



GROWTH OF BANANA CULTIVATION IN TAMIL NADU DISTRICTS

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ABSTRACT:

The present study attempts to analyse the growth of Banana cultivation in Tamil Nadu districts during pre and post-reform periods. The study concludes that, the area has increased in Tamil Nadu districts in the banana cultivation during the post-reform period when compared to protected regime, while production and productivity has declined in the reform period. Particularly Salem district witnessed in the growth rate of area and production was negative trend in the pre-reform period and it turned positive in the post-reform period, whereas productivity has declined in the liberalised regime.

KEYWORDS : *post-reform periods , while production and productivity.*

INTRODUCTION:

During 1991, the country initiated economic reforms aimed at far-reaching changes in regulations, fiscal policy, trade policy, exchange rate, role of market forces, private sector participation in economic activities and government controls and intervention in market. The agricultural sector was not targeted directly by the reforms for a couple of years, but it was affected indirectly through changes in the exchange rate, export liberalization and terms of trade resulting from disprotection to industry. Annual growth rate in total gross domestic product (GDP) has accelerated from below 6 per cent during the initial years of reforms to more than 8 per cent in the recent years. The approach paper to Eleventh Five-Year Plan finds that 8.5 per cent growth in GDP is feasible during the next five years. As a matter of fact, sectoral composition of growth is more challenging than the growth in total GDP, which is related to the well-being of a very large segment of population. Agriculture, which accounted for more than 30 per cent of total GDP in the beginning of reforms failed to maintain its pre-reform growth or keep pace with growth in the non-agricultural sector (**Chand, 2002**). On the contrary, it witnessed a sharp deceleration in growth after the mid-1990s. This happened despite the fact that agricultural productivity in most of the states was quite low and there was a lot of scope and potential for the growth of agricultural output (**Chand, 2008**).

The only measure taken during the early years of reforms that had a direct impact on agriculture was decontrol of fertilizers and reduction in the fertilizer subsidy. The disprotection to industry resulted in improvement in terms of trade for agriculture during the initial years of reforms. Another factor, which contributed positively to agricultural growth during the initial years of reform was a substantial hike in minimum support prices given by the government, mainly to reduce the gap between domestic and international prices that resulted largely from devaluation of the overvalued exchange rate. The impact of these changes and various other factors was a small acceleration in the growth rate of agriculture during the first six years of reforms. The average growth rate of GDP in agriculture and allied sectors turned out to be 3.64 per cent during 1990-91 to 1996-97 to 2004-05 the gap between them had also widened.

In contrast to the slowdown in agriculture, the GDP of the non-agriculture sector shows a robust and rising growth rate. Using the new base (1999-2000) of National Accounts Statistics, for which some of the data is available, annual growth rate in non-agricultural GDP after 2000-01 is 7.65 per cent, whereas the growth rate in agriculture is hardly 2 per cent.

With the above backdrop the present paper attempt to estimate whether the policy changes has positive (or negative) impact on the growth of Banana cultivation in Tamil Nadu in during the pre and post-reform periods.

DATA AND METHODOLOGY

Data

The required data were collected from the Seasonal and Crop Report of Tamil Nadu for the respective Years. The study covers the period from 1980 to 2010.

Growth Model

Growth is studied with reference to annual growth rates computed based on the compound interest rate formula adopted by the World Bank using the least square methods.

The least squares growth rate 'r' is estimated by fitting a least squares linear regression trend line to the logarithmic annual values of the variable in the relevant period. More specifically, the regression equation takes the form

$$\text{Log } X_t = a + bt + e_t$$

where this is equivalent to the logarithmic transformation of the compound growth rate equation

$$X_t = X_0 (1+r)^t$$

In these equations, 'X' is the variable, 't' is time period and $a = \log X_0$ and $b = \log (1+r)$ are the parameters to be estimated, 'e' is the error term. If b^* is the least squares estimates of 'b' then the average annual percentage growth rate 'r' is obtained as $(\text{antilog } b^*) - 1$ and multiplied by 100, to express it as percentage.

RESULTS AND DISCUSSIONS

GROWTH RATE OF AREA, PRODUCTION AND PRODUCTIVITY

Table -1 presents the result of growth in area, production and productivity of Banana cultivation in Tamil Nadu during the pre (1980-81 to 1991-92) and post reform periods (1992-93 to 2009-10).

Among the different indicators in the pre-reform period, production has registered the highest growth rate of 8.84 per cent followed by 5.88 per cent in productivity and 2.76 per cent in area. The post-reform period evidenced that the production has registered maximum growth of 5.12 per cent followed by area reported to be 3.11 per cent and productivity witnessed growth rate of 1.94 per cent during the period under review.

The overall mean growth rate of area during the post-reform period has increased to 3.11 per cent when compared to the pre-reform period. Both production and productivity witnessed a declining trend in the liberalized regime too.

Table – 1 Growth in Area, Production and Productivity of Banana Cultivation in Tamil Nadu during the Pre and Post-Reform Periods (1980-2010)						
States	Pre-Reform			Post-Reform		
	Area	Production	Productivity	Area	Production	Productivity
Kancheepuram	2.20*** (1.804)	6.03* (3.875)	3.75* (4.607)	0.68 (0.545)	2.36 (1.437)	1.67*** (1.900)
Caddalore	22.67* (10.359)	25.28* (8.140)	2.12 (0.835)	0.81 (1.682)	3.56 (1.545)	2.73 (1.209)
Thiruvannamalai	6.98* (3.23)	17.53* (4.572)	9.86* (3.383)	0.09 (0.047)	1.99 (0.810)	1.90** (2.028)
Salem	-5.09* (-4.971)	-0.63 (-0.413)	4.69* (3.855)	5.15* (3.457)	7.48* (4.802)	2.22* (3.237)
Dharmapuri	1.11 (0.503)	8.42* (3.663)	7.23* (5.511)	7.50* (5.230)	10.70* (4.558)	2.98 (1.578)
Coimbatore	-4.13* (-6.45)	0.88 (0.668)	5.22* (4.224)	7.39* (5.318)	8.29* (4.642)	0.84 (1.144)
Erode	-3.00 (-1.667)	4.40* (3.488)	7.63* (4.426)	6.07* (6.521)	7.70* (4.081)	1.54 (1.298)
Thiruchirapalli	2.91* (3.797)	7.41* (4.554)	4.37** (2.652)	-0.61 (-1.637)	-0.84 (-0.900)	-0.23 (-0.273)
Pudukkottai	11.11* (3.454)	27.68* (6.832)	14.92* (5.780)	0.89 (1.595)	4.29* (5.215)	3.37* (5.545)
Thanjavur	-1.63 (-1.645)	3.50 (1.588)	5.21*** (2.072)	0.55 (1.161)	2.58** (2.387)	2.02** (2.457)
Madurai	-1.91** (-2.067)	-1.63 (-0.281)	0.29 (0.050)	2.14* (3.300)	5.28* (3.406)	3.07* (2.784)
Ramanathapuram	-0.26 (-0.182)	2.70 (1.710)	2.96** (2.640)	2.43* (6.164)	3.86* (5.340)	1.39** (2.329)
Thirunelveli	2.32 (1.529)	15.84* (7.571)	13.21* (7.849)	0.49 (0.926)	2.26* (2.679)	1.76*** (1.820)
Nilgiris	3.79** (2.088)	3.33** (2.103)	-0.44 (-0.270)	9.71* (6.557)	12.45* (7.250)	2.50* (2.853)
Kanniyakumari	4.37* (4.439)	11.80* (9.881)	7.12* (3.891)	3.36* (13.194)	4.78* (4.710)	1.37 (1.411)
Mean	2.76	8.84	5.88	3.11	5.12	1.94

Note: Figures in parentheses are t values. **CGR:**- Compound Growth Rate; *= Statistically Significant at 1 % level. ** = Statistically Significant at 5 % level. *** = Statistically Significant at 10 % level;

Source: Season and Crop Report of Tamil Nadu of the Concerned Years.

CONCLUSION

The area has increased in Tamil Nadu districts in the banana cultivation during the post-reform period when compared to protected regime, while production and productivity has declined in the reform period. Particularly Salem district witnessed in the growth rate of area and production was negative trend in the pre-reform period and it turned positive in the post-reform period, whereas productivity has declined in the liberalised regime.

However, as a whole it can be said that the initial years of reforms were to some extent favourable for agricultural growth, but latter period it is very much disheartening to note that a sharp decline in the

growth rate of the almost all the sub-sectors and commodity groups in the agricultural sector is witnessed. Another disturbing feature of the recent growth process is that the agricultural and non-agricultural sectors are on a disparate growth path (**Reddy et al., 2011**).

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