INTRODUCTION

The study of cropping regions constitute an important aspect of agricultural geography as it provides a good basis for the agricultural regionalisation. Due to the physical and cultural diversity of land, farmers of a region grow many crops rather than a single crop. Thus the distributional pattern of crops gives rise to spatial predominance of certain crops resulting in the emergence of the crop regions. Spatially and temporally, crop regions are not static. The environmental determinants and the socio-economic conditions significantly influence the crop regions. For a progressive agricultural planning and orientation of farming on the right lines, the traditional rural agrarian economy need be changed, suitable crop associations should be evolved and the entire agrarian scene has to be transformed. So a study of crop regions is a prerequisite to achieve this agricultural prosperity.
The main objective of this chapter is to delineate primary, secondary and tertiary crop regions in Nellore district.

**Methodology:**

For delimiting crop regions in Nellore district mandal have been considered as basic unit, and the crop data is pertaining to the year 1987-88. At the same time, Taluk is taken as the unit, to bring out the changes in crop regions from 1974-75 to 1984-85 because the data during this two periods is available only on talukwise basis.

The task of the primary crop regions is accomplished by taking the first ranking crops into consideration i.e., the crops which account for the highest percentage of the total cropped area in each of the component areal unit, no matter what percentage it occupies in the gross cropped area. Similarly, the second order crop regions and the third order crop regions are delimited on the basis of the second ranking and the third ranking crops respectively.

The crop ranking assumes special significance, since it brings out the relative dominance of the
different crops in a region in the order of their importance, besides providing a basis for regionalisation of agriculture.

**Primary crop regions, 1987-1988:**

During 1987-88, 4 types of primary crop regions are recognised. The spatial distribution of these first ranking crops throw light on the regional character of these crops. The primary regions are paddy region, jowar region, tobacco region and groundnut region (Table 6.1)

**TABLE 6.1 : Distribution of First ranking crops in Nellore District, 1987-88**

<table>
<thead>
<tr>
<th>Name of the crop</th>
<th>Number of mandals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddy</td>
<td>37</td>
</tr>
<tr>
<td>Jowar</td>
<td>6</td>
</tr>
<tr>
<td>Groundnut</td>
<td>2</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1</td>
</tr>
</tbody>
</table>
NELLORE DISTRICT

PRIMARY CROP REGIONS

1987-88

LEGEND

- - - - - - PADDY

- - - - JOWAR

- - - GROUNDNUT

- - - - - - - - - - - - TOBACCO

FIG - 61

0 25 KM
(i) Paddy region:

It is the leading crop in the district and it is cultivated in about 80 per cent of the mandals. It forms the largest agricultural region in the district. It is very significant to state that paddy is having monopoly in the primary region formation. The climatic, edaphic, topographical and other conditions are more suitable for paddy farming in the district. Paddy region is mostly concentrated along the coastal region and also in the southern part of the district.

(ii) Jowar region:

It is the second largest crop cultivated as primary crop in Nellore district, next to paddy. Nearly 13 per cent of mandals chiefly confined to the North-western corner of the district. As a first rank crop, jowar is cultivated in Duttalur, Varikuntapadu, Vinjamur, Chegerla, Podalakur and Kaluvoya mandals.

(iii) Groundnut region:

Groundnut region is the third largest region in Nellore district, occupying only 4 per cent of total mandals. They are Seetarampuram and Udayagiri mandals.
This region is confined to the north western corner of the district.

(iv) Tobacco region:

It is too tiny in its extent as it comprises only one mandal, i.e. Marripadu mandal.

Of the 4 primary crop regions, the latter 3 are located in the western and north western parts of the district.

Changing primary crop regions, 1974-75 to 1984-85:

Mainly 2 types of primary crop regions are observed during the study period, i.e. paddy region and jowar region. In 1974-75, Atmakur taluk is located in the paddy region, and Udayagiri is in jowar region. In 1984-85, just replacement of these two regions is observed as Atmakur taluk in jowar region and Udayagiri taluk in paddy region. (Fig. 6.2). No other change is reported in the primary crop regions during this period.

Secondary crop regions, 1987-88:

The second ranking crops which include more number of crops than first ranking crops. Seven crops are
identified as second ranking crops during 1987-88 (Table 6.2). Among them Groundnut region occupies the leading position, and this crops ranks second in 26 per cent of mandals of the district. These mandals are located mainly in the southern part of the district (Fig. 6.3).

Next in importance among the second rank crops are paddy and jowar. Paddy being cultivated as a mono-crop in the district, As a second crop region, it


<table>
<thead>
<tr>
<th>Crop</th>
<th>No. of mandals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groundnut</td>
<td>12</td>
</tr>
<tr>
<td>Paddy</td>
<td>4</td>
</tr>
<tr>
<td>Jowar</td>
<td>4</td>
</tr>
<tr>
<td>Bajra</td>
<td>2</td>
</tr>
<tr>
<td>Fruits</td>
<td>2</td>
</tr>
<tr>
<td>Ragi</td>
<td>1</td>
</tr>
<tr>
<td>Tobacco</td>
<td>1</td>
</tr>
</tbody>
</table>

---
confined to only 4 mandals namely Vinjamur, Chegerla, Podalakur and Kaluvoya.

Jowar as a second rank crop is cultivated in 8.6 per cent of mandals, located in the North Western corner of the district.

In addition there are few more crops like Bajra and fruits which are second ranking in 2 mandals each. The secondary regions of Bajra are concentrated in Seetharampuram and Duttalur mandals. In the same way fruits as second ranking crop cultivated in Sydapuram and Gudur mandals.

The other two crops - Ragi and tobacco formed their regions as second ranking crops in Udayagiri and Kaligiri mandals respectively.

It is observed that in about 43 per cent of the mandals which registered mono crop, there is no secondary crop region. As stated earlier this area is confined to the coastal region.

Changing secondary crop regions, 1974-75 to 1984-85:

Comparatively, the extent of secondary crop region has increased from 6 taluks in 1974-75 to 8 taluks.
in 1984-85. The crops forming the secondary regions are paddy, jowar, groundnut, bajra and sesamum. Jowar as second ranking crop is cultivated in Kovur, Gudur and Atmakur mandals during the year 1974-75. It lost its ground in 1984-85, as a second rank crop, and jowar is replaced by paddy, which is completely absent in 1974-75, and crops like paddy, sesamum gained ground in 1984-85 as secondary crop regions in the place of bajra (Fig. 6.4). Even groundnut cultivation as a second rank crop also increased from 1 taluk to 2 taluks during this decade.

**Tertiary crop regions:**

In the tertiary crop region seven crops record as third ranking crops. They are confined to north western part of the district accounting only 26 per cent of total mandals of the district (Table 6.3).

**TABLE 6.3: Distribution of Third Ranking crops in Nellore District, 1987-88.**

<table>
<thead>
<tr>
<th>Crop</th>
<th>No. of mandals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>3</td>
</tr>
<tr>
<td>Paddy</td>
<td>2</td>
</tr>
<tr>
<td>Jowar</td>
<td>2</td>
</tr>
<tr>
<td>Ragi</td>
<td>2</td>
</tr>
<tr>
<td>Fruits</td>
<td>2</td>
</tr>
<tr>
<td>Bajra</td>
<td>1</td>
</tr>
<tr>
<td>Pulses</td>
<td>1</td>
</tr>
</tbody>
</table>
Among third ranking crops grown in the district, tobacco is in the top position, forming its regions in Kondapuram, Atmakur and A.S. Peta mandals. The next important crops are paddy, jowar, ragi and fruits each ranking third position in 2 mandals (fig. 6.5). The minor important crops in the tertiary crop regions are bajra and pulses forming its tertiary regions in only one mandal each. They are Ananthasagaram and Chegerla respectively.

The remaining 71 per cent of mandals in the district are completely devoid of tertiary crop regions.

Changing tertiary crop regions, 1974-75 to 1984-85:

The areal extent of tertiary crop regions has increased from 4 taluks in 1974-75 to 5 taluks in 1984-85. Only three crops namely tobacco, paddy and ragi formed regions during the year 1974-75. Whereas in 1984-85 paddy and ragi are replaced by groundnut and vegetables. Paddy is replaced by vegetables and groundnut emerged as a new tertiary crop region in Venkatagiri taluk. The coastal taluks except Kavali are completely devoid of third ranking crops.
Conclusion:

The study has revealed that there are 46 primary crop regions, 26 secondary crop regions and only 13 tertiary crop regions during the year 1987-88. Secondary and tertiary crop regions are very less comparing to the primary crop regions. It is obvious that the cropping pattern in the district is more specialized rather than diversified.

By observing the changing crop regions from 1974-75 to 1984-85, the areal extent of the primary crop regions is almost static, except some minor adjustments. But an increase is observed in secondary crop regions from 6 taluks to 8 taluks and in tertiary crop regions also there is an increase of 4 taluks to 5 taluks during the study period. It is clear that food grains especially paddy has a dominance over other crops in three-fourths of the cultivated area of the district. The change in crop Region during the decade 1974-75 to 1984-85 might have been due to demand for cash crops, increasing prices etc...