

# **Introduction And Research Methodology**

### 1.1 Role of Agriculture In Indian Economy :-

Agriculture is a very important sector of Indian economy. It contributes sizeable to the domestic as also to exports. More than two- thirds of the work- force work in agriculture. In a nutshell, its position is an all embracing one. The very existence of economic activities of the entire people is bound up with the state and health of this sector. This all pervading influence can be gauged from the following facts and figures.

No doubt with the faster development of the non- agriculture sectors, in recent years. The share of agriculture in National Income has fallen. Yet, it continues to be significant at about 24 percent at present. In 1950-51 agriculture and applied occupation contributed 59 percent of national income. In 1980-81 its contribution in national income was 40 percents. Its share may fall further because, of higher growth of other sectors, but in terms of quantities, its role in the economy will continue to be quite significance.

Agriculture dominates the economy to such as extent that a very high proportion of working population in India is engaged in agriculture. According to the census of 1961, 75.9 percent of working population was engaged in agriculture. 69 percent in 1981 and 59.9 percent in 1999-2000 working population out of total working population was engaged in agriculture. In the advanced countries only 2 to 3 percent of working population is engaged in agriculture. But in developing countries like India, it is playing an important role because the working population engaged in agriculture is quite high.

Agriculture contributes a sizeable part to export and is an important segment of imports of the country. Agricultural products like, tea, sugar, oilseeds, tobacco, spices etc, contribute the main items of export of India. The exports of agricultural products have been quite large and rising all through these years, particularly since the 1970's. These exports at present constitute 15 to 20 percent of the total exports of the country. Besides, the exports of products from activities allied to agriculture constitute a signification proportion of the total exports. If to this we add the export of products based on agriculture, the contribution becomes larger still. This makes it an important contributor to the national kitty of foreign currencies. Not only has it earned a sizeable amount of foreign exchange, its earnings development. It is because its earnings are available for the import of nonagricultural development goods, as agriculture itself needs little imports as its inputs.

Agriculture is the main source of livelihood. Out of every ten persons seven persons depend on agriculture in India. The proportion is very high and the most remarkable thing is that from 1901 to 1971 this proportion has come down marginally from 70 percent to 63 percent.

Agriculture has been the source of supply of raw material to our leading industries. Industry depends directly and indirectly on agriculture. Many small scale and cottage industries like handloom weaving, oil crushing, rice husking etc., depend on agriculture for their raw material. Agriculture plays an important role in developing the industries by supplying the inputs.

Agriculture also makes available resources for investment. This contribution is more significant because without it no capital formation can take place. Saving is created by raising the productivity of agriculture. The

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I wish to express my thanks to Shri. M.R.Chougale President, Kolhapur District Organic Farming Organisation and all respondents for their inherent help in providing the required data of organic farming in Kolhapur district. productivity of agriculture can be increased with little additional cost. As a result farmers save some amount of agricultural surplus. Then they invest their savings in non-agricultural sector which is very helpful to capital formation. In absolute terms the gross capital formation in a year is at present about Rs. 16,500 crore. As such, it is not surprising to find that the matter of investment also this sector has an important place.

It is thus obvious that agriculture occupies an important position in the Indian economy.

### 1.2 Methods Of Farming :-

### 1.2.1 Natural Farming :-

Natural farming was developed in Japan in 1930 by Mokichi Okada. It is parallal to organic farming in many ways. But it includes special emphasis on soil health through compost rather than organic fertilizer. Kyuesei nature farming, a branch group, makes use of microbial preparations. Nature farming is most active in the Pacific rim, California and Hawali.

OKada expounded it, rests on a belief in the universal life- giving powers that the elements of fire, water and earth confer on the soil. The potent's soil created over a span of eons had required life sustaining properties, in accordance with the principle of the indivisibility of the spiritual and the physical realms which provide the life force that enables plant to grow. To utilize inherent power of the soil one should undertake nature farming.

#### **1.2.2 Biological Farming :-**

Biological farming has become synonymous with farmers using the farm, fertility system as the basis for crop production. The reams system is based on the Lamotte Morgan soil test and use of rock phosphate, calcium carbonate and compost to achieve nutrition ratios of 7:1 of calcium to magnesium, 2:1 of phosphorus to potassium, and so on. Biological farming allows the use of selected chemical fertilizers and adopts low input approaches with the help of herbicides and insecticides.

Diagnostic instruments to monitot plan and soil conditions are frequently used in biological farming. Based on the collection of data, foliare sprays containing biostimulants and soluble nutritions are applied.

#### 1.2.3 Permaculture :-

It is a contraction of permanent agriculture. Australlins Bill Mollison and David Holmgren coined the term in 1978. Permaculture is concerned with designing ecological human habitats and food production system. It follows specific guidelines and principles in the design of these systems. Permaculture is also about careful and contemplative observation of nature and natural systems. It deals with recognizing universal patterns and principles, then leaning to apply these ' ecological truisms' to one's own circumstances

### 1.2.4 Organic Farming :-

Organic farming is a design system which aims to create sustainable habitats by organic patterns. Organic farming means, "The use of organic manures and natural method of plant protection instead of using synthetic fertilizers and pesticides.

It avoids the use of synthetic chemicals as well as genetically modified organisms (GMO'S) and usually subscribe to the principles of sustainable agriculture. Its theoretical basis puts an emphasis on soil health. Its proponts believe that healthy soil, maintained without the use of man-

made fertilizers and pesticides and livestock raised without drugs, yields higher quality food than conventional, chemical - based agriculture.

### 1.2.5 Regenerative Farming: -

In regenerative agriculture bunds on natures own inherent capacity to copy with pests, enhance soil fertility and increase productivity. It implies a continuing ability to recreate the resources that the system requires. In practice, regenerative agriculture use low- input and organic farming system as a framework to achieve these goods.

### 1.2.6 No Till Farming: -

'No till farming' also known as conservation tillage or zero tillage is a way of growing crops year to year without disturbing the soil through tillage. Once called chemical farming, the reference was subdued in order to promote the idea of ' No till farming ' being more natural. It is becoming more common as researchers study its effects and farmers uncover its economic benefits.

Producing crops usually involves regular tilling that agitates the soil in various ways, usually with tractor. Tilling is used to remove weeds, mix in soil amendment like fertilizers and prepare the surface for seeding. This can lead to unfavorable effects like soil compaction, loss of organic matter, degradation of soil, death of soil microbes, anthropodes and earthworms and soil erosions where topsoil blow away. No till farming avoids unfavorable effects by reducing or excluding the use of conventional tillage.

### 1.2.7 Hydroponics -

Hydroponics is a crop production method with mineral nutrition solution instead of soil containing silt and clay. Terrestrial plants can be

grown with their roots in the mineral nutrient solution or in an inert medium, such as sand, gravel or rockwool. A variety of techniques exist.

In this method plant absorb essential mineral nutritions as inorganic ions in water. In natural conditions, soil acts as a mineral nutrition reservoir but the soil itself is not essential to plant growth. When the mineral nutritions from the soil dissolve in water, plant roots are able to absorb them when the required mineral nutritions are introduced in to a plan's water supply artificially, soil is no longer required for the plant to thrive. Hydroponics is also a standard technique in biology research and teaching and it is a popular hobby. There is little commercial hydroponic crop production because it is more expensive method than traditional agriculture.

### 1.2.8 Ecological Farming System: -

Ecological farming system is sustainable and profitable method. It is a self-reliant method and has to be an integrated system. Since it is a knowledge- intensive practice, one has to keep pace with the dynamics of nature to increase the biological productivity of the soil.

Since economic farming system uses several inputs of farm growth and less independent on market purchased inputs, it is economically alternative to the growers. If the bio-fertilizers and organic nutrients supplements such as neem cack are subsidized to extent the same monetary advantage as chemical fertilizers, the cost of ecological farming will come down significantly.

### 1.2.9 Green House: -

A green house is built of glass or plastic. It heats up because the coming of suns ultraviolet radiation warms plant's, soil and other things inside the building. Air warmed by the heat from hot interior surfaces is

retained in the building by the roof and wall. The glass used for a greenhouse works as a selective transmission medium for different spectral frequencies and its effects is to trap energy within the greenhouse, which heats both the plants and ground. This process warms the air near the ground, and this air is prevented from rising and flowing away, in addition to the fact that infrared radiation cannot pass through the greenhouse glass. This can be demonstrated by opening a small window near the roof of a greenhouse: The temperature drops considerably. This principle is the basis of the autovent automatic cooling system. Greenhouse is the work by trapping electronic radiation and preventing convection.

#### 1.2.10 Alternative Agriculture:-

Alternative agriculture recognizes that a piece of land on which crop plants are grown is first and foremost on ecosystem, and not a factory. An ecosystem has many interacting organisms which must remain in balance. Many natural processes occur in such an ecosystem. Farmers should take advantage of these natural processes, rather than try to circumvent them with Chemicals. This system rejects certain practices (Such as heavy use of inorganic Fertilizers), but most important are the practices, which it favours.

- 1. Tillage that minimizes soil erosion even if it is more expensive.
- 2. Reliance on animal manures and green manures with minimal input of inorganic fertilizer.
- 3. Integrated pest management for pest control.
- 4. Management system, such as crop rotations, that helps to control weeds and disease organisms.

#### 1.2.11 Biodynamic Agriculture: -

Biodynamic agriculture means biological dynamics. It is a method of organic agriculture, which considers farm as a living system and where one activity affects the other.

It was evolved in Europe in 1920's following the lectures on agriculture by the Austrian antroposophist Rudolf steiner. Biodynamic farming parallels to organic farming in many ways but places greater emphasis on the integration of animals to create to closed nutrition cycle, effect of crop planting dates in relation to the calendar and awareness of spiritual forces in nature. A unique feature of this method is the use of eight specific preparations derived from cow manure, sillica and herbal extracts to treat compost piles, soils and crops. In comparison with are adjacent farms, the biodynamic farm exibited superior physical, biological and chemical properties and were just as financially viable as their counterparts.

### 1.2.12 Integrated Intensive Farming System. (IIFS):-

The IIFS methodology provides the pathway to achieve an evergreen revolution in agriculture. According to Prof. Swaminathan, An Chairman, M.S.Swaminathan Research Foundation, Madras. The IIFS involves agriculture intensification, diversification and value addition. It helps to improve physical and economic access to food, there by fostering sustainable food security at the level of each individual in house hold.

IIFS involves intensive use of farm resources. To be ecologically sustainable, such intensification should be based on techniques which are knowledge intensive rather than capital intensive and which replace to the extent of market purchased chemical inputs with farm grown biological inputs.

From the above discussion on various methods of agricultural production, we can study the organic farming in detail with the information given below.

### 1.3 Organic Farming: -

Organic farming system in India is not new, because it was followed from ancient time. It is a method of farming system which primarily aims at cultivating land and raising crops in such a way as to keep the soil alive and in good health by use of organic wastes (crop, animal, farm wastes) and other biological materials along with beneficial microbes (biofertilizers) to release nutrition to crops, to increase sustainable production in an ecofriendly and pollution free environment.

#### 1.3.1 What is Organic Farming?

The concept of organic farming is described by different people as follows.

### A) According to Fantilanan (1980)-

"Organic farming is a matter of giving back to nature what we take from it. It is safe, inexpensive, profitable and sensible. It is not mere non chemicalism in agriculture; it is a system of farming based on integral relationship."

### B) According to www.heartland fields.com -

"Organic farming is a production system which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators and live stock feed aditives. To maximum extent feasible, organic farming systems rely on crop rotation, crop residues, animal manures and to control weeds, insects and other pests."

### c) According to www.hillsdale.edu.com -

"It is a farming which uses agricultural waste as fertilizers and natural forms of weed control and pest management rather than chemicals."

Thus, most people imply that, "Organic Farming means the use of organic manures and natural method of plant protection instead of using synthetic fertilizers and pesticides."

### 1.4 Aims of Organic Farming: -

The principle aims of organic farming are given below.

1) To produce sufficient quantities of high quality food, fibre and other products.

2) To work compatibly with natural cycles and living systems through the soil, plants and animals in the entire production system.

3) To maintain and increase long-term fertility and biological power of soil using locally adopted cultural, biological and mechanical method.

4) To maintain and encourage agricultural and natural biodiversity on the farm and its surroundings, through the use of sustainable production systems and the protection of plant and wild life habitats.

5) To maintain and conserve genetic diversity through attention on farm management of genetic resources.

6) To promote the responsible use and conservation of water and all life there in.

7) To utilize biodegradable, recyclable and recycled packaging materials.8) To provide every one a quality of life that satisfies their basic needs, within safe, secure and healthy working environment that are involved in organic farming and processing.

9) To recognize the importance, protect and learn from indigenous knowledge and traditional farming systems.

### **1.5 Why Organic Farming?**

In many countries, organic agriculture and many of its components have prompted in reaction to the higher external input based techniques ushered during the "Green Revolution", and consumers demand for better quality Food. Generally, following issues are considered important in the context of organic agriculture.

### 1.5.1 Low Cost of Organic Farming:-

The irrigation, new seed and fertilizer require a high initial investment and thus were beyond the reach of majority of small farmers. The emphasis on organic practices involves the use of techniques such as nitrogen fixing, crops and green manures, recycling nutrient through composting, deep rooted plant, avoiding soil loss, locally developed pest control manures. It allows poor farmers to produce food and generate income for the families on sustainable basis.

#### 1.5.2 Conservation of Soil:-

Pressure on cultivated land has lead to soil degradation. In many cases marginal lands have been used for the cultivation of heavy amounts of external inputs. In large areas of cultivated land environmental damage is being associated with 'Modern' agricultural practices.

#### 1.5.3 Create Income Equality:-

The productivity of natural resources and income distribution in rural areas are closely interrelated affecting poverty. Wherever land has become unproductive, it has lead to income disparity. In many countries, farmers have adopted organic production system to free themselves from need for buying expensive inputs.

#### **1.5.4 Qualitative Product:-**

The method of organic farming produces quality food and poison less food. It has generated new demand for value added products. Increasing number of middle class consumer created more demand and willingness to pay a premium for quality product. The quality food and other products of organic forming is finding ready acceptance in our market and foreign market.

#### 1.5.5 Scope For Exports: -

Globalization and world trade regulation on one hand are expected to increase competition, but on the other hand it may also offer an opportunity to organic producers in India., to export who have been traditionally practicing organic agriculture for generations and so have a distinct competitive advantages as compared to their overas counter parts.

### 1.6 Essential Characteristics of Organic Farming:-

The most important characteristics are as follows.

1. Maximum use of local resources.

2. Protecting the long -term fertility of soil by maintaining organic matter level, fostering soil biological activity and careful mechanical intervention.

**3.** Minimal use of purchased inputs, only as complementary to local resources.

4. Ensuring the basic biological functions of soil, water- nutrients-humus continum.

5. Maintaining a diversity of plant and animal species as a basis for ecological balance and economic stability.

6. Increasing crop and animal diversity in the form of polycultures, agro forestry systems, integrated crop systems etc, to minimize risk.

### 1.7 Principles of Organic Farming:-

1. Organise the production of crops and livestock and management of farm resources so that they harmonize rather than conflict with natural systems.

2. Use and development of appropriate technologies based upon an understanding of biological systems.

3. Achieve and maintain soil fertility for optimum production by relying primarily on renewable resources.

4. Aim for optimum nutritional value of staple food.

5. Use decentralized structures for processing, distributing and marketing of products.

6. Create a system which is aesthetically pleasing for those working in this system and for those viewing it form the outside.

7. Maintain and preserve wildlife and there habitats.

### 1.8 Advantages of Organic Farming:-

The most important advantages of organic farming are illustrated as follows.

### **1.8.1 Soil Conservation :-**

Conventional farmers mostly add nitrogen, phosphorous(The old N.P.K) to the soil, perhaps a little calcium or sulfur if needed. They rarely, if

never add expensive, tertiary or trace soil elements. Once a conventional farmers uses the minerals endemic in his soil, which takes only a few crop rotation, the food subsequently produced is low or devoid of these nutritions. They use chemicals which kill minute soil dwelling bacteria. Many of these bacteria enhance the plants ability to synthesize or absorb nutritions.

#### 1.8.2 Low Cost :-

Organic farmers typically spend a lot of time and effort improving their land. They use compost and animal manure in place of chemical fertilizers and pesticides which are much expensive. On the other hand conventionally farmers use chemical fertilizers, pesticides and insecticides and modern machines etc., which are much expensive.

### 1.8.3 Poison Less Product :-

In inorganic farming farmers use chemical fertilizers, herbicides and insecticides etc. These things contain some proportion of poison. Consequently, the product becomes poisonous. On the other hand organic farmers use animal manure, organic wastes, compost, rock dust which contain of different trace minerals. As a result, the product of organic farming does not have any proportion of poison (DDT) and it also contains many minerals.

### 1.8.4 Qualitative Product: -

Organic food and fruits contains higher vitamins and minerals than inorganic product. Because organic farmers use the organic waste, animal manure, compost etc. As a result soil has a greater variety of living organisms and trace mineral. Consequently, organic product has better taste, better quality. On the other hand inorganic product has only visible quality and colour and size not internal due to inorganic inputs.

### 1.8.5 Employment Generation: -

One factor that needs to be addressed within the agriculture sector has been the steady decline of employment. According to many studies, organic farming requires more labour input than the conventional farming system. We examine whether conservation of more land to organic status could provide more employment opportunities in rural area.

#### 1.8.6 No Pollution: -

In conventional farming system farmers use chemical fertilizers and pesticides. As a result water pollution takes place in rainy season and inorganic factors goes in to drinking water by rivers. Soil pollution is also seen in inorganic farming system due to inorganic inputs. But in organic farming system, farmers use natural factors like as compost, organic waste, animal manure etc. Consequently water and soil are far away from pollution. **1.8.7 More Scope For Export:** -

Organically grown crop are believed to provide healthier and nutritionally superior food for man. That is why there is an increasing consumer demand for organic product. In developed counties consumers are willing to pay more for organic product. As a result, there is more scope for export for organic product.

### 1.9 Limitation to Organic Farming: -

Initially there may be some barriers, which inhabit the farmers from adopting organic farming. Land resources can move freely in the reverse direction. In changing over to organic farming an initial crop loss generally occurs, particularly if it is rapid. Biological control are weakened or destroyed by chemical, which may take three or four years to build up.

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Organic farmers may be afraid to enter the new market without adequate government support. They also lack of awareness of organic product. They are illiterate, that is why they have a problem of adequate information of organic farming system.

### 1.10 The World Seniario of Organic Farming: -

Organic farming has spread roughly to 100 countries. It is estimated that about 24 million hectares are under organic farming in the world and Australia is a leading country at present in this area. Other countries which have started organic farming are; Austria, Finland, USA, Germany, Uruguay, Italy, UK, Canada, China, France, Norway, Switzerland and many more. India is among those countries, which are lagging behind, in organic agriculture. Area under organic farming is reported to 41000 ha in India compared to 10,50,000 hectares in Australia. Most of the countries lagging behind in adoption of organic farming are from Asia and Africa.

The organic food market in the world is also reported to be grown rapidly in the last 10 years. The important organic products marketed in the international market are dried fruits and nuts, processed fruits and vegetables, cocoa, spices, herbal products, oil crops and derived products. Organic farming is bound to grow further around the world.

### 1.11 Need for Organic Farming In India: -

India needs to adopt organic farming on a large scale because the conventional methods of farming have caused damage to the ecology. This method of farming adopted by India and other countries is inherently self distractive and unsustainable. The theme of consumer welfare has become central in the developed counties of the world. The Indian agriculture

switched over to the conventional system of production on the advent of "Green Revolution" in the 1970's.

Science and technology have helped India to increase agricultural production from the natural resources like land but this achievement had been at the cost of nature and environment, which supports the human life itself. We in India have to be concerned much more than any other national of the world as agriculture is the source of livelihood of two-third of out people. Now the most fundamental resources like the land, water and air supporting the human life have degraded to such an extent that they now constitute a threat to the livelihood of millions of people in the country. Ecological and environmental effects have been highly published all over the world. The developed countries, it is true, are to great extent responsible for degradation of the environment. India has equally contributed in the degradation of ecology. Disappearance of forestry, high noise level and pollution in the cities are our own creations. However, the poorer need to take the remedial measures.

Organically cultivated soil is relatively better attuned to withstand water tress and nutrition loss. Their potential to counter soil degradation is high and several experiments in arid areas have revealed that organic farming may help to combat diversification. India which has some areas of semi arid and arid nature can benefit from the experiment. The national productivity of many of the cereal crop, millest, oilseeds, pulses and horticulture crop continues to be one of the lowest in the world in spite of the Green Revolution. The fertilizer and pesticides consumption has increased manifold but this trend has not been reflected in the crop productivity to that extent. The country's farming sector has started showing indications of reversing the rising productivity as against the increasing trend of input use. Thus the unsustainablity of Indian agriculture has been caused by the modern farming method which have affected the production resources and the environment.

## 1.12 Government, NGO's And Organic Farming: -

India is aware about the effects of conventional methods of farming and that is why there is some progress in the country in creating awareness among public about the increasing ill effects of farming systems which the country adopted 35 years ago. The threat posed by the conventional food products to the ecology are being viewed seriously. Several individual and associations have taken to organic farming and organic products are also available in our country through to a limit extend and initiatives are being taken to promote organic farming. In this direction, it has also set up a National Institute for Organic Farming for undertaking research work. The task for constituted by the Government of India has also recommended the initiation of post graduate level sources in organic farming.

A number of NGO's are spearheading of organic farming in India. As per the survey report, about 14000 tonnes of organic product have been produced in India which include tea, coffee, rice, wheat, pulses, fruits, spices and vegetables. Out of 14000 tonnes of organic production, it is reported nearly 11925 tonnes of production were exported 2002, to countries like U.K. Germany, Sweden, France, Itealy, Soudi Arabia, U.A.E, Japan and Spain, ect.

One Co-operative society viz, Peerumedu Development society (PDS) located at Idukki distict Kerala and Adarsha Krishi Sahakari Kharidi Vikri Prakriya Sanstha (AKSKVPS) located at Goa, are promoting the organic farming from last few years, in India.

### 1.13 Statement Of The Problem :-

The Indian agriculture switched over to the conventional system of production on the advent of Green Revolution. The change was in the national interest which suffered setback because of country's over dependent of foreign food. That is why we want to achieve self depends about the food.

Now, the most fundamental resources like land, water and air supporting the human degraded to such extent that they now constitute a threat to the livelihood of millions of people in the country. Ecological and environmental effects have been highly published all over the world, due to conventional production method, in which farmers uses the inorganic inputs. The products of inorganic methods are poisonous and less qualitative, which are very harmful to human and animal health.

But on all these problems, there is a solution, alternate production method, which is known as ' Organic Farming' system. Organic farming method avoids all problems which occur in conventional farming system. There are major benefits of organic farming, which are price premium for the products, conservation of natural resources, prevention of soil erosion, prevention of soil and water pollution, qualitative food, poison less food etc., other benefits are economical and social like generation of rural employment, lower urban migration, improved household nutrition and reduced dependence on external inputs. That is why; the researcher has selected the topic for research i.e., "Environmental and Economical Benefits of organic farming: In Kolhapur District".

### 1.14 Objective of the study :-

The main objectives of the study are as under.

1) To study the profile of the study area in respect of organic framings.

- 2) To analyses the method and management of organic farming.
- 3) To analyses the economic benefits of organic farming.
- 4) To suggest some remedial measure for spread of organic farming.

### 1.15 Chapter Scheme :-

The chapter scheme of the study is as under.

- 1) Introduction and Research Methodology.
- 2) Review of Literature.
- Environmental and Economical Benefits Of Organic Farming : In Kolhapur District.
- 4) Problems, Conclusion and suggestion.

### 1.16 Research Methodology :-

The study has carried out with the empirical investigation by canvassing structured questionnaire. The Research Methodology of study is explained as under.

#### 1.16.1 Study Area :-

The Kolhapur district was selected as a study area for organic farming system. In Kolhapur district there are 9 talukas out of 12 talukas, in which organic farming is done by the farmers.

#### 1.16.2 Sampling Plan: -

#### 1.16.2.1 Selection Of The Respondents: -

The District Agricultural officer, Kolhapur supplied to the researcher a list of organic farmers. In this list, there were 40 names of organics farmers out of 40 farmers 20 farmers / respondents' means 50 percent were selected for the study

### 1.16.2.2 Selection of Villages: -

There are nine talukas in Kolhapur district where organic farming is undertaken. At least two farmers from each taluka were selected. In some taluka more than two farmers were also selected in all 20 farmers. The purposive Random Sampling Method was adopted for study.



**Kolhapur District** 

**Total Number of Sample Farmers** 

### 1.16.3 Period Of Study: -

The study was undertaken in the month of August - September, 2006. Only the current year data 2006-2007 was taken in to consideration. Only the farmers those who were busy in organic farming were interviewed.

For the data collection the detailed questionnaire was prepared. The researcher collected the data personally. The secondary data was collected from newspapers, Journals, books and Internet etc.

### 1.16.4 Statistical Techniques For Statistical Analysis: -

Keeping the objectives of the study, some appropriate statistical techniques such as, correlation analysis, regression analysis, growth rate, coefficient of variation, mean, mode, median etc have been used.

### 1.16.5 Limitation Of The Study: -

The main limitation of the study as follows

- 1) The study covers only organic farming system. But there are many methods of agricultural production, which have not studied.
- 2) Only Kolhapur District was taken area of organic farming.
- 3) The study covers only management, income expenditures investment of organic farming. But not the marketing activities and other activities of organic farming.

#### 1.17 Conclusion: -

A number of states have made up policy to encourage the farmers for organic farming. It is expected that the use of organic farming in India will grow steadily in the coming years, due to efforts of government, individuals, co-operative leaders and the NGO'S. There is a good demand for organic products in the domestic market but it is not matched by the supplies. India can enjoy a number of benefits from the adoption of organic farming. The organic farming is an ecofriendly method of farming. But it has very less disadvantages and which are very minor. For the above benefits of organic farming, a vigorous compaign is required in the country.

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