, hence exposed to large-scale erosion of the top fertile soil. The scattered and uneconomic holdings also pose an insurmountable problem, which seems beyond control keeping in view the modern approach of mechanized agriculture. Though the net area under plough accounts for only one-tenth of the total area, agriculture plays a crucial role in the State economy. Despite its noteworthy performance in the production of food grains in recent years, the State continues to be deficit in food. However, the growth rate of agriculture, on the whole is slower than that of the country as a whole on account of topographical, climatic and financial constraints. The future development of agriculture depends on agricultural diversification, intensive cultivation and mixed farming with improved techniques of production.27

Agriculture is beset with the disadvantage of small holdings. Only 65 percent of the total reported area is available for cultivation. Out of this area, net area sown and current fallows account for only 21 percent. There is hardly any scope for mechanized farming due to preponderance of small holdings and terraced fields. Against all these odds, the farmers of Himachal Pradesh are constantly endeavoring to exploit fully the agricultural potential of the State to
increase food production and also to supplement their incomes through agricultural diversification. Wheat, barley, paddy and maize are the important cereal crops under cultivation. Seed potato, ginger and off-season vegetables are the important cash crops. There is potential for the development of crops like hops, mushrooms, olives, saffron and zeera.

Himachal Pradesh has achieved remarkable success in fruit and off-season vegetable production. During past two decades apple production is reported to have increased by more than 300 percent. Apple alone accounts or about 12 percent of the Net State Domestic Product originating in agricultural sector and about 4 percent of total Net Domestic Product of the State. It has ushered in prosperity in the tracts suitable for its cultivation. However apple cultivation, due to its climatic requirement, is strictly confined to the temperate region of the State. Fruits which are suitable for growing in other three agro-climatic zones of the State do not have bright prospects from the point of view of demand. These fruits, like citrus, mango, plum and pears do not have any comparative production advantage in hills over plains, and therefore, cannot compete in the market with the same fruits produced in the plains. Though the State has been making deliberate and conscious efforts to encourage large scale fruit production in all the districts, the strategy does not seem to hold much promise in the non-temperate belt, as also for fruits other than apple and nuts. Then, one is forced to explore what are the alternatives for agricultural diversification in future, in the State. Some studies showed the economics of production of off-season vegetables are a far superior alternative than other crops and fruits in terms of income, productivity and employment. Similarly some researchers observed dairy to be attractive option for increasing income and employment in rural areas of the State.

There seems to be good scope for diversification of agricultural sector for enhancing income and generating additional gainful employment opportunities. Some areas in the State have already made much headway in this direction and there is a vast scope to replicate these successes in other parts of
the State. The diversification of agricultural sector can also generate some marketable surplus to attract setting up of agro processing industries in the State.

Himachal Pradesh has a comparative advantage in vegetable production as the vegetables grown in the State come in the market when they are not available in the plains. Therefore, the vegetables produced in Himachal Pradesh are called "off-season vegetables and fetch high prices. Although vegetables can be grown successfully in all the twelve districts of Himachal Pradesh, a vegetable revolution is visible in certain pockets and valley areas like the Saproon valley of Solan district, which is now famous for its quality vegetables and vegetable seed production throughout the country. Many other commodities like mushroom, exotic vegetable, like, asparagus, chicory, broccoli, some medicinal herbs and floriculture crops, like gladiolus carnation, which also have 'potential for exports, can be grown in the State under natural conditions as the climate in most of the parts of the State is conducive for these crops.

A wide variety of food and non-food crops are grown throughout Himachal Pradesh. Due to the differences in soil and climatic conditions, different varieties of crops are grown which include rabi cereals (wheat, barley) and Kharif cereals (rice, maize, jowar, bajra, millets, and ragi) and various kinds of pulses. Besides food crops, a variety of non-food crops, dry and fresh fruits and vegetables are also grown. Therefore, a detailed analysis of the agricultural diversification will enable us to find out whether the farmers are shifting their cropping pattern in favour of superior cereals from coarse cereals or from food crops to cash crops and vegetables.
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