

Contract Farming in India, Problems and Prospects

A Case Study of Gherkin in Karnataka

Dr K C Gummagolmath

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Contract Farming has the potential of addressing most of the urgent and critical needs of the Indian agriculture sector. It is, perhaps, the only way to make small and marginal farmers competitive by enabling them to access technology, credit and marketing. At the same time, it encourages the private sector participation in agriculture on a massive scale. It also provides a platform for reliable agricultural produce and supply of specified quality produce. Contract Farming, therefore, offers an exciting opportunity for multi-faceted development of Indian Agriculture.

Karnataka, is endowed with excellent agro-climatic conditions to take-up cultivation of all kinds of crops including field and plantation crops. There is a tremendous growth in agro-based industries in the state on account of availability of raw materials, both in quantity and quality. However, a proper linkage between producers and consumers is lacking.

Gherkin cultivation was mainly concentrated in tropical countries and the major consuming countries are European Union, Australia, USA and Canada. The gherkin cultivation is not in vogue in India. In the beginning of 90's this crop was introduced in southern India namely Karnataka, Andhra Pradesh and Tamil Nadu by the multinational companies and domestic companies with a sole purpose of exporting to global countries.

The study was conducted on “**Problems and Prospects of Gherkin Cultivation under contract farming in Karnataka**” with following objectives

1. To study the modus operandi from the view point of agreement in contract farming in between the farmers and the sponsoring company in respect of inputs supply, finance, technology, supervision – administration and risk management.
2. To study the impact of the contract farming on access to technology on the part of the farmers; and impact of the contract on marketing financing, packaging, transportation, extension storage, wholesaling and retailing etc.

3. To study the overall model of contract farming from the viewpoint of enforceability (Law and Policy) of contracts, dispute resolution mechanism and marketing efficiency.
4. To study the strength, weakness and opportunities (using SWOT analysis) lying with the contract farming in gherkin and safflower.
5. To suggest the appropriate policy measures based on the findings of the findings of the research for possible improvements in contract farming in India and replicate the same for other regions and other commodities.

The cultivation of gherkin is undertaken in 20 districts of Karnataka. This covering both southern and northern parts of Karnataka. In the beginning the gherkin cultivation was taken up in Southern districts of the State namely, Bangalore Urban and Rural, Tumkur, Kolar districts. In mid 90's Davanagere and Haveri districts were added to produce the gherkins. At present the other districts like Koppal, Bellary and Bagalkot are also emerging as gherkin growing centers. Karnataka being the pioneer in the production of gherkin its contributing is about 90 per cent share in India's gherkin exports.

The gherkin is cultivated extensively in six districts which includes traditional, emerging and upcoming zones. With respect to the traditional area Tumkur ranks first (12,500 acres) contributing 22 per cent of the area followed by Hassan (6,500 acres), Haveri (5,900), Davanagere (4,500 acres) and Kolar (3,750 acres). Though Bangalore rural and urban district were categorized under traditional districts but due to urbanization and acute labour problems these two districts are now lagging behind.

In production Tumkur ranks first with 46,250 tonnes and in productivity Kolar tops the list with a yield of 4.20 tonnes per acre. The average productivity of gherkin in the State ranges from 3.35 tonnes to 4.2 tonnes per acre. The minimum and the maximum yield of gherkin in the state range between 2.4 metric tonnes and 12 metric tonnes per acre.

Gherkin is basically used for making quality oriented edible pickle mainly used for table purpose. The normal fruit size preferred by the consumer is 12 mm shall account for 300 pieces per kg which fetches the highest price. The other grades are 17 mm, 19 mm and 25 + mm which fetch lower prices according to their size.

The harvest of gherkins starts from 28 day onwards and continues till 60 days. The contracting firms procure the produce at the farm gates by offering a

price of Rs. 16 – 18 per kg for premiere quality followed by Rs. 6 and Rs. 4 per kg in respect of the large sized fruits. However, the exporting firms discourage the farmers to supply the large sized fruits by offering low prices.

The gherkin cultivation is popular among literate farmers. More than 80 per cent of the farmers are coming under the category of literate and even in case of non-contracting farmers the literate rate is over 80 per cent. The average age groups of gherkin growing contract farmers are in the range of 29 – 56 years in the study area and there is no significant difference in age in case of non-contract farmers.

The gherkin cultivating farmers mostly belong to the category of marginal (37 per cent) and small (53 per cent). However, the presence of big farmers (11 per cent) is also observed. In contrast marginal, small and big land holders account for 35 per cent, 54 per cent and 11 per cent in respect of non-contract farmers, respectively. The pattern shows that the sub-division and fragmentation has brought down the per capita size of the land holdings. The uneconomic holdings are no more left uncultivated because of this new opportunity.

The average area under gherkin cultivation in the study area is less than one acre (0.77 acres) when compared to cereals (1.90 acres), pulses (0.60 acres) oilseeds 0.23 acres and other crops (0.69 acres) in case of contract farmers and in case of non-contract farmers cereals (2.05 acres), pulses (0.80 acres), oilseeds (0.30 acres) and other crops is 0.79 acres. The gherkin cultivating farmers take up less than one acre since the crop is labour intensive. It is also noticed that the gherkin growers giving more attention to gherkin cultivation at the cost of other crops.

The major crops grown in the study area are mainly cereals such as ragi, maize, jowar, paddy and the significant pulse is tur and Bengal gram. Groundnut and sunflower are the common oil seeds grown in the area. The share of fruits and vegetables, chillie and sugarcane is significant in selected districts namely Tumkur, Haveri and Bagalkot districts respectively.

Firms (EOUs) provide credit facilities for secondary expenses in addition to the inputs such as seeds, fertilizers, etc.,. The farmers require large investments for developing land, digging bore-wells, farm building, etc. To meet these expenses the contract farmers approach credit societies, banks and others for credit. In case of non-contracting farmers, they need money for seeds, fertilizers and all other farm activities, they borrow loans from credit societies, money lenders, village traders, etc.

The average yield varies from 3.60 tonnes per acre to 3.88 tonnes per acre. The minimum yield is shown in 2.50 tonnes per acre in Tumkur district and in Davanagere district (12.0 tonnes / acre). The average minimum, maximum and average for the selected districts was 2-8, 10-8 and 3-7 tonnes per acres, respectively.

The EOUs supply seeds, fertilizers, pesticides and insecticides, threads to the farmers. Though the EOUs supply these inputs, some of the farmers do require cash for paying hired labours, supply water, digging of wells, etc. The farmers would approach the banks for their additional cash requirements. The major expenditure was on fertilizer, farm yard manure and picking of fruits which contributes about 60 per cent of total cost. The other costs incurred on seeds, treads (jute and plastic), land preparation and sowing.

The climatic conditions in many parts of the country are well suited for gherkin cultivation. The crop can be produced round the year, since the crop requires 90 days, three crops can be produced in a year. This situation also prevails in Karnataka, and gherkin producers produce 1 – 3 crops in a year. Many of the farmers (59 per cent) produce only one crop in a year followed by 31 per cent of farmers who produced two crops and only 10 per cent produce three crops in a year.

All the categories of farmers who produced gherkin along with other crops had higher income compared to non-contracting farmers. The average income of marginal farmers was Rs. 48,105 followed by small farmers (Rs. 49,156) and big farmers (70,238). As in the case of non-contract farmers the net income of marginal, small and big land holders are Rs. 30,185, Rs. 38,454 and Rs. 57,003 respectively.

The variations in income of the farmers in both the contracting farmers and non-contracting farmers were observed. The minimum income and the maximum income of the contracting marginal farmers were Rs. 35,313 and Rs. 63,005 respectively. In case of non-contracting marginal farmers it was Rs. 26,531 and Rs. 87,730 which is lesser than the contracting farmers. The similar trend is also seen in the small and the big categories of farmers.

All the categories of farmers opined that they would like to continue with the cultivation of gherkin with the same company as the company provides required support for the production of gherkin such as seeds, fertilizers and other inputs. The buyback system with a pre-agreed price reduced the risk in

production, provides good income for a better standard of living. Most of the farmers are firm in continuing the production of gherkin in future years also.

The farmers expressed that the income of the family has increased after undertaking the cultivation of gherkin and they could acquire acquired assets and enjoy a better living standard. The study also reveals that the EOUs do not supply inputs on time, some times they provide less quantity of inputs. The farmers were of the opinion that banks should come forward to provide farm credit at cheaper rate of interest for digging wells, bore-wells as the crop require regular water. This would increase the yield level of gherkins. It is observed from the sample districts; the farmers from all the groups sell their produce to the non-contracted EOUs as these EOUs offer higher price than the contracted price.

There are about twenty five companies engaged in the production, procurement, processing and export of gherkins from the state. The firms enter into contracts of gherkin cultivation and most of the EOUs are located in and around Bangalore. As mentioned earlier about 70,000 farmers have entered into contracts for the crop and are spread over about 58000 acres covering twenty districts of the state. The firms from the state are exporting gherkins to France, Germany, US, Russia, Australia, Korea, Belgium and Srilanka.

EOUs have two types of contract agreements namely direct model and intermediary model. Once the farmer agrees to produce gherkin on be half of the EOUs, they enter into a bipartite agreement between company and the farmers. The field investigators visit the farm regularly at least once in a week. In the second model the intermediary acts as on agent between the farmer and the EOUs. The facilitator/ intermediary supply all the necessary support for the production of gherkin to the farmers. EOUs totally depends on them to monitor all the services from supply of inputs, farm practices etc. the facilitators get a margin of Rs.3-4 per Kg of Gherkin.

SWOT Analysis of Gherkin Cultivation in Karnataka

Strengths

- 1 Scope for adoption of new technology
- 2 Aversion of price risk
- 3 Income stability due to assured price
- 4 Timely supply of Inputs and production by the firms
- 5 Credit facility by the companies

- 6 Guidance from qualified staff
- 7 Development of new skills through better extension
- 8 Opening of small and marginal farmers to International markets
- 9 More bargaining power for small holders due to large number of companies
- 10 Incentive for better performance and welfare fund for growers
- 11 Higher yields due to better management
- 12 Match between Demand and Supply balance due to fixed allocation of quota in advance
- 13 Availability of Grower's Record
- 14 Higher level of income
- 15 Support from local scientific agencies and government

Weaknesses

- 1 Risk of cultivating new crop and hence problem in adoption of new production technology
- 2 Risk of over matured fruits due to delay in harvesting just by a day
- 3 Risk of Refusing to purchase the specified quota in the case of decline in export
- 4 Exploitation by the firms by offering relatively lower price as compared to export price
- 5 Improper advise by the staff of the firms
- 6 Weak legal backup for the growers i.e. No arbitration agency in case of dishonoring contracts
- 7 Misunderstanding between growers and representative of firms on adoption of production practices
- 8 Poor quality of seeds and other inputs
- 9 Delay in payment of sale proceeds
- 10 Chagrining higher prices for inputs
- 11 Irrespective of grades, imposition of price cuts
- 12 Non availability of domestic market

Opportunities

- 1 Pooling of resources at one place
- 2 Lower cost of production due to cheaper inputs
- 3 Ensures supply of inputs to the farmers and output to the firm
- 4 Helps to overcome land constraints
- 5 Maintenance of uniform quality of the produce
- 6 Lot of potential exists for export
- 7 Encouragement of the system by government policies
- 8 Emergence of strong grower associations
- 9 Better technology transfer and Sharing of ideas among growers
- 10 The firm's participation in community affairs
- 11 Increase in private investments
- 12 Promotion of processing and value addition
- 13 Reduction of migration from rural areas
- 14 Backward and forward linkage is possible

Threats

- 1 Farmers non-acceptance for new crop
- 2 Breach of contract either by growers or by company
- 3 Diversion of inputs to other crops by the farmers
- 4 Indebtedness of growers due to excess advances
- 5 Chances of creation of monopsony market
- 6 Social and cultural constraints between contract and non-contract farmers
- 7 Due to entry of more firms, cutthroat competition exists among firms
- 8 Leads to monocropping
- 9 Government policies affecting trade
- 10 Firms may disappear from the area
- 11 Fear of possession of land by the companies
- 12 Poor cultural acceptability
- 13 Intermediary may take undue share in the 'Intermediary Model of Contract Farming'

Conclusion

Diversification of crops and the new farming system involves tremendous amount of technological input and market orientation requiring additional capital resource of mammoth proportion. In this direction, the corporate sector is coming forward to play a crucial role in agricultural development through contract farming systems. The government of India, emphasizing the need for a new legislation for farm sector, amended the APMC Act recognizing contract farming system and making several provisions to regulate the system. It is the order of the day that we have to move forward from traditional farming to value added contract farming to improve the lot of rural population emphasizing the need for a new orientation for farm sector and the states should create new laws for enabling contract farming on commercial basis and enabling corporate to contract their requirements from farms. The farming community is also waiting for the change for better living conditions and the solution to the problems of traditional technology and management practices. Their low bargaining power with input suppliers and produce markets, inadequate infrastructure and market information, lack of post harvest management expertise and inadequate capital to grow quality product are the major constraints faced by them.

The commitment driven contract farming is no doubt a viable alternate to farming model provides which overcomes the burning problem of diminishing farm size and assures reliable input supplies to farmers and deliver farm produce to the contracting firms, and solves their marketing problems in one stroke. The successful models like gherkin model in Karnataka should be encouraged and extended progressively to the rest of the agricultural commercial enterprises for mutual benefits of the farmer and the consumer in particular and the development of Indian agriculture in general.