

Chapter 1: Background

I. Dimensions of the agrarian crisis

Agriculture in Andhra Pradesh is in an advanced state of crisis. While discussing this crisis, it is important to be aware of the substantial regional variations both in absolute levels of production and income and in the way that this crisis has played out in recent years. Drought-affected areas in Rayalaseema and Telengana bear the brunt of the burden, even though even farmers in irrigated areas have been facing problems. In addition, the burden has fallen disproportionately on small and marginal farmers, tenant farmers and rural labourers.

The most extreme manifestation of this crisis is in the suicides by farmers, who are typically driven to this desperate act by the inability to repay debt incurred in the process of cultivation, which has become a volatile and economically less viable activity. But this is only the tip of the iceberg of generalised rural distress which had become prevalent across the state, and has also been expressed in severe cases in kidney sales and hunger deaths in certain areas. The problems of farming are evident, ranging from frequent droughts and soil degeneration, to lack of institutional credit and insurance leading to excessive reliance on private moneylenders, problems in accessing reliable and reasonably priced inputs to problems of marketing and high volatility of crop prices. But the crisis is also reflected in other features of the rural economy: the decline in agricultural employment and stagnation of other employment, leading to reduced food consumption and forced migration of workers; the evident decline in per capita calorie consumption even among the poor.

Production indicators give the first indication of the problem. The growth rate of aggregate agricultural output declined from 3.4 per cent per annum in the

1980s to 2.3 per cent per annum in the 1990s. Yield growth also declined. For example, the growth rate of rice yield declined steeply from an annual rate of 3.1 per cent in the 1980s to 1.3 per cent in the 1990s; for cotton the corresponding figures were 3.4 per cent and 1.4 per cent.¹ National-level studies estimate that crop yields in Andhra Pradesh declined by 1.8 per cent per year over the 1990s. In addition, the volatility of yields has also been higher in the later period.

Meanwhile, prices of crops produced by farmers in the state have become much more volatile as they have been more influenced by world market trends. From 1996, the falling international prices of many crops had their ripple effects in India even when the actual volume of imports did not increase, merely because of the possibility of such imports. There have also been much sharper fluctuations in such prices, which have changed sharply from year to year for some crops like cotton and groundnut. This has created a pattern of shifting, uncertain and unreliable relative price incentives for farmers.

Despite all this, it is certainly not the case that agriculture in the state has been stagnant over this period. On the contrary, there have been very substantial changes most particularly in cropping patterns, as farmers across the state have moved from traditional rainfed cereals to non-food cash crops. Table 1 gives an idea of the extent of the shift over four decades, but it should be noted that a substantial part of this change occurred in the more recent past. There have been large reductions in the acreage under jowar and other millets such as ragi, and increases in the area under groundnut, other oilseeds and cotton. This shift towards more emphasis on non-food cash crop production reflected several forces. There was the obvious need for farmers' households to access more cash income in order to meet a range of cash expenses for immediate consumption and even for cultivation. In addition, there was a pattern of increasing expenditure on health. Cash crop production typically entails more monetised inputs, such as seeds fertilisers and pesticides, and these were

¹ Estimates courtesy CESS, Hyderabad.

typically financed by incurring debt, most often with the input dealers themselves who also doubled as traders. Once such a money debt was incurred, cash crop production was further necessitated by the need to repay interest and principal, and it became almost impossible for farmers to move back to the old subsistence crops that did not command a market.

Table 1.1: Changes in Cropping Pattern
(per cent of cropped area)

Crops	North Coastal Andhra		South Coastal Andhra		Rayalaseema		South Telengana		North Telengana		Total State	
	1958	1998	1958	1998	1958	1998	1958	1998	1958	1998	1958	1998
Rice	38.9	33.0	40.5	48.6	9.1	11.1	14.8	23.9	20.8	29.5	23.1	30.5
Jowar	2.1	0.3	16.6	0.3	18.3	5.3	26.7	17.1	31.0	9.4	20.8	6.1
Other Millets	15.7	7.4	5.9	1.7	10.5	1.6	11.3	6.9	7.3	9.7	9.1	4.7
Pulses	11.0	13.4	9.1	14.8	6.5	5.6	11.8	14.6	15.1	12.0	10.7	11.9
Food Grains	66.9	54.4	72.1	65.4	44.4	23.6	64.4	62.5	74.2	60.6	73.1	53.2
Groundnut	7.1	9.5	3.6	1.8	20.3	48.3	10.5	9.5	8.0	5.3	10.5	15.3
Oilseeds	11.3	12.9	6.3	3.7	21.4	56.3	19.5	20.3	15.1	10.8	15.3	20.8
Cotton	0.2	0.7	0.8	7.0	7.9	5.2	0.4	8.2	4.0	17.6	3.1	8.2
Others	21.6	32.0	20.8	23.9	26.3	14.9	15.5	9.0	6.7	11.0	11.6	17.8

Source: S. Subramanyam (2002)

The technological problems of decelerating crop output and volatile and falling yields have been dramatically accentuated by the changes in relative prices, such that, especially from the mid-1990s, output prices have stagnated or fallen while the costs of inputs have gone up very sharply. This has created genuine questions regarding the viability of farming in the current context.

Table 1.2: Net income per hectare at 1971-72 prices in Andhra Pradesh

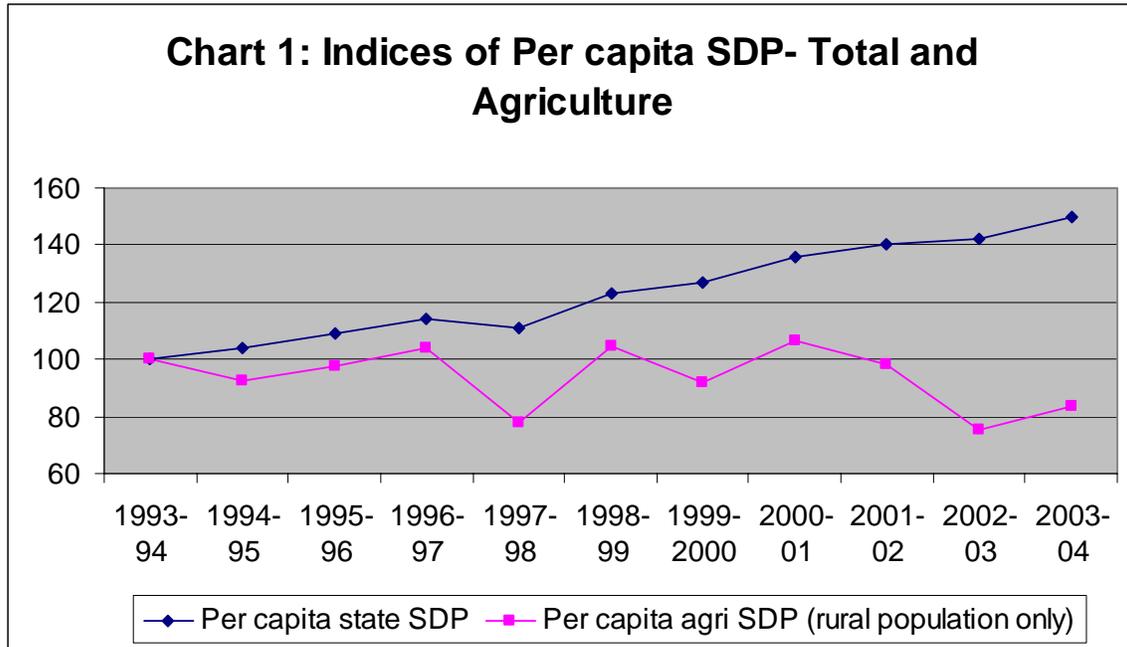
	Paddy	Groundnut	Sugarcane	Cotton
Early 70s	314	-		0
Mid 70s	81	-116		186
Late 70s	-36	-65	1056	638
Early 80s	150	-15	809	-
Mid 80s	140	-88	2194	-
Late 80s	215	-52	816	104
Early 90s	221	-9	1119	-
Mid 90s	227	-117	1563	474
Late 90s	167	-123	1139	-

Source: CACP, quoted by Directorate of Economics and Statistics,
Government of Andhra Pradesh

Table 2 gives an idea of the stagnation of returns and actual decline in returns from cultivation of several crops. In some cases, the subsequent patterns have indicated both more losses from cultivation and greater volatility. The Commission on Agricultural Costs and Prices, Government of India (CACP) reports show that the returns from cotton cultivation per hectare in current prices were negative (a loss of Rs. 1641) in 1996-97 and only Rs. 72 per hectare in 1997-98, after taking into account the total costs. Since it is widely believed that the CACP underestimates many elements of cost in Andhra Pradesh, it may be that the actual situation is even worse than this already dismal picture.

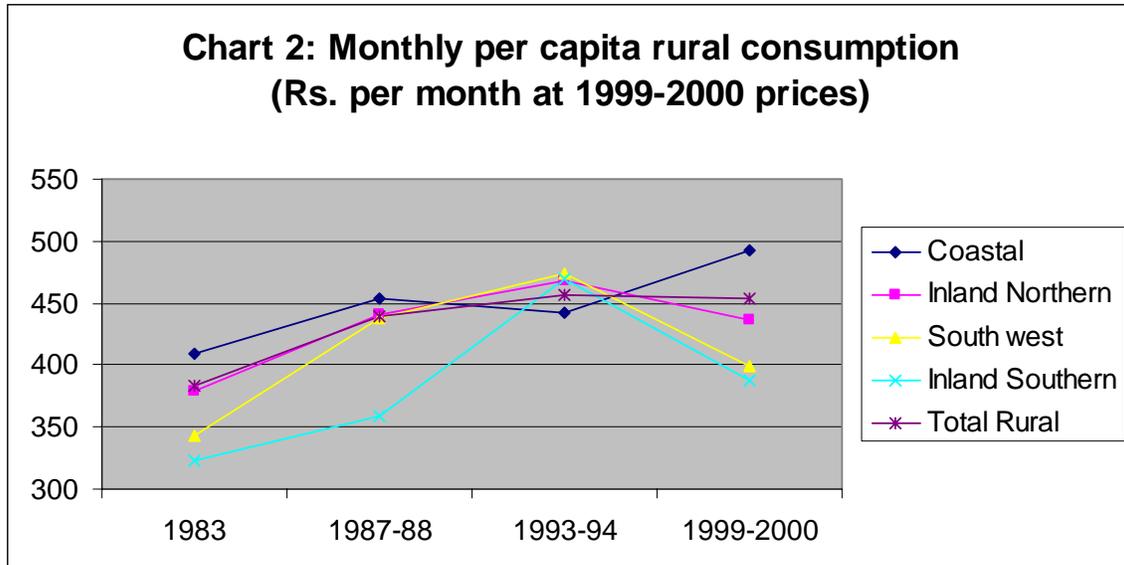
When all this is combined with the effect of falling prices, it is not surprising to note that the share of GDP in agriculture in A.P. declined much faster than all India, and that per capita GDP from agriculture in constant terms barely increased after the mid-1990s and actually fell in recent years. Chart 1 indicates the behaviour of the index numbers for per capita income (that is net domestic product in constant 1993-94 prices) for all sectors and for agriculture alone. While aggregate per capita income increased moderately from 1993,

agricultural income per capita of rural population shows no such increase, and has actually declined. In fact, between the triennium 1993-94 to 1995-96 and the triennium 2001-02 to 2003-04, per capita agricultural product actually declined by around 12 per cent.



Source: Calculated from NAS and Census of India

This has also been reflected in indicators of per capita consumption, which probably provide a more accurate picture of the real economic conditions in the countryside. Chart 2 indicates the trend in the four regions of rural Andhra Pradesh according to the NSS consumer expenditure surveys.



Source: NSS Consumption Expenditure Surveys

Note: The NSS regions correspond to the following districts:
 Coastal includes North Coastal Andhra and South Coastal Andhra;
 Inland Northern refers to North Telengana;
 Inland Southern refers to South Telengana and Kurnool and Cuddapah in Rayalseema);
 Southwest refers to Anantapur and Chittoor in Rayalseema.

Aggregate per capita consumption for the rural areas of the whole state taken together increased marginally between 1983 and 1999-2000. But it is notable that there appears to have been hardly any increase since 1993-94, despite the moderate increase in per capita SDP indicated above. What is even more significant is that per capita consumption *fell* after 1993-94 in all the regions of rural Andhra Pradesh barring the coastal Andhra region. This fall was particularly marked for Rayalaseema (comprising the Southwest and Inland Southern regions). So, in most of the rural areas of the state, average consumption expenditure actually declined in real terms in the period 1993-94 to 1999-2000. Even the rise in per capita income in Coastal Andhra may have an element of inter-regional inequality because of the differences between the backward North Coastal region and the advanced South Coastal region.

This is quite consistent with the picture of growing difficulty of cultivation. But in addition to the agricultural patterns, the general stagnation of the rural economy and the absence of non-agricultural income generation possibilities

contributed further to the deterioration of living standards in the countryside. Part of the problem in employment generation stemmed from agriculture itself – not only was this sector depressed, but the increasing mechanisation implied falling labour use per hectare of cultivation. It is not surprising that in this context, agricultural employment fell and total rural employment stagnated.

At first sight this appears to be incompatible with the general perception that rural poverty has declined and the official estimate that the actual incidence of poverty in the state in 1999-2000 was only 11 per cent. But most analysts agree that this is a gross underestimate.² It is evident that the official poverty line of Rs. 262 per capita per month (in 1999-2000) implying Rs. 8.60 per day, is far too low to meet the actual requirements of food and other necessities.³ In addition, per capita calorie consumption also appears to have declined. A further cause for concern is the composition of cereal consumption increasingly away from the more nutrient millets to rice.

II. Causes of the agrarian crisis

The causes of this widespread crisis are complex and manifold, reflecting technological and weather-related factors, changes in relative prices and reduced levels of public intervention in terms of both investment and regulation. It is true that climatic shifts have played a negative role, especially in terms of generally lower rainfall, more uneven and untimely rain and growing regional variation in the rainfall. However, the main causes are dominantly related to public policy, and in particular to an economic strategy at both central government and state government levels which systematically reduced the protection afforded to farmers and exposed them to market volatility and private profiteering without adequate regulation, reduced critical forms of public expenditure, destroyed important public institutions and did not adequately generate other non-

² Deaton and Dreze (2003) Abhijit Sen and Himanshu (2004).

³ Utsa Patnaik (2004).

agricultural economic activities.⁴ While this was true across most of rural India over the past decade, it was especially true in Andhra Pradesh.

The state of Andhra Pradesh had become almost a laboratory for every neo-liberal economic experiment, with a massive shift towards relying on incentives for private agents as opposed to state intervention and regulation of private activity, in virtually all areas. Ironically, this decline in the government's role took place at the same time that the state government was incurring massive external debts from bilateral and multilateral external agencies. Many of the problems in the economy of the state – in agriculture as well as in non-agriculture – can be traced to this reduction of the government's positive role and the collapse of a wide range of public institutions affecting the conditions facing producers.

The increase in the number of farmers' suicides is the most dramatic sign of extreme despair and hopelessness, and comes close to starvation deaths as the most blatant indicator of the extent of rural devastation. The proximate cause of such suicides is usually the inability to cope with the burden of debt, which farmers find themselves unable to repay. In most (but not all) cases, the debt was contracted to private moneylenders, as the massive decline in agricultural credit from banks and co-operatives has reduced access especially of small cultivators to institutional credit. Further, large numbers of farmers – tenant, tribal farmers, women farmers and those without legal titles – have no access at all to formal credit and are forced to rely entirely on private lenders.

But the debt burden itself is only a symptom of the wider malaise. Cultivation itself has become less and less viable over time, as input prices in Andhra Pradesh especially have sky-rocketed, and farmers have gone in for cash crops involving more monetised inputs, risky yields and volatile prices. The opening up of agricultural trade has forced farmers to cope with the vagaries and

⁴ These issues are explored in more detail in the next chapter.

volatility of international market prices, even while the most minimal protection earlier afforded to cultivators has been removed.

Public agricultural extension services have all but disappeared, leaving farmers to the mercy of private dealers of seed and other inputs such as fertiliser and pesticides who function without adequate regulation, creating problems of wrong crop choices, excessively high input prices, spurious inputs and extortion. Public crop marketing services have also declined in spread and scope, and marketing margins imposed by private traders have therefore increased. All this happened over a period when farmers were actively encouraged to shift to cash crops, away from subsistence crops which involved less monetised inputs and could ensure at least consumption survival of peasant households.

The crisis in water and irrigation sources can also be traced to these cultivation patterns. Over-use of groundwater – once again resulting from the absence of public regulation or even advice, as well as the shift to more water-using crops – has caused water tables to fall across the state. Indiscriminate drilling of borewells may have indirectly led to many farmers' suicides in the state. The prolonged period of poor and untimely rains in much of the state has exacerbated these problems and created crisis conditions. Declining public investment, inadequate maintenance and the regionally uneven pattern of spending, have all made surface water access also problematic. In consequence, there are now real problems with respect to even the current economic viability of farming as a productive activity in most parts of rural Andhra Pradesh, not to mention its sustainability over time.

Other factors have added to debt burdens that become unbearable over time. Production loans dominate in current rural indebtedness. But among the non-productive loans incurred by rural households, those taken for paying for medical expenses are the most significant. The deterioration of public health services and the promotion of private medical care have dramatically increased

the financial costs of sheer physical survival and well-being, even among the relatively poor.

The crisis in agriculture in turn has affected and been affected by the stagnation of other employment opportunities in the rural economy. The closure of many small-scale industries worsened the problems of people living in surrounding villages, as they lost possibilities of employment and chances for self-employed service activities catering to those industries and their workers. Handloom and other weavers have been adversely affected by the removal of public subsidies and the decline of co-operatives. While dairy and livestock rearing tend to be more stable sources of income, they have also become less profitable (and even turned loss-making in some areas) because of the increasing costs of feed and unequal market relations into which small producers have been pushed. There has been some growth of services employment, but nowhere near enough to fill the gap. As a result, the share of rural non-farm employment in the state actually declined from 23 per cent in 1983 to 21 per cent in 1999-00, while for the country as a whole it increased from 18 per cent to 24 per cent over the same period.

This entire process is sometimes presented as a situation in which rural people have been “left out” of the process of globalisation, or have been “marginalised” or “excluded”. But the problem is not at all that cultivators and workers in this state have been “left out”. Rather, they have been incorporated and integrated into market systems that are intrinsically loaded against them, in which their lack of assets, poor protection through regulation and low bargaining power have operated to make their material conditions more adverse.

These processes have operated differently across regions, and those areas that were historically backward and less developed have ironically been more adversely affected by the processes described above. It is clearly the case that the degree of distress experienced by cultivators in Andhra Pradesh varies

inversely with the extent of assured irrigation. Therefore, while the crisis is a serious one across the state, there is no doubt that it is more acute in drought-prone regions, where the social and economic processes have interacted with weather conditions to create circumstance of extreme difficulty.