CHAPTER - V
FINDINGS AND SUGGESTIONS

Summary:

The importance of the agricultural sector in the economic development of India is clearly indicated by its contribution to the national gross domestic product (GDP). In 2011-12, agricultural contributed 13.9 percent to GDP (at current prices), industry 27.0 percent and services 59.0 percent. The agricultural sector is also important to the socio-economic development as about 68 percent of the population live in rural areas and most of them depend on agriculture.

While the economy has been growing at about 8 percent yearly, agricultural growth has been dismal at nearly 2 percent during the last ten years. This is in sharp contrast to the average annual growth rate of more than 4 percent during the 80s and early 90s. It is this sharp decline in agricultural growth that is causing distress in rural areas. The present ear of globalization and liberalization has witnessed significant changes in agricultural the mainstay of Indian economy. These changes include cropping technology as well as cropping patterns. Export oriented products and processed food items occupy a vital position in the market these days. Such value added agricultural product needs heavy dose of costly inputs, improved crop varieties, and advanced technology to comply with the quality standards set by international organizations like WTO.

The new market realities due to focus on liberalization, privatization and globalization of the post WTO regime are here to stay, bringing in its wake new opportunities and challenges as well. The agriculture sector, like any other sector of the economy, has got to put its act together to evolve a response mechanism to face this ineluctable reality. This may call for a paradigm shift in its focus and approach. Introduction of reforms in agricultural marketing is the need of the hour to bring the requisite changes
in its structure and to push the sector to take off from its low growth rate of 2-3 percent to at least a respectable 4.5 percent contract farming proves to be beneficial to and fulfills the desired demand of both farmers and companies. In India most of the farmers belong to small and marginal categories, and are found resource poor. Against this backdrop, contract farming is billed to be a variable instrument to address many of the traditional ills affecting the agriculture sector and the farmers, such as fragmentation of holdings, long chain of market intermediaries, ignorance about the requirements of the buyers, low farm mechanization, inadequacy of capital and distress sale and consequent heavy losses to farmers etc. contract farming is an exciting way of giving the power of scale to the small farmers, of marrying the small farmer efficiency to the scale economy, transferring corporate management skill to the agriculture field, providing assured markets for the produce, reducing the transaction costs involved in the value chain of the commodities and of ensuring vertical integration through forward and backward linkages.

At the same time the agro processing farms are lacking in possession of land for cultivation of high valued crops. That is why these companies come forward with contracts in providing such costly inputs, improved crop varieties and advanced technology to the resource poor farmers. Hence, contract farming has attained a greater place in today's agriculture and it continues to play a major role in commercializing it.

Contract farming system has old historical resonances, such as the infamous contracts enforced by indigo planters in eastern India during the early colonial period. But recent pattern of contract farming has been developed especially in the United States where corporate penetration of agriculture is probably the most advanced. Agricultural trade globally is dominated by transnational corporations like Cargill, Archer Daniels Midland and Monsanto, which are increasingly involved at each stage of the agriculture system. These corporations achieve domination over the market
through a combination of horizontal and vertical integration. This has increased the margins for the procuring and processing firms while at the same time reducing farm incomes and increasing the prices for the consumers. This explains the rising spread between retail prices and the prices received by farmers the farmers really gain from agribusinesses which provide them huge and increased profits.

Contract farming arrangements of different types have existed in various parts of the country for centuries for both subsistence and commercial crops. The commercial crops like sugarcane, cotton, tea, coffee, etc. have always involved some forms of contract farming or the other. Even in the case of some fruit crops and fisheries, contract farming arrangement, involving mainly the forward trading of commodities have been observed. However, in the wake of economic liberalization, the concept of contract farming in which national or multinational companies enter into contracts for marketing of the horticultural produce and also provide technologies and capital to contract farmers has gained importance. Contract farming is generally defined as farming under an agreement between farmers and sponsor (processing and / or marketing firm) for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. Within this broad framework, there are different variants of contracts depending on the intensity of contractual arrangements. The basis of such arrangements is a commitment on the part of the farmer to provide a specific commodity in quantities and at quality standards determined by the purchaser and a commitment on the part of the sponsor to support the farmer's production and to purchase the commodity. Thus, under contract farming, the farmers grow selected crops under a buy back agreement with an agency called sponsor engaged in trading or processing and the latter contributes directly to the management of the farm through input supply including planting materials as well as technical guidance.
through intermittent crop supervision and also markets for the produce. Thus farmer assumes the production related risks, and the price risk is transferred to the company. In some cases, the company also bears the production risk, depending on the stage of crop growth at which the contract is made. If the contract is made at flowering or fruiting stage the company bears the production risk also. It is this variant of contract farming which is said to be one of the ways by which small farmers can participate in the production of high value crops like fruits, vegetables, flowers etc. and benefit from market-led growth.

Small farmers in India are generally capital starved and cannot make major investment in land improvement and modern inputs. Contract farming can fill up this gap by providing the farmers with quality inputs, technical guidance and managements skills. Although the company deals only with the contract crop, the farmers overall management skill may improve, thereby helping him to raise the yields of contract crops.

From the standpoint of corporate bodies farming reduces the supply risk, while the farmers enter into contractual arrangements with companies in order to minimize price risks. The company and the farmers enter into contracts to supply or purchase a specified quantum of the commodity at agreed prices. The agreed contract may be either formal or informal and may cover supply of inputs and marketing of output. By entering into contract, the company reduces the risk of non-availability of raw material and the farmer reduces the risk of market demand and prices of his produce. The input and services supplied by firms may include seeds, fertilizers, pesticides, credit, farm machinery, technical advice, extension etc. or may involve only the supply of hybrid seeds and marketing of produce.

Contract farming is becoming an increasingly important aspect of agribusiness, whether products are purchased by multinationals or by smaller companies. There are a few success stories on contract farming such as
PepsiCo India in respect of potato, tomato, groundnut and chili in Punjab, safflower in Madhya Pradesh, oil palm in Andhra Pradesh, White Onion, cotton fruit in Maharashtra seed production contracts for hybrids seed companies etc. which helped the growers in realization of better returns for their produce. Other success stories of contract farming are Amul and NDDB for milk procurement, sugarcane cooperative in Maharashtra and prawn-aqua culture in Andhra Pradesh. In our country this approach has considerable potential where small and marginal farmers can no longer be competitive without access to modern technology and support. The contractual agreement with the farmer provides access to production services and credit as well as knowledge of new technology. Pricing arrangements can significantly reduce the risk and uncertainty of market place.

Most of the studies reviewed above have indicated that the results of contracting are very promising in the early year. Farmers benefits from improved technology and higher productivity, quality and production. Some study indicated that contract farming helped farmers for the better, gave more reliable income, generated employment especially for women, provided new skills. In the review also indicate in contract farming has several disadvantages too: poor extension services, low prices to farmer due to haphazard pricing of the produce, inherent higher risk to cultivators, frequent delays in payment, week bargaining power of farmer, sole dependence on companies for inputs as credit, over exploitation of ground water and the threat of the environmental. Some study indicates generally the contracts are not written and the legal enforcement system is too tedious for both growers and firms. Today in India new national agriculture policy (NAP) favors such types of private sector participation through contract farming and land leasing to accelerate technology transfer, accumulate capital flow and organize assured market for crop production, especially of oil seeds cotton, horticultural crops, food grains crops and fruits, all types
Agribusiness companies need an assured and regular inflow of supplies to operate their processing facilities efficiently and often, they require the commodities to be processed to satisfy certain quality standards. The conditions that favor contracting are an opportunity for reducing price and sales volume uncertainties, the need for the standardized farm market to provide such produce, etc. The review of study indicate that the way contract contributes to farm income varies between commodities, contract growers receive higher prices yields presumably due to better quality. In the reviewed studies also stated that contract farming has a positive impact on crop production and farm income. The socio-economic factors that influenced participation in contract farming has education, age farm size, access to institutional credit, source of off-farm income and membership to an organization.

Most of the studies reviewed above have indicated that changing agrarian production structure under contract farming, especially issues associated with transfer of skills, choice of technology organization of labour, working conditions and terms of work. Some studies stated that several state governments, including Andra Pradesh, Gujarat, Karnataka, Punjab and Tamil Nadu have already started promoting contract farming with desired changes in the policy and the market front. They have started changing lows to enable and support such contractual relationship and providing companies interested in it which a variety of incentives, subsidies and tax rebates including lifting of land ceiling. There is a need for developed agriculture sector and increasing production and income by using optimum utilization of resources for the development of agriculture sector in the various state. No study has so for been conducted for studding contract farming in Maharashtra therefore, the present study is a sincere effort to study contract farming in India – A case study of Maharashtra.

It is observed that the process of contract farming in India involves,
engaging rural Indian farmers for the cultivation of agricultural produce under strict government policies. The role of contract farming in India rural economy involves government and private participation along with the rural workers. Further, it engages a good number of farmers and other rural workers to discharged other agriculture related activities. Contract farming is providing technology, extension services, credit, etc. to the farmers. A number of agribusiness firms have entered into contract farming agreements for a number of agricultural and horticultural crops, such as tomatoes, potatoes, chili, gherkin, baby corn, rose, onions, wheat, basmati, cotton, groundnuts flowers, medical plants, etc. produced in some from of contractual arrangements with the farmers in India. The state wise contract farming initiatives by the private sector. The state like Maharashtra, Andhra, Pradesh, Karnataka, Punjab, Hariyana, Madhya Pradesh, Chattisgarh, Rajasthan, Tamil Nadu, Uttarkhand and Uttar Pradesh provide favorable conditions for contract farming and success of contract farming in these states owes to lower total land under marginal fields, better irrigation facilities, soil productivity and yield per hector.

Contract farming in Maharashtra will get the much needed impetus, following the passage of the bill to amend the Maharashtra agricultural produce marketing (development and regulation) act has passed in the State Assembly on Thursday 20 April 2006. The government claimed that contract farming would boost food processing and export of agricultural produce. The contract farming act is designed to encourage the investment in the food processing industry of Maharashtra, which would ensure farmers get the best prices for their produce. The government further said, "food processing industry and exporters of farm produce have always wanted assured supply of quality farm produce. The act will not only assure this would happen, but also iron out vagaries in prices that plague farmers every year." As the new law allows buyers of farm produce to enter into direct agreement with the
farmers, the farmers will also be saved from paying commission and other charges to agriculture market produce committees. Food processing units are typically located in areas that are far removed from the place of production and the act will go a long way in creating new employment opportunities in rural areas.

Contract Farming Sponsor shall apply for registration in FORM G to District Deputy Registrar (DDR), C.S. with Registration fee Rs. 500. Agreement shall be exclusively for the purchase of agricultural produce only. Sponsor to submit the original copy of agreement to DDR. Prohibition for creation of right, title, interest or ownership in the land and sale under Contract Farming Agreement. Minimum period of agreement shall be for one crop season and max period shall not be more than 3 years. Liberty to mutually decide other terms and conditions of the agreement as in FORM I. Dispute arising out of agreement to be referred to DDR. DDR to give decision within 30 days. Appeal to Divisional Joint Registrar within 30 days. Agreement shall not be entitled to be called in question in any court of law.

The government of Maharashtra had decided in June 2005 to modify the 1963 APMC act (Distribution) in which contract farming has been included and rename it as model act 7. Early implementation of this act would encourage farmers, because despite the present constraint, success with strong linkages between farmers and processors marketing agencies has been achieved. Such partnership is essential so that the objective is fulfilled for a sustainable business relationship and marketing performance.

In Maharashtra 12 companies working in 10 district in 2008-09 and area under contract farming was 34880.53 hector and 14004 farmers involved. In Maharashtra 7 contracting companies of 5 district involved and it has covered 60207.8 hector of land and nearly 19154 farmers during 2010-11. In 2011-12 only one company working in three district. It has covered 1200 hectar land and near about 499 farmers for Potato production.
Findings:

Some important findings of the present study are as under:

1. In global world liberalization, corporatization has been playing an active role in all sectors of economy. Agricultural sector has also taken a different shape with latest developments.

2. Corporate mediation in agriculture through contract farming arrangements is taking a vital role in linking the corporate firms and the farmer.

3. Contract farming was expected to modernize the pleasant farmers by providing new technology, credit, inputs and technical advice besides linking them to the international market.

4. In India, after pronouncement of national agricultural policy, contract farming gained prominence. Many crops in different parts of the country are produced under contract arrangements.

5. The terms and conditions of the contract are determined by the processor. The growers have little say in deciding contractual obligations.

6. The NGOs also play a role in information provisions and in monitoring and regulating the working of contracts.

7. Contract farming is not a panacea to solve all related problems of agricultural production and marketing system. But contract farming could be evaluated as a way of providing earlier access credit, input, information and technology and product markets for the small scale farming structure.

8. Contract farming might also be seen as a way or as a part of rural development and promoted to improve agricultural performance especially in backward area.
9. Farming to both sides, there are some problems for successful implementation of contract farming having co-ordination and collaboration consciousness and acting in an organized manner are advisable for both sides.

10. In India modern contract farming start from PepsiCo in 1980 and in the year 2000 variants of contract farming introduced for various crops like wheat, basmati rice tomato, fruits, Horticultural all crops, vegetables etc. In the year 2003 Government of India accepted new policy framework for contract farming.

11. Contract farming has been successful in effecting crop diversification in many states. It observed that different commodities covered under contract farming in different states are both traditional ones like Basmati Rice, wheat, Maize, Red Gram, Bengal Gram, Groundnut, sesame, Cashew nut, coconut, onion, Potato all seed etc. and non-traditional ones like medicinal plants (Ashwagandha, Dhavana, Coleus, Safed Musli) and Gherkins. In the various state corporate involve in different crops in contract farming in India. The contract farming spread across crops, regions and agencies (public, private and multinational) in India.

12. In the 1980 changes in the national agricultural policy allowed private companies to operate in the seeds production sector they were also allowed to import commercial seed and germplasm for vegetables. The seed production first large scale activity started under the aegis of Mahyco in the early 1980 mainly in the Marathwada region of Maharashtra. It spread to neighboring areas of Andhara Pradesh, Vidarbha and Karnataka. These state / areas dominate the seed business.

13. In India ministry of agriculture has taken several policy steps and had formulated a law, to promote contract farming and to allow
accelerated technology transfer, credit flow and assured market for crop production. Agriculture produce marketing act (APMC) has been amended in accordance with the emerging trends. So far 15 states and 5 union territories have amended their APMC act to derive the benefits of market reforms.

14. The government of Maharashtra had decided in June 2005 to modify the 1963 APMC act (Distribution) in which contract farming has been included and rename it as model act 7. Early implementation of this act would encourage farmers, because despite the present constraint, success with strong linkages between farmers and processors marketing agencies has been achieved. Such partnership is essential so that the objective is fulfilled for a sustainable business relationship and marketing performance.

15. In Maharashtra 12 companies working in 10 district in 2008-09 and area under contract farming was 34880.53 hectar and 14004 farmers involved. In Maharashtra 7 contracting companies of 5 district involved and it has covered 60207.8 hectar of land and nearly 19154 farmers during 2010-11. In 2011-12 only one company working in three district. It has covered 1200 hectar land and near about 499 farmers for Potato production.

16. Bejo Shetal company engaged in onion seed contract farming in Aurangabad, Jalna and Beed in 2006-07 had 300 farmers contract in2006-07 and 350 farmers contract during 2010-11 Bejo Shetal Seed Pvt. Ltd. occupied 5 talukas and 13 village during 5 year. The purchase rate of onion in the year 2006-07 was Rs. 17000 / Qt. which increased up to Rs. 28000/Qt. in 2010-11. The Mahyco company purchase rate of cotton seeds in the year 2006-07 was Rs. 25000/Qt. it increased continuously and readed upto Rs. 55000/Qt. during 2010-11. Mahyco company increased purchasing rate of cotton seeds by 54.54
percent in five year.

17. The PepsiCo contracting company purchases Potato crop for processing. The purchase rate of potato in 2006-07 was 700/Qt. onion continuously increased upto 1000/Qt. in 2010-11. This company increase Potato price by 30 percent in five years.

18. The Jain Irrigation System Ltd. contracting company purchases white onion crop for processing. During 2006-07 purchase rate of white onion was Rs. 671/Qt. this rate decreased upto Rs. 500/Qt. in 2010-11.

19. Average family size was 4.91 among contracted farmer and 5.77 among non-contracted farmers.

20. The education level of sample farmers in contract farming maximum 45 percent farmers education level was secondary and in non-contract farmers’ 39 percents farmers education level was secondary. Study found that contracted farmers were more educated than non-contracted farmer.

21. In contracted farmers family worker was 3.06 workers per family and in non-contracted farmer and 2.61 workers per family. In the contract farming average family size is small and family worker involve is large and employment generation is also high.

22. Out of 100 selected sample farmers 27 percent contract farmers working in various subsidiary business and only 8 percent non-contract farmers working in subsidiary business. Contract farmers are more aware about subsidiary business than non-contract farmers.

23. The sample contracted farmers average farm size is 3.13 hecter and non-contracted farmer farm size is 3.1 hecter. 1.40 hecter which calculate 44.72 percent has contracted farmers average rain fed area was 1.40 hectares and non-contracted farmers average rain fed area was 1.8 hectares. Contracted farmers irrigated area was 55.7 percent and it was 41.93 percent in case of non-contract farmers during study period.
It is observed that in contract farming contracting company gives preference to develop irrigated land and provide irrigation instrument so that in contract farming the percentage irrigated land was highest than non-contract farming.

24. In the age group 25 to 40 there were 54 percent contract farmers and 49 percent non-contract farmers. It means youth farmers have been found moving toward contract farming which is helping to him stable income source in comparison with non contract farming.

25. In contract farming 38 percent farmer used drip irrigation at the same time 25 percent non-contract farmer used dripped irrigation. The sprinkler irrigation system is used by 17 percent contracted farmer households and only 6 percent by non-contract farmers. Contract farmers using more irrigation facility than non-contracted farmers.

26. Per acre gross returns of onion seeds under contract farming was Rs. 40,160 which is 1.24 time more than the per acre gross returns of non-contract farming. The net returns of onion seeds was 62.94 percent in case of contract farming with compared to 56.40 percent of non-contract farming.

27. Per acre gross returns of cotton seeds under contract farming was Rs. 58,120 which is 1.67 times more than per acre gross returns of non contract farming. The net returns of cotton seeds was 66.34 percent in case of contract farming with compared to 51.26 percent of non-contract farming.

28. Per acre gross returns of Potato under contract farming was Rs. 54,240 which is 1.24 times more than per acre gross returns of non contract farming. The net returns of potato was 37.09 percent in case of contract farming with compared to 27.74 percent of non-contract farming.
29. Per acre gross returns of white onion under contract farming was Rs. 70,840 which is 2.73 times more than per acre gross returns of non contract farming. The net returns of onion was 73.40 percent in case of contract farming with compared to 45.14 percent of non-contract farming.

30. It is observed that before contract farming 50 percent contracted farmers annual income was bellow Rs. 20000. After involve in contract farming one percent farmers average annual income was bellow Rs. 20000 during study period.

31. Due to contract farming per acre yield of onion seed increased by 23.39 percent, cotton seeds by 36 percent, potato by 43.75 percent and onion by 38.43 percent.

32. In the contract farming 72 percent farmer agreed that they have got the loan facility from the company on the contrary in non-contract farming only 33 percent farmers have got bank loans.

33. In the study area 62 percent contracted farmers are still hopeful for an enhanced production but in non contract farming 78 percent farmer said that there is not increase in the yield as they do not have the quality input and scientific advice.

34. After contract farming the income of sample farmers of Bejo Sheetal Seed Pvt. Ltd. increased by 33.66 percent, Mahyco's contracted farmers average income increased by 43.22 percent, PepsiCo's contracted farmers average income increased by 63.93 percent and Jain Irrigation System Ltd. farmers average income increased by 64.76 percent. After contract farming selected contracted farmers average income was increased.

35. After contract farming the cropping pattern has been changed. After contract farming the area under Jawar crop decreased from 48.5 percent to 33 percent, Bajara 13.5 to 9.25 percent, tur 10.5 to 7.5
percent whereas, the area under wheat, sugarcane, cotton, onion, onion seed crop increased due to contract farming. It means contract farmers moved towards the cash crops in comparison with non-contract farmers.

36. In the contract farming farmer use new irrigation instrument like drip, sprinkler by provided contracting company.

37. Selected farmers participate in contract farming for many reasons like assess to assured market, assured price, assess to better seeds, assess to better extension services, higher returns inspired by other contract farmers and contracting companies personal relation etc.

38. The contract farming gives benefits to farmers like increasing income, higher contract price, minimum transport cost, quality inputs and technical guidance etc.

Suggestions:

In the light of findings and conclusions of this study, the following suggestions are important to improve the present situation.

1. The contract farmers said that there are no adequate infrastructure facilities. So it is necessary to contract farming to increase infrastructure facilities like roads, public transport, telephones, postal services, stable electric power and water supply, cold storage facilities, etc.

2. The government needs to ensure that contract farming, which is generally commodity specific and tends to promote monoculture, does not grow beyond proportion to destroy bio-diversity and agricultural ecology. It may be necessary to provide necessary guidelines for land use planning in each region in order to prevent such eventualities.

3. The central and state governments are already considering value Added Tax throughout the country. The other barriers particularly, the
high level of public intervention in the market need to be completely stopped or greatly liberalized in order to allow free flow of trade in agricultural commodity.

4. Generally, contract companies most of the agreements of contract companies are found in English. So, it is suggested that companies should write their agreements in regional languages. So that the local farmers can understand the terms of contracts. At least it should be made bilingual, standard formats for farmer-friendly agreement should be designed and mandated by the government.

5. In the contract farming agreement record is not available. Therefore, it has been suggested that record of contract farmers, along with other relevant details such as the area and crops under contract, contracting agency and contract farmers, etc. should be maintained at a state level, country level and should be made available to the public through the website.

6. On a larger scale, the sponsors themselves should be honest. Therefore, the contract should be managed in a more transparent and participatory manner. So that there is greater social consensus in handling contract violation from either side without getting involved in costly as well as lengthy process of litigation.

7. In the study area main crops were Jawar, Bajara, pulses, cotton, etc. After the contract farming, farmers diverted to cash crops which give more income to farmers but at the same time due to this profit food grain crops have been neglected. Even major food producing areas now are gradually moving towards non-food crops under contract cultivation. So it is suggested that in the contract farming farmers should also cultivate food grains and government should give some intensive for improving production of food grains.
8. It is observed from the study of selected four contract farming company the average annual income of farmers increased by on an average 51.39 percent. But in Maharashtra contracting companies are limited. So it is necessary to involve more companies in contract farming.

9. In the study area 27 percent contracted farmers working in other commercial business. It is necessary to provide agro-based business to contracted farmers in Maharashtra.

10. It is found that only 38 percent farmers used modern irrigation facilities. So it is suggested that government and contracted company should provide modern irrigation facilities to farmers.

11. Net returns of Potato under contract farming was 37.09 percent which is much lower than onion seeds (62.94 percent), cotton seeds (66.34 percent) and white onion (74.40 percent). So it is suggested that PepsiCo contracted company should take effects to minimize production cost of potato and increases per acre yield of potato by using modern production techniques.

12. The purchase rate of white onion of Jain Irrigation Company was Rs. 671 / Qt. in 2006-07. Which reduced upto 500 per quintal in 2010-11. So it is suggested that Jain company should increases per acre yield of white onion by using modern production methods and paid maximum purchase cost to farmers.

13. It is observed that on an average per acre yield of selected contracted crops increased by 35.39 percent. So for increase in the agricultural production Maharashtra government should give some intensives to contract farming like providing irrigation facilities, fertilizers and other agricultural subsidies.
14. Only 33 percent selected sample non-contracted farmers have banking facilities. So it is necessary to provide more loans to farmers through banking and free them from cultehes of moneylenders.

15. The positive feature of model agreement in protecting the interests of farmers is that the loans and advances facility increased by sponsors due to contract farmers to cover higher cost of variable inputs.

16. Under unfavorable climatic conditions, the quality of farm produce cannot be maintained or the whole crop may fail. So it is suggested that crop the government should provide crop insurance scheme effectively to farmers.