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'THE POLITICAL ECONOMY OF HUNGER IN ZIMBABWE'

A WORKING PAPER

by

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Introduction

The CODESRIA/UNESCO project proposal on the 'socio-economic analysis of the problem of hunger and food self-sufficiency' focuses on a largely neglected aspect of the food crisis in Africa: the nature and origin of food demand. Thus while studies now abound on the various factors constricting supply, the demand side of the problems still remains a terra incognita, so that even where it is addressed, as in studies on food self-sufficiency, it is still perceived largely in terms of how supply can be organised to satisfy demand (increased agricultural productivity) or alternatively how demand can be modified to correspond with supplies (limitation of population growth).¹

There is also growing and widespread recognition that the prevention of hunger and malnutrition is primarily but not wholly dependent on overall food intake, and that there is a need to be concerned simultaneously with the rate of increase in food production, especially with the means by which production is increased as it is acknowledged that ceteris paribus unless there is an absorption of the rural labour force into productive employment, even a large increase in food output will leave many households with inadequate access to food supplies, so that scalar indices on nutrition and poverty cannot take us beyond the description and mapping out of the problem of hunger, whose interface is to be found at level of the 'food equation', that:

"Rather than as a race between food and population, the food equation is to be viewed as a dynamic balance in individual countries between food supply and demand that depends on complex relationships among a number of interacting variables. Equilibrium in this vital food equation can range from a low one of a small increase in food supplies and little purchasing power in the hands of the poor to high levels of each".²

Thus at the wider macro-level, the problem of hunger cannot be separated from that of effects of 'industrialisation', as evidenced in African countries by 'barely escapable obligation to resort increasingly to food imports'.² The whole issue of how African countries can transform their social relations into capitalist relations which are viable only at the price of being seriously dependent on the importation of food at manageable prices?
The project, however, focuses on the impact of industrialisation on the alteration of eating habits, and seeks to explore:

a) to what extent the changes in dietary habits are causes or effects of the problem of hunger?

b) the impact of these changes on the ability of African countries to maintain their independence in the area of food supply.

c) ecological effects and cultural aspects of productive behaviour where attempts have been made to meet new demands through local production.

d) to what extent policies to wean consumers from acquired new tastes, are feasible, desirable and realistic?

Further the project aims to shift emphasis from "a narrow agro-nutritional point of view and to focus more on the 'actor' (the consumer) whose impact on the agricultural production chain is often acknowledged but has so far received scant serious scientific analysis".4

The project's emphasis on socio-cultural aspects and 'the actor' however calls for some methodological and conceptual caveats, in order to avoid some of the pitfalls of mainstream social science, and also in order to pose questions for further research into the whole question of the transition from pre-capitalist to capitalist social relations of production. Dietary changes, we are often told, are a function of socio-cultural processes, with the result that food preferences are the last things to change in any cultures:

"Each individual learns the food preferences and taboos of his or her culture at a very early age, even in infancy, modifying them according to personal taste but rarely breaking with them to any great extent. Because they are learned so early, they later serve as a basis for much further cultural acquisition, forming part of the unquestioned foundation of the whole system of beliefs and values. For this reason it is difficult to persuade people to change their diet in ways not envisaged by their culture or even to contemplate change".

An emphasis on such a phenomenon as diet, linked to an attempt to understand the 'actor', easily fits in with mainstream neo-classical approaches whereby economic and social processes are defined as choices in the face of scarcity, and the focus is zeroed-in on the deductive analysis of the logic of economising
to the neglect of comparative analysis of actual social institutions and behaviour historically associated with production and consumption.

Nutritional theories on dietary habits are related to conflicting socio-economic theories and like these they tend to fit most comfortably with differing sets of ideological beliefs. Thus, the genetic potential model is premised on the following assumptions:

(1) That the human body is a system which is not only self-regulating, but self-optimising, so that for each individual there is postulated to exist a preferred state characterised by a unique set of values of the variables which describe the system's components (weight, height, blood levels, etc.). The preferred states are optimal for that individual with respect to all aspects of function. If there are no constraints on diet, or continued adverse environmental influences, an individual will always tend to seek out and return to the preferred state.

(2) Individuals differ from one another with respect to the values of the component variables which characterise their preferred state and with respect to the levels of performance of which they are capable when at their optimum. These inter-individual differences are seen as inherent and result from differing genetic constitutions. Individuals who are prevented from returning to the preferred state, because of dietary or other constraints, are regarded as malnourished in the sense of being in a non-optimal condition.

(3) States of malnutrition/hunger are detected and graded for severity by the extent of deviation of one or more stated variables from the preferred levels. Malnutrition results in either a sub-optimal response to a current stress or to an increased risk of failure at some time.

The genetic potential model finds its corollary in the 'subjective preference theory', wherein people are believed to have an innate tendency to express a consistent set of preferences as between the various items they want to buy. From such premises, various attempts are then made to predict how consumption would be distributed within a society 'where a free market' operates, and for how many people food consumption would fall below biological needs.
The 'subjective preference' aspect of the dominant neo-classical economic view leads the nutritionist who favours the genetic potential model of human nutrient requirements to suppose that malnourished people can be taught to make 'rational' choices of foodstuffs. Hence a need for nutrition education is identified in most recommendations; simultaneously from a 'cost of production' perspective it is also considered vital to attack hunger which is a 'social liability' by improving the growth potential and work capacity of adults and children through supplementary feeding so that they can be made fully productive and disease-resistant, thus breaking out of the trap of the vicious cycle of undernutrition - disease - sub-optimal production - further poverty - more undernutrition.

In such a model as sketchily outlined above, it is clear that improvements in the quality of life, greater choice or even increased security and economic independence are not counted as feasible project outputs. It is seen as necessary for the state first to increase its stock of human capital; redistribution of consumption comes later, that is if the market is permitted to operate efficiently.

This approach has been criticised for being static and for using the present as some kind of abstract historical mechanism which pays scant attention to real historical processes. The socio-economic analysis of hunger is best approached from a "social cost perspective" which involves the identification of a class experiencing actual physiological damage or who have adapted to the fullest possible extent to low food intakes, and are therefore at a high risk of becoming malnourished. This calls for an analysis which goes beyond the immediate biological ones - one which identifies the particular nature of the resources constraints or socio-economic dependencies which made the adaptive response necessary in the first place, and more importantly analyses the processes and relationships that have generated this lack of food security in the past and those likely to do so in the future.

Though such an approach has many advantages over the subjective preference/genetic model, it can lead to an oversimplification of the whole problem of dietary changes and the role of the consumer, by ignoring the problematic of the transition from non-capitalist to capitalist forms of production, and its cultural dimensions as manifested in actual socio-cultural practices such as diet. From a 'realist' interpretation of Marx's
theory of modes of production, one could postulate the existence of a mechanism(s) which, if it were to exist, would explain the empirically observable phenomena of hunger and changing consumption patterns in Africa. This mechanism(s) may be invisible to our normal sense experience, although typically indices of its existence abound in the reports of international agencies. Clearly, within capitalism it can be held that the production and appropriation of surplus - value constitute such a mechanism - and Marx details the origins of the phenomenal forms this gives rise to - prices, wages, profits, interest etc. However, as John Urry argues, such a conception is problematic in two respects. First, it can lead to viewing such societies as characterised by an 'expressive totality', that all aspects or elements of it are merely the phenomenal forms of the logic of the working out of the mechanism. And second, no account will emerge of the precise kinds of practice which individuals would have to engage in, so that these phenomenal forms are generated.

We therefore need, with reference to African societies, to begin to get a clear understanding of changing cultural practices such as 'diet' as attributes of 'civil society', and attempt to delineate some of the continuities and discontinuities between the pre-colonial civil societies and the colonial ones. For, whereas, the conditions under which exchange takes place have in part been determined by the state, the patterning of consumption - is largely determined outside production itself, within the sphere of civil society. And labour power, unlike all other commodities, is not produced by capitalists for profit. It is produced or reproduced in the sphere of civil society. So while all other commodities are produced within capitalist production, labour power is produced outside capitalist relations of production.

Therefore in analysing the complex relationships involved in changing consumption patterns it is important to avoid seeing just the logic of capitalism at work.

The paper that follows will be by no means an attempt to broach all of the theoretical issues posed above, and much of it will rather be suggestive of areas which still require research and cannot be dealt with in the paper.
A CHARACTERISATION OF THE FOOD CRISIS IN ZIMBABWE.

The socio-economic dimensions of hunger in Zimbabwe are primarily not related to the problems of maximisation of aggregate food production. In Zimbabwe the latter aspect would be meaningless without reference to the hierarchy of needs and values which have their basis on the nature of the structure of the pre-1980 settler political economy.

Thus, in spite of being a substantial food surplus nation, Zimbabwe has a malnutrition problem of major proportions. Upward of 20% of children under five have second or third degree malnutrition and nearly 30% are stunted while the infant mortality rate compares relatively favourably with those of other African countries. On the other hand on malnutrition statistics, Zimbabwe shows up badly by comparison. The percentage of children under five (20%) of the under-five population showing second or third degree malnutrition based on weight for age is roughly comparable to figures for Cameroon, Lesotho and Liberia. Results of the immunisation coverage survey conducted in July 1984 indicated that undernutrition is a significant problem. In the survey, 777 children were weighed and it was found that 16% of the children, 12 - 59 months, were malnourished. Stunting was found in 28% of Zimbabwean children, compared to 9% in Togo, 18% in Liberia and 21-24% in Lesotho, Sierra Leone, Cameroon and Egypt.

The discrepancy between the infant mortality rate and malnutrition is due to the possibility that Zimbabwe presents a relatively safer 'infection environment than many other African countries'. It is difficult to compare these figures with the pre-1980 conditions, because not much information was collected on nutrition conditions in rural areas. And even what there is, is largely based on hospital admissions - but it is important to bear in mind the uneven and inequitable population coverage by health services, so that given the incomplete nature of the health statistics, those groups most affected by malnutrition have been those groups that have had the least access to health services and whose sufferings most likely went unrecorded. This state of affairs is comparable to the answer given by a Brazilian researcher to a question on the incidence of snake bites. He replied that:
"It is difficult to know, since where there are statistics there are no snakes and where there are snakes there are no statistics".

The figures cited may therefore just be the tip of the iceberg. A health expert with Oxfam, Dr. David Saunders, recently said that many cases of malnourishment in children in Zimbabwe go undetected by health workers because they do not use the necessary detection methods.

A 1973 study of paediatric admissions to Harare Hospital found that severe malnutrition in the form of marasmus or kwashiorkor (which reflects gross deficiencies of calories and or protein, was the first, second, or third diagnosis for one-third of the 2,354 children admitted. In that year malnutrition was the second most common reason for admission and was the leading cause of death (31% - i.e. more than double anything else). In 1978 of 3,938 people hospitalised with nutritional deficiencies, 17% died. This was double the percentage of fatalities from other diseases except pneumonia. In 1979, nutrition problems were the direct cause for about 5% of all hospital deaths.

There are now several studies on the distribution of malnutrition in Zimbabwe, though most of them are mere estimates. But there is still very little in the way of studies that link malnutrition to the productive processes - the latter is either ignored entirely or subsumed under the spatial categories of rural/urban or treated in the most superficial way as 'occupation' - or 'income' or economic level. Thus in the ranking of malnourished groups, farm workers who with their families constitute approximately 23% of Zimbabwe's population, are the worst off. In a commercial farming area in Matabeleland in 1981, 14% of children in Beitbridge and 20% in Nyamandlovu were judged to be severely malnourished based on weight for age, the range was from 10% on some farms to 47% on another. And in a survey of 227 children carried out on farms in Mashonaland, Raffingora District - 24% of children suffered from second or third degree malnutrition and 49% showed some stunting. Further samples in a 30 kilometre radius of Bindura found 33% of children measured were stunted, and that over half had second or third degree malnutrition. At present, the minimum wage of Z$55 per month is less than half the estimated poverty datum income level. And, in spite of the government's efforts to minimise the displacement of farm workers, following the promulgation of minimum wage legislation, it is estimated that there was a loss of 51,000 permanent jobs between 1980 and 1982.
1983 employment in agriculture registered a further decline of 2.8%.\textsuperscript{15}

The next worst off group in terms of malnutrition have been the inhabitants of the communal areas. Infant mortality rates based on the 1969 census were two and a half to four times higher in rural areas than in urban areas. A 1975 study showed that the malnutrition problem in the communal areas was four to five times as bad as it was in urban or semi-urban populations. And four reports from the Mutoko area in 1980 showed that the nutrition problem among peasant farmers in communal areas was more than four times as great as for those living in townships.\textsuperscript{16}

As a result of enforced excessive human and livestock population, the resource base of these areas has for long been under severe stress making many households dependent on off-farm income of migrant members for subsistence. In the Gwanda area, for instance, severe malnutrition was to be six times higher in families where the migrant did not send remittances compared to those where he did. The least amount of malnutrition appeared in those families where the father did not migrate but someone else sent remittances.\textsuperscript{17}

In recent years the effects of drought, compounded by the deterioration of employment prospects, has led to a crisis situation for the 2.65 million people living in areas where "simply producing a bare subsistence crop is considered to be a good year."\textsuperscript{18}

So far as food and nutrition, the 'privilege' of urban low-income families is only very relative and it could not be otherwise, if as a 1974 study states, the income of most of them was below the poverty datum line.\textsuperscript{19}

A 1976/1977 survey of lower income urban households found an average monthly income of $80.92 (20% of this population earned $50 a month, 60% between $51 and $110 and 20% above $111). This compared to a poverty datum line requirement in September 1978 of $107 a month for the average-sized family. The Riddell Commission in 1980 updated the 1974 study to take into account changes in the cost of living and the introduction of minimum wage legislation, and came up with an estimate of $128.52. The minimum wage in industry and commerce was $85 with effect from January 1, 1981. By the end of 1983, the minimum wage in the industrial and commercial sectors had reached $128.72. But by the end of 1983, the P.D.L. has been calculated to have been $201.\textsuperscript{20}

Therefore even at a superficial level, and with reference to fragmentary pieces of data, it is clear that Zimbabwe faces a major hunger problem. It
is also clear that the worst affected classes are the urban poor and those rural poor who do not produce part or all of the food they consume. A considerable proportion of present hunger/malnutrition is also to be found among households that produce most or all of the food they consume.

Long-term changes in cropping systems have largely determined the amounts and kinds of foods produced. The reasons for calorie - protein deficiencies obviously differ among the different groups, primary reasons likely to be low household incomes, insufficient food intakes and high food prices. Changes in any of these factors have influenced food consumption. But from a nutritional point of view, only changes in food consumption by households within which some or all of the members are now malnourished or in which the risk of malnutrition is significant are of interest. With the present euphoria about the good rains and the expected bumper harvest for 1985, it would be timely to sound a cautionary note on placing too much emphasis on food supplies, for:

"... changes in food supplies affect the nutritional status only to the extent that food consumption of malnourished or at - risk individuals is affected. The degree to which expanded food production is translated into expanded food consumption by the malnourished varies depending on the crop or livestock species of which production is expanded, the nature of technology that brings about the expansion and who produces the increase. Thus using total production expansion as a proxy for nutritional effect is likely to be misleading ..." 

There is therefore a need to examine more closely nutrient aspects of the food consumed. Analyses carried out for the diets of 50 pregnant women in a district of Zimbabwe revealed a low content of protein, fat, iron, vitamin A, thiamin, riboflavin, niacin and ascorbic acid. Maize, the Zimbabwean staple diet, is also low in lysine and tryptophan. The biochemical causes of malnutrition in Zimbabwe have largely been attributed to micronutrient deficiencies related to calorie and to a lesser extent protein problems. The most common is pellagra, a nutritional disorder that is common in populations whose diets are heavily dependent on maize. It is characterised by scaly, peeling skin and cracked fiery lips. As far back as the 1950s a study of patients at Harare Hospital showed that of 54 consecutive admissions for nutritional disease, 22 were cases of pellagra. Another study of nutritional disorders in 1971 found that 269 of 361 mostly adult cases examined over three years were suffering from pellagra. The main cause of pellagra in Zimbabwe appears to be inadequate
niacin in a heavily maize-based diet, exacerbated by the increased consumption of highly refined maize meal.\(^{23}\)

Goitre, caused by iodine deficiency, seems from the fragmentary data available to be quite prevalent.\(^{24}\) An investigation cited by Berg, done in the Chimanda communal area, showed a 35% goitre prevalence among the studied population. A study among the Tonga in Omay in the 1960s found 45% of the community with goitre. The highest rate (77%) was among adolescent girls. Another study around the same time in Chikwaka communal area found in a sampled village population, a prevalence of 74%.\(^{24}\) Vitamin A deficiency has been found to be widespread, especially from May to December - 'the measles' season - and has been attributed to the lack of variety in the diet.

Thus besides the preponderance of maize in the diet of the malnourished in Zimbabwe, the very lack of variety looms as a major contributory factor. It has been estimated that cereals now account for almost three-quarters of the calories consumed per capita - and maize accounts for slightly over three-quarters of the cereals. And less than 5% of these calories are consumed in such forms as mealie meal. Of the remaining calories only 4% were estimated to come in the form of oils and fats - three-quarters of this being of vegetable origin. F.A.O./W.H.O. recommendations prescribe that 15 - 20% of calories should be in the form of dietary fats. For Zimbabwe, the per-capita intake in 1977, when livestock was more available (i.e. the cattle herd had dropped steadily from 6 500 000 herd in 1977 to 5 100 000 in 1980), was a seemingly plentiful 74 grammes compared to 55 grammes in Africa as a whole. But of this 18 grammes was in the form of animal protein (most likely consumed by high-income groups) and 56 in the form of vegetable protein - of the latter 88% was from cereals, and more than three-quarters of that amount from maize.\(^{25}\)

The seriousness of dietary deficiencies is underlined by the appreciation of the fact that malnutrition amongst infants in Zimbabwe is largely a post-weaning phenomenon. Most deaths occur in the one to four years of age bracket, after which there is a decline during school years. A 'weight for age' survey conducted in July 1984 covering 777 children in the 0 - 4 age group, indicated increasing prevalence rates by age. 7% of children below one year, and 16% of children 1 - 4 years were undernourished. Shifts in dietary patterns from such crops as groundnuts and millet to maize have had particularly serious nutritional consequences for infants and small children from the weaning stage - who do not have stomachs
large enough to absorb in a day the calories they require from a bulky food such as maize porridge. 26

While there can be little dispute on the bio-chemical aspects of hunger in Zimbabwe, the socio-economic analysis of its causes and also proposals for its eradication are more problematic. One finds it difficult to agree for instance with the Report of The Commission Into The Agricultural Industry's synopsis of the hunger problem in Zimbabwe:

"Gains in productivity have been insufficient to keep up with population growth with the result that the average Zimbabwean is both poorer and hungrier today than he was in 1971. In effect, the very real gains in productivity achieved in the large-scale farming sector have been more than offset by the agricultural decline in the communal areas". 27

One finds in this a veiled attempt to depoliticise the whole problem of nutrition, because mass malnutrition persists today in Zimbabwe not primarily because of the low agricultural productivity of the communal areas, but because social relations of production and exchange of a particular type still prevail. Only specific social groups have been the victims of malnutrition - and the eradication of mass malnutrition in itself through raising the 'productivity' of the communal areas, so that they 'catch up' with the large-scale commercial areas, cannot be put forward as a substitute for social change, and will only sharpen the instruments of social oppression inherited at independence of which mass malnutrition is but one manifestation.

Further, the connection between the problems of low production growth and malnutrition is all but mystified - and the 'commercial sector' and the communal sector are counterposed in a static fashion like two snapshots. Without attempting to show the dialectical relationship between them, the fact that Zimbabwean agriculture has developed unevenly and along social class lines, does not emerge from a reading of the whole report of the Commission.

The next section of the paper will attempt to contextualise changes in diet and production in Zimbabwe which throw some light on the current problem of hunger.
Changes in Diet and Production from the End of the Nineteenth Century to 1980: An Overview

From the manner in which we have characterised Zimbabwe's food crisis, the real main changes in dietary habits that concern us here are the changes to a largely maize-based diet and the decline in the animal protein component of the diet. But before attempting to patch some fragmentary historical data, it might at first be necessary to point out certain theoretical shortcomings in attempts to understand the 'consumer' in Zimbabwe.

Studies in the social and economic history of Zimbabwe which have broached the whole subject of food habits have largely done so from a narrow institutional point of view - wherein for instance workers' protests against the inadequacies and poor quality of diet emerge as one of the many forms of 'worker consciousness' pitted against capital's cost minimisation strategies. So that while it is now feasible to trace dietary changes at the point of production largely as far as mine labour is concerned, through a scrutiny of institutional diets, diet does not emerge as an important index of changing material culture for the wider society.

This state of affairs could be partly attributed to the topographical metaphor of the labour reserve whereby communal areas have been seen as a labour reserve for mines, large farms and industry. What has been stressed from the perspective of the labour reserve have been firstly the institutional wage supply determinants, such as urban influx policies, and secondly the institutional restraints which have been applied to the 'peasant economy' through the state's subsidisation of settler agriculture, land alienation policies etc. in order to push peasants into wage employment, and to render them incapable of accumulating surpluses; the progressively reduced buying power of a unit of peasant produce has been seen as having been crucial in the initial mobilisation of the labour force in colonial Zimbabwe. Mediation took place through the 'upward tendency in the effort - price of African participation in the produce market'. The labour flow in Zimbabwe is thus seen as having become a self-generative process as 'people (got) used to what they consume(d)'. To this Arrighi added that items not essential to satisfying subsistence requirements could 'with the mere passage of time, become necessities, whose consumption (was) indispensable.'
But attempting to delineate 'necessary' from 'discretionary' consumption would not tell us very much about the changing dietary patterns which influenced the reproduction of labour power. In the formalist way Arrighi poses the problem, 'choice' is made the essence of the economy, and the concrete culture of the economy in its market form is made a universal constant - 'the self-generative process'. The distinction between production and consumption is purely a marketing definition - with consumption being seen as the sole end and purpose, so that production is merely restricted to earning an income, and consumption, spending of that income.

From a materialist or substantive view production and consumption are part of the same process. Marx's view was based on a complex conception of production. Certain aspects of distribution, exchange and consumption are properly part of production, what he calls "factors" or "moments" of production and these cannot be seen as determined by production. Within the factors of production there is a narrowly defined mutual interaction. Then there are aspects of distribution, exchange and consumption which are not properly part of production, which lie outside it conceived in this wide sense, and which are determined by it in two ways. First, production determines the general form that distribution, exchange and consumption take; second production determines the relationships that each of them bears to one another and to production itself, since the process always returns to production to begin again. They are all members of a totality, 'distinctions within a unity, in which aspects of distribution, exchange and consumption react back in a determined form upon production'.

Thus as far as distribution relations are concerned, the distribution of people among the means of production is an aspect of the relations of production while the distribution of commodities between the same people is an aspect of distribution. Within exchange there is that which occurs between production units (i.e. within the sphere of production) such that commodities can be made which are suitable for consumption, by the final consumer (departments one and two respectively). And finally within consumption itself there is the specific aspect in which the individual worker reappears within production as refreshed and energetic labour power, and there is the more general aspect in which individuals consume the entire mass of commodities as a result of their differing use values.
With such a framework, the whole subject of dietary changes cannot therefore be approached from the point of view of a transition from 'discretionary' to necessary consumption, and due account has to be taken that dietary changes involve actual social practice within particular material and cultural contexts, and are not merely a reflex of the effects of capital upon non-capitalist forms of production. The problem of the transition from non-capitalist forms of production in Zimbabwe is however too complex to be exhaustively dealt-with in the scope of this paper, and all that is proposed here is to make some tentative suggestions gleaned from theoretical and empirical work done by Chevalier in Peru on the concept of 'form of production' and the relationship between capitalist and non-capitalist forms of production in peripheral social formations.

Chevalier contends that the formal subsumption of labour under capital may occur in the absence of monetisation and in the absence of formal dispossession. In other words simple commodity producers producing subsistence goods for their own consumption on 'free' land may be effectively separated from the surplus value they produce (that is 'formally' exploited by capital). All that is required for this to occur is that such producers 'maximise' the value of the ingredients used in production according to market calculations - and sometimes actually valorise them. In attempting to realise 'subsistence commodity values' (as distinct from 'non-commodified' use values) - by calculating the value of their own labour power and allocating it along lines indicated by its general valuation in the economy - the producers transfer the value of these non-monetised goods to other goods that are sold. Capitalists in the economy realise this value because the interaction between subsistence production and wage labour causes the undervaluation of both labour power and the goods produced by it.

Chevalier describes the interaction between simple commodity production and wage labour as follows: Wage labour exists in the economy, but no household can subsist on local wages alone, because the continued existence of subsistence production leads to a market undervaluation of labour power. Subsistence producers (as a class) are willing to work for wages lower than their reproductive costs and therefore wage labour (as a class) must carry out some subsistence production in combination with wage work to reproduce themselves: low wages, moreover lead subsistence producers to undervalue their own products, which they value in terms of the price of labour power needed to produce them (as established by the local market). Capital, therefore gets both cheap goods and cheap labour, both undervalued
by the local market. This results in the decentralisation of economic practices, but does not prevent capitalist relations of production from dominating the peripheral economy.

Changes in diet are a consequence of the attempts by subsistence producers to 'maximise' the value of the ingredients used in production. Those agriculturalists who (before the advent of capitalism) mainly produce food for their own households cease to produce the usual diverse array of products they had been accustomed to. They begin to produce a very few basic staples to obtain the most calories for the least effort. They minimise the expenditure of their labour power, Chevalier explains, because they have alternative uses for their labour power within the general economy.

At the preliminary level of analysis attempted in this paper, through the lack of empirical research, no attempt will be made to fit what data is available into Chevalier's framework - which has been posited merely to emphasise the point that the labour reserve paradigm is inadequate for explaining changes in diet or in understanding the consumer in the food production chain, as it divorces material practice from its cultural meaning - and to underpin the argument that changes in food habits are not simply a reflection of material factors (different forces of production) but instead stem from different material conditions (alternative uses of labour).
1890s - 1930s: THE COMING OF THE COLONIAL FOOD PRODUCTION SYSTEM AND THE NEW DIET.

In order to establish how changes in material conditions of production (alternative uses of labour) in Zimbabwe have influenced changes in food habits it is necessary to go back to the mid-nineteenth century in order to establish a base line for changing production patterns.

In the mid-nineteenth century, there were basically four categories of food production:

(a) domestic animals
(b) hunting of wild game
(c) crop cultivation
(d) gathering from wild plants

But it is important to bear in mind that, though there have been few parts of the land that could not support agriculture, Zimbabwe is not environmentally homogenous, and even in pre-colonial days, the population was not limited to a singular form of production and or use of natural resources. There have been substandard areas, where historically, losers in political struggles were consigned - such as the Inyanga part of the Eastern Highlands (good rainfall but poor soils), the crest of the watershed in the central plateau area (fair rainfall and soils but exposed living and grazing areas and limited resources), the lower Zambezi Valley (inadequate rainfall), the Western sand and sodic - soil zone (poor soils).

Though lying within the tropics, one fifth of the terrain is over 1200 m above sea level and three fifths between Zambezi and Limpopo valleys experience tropical climate. The soils are predominantly sandy with the heavier loamy and clayey soils occurring in relatively small local areas (Natural Region V and I - see map I). The rainfall is unreliable, with seasonal rainfall occurring mainly between the months of November and March. Only 37% of the country receives more than 700 mm annual average rainfall, considered necessary for semi-intensive farming, and less than a third of this area is actually arable. Average annual rainfall varies from below 300 mm in low-lying areas of the country to over 1 000 mm on the central watershed. Generally, the topography, soils and climate of Zimbabwe are not favourable for intensive agricultural production.
More precisely, Zimbabwe has been classified into five main 'agro-ecological' or 'natural' regions wherein agricultural development is conditioned by a variety of dominant natural characteristics. A sixth Natural Region X refers to an area of 3.1 per cent of the country, totally unsuited for agriculture.

**Natural Region I: Specialised and Diversified Farming Region.**

Above 1 000 mm. rainfall per year with comparatively low temperatures, and favourable for forestry, fruit and intensive livestock production.

**Natural Region II: Intensive Farming Region.** Rainfall is confined to summer and is moderately high (750 - 1 000 mm). The region is suitable for intensive systems of farming based on crops and/or livestock production.

**Natural Region III: Semi-Intensive Farming Region.** This zone receives 650 - 800 mm rain much of which arrives in infrequent heavy falls - and is marginal for crop production.

**Natural Region IV: Semi-Extensive Farming Region.** The region is low in its receipt of rainfall (450-650 mm) as is subject to periodic seasonal droughts and dry spells. The predominant use is thus livestock production.

**Natural Region V: Extensive Farming Region.** This region is characterised by very low and erratic rainfall, making it unreliable even for the production of drought-resistant fodder and grain crops. It is largely characterised by extensive cattle ranching and game ranching.
Going back to our attempt to characterise the categories of food production in pre-colonial Zimbabwe - from a consideration of present day agro-ecological zones - cattle rearing appears to have been an important activity. It was however limited to areas with pasture grasses for both wet and dry season use, or where during the dry season alternate long-distance grazing was available.

The importance of cattle to pre-colonial societies in Zimbabwe is further underlined by the fact that cattle payments had a "useful redistributive and wealth generating function in society where the reproductive abilities of women and cows were the only reinsurance against recurrent drought and the limited storage life of grain". In fact the rise and fall of the Great Zimbabwe State has been linked to the exploitation of transhumant type pasture land, achieving an ecological balance with tsetse fly, and the degradation of nearby pastures rather than to long-distance trade and gold mining. For, the latter, and even in the Mutapa state depended to a large extent on the ability of rulers to provide food for those engaged in trades, of which meat on the hoof was the most easily transportable. The nineteenth century however saw a long-term decline in cattle as a result of the advancement of tsetse fly, and in the 1860s/70s large herds were decimated by the bovine pleuro - pneumonia epidemic.

Wild game provided a dozen or so varieties, and hunting was not only an important social activity, but also a useful food supplement especially in times of drought.

Crop cultivation was restricted in part by differentials in soil fertility the capacity of sandy soils to retain water and the heavier clays and alluvials to drain properly and above all the irregularity of rainfall. Crops were therefore carefully selected with a view to their suitability for their soils and expected weather. The original food crops of the early Iron Age - i.e. various millets and sorghums were still the staple food during much of the nineteenth century. Although maize was available from as far back as the sixteenth century, and had spread widely, by the 1890s it had yet to become the staple crop, being largely used as a relish in its cob form to back up the millet porridge.

Without conjuring up scenarios of pre-colonial Zimbabwe having been representative of 'merrie' Africa, it can nevertheless be said that there existed
a dietetic balance which was to be upset by colonialism in ways we shall detail below. Various social and human controls were geared towards the maintenance of this balance. With respect to domestic stock raising, the seniority system by which senior adult males jointly managed herding, the maintenance of herd levels on given pastures the system of inheritance and limited access by younger males to cattle controlling elite, prevented the overstocking and overgrazing of land at the expense of future generations. And pastures near settlements were protected by long-distance herding by adult males.

'Traditionally' also the distribution of the produce was divided (though not equally) among all members of cattle-owning settlements. Cattle herds supplemented the daily diet through milk products; smaller stock and fowl were produced for more regular domestic meat, and the meat take-off of the cattle herds were used primarily in crisis situations, most frequently when drought brought hunger and threatened the harvest.

The keys to 'traditional' controls over wildlife lay in policies of group hunting and the development of special medicines, known only to the community doctor.

Cultivable soils were also a resource limited in quantity and easily overused. Local clans and chiefs therefore carefully controlled cultivation in their areas. Additional emigrants could be accommodated only by submitting to local controls and in most instances received the marginal lands. Though empirical data is hard to cite on this it can be assumed that in the extensive system of agriculture in practice, a necessary ratio existed between land cultivated and land left uncultivated, in order to ensure the maintenance of fertility of the soil and reproduction of the productive system at the same level of efficiency.

However it should again be stressed that in this almost 'ideal' situation we have described, there existed many inequalities with regard to access to fertile soils, and the very fact that both wives and cattle, the so-called traditional means of production, were less available to the lower strata of the population.

Though the system we have outlined above suffered some severe shocks during the series of droughts in the 1860s and 1870s and the bovine pleuro pneumonia epidemic, the final blow was delivered by the advent of settler colonialism.
The 1890s saw the widespread seizure of African cattle, after the Anglo-Ndebele war in 1893, and in Mashonaland in lieu of cash for the hut tax. The spread of the rinderpest from 1896 during which it is estimated that there was a 95 per cent death rate exacerbated by the destabilisation brought by white settler colonialism. To this was added widespread alienation of land after the Chimurenga War of 1896/7 enforcing a change in settlement patterns mainly from areas where cultivation had been intense to dry sandy soils, where a reduced variety of crops could be grown.

In some areas as a result of the early forced labour policies, and later hut and poll taxes males were involved in labouring outside the domestic unit further undermining the ability of many households to provide for themselves. The first recognisable response from the patchy historical data available, in that the years 1898 - 1914 saw an attempt by many peasants to rebuild their stocks decimated during the rinderpest epidemic of 1896. Thus in the years after 1898 the rate of increase in African stockholding has been estimated at some twelve to fifteen per cent annually, despite diseases, slaughtering for food and sales.

Thus it would appear that the increase in stockholding was an attempt by African producers to realise 'subsistence' commodity values, by calculating the value of their own labour power, and allocating it along lines indicated by its general valuation in the new economy, and at the same time resisting proletarianisation. The increase in stockholding was complemented by an increase in cultivated acreage, and the increased use of ploughs - for the production of food crops for sale. Further land alienation, even before the monumental Land Apportionment Act of 1930, deepened the crisis faced by African producers, forced into a transition from a balanced system of extensive agriculture to an intensive one; the ratio between land left cultivated and uncultivated was upset, and no matter how much they increased acreage ploughed, a vicious circle was set, wherein when yields fell, cultivated areas expanded and when cultivated areas expanded yields fell; a pattern to be reproduced through the next decades. The functioning of the 'new' system was thus incompatible with certain rates of population growth or with the necessity of extending cultivated areas; by the late 1920s it has been estimated that population in the reserves was already five times greater than its carrying capacity.
The effect of the succession of droughts from the years 1912/1916—known in oral traditions as the Bhuza famine (Nzara ya Bhuza)—illustrate further the destabilising effects of colonial rule. In 1912, the effects of the drought were slightly alleviated because of the relatively good price for cattle, enabling most African producers to exchange cattle for grain, but by 1916 when the price of cattle plummetted many peasants had to rely for subsistence on 'food aid' in the form of munga and millet from the Native Department.47 The longstanding 'tradition' of relying on exchange of livestock to insure against drought, which had been redeployed after colonialism to resist proletarianisation was thus progressively becoming inoperative. A contemporary observer drew the following lessons from the famine for the local white agricultural community:

"Several farmers also have seized this opportunity and have traded grain for cattle and those in a position to do this have profited from the drought. The deficiency of crops has also had the effect of inducing the natives to turn out to work on the farms, and thereby they benefit not only the farmers, who get labour, but also the country by retaining in it the wags which otherwise go to aliens, who take their savings elsewhere".48

The progressive undervaluation of labour-power of the African producer, in the emerging market economy manifested with such starkness in times of drought, was closely tied to and conditioned by the formation of price through credit, research and extension policies after 1908, by the state, which were meant to promote white settler capitalist agriculture. Until 1910, commercial agricultural production in Zimbabwe was based mainly on the monoculture of maize— and there was indeed little till then by way of technology to distinguish it from the peasant's product: land was first worked by hoe and seed broadcast. The first significant increases in maize yields came from the replacement of flint maize seed by imported maize seed. In 1915 maize accounted for over 92% of commercial land cultivated, which declined to 80% by 1921.49

And while in 1911, the agricultural industry employed only 16% of the total labour force, it employed 40% by 1921 and 50% by 1927.50 But even by 1930, most white farmers were not self-sufficient in maize, and the greatest part of them were entirely reliant on African producers for rations for their labourers.51

By the mid-1920s important and far-reaching dietary changes were afoot
in African society. Maize, which had been grown occasionally for home consumption, was becoming both a staple food and a cash crop. There were several reasons for this: firstly there was the matter of palatability of sadza from ground maize flour given the restricted variety of relish then available; sadza from zviyo/mhunga (millet etc) needed different types of relish to be palatable — such as the different types of meat that could be obtained through hunting before colonisation, whereas sadza from maize could be swallowed with less relish or with salt or without any relish. These with the increase in grinding mills, maize meal was becoming more available by then. Grinding mills were a great advance on the existing technologies for grinding maize. Whereas mhunga and rapoko could just be stamped in a mortar, cleaned and then ground into meal - the process was more complicated for maize. It could not be ground into meal on stones, but the kernels were first sprinkled with water, and while wet, were stamped in a wooden mortar to remove the bran covering. This bran was then winnowed out and the starchy grains were put in large pots of water and left to soak for three or four days, which caused the starch cells to swell and break apart. The soaked grain was then dipped into large baskets, which were put on top of stones, so that the water could drain off overnight. And finally, the grain was put back into a stamping mortar and pounded up into a fine meal - and the white flour-like meal was winnowed as it was removed from the stamping blocks and spread to dry in the sun.

The shift to maize, more fundamentally, however, was influenced by the changes from extensive to intensive cultivation, and the changes in the division of labour for agricultural tasks effected by the migrant labour system, which enforced the absence of men. Recent research revising earlier anthropological studies has thrown more light on our understanding of the division of labour by sex and its effects on agricultural production.

Baumann's seminal work of 1928, on the relationship between the sexual division of labour and farming techniques, suggested that hoe cultivation of vegetable foods, by women working individually, using methods which were very often superficial and without peak periods of labour input, constituted the earliest stage in the evolution of agricultural technique and social organisation. He further claimed that root crops and female labour were associated. And that grain crops, which required increased male labour, were a late development in Africa.
But Guyer has shown that the root/cereal crop labour organisation differs at least as much within these two categories as it does between them.\textsuperscript{57} And more pertinently for our study, she shows that differences in growing conditions and in labour organisation between maize and sorghum and millets (zviyo, rapoko etc.) are radical and invalidate any generalisations about grain crops as undifferentiated. While millet, and sorghum are characterised by the complexity of task specialisation and complementarity, peak period labour mobilisation and involved ritual activity, maize is not. Maize is characterised by individual and female labour, in contrast with other cereal staples - in other words the organisation of work is task specific for millets and sorghum, but crop specific for maize.

In millet production, for instance, Richards showed that tree pollarding was carried out by groups of young men, the stacking of branches by the women, firing of the field by the men, planting generally by men, with their wives covering up the seed. Men fenced the fields, women did any necessary crop-tending and reaping was an exclusively female task. Ritual activity was centred on tree - cutting in new - millet gardens.\textsuperscript{58}

Unlike millet, maize could be grown on individual farms, generally by women, with no set standards of labour mobilisation. Female labour predominated at all stages of cultivation, but men could work their own fields, and every member of the family tilled, harvested and stored the produce from his or her own plot. So that: "Symbolically as well as practically, the shift to maize was a shift in gender specificity".\textsuperscript{59}

Kuper has suggested that for Southern Africa, the old staple of sorghum is now used for beer, associated with men and threshed outside the homestead symbolically in the public sphere, whereas maize, the new staple is "used for porridge associated with women, and entirely processed within the symbolic confines of the domestic sphere".\textsuperscript{60}

But the fundamental problematic remains how such changes were brought about. The little evidence available in Zimbabwe shows that the main contribution maize made to the mitigation of labour peaks lay in the somewhat shorter growing season and the reduced need for scaring away birds and the effects of labour migration; as a 1942 study noted the widespread shift from millet to mealie meal was a result of the "labour-saving effect of buying meal", and that:
"The change has been necessitated by the absence of men at work, throwing added economic burdens on the women".61

What is important to stress with respect to these shifts in food habits is that it is not the crops themselves which have determined domestic labour allocation and cultural allocation but historical processes unleashed by the forced transition from non-capitalist to capitalist relations of production having generality from one region to another.

In considering the changes in food habits up to about the 1930s it is also necessary to explain the decline of animal proteins, primarily beef in the diets of Zimbabweans. Roberts has noted that discussion on this issue has been marked by emphasis on 'ritual aspects' neglecting the material explanations. 62 Thus there developed a 'European complex about African cattle', attributing the noted reluctance either to sell cattle or kill them for consumption not to prevailing marketing conditions but rather to psychological or cultural reasons. 63 With the increasing restricted access to land, however, cattle prices were often higher than wages on the mines and factories, and thus provided a way out of wage labour. 64 But of course the 'cattle complex' persisted. It was typified in the writings on the 'food crisis' of a renowned Rhodesian anthropologist, and Chief Native Commissioner, writing in 1950:

"In the present state of world food supplies and especially of the shortage of butcher's meat which is our chief source of proteins, the religious and social significance attached to cattle by the Bantu tribes (diminishing as it may be) is yet a matter of material importance".65

Pari passu with the development of new food habits by 1930, signified by the shift from sorghum and millets to maize meal, and the decline in meat consumption, there also emerged in these years the 'compound diet' on the mines - geared to the subsistence needs of the single migrant worker.

The quality of this 'institutional diet', which in the early years of this century was reported to be inferior even to the prison diet - is perhaps best indicated by the outbreaks of scurvy on mine compounds. Between 1906 and 1908 over 4 000 black miners died in compounds from various diseases. Of these 8,3% in 1906, 12,7% in 1907 and 13,5 per cent in
1908 were attributed to scurvy. For many of the mineworkers, the sole diet was mealie meal five days in the week. Food, like housing, was a target for cost-conscious employers, and as it was expensive for much of the early decades of the colonial period mining companies supplied their labour force with the cheapest possible diet. These were many cases where the only ration was maize meal and salt, forcing many workers to spend a large proportion of their wages on purchases of extra food, especially tinned meat. Many mineworkers resorted to hunting and gathering of wild vegetables in areas near the mine compounds.

In 1908, the standard diet for mineworkers which was to persist for decades to come was instituted. It constituted the following: 2½ lbs of meal, ½ oz of salt, 1 lb meat per week 2 lbs of vegetables per week and 8 ounces of lard.
The period 1930 - 45, in Zimbabwean social and economic history, is perhaps the least researched into. And yet in terms of attempting to understand Zimbabwe's hunger problem whether in terms of the present 'low productivity' of peasant farmers or in terms of food availability, it provides a useful benchmark.

And even in terms of theorising about the political economy of Zimbabwe, developments before 1930 are in a teleological fashion held up as a mirror of things to come.

This state of affairs is perhaps best represented by conventional 'radical' analyses of Zimbabwe which take as their point of departure the labour reserve hypothesis. While these studies go to great pains and detail to establish the administrative rationale behind the creation of the reserves in Southern Africa they explain little else.

It has now been established that administrative measures up to 1930 aimed at circular migration, the ideal being that only single male workers would migrate to urban centres; they were expected to return later in life or at times of unemployment and that the system was rationalised as ideologically necessary to protect whites and to keep rural societies intact. But social scientists in Southern Africa seem to have been unable to distinguish between intent and actual historical processes and have internalised the administrative logic and integrated it into some romantic anti-capitalist framework, the whole issue of food policy in independent Southern Africa is now being seen in terms of reversing the trend towards more urbanisation because it is argued that rural-urban migration provides cheap labour of benefit to an export - oriented enclave economy, limiting the role of rural areas to the reproduction of labour and thus conflicting with the role of rural people as commodity producers.

It is argued that up to 1930, the loss of cattle at the turn of the century led to self - generating male underemployment and reduction in household food supplies.
"Where this occurred the creation of male migrant labour entrenched what may have been only a temporary phenomenon. In addition to the decline in consumption goods from animal husbandry, there was also the loss of adult male labour, including in some areas even male child labour. This naturally affected not only the care and feeding of animals but also foodstuff production, if we recognise that male agricultural activities had hardly been non-existent, as colonial authorities so often claimed. Thus as males left their villages more frequently and for longer periods the heavy proportion of tasks associated with the production of agricultural goods - often cash crops that needed to be sold in order to buy consumption goods as in the case of cotton cultivation in Northern Mozambique - fell on the shoulders of women..."

And that by 1930, both mining capitalists and settler agriculturalists were able to claim the success of their policies, despite the fact that then and even five decades later there was no complete proletarianisation in the sense of the creation of a 'labour force dependent on its reproduction solely upon the wage mechanism'. But Wallerstein et. al. do not seek the causal factors for this in the objective social and economic processes but rather offer this explanation:

"This was quite explicitly ruled out by both colonial and capitalist agencies, for it was well recognised that full proletarianisation would require higher levels of wage payments".

Besides the overconcentration on the almost subjective determinants of labour supply, not only is the resistance to proletarianisation ignored but also the growth of the economy is assumed to have been unidirectional, without any crisis periods, when there was actually no demand for labour, as happened during the Great Depression after 1930.

The period of the Great Depression, was marked in Zimbabwe, by a devastating combination of crop failures, the collapse of markets and of prices for crops, and a collapse in the demand for labour, and unemployment. And surely, this must have some impact on the society and economy of the reserves, qualitatively and quantitatively different from what had taken place before 1930. And it must have led to changes in agricultural practices, and food habits.

By internalising the logic of the administrative labour reserve, the 'labour reserve school' finds itself in a similar dilemma as that faced by the administrators, which one observer described in the following terms:
"The relationship of the natives to the demands of the European economy has been similar throughout Southern Africa. Their comparatively large numbers persuaded the Europeans to think that here was a fund of cheap labour. Two factors - the inferior status presumed as being inherent in them, and their large numbers - determined the future place of the natives in all spheres of economic development. Two factors worked against this continuation of abundance: the indisposition of the African to identify himself with the new way of living and the attitude of the European toward the native's inferior status which kept the Native's wage to a minimum. In the presence of a large Native population, there emerged a 'shortage of labour'."

Because of an overemphasis on the supply determinants it is therefore not surprising that the problematic has resurfaced, in recent attempts to prescribe solutions to Southern Africa's food security problems. The only difference now is that the coming of black rule which in the so-called 'labour reserve economies', has meant either the end or the relaxation of urban influx controls, - and that is now posed as the 'crisis' and there is now talk of the 'defunct labour reserves' in Zambia now causing problems for peasants' nutrition as a result of their 'latent urban orientation,' or in the case of Zimbabwe for the transition to socialism'.

The other 'self-generating' mechanism often cited the 'labour-reserve school' to explain the peculiar nature of proletarianisation in Southern Africa is that of land alienation. By failing to relate land alienation to actual material conditions, such analyses obfuscate the real issues pertaining to the creation of a proletariat: that the formation of a proletariat should be treated independently of the question of the possession of land (absolutely) - as the process of differentiation which is identified as the mechanism creating this proletariat is not one which involves individual labourers. The subjects of capitalist differentiation are peasant households not individual peasants. The formation of a proletariat is therefore related not to dispossession but to the economic activity of household units. And the fact that in countries like Zimbabwe, this economic activity, has not been intersectoral, but rather spatial (and sometimes temporal) - does not reveal any peculiar logic about capitalism in Southern Africa not creating a 'full' proletariat. Land alienation should therefore incorporate more materialist concerns than the so-called 'straddling phenomenon', which are best likely to explain the so-called population problem of the communal areas and their low productivity. There is a need to understand particularly in the period 1930 - 1945 - the reinforcement of the now familiar vicious circle - of falling yields in spite of
expanded/intensive cultivation. And how land alienation created contradictions between production and consumption, means and needs.

The crucial point that Zimbabwe's contemporary food problem can be traced to the period 1930 - 45 has often been missed because of certain underlying misconceived assumptions concerning the relationship between production and consumption, and their interface with the wider political economy. The first is the crude evolutionist tendency which associates 'peasants' or 'communal producers' in post-1980 parlance with direct consumption and 'farmer' with commercialisation - thus stamping the character of self-sufficiency upon individuals committed to household production, only because they have historically tried to resist proletarianisation and not because they have been in any sense 'non-monetised' and averse to money-mediated forms of consumption. The second is what has been termed 'a mischievous attitude to African agriculture' - in the way crops are determined to be either cash or food crops; thus the term 'commercial' agriculture has come to have two definitions - one for the Europeans, no matter what they produced. Africans only became commercial when they produced for the 'market' - that is coffee, cotton, rubber etc and as a result:

"An African smallholder whose objective function is not defined in terms of British pounds sterling or American dollars is irrational and must be regarded as someone operating outside a money economy".

To understand what happened to Zimbabwean agricultural production in the 1930s, it is necessary to establish the class origin of the output of each agricultural commodity; the ideal criterion to use in determining this would be the proportion of this output coming from groups of farms arranged according to their use of hired labour power. But it has not been possible to obtain these types of data. A second best would be data on the proportion of hired labour used in the production of each crop. But even this exercise has not been possible within the time constraints of preparing this paper, so I have had to rely on impressions.

Thus up to 1930, tobacco and cotton in Zimbabwe appears to have been more of 'capitalist' crops than maize, though it is estimated that in 1921 tobacco occupied 3.28% of the area planted to white commercial farms compared to 80% for maize. And in the 1926 - 7 growing season when 'as a result of agricultural speculation ... pressure on available labour supplies gathered momentum', it is significant that
the two crops directly responsible for this trend, cotton and tobacco required more labourers per acre than the traditional staple of white settler farmers, maize. The number of European farmers increased rapidly from 2,403 in the 1923/24 season to 2,912 in 1927/28, and the acreage cultivated per farmer from 119 to 134 during the same period. A switch to labour intensive crops like cotton which required 'roughly two, three times as much labour than an equivalent area of maize, and to tobacco where the corresponding factor was 10 imposed further pressure on supplies.

Though one could say that 'maize' was the least capitalist crop, therein lies its importance for understanding how the settler political economy underpinned the relationship between production and consumption. In the colonial Zimbabwe of the 1930s it had become an example of a commodity that was a necessity for an economic class for both sale and food consumption - in the years 1928 - 1930, African sales of maize were about 15 per cent of total sales - due to the bad harvests of the previous year. For the 1933 - 5 period, between 50 and 75 per cent of all peasant produced maize marketed was retained by traders for selling back to peasants in the dry season, or was sold to cattle ranches, tobacco growers, and other indirect consumers such as mines. Thus while a 'necessity' for the workers and peasants in a sense, it was a relative luxury for the settlers - i.e. it was used for indirect feeds for the beef industry and for rations for labour by mineowners, by tobacco farmers and by the white working class for whom the domestic workers' rations (of which maize meal was a predominant portion) in a sense constituted an important part of its wage foods, and was always taken into account in the calculation of the white consumer price index. The fact that the markets for maize and feed were linked were therefore to present a multitude of problems with respect to pricing - especially in the Depression years.

The Depression was marked by the collapse of the prices of agricultural products - first for cotton, then for tobacco and finally for maize - a "cumulation of events that brought farmers to the brink of ruin; after the collapse of the cotton boom in the late 1920s growers of cotton turned to maize; simultaneously the tobacco boom of the mid to late 1920s forced up labour costs, which settler maize growers had to try to meet; and when the tobacco boom collapsed, previous tobacco growers were also found to 'switch to maize'."
What could be described as a 'maize trap' came into operation for both white farmers and African producers; thus for the large white farmer engaged in the production of maize for export, the price dropped from a plateau of 11 shillings a bag to 5 shillings in 1930 and to a low of 3 shillings and four pence in April 1931, - at the very time when the surplus for export was accumulating. \(^3\) There were difficulties in finding alternatives for maize as a cash crop not only for the settlers but also for the African producers. The settler was too preoccupied with short-term survival to diversify out of maize, and for the very large producers ranching was beyond their means because of the outbreak of foot-and-mouth disease and the prohibitive costs of building up a herd - and they could not diversify to cotton because the maize lands were then unsuitable for tobacco, whose market had in any case collapsed. \(^4\) The African producer had no alternative between maize and selling his labour power at a time when employment was unavailable, and even where it was, at below subsistence levels.

At first the settler government attempted to protect white producers by instituting an artificially controlled domestic price, pitched high enough to compensate for the low export prices which could at least have helped them to meet their costs of production, by compulsorily pooling all maize through a board of control (comprising representatives of all the interests involved: maize growers, the railways, mines, commerce and the millers) which would establish a uniform local sale price which would distribute the burden equally amongst producers. But when the scheme was implemented it was vehemently opposed by beef producers, the mining industry, small maize farmers and the employees of domestic labour.

Cattle and mining interests, as large indirect consumers of maize, were concerned at the prospect that uniform pricing would deprive them of the right to buy cheaper maize from African producers. The small maize farmer objected to having to subsidise the larger maize producers, and the white consumer objected to paying more for his workers' rations. \(^5\)

Some compromise was therefore hammered out in the 1931 Maize Act to prevent 'non-maize' growers from being penalised by exempting certain regions specialising in ranching for instance (e.g. Matabeleland). But it was found that farmers in non-controlled areas (growing maize in addition to cattle ranching) were able to sell maize to controlled areas, and were also able to buy it cheaper from African producers.
Though theoretically under the Maize Control Act of 1931, African maize producers were entitled to the same general 'pool' for maize delivered directly to the Central Board Depots in practice very little maize could be delivered direct because of the remoteness and inaccessibility of the reserves - they therefore had to sell their maize either to traders in the reserves or to the nearest white farmers and most likely buy it back in the form of maize meal.

The Act stipulated that Africans could not in controlled areas sell directly to the white farmers - but had to sell to the trader - producers. Traders were given a monopoly in such areas, and accordingly took advantage to pay ultra-low prices. Africans in some areas found it increasingly difficult to find cash for their tax commitments and for food purchases. The situation was graphically summed up in a telegram from the Native Commissioner Mazoe to the Chief Native Commissioner in July 1931:

"Consider immediate and urgent representations should be made regarding effects (of) maize control regulations in reserve. Natives complain with every case (sic) that they are unable (to) sell grain for cash and cannot obtain money for their tax. Traders in reserve now in position of monopolists, and can dictate not only price, but medium with which to buy grain which medium is trade goods only. I anticipate difficulty in collecting native revenue this year. In past years private consumers bought grain in reserve for cash, incidentally controlling to some extent the prices offered by traders".

Paying African producers below the export price for maize provided no solution to the problems faced by settler producers. The 1931 Act was therefore replaced by the 1934 Act which extended control to the whole country, by instituting a uniform price but for the purposes of controlling 'the price to the native' to prevent it from being artificially high, incorporated a dual marketing system: a local pool, reserved for whites and comprising the distributable revenue earned from local maize sales, and an export pool comprising revenue earned from exports, such export revenue being supposedly for distribution to African producers, but being paid out to white settler maize growers and trader producers who handled African maize; nor did the bulk of African producers participate in its distributions. Rather as Keyter has pointed out, the whole pooling system provided a mechanism whereby the state won over the tobacco growers and cattle ranchers (by providing cheap feed for them) by ensuring them cheap supplies of peasant produced maize, and by which it could run up cash surpluses to subsidise the higher maize prices paid to white growers from
the local pool.\textsuperscript{87}

Thus African maize supplies were intricately linked to the needs of the state to subsidise not only white commercial producers of maize but also to subsidise the indirect consumers who required cheap maize to minimise labour costs, and feed costs for livestock.

The 1934 Act, as far as the ability of peasant producers to meet their monetary obligations and consumption needs, worsened the situation. The N.C. Mutare wrote in 1934:

"... the main cause of the delayed collection of the tax was the extension of the Maize Control Act to this district ... The older natives had been accustomed to dispose of a few bags of maize at 7/6d to 8/- a bag. After deducting the price of the sack and the cost of transport, they could get a net price of about 5/- a bag and the sale of four bags meant their £1 tax. With the price at 4/- they had to sell from 8 to 12 bags to obtain the same money".\textsuperscript{88}

By 1937, in densely populated areas such as Mazoe, were reported to have recorded almost a 100% increase in the area under maize.\textsuperscript{89} In 1938, the Chief Native Commissioner was complaining that 'from one cause or another the production of maize in central districts appears to be increasing and there is no doubt that continuous maize crops rob the soil' and by 1939 he was noting that 'maize control ... does not stimulate production only in such areas and in such rotations as will least do no harm to the land. Also noted for the late 1930s was a steep increase in the total estimated African maize production and in the rising ratio of African sales to production. Africans were estimated to have sold between 23.5 per cent and 27.1 per cent of their total production in the three years leading up to the 1931 Act and between 20.4 per cent and 30.7 per cent in the four years leading up to the 1936 Act. 1937 – 8 saw the total production rise to a million bags, and sales to 43.4 per cent of that production – or double the amount previously sold. By 1938 – 9, the ratio was up to an even striking 54.4 per cent with sales almost treble the pre-control levels.\textsuperscript{90}

While the increase in output of maize barely kept pace with the population growth of the reserves, an explanation also has to be found for the sources of labour that made the increase possible, both in the long term and in the short term. The Depression had most likely meant the return of many
male workers to the reserves, and the ability of agricultural production was undermined by resettlement under the Land Apportionment Act. Thus in Chiweshe reserve, it was observed that there was marked ecological imbalance in agriculture in 1939. This was not due largely to natural population increase - but rather in the short term at least due to the forced resettlement within the reserve of Africans from neighbouring Crown Lands. Thus cultivated acreage was further extended, pressure imposed on the grazing lands - setting up a vicious circle which could only be broken by the removal of excess population.\(^{91}\)

While, in the short run forced resettlement and the return of workers, might have increased the population of the reserves - there are more long-term structural reasons responsible for the growth of population. Research has yet to be done on whether there were any drastic changes in the size of the family during the first thirty years of this century, and if there were, to what extent, they can be related to economic processes. Research done in Ecuador shows that for the peasants there, children are defined as crucial for subsistence. That children represent the possibility for diversification of monetary income in the future as well as security when the parents retire from active work. Peasants then have therefore been seen to exploit different 'economic niches' and this 'polyvalent' strategy was only possible when the family expanded.\(^{92}\) It is most likely that given the socio-economic crisis faced by Zimbabwean peasants, a comparable situation developed.

The outbreak of war in 1939 created a demand for labour. A Compulsory Native Labour Act was passed in 1942. And as many as 11 000 labourers were conscripted for three-month periods to work on farms to meet the world shortage of agricultural produce or building airfields for the Royal Airforce Training Scheme. The demand for labour was so great that a significant number of women began to enter the labour market, primarily as domestic labour.

Frederic Cooper has observed about the whole African continent:

"The years between 1935 and 1950 were the time of the greatest urban turmoil Africa has known, before or since".\(^{93}\)

This was borne out in Zimbabwe too, for as with peasant production the period when migrant labourers came forth, did enough work and did not
create trouble had been brief. And big yawning cracks were beginning
to appear in the system where migrant workers were supposed to deliver
themselves, do enough work and return to their villages. The system had
worked best during the Depression when cheapness was more important than
output.

The war also introduced spiralling inflation. While a small portion of
African workers received a cost of living allowance most did not.
Inflation hit the African harder than the European. And in addition to
inflation near famine conditions existed in 1942. The drought had in fact
been the worst over a decade. 96 Maize rations were reduced by 25 per cent
in early February 1942. Within days, African workers at the vital war
industry asbestos mine at Shabani struck. 95 The frequency of strikes was
to increase during the next decade.

Serious soul-searching on how to cope with the new situation, and
characteristically it was not seen as a clash between labour and capital
but rather as a clash of cultures. And the whole issue of the workers'
diet assumed a prominence it had not done in previous years. One such
expert commenting on dietary changes observed in 1942.

"If we wish to change food habits in the Native we must be prepared
to change related modes of production, distribution, storage
preparation, housewifery and consumption as well as tastes and social values".

How this was attempted forms the subject matter for the next chapter,
which attempts to give an overview of changing food habits, under the
aegis of industrialisation in colonial Zimbabwe from 1945 to 1965.
After the Second World War, the then colony of Southern Rhodesia was caught up in the general euphoria pervading the British Empire concerning the benefits industrialisation would bring about to the lives of its inhabitants. The London Times spelt out some of the social implications of this replication of this expected industrial revolution:

"Formerly, the low productivity of African labour was tolerated because it was cheap and abundant. ... Natural idleness was checked by physical compulsion. Now development reaches a point where it cannot progress without greater individual effort. ... Most Europeans have for centuries embraced a religious code which condemned idleness as Wicked; his cults and taboos have more frequently taught the African that work is degrading or evil. His universal attachment to the land removes the threat of want ... if he is prepared to live at a low level of subsistence. Simplicity of needs, together with the shortage of consumer goods, robs money wages of their values ... Nobody can deny the ugly aspects of mass unemployment of natives in plantations, industry and mines". However the African population of 160 millions 'by greater effort ... can produce surpluses which will raise its own standards and Minister to the need of others (emphasis added) ... The problem therefore is how to improve the output of the individual native ... First and foremost he must be made physically fitter ... by means of improved diet ... It involves also improved health services ... Provision of consumer goods as incentives to labour is important ...".  

Much soul-searching also went on in Southern Rhodesia, as the official doctrine of segregation was abandoned in favour of partnership - as it was argued that a system of segregation made with respect to consumer goods a naturally inelastic demand even more inelastic. And a leading economist advised:

"... The economic circumstances in which the objectives of settler supremacy can most easily be pursued no longer prevail. Adjustments in the method of economic expansion or in the social structure itself may thus be required if the growth of the money economy is to be sustained".
The Second World War was important for the profound structural shifts it brought about in the economy, and society for the two decades after 1945. Shortages of consumer goods during the war had brought about some import substitution. Throughout the war years, and post-war period all sectors of industry grew in real terms i.e. faster than the rate of inflation. Between 1945 and 1957, the value of manufacturing output rose steadily until it was challenging agriculture. And in what has been referred to as the second wave of colonisation, the number of settlers increased from 82 386 in 1946 to 135 996 in 1951.

But by 1957, the pace had slowed down, and by 1963 African employment was growing in the whole economy by only 1.1 per cent per year, and in manufacturing by only 0.9 per cent - and in fact, during the last three years of Federation i.e. 1960 - 1963, Africans in Southern Rhodesia lost nearly a third of the jobs created since 1954; and between the years 1960 - 65, African employment actually declined.

What had happened to the engine of growth? Explanations have ranged from the 'insufficiency' of demand, to the lack of confidence in the late years of the decade because of political uncertainty, but by far the most plausible explanation is that given by Ramsay who argued that from the last half of the 1950s, the manufacturing sector had moved into a position of excess capacity. And that variations in the capital/labour ratio rather than reflecting changes in the production function, signified instead shifts in the levels of capacity utilisation:

"The degree of utilisation or employment of capital is significant. Increasing spare capacity is quite consistent with a rising capital:labour ratio for this is likely to happen when demand falls relative to productive potential. As demand increases the capital:labour ratio will fall as new employees are used to work with the previously idle or under-employed capital goods. No shift in the production function will take place unless an irreversible change occurs in output per head".

Thus, the high net investment levels of the 1940s and early 1950s had 'irreversibly' changed the production function to a more capital intensive one, and the rising capital-labour ratio's beginning in the late 1950s were not an indicator of capital intensity in production but rather symptomatic of excess capacity. The capital stock of the manufacturing sector had in fact been designed for a level of demand that did not materialise, so that changes
in employment did not accompany changes in net output - and by running machines for more hours without changing the number of employees, manufacturers were able to satisfy the increases in demand that occurred in the late 1950s and 1960s without having to hire more labour.

The explanation for the excess capacity was of course rooted in the euphoria characterising the years after the Second World War, in that there was the 'high promise' that 'the then Southern Rhodesia would be the industrial centre for expanding markets within the Federation and supply goods also to other African countries.\textsuperscript{101}

This euphoria was to be fuelled by developments in agriculture after the Second World War - which all combined to produce ill-conceived strategies to supply labour to industry and attempts to improve 'human capital' and manipulate internal demand.

And until the late 1950s when the euphoria had somewhat dissipated, the settler state conceived a development strategy for agriculture in which the white farmers would provide the foreign exchange to fuel industrialisation, while the peasant sector would see to the production of food for the urban working class. Whereas before the Second World War - wages were inclusive of food rations - (and remained so for mine, agriculture; and domestic workers) - the labour force for the bourgeoning manufacturing industry, besides in some instances being 'fed' at lunchtime, purchased their own food, and there was an attempt at stabilising it, through State subsidisation of transport and housing.

In the second wave of settler colonisation demobilised British soldiers were settled on either private or Crown land, under scheme No. I. of the Land Settlement Act of 1944, where they took to tobacco farming. Tobacco enjoyed considerable comparative advantage over maize, being less bulky to transport. One economist enthused about the "golden leaf" and its implications for the economy of Southern Rhodesia:

"A favourable combination of circumstances such as faces the tobacco industry of Southern Rhodesia occurs infrequently in the history of most countries. Growing more food in place of tobacco would probably mean a damping down of the rates of capital accumulation and economic development. For growth and development tobacco is the staple crop of Southern Rhodesia; tobacco is the dynamic staple and maize is only the static staple of the economy. Even if self-sufficiency in maize were reached in the better seasons, imports would still be required during bad seasons.\textsuperscript{102}"
The proportion of national income generated in agriculture only exceeded that produced in mining in the period after 1946. After 1946, the output of tobacco expanded rapidly under the stimulus of high and rising prices. European agriculture replaced mining as the most important source of income. The change was reflected in the balance of payments in 1947, when for the first time agricultural exports (mainly tobacco) exceeded mineral exports in value. Up to 1939, gold mining had been the major industry, but the war years had seen its profitability eroded by rising costs and the shortage of imported inputs. The low level of imports had led to a favourable balance of payments, and external assets reached record levels. Further the dollar shortage in the 1940s - the demand for and price of Southern Rhodesia tobacco rose to record levels and output increased. It was only in 1953, with the ending of the inflationary boom that agriculture was surpassed by manufacturing.

Impressive, though these developments might have looked on paper, they were largely illusory - and the growth had taken place in an enclave fashion with few if any linkages with industry. According to R.W.M. Johnson, the essential conditions for growth as set out by Colin Clarke - still yet had to be met in Southern Rhodesia i.e. increases in the productivity of agriculture had to take place before or combined with an advance in industrial employment and capacity in the absence of cheap food imports. And as we have seen above this was not happening. Further, Johnson argued, an expanding economy could have one or two effects on the agricultural sectors: growth and productivity of the industrial sector might lead to a withering away of agriculture and substitution of its food products by imports. Alternatively, the lack of suitable cheap food imports could generate a competition for resources against the developing industrial sector. None of this had taken place in the Zimbabwe of the 1950s. Johnson went on to stress that even the Rostovian preconditions of take-off had yet to be met by the 1960s - as the very high ratios of capital formation had not been internally generated and were an effort to compensate for the lack of these 'pre-conditions' of take-off.

European agriculture did not therefore occupy so prominent a position as it claimed. From the failure of the tobacco industry to find a market before the war - and the declining employment levels from 1921 - 1941 - there was the temptation to see in this trend the classical decline of agriculture leading to industrialisation.
The growth of an economically viable export industry since World War II had had the effect of maintaining employment in agriculture very much higher than could be met by the country's food supplies, and it had been able to attract indigenous labour only because of the recurrent droughts up to 1951, and had to increasingly rely on foreign migrant labour.

In the period under review the settler state sought to supply the cheap food through a combination of marketing and pricing strategies to provide the incentive to African farmers to produce food, and thorough going land reform, in the guise of the Land Husbandry Act.

The need to rationalise the marketing system in accordance with the needs of the emerging industrial sector of the economy, soon became apparent after the War. From 1947 to 1953, the country found itself importing its food. While food shortages were being reported in South and South-East, in some areas 1948 was considered a record for crop production - and in some areas the surplus of small grains which were also being imported, were so abundant that the crop had to be left on the fields. In order to provide the incentive for the production of small grains, the Grain Marketing Act was passed in 1950. Its main purpose was to stabilise producer prices, provide a guaranteed market and provide for an efficient marketing service, safeguard supplies, and ensure equitable distribution under scarcity conditions. The pricing systems then in existence were taken over along with the administrative functions associated with the African maize crop. The three small grain crops of sorghum, rapoko and munga were to be controlled through the trade agents in the same way as maize. Between 1949 and 1953, when records were being broken for tobacco production, and there was a boom in agricultural exports, 22% of the country's marketed maize was being imported. And though maize then accounted for 50% of all African sales, it only represented 38% of production from settler farmers who were then cashing in on the tobacco bonanza. To further encourage maize production by African producers, regional pricing was introduced in the Grain Marketing Act of 1957 which set up a Transport Equalisation Fund.

A system of subsidies also operated from 1948 to 1956. The subsidy was required to absorb the high cost of imported maize, and was really a consumer subsidy. The producer price was set very little under the local selling price - and very little benefit accrued to African producers whom it was meant to benefit. In times when maize had to be imported, the
subsidy kept the urban cost of living down through price control on maize meal, but in years of exportable surplus, the urban cost of living became excessively high.\footnote{108}

After the 1949 devaluation, which led to an increase in maize prices - there was a rise in amount of maize marketed - but the experts in the Native Department who had been closely observing the rise in lobola prices, calculated that too much attachment by the 'natives' to their banks i.e. the cattle in such circumstances would lead to a reduction of marketed surpluses, and they proceeded to intensify destocking.

But the central and crucial strategy of transforming African peasants in Zimbabwe from providers of labour to a yeo-man class able to supply the cheap food to fuel industrialisation was in the Land Husbandry Act. This had been framed in the belief that population growth in the rural areas was slower than that in the territory as a whole and also in the belief that permanent urban migration was desirable and was to be encouraged. At the rural end - the system of land registration and individual tenure, would halt the ecological collapse of the reserves by reducing the land-carrying capacity. From the immediate post-war years and indeed up to the late fifties, policymakers assumed that opportunities for urban employment would go on expanding - providing the 'pull' out of the system, while in the enforcement of individual tenure would provide the 'push'.\footnote{109}

\textit{Pari passu} with these developments was an attempt after 1945 to give teeth to the Land Apportionment Act, by securing the placement of different groups in their appropriate land categories. In 1948, a Committee under Max Danziger, recommended the transfer of 2 million acres from the Native Purchase Area to the reserves, in order to absorb squatters on white farm land and native purchase area; roughly 5 600 000 acres was added to the reserves from the unassigned area.\footnote{110}

Thus an intensive and extensive resettlement exercise was begun in 1950. In round figures from 1936 up to 1960, meant the compulsory removal of some 113 000 Africans from the various other categories of land to the reserves. This number was far from the full complement for whom land had to be found. The implicit intention of the Land Husbandry Act had been that this landless class would be industrialised but as we have seen, industrialisation was still a pipe dream. Not only were there families to be resettled from European and other categories of land but also the residue of landless
persons who were accumulating as a result of the Land Husbandry Scheme. In 1960, it was estimated that of families for whom land had to be found there were no less than 111,261 families. By comparison, the number of individuals actually resettled between 1936 and 1959, namely 113,000 men, women and children, represented but a fraction.\footnote{111}

In the expectation of an industrial boom, and with the emergence of a labour force for whom food rations were not inclusive of wages, much attention became focused on food habits, in an attempt to improve the colony's human capital, and the Ministry of Health engaged in extensive publicity campaigns to teach employers of labour nutrition science.

The poor physical condition of the average Zimbabwean had brought itself to the notice of the settlers, when during recruitment for the imperial war effort - of those who volunteered, perhaps as many as 50% were rejected as being unfit or unlikely to become efficient.\footnote{112}

And medical evidence submitted to the Howman Committee of 1942 was 'almost unanimous in stating that malnutrition is seriously prevalent everywhere in the urban areas, particularly among the factory (laborer class)\footnote{113}. In addition to malnutrition, intestinal diseases and other infestations such as bilharzia and hookworm were seriously prevalent. And Chemists who specialised in the African trade 'found that 'tonics', 'fattening mixtures' and 'pick-me-ups' were a major line and the Bantu Mirror carried expensive advertisements whose theme was "prevent that tired feeling".\footnote{114}

A Nutrition Council was set up in 1948, and amongst some of its initial observations were:

"The traditional habits of feeding in the kraal are clearly unsuitable for organised labour in industry and agriculture in the European areas. The high incidence of dietetic deficiency diseases among kraal natives makes it abundantly clear that their feeding habits are seriously at fault".\footnote{115}

But of course there was no 'traditional' diet to talk of by the 1950s - except in the sense of food habits adopted under the impact of land alienation. The Report of the Nutrition Council for 1958 noted that the incidence of kwashiorkor was rising particularly in rural areas where families had been resettled.
"Generally these have been areas where a sudden change has taken place in the customary methods of food production. This has arisen through resettlement of a community on a different type of soil in one case and in other cases, through prohibition of gardens on pasture land and destocking of cattle."

The Nutrition Council’s dietary survey in the Chikwaka Reserve near Harare in 1953 had reported poor diet in all the villages surveyed. Meat was in very short supply, and was only regarded as an 'occasional luxury'. Vegetables were practically non-existent as few of the kraals had gardens, mainly due to the fact that cultivation was not allowed within 70 yards of rivers, and villagers were not prepared to carry water that far. Further few of the kraals had wells and an inspection had shown that 'from the nutrition aspect alone, the provision of more wells' would have been most advisable. Some beans, groundnuts and soya beans were being grown, but relishes were not prepared more than once a week in most areas. Cow's milk was found to be 'non-existent and the diet depended almost entirely on mealie-meal (sadza). While other grains were grown, because of the miniscule acreage devoted to them, the only variety in the diet they were able to bring about was in the form of beer. The only vegetable mentioned was pumpkin leaves - but these were very seasonal. The common practice was 'to have an early morning meal of bread and tea, and these appeared to be the most important purchased foods, with the exception of the inevitable coca-cola'.

At the work place, however, it was reported that 'perhaps the most difficult article of food to persuade Natives to eat is green vegetables. In this they differ little from European children' and it was recommended that:

"Employers of small labour forces whose employees refuse other fresh vegetables, are therefore advised to provide only sweet potatoes, tomatoes, pumpkin, onion and leeks ... and for employers of large labour forces, ... if there is then any evidence of waste of vegetables, the best (and only) procedure is to mince all meat and vegetables and to serve these together".

On a more 'scientific note' the Nutrition Council suggested the introduction of tortilla and tamale - but these met with consumer resistance because of their yellow colour and was associated with the 'Kenya' maize that the country had been importing. Suggestions to have the millers produce maize meal enriched with calcium, riboflavin and niacin did not go very far - and more - over fortification was criticised on the grounds that it corrected only a few of the known deficiencies, but ignored others such as protein deficiency and vitamins of the B complex other than riboflavin and niacin. Attempts to switch
to sorghum and millet had also not met such success - and attempts to encourage their cultivation in 1947 had led to a glut.121

As there was to be no radical change in productive relations and social structure which in the final analysis have conditioned hunger in Zimbabwe for the next fifteen years, and there was to be even more intensive exploitation, any change in the food habits of the 1950s was for the worse. The intensification of productive relations giving rise to this situation form the subject of the next section of the paper, which surveys the period 1965 - 1980.
THE APOTHEOSIS OF THE 'LOGIC' OF CAPITALISM IN
COLONIAL ZIMBABWE, THE PENETRATION OF THE WAGE - FOODS SECTOR
BY TRANSNATIONAL CAPITAL -: 1965 - 1980

In earlier sections of the paper, we have attempted to argue that chronologically, the origins of Zimbabwe's present 'hunger' problem (to those who recognise it as such) are to be found in the period 1930 - 1945. This was not so much so because the Land Apportionment Act was placed in the Statute Books of Southern Rhodesia. But rather that during the global crisis set off by the Great Depression, capitalist social relations of production, specific to the settler political economy were instituted. These were to condition the whole issue of food production and consumption; the strategy of the settler state was more in the way of 'crisis' management than of a planned food policy. And the consequences of this for the application of labour power to the production of its own sustenance and reproduction, and the capitalist institutions that emerged during that period provide the crucial connection between the problems of low production growth in the communal areas and mass malnutrition.

The period 1965 - 1980 is particularly relevant for the understanding of some of the dynamics of hunger in Zimbabwe. Analyses which have sought conceptually to separate the state from capital in colonial Zimbabwe have only managed to bring out a 'statist' explanation for the food crisis - where the crisis which Zimbabwe has faced in the year 1981/2/3 - have 'been seen primarily in the adoption of 'wrong policies' and ultimately in the nature and structure of the bureaucracy. Economistic analyses have differed little from this by seeking explanations of the food crisis in the structure and workings of the labour reserve economy - whose workings they interpreted only from the supply side of the equation. And therefore tend to see the solution to the present crisis, in terms of altering the supply functions of the labour reserve economy. Their historical explanation for the crisis has therefore, mechanistically coagulated all the supply functions of capital into the concept of 'fractions' of capital. Therefore in the case of Zimbabwe, attempts to understand the nature of the colonial state have delved into finely tuned distinctions of 'metropolitan' capital and 'setler' capital. Bayliss has however pointed out that it is:
"Not so much whether capital is foreign or settler, or even its sectoral location that determines its orientation to local economic expansion as the nature of its markets and the manner in which its specific production dynamics govern its relations to labour". (Emphasis not in Text)

In colonial Zimbabwe, particularly after the break-up of the Central African Federation the crucial dilemma faced by capital was how to raise the productivity of useful labour that produces the means of subsistence (or the inputs into the production). And no matter which particular combination constituted the settler elected government this came down to strategies by capital to reduce the value of the commodities the working class was receiving in order to reproduce itself.

This emerges from a closer examination of the marketing and pricing policies during the period. Though after the imposition of trade sanctions one of the main objectives of the Smith regime was to conserve and earn foreign currency, the logic historically and materially imposed by the development of capitalism made the 'success' of the whole socio-economic system dependent on the successful pursuance of a cheap food policy.

And it is worthwhile to explore theoretically how this can be achieved. According to Crouch and de Janvry:

"The need for cheap wage foods can ... (then) be met in either one of two ways - imports or stimulation of capitalist production. Either of these two solutions is contradictory to other needs of the fractions of the capitalist class which control the state. Food imports compete with machinery and raw material imports which are necessary for the import substitution sector. Also, the only way to increase food imports, at least at certain stages of development is by increasing agro-exports. But this competes with local food production and requires the stimulation of the agro-export sector which implies shifting state resources to the producers of export crops (cheap credit) for example and therefore away from the import substitution sector. The stimulation of local production requires satisfying the economic demands of the wage - food capitalist group for rent - yielding high prices. This diminishes industrial capital's expansion by forcing wages up to or transferring rent via cheap inputs as in the agro-export sector, which also goes against the interests of the industrial sector".

As we have seen in the previous section, the settler state attempted to find its way out of this dilemma after the 1945 war by first, importing maize (from
1947 - 53) hoping that the costs would be offset by earnings accruing from the tobacco bonanza. But the flinty yellow grain which made up the consignments, met with stiff consumer resistance. In tandem with the importation of maize, food production in the reserves and African Purchase Areas was encouraged by a subsidy from 1953 to 1956, and the Grain Marketing Act of 1950, repealed policies which had provided a disincentive for food production, such as the Maize Control Act of 1934. But there was little conflict with the leading agro-export sector, - the tobacco industry, and indeed there had by then developed a measure of complementarity between the maize and tobacco industries: maize was, both a complement and substitute for Virginia tobacco. And generally, where tobacco prices have fallen, settler capitalist farmers substituted maize for tobacco. And as the area planted to tobacco has declined that planted to maize has increased. And to maintain gross turn-over the acreage planted to maize has had to be increased. Thus it was not surprising that after the downturn in tobacco prices after 1953, Southern Rhodesia actually exported maize, until 1963 though just a year previously it was importing it. The price for exported maize remained consistently below the producer prices for local requirements. The gross returns on exports were only between $2 and $6 per tonne higher than the average price paid to producers. Imported maize in 1963 and 1964 was actually cheaper than locally produced maize. And in 1965 and 1966, though it was not cheaper than local maize, the cost of imported maize was still competitive.

Maize yields and area planted continued to increase after 1966 - partly because of the imposition of sanctions, and the fall in tobacco prices; but despite declining real prices for maize, there was a surplus produced for export in 1968. The evolving logic for the pricing of maize was that when it was imported its internal price was generally suppressed through a subsidy (1947 - 53), its production by capitalists was discouraged and it was relegated to favourably located peasants in the African Purchase Areas and Master Farmers, who produced using labour-intensive methods often for home or local consumption. However, the availability of maize for import was no guarantee that it would be imported. And as capitalists were already producing the crop on tobacco farms and on cattle ranches, they had enough leverage in the state apparatus to prevent imports. They nevertheless were prepared to accept low prices because of direct and indirect state subsidies. Given this logic the premium on maize in colonial Zimbabwe, despite declining terms of trade, was no act of irrationality as has been suggested in some quarters:
"It has been argued that the declining producer prices for maize were a result of government's attempts to cut down subsidy costs in support of a cheap food policy. Maize, however, is a low-value, high-bulk commodity and with the increasing demands on the nation’s transport facilities, the opportunity costs of exporting maize were high in terms of foreign currency earnings foregone. Furthermore in the period reviewed, maize was usually exported at a net loss. It is suggested therefore that whilst the country remained self-sufficient and whilst lucrative export markets were unavailable, there was no justification for a premium on maize."

The premium on maize was dictated by the fact that in a sense it was preferentially produced by capitalists who after violently seizing the land at the turn of the century had become ‘efficient’, and through the years had added to the stock through irrigation projects, nitrogenous fertilisers etc. This efficiency and control of resources had been translated into increasing production of maize at stable or decreasing prices. Even more fundamentally, maize had an absolute premium because its market was linked to that for livestock - feeds to that for wage foods. This point was driven home by the Southern Rhodesian Director of Census in 1939 when he wrote on the future of agriculture at that time:

"There is little doubt that during the next decade increasing attention will be paid to securing a balanced diet for the Africans. This is important if only on the grounds of raising his productivity. The challenge facing the European farmer is that of producing maize at a price which will enable the increased purchasing power of the African market to be spent on livestock products". (Emphasis Added)

As part of the ‘cheap food policy’, the state kept the local selling price of maize static, from 1939 to 1972. This did not as would have been expected conflict with the interests of beef producers then emerging as an important export sector. There was a progressive concentration in cattle numbers in Mashonaland rather than Matabeleland after 1965. From September to December 1970, bookings at the Bulawayo abattoir increased by 42 per cent, whereas for Salisbury abattoir they increased by 121 per cent. Since this involved a shift from transhumant pastures, pen-feeding assumed prime importance. The profitability of the beef industry was determined predominantly by the cost of feeder cattle, the cost of feed grains, and the price of grain - fed cattle. Maize forms the major component of stockfeeds and thus pen-feeding of animals is governed by the maize-beef ratio.

The movements of the Maize/Beef Ratio for the years 1971 - 1972 are shown in the table below.
MOVEMENTS OF THE MAIZE/BEEF PRICE RATIO

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MAIZE PRICE ($/+)</th>
<th>BEEF PRICE (c/kg)</th>
<th>Maize : Beef RATIO</th>
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<tr>
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<td>36,76</td>
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<td>1 : 13,1</td>
</tr>
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<td>43,52</td>
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<td>1 : 13,1</td>
</tr>
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<tr>
<td>1981</td>
<td>120,00</td>
<td>105,00</td>
<td>1 : 8,8</td>
</tr>
<tr>
<td>1982</td>
<td>120,00</td>
<td>128,00</td>
<td>1 : 10,7</td>
</tr>
</tbody>
</table>

Source: A.G. Ingram Lock, 'Commercial Sector Marketing in Zimbabwe'

Despite sanctions, the beef export industry continued to prosper. As a basis for comparison, it can be noted that pre-U.D.I., in 1964 export of all meats (fresh, frozen and chilled) from Rhodesia totalled 17,192 tonnes at a value of $5,984,000. In 1966, exports of frozen and chilled beef alone totalled 28,376 tonnes at a value of $11,458,000, and by 1975 these figures had risen to 40,752 tonnes and $24,247,000 respectively. In money terms the value of Rhodesia's beef more than doubled during the first ten years of U.D.I. The producer price for slaughter cattle, which had been set at 32.88 c per kg in 1966, remained relatively stable during the period until the 1970s; by 1976 it had reached 56.62 c per kg. It was not until the intensification of the liberation war after 1977 that deep cuts were made into the profitability of the beef industry. 130

Beef production was run under a state monopoly by the Cold Storage Commission, and some export markets yielded a net return to the Commission far in excess of producer prices but they could not absorb the country's total production and other markets...
'notably' the 'consumers' who had to be satisfied at returns below the 'net ex-works realisation of the bone - in beef producer prices'. This of course was another aspect of the cheap food policy that underlined pricing and marketing policies.

The state between 1965 and 1980 pursued a cheap food policy which managed to minimise competition between local food production and the agro-export sector, through active product and marketing policies. Through indirect consumer subsidies, the stimulation of food production was able to satisfy the economic demands of the wage food capitalist group for rent - yielding high prices, by keeping wage levels depressed throughout the period. In the absence of an internal capital goods or industry, meant that the agro-export sector was substituted (by earning the currency with which machinery was bought). This meant that increases in productive investment/gross capital formation in the first ten years after U.D.I. may have led to further exports - but not to an internal expansion of the means of production. From 1967 - 1976 - a quarter of the gross fixed capital for the country was accounted for by the manufacturing sector.

Thus while the economy grew rapidly at an average real rate of growth of 7.5 per cent from 1965 to 1974, the relatively high growth rates can be attributed to the utilisation of excess capacity. Ramsay has argued that the high net investment levels of the forties and fifties had 'irreversibly' changed the production function to a more capital-intensive one - and that rising capital labour ratios beginning in the late 1950s did not reflect more capital-intensive development but rather widespread excess capacity. So excessive was manufacturing capacity by the end of Federation, that the expansion in manufacturing output of the late 1960s and 1970s occurred despite no net new investment since the late 1950s. The import substitution that did take place was mainly in the direction of luxury goods, such as pet foods, breakfast cereals, cube sugar etc, for the consumption of high-income groups. During the period on average it has been estimated that low-income families spent only 45 per cent of their expenditure on manufactured foods products, of which nine tenths was spent on basic items such as bread, flour, milk and vegetable oils. More significantly, during the period 1965 - 1980, there was an inflow of foreign, mainly South African capital which strengthened its hold on beverages, chemicals, non-metallic mineral products, and made further inroads into food manufacturing and retailing. The food processing industry, by 1980, contributed nearly 25 per cent of the output of the manufacturing sector of the economy. In
1970, and 1979 the industry was the second largest contributor after mining in value added.\textsuperscript{136}

The only food sector not penetrated by agro-export transnational capital was the dairy industry which in the period 1965 - 1974 of all areas of agricultural production sustained the lowest levels of profitability. Dairy products were required for internal consumption only and Rhodesia could not compete with subsidised dairy products elsewhere. The period 1966-1975 saw a drastic fall in both imports and exports. Self-sufficiency was reached in 1969, and thereafter the industry was faced with the problems of overproduction. But in pursuance of the cheap food policy, there were no hitches in consumer prices as a means of ensuring producers profitability, nor was there any subsidisation. Throughout the period, state control through the Dairy Marketing Board gradually absorbed other dairy trading agencies so that the Board's intake represented over 75 per cent of national milk production.\textsuperscript{137}

The penetration of transnational capital into the wage foods sector was not only promoted by the cheap food policy, but also by the settler state's strategy of using capitalist irrigated agriculture to save foreign exchange by producing beef, sugar, cotton, citrus and wheat.

An essential part of the diversification away from tobacco after 1965 was the heavy investment in water resources development in plantations in the south-eastern Lowveld owned by transnational corporations. The profitability of lowveld agriculture depended on cheap labour, and underpriced irrigation water provided by the state subsidies for infrastructure development; the state also guaranteed secure markets. For its part foreign capital supplied technology and marketing to ensure the success of the 'blooming' desert.\textsuperscript{138}

In order to encourage wheat production, after independence, the state introduced high wheat prices after 1965. It was initially grown in the lowveld, encouraged by the Sabi-Limpopo Authority, and by 1971, despite a marked increase in demand, the country was producing 75% of its local requirements. After 1974/1975 the high prices offered for wheat encouraged the expansion of irrigation in the highveld - in Mashonaland and by 1979, Mashonaland was producing 63% of the country's wheat. Agricultural research from 1954 - 1969 into suitable strains of irrigated winter wheat
prepared the ground for the massive capital investment; efficient production of wheat progressively became more dependent on market-purchased inputs and credit from the Agricultural Finance Corporation. Wheat indeed, for Zimbabwe, was the first major annual crop produced, that required a high fixed investment.\textsuperscript{139}

Thus, in terms of food supplies colonial Zimbabwe had reached 'self-sufficiency' by 1979, despite the exogenous effects of the oil crisis of 1973 which sent the costs of such inputs as fertilisers, chemicals rocketing. In 1979, there were 542 000 ha planted in the 'commercial' cropping area, and unprocessed crop exports accounted for 18\% of total exports. In 1978, food imports accounted for only 1\% of the total import bill, though this increased to 2\% in 1979, when as a result of the intensification of the armed struggle, declining acreages, drought, some maize had to be imported.\textsuperscript{140}

Further from about 1976, the trading accounts of all controlled food products were being run at a loss met from state revenues.\textsuperscript{141} Food self-sufficiency cannot however be defined in a vacuum, but in relation to the values and needs of a particular society. And for the reproduction of capital and the needs of the settler political economy, food self-sufficiency was achieved in the years 1965-80. Similarly, given the mode of production the heavy farm indebtedness cannot be cited as evidence of the 'inefficiency' of white commercial agricultural production, unless one adopts a subjectivist definition of efficiency - which separates the settler 'state' from capital - and which pays little attention to the various trade-offs in the reproduction of the settler political economy. In a market economy, the only relevant test of efficiency is the farm's ability to survive as a producer of commodities while being able to 'pay itself' a return equal to that earned in other sectors - and it is of minor importance whether this was aided by the state. The 'inefficiency' of both capitalist agriculture and the state - lies more at the level of 'social' inefficiency - i.e. the social relations of production - and not some economistic determinants.

The very 'efficiency' of capitalist crop production, and its control of resources which were translated into increasing production of food crops at stable or decreasing prices - meant that the peasant's self-sufficiency was undermined as his range of possible activities was reduced as technological change penetrated the countryside. As a result, per capita production of peasant crops declined in absolute terms. And the level of food self-sufficiency of peasant households has in Zimbabwe had little to do with
how much maize he has been able to produce for his own consumption - but
rather how much he has been able to realise from sales to ensure a reasonable
diet. And historical evidence from changes in diet shows that this has
been the case since the 1930s. The whole issue, if viewed from an
idealistic romantic anti-capitalist view, wherein the fact that peasant
households have been locked into the production of commodities they do
not consume, is meant to mean that both food production and food consumption
are adversely affected and that the capacity for household autonomy and
self-sufficiency is undermined. Nutritional deprivation does not automatically
follow from the commercialisation of production and consumption as more
commercialised and capitalised agriculture provides for more direct
food consumption. The lack of ‘food self-sufficiency’ has therefore
more to do with the distribution of the social product of society.

From the level of the household, self-sufficiency can be viewed from two
angles; according to Cowen.

i) A self-sufficiency household is that one that meets food requirements
from the land to which the household is attached particularly when
requirements are set out in nutritional terms as some necessary
standard of consumption for productive work ... Non-food
requirements are also met separately and outside exchange relations,
when the household produces a surplus - a level of output greater than its
food requirements. This gives rise to the ideal of subsistence
agriculture, where there is no distinction between direct consumption,
as the object of necessary food production (subsistence agriculture)
and superfluous consumption as the object of surplus production
(commercial agriculture).

ii) The second and more realistic meaning of self-sufficiency is that the
household reproduces 'its subsistence whether in a commercial form or
not on the basis of family enterprise and not through the sale of
labour power which is necessarily a commercial activity. Therefore
associating 'peasant' or 'communal' with direct consumption and
'white commercial farmer' with commercialisation fails to define self-
sufficiency in accordance with differential values that enter into the
production and consumption of food.

And for the period under review i.e. 1965 - 1980 - when the production of
wage foods was almost completely commercialised, it is therefore not
necessary to concentrate primarily on access to land, but to wider productive processes which determine the marked disparity between wages and profit.

If a 'socio-economic analysis' of the hunger problem in Zimbabwe is not to be just a mere description of the signs and distribution of malnutrition and undernutrition, it is necessary to go from the abstract to the concrete.

In previous sections of this paper we argued that by the end of the 1920s the precolonial staple of sorghum and millets was replaced by maize - which has sometimes been seen as a crop symbolical of the migrant labour economy. And for various nutritional experts, many arguing from the human capital point of view in the 1950s pointed out its shortcomings as a staple diet in terms of its deficiencies in certain vital micronutrients. Simultaneously there was a concerted effort until the 1960s through extension programmes, provision of fertilisers, improved seed hybrids to peasant farmers etc - which improved yields. But with the decline in tobacco prices, capitalist farmers 'switched' back to maize. Peasant producers who were producing for consumption and for exchange, found themselves producing maize in unsuitable ecological conditions, requiring more inputs in the form of herbicides, fertilisers and above all labour for weeding and cultivation - and at the end of the day, producing maize for sale and buying back the processed product has become more convenient and cheaper. With the growth of wheat cultivation, backwards and forwardly linked to the food processing industry, operating within the confines of the state's cheap food policy - a more convenient diet for the masses in the form of bread emerged in the U.D.I. era.

The fact that bread has become or is becoming a staple diet is often mystified by the commodity fetishism that presently surrounds maize, which interprets overproduction by 'peasants' as proof that peasants have always been rational in any case, but that it was the skewed pattern of land distribution, or disincentives in marketing and pricing which made them resistant to the market logic.

In order to understand the dynamics of hunger in present day Zimbabwe, we however need in a sense to 'dive down' beneath the appearance of exchange and production techniques to uncover the nature of capitalist social relations, in terms of which the visible phenomena of exchange can be understood. It is also necessary to reject the methodology subjective preference theories which gives primacy to consumption, also that of cost of production theorists which gives primacy to production. For a dialectical analysis of
the social and economic aspects of hunger can only emerge in the methodology of the abstract theory of value, where production and consumption are seen as interdependent so that primacy cannot be afforded to one sphere alone. As the whole question of self-sufficiency and food habits is really about value:

"It is not then the supply and demand that determines value but rather the labour time required for production. Those products that take longer to produce will have a higher value, this higher value will appear in a higher price of production, and if supply and demand paralyse each other, this price of production will be the same as the market price".

It is within such a perspective we intend to view the trends in peasant production and material culture from 1965 - 1980 in Zimbabwe.

Firstly in respect to pricing and marketing policies adopted by the state after 1965 - maize became an inconvenient crop. The state-owned Grain Marketing Board was charged with the responsibility of determining the shortage or otherwise of controlled products of which the staple maize was one, through the preparation of harvest estimates.

For the years 1963/1964, Zimbabwe was importing maize, and in 1965, there were fears of drought, and for the 1965/66 season, based on its estimates, the Board announced that they would be unable to meet the local demand from locally produced supplies and yellow maize had to be imported. But by the end of the marketing season the Board found itself with a surplus because of late deliveries and there was congestion at its delivery points. As there was no government subsidy payable for locally produced maize, the losses incurred through the importation of yellow maize were met by the government and the local selling price remained unchanged. Characteristically, the maize lobby in the state began to howl for protection against inefficient African producers. In 1966 the Grain Marketing Act was passed. It aimed at controlling 'illegal' sales of maize by Africans in urban areas. The country was divided into two areas for the purposes of marketing maize. Growers in Areá A (White Commercial Areas) could only sell their produce within these areas to the Grain Marketing Board whereas a 'B' area producer (Reserves/Communal Areas) could trade without restriction in his own area, but was compelled to sell to the Grain Marketing Board if his product was to be moved into an A area. From 1968 until 1973 despite dealing terms of trade 'white commercial' production of maize continued to rise reaching a peak in 1972 with a record crop of 1.7 million tonnes.
While this was happening in the so-called 'commercial sector', data on African sales at the beginning of the 1970s revealed a 'small safety margin of food supplies in the surplus of grains over internal requirements - within a surplus in the good years of only 8 per cent, while in the bad years it was as low as 1,5 per cent. While commercial farmers were achieving records in production, H. Dunlop, an agricultural economist at the local University was alarmed enough to write concerning trends in the 'tribal trust lands'.

"The safety margin of food in the Tribal Trust Lands has fallen to a critical level and, creates a real threat of famine conditions in the near future". (Emphasis added)

Dunlop went on to argue that this decline was a long-term trend. That from 1957 to 1972, the value of cash sales from the reserves remained static at around $8 million per annum notwithstanding a two-fold increase in rural population. And the increases in yield were not as a result of increased productivity due to some magical input like the SR52 maize, but rather due to the extension of cultivation into grazing lands and marginal areas.

In the 1974/1975 season, however, sales to the Grain Marketing Board again exceeded estimates - this time by 29%. The Agricultural Marketing Authority reported:

"The subsequent marketing season of 1974/75 saw the Authorities' marketing agencies handling the largest sales ever made by Africans of those products for which the Authority is responsible. Recent years and particularly 1972 and 1973, have been notable for the increased value of sales made by Africans but 1974 topped these by a considerable margin".

1974 of course was the year of the world economic recession, which put paid to what till then had been considered the success of U.D.I. Between 1975 and 1976, the economy declined at a rate of 1,4 per cent and further declines of 7,4 per cent and 3,1 per cent were recorded respectively, in 1977 and 1978. The gross domestic product between 1975 and 1978, in real terms fell by 12,1% and in per capita terms, the decline was over 20% - meaning that living standards were cut by a fifth. More significantly, the total number of workers in formal wage employment which had reached a peak of
1 055 000 in 1975 declined continuously between 1976 and 1979; it fell by 65 000 or 6.2% of the peak level in 1975. Without any research having been done into the impact of these developments on the communal areas it can only be left at the level of conjecture, whether the declines in levels of employment had the effect of increasing the labour available to the African rural household producing the 'record figures and the largest sales' made by Africans.

A significant trend after 1974, was the declining profitability of maize and the rise in production of wheat. Following the rise in commodity prices triggered off by the rise in world prices in 1974, the Agricultural Marketing Authority paid record producer prices, but these were in any offset by the rise in imported input costs. With the fallback in prices in 1975, there was a downward revision of producer prices. A maize price agreement which had guaranteed government support for a minimum producer price was not reviewed and the state resorted to alternative means of assisting maize producers - by increasing the local selling price which until the end of the 1975 season had remained static for close to 15 years. But the rebates on maize used for stockfeeds were retained. There were further declines in commodity prices for maize during the second quarter of 1977, with a slight recovery in 1978. The state consistently refused to offer a higher pre-planting price to the chagrin of the maize producers.

Due to the disincentives of the pricing system, and the effects of the liberation war on farming operations there was a decline in the tonnage delivered to the Grain Marketing Boards in the 1974/75 season, 1 337 million tonnes was delivered. This had fallen to 877 000 tonnes in the 1978/79 seasons, which represented a decline of some 34 per cent. And while the country was barely meeting its requirements for maize, irrigated winter wheat exceeded domestic requirements by over 40 per cent in 1978. The shift from maize to wheat, meant that maize production now became relegated more and more to the communal areas - where the technology for its production was so labour-intensive and the only way the communal producer could gain a competitive edge of the capitalist farmer, was by over-exploiting his own family. Survival for the African rural population in such circumstances depended on the high cost of or unavailability of imported inputs (chemicals, fuel, fertilisers etc) for the highly capitalised settler maize producers, and on their poverty. Wheat, which was increasingly becoming an essential component of wage foods, became the most 'dynamic capitalist crop'.
Population pressure and widespread land degradation became major problems in the communal areas. Estimates indicate that over the period 1961 to 1977, the number of communal area cultivators increased by 88 per cent from 359,000 to 675,000. The total area under cultivation increased by 91 per cent from 1,15 to 2,2 million hectares at the expense of grazing land. Cattle numbers increased by 70 per cent from 2 million to 3,4 million, resulting in overstocking of the reduced grazing area. However, the breakdown in disease control during the liberation war resulted in the loss of at least 1 million cattle in communal lands. Although the cattle population fell the number of cultivators increased resulting in draught power problems, which led to delayed crop establishment by the majority of households.

Shumba's study shows that the fall in herd size and the increase in the number of non-cattle owners and the use of cows for draught power have been exacerbated by the lack of dry season cattle feed resulting in 'weak cattle and a reduced draught power pool to service an increasing number of cultivators' at the beginning of each season leading again to late planting.

Reduced tillage techniques in the communal areas by 1980 had led to serious problems for the production of maize; early weed infestation, incorporation of manure, pests and diseases. Under such conditions, the struggle by many communal area cultivators not only to realise sales for a commodity whose market value had by 1979 plummetted, but also to produce for their own consumption, was indeed desperate. The risk of 'starvation' however did not necessarily show itself in such conspicuous events as the famines in Ethiopia and the Sahel. But rather in the state of perpetual under-nourishment.

Such was the food problem inherited by the Zimbabwean state at independence. In the next and penultimate section of the paper, we shall review the changes which have taken place since independence.
The problem of 'hunger' was one of the main contributory factors to the downfall of the settler political economy in Zimbabwe. 'Hunger' is however always very difficult to define. The difficulties in defining it relate mainly to the problem of value - i.e. whether the total value in a given society is interpreted from a subjective preference theory of value, or from the abstract labour theory of value.

Much of the difficulties in understanding the evolution of food policy in Zimbabwe after independence relate primarily to misunderstandings about the role of the 'state'. Too often, from an historical, albeit cynical, perspective the state is perceived in purely technocratic terms. From which the present food crisis in Africa is explained away by 'ignorance' or the implementation of 'wrong policies'. And taken even further, it has been argued that these 'wrong policies' or mistakes arise not primarily because Africans have not been able to match the cultural efficiency of the colonial masters, but because state 'interference' in exchange and production always leads to disasters.

Without any attempt to clearly understand the nature of the 'state' in Zimbabwe, some continuity is being posed between the pre-independence state and the post-independence state - insofar as their role in agricultural production, pricing and marketing are concerned. But even if one is able to demonstrate market inefficiencies in the period 1965 - 1980, that proves that commercial farmers were not a 'success element' - this does not take us very far in prescribing solutions to the present problem.

Mumbengegwi, for instance, has written that:

"The general view in Zimbabwe is that commercial farmers are seen not as a failure but a success element in agriculture. Whereas the latifundia and other feudal forms of ownership distorted the agrarian structure in a negative manner, capitalist commercial farmers in Zimbabwe are seen to contain some positive elements from productivity and efficiency considerations that ought to be preserved."

While this might have been so at the time Mumbengegwi wrote his article, since the publication of the Report of the Commission of Inquiry into the Agricultural Industry the general view of pre-independence agriculture has been somewhat tempered, as the Commission reported:
"It is not uncommon for Zimbabwe's agricultural prowess to be upheld as a model for other nations on the continent. What is less commonly appreciated is that Zimbabwe's agricultural industry overall has been in a state of decline over the past decade. While there have been major gains in productivity in parts of the industry, these have been offset by the increasing deteriorating of the communal areas. ... although Zimbabwe has improved its agricultural productivity over the decade, this improvement, as is the case in most of Africa, has not kept pace with population growth. The implication here is that, regardless of the profitability of some agricultural enterprises, the overall profitability of agriculture has not been sufficient to encourage the substantial increases in production need to match population growth."

The emerging 'general view' with respect to agricultural and food policy is that the institutional structures for channelling state intervention in products pricing and marketing inherited at independence should be retained, and that the state should also play an increasingly interventionist role in providing the incentives, credit and technical assistance to the previously disadvantaged small-scale farmers, but should take a back seat as far as the redistribution of consumption is concerned:

"A further factor of which cognisance should be taken by the government is the destabilising effect of general wage awards upon the agricultural industry, which has to plan its operations well in advance and is usually precluded from recovering increased labour costs through increased selling prices."

State intervention in wage and labour policies is now in fact being seen as a threat to the country's food security, as Professor Hawkins writes:

"The World Bank stresses that government overall economic policies and programmes are crucial to agricultural sectors in Third World economies. This is particularly so where wage and labour policies are concerned. While the need to improve the pattern of income distribution in developing countries is widely acknowledged, new ways of doing this must be found. In the past, the emphasis has been on the combination of minimum wage policies on the one hand and price programmes on the other. All too often, this policy framework has worked against agriculture by controlling its output prices while simultaneously pushing up wages and other input costs."

The fact that Zimbabwe has a major malnutrition problem precisely concentrated among the commercial farm workers, is hardly addressed - and exactly how expanded food production will be translated into expanded food consumption by the malnourished is left to the mechanisms of the subjective preference theory. But using total production expansion as a proxy for nutritional effect is
highly mischievous and misleading.

Inequities in both production and consumption are not primarily functions of the technical dimensions of physical production, but are an expression of the distribution of power between classes. And these power relationships can only be understood from a historical perspective, incorporating the methodology of the abstract labour theory, which integrates the spheres of production and consumption. In this the State's role is not to ensure the success of capitalism. Rather the state is a vital instrument in the defeat of capitalism, and its planning role has to be primarily in directing production enterprises as the expression of a redistribution of power between classes.

(i) Some Salient features of the post-independence economy with special reference to food production.

The coming of independence and the end of the war brought with it positive real rates of growth. In 1980 the economy expanded by no less than 14% - restoring in one year all the lost output of the recession years. Zimbabwe's real Gross Domestic Product increased nearly 27% in the first two years of independence - on the strength of the lifting of sanctions, stockpiles and the 1980/81 bumper harvest. Preliminary estimates at the end of 1984 suggested that in the two subsequent years, the real G.D.P. fell by more than 8% and with a decline of between 1% and 2% expected in 1984, real output in 1984 was only 3% above its 1980 levels.

Independence however did not remove some of the structural problems in the economy, inherited at independence in particular the relationship of Gross Fixed Capital Formation to Gross Domestic Product. This fell from between 20% and 30% of G.D.P. in the early seventies to around 15% for the period 1978 to 1980. The low level of capital formation has contributed to 'excessive ageing of the country's machinery and equipment' as little had been invested since the mid-1950s for replacement of worn-out equipment. Having inherited such a weak productive capital stock, the economy was not able to sustain the post-independence demand upsurge without serious inflationary pressures or incurring a massive foreign debt abroad to obtain imports that would add to domestic supply. At independence, Zimbabwe was in balance of payments difficulties, worsened by the 1979 oil shock. For the 1980 - 82 period, the situation had worsened because of the recession, and the drought.
Debt service ratio which in 1978 was a mere 0.9 per cent, by 1981 was already 16%. The following year it took up more than a quarter of the country's earnings and in 1983, it rose to 30%.\(^{167}\)

The manufacturing sector has been experiencing problems of declining output associated with the shortages of foreign currency. In general, in the consumer goods range, those industries registering the most substantial declines were those that experienced the most rapid growth during the post-independence boom. In the first year to eighteen months after independence, clothing and furniture output went up by 50% and 33% respectively, while foodstuffs production increased at an annual rate of slightly less than 10%.\(^{168}\) By September 1983 the production of wood and furniture had fallen to 60% of the level reached in mid-1981 at the height of the post-independence boom and output of clothing and footwear had fallen to 80%.

Most manufacturing groups recorded substantial declines in output for 1982 and 1983. By the end of 1983, output of non-metallic mineral products was down by 18%, paper, printing and publishing by 17%, transport equipment by 15% and metals and metal products by 14%.\(^{169}\)

The exception to this general tendency of decline in manufacturing has been food manufacturing. This had become well established by the time of independence, and has fared better than the other sectors, because it is less dependent on foreign currency for imported materials than any of the other manufacturing groups. From 1981 - 1983, the volume of food production rose by 30% although the rate of increase began to slow down in the second half of 1982.\(^{170}\) The drought undoubtedly led to this increase. The pattern of output by June 1984 had however altered considerably as consumers moved away from highly refined and "non-essential foodstuffs to the purchase of basic lines. Hence the producers of highly processed foods began to feel a fall in demand several months before the producers of staples. By the end of 1983, the demand for 'basics' was reaching a limit imposed by declining real disposable income and a slowing down of the increase in demand was registered early in 1984.\(^{171}\)

Almost 14% of industrial production in Zimbabwe takes the form of the further processing of foodstuffs while other agro-based industries such as tobacco and beverages, wood and textiles, account for a further 22% of output.\(^{172}\)

In 1982, Agriculture was the single largest source of employment, absorbing a third of wage employment - next was manufacturing (15%), private
domestic service (11%), public administration (7%), mining and communication (4%). Official figures show that agricultural employment on commercial farms grew erratically, to reach a peak of some 366,000 employees in 1974 - 35% of total employment in the formal economy. In 1984, commercial farm employment was estimated at around 260,000, a decline of almost 30%.

As a result of the 1980/81 bumper harvest, there was an 89 per cent improvement in 1981 in gross fixed capital formation. But with the onset of the drought, agricultural output is estimated to have declined by 15% in 1982. In 1983 the value of crop sales from communal areas was 30% down on the previous year. Despite the drought, 1984 was a record year for the agricultural sector: for the sector as a whole, the output in volume terms, is estimated to have exceeded the 1983 output by 22% and 3% above the previous record level achieved in 1981.

In the following parts of this section of the paper we shall attempt to analyse the impact of the post-independence state's intervention, firstly on the allocation of labour power, and then on agricultural production.


Much of the debate stimulated by the World Bank's advice for ways of overcoming the hunger problem misses the crucial point underpinning the various positions taken. In weighing the costs of production of the various inputs and outputs of agriculture, and how these are likely to be influenced by the degree of state intervention - labour power is totally left out of the equation. Labour power is the potential for work, as opposed to labour which is the actual work done. While the removal of subsidies on food commodities has received much attention, its gradual removal from the commodity of labour has almost been ignored.

For capitalist production and the extraction of surplus value to have taken place in colonial Zimbabwe, labour power had to be allocated amongst different sectors of the so-called modern economy. This was not done via a 'free market' except for Whites, Coloureds and Asians - because a central state operated labour exchange (particularly in the case of agriculture, mining and domestic service) informed each of its branches to what geographical area, industry and occupation it could supply its registered African work seekers.
In the early years of the twentieth century, farmers joined with mining interests to establish collective recruiting agency for the importation of foreign workers through the Rhodesian Native Labour Bureau. This 'collectivisation' of contracted labourers was designed to supplement the inflow of workers entering the colony as independent 'freeflow' migrants. But most importantly it was also aimed at recruiting costs of private individual recruitment agencies. In the post-1946 period a parastatal - the Rhodesian Native Labour Supply Commission (later changed to Rhodesian African Labour Supply Commission (RALSC) filled a similar role and in the 1960s functioned exclusively for 'commercial' agriculture. Whilst colonial Zimbabwe as a whole built up a high level of dependence on foreign labour, throughout the 1900 - 1940 period, commercial agriculture, as a low wage sector was even more dependent on state subsidisation in the allocation of this labour. Under the contract system the R.A.L.S.C. imported the equivalent of 338,204 workers working one year, or an average inflow of 13,528 from 1946 - 1971.

This directed process had several implications for the overall 'cheapness' of African labour power. First, given that the Commission (i.e. RALSC) made most allocations to capitalist agriculture it increased the reserve army for this sector, thereby tending to reverse the urban directed migration trends after 1945. Curtis writing on South Africa where a similar system still prevails has described how this mutual subsidisation operated:

"The state - directed system of the allocation of African labour power is here understood as a subsumed class process. It reproduces a condition of existence for the extraction of surplus value: the allocation of African labour power to various capitalist employments (and in such a way as to lower African wages). Yet it also requires the distribution of surplus value to the state in the form of taxes (and also labour recruiting fees paid directly to the bureaux), thereby rendering African labour power both cheap in the sense of wages paid and costly in terms of the tax support of this system of allocation".

But a fundamental contradiction was that these 'centrally specified distributions' reduced labour productivity as African workers were allocated jobs for which they either had little interest or experience. This tended to reduce output from what it otherwise would have been, and thereby also to lower rates of profit and surplus value, ceteris paribus. To compensate, so as to raise productivity, many commercial farmers employed relatively large numbers of white supervisors and managers - "subsumed class supervisors" whose wages
represented a further drain on the extracted surplus value - in other words, another cost of reproducing this system of African labour power allocation.

Frequent references are often made to the relative privilege of the urban workers without real close analysis for whom this 'privilege' operated, and the complex contradictions inherent in the system. Thus the Commission of Inquiry into the Agricultural Industry states:

"Government labour policy since independence has unfortunately continued the 'urban' bias of previous administration, albeit with a different emphasis."

This 'privilege' has to be placed in an historical context. Following the growth of the manufacturing sector, and the consequent increase of a labour force in urban areas, after 1945 for whom the methods of control used in agriculture and mining could not be applied a set of institutional arrangements were devised in colonial Zimbabwe, largely modelled on the South African system.

This involved subsidised housing and transport under the Services Levy Act of 1960 under which employers of urban labour were charged a fee by local government authorities to compensate sub-economic rents and bus fares.

This housing and transportation must be understood as being capitalist wage - commodities. The state production and sale of these commodities has been at prices less than their values, being 'subsidised' by the redistribution of surplus value in three ways. First, these wage - commodities were financed out of general tax revenues of the state. Second they were supported by specific levies paid by firms not directly providing housing for their labour. Finally they were also subsidised, again as required by statute by the redistribution of the profit from the production of municipal 'traditional' beer to Africans in townships.

The subsidisation of township housing and transportation undoubtedly mitigated some of the effects of the reduction in the disposable income of Africans, since their real purchasing power fell less than did their money income, thereby helping to maintain real consumption and it was hoped their labour productivity. However, this subsidy benefited only those African workers who lived in or near white areas - mostly those employed in the manufacturing, construction, service and government sectors.
The consumption of rural-based mining workers and agricultural workers was not so 'subsidised' as the state did not purchase wage-commodities at prices lower than their value. Instead, as studies by Van Onselen and Phimister have shown, miners were given food in order to increase productivity, and houses often of the worst type, were built for farm labourers to compensate for the rural-urban wage gap.

This provision of 'in kind' use values to African miners and farm labourers was meant to compensate for their lower money wages as compared to urban manufacturing workers, and increase their real consumption and hence their labour productivity and the rate of surplus value. But as we mentioned in an earlier section of the paper - this did not happen, and historically agricultural and mineworkers have constituted the most malnourished segment of Zimbabwe's population.

There were several other contradictions: firstly, an addition was made to the 'money' value of African labour power, thus directly reducing its cheapness. The particular form in which the 'in kind' value of labour power was provided - i.e. by insanitary and overcrowded housing, poor and inadequate rations, led to protests, demonstrations, desertions etc. - all of which reduced labour productivity and the rate of surplus value, and hence increased the 'subsumed class costs of supervisors and police'.

The introduction of minimum wage legislation for agricultural workers which ended 'wages in kind' was indeed a major crisis for capitalist agriculture in Zimbabwe; the crisis was worsened by the resettlement programme, and the removal of institutional support for allocating labour power. Tobacco growers who in 1980 following the lifting of sanctions were hoping to see a repetition of the halycon days of the 1950s were the worst affected. Tobacco is the most labour-intensive, and the elasticity of factor substitution is relatively low. At independence, tobacco growers employed 34% of the agricultural labour force. Its special case was advocated by a group of academics at the local university in 1980 in the following contradictory manner:

"A sound pricing policy for the agricultural industries together with a moderate wage policy will do much to encourage the needed food production and stem the drift of people to urban areas. Food deficits and urban unemployment plague much of Africa; Zimbabwe has initiated the appropriate policies to avoid these problems. The need now is to build on this sound foundation".
By 1984, commercial agriculture was still the largest employer of labour in Zimbabwe, with some 220 000 permanent and casual employees. It was estimated that since 1979, there had been a rise of 250% in the cost of labour, giving rise to a decline in the number employed.182

Two points are not clear in all these assertions that the state's labour legislation is a threat to the country's food self-sufficiency. Firstly, do these labour costs include payment in kind? Secondly what is the ranking in terms of input costs of labour? No clear answer has yet emerged but the following tables showing the variable cost per hectare for wheat, maize, tobacco and cotton, show some interesting trends on the relative weights of labour inputs compared to technical inputs.

For wheat, the variable cost of labour per hectare was 5% of the total in 1980/81 and by 1984/85 was 9%. That for fertiliser and lime was 33% in 1980/81, and had declined to 31% in 1984/85. Costs of irrigation went up by 4% in the same period.

For maize, the percentage of labour rose by 5% in the same period from 17% to 22% fertiliser and lime declined from 37% to 34%. For tobacco, the variable cost per hectare actually declined from 39% of the total costs in 1980/81 to 33% by 1984/85.

In terms of labour inputs, cotton underwent the steepest decline - from 35% in 1980/1981 to 24% in 1984/1985. The sharpest rise for cotton was in repairs and maintenance costs, which went up by 10% in the period.

### VARIABLE COST PER HECTARE IN $ PER HA:

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<tr>
<th>A. WHEAT</th>
<th>1984/85</th>
<th>%</th>
<th>1983/84</th>
<th>%</th>
<th>1982/83</th>
<th>%</th>
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### Cotton

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Thus far, we have tried to establish what in fact distinguishes the pre-independence from the post-independence period with regards to the state's and agricultural production - and we have argued that it has been the removal on the subsidy for labour. In the next subsection of the paper we shall consider the state's role in regulating consumption - and to what extent this has been determined by a move away from the cheap wage food policy characteristic of the pre-independence era or whether it has been as a result of I.M.F.- imposed demand management strategies.

(iii) State macro-economic policies and consumption since 1980.

The debate on whether the austerity measures adopted by the state in 1983 were 'home grown' or were imposed by the I.M.F., has aroused much controversy and bitter recriminations. While from short-term considerations the 1983 Budget seemed to be a product of the I.M.F. - from the long-term perspective, imposed by the projected transition to socialism - the austerity measures particularly those removing food subsidies, were indeed 'home grown' - as these had been intricately linked to the cheap wage food policy of the settler state - and was aimed at minimising labour costs all round, which are inappropriate for balanced industrialisation.

From 1980 - 1983, the state ran expansionary budgets, reflecting the general optimism about the prospects for the economy. On the surface of things, this did not seem to be a deliberate 'choice' by the state to pursue an expansionary policy based on financing rather than adjustment. In the immediate short term these policies were successful as there was rapid growth in the first two years of independence, with employment picking up to reach the peak 1974 levels by 1982. If expectations about the end of the world recession and drought have materialised - there might have been long-term growth of the economy.

But by mid - 1982, it was increasingly apparent that with a deteriorating, worsening fiscal position, growing indebtedness, and drought - a switch in policy had to be made. The dollar was devalued, and the government introduced additional measures expected to yield an additional $150 million. General sales taxes on selected consumer durables of 18 - 23% were imposed.

Devaluation of the dollar was expected to raise the domestic price of exports, raising profit margins and thereby stimulating investments. This was not to happen, for though profit margins of export firms increased, this was not matched by increased investment. Levels of exports rose by only 7% in nominal terms but in real terms declined by over 30%. Consequently there
was no appreciable rise in employment in the tradeable sector to compensate for the deflationary effects of the demand management measures on the non-tradeable sector.

Even if one attempted to sustain the argument that removal of subsidies was a move away from cheap wage-food policy, the timing of the removals of the subsidies had the effect of harming the intended beneficiaries. Between 1980 and 1983, both producer and consumer subsidies rose from $37.7 million to $126.5 million, an average annual increase of 78.5%. On September 2 1983, the government reversed the trend by first reducing consumer subsidies - by the time of the 1983–84 Budget total subsidies had fallen by 49%. The removal of subsidies had dramatic effects on the prices of basic commodities. And wage earners suffered severely and saw losses of the gains made since independence as a result of increased minimum wages. Even the rural population who were supposed to benefit fared off badly. And if one takes the expenditure on the acquisition of land and resettlement as a more meaningful index of rural poverty - allocations to the lands were severely guillotined. And given the commercialisation of food production which increasingly necessitated the purchase of food, rural households, who too are largely dependent on remittances from the urban areas, experienced substantial declines in their standards of living.

These measures failed to achieve the desired effects of subsidising cheap wage food policies, because of the freeze on wages. And as we noted above the wage food sector was the only exception to the general trend of decline in the manufacturing sector. From 1981 to 1983 the volume of food production rose by 30%. This expansion was achieved by the diversification away from the luxury food items to the basics.

The next sub-sections will analyse the effect of state credit policies and product pricing and marketing policies on agricultural production.

(iv). State Credit and Agriculture Since 1980.

An important legacy of the pre-independence state credit policies was that the heavy indebtedness of commercial farmers resulted in the over capitalisation of land. And given that the 'commercial' definition of 'utilised' land is not presently applied in the real physical sense of utilisation but also incorporates the 'market' value - under the willing buyer/willing seller system imposed at Lancaster House - the state in acquiring land has found itself paying off the debts accumulated by commercial farmers during U.D.I.
The credit pool for agriculture by 1983 was in excess of 400 million dollars. This was monopolised by one group of recipients - the large-scale commercial farmers - who were receiving above 90% of short-term and medium-term credit, 85% of livestock loans from the Cold Storage Commission and all the long-term credit. This has not been because the state has continued to discriminate against African farmers, but rather due to the limits to which a given unit of land can economically absorb additional inputs in the form of fertilisers etc. And as far as medium-term credit, the land holding size is the technical unit which determines the feasible implements that can be used as well as the scale of operations. The cattle finance scheme has not been extended to communal areas on a significant scale because of fears for overstocking.

The amount budgeted for communal areas in the 1982/83 year was underspend. A gross anomaly in the credit situation has been the fact that local resources are still being made available to individuals in the form of long-term loans to buy "large tracts of land in commercial areas which the state was starved of funds to acquire land for resettlement".

State credit has however been an important element in preserving the fabric of the commercial farmers during the drought, when most farmers found themselves unable to pay off short-term loans used to finance annual inputs like fertiliser, seed, pesticides and petrol. The total short-term debt to banks and the Agricultural Finance Corporation rose from Z$124.7 million in 1980 to Z$203.7 million in 1983, and reached Z$260 million in April 1984. A Commercial Farmers Union spokesman was quoted as saying then:

"It has reached a point where many farmers have little hope of retiring their short-term loans. Even a superior crop would not necessarily help given present pricing policies. If something is not done the banks will end up owning a lot of farms next year."

It still remains to be seen whether the expected bumper harvest will improve the debt situation of the commercial farmers.

Communal farmers on the other hand have been saved from this plight by their very poverty. The drought resulted in a loss of livestock and in certain areas they were forced to eat their seed.

Credit expansion to communal and small-scale commercial sectors has constituted an average of 10% of short-term credit, and about 30% of medium-term credit. Most of this has been provided by a World Bank loan which ends in 1986, and an
E.E.C. grant, so that a miniscule amount of national resources have been mobilised for this expansion - which factor is likely to put pressure on the balance of payments position of the country.  

And even where agricultural credit has been extended from the Agricultural Finance Corporation, it has been the economically better off who have been the main recipients (judged by their access to land having an average of 6.1 acres, compared with 4.8 acres for non-recipients and livestock having an average of 6.5 head of cattle compared with 2.9 for non-recipients).  

There were about 26 co-operatives in 1983, but their only source of credit has been the Agricultural Finance Corporation, with other sources closed to them. As one researcher has remarked this has serious implications for the transition to socialism:  

"If a major socialist transformation of agrarian relations is to be effected, then unless access to those credit resources which are controlled by the other privately owned institutions which for the same reasons that they are denying the existent producer collectives would continue to withhold the credit, lack of resources would prove a fundamental constraint to the whole agrarian revolution".  

(v) Pricing and Marketing of Food Products Since 1980 and Changing Food Production Patterns.  

In 1980, in order to forestall what was expected to be a post-war famine the Minister of Agriculture announced a pre-planting price for maize of $120 per tonne for the 1981/82 marketing year. This was 41 per cent above the 1980/81 price and almost double that of two years previously. Following this large increase the maize price was held constant for three years. However in real terms (using 1964 as a base year the price declined by 25% in 1981 - 82 - 1983 - 84). As a measure to provide incentives after drought a minimum guaranteed price of $140 for 1983/84 was announced. With the continuation of the drought the state found it necessary to announce a pre-planting price of $180 per tonne in July representing an increase of 29%.  

The Grain Marketing Board selling price was raised by $20 per tonne to $157 per tonne with effect from September 1983. Prior to this, the selling price of $137 per tonne had remained in effect since the beginning of the 1981/82 season."
The State attempted to move away from the whole system of announcing pre-planting prices, but given prevailing circumstances had to resort to it. Commercial farmers have however persistently claimed that the government after independence failed to ensure the largest possible harvest of maize (a controlled crop) by setting the producer's pre-planting price high enough to encourage maximum planting. The $140 per tonne announced in 1983 was considered barely a breakeven price. The area planted to maize in the large-scale commercial farm sector dropped 17% to about 190 000 hectares as farmers switched to safer, more drought-resistant crops like cotton.

As we have seen in earlier sections of the paper, this was not the first time commercial farmers had made such a switch - having done so after the Second World War. And after the 1974 oil shock, the acreage planted to maize had decreased in the large-scale commercial farm sector - partly as a result of the failure of the government to satisfy their demands for higher pre-planting prices. The shift was discernible from 1982/83 when though the bulk of maize deliveries was from the large-scale sector, there was a significant upturn in the proportion of the total crop delivered by African producers in the former purchase areas and the communal areas. Deliveries from these sectors increased only marginally from 363 000 tonnes in 1981/82 to 396 000 tonnes in 1982/83. Due to the reduced acreage and production in the large-scale commercial sector, the percentage of total deliveries from these sectors rose from 18 to 26 per cent in the same years. In the five-year period 1976/77 to 1980/81, deliveries from African producers averaged 71 000 tonnes or approximately 11 per cent of the total estimated production. The deliveries to the G.M.B. in 1981/82 increased to 363 000 tonnes which was approximately 33 per cent of the estimated production. A further increase occurred in 1982/83 when deliveries rose to 369 000 tonnes or 55% of estimated production.

The shift away from maize by large-scale commercial farmers cannot be attributed solely to the lack of 'incentives' in the pre-planting prices nor to the drought - but rather to the change in the pricing system prevailing before independence, whereby, when basic maize prices tended to increase to world price levels because of either a poor crop or increased internal demand, the settler state had resorted to imports in order to hold prices down and thus reduced the pressure on wages. In April 1984, private economists were forecasting maize shortages of as much as 700 000 tonnes. And in all, more than 250 000 tonnes of maize was imported at a cost of almost U.S.$100 million - a staggering drain on the country's reserves. But when the final crop was
delivered, as had happened in 1965/66, and 1974/75 the harvest had been underestimated - this time by 50%. The underestimation has been variably attributed to 'a freakish spate of late rains that somehow produced the best possible yields from peasant land'.

But the so-called miracle of the unexpected maize surplus from African maize producers is not just a matter of statistical quirks and oddities - but rather a reflection of the pricing system inherited - where maize had to be imported, both to protect beef producers and suppress wages even when there was no shortage. The form in which official statistics for agricultural production are collected, which attempt to calculate the proportions of directly produced forms of consumption and purchased forms of consumption, without taking into account historical changes in food habits, which would indicate that purchased forms of consumption have become more important. This misconception has therefore led to much circular theorising on the 'surprise' of the 1984 harvest. One merchant bank economist declared:

"This feature makes the 1984 figures even more startling, as it is known that in 1981 the pricing structure was such that many farmers sold all their whole grain to the Marketing Board and bought back their milled grain requirements at a lower price. In 1984 this anomaly in the pricing structure has been corrected with the result that substantial quantities of grain production did not enter the marketing system".

While in the early seventies export sales were consistently higher than local sales, only in the latter part of the decade was the trend reversed, largely because of reduced acreage by commercial farmers. After independence, the trend was reversed because of demand factors - by 1980/81, local sales had reached 723,586 tonnes, the main reason being the feeding of returned refugees after the war. In 1981/82 sales dropped by 8 per cent to 664,000 tonnes due to the discontinuation of the feeding programmes. In 1982/83, sales rose by 57% to reach 1,041,639 tonnes, 23% above the forecasted demand. This was not only as a result of farmers buying back their maize in milled form, but because of purchases by the Department of Social Services for drought-relief.

The unprecedented sales levels which began in the latter half of 1982/83 and continued in 1983/84. A record of 1,273,240 tonnes were sold - 22 per cent above 1982/83. The Department of Social Services increased its purchases to 223,900 tonnes, almost five times the amount purchased the previous year. The demand for 1984/85 was originally projected at 1,75 million tonnes - but
due to consumer resistance to yellow maize, sales were not expected to reach 1 million tonnes.\textsuperscript{201}

Wheat also shows some interesting relationships between production and consumption. The area planted to wheat showed an increasing trend until 1982, when it peaked at 37,329 hectares. But with the shortage of water and suspension of water rights, hectarage planted to wheat fell by 42 per cent to 21,504 h.a. Further declines were registered in 1984. Deliveries of wheat by the large-scale commercial sector peaked at 200,734 tonnes, before falling by 41 per cent to 117,444 tonnes in 1983. At the same time, the state sector increased its share. Production on ARDA (Agricultural and Rural Development Authority) rose dramatically to reach 17,337 tonnes, an increase of 121 per cent on the previous year's crops of 7,854 tonnes.\textsuperscript{202}

In 1983/84, the producer price for wheat was set at $220 per tonne - a $30 increase over 1982/83, and $55 above the 1981/82 price. Although the producer price showed a $55 per tonne increase in the two years in terms of the deflated value (1964 prices), the prices actually fell by $1.52 in the same period. In 1984/85 the producer price was set at $250 per tonne, a 14 per cent increase. Wheat exports were stopped in January 1983, and Zimbabwe had to resort to aid to meet the shortfalls in demand. Local production has been unable to keep pace with demand - as has been revealed by the periodic bread shortages in 1984.\textsuperscript{203}
SOME CONCLUDING REMARKS.

The most important change in food habits in Zimbabwe over the last 100 years has been the shift to purchase items of consumption. This has however had the unfortunate consequences of increasing the control of transnational capital on the economy. Given the nutritional deficiencies as a result of the largely maize-based diet, the move towards commercial consumption, should, if the power of transnational capital in the food chain is reduced, be able to provide for a more varied diet. There is also a need to increase the diversification of cropping in the communal areas - as dietary imbalances have been caused by the limitations on the variety of food produced and consumed, related in turn to low cropping intensity and the low productivity of non-staples.

Research is going on into the production and processing of more drought-resistant cereals - sorghums and millets. But it is doubtful whether food habits could be changed to increase demand for these. As we noted in previous sections of the paper - the palatability of these is largely dependent on the variety in the relish. So that if a switch back to the more nutritious sorghums and millet is envisaged it should take place at the same time - with the development of fisheries, and moves to make game meat more available - to the population possibly by the Cold Storage Commission extending its operations, to include game.

The goals of food self-sufficiency in post-independent Zimbabwe have produced a clear tension between the goals of expanding popular consumption and the need to increase rapidly the rate of capital accumulation. Constraints in the transition food strategy have emerged from firstly the structural characteristics of the social and economic model inherited from the past, and secondly from conjunctural tension in the form of the international recession and drought.

Thus the production structure inherited was designed to meet the needs of the agro-export sector and a high-income minority but not the basic needs of people or of autonomous national development. In attempting to redress this situation, however, difficulties have been posed by the economy's vulnerability to fluctuations in international commodity markets, and the high level of dependence on imports of key inputs such as machinery.
Within budgetary constraints imposed by these factors - the resettlement programme whose main aim has been inter-alia to abolish the geo-political marginality of large regions of the country, has had to be decelerated.

The state's food strategy has attempted to restructure the market for non-agricultural consumer goods and since Independence there has been an expansion in previously severely limited infrastructure for health, education and other basic services.
NOTES


3) CODESRIA/UNESCO project p. 2.

4) Ibid p. 3.


7) Ibid.


9) Ibid. p. 39.


12) Herald 12 February 1985

13) A. Berg, 'Malnutrition in Zimbabwe' p. 6.

14) Ibid. p.9.


17) Ibid. p. 27.


19) V.S. Cubitt, Roger C. Riddell, The Urban Poverty Datum Line (Salisbury; University of Rhodesia 1974)


23) A. Berg, 'Malnutrition in Zimbabwe' pg. 22.

24) Thi cited in Ibid. p. 22 - 23.

25) See Ibid pg 44.

26) UNICEF/Government of Zimbabwe, Situation Analysis pg. 51.


30) Ibid pg. 198.

31) Ibid pg. 199.


34) Ibid. pg. 99.


36) D.N. Beach, 'The Zimbabwe Plateau and Its Peoples 1400-1900' Henderson Seminar. No. 52. Department of History, University of Zimbabwe August 1981 (Mimeo)


39) Ibid pg. 85

40) Ibid pg. 87.
41) D.N. Beach, 'The Zimbabwean Plateau And its Peoples' p. 24 - 25.


44) C.F. Keyter, Maize Control in Southern Rhodesia 1931 - 1921 (Salisbury, Central African Historical Association, Local Series No. 34, 1976) pg. 2.


47) NAZ. T2/29/64/4 Native Commissioner Ndanga to Chief Native Commissioner 29 May 1916.


50) Ibid. pg. 25.


52) Ibid. pg. 50.


57) Jane I. Guyer, 'Naturalism in Models ...' pg. 374.


59) Jane I. Guyer. 'Naturalism in Models'. pg. 374.

61) R. Howman, 'The Native Labourer and His Food' in NADA No. 19. 1942. pg. 7.

62) R.S. Roberts, 'African Cattle'. pg. 84.


64) Ibid, page 27.


67) Ibid. pg. 44.

68) Ibid. pg. 112 - 113.


71) Ibid, pg. 206.


76) Luis Crouch and Alain de Janvry, 'The Class basis of agricultural growth, in Food Policy Feb. 1980. pg. 5.

77) K. Muir, 'Economic Review of Crop Production in Zimbabwe' 1890 - 1940' pg. 9.


79) Ibid. pg. 10.

80) C.F. Keyter Maize Control pg. 2.
82) Ibid. pg. 3.
84) Ibid. pg. 6.
85) Ibid. pg. 4.
86) Cited in Ibid. pg. 5.
87) Ibid. pg. 10.
88) Cited in Ibid pg. 20.
89) Ibid. pg. 22.
90) Ibid. pg. 22 - 23.
95) O.B. Pollak, 'The Impact of The Second World War' pg. 122.
96) R. Howman, 'The Native Labourer and His Food', pg. 7.
97) The Times 17 December 1948.
105) Ibid.
109) Ibid pg. 211.
112) Chief Native Commissioner, *Annual Report* 1941
114) Cited in ibid pg. 236.
119) Ibid. pg. 10.
121) Ibid. pg. 4.
123) Luis Crouch and Alain de Janvry, 'The Class Basis of Agricultural Growth' pg. 11 - 12.


125) Ibid. pg. 7.


131) Ibid. pg. 21.


133) D.I. Ramsay, 'Productivity and Capital in Rhodesian Manufacturing Industry'.


139) Kay Muir, 'Crop Production in Zimbabwe' pg. 13.

140) Ibid. pg. 5.


144) Ibid. pg. 208.


146) Kay Muir, 'Crop Production in Zimbabwe' pg. 7.


148) Ibid. pg. 15.

149) Agricultural Marketing Authority, Reports and Accounts For The Year Ended 1975. pg. 9.


151) Reserve Bank of Zimbabwe, Quarterly Economic and Statistical Review Vol. 1. No. 1 1980. pg. 11.


156) Ibid. pg. 237.

157) Ibid. pg. 238.


161) See Ibid. Chapter 4, Chapter 12, Chapter 9.

162) Ibid para 374.


164) Thandika Mkandawire, 'Home Made Austerity Measures' pg. 10.

166) Thandika Mkandawire, 'Home Made Austerity Measures' pg. 5.
167) Ibid pg. 9.
173) Ibid. pg. 4.
177) Ibid.
180) Fred Curtis 'Contradiction and Uneven Development' pg. 393.
183) Thandika Mkandawire, 'Home Made Austerity Measures.'
184) For further detail see Ibid.
185) Ibid. pg. 22.
186) Ibid. pg. 30.
187) Ibid. pg. 31.
189) Ibid. pg. 7.
192) Ibid. pg. 20.
193) Ibid. pg. 23.
195) Ibid.
201) Ibid. pg. 7.
202) Ibid. pg. 6.
203) Ibid. pg. 8.
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