CHAPTER 1

LIBERALISATION, STRUCTURAL ADJUSTMENT AND FOOD SECURITY – AN INTRODUCTION TO THE PROBLEM

1.1. Introduction

It is of contemporary interest to study the impact of changes in national and thesis attempts to explore the impact of adjustment and economic reforms on food security, an issue that is of primary relevance to any discussion on welfare and development. While this broad area has been widely explored, we seek to study specifically the impact of economic reforms and trade liberalisation on food security in the context of high overall growth.

The analysis is carried out in the context of Gujarat state, for the years 1960-2006, during which the state undertook a vigorous economic growth path. The impact of this economic growth, according to our hypothesis, does not result in equal distribution of its benefits in the poorer regions. This issue is analysed on the basis of secondary data as well as field investigation carried out in some of the poorer regions of the state. The present chapter gives a background of economic reform policies and their impact as well as a historical perspective on the general economic situation of Gujarat state. It also spells out the objectives of the study and develops the hypothesis.

The objective of this study is to examine the impact of economic reform policies on food security in Gujarat. This will involve a comparative study of the situation and factors affecting food security before and after liberalisation. The period of the study will be 1960-2006.

Numerous studies have been conducted on the effects of economic reforms. Studies on food security have generally concentrated on states like Bihar and Orissa, which have a low income and low nutritional standards. Gujarat, a state whose per capita income is higher than the national average, and where state GDP increasingly originates in the secondary and tertiary sectors, has not received much attention as far as food security is concerned. There are indications however, of declining nutritional standards in Gujarat during the economic reforms period (Mahadevia, 2000).
This study will analyse the patterns of growth, distribution and poverty in a high growth state. It will also provide an alternative empirical groundwork on which government policies related to food security, especially in the context of an economy that has a fairly high income level and a significant contribution of the non-agricultural sector, can be based.

1.2. Adjustment, liberalisation and their impact in developing countries

Most of the developing nations of today have a history of colonial rule whereby their economies suffered great exploitation for the sake of the economic development of the colonisers. After political independence, most of these nations had a narrow and fragile economic base and to a great extent remained economically dependent on aid and credit from either international agencies or from developing countries. Those that managed to establish a substantial economic base still remained vulnerable and could not insulate themselves from external economic shocks and unstable prices in the world markets. In such situations their economies suffered setbacks that necessitated infusion of funds, which they mainly obtained from international funding agencies.

The aim of international finance capital is to secure returns on capital, and to ensure this the Bretton Woods Institutions (IMF and World Bank) drew up a programme of loan conditionalities for debtor nations. These came to be known as the Structural Adjustment Programs (hereafter SAPs or adjustment programs). In the 1980s and 1990s a number of Third World Countries have entered into agreement with the IMF, and implemented such adjustment programs, with the aim of enforcing macroeconomic discipline and restoring balance in their domestic and external economies.

The crisis began with the massive trade deficit of the US which led to devaluation of the dollar and initiation of the free currency float system in the early 1970s. This devaluation led to a decline in the export earnings of the oil exporting countries, which responded by increasing the oil prices in 1973-74 and again in 1979. These sharp economic shocks caused external payments imbalance in the oil importing countries, both developed and developing. The US economy could not withstand the second oil shock and suffered massive recession during 1980-84. The response was through contractionary policies at the domestic level – including restriction on
imports and credit and an increase in interest rates, and at the international level through cutting down capital flows and ODA to developing countries.

The combination of the increasing import bill for oil along with declining international demand for primary product exports due to recession in the industrial countries, high interest rate etc. pushed the developing countries, principally the countries of Sub-Saharan Africa and Latin America, into a situation of economic crisis (Cornia et al 1987, Mkandawire and Soludo 1999). The US economy regained its balance by manufacturing product imports, but this did not benefit the developing countries since they were primary product exporters. Therefore the developing countries faced increasing import bills on oil imports combined with stagnant and declining export earnings.

Resource flows to the developing countries also faced a massive decline during 1980-85. Private sector lending to the developing countries declined from $ 38 billion in 1980 to $ 15 billion in 1985 (World Bank 1986, quoted in Cornia, 1987). Most of the capital flows were attracted to the US due to the prevailing high interest rates in that country. Thus, the developing countries were starved of commercial loans at the international level. On the other hand, this also raised the international interest rates. Capital importing developing nations therefore had to face rising international prices of capital goods as well as increasing rates of interests on loans required to import the same. While official development assistance (ODA) did increase in 1985 by 3 to 5 per cent (it stagnated between 1980 and 1984), this amount was not sufficient to compensate for the decline in the other resource flows (export earnings and commercial loans) to the developing countries. In 1984 and 1985, the resource transfer to developing countries actually became negative, i.e. at the international level; resources were being transferred from the developing to the developed nations. The total transfer of resources to the developing nations, which stood at 39.4 billion dollars in 1980, declined to 10.4 billion dollars in 1982, and by 1985 it was -31 billion dollars i.e. 31 billion dollars were transferred from the developing to the developed nations in that year (Cornia, 1987, 16).  

1 Cornia, G, Economic Decline and Human Welfare in the First Half of the 1980s, Table 1.2, p. 16, in Cornia, Jolly and Stewart, (1987). The data is based on calculations of credit and direct investment. By 1983, debt servicing (interest payments by developing to developed nations) was larger than the capital inflow, while income loss from foreign investment (outflow of
Not all developing regions were affected to the same extent – the South and East Asia countries continued to have positive growth rates since they were able to take advantage of the increasing export demand for manufactures (Hong Kong, South Korea, Singapore, Taiwan). Rapid technical advance and investment in agriculture had enabled countries like India, Indonesia, Pakistan, and Sri Lanka to be more self reliant and less indebted. However it is true that taking the group of developing countries on the whole a decline in GDP per capita in the industrial countries has a multiplicative effect on their export earnings and GDP per capita. In fact the IMF estimated that a 1 per cent increase (decrease) in real GDP growth rate of the industrial countries is associated with a 3.5 per cent increase (decrease) in the export earnings of the developing countries (de Larosiere, 1986, cited in Cornia, 1987).

Faced with a shortage of resources from imports, lending and aid, many of the developing countries experienced declines in their GDP and per capita income levels. Many of the developing countries introduced programmes of adjustment during this period, with or without the support of the IMF. Patnaik (2003a, 34) estimates that there were more than 80 countries in the world implementing loan-conditional structural adjustment and trade liberalisation in the 1980s. On an average during 1980-85 there were 47 countries with IMF programmes every year, while several others introduced adjustment programmes on their own (Cornia, 1987, 12).

The impact of these programmes has been the subject of great controversy. Cornia et al (1987) have studied a 10-country sample from Africa, Latin America and Asia to analyse the effectiveness and impact of SAPs. They come to the conclusion that ‘adjustment is necessary’. Though most of these countries faced a crisis from an external source – fall in export prices or increase in import prices and resultant decline in terms of trade, or in some cases from drought – they feel that countries have to adjust to the international environment. The question therefore is not whether to adjust, but how to adjust. They feel that growth oriented adjustment is necessary but not sufficient to protect the vulnerable; there has to be an adequate effort to protect funds] was larger than inflow of investment. As a result, net transfers in terms of both credit and investments became negative, and grants were not large enough to cover the deficit, resulting in a net resource outflow from developing nations.
the vulnerable. The countries – Botswana, South Korea, and Zimbabwe – which have implemented SAPs without harming the vulnerable have continued or established programmes of social welfare or human development. However this is not true for other SAP-implementing countries. The most important stipulation in the SAPs, is to reduce the fiscal deficit by cutting down on so-called ‘unproductive’ expenditure on programmes of health and education, as well as subsidy and support for the poor and vulnerable. In this process these countries have suffered declines in their per capita GDP and agricultural wages, and their levels of poverty have increased (Patnaik, 1996, quoting IMF studies).

The World Bank has defended the poverty-reduction impact of the SAPs as follows – "...(the SAPs) have often been accused of hurting the poor ... (adjustment) has contributed to faster per capita GDP growth in half the countries examined, and there is every reason to think it has helped the poor on the basis of strong linkages between growth and poverty elsewhere in the world.” (World Bank, 1994, quoted in Mkandawire and Soludo ibid.)

This claim is based on the experience of half of the countries examined by the World Bank in its study. However the experience of the other half of the countries examined – which did not show an increase in per capita GDP – is not considered, and there is neither any mention of direct poverty data nor any attempt at examining the causal relation between growth and poverty reduction.

The evidence from Africa shows in fact a clearly deleterious impact of SAPs on poverty. A study of the impact of SAPs on countries of Sub-Saharan Africa (Mkandawire and Soluda, 1999) reveals that the professed aims of the SAPs of reducing the fiscal deficit as well as other indicators of economic stability have either worsened or have remained stagnant.
Table 1.1  
Africa’s Economic Performance 1965-94

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Performance (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate of GDP (avg.)</td>
<td>5.7</td>
</tr>
<tr>
<td>Fiscal balance to GDP ratio</td>
<td>NA</td>
</tr>
<tr>
<td>Rate of inflation</td>
<td>5.8</td>
</tr>
</tbody>
</table>

Source: adapted from Mkandawire and Soludo, 1999, table 2, p. 7

Ali (1988), cited in Mkandawire and Soluda (ibid.), carried out a study of 10 countries of Sub-Saharan Africa, which were classified into ‘intensively adjusting’ (Ghana, Kenya, Malawi, Tanzania, and Zambia), ‘other adjusting’ (Gabon, Gambia, and Mali) and ‘non-adjusting’ (Ethiopia and Lesotho). It was found that poverty increased from 56.6per cent in 1965 to 62.4per cent in 1988 for intensively adjusting countries and from 45.1per cent to 60.7per cent for the other adjusting group, which the head count ratio of poverty declined for the non-adjusting group from 65.8per cent to 43.6per cent in the same period. At the very least this casts doubt on the poverty reduction impact of the SAPs. Table 1.2 indicates changes in unemployment, wages, and food prices for a sample of countries during 1980-85. In most cases, along with negative growth rates in GDP, negative growth rates of wages, large rates of unemployment and increases in foodgrain prices are observed.

The decline in real wages was accepted in the SAP on the basis of an understanding that it would lead to an increase in output and the use of labour absorbing technology especially in the countries which have their factor endowments tilted in favour of labour, and that this in turn would lead to increased employment. However this has not happened in the African countries.
Table 1.2

Percentage Change in Macroeconomic Indicators, Sample of Ten Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Basic period</th>
<th>Av. annual GDP growth</th>
<th>Growth in unemployment (year)</th>
<th>Growth in wages</th>
<th>Growth in food prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>1980-84</td>
<td>10.4</td>
<td>7.0 (1981)</td>
<td>n.a (wage freeze)</td>
<td>n.a</td>
</tr>
<tr>
<td>Brazil, Sao Paulo State</td>
<td>1981-84</td>
<td>-2.2</td>
<td>5.8 (1981) 7.1 (1984)</td>
<td>-5.9</td>
<td>31.0</td>
</tr>
<tr>
<td>Ghana</td>
<td>1979-85</td>
<td>-6.9</td>
<td>n.a</td>
<td>-5.1</td>
<td>45.0</td>
</tr>
<tr>
<td>Peru</td>
<td>1977-85</td>
<td>-2.2</td>
<td>5.0 (1977) 10.9 (1984)</td>
<td>-4.8</td>
<td>n.a</td>
</tr>
<tr>
<td>South Korea</td>
<td>1979-81</td>
<td>1.1</td>
<td>n.a</td>
<td>1.3</td>
<td>n.a</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1978-83</td>
<td>3.7</td>
<td>14.7 (1978/9) 11.7 (1981/2)</td>
<td>-3.7</td>
<td>20.0</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1980-84</td>
<td>1.8</td>
<td>n.a</td>
<td>-1.0</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Source: Cornia 1987, extracts from table 1.6, p.23

Policies of macroeconomic stabilisation have been implemented in other parts of the world in the 1990s. Market reforms implemented in Russia, Ukraine and the CIS countries resulted in massive declines in GDP in 1996 to levels half of those in 1990, while for Georgia the decline was as large as 82 per cent (Patnaik, ibid, 37). It is important therefore to understand the mechanism causing these declines.

The most important factor in the sequence of deflationary policies is the decline in government expenditure. Pinstrup-Andersen et al (1987) estimate that government expenditure fell in over half the countries of the developing world during 1980-84, with a greater proportion declining among countries with adjustment policies than among those without. There were reductions in health and education expenditure per capita in many countries in the 1980s. Among all the countries for which data is available, 21 countries faced a decline in government expenditure during the period 1979-83. In sub-Saharan Africa, the agricultural sector declined due to a collapse of government support, especially for rural infrastructure. This also reduced the responsiveness of agricultural production to price incentives. Reduction in government investment also had an impact on the industrial sector, with
manufacturing value added over 1980-93 increasing at a slow rate of 3 per cent and from 1989-94 at 2 per cent per annum.

Among all types of government expenditure, the largest cuts fell on capital expenditure, especially in Africa, Latin America and the Middle East. On the other hand, the countries of Asia and Europe had proportionately larger cuts on subsidies. The sector facing the heaviest cuts in capital expenditure was economic services. In the area of subsidies the main target is on those aimed at maintaining low food prices for the poor. According to the logic of the liberalisation strategy, food subsidies introduce price distortions into the economy (Pinstrup-Andersen et al., ibid.). As seen in table 1.2, adjustment programmes have the effect of raising foodgrain prices; therefore overall the impact on the poor is negative.

R. van der Hoeven 1994 (quoted in Patnaik, 1996) summarises an IMF study of the impact of the adjustment programme in Latin America. Overall the per capita GDP of all countries of Latin America implementing the programme between 1980 and 1990 declined by 9 per cent, the minimum wage declined by 31.7 per cent and the agricultural wage by 26.5 per cent. The proportion of poor increased from 41 to 44 per cent. The absolute number of people in poverty in Latin America has increased by 45 per cent. Real average and minimum wages were cut by 25 per cent from 1980-85 in two-thirds of the countries for which data is available. Overall in the 46 countries of the region per capita GDP declined by 1.1 per cent annually over the decade, and since incomes of the elite did not decline, the impact has been felt by the rest of the population (Patnaik, ibid.).

It is adequately clear that the SAPs have not been unambiguously successful in their objectives of establishing macroeconomic balance and promoting growth. On the other hand they have had a markedly negative impact on the poor of the implementing countries, in terms of prices, wages as well as employment opportunities. Factors triggering an economic collapse in these countries were mainly external, related to international prices and/or natural calamities rather than any policies initiated by the countries themselves. With receding state intervention in terms of support and subsidies, which was a requirement of the SAP, it is obvious that the impact on levels
of living and nutritional standards of the population living near the margin in these countries is a negative one.

1.3. Economic Reform Policies and Trade Liberalisation in India
India also has undertaken the same type of structural adjustment package as the Latin American and African countries whose experiences have been outlined above. In the context of this package the state has been steadily withdrawing its intervention from a number of areas, particularly the provision of subsidies and investment in social welfare and economic services. Increasing stress is being laid on export promotion, earning of foreign exchange, along with a reduction in the fiscal deficit through reducing ‘unproductive’ expenditure like that on food subsidies. The impact on the poor especially in terms of food security is therefore of central concern. The new economic regime seeks to address the issue of food security to the citizens through trade and globalisation rather than through increased domestic availability self sufficiency.

Economic Policy from 1951 to 1991
The initial years of planning in India were marked by state intervention and monitoring in almost every field. They were also marked by active government expenditure in economic and social sectors. In the beginning of planning this interventionist strategy was seen as a vehicle of growth. It was felt that the market was not an adequate forum for making economic decisions, and that agriculture, industry and trade required the support and protection of the state. The stress in the agricultural sector was on foodgrain sufficiency, to enable freedom from foodgrain imports which were high during the 1960s. The state controlled production, distribution and trade of agricultural commodities through the establishment of the Agricultural Prices Commission in 1965, the expansion of the Public Distribution System, and the provision of subsidised inputs to small and marginal farmers along with softer rates of credit. The Green Revolution technology introduced in the latter half of the 1960s, along with the institutional support provided by the state, enabled fast growth of agricultural productivity and production.

In the industrial sector the state had undertaken ownership and management of enterprises in a number of areas related to strategic defence, infrastructure and other
key areas for economic development where private investment was not likely to be forthcoming. Apart from the creation of public and private sector areas, there were also special provisions for credit and subsidies to the small scale industrial sector.

Two key areas of economic intervention of the state were subsidisation and investment. Subsidies were made available in all those areas which were perceived as weak – credit and inputs like water and electricity to small and marginal farmers and industrial unit owners – along with institutional provisions for research, training and marketing of the products of these. Investments in key infrastructural areas such as roads and transports facilitated development of these sectors. Government expenditure was also specifically directed towards poverty removal, on the basis of the understanding that though infrastructural investment would enable growth, this growth would not automatically trickle down to the masses. At the international level protection was provided to Indian products through stringent import and export controls.

In the 1980s the growth impulses generated through the Green Revolution technology were wearing out. There was increasing criticism regarding the alleged inefficiency and wastage of resources in government expenditure on agricultural and other subsidies, the functioning of public sector enterprises, and the public distribution system. There was an increasing body of ideas that the market was the most efficient instrument in allocation of resources and that ‘distortion’ of prices through controls and transfers would result in inefficiency. In the international arena there was a call for dismantling controls on trade, both tax and non-tax. The stress changed from ‘distribution’ to ‘growth’ and the belief that trickle-down would lead to automatic poverty alleviation.

**Economic Policy after 1991**

The Gulf War of 1991 and the return of Indian workers from the Gulf countries resulted in a loss of remittances from these countries. The increase in oil prices also provided an external shock to the economy, and resulted in a temporary crisis in the foreign exchange position. Faced with the crisis, India was obliged to take aid from the IMF, which was based on structural adjustment conditionalities. A new economic
policy was initiated in the country as a result of both the internal pressures to free the market was well as the loan conditionalities imposed by the IMF/World Bank.

The New Economic Policy was introduced in 1991 in India. It consisted of both stabilisation measures and structural adjustment programmes, under an overall umbrella of liberalisation and greater reliance on market mechanism. The Government of India started its new reform with a devaluation of the Rupee by 25 per cent in 1991 along with abolishing export subsidies and introducing an import entitlement scheme for exporters. Devaluation has been coupled with a series of trade reform measures aimed at removing quotas, scaling down of tariff rates to attract foreign direct investment. A very important aspect of the new policy related to cuts in the Government development expenditure.

In 1994 India became a signatory to the GATT Uruguay Round agreement, which was based on a firm belief that each country should base its production on its area of comparative cost advantage, and import other items where it had a cost disadvantage. India was therefore obliged to open its doors to international players, reduce its support to its own farmers and producers, and dismantle quantitative and trade barriers to international trade.

Therefore the combination of the structural adjustment programme, the WTO agreement, and India's own changing leaning towards the market resulted in a complete reversal of the interventionist policies followed until 1990. Government expenditures on employment generation, rural development and infrastructure were at a high level 13.2 per cent of the GDP in the Seventh Plan i.e. 1985-90. Rural development expenditures had increased from 1987 when there was a drought. A large proportion of the expenditure was geared towards creating employment opportunities in the non-agricultural sector. However all these trends were reversed after the IMF loan and the agreement to the SAP. In 1992, rural development expenditure declined to only 7.8 per cent of the GDP. The new policy has had negative implications in several ways (Patnaik, 2003a). The headcount ratio of poverty in rural as well as urban sectors increased.
1.4. Food security and food policy in India before and after Independence

Pre-Independence Food Policy
The food problem that India faced is in part a legacy of British rule. According to Bhatia (1970) there was never a country-wide famine before the advent of railways; famine was always restricted to a limited drought affected area. The railways made it possible to carry grains in times of scarcity to affected parts but they also allowed the systematic export of grain preventing the retention of local stocks as a precaution against dearth. While the former did a lot to ease the extreme scarcity faced by specific areas, in the long term regional disparities in the availability of foodgrains and their prices tended to disappear under the influence of market forces, and prices rose all over the country as opposed to only a limited geographical area. Because trade was free it was not possible to confine the distress caused by famine to a particular area. Thus, after 1860, the number of famines rose drastically. Between 1860 and 1909 there were 29 years of famine. The most notable famine during the nineteenth century was the Orissa famine of 1866 where for the first time the British government was forced to work out a food policy for India.

In almost all famines of this period, it was the short supply of foodgrains that was responsible for a steep increase in prices, thereby making foodgrain inaccessible to the poor. The foodgrain shortage occurred due to two factors – inaccessibility due to high prices, and absolute shortfall of production. While food price would rise in the event of output shortfall if not adequately compensated by imports, food price could also rise without output shortfall under certain circumstances of sudden expansion of demand as the later Bengal famine showed. According to the Report of the Famine Commission 1898, there was ‘no absolute dearth of food’. Throughout the famine period food was ‘always purchasable though at high and in some remote places excessively high prices’. Famine was therefore not a matter of complete absence of foodgrains from the market; it was the sharp increase in prices rendering food beyond the reach of the poor that caused starvation and death.

However, an enquiry into the sharp increase in prices after 1860 by the Government found that ‘a shortage of supplies’ in the country, particularly of foodgrains, was responsible for the price rise. This was understood to be mainly because of the failure
of food cultivation to keep up with the growth of population (Report on the Rise of Prices and Wages, quoted in Bhatia, 1970). The report states that both internal consumption and exports had increased at a quicker rate than the production of foodgrains, which caused the general price level of foodgrains to increase. Between 1880 and 1908 exports showed a steady increase amounting to 2.4 million tons in 1895-96. Even in the famine years of 1896-97 and 1899-1900 India exported 1.5 million and 2.2 million tons of foodgrains respectively, in spite of the fact that in the earlier year 4.5 million people died of sheer starvation and the shortfall in domestic production was 19 million tons. Thus there was evidence of physical shortage compared to the number of people demanding food.  

Thus India in the nineteenth century suffered from food insecurity resulting in massive famines, and the cause of these food shortages was a combination of inaccessibility due to unfettered open market trade within the country, a slow rate of growth of production, and a colonial policy that directed production towards exports at the cost of domestic consumption.

In the first two decades of the twentieth century, the situation of agricultural production improved somewhat. The area under cultivation went up from 103 centiares\(^3\) per capita in 1901 to 111 centiares in 1921. The double cropped area likewise increased from 18 to 19 per cent of the total cropped area and the output of wheat increased substantially from 5.05 million tons to 8.34 million tons due to the increase in productivity of land under wheat cultivation. As against this the population increased by only 5 per cent between 1891 and 1921. The real reason for the improvement in per capita land under cultivation was that the increase in population

---

\(^2\) According to the Famine Commission however, each province at the time was surplus in foodgrains and the annual surplus from British India including Burma was 5.16 million tons, more than adequate to meet any regional shortfall. Similarly the Census Commissioner of independent India in 1951 arrived at the conclusion that 'in or about 1880 India was normally surplus in foodgrain... order of 12 million tons'. However the calculations on which these two studies are based are quite questionable. The population figures underestimated the actual number of mouths to be fed. Moreover the Census Commissioner's data was based on the average level of annual exports at the time. Ordinarily exports would reflect the surplus that a country has over and above its domestic consumption. However a colonial economy like India was required to pay an annual tribute to the imperial power. An export surplus could therefore be created even when the domestic production is barely sufficient for the country's own population, by reducing the already low level of domestic consumption per capita, and this was actually what happened in colonised India (Bhatia ibid).

\(^3\) 1 centiare = 0.0002 acres
was negligible during this period. After 1921 the population started to increase rapidly and the increase in cultivation failed to keep pace with it. Therefore there was a decline in the per capita land under cultivation after 1921.

Population grew rapidly especially after 1920, while the area under foodgrain and the total area under cultivation did not increase at the same rate. Productivity of land also did not show any appreciable increase. Another important trend was the substitution of commercial crops for food crops. The better quality soils were transferred to the cultivation of commercial crops leaving inferior soils for foodgrain cultivation. Total non-foodgrain production expanded more than ten times (at a rate of 1.31 per cent) as much as that of foodgrains (0.11 per cent), between 1918 and 1947 (Blyn, 1966 quoted in Patnaik, 1991). Since there was little possibility to increase the area under cultivation, increased output of commercial crops took place by displacing the area under foodgrain. A foodgrain like irrigated wheat was itself was considered a remunerative commercial crop and was produced partly for export. Poppy, indigo and oilseeds were the other commercial crops that displaced foodgrains.

Export of colonial agricultural products to the world and not just to itself, was an essential instrument for the British colonial power to transfer a large part of the economic surplus in India it collected as taxes, to itself in usable forms. Export earnings were unilaterally transferred to the British exchequer, while Indian exporters were paid in rupees out of the tax revenue that the British collected from India. Thus the British taxed Indian producers and paid back a part of their own taxes as export proceeds, while the foreign exchange earnings from their exports were expropriated.

In the inter-War period, there was a 29 per cent decline in the per capita foodgrain output and availability in British India as a whole. This decline was the severest (as much as 38 per cent) in Greater Bengal and least, 18 per cent in Punjab. After 1921 the exports of foodgrains stopped and India became a net importer of foodgrains. The Great Depression had its impact on the food situation of India. Since the income elasticity of demand for food is high in India, food demand falls steeply with a fall in income and rises with an increase in income. Agricultural prices declined at a much higher rate than the prices of industrial products. The fall in prices of foodgrains and other agricultural products during the Depression caused a decline in agricultural
incomes so steep that in spite of the increase in population between 1930-31 and 1940-41, the total consumption expenditure of the country remained constant (Bhatia, ibid.) and thus the consumption per head declined. This situation was exacerbated by the rigid stance of the British government in maintaining a balanced budget. Therefore in response to a declining level of tax revenue, public expenditures, especially employment-generating investments in irrigation, roads and railways, were reduced in order to maintain the other part of the budget devoted to meeting payments to exporters, thus the attempt was to maintain the earlier magnitude of the transfer to Britain. This reduction, at a time when employment support was most urgently required to raise incomes, pushed the poor into even further levels of misery.

Thus the food situation before the War was already a difficult one. The triggering factor for the Bengal famine was the outbreak of the Allies war in Asia against Japan, the expenses of which were imposed to the largest extent on India via an agreement signed between the Britain and the colonial Indian government. India had to meet all the costs of housing, supplying and transporting Allied troops in India for the entire duration of the War to whatever extent required, against a mere paper promise of repayment in sterling after the end of the war. The total India government outlays were 38 billion rupees from 1941 to 1946, while the normal outlay would have been 12 billion rupees in those six years. Thus an additional 26 billion rupees of resources were levied from a population which was already over taxed. These budgetary resources were used to establish war-related industries and meet the requirements of foreign troops based in Bengal, and the hugely increased spending was mainly deficit-financed by printing money. The resulting increase in incomes and purchasing power on account of war boom drove food prices upward beyond control. While a system of price control for food items (the predecessor of the rationing system) was established at this time to protect the urban workers in the ports and war industries, the rural population was left entirely unprotected. An estimated 3.1 million persons died in the Bengal famine.

The situation of foodgrain availability at the time of independence was a highly precarious one. By 1946 the foodgrains output per head of population had dropped to 136 kg. compared to 200 kg. in 1900. Even before Independence a ‘Grow more Food’ campaign had to be launched given increasing difficulties.
Post-independence food policy

Independent India inherited a food crisis. The food situation was critical in the first four years of independence. Not only was there the longer term food output decline relative to population, but also the fact that there were crop failures between 1947 and 1951, and the Korean War boom kept global prices high up to 1953. Between April and August 1948 the index of food prices rose by 15 per cent. In response to this situation the government reintroduced controls and rationing of foodgrains, covering 126 million people. The prices of foodgrains are an indicator of the scarcity conditions prevailing in the country, and from 1947 to 1951 there was a steep rise in foodgrain prices.

Table 1.3
Price Indices of Foodgrains and the General Price Level 1947-1951
(Base year 1939 =100)

<table>
<thead>
<tr>
<th>Year</th>
<th>General Price Index (all commodities)</th>
<th>Price index of cereals</th>
<th>Price index of pulses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1947-48</td>
<td>308</td>
<td>333</td>
<td>474</td>
</tr>
<tr>
<td>1948-49</td>
<td>476</td>
<td>463</td>
<td>434</td>
</tr>
<tr>
<td>1949-50</td>
<td>385</td>
<td>457</td>
<td>532</td>
</tr>
<tr>
<td>1950-51</td>
<td>410</td>
<td>483</td>
<td>473</td>
</tr>
<tr>
<td>1951-52</td>
<td>440</td>
<td>476</td>
<td>504</td>
</tr>
</tbody>
</table>

Source: Bhatia, *ibid*, adapted from Table IV, p.42

Between 1947 and the beginning of planning therefore the general price level rose by about 38 per cent and foodgrains price rose by 42 per cent. An All India Policy on Agriculture was defined for the first time after independence and may be considered as free India’s first policy statement on food security. The groundwork for this policy had been done by a number of Expert Groups and Committees. In January 1946 the colonial government had issued a statement on ‘Agriculture and Food Policy of India’ as follows:

"The all India policy is to promote the welfare of the people and to secure a progressive improvement in their standard of living. This includes the responsibility of providing food for all, sufficient in quantity and of requisite quality. For the achievement of this objective, high priority will be given to measures for increasing the food resources of the country to the fullest extent and in particular to measures designed to increase output per acre and
diminish dependency on the vagaries of nature. The aim will be not only to remove the threat of famine but also to increase the prosperity of the cultivator, raise levels of consumption and create a healthy and vigorous population.\textsuperscript{44}

After Independence, a committee was set up in September 1947 to examine the situation of foodgrain policy, with the main objectives of developing measures to increase domestic production, examine the extent to which reliance could be placed on imports, and to make the necessary modifications in the existing foodgrain policy. The committee confirmed that there was a gap between demand and supply of foodgrains, which was to be met from imports. However they observed that the scale of imports was to be restricted as far as possible to the amount required to maintain a reserve and meet shortages (Acharya, 1983). It also recommended the creation of a foodgrain reserve of between 0.5 and 1 million tons. In August 1949 the Foodgrains Investigation Committee was set up for the evaluation of controls as they had existed till then and a review of administrative arrangements in regard to handling of foodgrains at ports, transport, storage and distribution costs etc.

Over the First Plan period, the growth rate of foodgrain production was about 3 per cent and it was maintained till the mid-1970s (Srinivasan, 1976, Vaidyanathan 1977, quoted in de Janvry and Subbarao, 1986). In 1951, the first year of planning, the situation of foodgrains was quite gloomy. Stocks of foodgrain with the states were only a little over 0.70 million tons. There was extensive damage to the previous year's crop due to drought and floods. Imports and a well-monitored system of rationing ensured that the situation improved in 1952-1953. The positive trend continued till the end of the First Plan i.e. 1955-56.

In the Second Plan it was decided that rationing of essential items like foodgrains was to be avoided as far as possible. In order to overcome shortages, it was recommended that the state would maintain some buffer stock and operate them so as to moderate price fluctuations. It was also felt that the buffer stocks would act as a counterbalance to inflationary pressures arising out of deficit financing. Poor agricultural production

in the year 1956-57 proved the necessity of this measure; stocks were built through imports and the system of foodgrain distribution through fair price shops was reintroduced, and in 1958-59 the government took over the wholesale trade of foodgrains. This Plan period was also significant in the fact that the government initiated the imports of foodgrains from the United States through the PL-480 scheme.

From the Second Plan onwards the concept of buffer stocking and price controls assumed importance. In the Third plan emphasis was placed on incentives to farmers along with protecting the interests of the consumers. From the Third Plan onwards, the areas of debate were on the size of the buffer stock; however buffer stocking and control of the foodgrains market by the government were accepted on principle.

Food production was always uncertain and the main issue facing policy makers at this time was how to overcome possible shortages arising due to uncertainty in the level of output. The country experimented with imports during the Second and Third Plans. However it was always understood that imports constituted an emergency measure that was to be avoided as far as possible. The concept of a permanent buffer stock of foodgrain as a measure against the uncertainties of production was introduced during this period as well.

Food policy therefore related to three major areas: production, pricing (including maintenance of price stability), and distribution. During the food crisis of the 1960s India was highly dependent on the US for import of foodgrains under the PL 480 scheme. It was perceived that the poor bargaining position of India made it possible for the US to try and gain political mileage. It was after this that the country laid stress on self-sufficiency in terms of food grain production.

In the 1970s there were two angles from which the issue of food security was approached – the viewpoint of production and the viewpoint of distribution.

5 "During the 1960s India was massively dependent on food aid in large quantities from the US. There were two consecutive droughts and real famine threatened. .... Starvation was prevented only by the arrival of ships from the US with about 14 million tonnes of foodgrains each... leaving American ports every 10 minutes. ... One day the ships stopped. ... it might have had to do with the joint communiqué between Indians and Soviets ... critical of US policy in Vietnam." (Gurcharan Das, 2000; p. 140; quoted in Gulati, 2000)
Production was sought to be enhanced by the rapid spread of technology and institutional support like subsidised inputs and credit. The Green Revolution enabled rapid increase in production of foodgrains. For the first time also, the main contribution to the rise in production was not from the area under cultivation but from yield per acre. While foodgrain production has increased at an average rate of 2.48 per cent during this period, the main contributor to this increased production is the yield per acre, and very little is owed to an increase in the area under cultivation. Rate of growth of cereals has been the highest, again based on the increase in crop yields.

The entire period has been divided into two sub-periods showing different trends. Between 1949 and 1965, there is an equal contribution of area under cultivation and yield towards production. Area under cultivation increased at the rate of 1.35 per cent and yield at 1.36 per cent, so that total production of foodgrain increased at the rate of 2.82 per cent during this period. However during 1965-2001, the area under foodgrains has more or less stagnated. Since yield per acre has increased at 2.53 per cent during this period, however, the total production grew at 2.1 per cent (Table 1.4). Production of total cereals grew at 3.21 per cent between 1949 and 1964. This rate appears in fact to have declined slightly to 2.79 per cent between 1965 and 2001. This is due to the slow growth of coarse cereals, which have been replaced in this period by wheat and rice. In fact the area under coarse cereals declined while the area under wheat and rice grew, albeit slowly during 1965-2001. The fastest growth in production as well as yield was in wheat.

However the periodization in this table from official sources is not very satisfactory as an indicator of changing trends because the first sub-period is only 15 years long and the second, as much as 35 years long. The second period includes both a high-growth period up to the 1980s and a sharply lowered growth period in the 1990s with low growth continuing into the present decade, as we will see in later chapters.
Table 1.4
Growth Rates of Foodgrain Production, Area and Yield 1949-50 to 2000-2001

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area</td>
<td>Production</td>
<td>Yield</td>
</tr>
<tr>
<td>Rice</td>
<td>1.21</td>
<td>3.5</td>
<td>2.25</td>
</tr>
<tr>
<td>Wheat</td>
<td>2.69</td>
<td>3.98</td>
<td>1.27</td>
</tr>
<tr>
<td>Coarse cereals</td>
<td>0.9</td>
<td>2.25</td>
<td>1.23</td>
</tr>
<tr>
<td>Total cereals</td>
<td>1.25</td>
<td>3.21</td>
<td>1.77</td>
</tr>
<tr>
<td>Total pulses</td>
<td>1.72</td>
<td>1.41</td>
<td>-0.18</td>
</tr>
<tr>
<td>Total foodgrains</td>
<td>1.35</td>
<td>2.82</td>
<td>1.36</td>
</tr>
</tbody>
</table>

Source: www.agricoop.nic.in/stats.htm

A combination of policy measures was employed to accelerate agricultural growth. These included large planned investments in rural infrastructure like irrigation, power, rural credit, markets and scientific research and extension. The Agricultural Prices Commission APC (later the Commission for Agricultural Costs and Prices CACP) was set up in 1965. The APC made possible the creation of an appropriate price climate and provided incentives to farmers to adopt the new technology. Deliberate measures were taken to include small and marginal farmers into the process of upgradation of technology by providing them with subsidised inputs. Stable and remunerative prices were announced for those crops in which advances in technology were taking place and potentially a breakthrough in yield was possible.

The impact of the Green Revolution continued into the 1980s and reached a plateau by the end of that decade. The decade of the 1980s recorded the highest growth rate in foodgrain production. The highest growth rate for individual crops was in wheat in the 1970s and rice in the 1980s while coarse grains declined. There was a sharp decline in foodgrains growth from 3.54 per cent in the 1980s to 1.66 per cent in the 1990s. Wheat production has still maintained a substantial upward direction; however growth rate of rice as well as pulses has gone down substantially, while coarse grains show an actual decline in production.
Table 1.5
Decade-wise Annual Growth in Foodgrain Production (per cent per annum compounded)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>3.28</td>
<td>8.05</td>
<td>1.91</td>
<td>4.29</td>
<td>1.53</td>
</tr>
<tr>
<td>Wheat</td>
<td>4.51</td>
<td>5.90</td>
<td>4.69</td>
<td>4.24</td>
<td>3.67</td>
</tr>
<tr>
<td>Coarse Grains</td>
<td>2.75</td>
<td>1.48</td>
<td>0.74</td>
<td>0.74</td>
<td>(-)0.49</td>
</tr>
<tr>
<td>All Cereals</td>
<td>3.0</td>
<td>2.51</td>
<td>2.37</td>
<td>3.63</td>
<td>1.84</td>
</tr>
<tr>
<td>Pulses</td>
<td>2.72</td>
<td>1.35</td>
<td>(-)0.54</td>
<td>2.78</td>
<td>0.76</td>
</tr>
<tr>
<td>All Foodgrains</td>
<td>3.22</td>
<td>1.72</td>
<td>2.08</td>
<td>3.54</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Source: www.apeda.com/html/agriculture

Up to this point the understanding of food security had remained synonymous with that of self-sufficiency, state support and monitoring of markets. However at the end of the 1980s there was a growing dissent regarding the efficiency of the earlier monitoring systems. Prominent economic thinking was in favour of dismantling controls and enabling open market transactions of foodgrains to become easier.

These arguments at the domestic level, coupled with India’s signature to the WTO Agreement in 1994, initiated several changes in the food policy. The WTO Agreement on Agriculture included the conditions of free market access for trade, dismantling of all trade-related support measures as well as domestic production-related support. Subsidies were now understood to be inefficient as well as unfair in terms of international competition. The Agreement postulates a complete removal of all import quotas, a step-by-step reduction in import tariffs and of all forms of support to exporters.

At the domestic policy level, there has been increasing dissatisfaction with the performance of the Public Distribution System and the costs involved in it. A large body of opinion was that subsidised food should be available only to the poor, and in response to this, the government introduced the Targeted Public Distribution System in 1997. Buffer stocking, which was considered so essential in the early years of planning, was attacked due to the high costs of maintenance of stocks. In fact it was felt that there should be some reliance on imports rather than on complete self-sufficiency. Thus in the 1990s and thereafter, the understanding of food security and the relevant food policy appears to have changed radically.
1.4. Land Relations in Gujarat under British Rule

Agriculture in Gujarat in colonial times was a fallback mechanism for employment. When traditional industries and trade broke down due to the import of cheap and synthetic substitutes imported from Britain, those earlier employed as artisans or small producers, turned to agriculture. The proportion of rural population engaged in agriculture increased due to the breakdown of traditional industry, and swelled the ranks of the small cultivators or agricultural labourers.

<table>
<thead>
<tr>
<th>Form of land relation</th>
<th>Percentage of agrarian population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-cultivating proprietors</td>
<td>2.5</td>
</tr>
<tr>
<td>Cultivating owners</td>
<td>33.4</td>
</tr>
<tr>
<td>Tenant cultivators</td>
<td>4.4</td>
</tr>
<tr>
<td>Agricultural labourers</td>
<td>52.1</td>
</tr>
</tbody>
</table>

Source: Choksey, 1968, p. 61

Feudal landlord-serf relations were the hallmark of agrarian relations in Gujarat in colonial times. The large landlords of the 19th century were descended from revenue farmers of the Mughal and Maratha times and were known as Desais. By law they were entitled to 2½ per cent of the revenue that they collected, but in practice, since there was hardly any monitoring, they retained a lot more. In the initial stages of British rule the Desai system was continued, with the Desais now acting as revenue collectors for the British instead of for the Mughals or Marathas. In Central Gujarat this revenue collection was done by the large peasants of the Patidar community through a system called narva. In ryotwari villages too, where in principle the government was supposed to collect revenue directly from the farmers, in fact the government gave leases to leading Patidars who became responsible for collecting revenue. Thus the rich peasantry, while not actual owners of the land cultivated by the smaller landholders, became de facto landlords and revenue collectors.

There also existed a class of absentee landlords who came into being in the early British rule. They were bankers, traders and lawyers who set up money lending businesses with the peasants. The British until 1860 collected revenue from urban bankers, who made arrangements with rural small landholders, money lenders or rich
peasants in the village, who ultimately collected it from the peasants. These urban bankers, who became absentee landlords, allowed the peasants to cultivate the land as peasants, and were not interested in any aspect of production except the surplus.

In the 1860s land title deeds were drawn up. This converted the erstwhile revenue collectors into actual owners of the land. With legal ownership of land, the rich Patidar landowners in central Gujarat took recourse to the courts to gain legal control of the land of those indebted to them. This gave them the opportunity of more complete domination over the poor peasantry. Another group of landlords originated from the government grants of land after the famine of 1899-1900. Many poor peasants in central Gujarat were unable to make a living from the land and migrated, leaving large areas of the land fallow. These areas were given as grants to cultivators from other parts of Gujarat.

There thus came into existence a large and growing class of people in agriculture who were not interested in increasing agricultural production but only in collecting rent. While there were regional variations, tenancy was widely prevalent all over Gujarat. The tenancy system mainly consisted of sharecropping, where the sharecropper was known as 'bhagiya' who were more partners than servants, receiving a certain share of the total product for their labour. The landlord paid the revenue and the tenant bore the cost of cultivation. Since landholdings in British times in Gujarat were mainly dry, the required size for a holding to be an economic unit was 15-20 acres (Choksey, 1968). However, with small tenant holdings being widely prevalent, the largest percentage of holdings was between 1-5 acres in size. Average size of the holdings declined during British rule.

Table 1.6
Decline in Size of Holding, Gujarat, Late 19th and Early 20th Century

<table>
<thead>
<tr>
<th>Year</th>
<th>Average size of holdings (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1886-87</td>
<td>9.5</td>
</tr>
<tr>
<td>1900-01</td>
<td>9.2</td>
</tr>
<tr>
<td>1916-17</td>
<td>8.1</td>
</tr>
<tr>
<td>1921-22</td>
<td>7.7</td>
</tr>
<tr>
<td>1926-27</td>
<td>7.6</td>
</tr>
<tr>
<td>1931-32</td>
<td>6.2</td>
</tr>
<tr>
<td>1936-37</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Source: Choksey (1968) table 26
Agricultural labour all over Gujarat originates in the people known as 'Kaliparaj' (i.e. black people), or the 'lower' castes. The Kaliparaj served as 'hali' or bonded labour in the fields of the landlords. Apart from this, farm servants were employed as 'chakar'. The chakar unlike the hali, were paid an annual cash wage along with food and clothes. Halis were serfs who were indebted to the landlords – who belonged to the ‘Ujliparaj’ (fair people) class – and consequently served as bonded labour to them. The Kaliparaj were at the lowest end of the agricultural class structure and remained in dire poverty and misery in spite of the overall prosperity of the agricultural sector.

Agricultural production, commercial crops and irrigation

Before 1860 foodcrops played a more important part in the agricultural economy of Gujarat, whereas at the end of British rule the more dominant part was played by commercial crops. There was spread in tillage area under British rule. Of the total land in British Gujarat 70 per cent was available for agriculture and all of that land was cultivated. Yet the area under foodcrops continued to decline.

<table>
<thead>
<tr>
<th>Rice</th>
<th>Wheat</th>
<th>Jowar</th>
<th>Bajri</th>
<th>Maize</th>
<th>Other (non-cereal) crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>360544</td>
<td>322711</td>
<td>660380</td>
<td>346220</td>
<td>127345</td>
<td>2615737</td>
</tr>
<tr>
<td>(8.13)</td>
<td>(7.28)</td>
<td>(14.89)</td>
<td>(7.81)</td>
<td>(2.87)</td>
<td>(59.00)</td>
</tr>
</tbody>
</table>

Table 1.7

Area under Different Crops in Gujarat 1938-39 (acres)


- Figures in brackets are percentages of the total land area under all crops.
- Area under non-cereal crops is calculated by subtracting total of cereal crops from total area under all crops.

The total area under all crops in 1938-39 was 4,432,937 acres. The main commercial crops were tobacco and cotton, especially the latter, which substituted rice and jowar. Non-cereal crops covered 59 per cent of the total area under all crops, and assuming that the percentage under pulses and vegetables was a small proportion, we can say that about half of the cropped area was under commercial crops.

Before the arrival of the British, cash cropping in Gujarat was not prominent, and greater priority was given to the production of foodcrops. The British found that the soil of Gujarat was suitable for the cultivation of cotton, and therefore undertook large
scale substitution of cotton for foodcrop production. After the loss of the American colonies, it was in the interest of Britain to find another captive source of cotton production. The government made every attempt to encourage cotton production. The quality of the cotton however was not as good as the American variety, and therefore the first half of the 19th century saw a great number of experiments attempting to produce a superior variety of cotton in Gujarat.

Cotton had in fact become the source of economic prosperity in Gujarat. The massive famine of 1899-1900 caused extreme distress in Gujarat, but the recovery was rapid only due to the profitability of cotton. On the eve of the First World War trade was brisk and prices of cotton were high. Demand for labour was in excess of the supply, so that wages remained high. However the demand for Indian cotton was always second to that of American cotton, and therefore the prices kept fluctuating. However, agriculturists had realised the profitability of cotton and area under cotton kept increasing. In fact in 1918, which was a year of high prices, the area under cotton was as high as 4,750,000 acres. High cotton prices benefited the cotton farmers, and wages to agricultural labour were also high in the years of boom in cotton prices. But this was the last boom phase for cotton, and especially after 1926-27 there were many fluctuations in the price. The years 1930 and 1931 saw a crash in prices as a result of the Depression, and large cotton and sugarcane farmers suffered bad losses.

The increasing area sown with cotton was mainly diverted from the foodgrain area. The percentage of net cropped area under food and non-food crops in 1891 was 72 and 28 while in 1938-39 this proportion had changed to 54 and 45 respectively. Gujarat started relying heavily on foodgrain imports. In a normal year the Bombay Presidency had to import 500,000 tons of grain, and in a famine year this was as high as 2,000,000 tons.

Apart from changes in the pattern of cultivation, per acre yields were also quite unstable. The fluctuation in yield is sometimes attributed to seasonal variations.

---

6 "The soil of North and North East districts under the government of Bombay and especially the province of Gujarat....produce cotton more abundantly than any other part of British dominion in India." - Report and Documents in Culture and Manufacture of Cotton wool, Raw Silk and Indigo in India, 1836, quoted in Choksey (ibid).
However, yields show a general downward trend. This was a result of increasing population pressure on land alongside stagnation in production techniques.

Irrigation was a neglected area during the British rule. The total capital expenditure on irrigation in Gujarat up to 1927 was Rs. 24,63,883, much lower than in other regions. As a result only about $5\frac{1}{2}$ per cent of the total cultivated area was irrigable. Moreover the area under irrigated crops as a percentage of total cropped area actually declined from 4.8 per cent in the five years ending 1914-15 to 2.6 per cent in the five years ending 1939-40. The absolute area under irrigation also declined. This decline was because the farmers found irrigation unprofitable, due to the high irrigation costs and low market prices of agricultural products.

**Food Security and Famine**

Famines were common in Gujarat as in other parts of India. In 1899-1900 the whole of the state suffered from famine. The crop production had declined to 23,499 tons in 1899-1900 from 5,54,205 tons the previous year. The low agricultural production and distress in the rural areas drove people to the urban areas in search of employment. But wages were inadequate to support families, and starvation and malnourishment were very high. Death due to famines was very high, though the number of people actually dying of starvation was only 5633, and the number dying of malnourishment-related diseases was much higher.

However in the years following the famine, the government made every effort to recover the revenue that it had lost in the famine years. No time was given to the peasants to recover from the impact of the famine. The following year, 1918-19, was a famine year again, and 1920-21 was also a bad year, while the peasants had not been left with any surplus to tide over the lean year. The government advanced *takavi*? loans for wells and land improvement and Rs. 63,20,130 for seed and plough cattle. Apart from this other forms of relief such as doles, food from village kitchens and employment in relief works were also undertaken. These policies were however extremely ad hoc and undertaken as and when the situation demanded. There was no regular famine policy until after the 1901 famine. A systematic food policy was

---

7 *Takavi* = advance of money made to cultivators by the government at the time of sowing to be repaid when the crop is gathered. (Choksey, 1968, glossary of terms)
implemented during the years of the First World War when inflation was rampant and foodgrain prices were increasing. For the first two years of the war the prices of staple foodgrains were kept steady through heavy imports. While the increasing prices of fodder and commercial crops benefited the large farmers and the business communities, the middle and lower income groups found their purchasing power declining. In response to this situation, cheap grain shops were opened, and imported rice from Burma replaced jowar and bajri in people’s diets.

**Wages and Condition of Rural Labour**

The popularity of cotton and other commercial crops brought prosperity to the agricultural economy of Gujarat. However this prosperity did not percolate to the poor. The wages that ruled in 1859-60 were close to subsistence level. The wages increased with the increased demand for labour in the years when cotton production was booming, but declined again in the famine years. While money wages did increase by about 25 per cent in some places, real wages remained stagnant or declined.

One factor that worked in favour of increasing wages was the increase in labour demand outside Gujarat, resulting in immigration to Bombay, Burma and South Africa. Apart from this labour also migrated to find work in the textile mills of Ahmedabad. This created a shortage of labour in the rural areas and drove up the wages. However in spite of relative increase in wages, the benefits went to the money lenders and traders who charged usurious rates of interest on loans. Labourers at least benefited from the increase in wages, but the small cultivators remained in a miserable condition in spite of bright market conditions. The rich peasants did not depend only on agriculture but diversified their means of livelihood into non-agricultural sectors, such as trade, money lending, became cotton agents or invested in cotton ginning factories.

1.5. **The Agricultural Sector in Gujarat After Independence**

**Agrarian Change**

After independence, land reforms were introduced in India as in other parts of the country. Although in Gujarat the abolition of zamindari was adequately implemented, this did not result in any drastic changes at the level of the agrarian structure, since
most of the beneficiaries were the middle and upper-middle castes. In fact while the abolition of zamindari was vigorously implemented in the state, this was not the case with the implementation of the tenancy laws. G. Shah (2002) argues that it was due to the emerging political identity of the middle peasant class in the state, who managed to avail themselves of the benefit of the zamindari abolition, but prevented the landless and land-poor classes from gaining protection under the tenancy reforms. The lower castes, who were in the main landless, were unorganised, illiterate and unaware of the legal system, and therefore did not get the benefit of the reforms since they were unable to get themselves registered as tillers of the land. Another constraint was the lack of availability of affordable credit, so that they were not in a position to pay instalments to the erstwhile landowners.

Both the land reforms and the various developmental projects implemented by the state had a negative impact on the lower caste and tribal communities in Gujarat, who were prevented from getting their tenancy recognised and on the other hand lost the common property resources (forests etc.) which were their means of livelihood. Only about half the area held under tenancy passed into the hands of the erstwhile tenants. About 40 per cent of the tenants became victims of forced evictions. Ceiling surplus redistribution was not adequately implemented, and there is massive absentee landlordism with large holders having land spread over villages other than the village of their residence. Only 2 per cent of the net operated area was declared ceiling surplus and only 1 per cent was redistributed (G. Shah and Rutten 2002).

Both in terms of classes and regions, post independence land redistribution resulted in greater inequality in the state (G. Shah and Rutten 2002). On the one hand the landless and poor tenants were immiserised and on the other hand there emerged a class of upwardly mobile middle peasants who aggressively implemented technological changes that were initiated in the Green Revolution of the 1960s, which gave an added impetus to the trends of agricultural commercialisation which had been initiated by the British with the introduction of cotton as a major crop in the 19th century. While the colonial period saw a very limited proportion of land under irrigation, however, after independence there was massive expansion in irrigation facilities in the state, aimed specifically at consolidating the gains from the technological revolution. This resulted in rising output and yields, and in the even
greater substitution of commercial for food crops. After the collapse of the textile industry in the state, the emphasis was shifted to oilseeds (under the aegis of the Technology Mission for Oilseeds and Pulses) and tobacco. At the same time the gains in output and yield were highly concentrated both regionally and agricultural class-wise. The largest beneficiaries of the institutional and technological changes in the state were the middle peasants who were able to strengthen their economic position as relatively prosperous cultivators.

Agriculture and Industrial Development

Gujarat ranked eighth among the Indian states in terms of industrialisation when it gained statehood in 1960. Industrialisation has been concentrated in the so-called 'Golden Corridor' stretching north-south across Gujarat from Ahmedabad to Vapi. Most of the industries are small scale and provide the major source of production and employment in the state. In the 1990s however there has been an attempt to develop medium and large-scale industries. However these industries still do not contribute to any significant extent to employment; within the industrial sector, employment has been mainly concentrated in the small-scale industries. There has been not much industrial development outside this geographical area, though post-liberalisation there has been an attempt to develop the port cities in the state to develop trade as a large source of income.

The industrial sector has acted as a sponge for migrant labourers from the rural areas of poorer districts and in that sense has provided an alternative source of livelihood outside agriculture. Small and marginal farmers supplement their agricultural income through agricultural labour as well as non-agricultural labour in construction and industries. However this may be termed more as distress migration (A Shah 2002) and distress diversification of employment, since workers in the small scale industries are mainly casual and face insecure employment and dangerous working conditions. The industrial units themselves do not in many cases follow the environmental laws and other legal requirements, and often face closure, so that uncertainty of employment is increased still further.

8 In fact these peasants were also enabled to use their caste position to gain political power in the state, so that the political economy of the state was newly defined post independence by the emergence of the middle peasant castes.
The New Agricultural Initiative in Gujarat

The Government of Gujarat constituted in November 1999, a high level committee to prepare a comprehensive vision for agricultural development in the state, under the name of Gujarat Agro Vision 2010. The report of this study presents the view that Gujarat has the potential for vibrant agricultural development stressing on agro-industries. Therefore the emphasis was on production of crops that the state has competitive advantage in – viz. a range of fruit and vegetable crops – and those where agro-industrialisation can be further developed – viz. oilseeds. The policy document lists the strengths of the Gujarat economy in the agricultural sector as the agro-climatic suitability for a variety of commercial crops, an established agro-industrial base, and a large share in India’s agro-commodity exports. While the document does recognise that the opening up of the economy is likely to pose a threat for specific industries like dairy, this is not envisaged for agricultural production. The opening up of the economy and the WTO agreement are in fact seen as opportunities to improve agricultural exports. On the other hand the document recognises the need for better infrastructure, especially irrigation and roads. Overuse of groundwater is listed as a serious concern to be dealt with.

In line with this assessment the aim of the policy is to focus on a few crops which can sustain competition, and on value added agro products. Therefore the entire focus of the policy is on technological upgradation which will enable the state to specialise in marketable commercial crops. The Annual Plan of 1999-2000 also states as its goals the need to provide remunerative price for each crop to the farmers, and to provide a hedge against risk and uncertainty based on climate. Special emphasis has been placed on developing agriculture through several measures such as watershed development. Agro industry is given especial emphasis, and the state government has established Gujarat Agro Industrial Corporation Ltd. to provide support to agricultural activities in the state. While foodgrain production also receives a mention in the Agro Vision 2010 document, the relative importance is very low. A special program viz. Integrated Cereal Production Program is implemented in the state with the support of the central government, and 16 districts of Gujarat have been identified for it by the Planning Commission.
It is clear that agriculture in the state since British times was developed as a commercial activity, and therefore the stress was on commercial crops rather than foodgrains. Land distribution and agricultural relations were highly unequal. The politically resurgent class of middle peasants ensured the adequate implementation of zamindari abolition so that they gained economic strength as independent cultivators; however tenancy laws and redistribution of ceiling surplus land were not adequately implemented, so that the small and marginal peasants and landless labourers did not stand to gain from the land reforms. In most parts of the state apart from the Golden Corridor areas, agriculture remains uncertain and dependent on rain. This leads to distress among the poorer agricultural classes, resulting in distress migration and diversification into non-agricultural occupations with insecure employment potential. Thus agricultural growth in the state has not succeeded in eliminating existing economic inequalities.

Technology has favoured increasing productivity of cash crops and the post-1990 agricultural initiative has consolidated this trend. The emphasis is on developing a vibrant agricultural sector which will feed into the industrial sector with the development of agro-industries, and on developing the export potential of the agricultural sector. Again the distributive aspects of this envisaged growth are not given prominence. It is not clear whether and how the new initiative will benefit the small and marginal farmers and whether these and the landless agricultural classes will stand to gain in terms of employment in the upcoming agro-industrial units. Since the emphasis is on production of commercial crops rather than foodgrain the state remains dependent on foodgrain imports.