Review Article

Contract Farming of Medicinal Plants in India

Choudhary Balram*, Goyal Anju ¹, Khokra Sukhbir L., Kaushik Pawan, Kaur Navjeet

University Institute of Pharmaceutical Sciences Kurukshetra University, Kurukshetra (Haryana)
¹B. N. Girls College of Pharmacy Udaipur (Rajasthan) 313001 India

Contract farming is defined as a system for the production and supply of agriculture and horticulture products under forward contract between suppliers and farmers. Contract farming can lead to improvement in income reducing some of the risk farmers, face from production and price fluctuations. From the point of view of purchasers, contract farming provides greater control over volume and quality consistency; to a certain extent. Recognizing the potential and benefits of contract farming arrangements in the agriculture sector, NABARD took the important initiative of supporting such arrangements by the banking sector and developed a special refinance package for contract farming arrangements aimed at promoting increased production of commercial crops and creation of marketing avenues for the farmers. Herbal industry has been used to procuring medicinal plants through a network of traders who get their supply through collectors,” “The sector needs to develop an intellect for contract cultivation. Himalaya tied up with one of its key suppliers, Gram Mooligai Co. Ltd, to set up a 75-acre nursery of high active ingredient plant species near Madurai in Tamil Nadu. Sami Labs has over 4000 acre of land under medicinal plant cultivation.

Key words: Contract Farming, Medicinal Plants, Herbal Companies, agriculture

INTRODUCTION

Contract farming is defined as a system for the production and supply of agriculture and horticulture products under forward contract between producers /suppliers and farmers. Farmers are required to plant the contractors crop on his land and to harvest and deliver to the contractor a quantum of produce based upon anticipated yield and contracted acreage. The essence of such an arrangement is the commitment of the producer/seller to provide an agriculture commodity of certain type at a time and in the quantity required by a known and committed buyer. This could be at pre-agreed price.

To establish an agrarian economy that ensure food and nutrition security to a population over a billion ,raw material for its expanding industry base ,surplus for export and a fair and equitable rewarding system for the farming is no doubt a reliable alternative farming model which provide reliable input service to farmers
and desired farm produce to the contracting firms. Several Indian and multinational companies have already begun such initiative in India and have demonstrated repeated success. The existing literature on contract farming identifies several major areas where contract farming can provide benefits. From the point of view of farmers, contract farming can provide access to markets, credit, technology and input that they would otherwise be excluded. Moreover, contract farming can lead to improvement in income reducing some of the risk farmers face from production and price fluctuations. From the point of view of purchasers, contract farming provides greater control over volume and quality consistency; to a certain extent, it can also lower certain transaction and production costs that purchasers face.

Types of Contract Farming

1. Centralized Model
2. Nuclear Estate Model
3. Multipartite Model
4. Informal Model
5. Intermediary Model

Table 1: Some of the Medicinal Plants Cultivated in India Under Contract Farming

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of plant</th>
<th>Biological name and common name</th>
<th>Part used</th>
<th>Cultivation condition</th>
<th>Manure and fertilizers</th>
<th>Irrigation</th>
<th>Yield and economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kalmegh*</td>
<td>Andrographis Paniculata Wall .Ex .Nees</td>
<td>Whole plant</td>
<td>loam to lateritic soils with moderate fertility</td>
<td>Plants have to be grown without chemical fertilizers.</td>
<td>Fairly distributed rainfall during monsoon is sufficient.</td>
<td>24000/acre</td>
</tr>
<tr>
<td>2</td>
<td>Amla +3</td>
<td>Embelica officinalis Amla or Indian Gooseberry.</td>
<td>Fruits</td>
<td>Light as well as medium heavy soils</td>
<td>15 kg FYM and 0.5 kg phosphorus should be applied.</td>
<td>Young plants require watering during summer.</td>
<td>one lac per hectare</td>
</tr>
<tr>
<td>3</td>
<td>Ashwagandha*</td>
<td>Withania Somnifera Indian ginseng</td>
<td>Root</td>
<td>slightly basic soil with good drainage</td>
<td>plant are usually not fertilized.</td>
<td>natural irrigation and artificial watering is only done in severe drought conditions</td>
<td>17700Rs./hectare</td>
</tr>
<tr>
<td>5</td>
<td>Guggal*</td>
<td>Commiphora mukul: guggul gum, Indian myrrh</td>
<td>Sandy to silt loam soils</td>
<td>Drip irrigation Preferred</td>
<td>Appro 54000/hect/yr.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
National Bank for Agriculture and Rural Development

Recognizing the potential and benefits of contract farming arrangements in the agriculture sector, NABARD took the important initiative of supporting such arrangements by the banking sector and developed a special refinance package for contract farming arrangements aimed at promoting increased production of commercial crops and creation of marketing avenues for the farmers.

Policy Initiatives by NABARD

In order to augment the reach of bank credit and increase the production of commercial crops as also for creation of marketing avenues for the farmers, all contract farming arrangements are made eligible for availing special refinance package from NABARD. The various initiatives undertaken by NABARD in this direction are:

Financial Interventions:

- Fixation of higher scale of finance for crops under contract farming
- Term facility for repayments (3 years)
- Special Refinance package for financing farmers for contract farming in AEZs
- 100% refinance to disbursements made by CBs, SCBs, RRBs and select SCARDBs (having net NPA less than 5%)
- Preparation of banking plan for financing Diesel Gensets to Gherkin farmers in Karnataka with TFO – 1.71 crore.
- Extension of refinance scheme for financing farmers for contract farming in AEZs to contract farming outside AEZs besides coverage of medicinal and aromatic plants.
- Extension of Refinance scheme for contract farming under Automatic Refinance Facility.
- Area Development Project for grapes in Nashik District, Maharashtra with TFO – 402 crore.
- Refinance support extended for contract farming within AEZs and outside to various financing agencies during 2004-05 and 2005-06 was to the tune of Rs.774 crore and Rs.268 crore respectively.

Role of Herbal Companies in Cultivation of Medicinal Plants

The fall in collection of wild herbs threatens the growth of the industry. The industry has been used to procuring medicinal plants through a network of traders who get their supply through collectors, The sector needs to develop an
intellect for contract cultivation.
A majority of India’s marginal farmers, already reeling under debt and wide price fluctuations for regular harvests of rice, wheat or vegetables, are unwilling to risk herb cultivation.

Himalaya tied up with one of its key suppliers, Gram Mooligai Co. Ltd, to set up a 75-acre nursery of high active ingredient plant species near Madurai in Tamil Nadu. By 2015, Himalaya aims to source 70% of its raw materials through cultivation.

Besides paying a one-time fee of Rs7.5 lakh to Gram Mooligai, which supplies 60% of its raw stock, Himalaya will foot the cost of testing mass cultivation of some herbs. Gram Mooligai, owned by medicinal plant gatherers and small cultivators logging sales of Rs86 lakh last year, will make seeds of tested herbs available for free to farmers who could grow them in between their regular crops and supply the produce to Himalaya.

Sami Labs has over 4000 acre of land under medicinal plant cultivation. Reiterating its commitment to contract farming for medicinal plants, the company is keen on acquiring nearly 20,000 acres of land in various parts of the country in the next one year.

The company has already identified land in AP, Uttarakhand, Tamil Nadu, Karnataka and Maharashtra. Rs 3 crore has been earmarked for these land acquisitions. Company will utilise this land for growing nearly 20 varieties of medicinal plants. As part of company contract farming commitment, it will also provide technical expertise, facilitate loans and insure crops by entering into a buy-back agreement with farmers. Company has already obtained permission from the government of Uttarakhand for contract farming of medicinal plants. Sami Labs spends nearly 9 per cent of its revenues on R&D, while it buys cultivated material worth Rs 20 crore from farmers every year.

Export of herbal products, although worth only Rs1,000 crore according to the National Medicinal Plant Board, is growing at 50%—or double the pace of the roughly Rs90 billion domestic market. “Ageing populations in Europe or the US are moving towards herbal products for internal and topical health,” Around 960 species of medicinal plants are used by Indian Ayurveda companies where 178 species are required in excess of 100 tonnes annually, according to not-for-profit Foundation for Revitalisation of Local Health Traditions10.

CONCLUSION
The key benefits of contract farming for farmers can be summarized as: improved
access to local markets; assured markets and prices (lower risks) especially for non-traditional crops; assured and often higher returns; and enhanced farmer access to production inputs, mechanization and transport services, and extension advice. Additional key benefits for contract partners and rural development often include: assured quality and timeliness in delivery of farmers’ products; improved local infrastructure, such as roads and irrigation facilities in sugar grower areas, tea roads, dairy coolers/collection centres, etc. and lower transport costs, as coordinated and larger loads are planned, an especially important feature in the case of more dispersed producers.

REFERENCE