Economics of chilli crop cultivation in Indian agriculture- A study in upper Krishna project area (Karnataka)

B. VITHOB AND Y. GAYATRI

ABSTRACT
Chilli is an important commercial crop of India and is grown both for the home and foreign market. The chilli crop is raised under rain fed conditions. In the study area also chilli is the dominant crop as commercial and majority of the farmers under the UKP area are cultivating chilli crops. The present study highlights economic conditions of chili cultivating farmers in the Upper Krishna Project (UKP) area.

INTRODUCTION
Chilli is an important commercial crop of India. It is grown both for the home and foreign market. Plant was carried out to the old world by early explores being introduced by Columbus on his return trip in 1492. Cultivation spread from the Mediterranean area to England by 1548 and to the Central Europe by the close of the 16th century (Boswell, 1949). The Portuguese brought chilli plant to India from Brazil in 1585 and cultivations was reported in China during the late 1700’s (Sturtevant, 1885). The important foreign markets for Indian chilli are Srilanka, Kuwait, Iran and England. However bulk of the production is consumed within the country.

Major chilli growing countries in the world are India, Korea, Pakistan, Turkey and Sri Lanka in Asia, Nigeria, Tunisia, Ghana and Egypt in Africa, Mexico and USA in North Central America, Yugoslavia, Spain, Romania, Italy, Hungary and Bulgaria in Europe and Argentina and Peru in South America (Hosamani, 1982).

In India the major chilli growing states are Andhra Pradesh, Maharashtra, Karnataka and Tamil Nadu and about 70 per cent of the total area lies in these four states. Chilli crop is raised under rain fed conditions. As per 2001 data, Shorapur and Shahapur talukas in Karnataka produced more chilli. The main objectives of the study are as follows: to study the various types of chilies in the study area, to explain the nature and economic status of chili cultivation in study area and to study the problems and prospects of chili cultivation in study area.

MATERIALS AND METHODS
The present study is based on both secondary and primary data. The secondary data were collected from books, journals, reports, published and un-published research thesis. The primary data were collected from chilli cultivators in Upper Krishna Project (Shorapur and Shahapur Talukas in Gulbarga district) area personnel interview regarding chilli crop cultivation and 50 chilli crop cultivators were interviewed (each 25 from both Talukas). The collected data were tabulated in simple percentage.

RESULTS AND DISCUSSION
The results obtained from the present investigation have been presented in the following sub heads:

Varieties of chili crops in study area:
Large number of chilli varieties differing in size, shape
and pungency of the fruits are grown in Karnataka besides local types are grown in the major chilli growing areas.

**Cost of cultivation:**

Regarding the above statement, information collected by the farmers, at present farmers feel more expenditure on production of chilli crop, hence most of the farmers cannot grow chilli. Plants are infected by various diseases causing organisms and the occurrence of some diseases are endemic in certain chilli growing tract except chilli which is universal in nature. The detail expenditure on chilli production per acre in the study area can be understood by the Table 1.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Particulars</th>
<th>Expenditure (Rs) per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>For seeds purchase</td>
<td>0900</td>
</tr>
<tr>
<td>2.</td>
<td>Manure and transport</td>
<td>1,000</td>
</tr>
<tr>
<td>3.</td>
<td>Expenditure on labour</td>
<td>4,500</td>
</tr>
<tr>
<td>4.</td>
<td>Fertilizer</td>
<td>1,000</td>
</tr>
<tr>
<td>5.</td>
<td>Expenditure on transport for sales</td>
<td>1,400</td>
</tr>
<tr>
<td>6.</td>
<td>Pesticides</td>
<td>1,200</td>
</tr>
<tr>
<td>7.</td>
<td>Others</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>11,000</strong></td>
</tr>
</tbody>
</table>

Source: Field Survey

Table 1 reveals that estimated total cost of cultivation to be Rs.11,000 per acre. The labour cost is the major cost component accounting Rs.4,500 out of the total cost. It is because crops require more labour for transplanting, weeding and picking of fruits etc.

**Yield and price:**

With recommended package of practices with the good management, one can get a yield of 7 to 8 quintals dry chilli per acre in the North Karnataka. In the study area, some farmers have recorded yield of 8 to 9 quintals of dry chilli per acre. It accounts for a gross income of Rs. 26 to Rs. 30 thousand and a net income of Rs. 15 to Rs. 20 thousand per acre from both the average crop yield under current market prices.

Price is fixed depending upon quality of output or crop, crop position in general, internal demand, supply position and export demand. Variety, season of cultivation and cultural practices also influence the quality of chilli. Wholesale prices have direct bearing on the seasonal condition, prevalence of wide spread occurrence, weather hazards like flood or drought or leaf curl disease in chilli growing areas of Shorapur and Shahapur Taluks. Continuous upward trend in prices of chilli in the month of February up to Rs.2500 to 4000 per quintal and it increases to Rs. 6000 to Rs. 8000 in the month of September, due to less production of chilli in the season.

**Annual household income of chilli cultivators:**

Income of sample households is extremely low in the study region. The low income plays vital role in affecting the socio-economic conditions of sample households within this framework. The income of sample households from different crops are indicated in Table 2.

Table 2 shows that about 58 per cent of families have annual income in the range of Rs.15 to 30 thousand and 32 per cent families were having above 30 thousand in the study region. It is for all the farmers in the region following by chilli crop in cultivation i.e. 45 per cent, 25 per cent from paddy crop and 30 per cent from cotton, groundnut and sunflower.

**Problems of chilli cultivators:**

In the agrarian economy of the study region farmers have been facing many problems. It true sense, they born in problems, go with problems and die in problems. Generally some problems which were mainly faced in the study region are as follows:

– Supply of low quality seeds.

<table>
<thead>
<tr>
<th>Income (Rs.)</th>
<th>Paddy</th>
<th>Cotton</th>
<th>Chili</th>
<th>Groundnut</th>
<th>Sunflower</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15000 (10)</td>
<td>24</td>
<td>04</td>
<td>42</td>
<td>22</td>
<td>08</td>
<td>100</td>
</tr>
<tr>
<td>15001 to 20000 (22)</td>
<td>35</td>
<td>10</td>
<td>35</td>
<td>15</td>
<td>05</td>
<td>100</td>
</tr>
<tr>
<td>20001 to 25000 (20)</td>
<td>20</td>
<td>10</td>
<td>45</td>
<td>25</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>25001 to 30000 (16)</td>
<td>25</td>
<td>20</td>
<td>40</td>
<td>15</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>30001 to 35000 (14)</td>
<td>32</td>
<td>-</td>
<td>48</td>
<td>12</td>
<td>08</td>
<td>100</td>
</tr>
<tr>
<td>35001 and &gt; (18)</td>
<td>22</td>
<td>04</td>
<td>62</td>
<td>12</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field survey
Notes: A figure in brackets shows percentage of heads
– Less yield, due to low quality of fertilizers and pesticides.
– Inadequate water supply by canals.
– Lack of appropriate training to farmers.
– Too disturbance from mediators in the market.
– Fluctuations in prices.
– Lack of crop insurance.
– Inadequate availability of warehouses.
– Problems of transport, electricity and sales centres

Suggestions:
As the farmers are suffering from social and economic problems in the study area, to overcome these problems, some necessity measures may be suggested as below:
– To provide better quality seeds, fertilizers and pesticides through Rait Sampark Kendra (RSK).
– To open RSK Godowns in all block areas.
– Suggestion should be given to the farmers compulsory from experts for seed treatment and spraying of pesticides.
– Water facility to be provided for throughout the year by canals.
– To control mediators in the market centres.
– To make compulsory crop insurance to farmers.
– To construct warehouses in every Gram Panchayat.

Conclusion:
Chilli is the important commercial crop grown in India for the fruit, which are used as condiment, both when green and ripe. It is an important crop in study area also, because it is suitable for irrigated area. So, in the study region 50 to 60 per cent farmers preferred this crop for cultivation.

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Literature Cited