CHAPTER- 9

CONCLUSION

After making an intensive study on the topic “Role Of Agro Based Industries In the Development Of The Economy Of District Jalaun; A Study Of Post Liberalisation Period From 1991 to 2001”, we have just jump in to the following conclusions:

India is an underdeveloped economy. There is no doubt that the bulk of its population live in condition of misery. There exist unutilized natural resources. Indian economy is primary producing. A very high proportion of working population is engaged in agriculture. In 1999, about 61% of the working population was engaged in agriculture and it’s contribution to National Income was 28%.

Although from the occupational point of view the Indian economy is primary producing yet one can not easily escape the conclusion that agriculture continues to be a depressed industry as the productivity per person engaged in it is very low.

When we analyse the employment opportunities we see that in India labour is an abundant factor and consequently it is very difficult to provide gainful employment to the entire working population.

Moreover, in the agriculture sector of the Indian economy, a much larger number of labourers are engaged in production than are really needed. Accordingly the marginal productivity of labour in agriculture is often negligible; it may be zero or even may be negative, thus there exists ‘disguised’ or concealed unemployment in agriculture. Even if surplus population is siphoned off, the total output from agriculture will not fall because those persons who were working below capacity begin to be utilised to the full. Disguised unemployment in rural areas is the result of heavy pressure of population on land and absence of alternative employment opportunities in our villages.

In India capital per head available is low and secondly the current rate of capital formation is also low. Gross capital formation in India is less than that of developed countries. In India the quality of human capital is poor. India suffers from mass illiteracy. Illiteracy retards growth. A minimum level of education is necessary to acquire skills as
also to comprehend social problems.

In India most modern techniques exist side by side with the most primitive in the same industry, but there is no gain saying the fact that the majority of the productive units and a major part of the output is produced with the help of techniques which can be described as inferior judged by modern scientific standards.

Since new techniques are expensive and require a considerable degree of skill for their application in production, the twin requirements for the absorption of new technology are the availability of capital and training of an adequate number of personnel. It is necessary to have a basic minimum level of education among the actual producers in order that the economy can absorb new technology.

The Indian economy suffers from this basic weakness. The low productivity per hectare in Indian agriculture and the low level of productivity per worker in agriculture and industry are largely a consequence of technological backwardness. In India the vast majority of farmers are too poor to buy even the essential inputs, such as improved seeds, fertilisers and insecticides, not to speak of affording the more expensive producers' goods like harvesters, tractors, sowing machines, etc.

Agriculture has got a prime role in Indian economy. Though the share of agriculture in national income has come down since the inception of planning era in the economy but still it has a substantial share in GDP. The contributory share of agriculture in Gross Domestic Product was 55.4% in 1950-51, 52% in 1960-61 and is at present reduced to nearly 25% only.

Agriculture sector, at present provides livelihood to about 64% of the labour force. Various important industries in India find their raw material from agriculture sector. Cotton, textile, jute sugar, vanaspati industries etc. find their raw material from agriculture. Allied agriculture activities like horticulture, agro-forestry, fisheries, milk dairy etc. are directly or indirectly dependent on agriculture. At the same time Handloom, spinning, oil milling, rice thrasing etc. are various small scale and cottage industries which are dependent on agriculture sector for their raw material.

India's foreign trade is deeply associated with agriculture sector. Value of agriculture exports to total exports of the country has been ranging between 15 to 20%. Besides, goods made with the raw material of agriculture sector also contributes about
20% in Indian exports. In other words, agriculture and its related goods contribute about 38% in total exports of the country.

India has attained self-sufficiency in almost all consumer goods. Growth of capital goods production has been specially impressive. An impressive industrial capacity has been achieved in mining and metallurgical industries, chemical and petrochemical industries, fertilizer production, capital goods industries including sophisticated equipment for steel mills, fertilizer plants, chemical plants, etc. light, medium and heavy engineering industries, power and transportation industry, construction industry, etc. Further, India can now sustain the future growth of vital sectors of the economy primarily through domestic efforts and only with marginal imports. Finally, the infrastructure including R & D capability, consultancy and design engineering services, project management services and innovative capacity to improve and adapt technologies have indeed shown an impressive record of progress.

When we analyse the agriculture, agro-based industries and allied agriculture activities in the context of foreign trade we see that India's share of the world trades in agriculture is only 1%. Its share in the world trade of agriculture products, except for the traditional items exported, has been low due to lack of export orientation in domestic production. Further as a policy, exports of items of mass consumption are only permitted in a manner, which does not compromise the food security of the country. The agriculture products exported from India include tea, coffee, raw cotton, rice, wheat, course grains, tobacco, fruit juices, cashew, sesame, Niger seed, oil meal extractions, sugar, flowers and horticulture products, fresh fruits and vegetables, processed fruits and juices, meat and meat preparations.

**Opportunities in the field of medicinal herbs**: 

The opportunities that favour the utilisation and cultivation of medicinal herbs in India are summarized below:

1- Because of its vast bio-diversity and the potential for commercial exploitation of medicinal plants, India could become a leading supplier of herbal medicines to global markets.
2- A vast majority of the world population is currently finding themselves unable to afford the products of the western pharmaceutical industry, and they mainly have to depend on the use of traditional medicines, which have been derived from plants.

3- Developing countries spend roughly forty to fifty percent of their health budget on drugs and as a strategy to reduce the financial burden on developing economies, the World Health Organisation (WHO) recommends, encourages and provides for the inclusion of herbal medicines in national health programmes. Such herbal medicines are easily available at affordable prices for the common man, they are time tested and considered safe than modern synthetic drugs. Of late, there has been a resurgence of interest in herbal medicines also in western European countries.

4- Introduction of medicinal plants in the cropping patterns of the farming communities especially in dry land and watershed areas could provide a strong thrust to the need for soil and water conservation and would also provide reasonable returns and indirectly help in ex-situ conservation of these to a large extent.

**Potential**

The following points highlight the potential of medicinal plant in India, the cultivation and processing of which could be a profitable business venture.

- India is bestowed with incredible plant resources and a rich bio-diversity, which can form starting points for the medicinal plants business sector.
- The varied agro-climatic conditions stretching from alpine / mild temperate to tropical types with abundant rains and sunshine, make India an ideal place for the luxuriant growth of flora fauna.
- India is a proud possessor of a rich medicinal heritage which encompasses various systems of medicine, namely, Ayurveda, Siddha, Unani and also the Tibetan system of
medicine, apart from thousands of tribal bodies of knowledge of traditional herbal medicines. It also has an invaluable treasure trove of various scriptures on diverse medical systems.

- We need to pay attention to medicinal plants on which:
  * Significant research needs in aromatic / medicinal plants,
  * Medicinal plants being imported
  * Plants which are used in the treatment of various diseases having properties such as: anti-cancerous, anti/protozoal, anti-diabetic, anti-inflammatory etc.
- There is very great demand for herbal products in cosmetic and health care products, several pharmaceuticals industries processing allopathic drugs are becoming aware of the emerging trend of herbal medicines and are trying to access this market. Such components are already releasing purely herbal-based drugs in the market. On account of this, it is evident that the future of medicinal plants industry is bright in India.
- In the developed countries, the market for total medicine is growing at a faster rate than that other of pharmaceutical products. Some of the reasons for this are:

  * Realization that allopathic drugs have harmful side effects.
  * Allopathic medicines are said to be ineffective against many chronic diseases like cancer.
  * Herbal medicines are comparatively less expensive.
  * Western medicinal profession has begun to acknowledge the value of herbal medicines.

There has been a tremendous upsurge in the demand for phyto-pharmaceuticals, raw medicinal herbs and vegetable drugs of Indian origin in the western world. There is also an increase in the demand from the domestic market for plants / plant parts used for perfumery and those with insecticidal properties for traditional herbal drugs owing to the increased awareness of the ill effects of western medicine.
**Weakness**

There is no doubt that the medicinal plants based drug industry is progressing very fast, but at the same time facing a lot of problems.

In spite of the fact that the considerable research work has been done during the last thirty years, India has not made much headway in increasing its export potential and most of the drugs used in the traditional system as still obtained from wild sources. There is urgent need to identify our research and development efforts so as to produce their plants and their constituents in the country, which was still imported. There is a need also to develop research methods for the traditional systems are still obtained from wild sources. There is urgent need of intensify our research and development efforts so as to produce these plants and their active constituents in the country, which are still being imported. There is a need also to develop research methods for the traditional systems of medicine, which has great potential in the developed countries of the world.

Some of the medicinal plants growing in the wild are becoming extinct on account of destructive collection techniques such as uprooting of the entire plant with its roots. It is also widely known that large-scale use of adulterants and other substitutes bring down the efficacy of the formulations.

Systematic cultivation of a few medicinal plants has been found to be a discouraging venture primarily due to its being uneconomical.

Some of the varieties of medicinal plants have a long gestation period before the plant begins to yield. For example: Ashoka, Neem, Bel, Nutmeg etc. post harvest-handling practices such as fumigation during storage results in the contamination of the raw materials and subsequent decreased effect of the finished preparation.

**Limitations:**

Although, we have enumerated the opportunities and potential of cultivation of medicinal plants in India, there are certain inherent qualities and constraints in the system today which seem to limit the medicinal plant industry as:
The most alarming problem the medicinal plant industry is facing today is the constant dwindling of natural resources due to the haphazard collection channels.

* The rampant adulteration and substitution of the raw materials in the production of indigenous medicines might lead to bad name of the Indian systems of medicine.
* Growing pressure of population and increasing urbanization has resulted in large-scale deforestation, resulting in the loss of natural plant resources.
* In many cases since the important plant parts are the roots or the entire plant, this results in plant collectors engaging in the destructive collection / extractive methods resulting in many species becoming extinct or being listed as a threatened species.
* Despite the fact that our forests are a major resource base for medicinal plants as many of them appear in the wild, the importance of this has not been totally recognized by the Government departments and negligible or no action is taken or planned as long term strategy for conservation of bio-diversity and support to communities which rely on this totally.
* Unauthorized collection of minor forest produced by persons who are led by the increasing demand for medicinal plants has resulted in the deprivation of the rights of the communities engaged traditionally in this activity.
* Highly volatile market prices of medicinal plants partly because of fluctuations in production and demand may render many of the crops uneconomical for cultivation.

Medicinal plants as an industry offers the most attractive entry opportunities. It also offers good potential by the way of absolute volumes, growth potential and export potential. Owing to the inherent agro-climatic condition of India and its vast natural resource potential including an emporium of medicinal herbs available in India, the cultivation and processing of medicinal herbs is definitely a worthy business opportunity. A judicious selection of the plant species depending on its export potential and cultivation requirements need to be made before venturing on its commercial production. With the increasing attention being paid to ecological and environmental issues globally, rationalistic and realistic approach needs to be chartered for successful and sustainable development of this growing industry.
It is obvious that with land resource getting limited, integrating medicinal and aromatic plants with a high value crop such as oil palm through suitable agro-forestry systems of planting, appears to be a viable and attractive option which should be seriously considered by the planting community. Under current scenario of limited land availability and the need to increase productivity and income, maximizing land use through agro-forestry systems of planting compared to the traditional monoculture planting, offers an alternative option for the planting of potentially high value crops such as the medicinal and aromatic plants. With the adoption of existing advanced agricultural plantation technologies in agro-forestry systems of planting and the planting properly implemented, establishment and planting success of the medicinal and aromatic plants under oil palm will be somewhat assured. In addition, by raising the awareness of the herbal industry on the commercial importance of medicinal products using raw materials from our tropical forest, the economic potential of these medicinal and aromatic plants will be increased. This will subsequently contribute to the development of herbal industries as well as medicinal plants research in this country.

Finally we see that the economy of the district Jalaun is agrarian. 79% of the total population of the district is dependent upon the agriculture. The marginal productivity of the labour is zero or sometimes it is negative too. In the district disguised unemployment exists. Thus there is a great necessity to develop the agro-based industries as these industries require low investment of capital and not too much skilled persons are required. In the district many agro-based industries are working properly as in Orai, Dal Mills, Oil Mills, Flour Mills, Spices and Bakery industries are in large quantity where as in Jalaun seed processing units are established. In Konch area there is one fish hatchery of 16 hectare managed by Fisheries Development Corporation and the farming of peppermint plants is also in practice in large scale. There is big production of peppermint oil in the district. Many big and small units for extracting peppermint oil are established and working properly. In Kalpi Tehsil there are many units of hand made paper. This; hand made paper is a special type of product. As per the information received there are nearly 42 units in which nearly 5000 persons are employed. This industry is basically labour-intensive industry but in recent years some units are also using machines for
quick and large production. In Madhoghar area there are some Oil Mills. Milk dairies are also working in unorganised way and there is also good production of Ghur in this area. The government and many NGOs are promoting the herbal plantation in the district as there is great opportunities in this field. Some industries based on such herbs and plant are also being established. Yet the full utilisation of the available resources of the district Jalaun has not been made.

There is very great opportunity in the field of the agro-based industries. All types of the industries like cottage and small scale industries may be developed in the district. This step would be helpful in solving the problem of unemployment and ultimately will increase the per capita income of the district and the national income.

We see that in the district agro-based industries are established with low investment of capital, it require larger number of labourers as these industries are labour intensive. In such industries too much skilled labourers are also not required. Agro-based industries in the district had made it possible to provide employment and development in the rural areas. Many labourers living below poverty line, are now getting employment in the agro-based industries. There are more and more opportunities of the employment generation in the district, in the field of agro-based industries.

In short the following factor should exist for the development of agro-based industries:

-- Availability of raw material
-- Availability of labourers
-- Low investment of capital
-- Cottage, Small and Medium size of industries possible

Thus we can conclude that the economy of the district is agrarian. The availability of raw material is easily possible which is helpful in promoting such industries as well as in removing the problem of unemployment.

The market for finished products of such agro-based industries is available in the district itself as well as in the neighbouring districts. Also the opportunities of the export of such products exist, but for it we would have to pay attention towards the quality and quantity of the product.

Concluding we find that in the operation area i.e. in the district Jalaun there are so many agro-based products which were found to be very appropriate to the above
conditions and thus the following industries have great opportunities to be established:

- Flour mill
- Bakery products industries like biscuits, bread etc.
- Pulses (dall mill)
- Processed Peanuts, Namkins etc.
- Fishing and Canning (finished product of fish)
- Floriculture
- Herbal Plantation and its final products
- Processed fruits and vegetable like tomato and chilly sauce and tomato soup
- Paper products like hand made paper and boxes
- Herbal cosmetic items
- Herbal medicines
- Vegetable products like processed vegetables and its products as Allu chips etc.

Main Factors Which Are Responsible For Non Creation Of Employment Even Though There Exist Education:

1. Excess of Population.
2. Corruption.
3. Wrong system of education.
4. Lack of technical education.
5. Lack of capital.
7. Low creation of employment opportunities by the government.
8. Low creation of self-employment.
9. Lack of employment according to education.
11. Non utilisation of resources.
12. Non implementation of projects.
13. Complexities in documentation.
The assumed hypothesis are tested on facts and the conclusions which have been found out are as below –

The first hypothesis is that — Agro based industries have led to development of infrastructure and more and more employment in rural areas, we see that in rural areas agro- based industries have failed to develop the infrastructure facilities but have been successful in providing the rural employment. People are getting employment in the rural areas as well as in the towns yet these industries are under developed. District Jalaun exist great opportunities of development of agro-based industries.

The second hypothesis that — Agro based industries have generated a sustained growth of development. It looks very near to the fact, as there is a positive correlation between the employment generation and the economic development. Since agro based industries have provided employment in the district and also these industries have been helpful in increasing the per capita income thereby making it possible to reduce the poverty. Thus these industries have generated a sustained growth of development.

The third hypothesis is that — Agro based industries have made possible to keep away the problem of unemployment as well as poverty; has also been accepted as these industries have generated employment in this area and thus made it possible to reduce the problem of unemployment and poverty.

The fourth hypothesis that — Through Agro- based industries the development of the economy may be made is acceptable in it’s original form. As the development of the agro based industries is one of the most important factor of the economic development. The economic development of countries, like India depends upon many indicators as education, employment, energy generation, export creation, technological development etc. The development of the agro based industries increase mostly all above mentioned indicators of development. The agro based industries generate employment in rural as well as in urban areas and the employment generation eliminate the problem of poverty. Through the development of agro based industries the export of the country increases. Since the economy of India and particularly of District Jalaun is agrarian, bulk of the population is related to villages and agriculture so there is no shortage of labour and other inputs for the agro based industries. This factor indicates that in this area the agro based industries may be more developed. Thus with the help of agro based industries the
development of the economy may be made possible.

The fifth hypothesis that— More opportunities of employment have been generated with low investment of capital in agro-based industries is true. Agro-based industries are mostly labour intensive. In the district there is scarcity of capital but no shortage of labourers. Agro-based industries are possible in cottage and small scale form which are labour intensive. Thus more opportunities of employment have been generated with low investment of capital in agro-based industries in comparison to others.

We see that all the above-mentioned hypothesis have been accepted except one “that the agro-based industries have led to development of infrastructure facilities”. The tested hypothesis reveal results that with the help of agro-based industries the development of the district is possible. At the same time the agro-based industries also reduce the problem of unemployment and poverty. Keeping in view the availability of physical and natural resources; the agro-based industries have great opportunities to be established in the district. Now we have to take steps towards establishing the agro-based industries.