



AMIC – INFOSERIES – 5
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SHIFTS IN KERALA'S AGRICULTURE: WHAT ACREAGE RATIO INDICATES ?

INTRODUCTION

The cropping pattern of any region would basically be influenced by the natural endowments like rainfall, sunshine, soil type, physiographic conditions, and the availability and access to core infrastructure like all weather roads, good telecommunication and transportation facilities, markets etc. Kerala is blessed in most of the above factors, and had a diversified cropping pattern (Table 1), utilizing nearly 71 per cent of the total geographical area.

Table 1. Cropping Pattern in Kerala during 2006-07

| Sl. No. | Crops | Area ('000 ha) | As % to the gross cropped area |
|---------|------------|----------------|--------------------------------|
| 1 | Rice | 228.94 | 8.29 |
| 2 | Tapioca | 83.99 | 3.04 |
| 3 | Coconut | 818.81 | 29.66 |
| 4 | Arecanut | 99.79 | 3.61 |
| 5 | Cashew | 58.38 | 2.11 |
| 6 | Pepper | 175.68 | 6.36 |
| 7 | Ginger | 8.87 | 0.32 |
| 8 | Banana* | 110.71 | 4.01 |
| 9 | Vegetables | 47.83 | 1.73 |
| 10 | Rubber | 512.05 | 18.55 |
| 11 | Tea | 36.13 | 1.31 |
| 12 | Coffee | 84.12 | 3.05 |
| 13 | Cocoa | 14.40 | 0.52 |
| 14 | Others | 481.39 | 17.43 |

* Includes *Nendran* and other plantains

SHIFTING ACREAGE RATIOS: SIGNIFICANCE

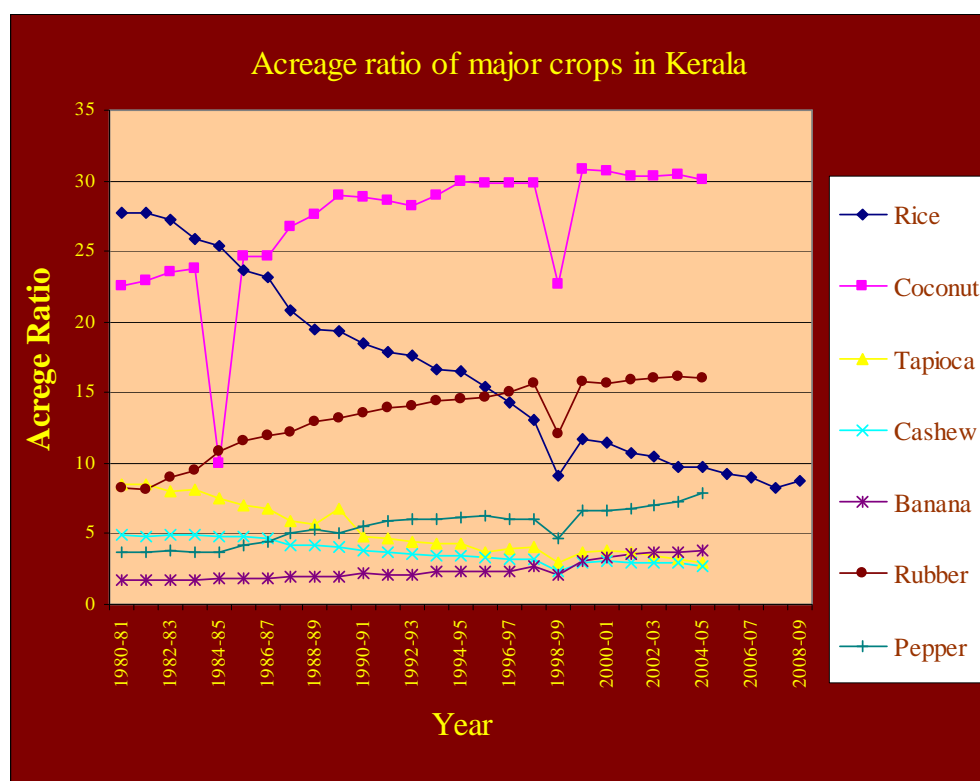
Acreage ratio expresses the area under an individual crop as a percentage to the total cropped area. The average ratio of the major crops in Kerala from 1980-81 to 2008-09 has been worked out and presented in Table 2 and Fig.1.

Table 2. Acreage ratio of important crops in Kerala

| Year | Rice | Coconut | Tapioca | Cashew | Banana | Rubber | Pepper |
|---------|-------|---------|---------|--------|--------|--------|--------|
| 1980-81 | 27.79 | 22.58 | 8.49 | 4.90 | 1.71 | 8.24 | 3.75 |
| 1981-82 | 27.78 | 22.95 | 8.54 | 4.82 | 1.72 | 8.18 | 3.73 |
| 1982-83 | 27.20 | 23.56 | 7.95 | 4.94 | 1.68 | 8.95 | 3.76 |
| 1983-84 | 25.86 | 23.84 | 8.14 | 4.97 | 1.73 | 9.48 | 3.71 |
| 1984-85 | 25.40 | 10.00 | 7.54 | 4.76 | 1.79 | 10.85 | 3.68 |
| 1985-86 | 23.67 | 24.59 | 7.08 | 4.81 | 1.85 | 11.53 | 4.24 |
| 1986-87 | 23.13 | 24.60 | 6.72 | 4.65 | 1.86 | 11.94 | 4.49 |
| 1987-88 | 20.83 | 26.74 | 5.96 | 4.19 | 1.94 | 12.24 | 5.04 |
| 1988-89 | 19.49 | 27.56 | 5.72 | 4.21 | 2.00 | 12.94 | 5.30 |
| 1989-90 | 19.32 | 29.01 | 6.81 | 4.10 | 1.96 | 13.13 | 5.02 |
| 1990-91 | 18.52 | 28.81 | 4.85 | 3.83 | 2.17 | 13.50 | 5.58 |
| 1991-92 | 17.92 | 28.57 | 4.70 | 3.71 | 2.15 | 13.88 | 5.89 |
| 1992-93 | 17.64 | 28.24 | 4.43 | 3.58 | 2.14 | 14.07 | 6.01 |
| 1993-94 | 16.66 | 28.98 | 4.30 | 3.51 | 2.37 | 14.37 | 6.05 |
| 1994-95 | 16.50 | 29.89 | 4.27 | 3.47 | 2.38 | 14.54 | 6.14 |
| 1995-96 | 15.36 | 29.80 | 3.70 | 3.37 | 2.38 | 14.64 | 6.26 |
| 1996-97 | 14.27 | 29.86 | 3.99 | 3.21 | 2.39 | 15.08 | 6.06 |
| 1997-98 | 13.04 | 29.77 | 4.09 | 3.19 | 2.72 | 15.67 | 6.06 |
| 1998-99 | 9.08 | 22.70 | 2.90 | 2.35 | 2.10 | 12.10 | 4.68 |
| 1999-00 | 11.65 | 30.81 | 3.73 | 2.97 | 3.07 | 15.75 | 6.60 |
| 2000-01 | 11.50 | 30.64 | 3.79 | 3.05 | 3.29 | 15.70 | 6.69 |
| 2001-02 | 10.77 | 30.27 | 3.72 | 3.00 | 3.54 | 15.88 | 6.82 |
| 2002-03 | 10.45 | 30.27 | 3.51 | 2.98 | 3.72 | 16.03 | 7.02 |
| 2003-04 | 9.73 | 30.41 | 3.19 | 2.92 | 3.70 | 16.19 | 7.33 |
| 2004-05 | 9.68 | 30.01 | 2.95 | 2.72 | 3.79 | 16.04 | 7.93 |
| 2005-06 | 9.24 | 30.07 | 3.03 | 2.62 | 3.91 | 16.56 | 7.97 |
| 2006-07 | 9.03 | 29.92 | 2.99 | 2.42 | 3.85 | 17.21 | 7.43 |
| 2007-08 | 8.29 | 29.66 | 3.04 | 2.11 | 4.01 | 18.55 | 6.36 |
| 2008-09 | 8.69 | 29.23 | 3.24 | 1.97 | 3.89 | 19.20 | 5.70 |

A perusal of the table indicates that rice, coconut, tapioca, rubber, pepper, banana, and cashew together accounted for more than two third of the total cropped area in Kerala at the beginning of eighties. The acreage ratio of rice, tapioca and cashew has been declining continuously during the reference period while that of coconut, rubber, black pepper and banana is on the rise. This trend is truly indicative of the changing relative profitability of these crops brought about by changing cost of cultivation scenario and out price changes. The high wage rate structure prevailing in the state coupled with non availability of labour at critical farm operations compelled many farmers to switch over to less labour intensive perennial crops. For them, once the initial establishment of the plantations is over, the involvement of labour is limited to routine maintenance and harvesting only.

Fig. 1. Acreage ratio of important crops in Kerala



SHIFTING ACREAGE RATIOS: A FOOD SECURITY PERSPECTIVE

The changing acreage ratio may be attractive from the stand point of augmenting farm income. But it does not augur well from the food security point of view for a State like Kerala, who has been a chronically food deficit from the sixties onwards. Rice and tapioca, are two basic food crops in Kerala. It is disheartening to note that paddy crop has lost acreage from 27.79 to just 8.69 per cent of the total cropped area, while tapioca has lost from 8.49 to 3.24 per cent of the total cropped area. The PDS and the unrestricted inter state food movement has helped her to meet the deficit in the past. The drastic loss in acreage ratio by food crops may have its own implications in the long run considering such shifts at the macro level also.