
A SYSTEMS APPROACH TO DEVELOPMENT:
Sectoral Planning and Policy Control of Rural Household
Food Security in Zimbabwe.

c **Peter R.O. Gwokto Pa'Festo**

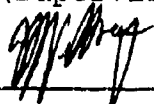
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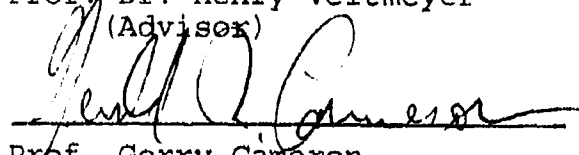
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Prof. Robert McKinnell
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*"A voice is heard in Ramah,
mourning and great weeping,
Rachel weeping for her children
and refusing to be comforted,
because her children are no more".*

(Jeremiah 31:15)

This thesis is dedicated to my beloved parents

SHERINA LADHO Pa'FESTO and FESTO OYWAK

And to the memory of

my late brothers

JIMMY OPIO Pa'FESTO

LUKA OKONGO Pa'FESTO

his wife

SARAH OKONGO Pa'FESTO

and their son, my nephew

GODFREY OKONGO Pa'FESTO

*Your love and commitment,
brought me this far,
while never to see me succeed.*

A SYSTEMS APPROACH TO DEVELOPMENT:
Sectoral Planning and Policy Control of Rural Household
Food Security in Zimbabwe.

By: Peter R.O. Gwokto Pa'Festo

INTERNATIONAL DEVELOPMENT STUDIES
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To the Almighty God from whom all things begin.

***"The price of doing something half-way
is no less than the price of doing it completely.
Therefore, we may as well do it properly".***

Dr. Henry Kissinger,
Eulogy to former American President,
Richard Nixon, 1994.

I have come this far because many people facilitated my efforts in this study: my supervisor, Prof. Robert McKinnell; my advisors Prof. Dr. Henry Veltmeyer, Prof. Dr. Anthony O'Malley and Prof. Gerry Cameron; Hellen Merrill of the Financial Aid Office and Mr. Dumba, W. of the Zimbabwean High Commission to Canada.

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I have never ceased to enjoy the company and friendship of my Zimbabwean friends. Through Munyaradzi Makani, I have kept the memory-candle of my little kins in Uganda infinitely burning. As I have often mentioned in seasons greetings to him, "Always the best of Friends" and forever should this also be to his parents Joyline and Ferdinand Makani.

Finally, I am greatly indebted to the moral support and encouragement given me by my friend Elizabeth Bvukumbwe.

"In principle, we have the technological capability of adequately feeding, sheltering, and clothing every inhabitant of the world.... In principle, we have the technological capability of providing adequate medical care for every inhabitant of the world.... In principle, we have the technological capability of providing sufficient education for every inhabitant of the world for him to enjoy a mature intellectual life.... In principle, we have the technological capability of outlawing warfare and instituting social sanctions that will prevent the outbreak of illegal war.... In principle, we have the capability of creating in all societies a freedom of opinion and a freedom of action that will minimize the illegitimate constraints imposed by society on the individual.... In principle we have the capability of developing new technologies that will release new sources of energy and power to take care of physical and economic emergencies throughout the world.... In principle, we have the capability of organizing the societies of the world today to bring into existence well-developed plans for solving the problems of poverty, health, education, war, human freedom and the development of new resources.... If the human being has the capability of doing all these things, why doesn't he do it?.... the answer is that we are not organized to do so."

¹C. West Churchman, *The Systems Approach* (New York: Dell Publishing Co., 1968), pp. 3-4.

ABSTRACT

In recent years, the paradigm of food security has received enormous attention from researchers. Throughout the Third World of primary commodity exporters, the preoccupation is with agriculture in general and not food security in particular. This thesis entitled: **A SYSTEMS APPROACH TO DEVELOPMENT: Sectoral Planning and Policy Control of Rural Household Food Security in Zimbabwe**, explores development planning with respect to the well-being and, specifically the food requirement of individuals in poor rural households.

Zimbabwe is chosen because of its much publicized achievement in that it attained higher levels of food supplies in the mid and late 1980s than any other country in sub-Saharan Africa. It would later be referred to as a model for famine-prone Third World countries, especially in Africa (Sachikonye, 1992). However, there has always existed a paradox to Zimbabwe's 'success story' whereby, amidst food surplus, poor rural households have been faced with continuous food crises. As this thesis will explore, the crisis is not only a result of natural factors but mainly a result of planning and policy flaws.

This study will also reaffirm that the notions of food crisis and food surplus are found to be not only inseparable but persistent, regardless of changes in the political, economic, social and agro-ecological climates. It uses recent

trends in Zimbabwe's food security debate to assess the framework and practice of an alternative theoretical model for development planning, viz., the systems approach. As such, the emphasis is both on food security and the prospects for adopting systemic analysis as an approach to overcoming common problems of development planning in the Third World.

The study relies on secondary data and information, mainly obtained from sources in Canada and Zimbabwe.

The systems approach is associated with the idea of separate components and how they interrelate. Understanding systemic interaction among parts is vital because the modification and redistribution of development goals across society requires these parts to be reorganized and restructured into a working and beneficial whole: a system.

Practically, however, the case of Zimbabwe indicates that most of the system parts and policy elements were indeed considered during the pre-modelling stage. Instead they are now incompatible due to irregularities and the biases which stem from the established institutional arrangements created to promote interaction and integrity of the system.

An attempt is made to assess the impact of existing policy measures on the system by examining both theoretical and fundamental issues in food security.

In the final analysis, it is shown that fundamental policy weaknesses are the main cause of deficiencies in Zimbabwe's food security system. Above all, it is established

that the systems model of analysis is very useful because it isolates phenomena and splits elements into units small enough to facilitate the design of remedies to identified weaknesses.

The analysis also integrates two important issues. The first deals with pre-modelling, that is, placing the food security system in a position where it can include all vital policy-related elements for its performance. A division with the responsibility of ensuring the availability of these elements to the system is recommended in the national Planning Commission.

Second, every proposed policy control instrument requires critical evaluation. To facilitate this evaluation it is imperative to assess the impact (efficacy, effectiveness, availability, economic and ethical potential) of every food policy on rural households before they are recommended for controlling and directing the system.

Finally, it will be argued that common problems of development in the Third World can be ameliorated by concentrating research in rural communities rather than in centres of political and economic activities. Food security is one such problem that is amenable to this approach.

Halifax, February 1995.

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LIST OF ACRONYMS

AMA	<i>Agricultural Marketing Authority</i>
APA	<i>African Purchase Areas</i>
CCODP	<i>Catholic Committee on Development and Peace</i>
CFU	<i>Commercial Farmers Union</i>
CL	<i>Communal Lands</i>
CMB	<i>Cotton Marketing Board</i>
CSC	<i>Cold Storage Commission</i>
DMB	<i>Dairy Marketing Board</i>
DRP	<i>Drought Relief Program</i>
EC	<i>European Community</i>
EEC	<i>European Economic Community</i>
FAO	<i>Food and Agricultural Organization</i>
FFYDP	<i>First Five Year Development Plan</i>
GAP	<i>Gross Annual Product</i>
GDP	<i>Gross Domestic Product</i>
GFR	<i>Grain-Flow Requirement</i>
GMB	<i>Grain Marketing Board</i>
GSR	<i>Grain-Supply Requirement</i>
IFAD	<i>International Fund for Agricultural Development</i>
IGADD	<i>Inter-governmental Authority on Drought and Development</i>
IMF	<i>International Monetary Fund</i>
LSCF	<i>Large Scale Commercial Farmers</i>
NFAZ	<i>National Farmers Association of Zimbabwe</i>

NGOs	<i>Non-governmental Organizations</i>
NIDL	<i>New International Division of Labour</i>
NIEO	<i>New International Economic Order</i>
MB	<i>Marketing Board</i>
PE	<i>Public Enterprises</i>
R & D	<i>Research and Development</i>
RD	<i>Rural Development</i>
SADC	<i>Southern African Development Community</i>
SAP	<i>Structural Adjustment Program</i>
SSCF	<i>Small-Scale Commercial Farmers</i>
UDI	<i>Unilateral Declaration of Independence</i>
UNACSTD	<i>United Nations Advisory Committee on Science and Technology Development</i>
UN	<i>United Nations</i>
USSR	<i>Union of Soviet Socialist Republics</i>
WB	<i>World Bank</i>
WFC	<i>World Food Council</i>
ZFA	<i>Zimbabwe Farmers Association</i>
ZIMCOPD	<i>Zimbabwe Conference for Reconstruction and Development</i>

A. INTRODUCTION

The literature on food insecurity and, specifically, the literature concerned with all instrumental sectors involved in developing planning strategies and food policy controls, embraces critical economic, socio-cultural, ecological and political considerations. Whereas the development of an effective food security system depends largely on the free play of these factors, most literature suggest that, for sub-Saharan Africa, the political consideration manifested through the state sector is the most dominant in influencing policies and decisions. As such, the state tends to deal unilaterally with those sectors of the system which are directly involved in the procurement of food, and with the other active sectors of the national economy as a whole.

This thesis argues with reference to Zimbabwe that the unilateral approach to state planning and policy-making adopted by most governments in sub-Saharan Africa is the major impediment to the creation of viable and lasting food security systems in the region. Consequently, the importance attached to nutrition requirements, accessibility to food, and the food purchasing power of the multitude of socio-economic classes in both rural and urban areas are down-played.

This study suggests that the reasons for recurrent food crises rest in the deficiency of symbiotic reciprocity or purposeful systemic interactions among the component sectors

of sub-Saharan economies and the food security system in particular. This suggestion is held to be true under various economic and political climates, and at all bureaucratic hierarchies of planning, control and policy-making.

A new approach to developing sectoral planning strategies and the instruments of policy control in food security will be emphasized in this study. The approach views the food security system at a more practical, macro level than at a conceptual, micro one. It is conducted in the spirit of promoting the systems model of analysis as a modern tool for defining and identifying problem areas in the food security system, as well as for the analysis and formulation of policy instruments which relate to the present state of food security in sub-Saharan Africa, and Zimbabwe in particular.

As a theoretical and most practical methodological approach, the systems model of development planning is recommended for developing an effective and efficient insurance against sporadic, seasonal and chronic rural household food shortages and famines. In this study, the relationship among the identified component sectors and sub-sectors (or parts) is conceptualized as systemic.

Furthermore, this relationship goes beyond immediate farming practices and the natural (ecological) environment in which the production of food is facilitated and sustained. Foremost, it involves the examination of, first, the levels of interdependence among the **food production sector**, the **non-food**

production sector, the food distribution sector, and the government sector¹. Second, it involves the assessment of policy instruments which were formulated to cement their inter-related functions into a productive and stable whole.

This study will also reveal that food security is more than the minimum emphasis on the production of abundant food. It will be discovered that even within a population exhibiting surplus, encountering a stratum of households with inadequate supplies to maintain a healthy life is not uncommon. This simply means that food insecurity can co-exist with food abundance and such co-existence is part and parcel of the socio-economic or class differentiation and the dilemma faced by most groups and individuals in certain societies, communities or countries in sub-Saharan Africa.

To address the problem, this thesis suggests that society and states in the Third World should focus on enhancing individual household access to food by ascertaining the self-sufficiency and self-reliance of rural households through whatever means are practicable.

In the final analysis, the systemic model developed is expected, first, to facilitate the identification of sectors, sub-sectors and policy elements which comprise the food security system. Second, it will illuminate the system's policy problems and determine the consequences of policy

¹ These four sectors or components of Zimbabwe's food security system may also be referred to as sub-systems. They are supported by elements whose behaviours policy instruments are formulated to control.

impacts from one sector or sub-sector to another.

As in Latin America, food insecurity in rural Zimbabwe is also related to the fact that there is an inequitable distribution of benefits resulting in a highly polarized yet integrated socio-economic and class structure. Here, a "numerically large labour-intensive traditional subsistence sector co-exists beside a large-scale capital intensive commercial sector" (Nef and Vanderkop, 1990:98). More often than not, the latter provides the main source of employment income for the peasantry. To assess the nature of exploitation and class differentiation, an alternative is obtained by systematizing the design of planning and policy control measures that characterize the flow of food-related activities, information and their impacts.

The focus group in this study comprises the poor households and individuals who live off the rural communal lands (CL) of Zimbabwe. Their food basket is the most vulnerable to both natural and man-made causes of food insecurity. Unemployed and propertyless urban dwellers whose entitlements fluctuate by wide margins, are another affected group, but they receive less attention in this study.

PART ONE:

**FUNDAMENTALS OF FOOD SECURITY,
THE SYSTEMS APPROACH TO DEVELOPMENT PLANNING,
and
UNRAVELLING ZIMBABWE'S FOOD SECURITY PARADOX**

CHAPTER I

POSING THE THESIS PROBLEM

A. DEFINING FOOD SECURITY.

According to Foster (1992:107), the World Bank defines food security as 'access by all people at all times to enough food for an active, healthy life'. Maxwell (1992:2) instead, adopts the UN/FAO definition that it is, 'ensuring that all people at all times have both physical and economic access to the basic food they need'. Barraclough's (1991) definition states that food security is the 'sustained and assured access by all social groups and individuals to food adequate in quantity and quality to meet nutritional needs' (Barraclough, 1991:1).

In general, the above definitions emphasize very similar central concerns in the food security debate, viz., the accessibility to food, the ability to acquire adequate and quality food, the movement of food from surplus to deficit areas, and the protection of effective household and individual entitlement power to food. Also implied in the definitions, is the prioritization of actual food production as the most effective and reliable method of attaining self-reliance and self-sufficiency. By focusing the examination on accessibility, and the quality and quantity of food, these definitions recognize the socio-economic disparities

perpetuating class struggles in certain societies.

Conversely, food insecurity is the household's lack of power to acquire a sufficient supply of food. Accordingly, it can be either transitory or chronic. A transitory food crisis is one which refers to inadequate food consumption levels due to intra- or inter-seasonal fluctuations in supply and/or effective demand. Chronic food crisis, meanwhile, occurs when the means to ensure an adequate diet are persistently lacking.

Whereas chronic food insecurity manifests itself in the form of a persistently malnourished and undernourished population, transitory food insecurity has a totally negative and debilitating connotation. In its extreme form, it manifests starvation, famine, acute malnutrition, and significant deaths.

Based on the above definitions, this thesis makes two suggestions relating to the food security situation in Zimbabwe. First, it suggests that food security at the national level is an aggregation of household and individual food security facilitated by the combined activities of the food production sector, the food distribution sector, the non-food production sector and the government sector. Second, for the household or the individual to be food secure, Zimbabwe's food security system should be capable of ensuring continuity in food sufficiency for all socio-economic classes.

The implication of both suggestions is that food security at the rural household level and food security at the national

level are absolutely inseparable because the failure in one's contribution to the system entails the other's peril. In one study, Alamgir and Arora (1991) stressed the importance of the "food availability" concept. It is argued that food security at the national level means 'the assured availability of food for households and individuals to draw on in order to meet their minimum consumption requirements during a given period of time' usually a year (Alamgir et al, 1991:7).

Therefore, as policy requisites for redefining the significance of the above inter-relationship, the prior fulfilment of two related economic requirements is vital. First, is the requirement to ensure the availability of an adequate and reliable supply of food through some combination of domestic production and/or imports; and second, the requirement to ensure that all policies are directed towards reinforcing the power of households in acquiring *sufficient* quality food through some mix of direct household production and purchase (Asefa, 1991).

The above definitions lead us to seeking an understanding of the focus group in this study, namely, poor rural households. It is important to know who comprise this focal group, and to understand the dominant characteristics (location and economic occupation) which make them the most vulnerable class to food crisis.

B. WHO ARE ZIMBABWE'S RURAL POOR ?.

Poverty is mainly a rural phenomenon in Africa, and since it implies the loss of or the unavailability of entitlement, it is therefore synonymous with vulnerability. But, to reiterate Jeremy Swift (1989:8) "vulnerability is not simply another word for poverty". Rural poor people just happen to be among the most vulnerable. Others include landless labourers and people in the informal urban service trade whose incomes are no higher than the incomes of under-privileged rural producers.

A study conducted by Cousins, Weiner and Amin (1992) distinguished Zimbabwe's rural poor households by first developing a coherent pattern of the reproduction/accumulation processes on which their entitlements were presumed dependent. They identified the existence of a:

"pattern of uneven development, both socially and spatially, with highly unequal access by Communal Land (CL) households to productive resources... Some rural households are using income from off-farm employment to invest in agricultural production... Households with members engaged in skilled and permanent off-farm wage labour tend to be the wealthiest members of the community... Access to land and ownership of sufficient draught power are also associated with higher levels of agricultural production... The rural labour market is dominated by casual labour and piecework rather than fully proletarianized labour... Absolute landlessness is not that high in the CLs, but many arable plots are small and on poor soils" (Cousins et al., 1992:8-9).

This is the pattern of activities from which stratified rural communities in Zimbabwe emanated and, by themselves, these

activities also represent the underlying processes which accentuate inequalities among rural households. It is also deducible from this pattern that not all rural households are poor (- and therefore vulnerable).

The above analysis of the reproduction/accumulation process leads to the following clear-cut delineation of the poor and most vulnerable classes of rural households in Zimbabwe:

- . Households able to reproduce themselves from rural production alone (agriculture, craftwork, beer-brewing, and construction). These have been termed *petty commodity producers*;
- . Households able to reproduce themselves from a combination of rural production and wage labour. These are the *worker-peasants*;
- . Households unable to reproduce themselves, from whatever source, without external assistance from either households or from the state. They are the *lumpen semi-peasantry*; and,
- . Households which regularly produce a surplus, invest in agricultural production and hire significant amounts of labour. They are the *rural petit bourgeoisie*, (*ibid.*, 1992:11).

The *lumpen semi-peasantry* are the most marginalized and impoverished class. Together with *petty commodity producers* and *worker-peasants*, they form the most vulnerable group to

both natural and policy-induced food crises. Hereafter, this group will be referred to as **poor rural households**.

C. OBJECTIVES OF THE STUDY.

This thesis proposes to demonstrate the systems theory and model of analysis as an alternative tool for assessing the relational dynamics in Zimbabwe's food security system during normal and crises conditions. The same tool was suggested earlier as an alternative method of planning and developing an effective, efficient, economically and ethically sound food security structure in which policy flaws are systemically identified and resolved.

Zimbabwe's food security system is characterized by a combination of conflicting and complementary behaviours which undermine the capability of current governing policies. This understanding is reflected in Easton's (1957) analysis in which the input-output-conversion-feedback synthesis is singled out as an important systemic process for organizing policy elements, directing policy objectives and assessing policy impacts on the system as well as its beneficiaries.

In a state of negative entropy², component sectors of the food security system can minimize stress and conflicts by moving towards a state of equilibrium in which each sector's

Entropy is the state of disorder or disorganization in a system or the tendency toward such a state. **Negative entropy** represents order and organization in the system.

productivity is maintained through an acceptable and appropriate circular flow (input-conversion-output-feedback) of elements and information.

In the final analysis, the practical model this study proposes to design should be able to combine the following ideas:

- . It should handle the domains of a set of problem issues such as droughts, seasonal malnutrition, institutional weaknesses in pricing, distribution and marketing, population growth, environmental degradation, rural infrastructure, land reform, indebtedness, unfavourable international economic environment, and rural-urban migration.
- . Its component and policy elements should integrate in such a way that they can be added or modified or subtracted from the system without jeopardizing its stability. These are: food pricing and marketing, food imports, food distribution, trade policies, seasonal food-price stabilization, the use of appropriate technology, the development and improvement of food storage facilities, the transport and communication infrastructure, the availability of trained rural extension workers, and the provision of credit facilities to rural households.
- . The above should be capable of integrating in such a way

that they can be taken apart and reconstituted into different configurations for handling very different subsets of problems which, if solved, would further not only food security but integrated rural development.

The reorganization of the system should, therefore, be predetermined by changes in policies such that changes may result in the equilibrium and further survival of the system.

D. THE RESEARCH QUESTION

Although the effects of unabated natural disasters and ecological imbalances are major causes of poor harvests and subsequent food crises, this thesis will suggest that factors which aggravate the crises remain under-represented by decision-makers as well as the current partial models of solving problems of development. Policy and institutional factors may be the direct cause of food crisis or may aggravate the crisis in a food security system that is already weakened by natural factors.

Aggravating factors are, undeniably, man-made. They emanate from flaws embedded in those policy instruments which were initially formulated to control intra- and inter-sectoral interactions and activities in the present system. Consequently, the central question this thesis seeks to answer is: What are the key sectors, sub-sectors and policy elements in Zimbabwe's food security system, and how does the role of

the government sector as a single actor with multiple objectives vested in other sectors of the system, influence the planning, formulation, and implementation of policies aimed at alleviating rural household food insecurity ?.

E. THE THESIS

Prior to describing the substance of this study, it is important to sufficiently articulate that the formulation of effective food security policies beneficial to Zimbabwe's poor rural households, does not justify the system's infallibility. It is only perceived as a vicious cycle of processes which provide the required foundation for further modifications as dictated on the system by the persistently changing economic, political and ecological factors in its environment.

In the final analysis, a methodological framework that addresses the fundamental changes needed to facilitate the development of a food security system which addresses the food needs of poor rural households is required. The methodology is expected to facilitate the *modification and redirection* of development policies and goals, while at the same time forging compatibility and reciprocity through *reorganization and restructuring* of the system and society, especially a society that is as economically and socially stratified as Zimbabwe's.

1. **Modification and Redirection of Goals.**

The principle of modification and redirection of development goals is adopted from a study of sustainable development by Santoso (1992). The development of a healthy people with healthy minds is referred to as the spring board to economic, political, environmental, and social progress in the Third World. In contrast, the present study seeks the assurance that rural food security is fair, accessible, and sufficient in terms of nutritional quality and quantity. This assurance rests on the premises of a food security system that is capable of being redirected towards human development in general.

There are two reasons for emphasizing redirection of the system. "First, ecologically nature has a certain limit to allow human beings to create material abundance. Second, all human beings are subjects of development" (Santoso, 1992:6). Therefore, the appropriation of sufficient food as a basic human need while recognizing both the generosity and limitations of nature is fundamental for accelerated rural development in the areas of education, health, population, poverty, infrastructure, and social organizations.

It is deducible from the analysis that the interpretation of the quality of human life can not be limited to material or physical qualifiers. For example, the 'physical' existence of a food surplus alone is insufficient reason to generalize its

accessibility by every household stratum. This implies that the success of policies designed to improve the quality of human life should serve as a basis for explaining why households in certain socio-economic classes in Zimbabwe and the rest of the Third World, although vehemently opposed to inequity in material accumulation, are constantly more food insecure than others.

Modification and redirection of development goals also exemplify the necessity for moral considerations. These goals occur at both the individual and societal levels, and can be assessed both objectively and subjectively. Thus, the quality of human life will derive from the premises that development is dedicated for human beings, and human beings are both "social and individual creatures, are both objects and subjects of development who need material and spiritual [or non-material] satisfaction" (*ibid.*, 1992:7).

2. Reorganization and Restructuring

Reorganization and restructuring requires the reordering of the centralized decision and policy-making structures such that the food security system and related policy instruments can flex according to social, economic, political, ecological and climatic changes.

Such liberalization means that an economic-growth-oriented development is not realizable within the framework of

an authoritarian-developmental state because decision-making pertaining to all sectors of the economy is centralized regardless of disparities in their respective structures and functions. Through the evaluation of policy instruments and the manner they are implemented, this thesis will reveal that all sectors and sub-sectors involved in providing and safeguarding rural household food security in Zimbabwe are subjected to the authority/power at the centre, namely, the state.

Consequently, the production, marketing and distribution of food as well as the allocation of the means of production are a monopoly of the state decision apparatus. However, while the state has control over internal policy elements, it has not succeeded in averting external pressure mounted by, among other agents, the European Community (EC), the World Bank and the International Monetary Fund (WB/IMF).

As far as food security is concerned, the Zimbabwean framework emphasizes development in a more economic than political sense. There is absolute dependence on state intervention in the implementation of formulated policies and proposed development strategies.

To the actors in decision-making, the moral or social welfare obligation of the state is perceived as secondary to the primary economic concerns. For example, that the objective of agricultural food production is economic is substantiated by the level of resource input that the state gives commercial

food producers. Thus, the barriers to decentralization are ironically the products of an interventionist power that is, at the same time, striving to reduce public spending.

In Zimbabwe and most of the Third World, political and economic decisions are made with fear and uncertainty about repercussions from within and without the country. In particular, authoritarianism and interventionism in Zimbabwe is challenged by those who derive economic benefits from the weaknesses of the system. Well articulated pressure groups have successfully reoriented the state's centralized stance to their own interests.

For example, by injecting high revenues in the state's coffers, the predominantly white commercial farmers continue to own large expanses of rich agricultural land. This group is better organized politically and economically as to be very effective in inhibiting changes that would, otherwise, destabilize their economic base. Consequently, they have succeeded in slowing the pace of land reform (Jayne and Chisvo, 1991).

Just as the government is devoid of alternative methods to supplement revenue losses from commercial producers in the event of excessive land reform, the farmers too fear losses resulting from the loss of both their farm land and the cheap labour of under-privileged CL inhabitants. Hence, fear and uncertainty inhibit the formulation and implementation of strategies which could improve the status of rural household

food security.

F. METHODOLOGY

1. Sources and Types of data

This thesis has relied on secondary material as the primary sources of data. At libraries and research centres in Halifax and Montreal, these sources include books, journals, magazines, newspapers, government and non-government documents, and other publications³. The Zimbabwean Deputy High Commissioner to Canada was very responsive to my request for government documents and publications in this area.

My initial ambition in studying Zimbabwe's food security paradox, was to conduct an on-site collection of relevant data and information. Time and funding have been major constraints to this endeavour.

Since the systems approach provides a strategy for evaluating, identifying constraints and designing

Lincoln and Guba (1985), explain the advantages of relying on secondary information. "...they are almost always available, on a low cost, or free basis. Second, they are stable sources of information, both in the sense that they may reflect situations that occurred some time in the past and that they can be analyzed and re-analyzed without undergoing changes in the interim. Third, they are a rich source of information, contextually relevant and grounded in the contexts they represent... Fourth, they are often legally unassailable... Finally, they are, unlike human respondents, non-reactive" (Lincoln, et al., 1985:276-7).

However, the disadvantages of secondary data and information are that materials referred to are no longer representative of the current situation and therefore lack objectivity. Also, the original bias of the researcher is difficult to detect. In addition, the researcher is obliged to use outdated materials. This weakens the validity of the present research and analysis. However, these disadvantages are not so critical as to destroy the reliability and consistency of the data and information carried in them.

interventions with favourable impacts on the system's equilibrium, systemic analysis will be used in the evaluation of the food security system and in the interpretation of available data and information.

Much as it is overridden with scientific rigor, systemic analysis is appropriate when used in prioritizing national development programs and policy instruments, especially those policies relating to the production, marketing and distribution of food as well as timing its availability in deficit areas.

The systems approach or theory as used in this thesis provides extremely powerful conceptual tools for making realistic analysis and synthesis of complex socio-economic systems. When the decision problems are stated as scientific (mathematical or mechanical) models, the theory shows the many ways of integrating them to solve the overall decision problem of the system. But when the decision problems are only descriptively stated as is the case with Zimbabwe's food security system, the theory is nevertheless very useful. The procedure is used to understand the structure and activity of the system, to generate analysis procedures and, to identify problem areas which require restructuring and reorganization.

However, the practical application of such a coordination structure needs very strong and effective political support. An application of the coordination principles becomes a starting point for generating synthesis procedures and the

strategies for controlling systemic interactions.

The relevance of the systems approach to the development of strategies useful in sectoral planning and policy control of Zimbabwe's rural household food security is also augmented by the following examination by Lofchie and Commins (1986). They state that:

"..studies of sub-Saharan food policies need to be broadened to include systematic attention to policy implementation. The conventional economic approach to policy proceeds as though the government were a unity actor with multiple objectives that are rationally traded off. While such an approach has merit as a way of examining the cost of alternative policy options, it is weak in explaining both the outcome of actual policy-making processes and the implementation of policy reform. An understanding of the power and interests of the multiple actors who influence food policy is important.." (Lofchie et al., 1986:34).

The impetus derived from the interaction between the system's four sectors coupled with the unitary dominance of the government sector, is that it provides the basis for a new methodological tool capable of generating, reorganizing and redirecting the system. The above examination leads to two recommendations.

First, it recommends the systems model of analysis as a methodology for understanding the powers and interests of the multiple actors (individuals, classes and agencies) who influence policy-making. And second, it offers a critical challenge to the conventional approach. This approach places the government sector in the position of a unitary and authoritarian actor in decision-making. This argument is

pursued thoroughly in Part Two of this thesis.

Furthermore, it is suggested that the systems model of analysis is the most efficient methodological tool for forecasting and planning because it provides a comprehensive and integrative approach to the complex variety of socio-economic conditions and class differentiation in developing countries. It is:

'a flexible technique which is especially applicable when considering the political and socio-economic variables in which the concentration of interconnexions and interdependencies of the elements [and sectors] is especially high... Besides incorporating a transdisciplinary procedure of research, the systems approach simultaneously facilitates the investigation of empirical reality while keeping the analysis at the theoretical model ..the approach [is a] basic recognition of the objects owned within the system, i.e., the systemic properties and its major components' (El-Yacoubi, 1976:3).

The scientific rigor is thus loosened because it becomes possible to integrate empirical reality, viz., the systemic properties, while maintaining the theoretical model. Models as used in this context promote the organization of available information on the system. They also facilitate the extension of alternative approaches to the resolution of problems of development prevalent in the traditional models.

2. The Analysis of Data.

Decision-makers often attempt to avert scientific rigor by ensuring that a system can project the impacts of

alternative policies. This is only feasible if the prior subjection of an input to the conversion process can result in the remission of an empirical feedback to policy-makers. A change is anticipated in the system's performance when the conversion process yields a feedback which is different from the predicted results. If the change negatively disorients the food security of poor rural households, it is possible to conclude that an inputted policy-element was ridden with planning and policy flaws. Determining the flaw, then becomes an integral aspect of rectifying the problem.

For the purpose of screening alternatives, accuracy rather than the precision of model projections is most important. Fitzhugh (1987) developed four principal steps for evaluating a system. They are:

- . characterization of the system (the four sectors of the food security system): It involves an assessment of the composition, resource inputs, product output, operational processes and interactions among them;
- . analysis to identify constraints and practical options for their resolution, (that is, evaluation of the current system and all food-related policy instruments);
- . design and evaluation of interventions to the existing system as well as determining the timing for intervention into the systemic processes at work. They must be sustainable and operational

within the present social, political and economic platform of Zimbabwe;

- . implementation of technically, economically and socially feasible interventions.

The methodology implied in the above stages searches for levels of interconnections among systemic properties, thereby facilitating the evaluation of the system's performance. Following Hajnal and Kiss's (1988) application of the systems approach to planning integrated development, the evaluation will essentially attempt to enhance Zimbabwe's food security by spelling out assumptions on the impacts of current policy measures on the system and, consequently, poor rural households.

G. CONCLUDING REMARKS

This thesis will argue for the creation of a food security system that both respects the food basket and can procure direct benefits to poor rural households and individuals. As a prerequisite, it is important to assess the performance of the current system in order to determine present policy flaws. The assessment will, however necessitate the prior identification of the system's component sectors and sub-sectors as well as the policy elements to which they are susceptible. Only by accomplishing this objective can the existence of inhibiting policy-measures be justified.

Whether a different framework is adopted for the study of rural household food security in Zimbabwe, the final analyses are still expected to address major factors which require restructuring and redirection of appropriate policy controls. These include: rural household income and food entitlement power, the ability to produce and be self-sufficient in food supply, accessibility to alternative sources of food supply, and the health (nutrition) standard of poor rural households.

On the other hand, the study of how government policies practically address the above issues relies on an assessment of the efficiency and effectiveness of the present food security system. The assessment of its parts provides vital indicators of whether current regulatory instruments are effective in controlling the system's behaviour and directing it towards attaining rural household food security.

At its minimum, the analysis is expected to indicate whether the reorganization of the present food security system and policy controls is necessary at all. And at its maximum, it is used to indicate whether political and/or economic restructuring at the higher level is the most imperative. This study refrains from the second alternative because it is complex and in the 1980s, attempts at it culminated in a series of civil unrest and coups d'état in several African countries (Chazan and Shaw, 1988).

The problems identified in this study should not be confined to the Zimbabwean food situation. Rather, they are

common features, often more severe, of the food security system and policy problems in sub-Saharan Africa. In general, this thesis argues that the vital food needs of the poor rural household class, and as such their contribution to the national and regional economic, social and political development, have been suppressed.

In this study, the recommendation for integrating the systems model of development is substantiated by ideas from the 'critical approach' school of thought. This effort proves the usefulness of the model as an appropriate methodological tool for identifying and defining the problems often faced in designing an operationally effective and efficacious food security system and in implementing cognate policy-decisions. The creation of a successful food security system is expected to revolutionize planning and policy-making in Zimbabwe and regions of sub-Saharan Africa where similar political, ecological, economic and social differentiation are prevalent.

H. OVERVIEW

This study is divided into two parts and organized in eight chapters. In Part One, chapter I has provided the objectives of the study, and the definitions of food security and food insecurity by international institutions such as the UN/FAO and the IMF/World Bank, and individual scholars such as Barraclough (1991), Maxwell (1992), Foster (1992) and Tapsoba

(1990). It also explores the thesis and the research problem as well as the methodology, sources and types of data used in the final analysis.

Chapter II explains why Zimbabwe was chosen for this study. It describes how and why the Third World food security situation is better understood, studied, assessed and analyzed when it is construed as a system with isolated but inter-related sectors. Each sector comprises a number of identifiable working sub-sectors at which related policy-measures are aimed. It is also suggested that the impacts of these policies serve as indicators for assessing the performance and the equilibrium of the system.

Chapter III explores key issues in the food security debate. It examines the study of food security as an analytical construct and explains the conceptual framework used in the present study by presenting paradigms in the systems study of food security. These paradigms include the conventional and the critical approaches in development thinking. Furthermore, it discusses the magnitude of the food problem as one giant crisis confronting the Third World, especially African countries.

Some key issues from the literature on food security and the systems approach are elaborated and fundamental issues in food security are discussed. They include factors which cause and/or aggravate the food crisis in the Third World.

Chapter IV deals primarily with an examination of the

current food situation in Zimbabwe. It provides, among others, the country's historical background to current inequalities in agriculture and the continuing quest for land reform. Furthermore, it explores issues which have historically inhibited positive changes in rural food production and continue to pit the poor rural Communal Land (CL) smallholder food producers against the affluent European dominated large-scale commercial producers. These issues include: the physical, climatic and ecological geography of the country as well as demography and factors influencing its distribution across the country.

A description of the current food situation is simplified by the attempt at systematizing food security right from the start. Each of the four sectors and sub-sectors of the food security system is explored and critically assessed in order to provide a coherent reality of how the current system functions.

Under the Government sector, the issues discussed include: land reform and resettlement, and the administration and impacts of the Structural Adjustment Program (SAP) on poor rural households. Whereas these two sets of issues are directly attributable to the government sector of the system, their influence also permeate the rest of the sectors.

The food distribution sector encompasses food marketing and distribution, rural household incomes, food pricing and food price control, and the role of food subsidies.

The food production sector describes how government incentives have affected land reform and rural household food production. It explores the nature of land reform and how climatic, ecological and socio-cultural impediments have hindered its fair (re)distribution. It further describes the typologies of land ownership that themselves characterize the class stratification of Zimbabwean societies.

The non-food production sector addresses the position of agriculture in terms of its contribution to the gross domestic product (GDP). It highlights the growth of the non-food agricultural manufacturing sector. In addition, it explores the division of labour between the rural and urban sources of household income entitlement power. Lastly, it explains discrepancies in rural household wage distribution and food purchasing power.

Finally, this chapter discusses major constraints to rural household food security in Zimbabwe.

Part Two builds upon chapters II, III and IV in the systemic assessment of the current food security system. In Chapter V, two hypothetical systems models are used for describing Zimbabwe's food security system under normal and under crisis situations. To facilitate the analysis of policy flaws and the role they play in rural household food security, the present food security system is broken down into sectors and sub-sectors that relate to the hypothetical system.

This chapter also explores and evaluates alternative

policy instruments and possible structural modifications based on problem-areas in the present system. In addition, it discusses the possible consequences on rural household food security, of implementing alternative proposals. The ability to accurately project or predict policy outcomes by weighing economic, political and social tradeoffs will be found to be a crucial advantage of the systems approach to planning.

This chapter is devoted to systematizing the development of planning strategies. It addresses the first two of Fitzhugh's principle steps, viz., the characterization of the system, and the analysis to identify constraints and practical options for their resolution. It focuses on the identification and description of the system's component sectors, its sub-sectors and the nature of systemic linkages.

Chapter VI is concerned with systematizing the assessment of policy instruments. It emphasizes the design and evaluation of interventions to the existing system. It offers a critical evaluation of the policy instruments which control the present system.

Last but not least, Chapter VII deals with drawing out recommendations for eliminating inappropriate policies, adding new instruments and modifying as well as redirecting ineffective ones. In precise terms, it addresses possibilities for the implementation of technically, economically and socially feasible interventions. The recommendation for addition, subtraction and modification of policy instruments

will be undertaken with a focus on four objectives pre-eminent at all stages of policy-making. All policy instruments will be assessed for their effectiveness in enhancing the objectives of growth, equity, stability and self-reliance, and ecological sustainability.

Chapter VIII is the conclusion to this study. It reiterates the most critical structural and policy issues in the preceding discussion. Foremost, it emphasizes moderation and liberalization - but not the loss of control - in the unitary approach undertaken by the state in directing and organizing the food security system. It also reiterates the application of the systems approach to solving most problems of development in Third World countries.

Finally, it emphasizes that in order to solve most of these problems, decision and policy-makers should concentrate research and development in rural areas because it is in rural areas where most problems of development are vivid and clear-cut.

Chapter II

THE THEORETICAL FRAMEWORK

A. THE ORIGIN OF GLOBAL FOOD SECURITY PROBLEM: A REVIEW

According to Green and Kirkpatrick (1982), the global problem of food insecurity was highlighted by the crisis of 1974 when a succession of crop failures resulted in declining food-stocks and high food prices.

Paradoxically, as global food production increased and food shortage declined in the 1980s, the number of hungry people continued to rise. However, the change in the relationship between food production and self-sufficiency helped to shift global attention to two foci concerned with a population's food requirements. First, the attention shifted to a focus on increased accessibility to food and the ability to acquire a sufficient amount at all times for an active and healthy life (Maxwell, 1992). And second, it shifted to a focus on the most needy and vulnerable groups, viz., the poor, low-income rural households and individuals. This groups make up the majority of the Third World population and 70% of the inhabitants of sub-Saharan Africa (Lele and Adu-Nyako, 1992).

It can be argued that food security is a much broader concept than food self sufficiency because it seeks to explain the extent of food distribution and the household's ability to acquire food by addressing both food self-sufficiency and its

nutritional quality. Again, it is a much narrower concept than agricultural growth because it deals exclusively with food and food-related activities as the essential for a healthy human life rather than with non-food agricultural production and related activities.

B. WHY ZIMBABWE WAS CHOSEN FOR THIS STUDY

1. The Paradox: Food insecurity amidst food surplus

This thesis has critically examined a number of recent scholarly contributions to the study of current trends in Africa's food security. Arguments stemming from them suggest, in one way or another, that the food security system should be re-oriented so that it can deal with the crucial issues of food production, food distribution and food marketing in rural areas.

The derivations from these arguments are diverse. First, they suggest that without increased food production it will be impossible to feed increasing rural and urban populations in the Third World. Whereas there is a pressing desire to diversify from the traditional food crops to the cash-oriented, non-food agricultural crops, such pressure should not permit the reduction in actual food production.

Second, without better distribution and marketing controls, it is unlikely that food security for all can be

attained in class differentiated and economically stratified populations.

Third, appropriate policy measures should aim at firmly securing individual and household ownership of the means of food production, protecting household incomes, establishing standards for land tenure and (re)distribution, regulating taxation on farm produce, and preventing rural gender exploitation.

The unilateral, monopolistic and interventionist decision-making role assumed by the government (state) sector in Zimbabwe's food security system is necessarily by default. That is, in its capacity as the highest bureaucratic policy-making entity. Accordingly, this sector does not perceive itself as a separate, single actor in the food security system. While its decision are conceded to, the reliance on it has not procured - neither promised - food security for poor rural households.

Based on the above suggestions, this thesis will argue that food insecurity in Zimbabwe remains undiminished even amidst widely publicized surpluses and greater - though not yet equitable - land redistribution. The current policies on food security do not impact equally on the system's sectors (of which rural peasant food producers are a part) because they mainly reflect government and urban interests and bias against the rural households.

2. Purpose of the study

The purpose of this study is to determine elements of the food security system that are most susceptible to policy changes. One such identification of policy elements was carried out in a study by Jayne and Rubey (1993). The study which initially proposed that market reform may considerably reduce the magnitude of the trade-off between government's food security and budget minimization objectives, discovered that policy instruments aimed at enhancing competition in small-scale milling to produce cheap meals affordable by low-income rural households were neglected. The neglect arose because of the conventional perception that urban consumers strongly preferred industrially milled (or fine-grind) maize meals.

The study indicates that attempts at market reform, for example, though focused on key policy elements such as food pricing, food distribution, the tastes of various economic classes, and household purchasing power do not necessarily alleviate crisis in poor rural households.

Amidst policy inconsistencies, the food crisis has surprisingly attained two deplorable levels during the past 14 years of independence. However, policy-makers have been quick to conveniently attribute these crises to natural factors, principally droughts. This does not help in neutralizing the effects of unequal food distribution, poor marketing and

storage, unfair pricing and inadequate rural infrastructure (Sachikonye, 1992; Jayne and Chisvo, 1991).

Furthermore, although most studies on food crisis do not agree on the magnitude of future global food problems, they do agree on current dimensions of food production, food distribution, household purchasing power, and government policies. By themselves, these factors are reflections of a system whose objectives are policy-guided. Why it fails to meet its objectives is the composition and origin of the argument presented in this thesis: that there are serious policy, functional and structural flaws in the present system such that poor rural households are constantly food insecure.

3. Systematizing Zimbabwe's food security.

The systems model of analysis weights the pros and cons or the comparative advantage of every proposed policy instrument to each sector and sub-sector of the system. All sectors contributing directly to Zimbabwe's food security are hereby described and analyzed as a mechanical conglomerate of systemically arranged parts⁴. Each part, referred to as a sector, comprises sub-sectors and policy elements whose behaviour the general system seeks to control.

⁴ Also referred to as an arrangement of micro-systems or sub-systems or sectors forming the larger entity - the macro-system. Aydemir & Yazar (1987) use the terms 'supremal' and 'infimal' to refer to the system and its sub-systems, respectively.

Although an attempt is made to relate identified policy-issues to weaknesses in the input/output interconnections among the four sectors, the development of an effective and efficient alternative food security system does not necessarily imply the complete overhaul of policy controls currently coordinating systemic interactions. Rather, it is an attempt to tackle problem areas in the system by redressing policy measures that disorient the performance of vital systemic elements from attaining the 'food for all objective'.

In the final analysis, the burden of setting the stage for future food security rests completely, though not exclusively, on the dominant government sector of the food security system. However, the fact that symptoms of food insecurity abound in rural areas also suggests that, while playing the role of an authoritarian unitary (single) actor, the government sector has neglected the damaging impacts of its ardent policies on the system as a whole and rural households in particular.

4. Prediction and Accuracy of Systemic Analysis

It is important to recognize the contribution which the present food crises will have in the shaping of future food security policies in Zimbabwe. It has been revealed that "crises can lead directly to important changes in domestic policies that are sometimes related to shifts in political

[and economic] power' (Lofchie et al., 1982:3). Lessons from previous experiences with food crisis may lead to preparedness against future similar occurrences.

The task of accurately identifying the components and properties of Zimbabwe's food security system also helps in reducing reliance on unfounded prediction. This is because ill-suited policies can be evaluated based on structural and functional changes in the roles of specific elements rather than on changes in the performance of the overall system. But, whereas the prediction of a systems behaviour is not ruled out in policy-making, this thesis has reason for not completely subscribing to its accuracy. Since a system in operation submits empirical feedback, an analysis of the feedback can be more accurate than predictions that are sometimes exaggerated.

Looking at the systems model of analysis in the above context may also facilitate the hypothesis that attempts at skewed policies that address the food choices of the urban-based non-food production and the food distribution sectors may translate adversely on rural household food security.

C. PARADIGMS IN THE SYSTEMIC STUDY OF FOOD SECURITY

1. Food Security as an Analytical Construct

Since it requires defensive mechanisms, food security is thought to be an "analytical construct that belongs both to

the realm of development studies and to the realm of security studies. Hence, the 'food security paradigm' entails explicit policy options and solutions to handle normatively defined socio-political [and economic] problems" (Nef et al., 1990:100).

Accordingly, since food security is a development objective which the government of Zimbabwe has attempted to address through official institutional arrangements and policy regulations, incessant rural household food crisis can possibly be examined from two perspectives.

First, it can be examined from a socio-political perspective in which public policies have not only failed to avert those factors which aggravate food crises, but have directly contributed to the weakening of food production, food distribution, food marketing and the actual erosion of rural household incomes.

Second, class differentiation is dominant. As such, the socio-economic dimension of the ownership of the means of production is manifested in greater disparities in individual and household incomes and other entitlements. Competing groups of the landed aristocratic class and the rural *petit bourgeoisie* are poised to exploit the existing labour surplus of the traditionally conservative rural *lumpen semi-proletariat*, worker peasants and petty commodity producers. This tendency has widened the gap between the propertyless and the property owners. It simply implies that the definition,

the identification and the resolution of controversies in the debate over Zimbabwe's food security will require answering obscure socio-political and socio-economic questions besides the contradictions in empirical realities reflecting the country's actual food situation.

This study suggests that current public policies are not so much obsolete as to be inappropriate, out-dated and therefore inefficient in handling the country's food situation. Rather, these policies are either saturated with bureaucratic red-tape, as is common in socialist-oriented economies, or they lack the dynamism and the flexibility in adjusting to the imminent shake-up of the food security system by either natural, or external and internal policy-induced factors. Consequently, the search for defensive mechanisms must integrate well defined sets of rules and institutional arrangements to direct the system (Hopkins and Puchala, 1978).

2. The Food System, Food Regime and Food Security paradigms.

There are three concepts useful in the present analysis of Zimbabwe's food security. These are the food system, the food regime and food security. By food system is meant the interconnection of several functional sectors and sub-sectors (Nef et. al., 1990). The United Nations Advisory Committee on Science and Technology for Development (UNACSTD, 1986), refers to the food system as:

'the whole complex...interactions relating to food production, processing, exchange, and consumption. It stresses the interaction and feedbacks between component elements...concerned with the place of food...within larger environmental resource and social contexts (UNACSTD, 1986:6).

For Zimbabwe, the food system comprises, four functional sectors: the food production, the non-food production, the food distribution, and the government sectors. The effectiveness and equilibrium of the present system will be assessed based on inter-sectoral interactions and feedback to planners and policy-makers.

The set of institutionalized practices, namely, rules and institutions such as marketing boards, cooperatives, farmer unions and other food-related agencies comprise the *food regime*. The food regime may be either decentralized, loose or monopolistic because it develops and intervenes in the planning and control of administrative standards. The contrary, that is, a *loose food regime* is a decentralized system in which market forces determine the distribution and exchange of food. A *monopolistic food regime*, meanwhile, is one that moves away from a perfectly competitive situation (Nef et. al., 1990).

Zimbabwe's food regime is currently viewed in this thesis as mainly centralized and monopolistic because socialist views have for a long time dominated the political agenda of the ruling government. However, the socialist transition which was expected in agriculture after the country attained independence, never succeeded in its entirety (Munslow, 1985).

It is on this ground that the necessity to evaluate the virtues of centralized planning and policy control of food security becomes crucial. The process has significantly affected food production, distribution, and pricing policies as well as the incentive to improve the performance of the current system. It also appears that beside the centralized and monopolistic government approach to policy-making, decisions which are made within each of the sectors also infringe on the performance of other sectors and the system as a whole.

However, suffice it to suggest that it is the combination of Zimbabwe's food system and its food regime which helps in determining the degree to which poor rural households enjoy food security. Similarly, the combination of food instrumentalities (policies, production, trade, purchase and bartering) are required for attaining adequate levels of food quantity, quality and variety. At the national level Zimbabwe will be required to optimize the use of its natural resource endowments, its comparative advantage in food and non-food agricultural production, and its level of industrialization.

An understanding of the various schools of thought and discourses will also help to provide important insights for developing an alternative planning strategy for rural household food security. In fact, policy-makers appear to be lost in a labyrinth of multiple approaches from which they are unable to select and implement any one successfully.

Consequently, the recommendation for adopting a systemic approach will also require an understanding of the various discourses in the food security debate. Areas of convergence and divergence, conflict and consensus, are identified in the Zimbabwean food system and analyzed in terms of controversies relating to these approaches or discourses.

D - APPROACHES TO THE SYSTEM ANALYSIS OF FOOD SECURITY

There are two in-depth approaches to the understanding and analysis of state involvement in matters of national food security. The examination is based on an assessment by the World Food Council (WFC) (Nef et. al, 1990). The council identified two discourses in the 'food security paradigm'. These are, the conventional and the critical approaches.

1. The Conventional Approach

Since the conventional approach emphasizes growth economics and Neo-Malthusianism⁵, it is argued to be a mode of rationalization that is rooted in orthodox development

The Allan Shawn Feinstein World Hunger Program, Brown University (1988:2). Occasional Papers, OP-88-1. "Malthus, the first theorist, writing before the main part of the European industrial revolution, wrote:

Population, when unchecked, increases in a geometric ratio. Subsistence only increases in an arithmetical ratio. A slight acquaintance with numbers will show the immensity of the first power in comparison of the second.

By the law of our nature which makes food necessary to the life of man, the effects of these two unequal powers must be kept equal.

This places a strong check on population from the difficulty of subsistence. This difficulty must fall somewhere; and must necessarily be severely felt by a large portion of mankind".

theories. In this approach, food security is a mathematical computation determined by the magnitude of international cooperation, the level of Western technology in use, and the population growth rate attained by a country. Hence the equation

(modernization = Westernization = stability = development).

This conservative structuralist-functionalist epistemology of the conventional approach is orthodox, reformist and culture bound because it contrasts systems maintenance, social integration and gradual evolution with undesirable radical developmental changes. These changes are too costly for the Third World to attain at the transitional pace expected of them by Western countries (Almond, 1968).

On the same note, it is not uncommon that most current development programs in the Third World are prepositioned along externally induced Western lines of interest. At the political level, these programs mainly target the prevention of Third World insurgencies against donor Western nations (Dwivedi and Nef, 1982; Nef et al., 1990). At its maximum, the conventional approach attempts to force the Third World into complying with stringent mechanisms of Western-type social, economic and political ideologies.

The equation exhibits many internal inconsistencies. While it explicitly implies that food insecurity in sub-Saharan Africa is the corollary of the deficiency in policies concerning technological transformation, the environment, and

demography, the solutions it offers are not only ill-suited to local conditions - culture, economy, politics, tastes - but are Western in content.

For example, the methods of structural adjustment that Third World economies are being forced to undertake have been detrimental to all existing systems: food security is just one example. The notion of food as a defensive weapon in the realm of national and international security has witnessed developed Western countries, especially the United States, use grain as an instrument of foreign policy in Third World countries. Some have reacted but no sooner than being gagged with more "assistance". When social and economic disorder started to have effect on his leadership, Zimbabwe's President Robert Mugabe "accused the United States of using its foreign aid to coerce other countries to toe its line" (Henderson, 1990).

The problem, as Henderson (1987) argues in an earlier paper, is that the need for technological transfer, professional training, investment capital, development assistance, and grain supply obliges most African governments to "view their economies as dependencies of the world capitalist system. Such dependence for basic development needs increases the vulnerability... to economic pressure in their political relationships with Western developed countries" (Henderson, 1987:14).

The equation ignores the political and economic dominance of developed countries in shaping the new international

division of labour (NIDL) and the new international economic order (NIEO). This dominance appears to have increased with the demise of the Cold War. Hence:

...there exists a type of "food power" relevant to international relations..[As] the relative positions of various states change with the waning of the Cold War and new issues and forms of wealth emerge, food security provides many with a source of power (Balaam and Carey, 1981:2)

Applied to Zimbabwe, the frequently acclaimed surplus output could possibly make her a regional power over its yearly food deficit neighbours.

However, the preoccupation with such security arrangements tends to devastate both regional and local food security. At the regional level, the over-reliance on the production and export of primary commodities by neighbouring countries makes Zimbabwe their sole supplier of food-grain. At the local level, the increasing demand for foreign exchange required to run the institutional and the communication infrastructure required to fuel regional dominance would dilute the focus on local food supplies since surplus will need to be quickly transformed to cash.

The attempt to radically modernize or westernize also tends to be catastrophic, especially if the methods in use will drastically alter the *status quo* of the existing political and economic arrangements. The IMF's firm stance on structural adjustment, for example, has severely affected healthcare, education and household food security in Zimbabwe (Meldrum, 1993).

The conventional approach has been dismissed by the World Food Council as a "narrow focus" of the problem and solution to food insecurity (Nef et. al., 1990). In a technical, logistical and operational sense, the conventional approach unfairly gives monopoly control to developed countries. For example, Canada and the U.S operate a virtual global monopoly in the production and marketing of wheat. This disregards the fact that many other climatic regions of the Third World can sustain the production of wheat at even lower costs.

Furthermore, by subjecting Third World countries to the rigmaroles of acquiring and utilizing expensive technology in the name of modernization, development and westernization, the cost of maintaining imported technology has placed more strain on their meagre and underdeveloped resources.

In addition, the conventional approach should be criticized for developing a rigid formula which presupposes that food security can not be attained without the prior fulfilment of any one element of the equation. It is an inconsecutive and impracticable formula because, even in those developed countries where it represents success, certain strata of the population are predominantly poor and food insecure, and class conflicts abound.

Finally, where modernization is pursued with the sole objective of achieving positive adjustments, comparative advantage is negated. For example, as a part of its aid package to the Sudan, the IMF/World Bank conditioned Nimer's

government to concentrate on the production of cotton (whose global demand drastically collapsed) and import wheat from the USA. Following a series of demonstrations by workers and students, the government was toppled (Chazan and Shaw, 1988).

A counter-discourse christened "the critical approach" which represents the reality of the Third World's economic and political environment has emerged to challenge the strength of the liberal conventional approach (*ibid.*, 1990).

2. The Critical Approach.

The critical approach to the analysis of food security is an inward-oriented rather than an outward-oriented development approach. This:

"counter discourse contains radical revolutionary approaches, theology of liberation, basic needs, ecologism to self-interested nationalist pragmatism ...this position stresses political autonomy and endogeneity of decision-making without imposed prescriptions and interference... This involves food security as part of a war economy..." (Nef et al., 1990:114-5)

This view is supported by both the landed aristocrat and the peasantry of the Third World who argue that the expansion of multinational corporations and international agribusiness schemes is a threat to self-determination and an infringement on their rights to the ownership of the means of production⁶. Some form of protectionism, export promotion and incentives to

⁶From the documentary "The Politics of Food", 1987.

Some form of protectionism, export promotion and incentives to agricultural production are seen as necessary for the survival of the Third World as a class in a global community which includes developed Western nations.

Since it focuses on food self-sufficiency and self-reliance, the critical approach perceives distribution dysfunctions as relatively autonomous from production. This means that increases in food production do not automatically translate to the reduction in household food crises as long as existing socio-economic and political incentives continue to disempower the poor rural classes their food entitlement.

In fact, most developing countries are ardent supporters of this approach. Its definition of food security is much broader and calls for both adequate food supply and appropriate policy instruments to govern its production, distribution, marketing and pricing. By emphasizing macro-policy aspects, the critical approach focuses on fundamental systemic - social, political and economic - reorganization in order to address the food problem of the Third World. Unlike the orthodox approach, internal demographic and technological factors are not viewed as central causes of food insecurity (Nef et al., 1990). Similarly, neither is the rigid equation (development = westernization = stability = modernization) inevitable in achieving accelerated rural development.

The focus on the inward-oriented development theory, which this approach advocates, emphasizes food as a right of

westernization/modernization/development process. Food is viewed as a medium that provides the "centre" (North or the developed nations) with a weapon against the "periphery" (South or the Third World) in the infinite North-South conflict.

The relevance of this approach to the Zimbabwean food security situation is mixed. In principle, the macro-economic policies of this approach aim at reorganizing and redirecting the current food security system so that it may resist the infiltration of western orthodoxies. This way, developed countries could be inhibited from realizing their economic and political objectives at the expense of Zimbabwe's resources.

So far, the reorganization has been futile because the current global economic crisis coupled with the intricacies of the NIEO is apathetic to the Third World cause. Utmost desperation has driven most into accepting the much dreaded IMF structural adjustment programs and its excruciating conditionalities⁷. Accordingly, Zimbabwe succumbed following a series of economic and political acts of sabotage

The SAP measures may vary from country to country, but the various components of the economic stabilization package involve the following broad measures:

- a. Devaluation and unification of the exchange rate and elimination of exchange controls and multiple exchange rates;
- b. Liberalization of trade and elimination of protective tariff barriers;
- c. Market liberalization within the national economy implying inter alia the elimination of subsidies and/or prices controls;
- d. Privatization of parastatals, de facto privatization of some social services;
- e. Reduction of the budget deficit and contraction of nominal and real government expenditure, austerity in government spending;
- f. Control of internal demand implying the de facto control over real wages and labour costs through de-indexation; and,
- g. Poverty alleviation schemes directed towards target groups

perpetuated by Western interests, principally the United States (Sachikonye, 1992).

Zimbabwe experienced the debilitating effect of 'food as a Western weapon' prior to the 1991/92 food crisis when it pleaded for US financial aid to help alleviate its deficit problem and revitalize the declining infrastructure and manufacturing base. As a precondition, the IMF/World Bank forced it to sell the existing stockpile of food-grains to the UN/World Food Program for distribution in war-torn Mozambique. The country in turn received American food aid in the form of yellow corn - considered unpalatable by both the rural and urban population. The subsequent food and financial crises were procrastinating and irresistible (Stoneman, 1992; Stoneman and Thompson, 1994). However, it helped to reveal loopholes in the country's famine preparedness programs.

It is also argued that the critical approach does not ascribe food insecurity to rapid population growth rates and the technological backwardness of the Third World (WFC, 1979). Zimbabwe has a booming industrial capacity and a relatively low population density. Crisis in this case stems from the dictates of the conventional approach to development. For instance: mechanization resulting in unemployment, agribusiness leading to the deprivation of rural peasant holdings, and industrialization with its cognate problems relating to urban growth.

Second, it stems from internal obstacles such as local

culture, rural-urban migration, the natural environment, tastes, the colonial legacy, inequity in property ownership, poverty, overcrowding, and ecological destruction. These two dimensions have imperilled food security in sub-Saharan Africa in general and encouraged the bias in planning and policy-making.

In Zimbabwe, this bias pits agriculture against the manufacturing and mining sectors of the economy. Even within the agricultural sector, more emphasis is given to the cash and non-food export crops than to food crops (Fayez, 1993).

Therefore, unlike the conventional approach, the critical approach is definitely against dependency and the reliance on food aid or food imports by Third World countries, especially those that have the potential for self-sufficiency and self-reliance. Zimbabwe's attempt to circumvent Western food power and domination by challenging "the assumptions of mutuality and 'antiseptic' comparative advantages extant in complex interdependence" (Nef et al., 1990:115) earned it international recognition as the first African country to successfully attain - and to some extent, maintain - food self-sufficiency and self-reliance. However, this 'success' has remained a major paradox, as argued earlier (Sachikonye, 1992; Jayne et al., 1991).

However, the examination of the food question from the critical approach perspective is also inadequate. Its implied suggestion that Zimbabwe's rural household food insecurity is

mainly the consequence of dominant factors such as rapid population growth, flawed land reform processes, insufficient water resources, climatic fluctuations, peasant ignorance, technological backwardness, and bureaucratic wastefulness, means that removing one or even several of these factors could solve the problem without resorting to food supplements from Western emergency food-aid. This is simply not true.

The following chapter will attempt to address the fundamental issues surrounding the causes of food crises in sub-Saharan Africa. Their relationship to Zimbabwe is vital for the analysis of the country's food situation not only because of its location and identity with the natural (ecological and climatic) environment in this region of Africa, but also because the surrounding regions directly influence its political and economic directions. Hence, an understanding of the region's food problem is important before narrowing the analysis to a focus on Zimbabwe.

CHAPTER III

FUNDAMENTAL CAUSES OF FOOD INSECURITY IN SUB-SAHARAN AFRICA.

A. INTRODUCTION

The food scarcity problem impinges, albeit unequally, on all socio-economic classes in sub-Saharan Africa. Traditional methods of ensuring food security have been undermined by the dilemma faced by policy-makers in choosing one or a combination of both the conventional and critical approaches to development. Whether an inward-oriented or outward-oriented approach is undertaken in the formulation of appropriate food security policies will depend on the extent of spatial and generational socio-economic differences.

While class division is a characteristic of both urban and rural areas, gender inequities have also abounded. Hunger has fuelled widespread disarray. Political dissatisfaction with the extent of food scarcity, its distribution, the inarticulate food pricing and marketing practices and the direction of its food subsidies were common attributes of a series of food-related demonstrations and *coup d'etats* which rocked the continent in the 1980s (Chazan et. al., 1988).

The traditional (Malthusian) view that when national food security fails to equate exponential demographic growth with available food reserves, famines and civil disarrays ensue to level the population with existing food stocks has also been

refuted by other theorists who studied the instances of renowned famines like the Great Bengal, the Ethiopian and Sahelian famines and the present incidents in Angola, Liberia and the Sudan.

While food insecurity is not uncommon in rural households of the Third World, the root causes of the problem and its solutions have long remained the policy-maker's dilemma. The following theoretical approaches to analyzing the Africa's food problems are derived partly from the paradigmatic approaches discussed in the previous chapter and partly from two recent theories advanced by Ben Crow (1992) and Amartya Sen (1981). They are: 1 - the 'food availability decline' theory; and 2 - the 'entitlement' theory, respectively.

B. THEORETICAL APPROACHES TO UNDERSTANDING THE ROOT CAUSES OF AFRICA'S FOOD INSECURITY.

1. Ben Crow and The 'Food Availability Decline' Theory

Crow's (1992) analysis addresses the relationship between the population and overall food supply. A simple formula is the basis of his argument:

$$\underline{\text{Food Available} = (\text{Total Production} + \text{Food Imports} - \text{Food Exports})}$$

The view held by this thesis is that the calculation emphasizes actual food produced by households but fails to recognize the downside of the natural - climatic and

ecological - environment from which they derive their production.

Furthermore, it addresses food imports and food exports as though a numerically large proportion of rural households in sub-Saharan Africa - including in Zimbabwe - complement their food requirements with food imports. Imported foodstuffs are considered expensive, unpalatable and hardly permeate into rural households. This is partly due to poor distribution infrastructure and partly due to the assumption that, in general, rural people are poor (have weak purchasing/entitlement power) and in most cases, are accustomed to producing and consuming their own food supplies. True.

Instead of food imports, wild food substitutes deserve recognition and inclusion into the formula because it is a famine coping strategy which rural households readily opt for⁸. An analysis of famine and household coping strategies should include the collection of wild foods as a vital option since they are readily available to poor rural households and are not exclusively owned or dominated by a specific class of households. This synthesis derives from the premises that risks in food security are frequently anticipated at a household level and, consequently, strategies are often carefully planned to cope with them (Corbett, 1988:1100). Wild food substitutes are commonly resorted to just before

Robert Chambers (1989:5) also argued for the inclusion of wild foods in agricultural germplasm research.

households consume stored seeds and decide to relocate closer to alternative sources.

Crow's 'food availability decline' thesis is expounded in the idea that a flood or a drought and the concomitant harvest failure is the direct cause of food insecurity. The weakness of this theory is that it does not isolate, in its account, the idea of complex disasters. These are disaster situations during which a combination of several factors act simultaneously to hasten the decline of available food stock.

There are two perspectives from which to assess complex disasters. One is a perspective in which a single factor procreates multiple problems. And the other is where many factors impinge simultaneously on a single problem. The latter is difficult to resolve because of the limited possibility of determining boundaries to each factor and how to resolve them one at a time without creating newer problems.

For instance, a flood may not only reduce food production but may also disable the communication and transport infrastructure, and create appalling environmental conditions for the spread of water-borne diseases. As the distribution of emergency food aid and food imports is hampered, so will the need to broaden the content of the emergency package to include health, especially disease dimensions and facilities for improving the transport and communication infrastructures.

The 1991/92 food crisis in Zimbabwe represented a complex disaster in which drought, stalled government policies and

inadequate infrastructure all played a critical role. By far, the most documented of complex disasters was the Ethiopian famine in the early 1980s. This crisis featured the combined effects of drought, disease outbreaks, crop failures and civil strife as a single complex cause (Desai, 1987).

By attributing the decline in available food during any particular period to a single cause, this theory presupposes that eliminating that single factor may be tantamount to eradicating the entire food crisis. This, also, is not true because a factor may procreate, thereby, requiring exclusive policy and structural remedies to each additional problem.

2. Amartya Sen and The 'Entitlement' Theory

The second analysis is an approach pioneered by Amartya Sen (1981). This approach, known as the 'Entitlement theory', seeks to replace the 'food availability decline' thesis mentioned above by integrating in it the explanation of physical and non-physical occurrences which afflict poor rural households at the onset of or during food crisis situations. It identifies two paradigms, viz., that of endowment or owned assets, and that of entitlement. Food entitlement comprises direct entitlement, exchange entitlement, and trade entitlement⁹.

According to Crow (1992:24), "direct entitlement is access to food gained through own production and consumption. Exchange entitlement is that command over food which is achieved by selling labour power in order to buy

Sen proposes that either or both these paradigms are essential for explaining the disintegration of family cohesion and the loss of the economic entitlement of rural households. The theory¹⁰ explains how households cope during famines, how and why families break under food stress, and how households gain command over food in the long-run.

The basic tenet of this theory argues that rural people in the Third World go hungry not necessarily because there is a decline in food availability. Rather, it is because they lose their 'entitlement'. It means that the ability to acquire food whether through the direct use of one's own means of production, or through purchasing and exchange power is seriously curtailed. This ability is influenced to a large extent by government policies which render them vulnerable to natural factors such as droughts.

Consequently, ensuring an effective level of national food security entails ensuring, at the minimum, an adequate and a stable household entitlement power. This power is the medium by which the level and magnitude of food-related transactions between the suppliers and consumers are determined.

Sen's theory has been vehemently criticized for its several omissions. In attempting to analyze what factors make

food. Trade entitlement is the sale of produce to buy food".

For more on the 'Entitlement Theory' refer to Amartya K. Sen. 1981. Poverty and Famines: An essay in entitlement and deprivation. Clarendon Press. Oxford.

people vulnerable, Jeremy Swift (1989) has presented seven unanswered questions:

1. Sen's analysis does not help in understanding or predicting the timing of the onset of the sudden collapse in people's ability to feed themselves;
2. it does not adequately explain the differential vulnerability within some communities apparently facing similar production or exchange failures;
3. it emphasizes the differential role of poverty between communities but has problems as an analytical tool since it looks mainly at households; it does not help very much in analyzing differential vulnerability between individuals within households;
4. it does not help us understand apparent differences between communities in their expectations of government assistance;
5. it does not explain the behaviour of many households faced by famine, who may go to considerable lengths to preserve their assets at almost any cost;
6. it does not satisfactorily explain what happens after a famine, when production and exchange may resume and yet certain households may remain vulnerable; and
7. Sen's work treats war and civil disturbance as external to the model (Swift, 1989).

Yet despite critiques such as Swift's, the concept of household and individual food 'entitlement' power has not been successfully refuted and neither has an alternative concept surfaced to sufficiently explain why individual and households lose control over food supplies.

The following section attempts to identify key issues

confronting rural household food security and policy-makers in sub-Saharan Africa. The discussion is based on fundamental causes of food insecurity and on factors which aggravate the food crisis. In fact, they are fundamentals for which policy instruments are formulated.

C. FUNDAMENTAL ISSUES IN FOOD SECURITY: A REVIEW

It is important to understand prior to discussing the fundamental causes of food insecurity, that monitoring Zimbabwe's rural food security is crucial because at the forefront as major national income generating activities, are the manufacturing and mining sectors (Fayez, 1993). Moreover, these two sectors also comprise the non-food production sector of the food security system.

That they are the major source of national revenue also implies that the food purchasing and entitlement power of rural households and individuals who depend on these economic groups is higher than the vulnerable wages of rural CL food producers and commercial farm labourers. Ironically however, the bulk of manufacturing activities depend on the food and the non-food agricultural products (*ibid*, 1993).

The combination of effective food-related instrumentalities and policies governing food production - for example, buffer stock and rationing operations, food pricing, food distribution, taxes, and land reform - is crucial for

averting the decline of rural economies. Therefore, in order to reorient the food security system so that it can meet the increasing food needs of the majority of poor CL households, policy-makers will be required to reorganize the present system such that it is capable of withstanding crises.

In the final analysis, a stable food security system for Zimbabwe will require the fulfilment of two policy conditions. First, it will require a conscious decision by the actors in the system to reach certain desirable levels of performance and, second, it will require favourable circumstances for its operation and reproduction so that the effects of unilaterally focused policies are shared by all the system's sectors. Rural households in Zimbabwe are constantly in crisis because, as in Latin America, its food "policies have been exclusionary, or have addressed...misperceived problems" (Nef et. al., 1990: 102).

1. Causative Factors of Food Insecurity

The genesis of food crises in Africa and Zimbabwe in particular, is a result of the interaction between environmental, economic factors and most of all the failure of policy to deal with them. For instance, production failures resulting from the effects of drought do not rapidly translate into acute food crisis unless socio-economic and political issues associated with deficiencies in public policy are also

prevalent. The following examination of the fundamental causes of food insecurity is largely derived from Tapsoba (1990) and supported by other researchers. Most of these determinants have very direct implications for Zimbabwe.

In the FAO's Rural Development (RD, January, 1994), the International Fund for Agricultural Development (IFAD) determined these factors according to their relationship to poverty. Accordingly, poverty as represented in the 'entitlement theory', is mainly an identifier of rural conditions and peasant production. The contradiction with poverty is that it is often accelerated by socio-economic processes meant to curb its increase. As a result, poverty, not natural disasters, is the undisputable cause and accelerant of chronic rural household food insecurity (FAO, RD, 1994).

Second, there is the issue of policy bias. It is emphasized that African governments pursue inappropriate policies which neglect food production and agriculture in general. In Africa, agriculture contributes roughly 20% of the GDP and employs 65% of the labour force. But since independence, many African countries have favoured industrial and urban development at the expense of food and agricultural development (Tapsoba, 1990). According to IFAD's assessment, such biased policies include "urban-oriented investment which deprives rural areas of resources, and overemphasis on export crops, which undermines local food production. Small farmers

are similarly disadvantaged by price [policies] favouring imported cereals...' (FAO, RD, 1994:15).

One argument which represents Zimbabwe's stance is that, within the agricultural sector itself, policies have favoured large-scale commercial farms, multinational agribusiness schemes, and plantations producing export crops such as tobacco, flowers and cotton. In terms of incentives and financial support, these policies discriminate against peasant holders and as such, the food aspect of agricultural production is neglected (Maxwell, 1992; Tapsoba, 1990).

In addition, government policies are often contradictory and governments are hostages of powerful pressure groups. Instead of assuming that "governments try to maximize some abstract national welfare function, but fail to do so because they have inadequate information or encounter obstacles, it is more realistic to assume that they respond to the pressures and interests of their support groups. Government policies are often contradictory" (Barracclough, 1991:5).

In fact, governments always depend on groups that support them. This implies that the allocation and ownership of the means of production, viz., land, loans, grants, expertise and pricing mechanisms will continuously favour sectors with powerful lobbyists. The tendency to concentrate policy decisions which boost commercial agricultural activities with the intent of increasing food production and creating jobs for the rural sector, is to the contrary intensifying skewed

policy practices which accelerate rural poverty (Glover, 1987).

The third cause of food insecurity stems from the examination that, in much of sub-Saharan Africa, dualistic agrarian structures originating in colonial times persist. "Highly capitalized large and medium-sized farms have virtually monopolistic control over land and labour at the expense of the small [peasant] farm sector... In southern Africa [especially Zimbabwe], large-scale commercial producers - whether private or state run - control the best farm land" (FAO, RD, 1994:10). The effect of a dualistic agrarian structure on food insecurity is that marginalized rural food producers eventually subsist far below the poverty line. Furthermore, dualism severely limits their propensity to grow more food and to accumulate more entitlement power.

The fourth factor relates to the methods of food production. Technological change in sub-Saharan Africa is stagnant. Overall growth in Africa's food production is being achieved mostly through the expansion of land area under cultivation (Tapsoba, 1990). In other words, significant technological transformation in African agriculture is not occurring. The current drop in food production is the consequence of a low level of technological input on exhausted CL holdings.

Furthermore, since technological advances in food production entail the use of purchased inputs, accessibility by the poor to these inputs has been limited by both high

costs and the uncertainty about long-term returns (Lele et al., 1992:95). Only large-scale commercial food producers can afford advanced technological inputs such as mechanization, training, hybrid seeds and fertilizers because the subsequent large farm output helps to cushion the risks of poor returns. These advances have proved too costly for the small-scale rural peasant food producers. The attempt at land reform in Zimbabwe has resulted in the allocation of agricultural land to marginalized African farmers who have inadequate resources and the technological know-how in food production.

In addition, political and economic factors are intricately interwoven with patronage, ethnicity and nepotism. Hence, agricultural research and technology diffusion in Africa will have to contend with the dynamic conflict of interests typified by political and economic controversies (Biggs, 1990:1481). As a result, only those with access to higher individuals and authorities can acquire sufficient capital resources for purchasing expensive and highly efficient farm inputs.

The fifth issue concerns dependence. It is suggested that "individual attention span and bureaucratic response are limited, and, for the past years, swamped by disintegration of the USSR and Eastern Europe and even the recent Rio earth summit, Africa no longer has a key strategic role for the West" (Buchanan-Smith and Downing, 1992:465). Following the demise of the cold war, the political and economic interests

of both the north and west have shifted the importance once attached to the strategic position of Africa to the market potential of the former communist East European block. The Horn of Africa¹¹ has ceased to be of strategic military significance to either the crumbled Soviet Union or to the United States.

The sixth issue is that of institutional weaknesses and poor basic rural infrastructure. The major cause of this problem is attributed to poor manpower development, inadequate research and extension services, the absence of local institutions, and inequitable land tenure. Agricultural Research and Development (R & D) has not been as successful in rural household food-crop production as it has in commercial cash-crops production. Rural extension service, which is a key link between researchers and rural food producers, remains a weak component of the system. Besides, if it exists at all, it concentrates on the production of cash-crops on a commercial scale, and on export oriented farming (Tapsoba, 1990:11).

Some institutional practices have also aggravated rural household food insecurity by perpetuating poverty. They include inequitable share-cropping and tenancy arrangements, poor markets, limited access to credit, and a lack of grassroots institutions needed to foster rural people's

The 'Horn of Africa' is a term often used to refer to Ethiopia, Djibouti, Eritrea and the Republic of Somalia. These countries occupy the north-eastern part of Africa. They are well positioned at the strategic southern entrance to the Suez Canal and the oil fields of the Arabian peninsula.

participation in development programs.

In addition, there are imperfections in food-related markets, with the most obvious being large subsidies required to run the marketing boards (MB) and state-controlled marketing and movement of food. However, in Zimbabwe, food subsidies have been reduced since 1980 following an abandonment of the cheap food policy (FAO/UN, 1990).

2. Factors Aggravating Food Insecurity

Among factors which aggravate food insecurity, there is first, the issue of demography. The pressure of population growth is seen to have obliged most regions of the world to abandon other priorities and focus on intensive and scientifically based food production systems. But, in most African countries, this transformation is uncoordinated and stagnant. In principle, the time in which the transformation to a more intensive farming practice must take place is considerably shorter because of rapid population growth and limited holdings.

The assessment derived from my experience in south-western Uganda and central Kenya is that economic and social effects of exponential population increases do actually accelerate the decrease in size of agriculturally productive land per household. It is also a major factor in fuelling rural poverty. Thus, rapid population growth causes and

perpetuates "rural poverty by increasing pressure on limited productive resources, social services and employment" (FAO, RD, 1994:10).

The preoccupation with the population question in Africa is not primarily with numbers or density. It is with its rate of growth vis-a-vis available food supplies and the environmental costs of meeting increasing food demands as well as accommodating the population itself. Besides the reduction in size of rural family holdings, exponential population growth leads directly to perennial cultivation and the subsequent exhaustion of available land. This leads directly to increases in the price of food and the destruction of the environment in the search of fuel-wood.

The Malthusian view that famines normally come to level the population with available food supply, has been refuted by those who believe technology can complement diminishing natural food production and supply. Although this argument is true, the application of such technology offers insignificant economic advantage to densely populated areas (Lockwood, 1991). The complex relationship between food security, population, the environment and technology can not be easily disentangled, and it does not the abandonment of an analysis of rural household food security.

The second factor is also closely related to population growth. Researchers suggest that the high incidence of unabated rural-urban migration has added another dimension to

the precarious food security situation in Africa. Migration from rural areas to urban centres has resulted in the shortage of labour on rural family holdings. It is mostly women and children who are left to cultivate and this group alone is incapable of producing sufficient food to meet the ever growing food demands of the urban population (FAO, RD, January 1994; Tapsoba, 1990; Jayne et al., 1991).

Rural-urban migration also has its share of advantages and disadvantages. It has undoubtedly increased the income and improved the welfare of migrants. However, the policies perpetuating this migration trend tend to have adverse effects on rural economic growth. Besides neglecting rural food production, the predominantly male rural-urban migrants are also being associated with the breakdown of families, the growth of unhygienic slum quarters, urban crime, prostitution and, in general, low labour productivity (Lele et al., 1992).

The third factor is ecological. It comprises environmental degradation, droughts and desertification. Ecological problems are a common occurrence in the Sahel and sub-Saharan Africa. As both the human and livestock populations increase, marginal land is continuously being cultivated and grazed. Fallow periods are increasingly becoming shorter. This trend also helps to explain that rapid degradation of the environment and the related demand for area expansion are strongly linked to rural household food insecurity (Tapsoba, 1990; FAO, RD, January 1994).

One study provides a social interpretation of the interrelationship between food security and the environment. The perceptions of the trade-offs between the environment and food security differ at all levels of society such that at the higher levels, institutional, political and economic distinctions require paramount consideration if the relation between food security and the environment is to be reorganized (Davis and Leach, 1991).

This observation is based on the premises that the interests of the people who depend directly on the immediate natural resource endowments (climatic/ecological) are often ignored during policy-making. A characteristic tenet to this Western approach is putting the environment above the people. While this is a cogent argument, environmental destruction by profit-motivated multinational and international agri-business corporations in the Third World provide food security for developed countries at the expense of the environment and the food security of the countries in which they operate.

A precondition for effective emergency relief is the operation of appropriate early-warning systems (EWS). Research has found that national and international preparedness and response are sorely inadequate in most African countries (Buchannan-Smith et al, 1992). Thus, government policies have wrought environmental damage. Instead, programs to expand cereal production into marginal areas have increased subsidized capital to support commercial operations, increased

subsidies for inappropriate technologies, and increased excessive transfer of income out of the agricultural sector. This tendency has stifled rural household food security (FAO, RD, 1994:10).

The fourth issue relates to political instability. This factor emanates from wars between nations or from civil unrest. The result is frequently the disruption of food production and food-related activities during and after wars. The worst impact of civil strife involves the direct destruction of entitlement and the abandonment of rural peasant holdings (Tapsoba, 1990; Buchannan-Smith et al., 1992). Such incidents featured prominently during the Biafra secession attempt in Nigeria, the Ethiopian famine and until recently in Mozambique, Liberia, the Sudan, Angola, Somalia and Rwanda.

The effects of political struggles and civil strife is two-fold. First, it disrupts development assistance to the poor rural peasants and second, it transforms many food producers into consumers of social services. This has severe repercussions on food production, household savings, capital accumulation and investment (FAO, RD, 1994:11). During political and civil wars, physical infrastructure is destroyed, resources are diverted to purchase weapons, and refugee camps swell exorbitantly at emergency food distribution centres (Crow, 1992).

The fifth issue, although global, has hit African

countries the most. Recession and the accompanying debt crisis have accentuated the food insecurity problem. While targeting those rural households whose food security is extracted from wage labour, it is argued that rural household food insecurity has increased considerably because in general African countries are always in the lower per-capita income bracket, with or without recession. This takes into account one factor: that in these countries policies have not addressed wage labour in rural production adequately. Affluent households in the rural context - those with large farms, cattle and improved housing - are still the only employers of rural labour (Adams, 1991).

The sixth factor is an appendage to the above issue. Economic imbalances affect Third World food production and household food security, in three ways:

First, economic recession reduces the effective domestic demand for food and agricultural commodities.

Second, foreign exchange shortages reduce Africa's ability to import modern farm inputs.

Third, expansionary monetary and fiscal policies associated with an economic crisis, together with fixed nominal exchange rates, affect different sectors of the economy in different ways (FAO, 1991). The growing effect of these imbalances often trickles down to upset the food security of different socio-economic groups - including poor rural households - in different ways.

The international economic environment also directly influences the well-being of Africa's poor rural households and their food security. The IFAD observed that falling commodity prices and protectionist policies in developed countries "affect the employment and incomes of plantation workers and smallholder... Changes in international interest rates have repeatedly hurt small scale producers in debt-burdened Africa... while world grain price increases have triggered rural famines" (FAO, RD, 1994:11).

The nutritional status of rural households is also influenced by exorbitant food prices that rural households can barely afford with meagre incomes. For working families, incomes (salaries and wages) are often so low that these families hardly live on them for the stipulated period. However, as Longhurst (1988) argues, to blame food insecurity on poverty is something of a tautology when one remembers that half or more of the incomes of the poor in developing countries are accounted for by their food consumption. This is an argument originating in Sen's (1981) 'entitlement' theory and also supported in a study by Woldemeskel (1990).

The seventh factor concomitant with recession and the debt issues, is the low purchasing power of wages or earned incomes for those households whose food security is reliant on them. This income purchasing power affects rural wage labour with greater intensity than urban-based employees. Prices of primary commodities do fluctuate at wider margins than those

of manufactured goods and mineral products. The decrease in the purchasing power of households who supply labour to commercial food producers increases their vulnerability to food shortages (Adams, 1991).

The eighth cause of food insecurity comprises inappropriate marketing systems and inappropriate policy instruments. It was found that the structure of the food-grain markets in sub-Saharan Africa has virtually eroded incomes as well as food security in the poor, food-deficit rural households (Jayne et al., 1991; Meissner, 1989). Exploitative and corrupt middlemen (individuals and governments) have also accelerated rural poverty and food insecurity (FAO, RD, January 1994).

The first case on inappropriate marketing is typified by Latin American and South Asian examples. Here, landlords persistently exploit sharecroppers and tenants, money lenders exploit debtors, and traders exploit small-scale producers. While striving to service their debts, the underprivileged groups have lost the capacity to provide food security to their own families. The result has been a deepening poverty trap and malnutrition.

In the second case relating to inappropriate policies, government-controlled cooperatives, marketing boards and government agencies disrupt household and individual food security through high taxes. This is done with the aim of servicing debts, but the result is mixed. For example large,

inefficient bureaucracies are, literally, paid by the productive sectors of the community and yet they frequently contribute instead, to the accumulation of large budget deficits (FAO, RD, 1994).

The absence of famine early warning systems (EWS) constitutes the ninth issue. An accurate estimate of aggregate food supply is appropriate for complementing the entitlement information used to both anticipate and adequately respond to future food crises. Such indicators as nutritional surveys, the trend of food-for-work activities, fluctuations in rural household entitlement and demand for food, yearly government budget estimates, population data (on births and deaths), and changing trends in food aid and food imports are either lacking or are incomplete in famine prone sub-Saharan African countries (Atwood, 1991).

One commonly used method is the food balance-sheet. The use of this method of assessing changes in aggregate food availability has been criticized for its inaccuracy, incomplete data, and for the fact that governments in Africa tend to either overstate or understate consumption (*ibid.*, 1991). Thus, the careful monitoring of food availability at national level is partly hampered because some governments attempt to protect the image of a crumbling economy (hence their regimes) by exaggerating the availability of surplus food-stock when in actual fact there is none that can avert looming crisis. Others, following my personal experience in

war-torn Sudan, plead for emergency food relief while at the same time diverting available food stock to be traded for sophisticated weaponry.

The effect of drought and the food crises of the mid-1980s in Botswana, Ethiopia and Kenya illustrate the importance of monitoring food supplies using early warning systems (*ibid*, 1991). In very few African countries are programmed crisis management responses tied to levels or indicators of early warnings in contingency plans¹². In general, local administrations are frequently weak. Most communications and transport infrastructures are equally undeveloped to the extent that delays in distributing relief to reduce hunger-related deaths are often inevitable (Buchannan-Smith et. al., 1992; Hubbard, Merlo, Maxwell, and Caputo, 1992).

Finally, there is a cultural phenomenon implanted at all levels of political and economic decision-making. A large body of the peasantry is said to be experiencing a gradual but certain process of immiseration because "access to land is constrained by a complex set of customary practices that restricts land rights based on cultural, ethnic or gender issues as well as by political factors" (Lele et al., 1992:98).

Besides focusing on national food security planning and on issues of household entitlement, food security issues also arise at the supranational level particularly in the context of regional groupings such as the Southern African Development Community (SADC) and the Intergovernmental Authority on Drought and Development (IGADD). SADC member states include Botswana, Angola, Namibia, Tanzania, Lesotho, Swaziland, Mozambique, Zambia, Zimbabwe and the Republic of South Africa. While IGADD member states are Ethiopia, Somalia, the Sudan, Uganda, Kenya, Djibouti, Eritrea and Tanzania.

The present coherent picture is that women are the primary food producers in Africa while men are wage labourers. Accompanying this irony is the fact that policy interventions aimed at improving the income, status and bargaining power of female wage workers in both rural and urban settings are themselves conspicuously lacking. Furthermore, gender inequality is not manifested in the employment and household income disparities alone. It also transcends the terms of property ownership, education, employment, wages and legal rights (Adams, 1991:163).

It is generally recognized that, while poverty has undoubtedly undermined "traditional social bonds, the marginalization of women has become a fact of rural life in most developing countries" (FAO, RD, January 1994:11). The '**feminization of poverty**' is yet another aberration of household food insecurity in so far as women are considered the sole bread-winners in rural households. This is true even in situations where their male counterparts have not migrated to urban centres.

D. CONCLUDING REMARKS

In studying the Zimbabwean food security situation, it is impossible to abandon the importance of the intricacies inherent in its social, political and economic history. While the country's food security system is vulnerable to causes and

factors discussed above, variations in the country's agro-ecological and climatic habitats give the above intricacies an added complexity.

The combination of these factors were determinants of food security during the colonial regime and they still influence current trends in sectoral planning and policy-making.

The following chapter briefly addresses the relationship between historical circumstances and the state of the current food security system. It goes on to provide a sector by sector examination of the current food security situation by assessing sectoral activities and the policy instruments which direct and coordinate their interactions.

CHAPTER IV

HISTORICAL AND CURRENT TRENDS IN ZIMBABWEAN FOOD SECURITY

A: HISTORICAL BACKGROUND TO SOCIO-ECONOMIC INEQUALITY.

The history of Zimbabwe¹³ is a reel of explosive incidents dominated by, first, the relation between the White and the African populations, and second, between the white population in Zimbabwe and their ancestral cousins, mainly in the United Kingdom. For the purpose of this thesis, an abridged version will suffice to acquaint the reader with what has been one of the most chilling events in the colonial history of continental Africa.

The Republic of Zimbabwe, successor to the colony of Southern Rhodesia, takes its name after the great stone ruins of the kingdom of Munhu Matapa. In the 1880s, Cecil Rhodes travelled northwards from the Cape in the fabled *Pioneer Column* in search of mineral rights in the interior of Africa. At the infamous 1888 Rudd Concession, Chief Lobengula of the Ndebele, signed away mineral rights in all lands under his domain¹⁴ (Brown, 1993).

After defeating the Ndebele and Shona in a series of

See appendix 1.

The Rudd Concession, misinterpreted to Lobengula, allowed the settling of the area between the Limpopo and the Zambezi rivers and Cecil Rhodes arranged for the British South Africa Company to settle and exploit the resources of the region.

Chimurenga¹⁵, the white settlers who were frustrated by the absence of gold and diamonds, resorted to grabbing land and livestock from the local people. To honour the empire builder, the settlers named their conquered territory, Rhodesia. Until Independence in 1980, the society thus founded was profoundly rooted in economic inequality and outright racism. To encourage European immigration into the new land, the new regime ensured that:

"the land provided had to be the best available... and [it] ignored the African interest. Cheap and abundant native labour had also to be provided to attract settlers...this meant creating artificial inducements to the Africans to leave their own farming..."¹⁶ (Leys, 1959:26).

The success of this outright racial oppression and segregation rested in the domination of all avenues to acquiring productive land, education, health, parliament and infrastructure by the minority White settlers.

To maintain racial oppression and segregation, the government of Ian Smith made a Unilateral Declaration of Independence (UDI) from Britain in 1965. The repressive machinery of the UDI left complex policy contradictions of which some still remain unresolved by the present majority government. Major changes have occurred although critical vestiges remain absolutely skewed.

...a Shona word meaning Liberation War.

Theodore Bull, (1967), states that "...many of the indigenous inhabitants would become assimilated into the money economy...they were encouraged to do so by various methods including a Pass Law..to get labour to go where it was wanted and a hut tax which necessitated Africans leaving their homes to work for cash wages.

B: AGRO-ECOLOGICAL AND AGRO-CLIMATIC GEOGRAPHY.

According to Kay (1993), present Zimbabwe is a land-locked country sharing its boundaries with Zambia on the north and north-east, Botswana on the south-west, Mozambique on the east, and on the south, the Republic of South Africa.

Lying between the Zambezi and the Limpopo rivers, Zimbabwe consists of three relief regions, viz., the highveld comprising land 1,200 m above sea-level, the middleveld with land between 900 m - 1,200 m above sea-level, and the lowveld with land below 900 m above sea-level¹⁷.

Temperatures vary accordingly and are moderated by altitude. Rainfall is restricted to November-March and it varies extremely across the country, being generally too low for commercial crop production. Additional demand for water in other economic activities has had to be complemented through the development of large-scale dam-building programs (*ibid.*, 1993).

A critical determinant of food production is the regional variation in climate and soils. On this basis, six broad categories of land have been identified depending largely on bio-climatic conditions (appendix 3.2). However, the utilization of large irrigation schemes and fertilizer has helped in overcoming climatic limitations, such that areas once suitable only for ranching have become major grain producing regions.

Cliffe, (1988) has categorized these lands into the following regions: a. Region I (1.6%) with reliable rainfall, for specialized and diversified farming. b. Region II (18.7%) with moderately high rainfall, for intensive commercial crop and livestock farming. c. Region III (17.4%) with mediocre rainfall, for extensive commercial livestock farming and drought-resistant crops. d. Region IV (33%) with low and unreliable rainfall, for semi-extensive livestock production, Region V (26.2%) semi-arid country, for extensive ranching. e. Region VI (3.1%) skeletal soils, unsuitable for agriculture.

C: DEMOGRAPHIC STRUCTURE

The original people of Munhu Matapa were the Shona. They were predominantly farmers growing millet and sorghum as staple food crops, and kept a diversity of livestock including cattle, sheep, goats and donkeys. Hunting and mining were minor occupations.

Today's diversity in the country's population is rooted in the legacy of its colonial and UDI past. It comprises the African majority, European descendants, Asians and Coloureds. The collective role of the last three groups, though insignificant in the political sphere, wields unsurpassed influence in the economic sphere. The African population comprises mainly the Ndebele and the Mashona plus minor ethnic groups. Following Independence in 1980, the integration of the mainly urban African poor into the informal economic sector stimulated the rapid growth of multiracial urban populations throughout the country.

In the rural areas, there is a small number of white farmers who by virtue of advanced, effective and efficient technology, dominate commercial farming. From these few large commercial establishments, the outputs of livestock and crops at the national level dwarf the contributions by the numerous peasant households in the congested and agro-ecologically poor Communal Areas (Ministry of Finance, 1986).

D. PRE-COLONIAL (NATIVE) AND COLONIAL FOOD SECURITY.

Pre-colonial food production was predominantly attained through shifting cultivation. Land was tilled until its fertility declined before the peasant community relocated onto new land. This method of cultivation, often presented as some form of primitive husbandry, is still practised in many societies of sub-Saharan Africa. Constraints in obtaining appropriate technology makes it a sensible, affordable and practicable way of exploiting and protecting the environment (Palmer, 1992). The bulk of current household food self-sufficiency relies on the availability of these communally owned and cultivated lands.

With the advent of repressive colonialism, native Africans were effectively converted from peasant farmers to migrant labourers on European settler farms and in labour-intensive urban industries. While this conversion unfolded, Africans were concurrently being transformed from being food self-sufficient and self-reliant to being absolute food purchasers. The food purchasing power and entitlement of rural households became a crucial determinant of the level of household food security because better agro-ecological zones were legally reserved for White settlers. Native Africans were driven into Native Reserves¹⁸ (Palmer et al., 1992:21-3).

Native reserves, which still dot Zimbabwe's landscape,

¹⁸Later Tribal Trust Lands (TTL), and now Communal Lands (CL)

are a product of the colonial and UDI era. They were created "first, to remove 'unwanted' Africans from the best farming lands; secondly, to eliminate possible competition from African farmers; and thirdly, to create an essentially migrant labour proletariat" (Munslow, 1985:43). The independence government has, in its 13 year regime, done less than the minimum opted for eradicating the concentration of Africans in Communal Lands. Hence, land reform has all the potential for detonating a volatile political crisis.

As this study approaches the examination of the present system, it may be argued that the bias of current policy against rural households and smallholder food producers are still weighed down by the legacies of settler policies. In the first place, the majority of rural Africans are still secluded in overcrowded barren agricultural areas. As a result they can barely compete with the white-owned large commercial farms.

Second, Africans originally accustomed to growing a diversity of food crops to insure against unforeseen environmental eventualities are now obliged to rely on maize as both their staple food diet and as a marketable product. People can trade surpluses for cash and buy food in times of scarcity (Bull, 1967; Palmer et al., 1992). Most rural peasant households are still unable to make substantial earnings in other commercial crops. This is because the frequently fluctuating prices of agricultural commodities are difficult to complement with the limited area size and soil fertility of

accessible land. A viable option is the production of staple food crops which can be both traded and consumed by these households, principally maize.

Until Independence, colonial and UDI food security policies which aimed at addressing access to social services, the acquisition of farm inputs and productive land, proximity to transport and marketing facilities, price regulations, foreign exchange, credit facilities, research and technical support, were all characterized by the existence of a double agenda (Green, 1986). That is, while these policies assured poor Africans adequate food security, they also subjected them to all forms of social and economic exploitation by European settlers. They represented and protected the economic interests of the colonial and UDI governments. Dominant features of the old system still characterize the present government's food security policies. For instance, within the food security sector, policies still favour the white-owned large-scale commercial farms (LSCF) over native African peasant holdings, which are, after all, confined to agro-ecologically and agro-climatically poor reserve lands (Munslow, 1985).

The impact of post-independence agricultural and food security policies on the overall state of rural household food security are some issues that this thesis will address. Their implications will be critically assessed in the analysis.

In the following assessment, overlaps in agricultural and

food security policies have been avoided as much as possible because the two, though related, require different approaches to analyzing and implementing their policy requirements.

E. AN EXAMINATION OF THE CURRENT FOOD SECURITY SYSTEM

The persistence of food insecurity in Zimbabwe is not limited to seasonal occurrences. Neither will this thesis restrict the assessment of the present food security system to periods of food scarcity or poor harvest at the national level. Rather, the embarrassing co-existence of huge stocks of grain and chronic food shortages in some districts and amongst certain strata of the society requires that the roots of such permanent food deficits "be sought not only in gaps in official policy but also in the consequences of an incomplete agrarian reform (Sachikonye, 1985:88).

A poignant repercussion of rural food shortage during the last Zimbabwean drought was manifested through four critical incidents: i. the decimation of livestock, ii. job losses of up to 40,000 in the farming sector which employs 25% of the total national work-force, iii. acute malnutrition and the number of children dropping out of school due to hunger, and iv. infant deaths (*ibid.*, 1985)¹⁹.

One survey (Jayne et al., 1991), reveals the daily grain consumption requirement of about 0.6 kg. per adult in dietary patterns of food-secure households. Most family sizes are approximately 6.5 in adult equivalent, thereby demanding the procurement of 1425 kg of grain for an average household annually.

The study indicates that food scarcity and malnutrition at the rural household level are the leading causes of death among Zimbabwean children in rural areas. Once again, the paradox stems from the fact that food shortage and malnutrition at the rural household level are accompanied by abundant food supplies at the national level - a fact that even the government recognizes (Government of Zimbabwe, January 1991).

Measured in terms of foreign exchange, the country is largely self-sufficient in food. But food self-sufficiency at a national level has not eradicated malnutrition and occasional hunger in the low income rural classes. Whereas the major cause of this problem may be found in the lack of accessibility to sufficient food, equally crucial are the underpinnings of several existing policy issues (Skalness, 1989; Thompson, 1988). Jayne et al. (1991), sums the present food security policy contradictions in the following way:

'It is not a paradox that rural food insecurity persists in Zimbabwe despite a 300% increase in smallholder grain sales to the GMB since independence. On the surface the situation is due to substantial variations among households' productive resources, the ability to produce a marketable grain surplus, and other income-earning opportunities. Yet the historical and current orientation of agricultural policy towards surplus producers and the neglect of market development for rural consumers has certainly contributed to these income inequalities and the current level of food insecurity in the country' (Jayne et al., 1991:329).

This summary of the current system's paradox calls for an understanding of the basic components or properties of the

system. In the following section, I will discuss the current food situation by examining four vital sectors of the food security system, viz., the government sector, the food distribution sector, the food production sector, and the non-food production sector. Through these sectors, the aggregate of identifiable policy elements and their respective contributions to the system's survival and equilibrium can be determined.

1. The Government Sector

It is important to examine how policies formulated by this sector impact on itself and on the other three sectors of the food security system. How these policies are derived and what attempts to transform them have been undertaken in recent times are vital for assessing the system's current performance and for recommending policy and structural modifications to the system. Modifications should conceptually isolate but not ignore the fact that it is in the rural households of Zimbabwe where the brunt of inappropriate policy instruments concerning food security and nutrition are felt the most (Kennedy, 1992; Government of Zimbabwe, January 1991).

Since the government unilaterally makes policy decisions regardless of any priorities known to the other three sectors, its influence penetrates both the macro and micro levels of policy-making in the system. Rather not to duplicate these

contradictions, two key issues are singled out as central to the explanation of the political, economic and social dilemma facing policy-makers. From these issues radiate the rest of the policy problems affecting the food security system.

1. Land Reform and Resettlement.

The single and most controversial long-term problem facing the country is the fulfilment of an earlier promise made by the present government regarding land reform. Land distribution and ownership in Zimbabwe remains extremely skewed. It is widely accepted that the difficulties facing land reform since the end of the 10 year moratorium following Independence is a product of the Lancaster House Agreement²⁰. However, this is not reason enough to warrant the persistence of inequalities in land ownership five years after the end of the moratorium.

In 1981, the Zimbabwe Conference on Reconstruction and Development (ZIMCORD) estimated that by the end of the first five year Development Plan (FFYDP, 1981-85) more than 4.5 million (60%) of the country's population would be living in

The Lancaster House independence agreement stipulated: provisions against the expropriation of property rights without compensation enshrined in a Declaration of Rights which remained inviolable for a decade (1980-90); government obligation to purchase land on a willing-buyer, willing-seller basis with prompt and mandatory payment; and, compulsory purchase of land entailing payment in foreign currency at current market prices (Munslow, 1985).

communal lands (CL)²¹. At the time of ZIMCORD's estimates, there were nearly 4,500 large-scale commercial farms (LSCF) almost entirely owned by whites. The farms occupied 13.5 million hectares and supported 1.7 million people (farmers, labourers and their families). A third category of 8,500 small-scale commercial farmers (SSCF) continued to exploit the African purchase areas (APA) which occupy 16 million hectares and support 4 million people on an average 20 hectare farm only (ZIMCORD, 1981; Munslow, 1983). The APA and the CL together constituted 53% of rural lands but carried 62% of the black population (Ministry of Finance, 1986; FAO, 1990)²².

In its Socio-economic Review (1980-1985) of the FFYDP, the Ministry of Finance (1986) also acknowledges that, although the primary basis of the imbalances in the economy is the ownership structure of productive resources, the "situation, along with the institutional structure which had been built to support the expropriation of the agro-ecologically suitable land for the exclusive occupation of whites", made it difficult to undertake radical changes without causing massive disruption of economic activity (Ministry of Finance, 1986:8). This argument is the basis of all the fear and uncertainty inhibiting speedy land reform.

Although inhabitants own and pass land by rights of birth in the CL areas, they are not permitted to buy or sell any.

Government of Zimbabwe (January 1991),...The agricultural sector in Zimbabwe consists of four main groups: Communal areas (CA or CL), large-scale commercial farms (LSCF), resettlement areas, and small-scale commercial farms (SSCF).

a- Obstacles To Land Reform.

Given the historic dependence of the agricultural sector on large-scale commercial farms, the one factor that continues to inhibit the fast pace of land reform is the government's indecisiveness over its reform strategies. The slow pace is aggravated by the uncertainty of resettling rural peasants without harming the large-scale commercial farms. Any unfair trade-off can jeopardize rural employment and revenue as well as large-scale commercial food production (Thompson, 1988; FAO, 1990). The commercial food production entity is not only considered the largest contributor to formal employment in rural areas, but also the basis on which national food exports are largely dependent (Munslow, 1985)²³.

Furthermore, the resettlement program is a costly venture with both direct and indirect fiscal costs. At a time when the government is striving to lower its deficits, supporting resettled families at the initial stage is a frustrating venture (FAO, 1990; Sachikonye, 1985).

Another disturbing factor is that approximately 75% of communal resettlement lands are situated in marginal areas with poor soils and low rainfall. In these areas, overcrowding and reliance on traditional food production practices

Thompson (1988:188). Depending on whether harvests have been good or bad, agriculture contributes only 12% to 18% of Zimbabwe's gross annual product (GAP). Never-the-less, it is the second largest foreign exchange earner after the mining sector. Although it is a small contributor to the GAP, economic growth as a whole is low in years when agriculture does badly. Most industries are connected to processing agricultural produce).

are also responsible for rapid environmental degradation (Government of Zimbabwe, January 1991).

As a central concern in planning, the search for an alternative mechanism of transferring land from the LSCF may evolve into intricate political problems. In turn, the social and economic necessity of transforming rural household food security may be less imperative. One of these strategies requires that commercial farmers pay land tax (*ibid.*, January 1991). The assumption is that the cost to farmers holding unused and under-utilized land will heighten. Since the costs vary from farmer to farmer depending on their farm size, commercial producers will be forced to retain land which they can effectively use and sell the rest to the government for resettling peasants.

ii. The Structural Adjustment Program (SAP)

Stoneman (1992) suggests that the orthodox structural adjustment programme (SAP) currently in effect projected three immediate impacts on rural household food security by 1992. First, it required all inefficient parastatals to scale down or close completely.

Second, it required the GMB in particular, to close most of its depots and stop building more silos in the outlying rural areas. The subsequent lack of handling and storage facilities contributed to the reduced output in food

production on peasant communal holdings. As a result, rural peasants became marginalized. The economies of scale (for example, improved infrastructure for delivering social services, food marketing and food distribution) once associated with the increasing silos in rural areas are now restricted to commercial farming zones.

Third, due to inadequate incentives in grain production, commercial farmers reduced the acreage under maize production to 40%, leaving the shortfall to be covered by communal area production and imports.

Some households, individuals or groups, in both rural areas and urban centres, are likely to be adversely affected since structural adjustment programs may lead to serious short-term effects. But, despite attempts at addressing and mitigating the inflation problem, prices continue to increase. From a socio-economic point of view, general price increases and inflation are already inhibiting access to food grains by the poor, and therefore vulnerable, rural peasant households (Government of Zimbabwe, January 1991).

2. The Food Distribution Sector

Zimbabwe has had a long history of food distribution, price regulation and market controls. During the 1965-80 UDI government, these controls were promoted by the settler community to procure food self-sufficiency for the African

labourers, and to effectively sustain a government of and for the white commercial farmers (FAO, 1990; Thompson, 1988). The food distribution sector currently manifests the following systemic properties:

i. Marketing and Distribution

The organization of the grain marketing and distribution sector in Zimbabwe is by far the most rigid, and the one with the most adverse effects on rural household income and, consequently, their food security. The foodgrain marketing sector "features a predominantly one-way flow of grain from rural to urban areas and is characterized by centralized urban milling and storage" (Jayne et al., 1991). It assumes that since rural households live on the same land they use for food production, rural farming communities are therefore, self-sufficient in food supplies compared to urban dwellers.

The implication of the one-way distribution in which grain is siphoned out of the rural areas early in the harvest season, negates the government's prime objective of raising and stabilizing the growth in rural household incomes. During the planting season when grain is in short supply, "controls on maize movement, resale and pricing restrict consumers in these same areas from obtaining maize through private trading channels, thus creating localized shortages" because the reverse flow of food grain is not permitted (*ibid*, 1991).

Whereas the food distribution sector is treated in this study as an autonomous sector of the food security system, it nonetheless operates under strict policy regulations designed by the government sector. Thompson (1988) has examined the implication of some of these policy regulations:

First, in circumstances where available infrastructure could have stimulated grain trade with deficit areas, and thereby eased food scarcity, unless destined for a GMB collection depot, private grain movement from urban centres and European commercial farms (Zone A) where it is abundant, to the rural, mainly African, CL smallholder areas (Zone B) where it is periodically scarce, is prohibited.

Second, the collection and movement of grain away from depots in surplus rural CL areas and the restriction of its direct resale to consumers in deficit zones means that local supply and demand is tightened. Due to limited large storage facilities to CL food producers, the restriction obliges the sale of all surplus to the GMB. The corollary to this trend is that, while the GMB hoards grain in centralized locations, an upward pressure is being exerted on local market prices such that the poor rural households may not meet their requirements in the long run.

Third, the bias in policy regulations against rural consumption habits is expressed through the way transport costs and subsidies for urban millers and urban consumers of industrially-milled meal are handled. Due to seasonal and

territorial variation in the pricing system, the GMB provides free storage and transport services to the urban millers and wholesalers but not to those rural retail-traders who are capable of purchasing its grain. This instance is not unexpected because it is in the urban centres of Zimbabwe where political dissension and dissemination of anti-government policy sentiments are most potent.

Fourth, by controlling grain movement between rural CL zones, the GMB has secured favourable grain supply to the income-dependent urban population. However, not all urban households are financially empowered. During declining foodstocks, the bias may impact heavily on rural consumers who have to purchase the fine and expensive industrial meal instead of the much preferred coarser and cheaper hammer-milled meal. For rural households whose food supplies require complementing by urban employed relatives, this restriction necessarily heightens food scarcity at both ends.

Finally, the ability to develop an alternative marketing and distributing system is thwarted by the fact that the Zimbabwean government, as indicated earlier, regularly injects heavy subsidies on surplus food sold by rural peasants for the cheap consumption of the urban class. That there is always a surplus in the rural areas, is not true. At harvest time, marketed surplus simply flows to urban centres through the GMB to be sold to urban consumers at subsidized prices. It is re-channelled to rural consumers during the rainy/planting season

in forms they can barely afford (Jayne et.al., 1993; Buccola et. al., 1988).

The single-channel unidirectional flow of grain from rural smallholder areas to GMB and urban millers, also implies that private markets open for competition are conspicuously lacking in Zimbabwe.

ii. Household Income and Food Security

The constraints posed by the GMB also infringe on the choice of low income urban consumers of what quality and quantity of food they can afford with available incomes.

Besides adhering to costly grain movement and storage, the marketing sector has placed tremendous strain on the real incomes, food consumption, and the child nutrition of grain-deficit poor households. It has also shifted and concentrated employment and multiplier effects of grain-related industries from rural to urban areas (Jayne et al., 1993).

The preponderance with low incomes in the rural areas suggests the need for formulating policy alternatives to help revitalize the declining food purchasing and production power of rural households. This refers to cost recovery programs in subsidy reduction to the GMB and redirecting it to improve the income status of rural households by enhancing and protecting their food self-sufficiency (Government of Zimbabwe, January, 1991).

iii. Price Control

Increased emphasis on grain stock policies and concern about rural household food security and low income has attracted increased attention to domestic grain pricing. One survey (Jayne et al., 1993:320) found that instead of increasing rural incomes, government food-grain pricing and marketing policies²⁴ were responsible for the dramatic rise in GMB grain intake from the rural smallholder farmers. Although rural smallholder in the CLs were considered surplus producers of food-grain, the collected data revealed the following information:

First, most farmers in the drier regions sold little or no grain. At the same time, income from grain sales was found to be concentrated among a narrow segment of food producers in the food productive regions.

Second, households in the CL areas who sold the most grain also tended to have higher incomes and higher grain consumption.

Third, between 50% and 100% of farm households in the dry areas were found to be net purchasers of grain. Besides ecological and climatic variations in these areas, households

Jayne, et al, p.320...'The primary instruments of this objective have been grain pricing and marketing policies, in particular, [a] producer prices consistently above export parity; [b] an expansion of GMB buying points to stimulate marketed output in smallholder areas; and [c] a massive infusion of government credit recouped from crop sales to the GMB'.

were also constrained by limited land, draft animals and non-farm income to finance investments in improved technology.

Fourth, private marketing channels linking surplus and deficit rural areas appeared to be thinly traded. This is the consequence of competition among traders. It also emanates because of restrictions which permit trade in food between certain zones only.

Finally, incomes in grain-purchasing areas are often more affected by the price of urban-processed maize meal than by GMB producer prices (Jayne et al., 1991).

It is generally understood that, while food producers are interested in high food prices and consumers are interested in low retail prices, "much less understood are the high risks and conflicting demands faced by those governments which have concentrated pricing, storage and trade decisions in the public sector" (Buccola et al., 1988:361).

Although policy instruments aim at stimulating a form of 'positive discrimination' in order to allow a certain level of equality in the distribution of monetary resources, the concentration of decision-making in the public sector, to the contrary, entails tremendous over-staffing, ineffectiveness and mismanagement. The long term consequences of such centralized decision-making is that, while excessive costs are incurred by governments, the bulk of decisions discriminate against the poor rural class, thus reducing the imperative need for equitable (re)distribution of development resources.

The above instance is adequately documented in the case of Zimbabwe. Here, food and non-food agricultural price regulation and intervention is operated through four agricultural marketing parastatals coordinated by an umbrella organization called the Agricultural Marketing Authority (AMA)²⁵. The AMA operates by ensuring that:

"a controlled producer price system operates for wheat, maize and other coarse grains, soybeans, groundnut, sunflower seed, cotton, beef and whole milk, and retail prices are fixed for maize meal, bread, cooking oil, beef milk and stock feeds... Some intraregional trade is permitted within the communal areas, although not between them... Pan-territorial and pan-seasonal pricing systems inhibit the private sector from collecting maize from outlying areas and from performing a cereal storage function" (FAO, in RD 1990:54).

Since it dominates the food-grain trade, the GMB also controls much of the grain reserves. As a result, accessibility to grain by rural households and private retail traders is restricted because optimal stock and price policies that the GMB controls, are interdependent (Buccola et al., 1988).

iv. Subsidies

Although most agricultural commodities are subject to price control, subsidies to stabilize GMB and Dairy Marketing Board (DMB) prices have been either scaled down or removed.

FAO (1990, p.54)...The Agricultural Marketing Authority comprises: the Cold Storage Commission (CSC), the Dairy Marketing Board (DMB) and the Grain Marketing Board (GMB). It caters for beef cattle, maize and other food crops, dairy products, and cotton.

The International Monetary Fund (IMF) required subsidies to the GMB to be reduced from Z\$.59 million in 1990/91 to Z\$.18 million in 1992/93. They are planned to fall to Z\$.12 million in 1993/94 before being finally phased out to zero in the 1994/95 fiscal year. (Tables 3.1-3.).

The effect of subsidy reduction on rural household food security is that the highest consumer prices for maize are now paid in low-income food deficit rural areas. In these areas the GMB still maintains control over marketing and distribution. On their own, rural households are limited by the under-development of rural markets and the high cost of transport (Government of Zimbabwe, January 1991: Annex 2)²⁶. Furthermore, except for the Cotton Marketing Board (CMB), other MBs operate at losses arising from low sale prices which do not account for marketing board costs and from the disparity in subsidy payments. This entails an unfair level of compromise between producer and wholesale prices.

There is also a distinction to be drawn between direct and indirect subsidies. While direct subsidy on maize meal was eliminated in 1987, indirect subsidy was permitted in order to protect both the producers and consumers from any backlash arising from the deficit-strapped marketing boards (*ibid*, January 1991). According to the table, the gradual reduction in the amount of direct and indirect transfers affects all public enterprises. The structural adjustment program

²⁶See Appendix 2

HISTORICAL TRENDS IN GOVERNMENT SUBSIDIES AND ADVANCES TO MAJOR PUBLIC ENTERPRISES, 1986/87 - 1990/91 (Z\$ MILLION)

	1986/87	1987/88	1988/89	1989/90	1990/91
Agric. Marketing Boards	166.0	210.0	156.1	160.2	.....
Grain Marketing Board	48.1	123.9	80.0	48.9	.....
Dairy Marketing Board	65.0	43.3	40.0	56.1	.....
Cold Storage Commiss.	49.5	31.2	11.1	37.5	.....
Cotton Marketing Board	..	11.7	25.0	17.7	.....
Agric. Marketing Auth.	3.4	..	..	..	.....
Zim. National Railways.	80.0	100.0	120.0	100.0	255.0
Air Zimbabwe Corp.	45.0	39.9	10.0	15.0	9.0
Affretair	15.0	3.0	..	..	.....
Zim. Steel Corp.	82.0	100.0	167.0	100.0	100.0
Agric. Finance Corp.	18.4	4.5	15.0	12.5	.....
National Oil Company	..	..	..	..	.....
Total	406.4	457.4	468.1	387.7	628.6

Table 3.1

(Source: Govt. of Zimbabwe: Annex 1, p.8)

HISTORICAL TRENDS IN PE PROFITS AND LOSSES (-) OF MAJOR PEs, 1985/86 - 1989/90 (Z\$ MILLION)

	1985/86	1986/87	1987/88	1988/89	1989/90
Agric. Marketing Boards	-183.0	-214.8	-193.1	-163.0	-166.7
Grain Marketing Board	(-82.9)	(-86.6)	(-71.7)	(-71.8)	(-59.2)
Dairy Marketing Board	(-55.6)	(-49.3)	(-51.3)	(-52.2)	(-59.8)
Cold Storage Commiss.	(-33.4)	(-28.9)	(-36.7)	(-18.0)	(-32.5)
Cotton Marketing Board	(-11.1)	(-50.0)	(-33.4)	(-21.0)	(-15.2)
Agric. Marketing Auth.	..	..	..	..	.....
Zim. National Railways.	-91.7	-126.8	-116.7	-117.6	-216.0
Air Zimbabwe Corp.	-25.1	-23.2	-27.1	-10.1	-4.5
Affretair	-3.3	..	..	..	.....
Zim. Steel Corp.	-57.9	-89.4	-87.2	-77.6	-80.0
Agric. Finance Corp.	-14.6	-17.9	-16.0	..	.....
National Oil Company	-13.4	119.0	112.2	5.9	-106.9
Total	-389.0	-353.1	-327.9	-362.4	-574.1

Table 3.

(Source: Govt. of Zimbabwe: Annex 1, p.9)

**PLANNED REDUCTIONS IN GOVERNMENT SUBSIDIES, AND ADVANCES TO MAJOR
PUBLIC ENTERPRISES UP TO 1994/95 (Z\$ MILLION)**

	1990/91	1991/92	1992/93	1993/94	1994/95
Reduction of operating losses of budgeted parastatals:	-309.0	-160.0	..	..	..
Marketing Boards of which	-166.7	- 83.4	- 50.0	33.3	..
GMB	(-59.2)	(-29.6)	(-17.8)	(-11.8)	(..)
DMB	(-59.8)	(-29.6)	(-17.9)	(-12.0)	(..)
CSC	(-32.5)	(-16.3)	(- 9.8)	(- 6.5)	(..)
CMB	(-15.2)	(- 7.6)	(- 4.6)	(- 3.0)	(..)
NRZ	(-70.0)	(-35.0)	(-21.0)	(-14.0)	(..)
AZ	(- 4.5)	(- 2.3)	(- 1.4)	-0.9	(..)
ZISCO	(100.0)	(-80.0)	(-60.0)	(-40.0)	-40.0
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Total	-650.2	-360.7	-132.5	-88.2	-40.0

Table 3.3

(Source: Govt. of Zimbabwe: Annex 1, p.10)

Operating loss (after stabilization) on the basis of current prices in 1990/91 = Z\$.118 million

recommends prices that are directly administered by the boards to be replaced by market-determined prices.

The question to policy-makers, then, is whether the food security of poor rural households is better served by market-determined or by state-controlled prices, and which of the two would improve food-availability and self-sufficiency without jeopardizing rural household entitlement power.

But, suffice it to acknowledge also that, since the IMF conditionalities are recommendations of developed Western countries, their implementation in Zimbabwe and other Third World countries has resulted in the outright deprivation of rural household food security (Skalness, 1989; Thompson, 1988; FAO, 1990).

3. The Food Production Sector

In terms of volume handled and in terms of food security, maize is the staple food as well as the main source of cash income for rural Zimbabwean households. In general, rural peasant households meet their food supplies through domestic production or through selling their produce and purchasing grain at retail prices whenever required and wherever available (Pankhurst, 1991).

The increase in the number of small-scale African commercial farmers occupying the APAs, has increased rural food production and household food security. This implies that

a middle class dominated by African food producers has surfaced to narrow the existing gap between the predominantly white large-scale commercial food producers and the rural CL African peasant food producers.

The development of policy instruments aimed at attaining food self-sufficiency among rural households has been a major government priority. At independence, the government was overwhelmed with the high level of poverty among Africans, the marginality of the land they occupied, and the absolute dependence of the food and non-food production sectors on the LSCF.

To improve the food security situation of the rural Africans, a policy of promoting small-scale producers in the CLs while maintaining incentive prices and credit for the LSCF was a strategy adapted to suit the political and economic climate of the time. Consequently, there were improvements in extension services and in the provision of improved seeds to CL producers. Accessibility to credit was improved and peasant producers increased the application of fertilizers and irrigation on their holdings. Furthermore, there was a rise in the number of GMB collection and distribution centres to cater for rural peasant producers (Stoneman et al., 1994).

Two other issues also relate very strongly to the food production sector. These are smallholder farmer organizations and collective action, and the rural household division of labour.

i. Farmer Organizations and Collective Action

Collective action among smallholder is a major contributor to Zimbabwe's rural food production and household food security. The formation of farmer groups is a strategy being undertaken to challenge the bias that policy-makers, predominantly in the government sector, have for decades given to commercial food producers. Collective action among peasant and APA food producers is determined by the amount and type of available resources that producers can pool and control together. They include land, labour and access to extension services, grazing land, and water reservoirs (Bratton, 1986).

Farmer organizations have improved rural household food security. The problem, however, is that since group members are now able to sell more grain per household and a higher proportion of their total marketable foodstuffs, the monocultural cultivation of maize as a cash and food crop has reduced self-sufficiency in other food supplies and increased vulnerability to crises and child malnutrition (*ibid.*, 1986).

Additional impetus to the growth of rural farmer organization originated from the LSCF attempt to diversify its produce due to recurrent low rainfall, the fixed GMB grain prices, and the modest redistribution of mostly marginal land to peasant families (Stoneman, et al., 1994). Since 1985, the diversification has been away from the reliance on maize as both a food and cash crop to other mainly non-food cash crops

such as flowers, fruit and the 'traditional' tobacco crops. Since the bulk of food-grain is produced in commercial farms, the reduction of acreage under maize immediately shrunk GMB stocks from an average 960,000 tonnes for 1988-89 to 264,300 for 1991-92²⁷ (Sachikonye, 1985).

Yet diversification by LSCF left an immediate gap to be filled by small APA and peasant food producers. Hence the attempt to pool available resources in order to produce and sell competitively large amounts of food.

ii. The Household Division of Labour: Its Socio-economic Impact on Rural Household Food security.

The majority of black Zimbabwean women and children live in the rural areas as peasant cultivators. Over a quarter of the male population live and/or are employed in urban centres from where they maintain links with their rural home communities. The reason for maintaining such extended family links is two-fold:

First, urban areas offer little long-term security as compared to the economic and social security derived from the traditional extended family support system.

While natural factors, such as droughts, tend to interfere with the development of the desired level of rural

The commercial farmers planted only 78,000 hectares in 1992 compared to 125,000 in 1991 and 285,000 in 1984. Communal and resettlement areas planted 600,000 compared to 925,000 in 1991

food security, traditionalism persists as the most infallible strategy for coping with household food scarcity. The extended family system, a tradition which emphasizes family cohesiveness and survival, coexists with modern strategies of coping with food shortages.

'Households still live in tribal style within communal lands, where they depend upon subsistence production, supplemented by small irregular sales of surplus produce, by casual employment and by remittances from immigrant labourers' (Kay, 1993: 964)

Second, the migrant labour system is basically used to supplement labour expended by women and children in the indirect extraction of capital that is used to concretize household food self-sufficiency and reduce vulnerability to seasonal food shortages. However, not only is rural household food security influenced by the strength of available income and accumulated entitlement. The proportion of income controlled by women is equally crucial in determining household caloric intake. It was found that Zimbabwean women devoted a greater proportion of their incomes to the household food requirement compared to men (Kennedy et al., 1992).

Policies have also indirectly influenced the household division of labour. In one study (Bratton, 1986), men were found to comprise the bulk of the 'migrant labour' force. And in both urban and rural areas, women were found to be responsible for most of the material reproduction of labour (for example, grinding maize, cooking, cleaning, collecting

water, and attending to children's needs). Whereas women's earned incomes went entirely towards household subsistence costs, most men used their incomes otherwise (for example, in drinking sprees and polygamous marriages), with just a little devoted to food for their families.

One study on female wage labour in Zimbabwe also suggests that "blatant inequality exists between men and women" (Adams, 1991:163). It suggests that a significant number of rural women should not be considered food producers, but wage workers. While some women aided by husbands working in urban areas and mines are capable of operating rural business and farms, many are confined to daily-paid cash employment used to meet immediate household food demands. The issue is that these incomes are not recorded and neither are there attempts to address their importance.

The impact of the above relationship on household food security has two contradicting implications. First, it implies that male migration to urban centres and LSCFs eases population pressure on the CLs. However, the same implication also weakens the necessity for urgent land reform.

Second, it means that, due to limited government-backed incentives, the motivation to exploit land for a living is reduced. As a result, the processes involved in rural household food production - planting, weeding, harvesting, transporting yields, shelling and threshing - are left to be shouldered by women and children. This traditional trend has

inevitably undermined current household food security. Furthermore, it influences social, economic and political changes at the national level and international responses (Cliffe, 1988; Munslow, 1985).

A conspicuous image reflected in rural household food security stems from its gender bias and in the extreme exploitation of women and children. This practice is ingrained in the social fabric of most African traditional societies where controversies surrounding traditional gender role differentiation are condoned by both sexes (World Food Update, 1993). Rural women in Zimbabwe are farmers who produce most of the food requirements of their families and communities. Strongly committed to self-reliance, they are not helpless, not hopeless, and certainly not passive since they always strive to prevent crises in their own families and communities.

The above socio-economic analysis is also compounded by social and ecological factors. One feature of land distribution and resettlement has been the establishment of CL areas. Despite the good intentions given by policy-makers to the resettlement program, the magnitude of overstocking, soil erosion, deforestation, desertification, and deterioration of water resources, have all combined to accelerate long-term ecological damage and rural household food insecurity (Thompson, 1988).

The relevance of the rural domestic division of labour is

not limited to the above socio-economic and ecological explanations. In its historical context, it reflected the salient political manipulation aimed at prolonging the longevity of the White settler regime which masterminded it. It made it possible to exploit much of the male labour force in labour intensive jobs, principally, agriculture.

During the two decades of UDI repression effective food security was a useful propeller in accelerating the political and economic aggrandizement of the regime despite United Nations trade sanctions. Then, a decisive intervention into the market control of food pricing and distribution was a method to ensure that the purchasing powers of Africans employed on European establishments could meet their household food requirements, and thus ensure the continuity of cheap and surplus labour. Agricultural production later became the foundation of an inward-oriented industrialization out of which emanated the growth in manufacturing (Fayez, 1993; Cliffe, 1988).

Furthermore, at their inception in 1966, the Grain Marketing Board (GMB), Cold Storage Commission (CSC), Cotton Marketing Board (CMB) and Dairy Marketing Board (DMB) were made to operate at a no-loss, no-profit basis with the dual objectives of maintaining high prices for farmers and ensuring stable food prices for consumers who are largely Africans (Thompson, 1988).

Today, however, in contrast to the highly mechanized

commercial farms, the communal peasant holdings still rely on simple technology to obtain good food-crop yields. The most advanced form available to such groups is the ox-plough.

The failure of the food security policy instruments have occasionally entailed disruptions in food production and incited a series of social and political expressions against the regime and the system. In rural areas, they are mainly engineered by unemployed farm labourers whose only access to food security derives from wage or salary entitlement²⁸.

4. The Non-Food Production Sector

This sector comprises wage and salary earning employees as well as those entities to which they sell their services. These entities in Zimbabwe include the public (civil) service, mining establishments, manufacturing firms and private business enterprises. This sector is not engaged in the direct production of food but may be involved in food processing.

The growth of the small scale sector has been slow due to inadequate incentives. The government's own assessment spells out that the growth of the small scale sector has been inhibited by the high cost of finance, limited land and basic utilities, as well as the presence of numerous licensing

In Mashonaland Central province, the Dema people were abandoning government resettlement schemes for their old villages to forage for food (The Herald, 11 Nov. 1991). In Bikita, starving villagers marched to the district administrator's office to demand delayed food rations. In all, more than 2 million people required food.

processes and other regulations.

Meanwhile, the official estimate of unemployment was 37% of the young and educated labour force. While gender distribution among the unemployed is roughly equal, women aged between 25 and 59 represent two-thirds of this group (Government of Zimbabwe, January 1991).

As of 1989, the minimum wage in the LSCF and transnational agri-business sectors was Z\$. 116.00 per month (*ibid.*, 1986)²⁹. This discrepancy is explained by the large number of low-paid casual and seasonal labourers. While the analysis of rural household income levels may be contradicted by the fact that some commercial farm labourers are also members of communal households, in general commercial farms labourers are still among the poorest of the poor in Zimbabwe (Government of Zimbabwe, January, 1991).

The impacts of drought, economic imbalances, food shortage and inappropriate food security policies are equally ravaging on the non-food production sector. In most cases, the food crisis experienced by the unemployed casual/seasonal rural labourers in agriculture and mining establishments, often trickles down to disorient the general economic activities in communities and villages from which they come. This situation arises when normal remittance for the purchase

The same study states that, large-scale commercial agriculture and large transnational agribusiness - sugar, tobacco, citrus, coffee, tea, groundnut, maize - are still the largest contributors to formal employment although this fell from 41% in 1964 to 26% in 1983. Approximately 1.4 million people live on large-scale commercial farms.

of food is stretched out during the search for alternative sources.

F. CONCLUDING REMARKS

Zimbabwe, therefore, presents a complex set of obstacles which constrain the effective performance of its food security system. Although they explain underdevelopment in the Third World in general, some have been found to be unique to Zimbabwe. Most of the unique obstacles are legacies of its colonial past and the systems of governments which is currently in place. Zimbabwe's extent of household food security has been refuted by several researchers.

First, a study by Stoneman et al. (1994) has refuted the consistency of UNICEF's 1993 infant health assessment which rates malnutrition in Zimbabwe for the year 1990 as the lowest in Africa. There is evidence that this favourable picture has been reversed by, among others, the effects of the structural adjustment program and the persistently growing level of poverty among individuals and households. It is also suggested that not only has the structural adjustment program caused food prices to go up, the tough economic measures have eroded the level and improvements in public health and education attained after independence (Meldrum, 1993).

Furthermore, rural peasants' grievances are still unresolved since whites continue to own half the productive

land (Palmer et al., 1992). The pace of the reform process is slow, if not, stagnant and the majority of rural households are still without access productive land.

Second, the plight of the urban poor, for whom there is no state welfare provision, is alarming under SAP. With mechanisms of price control and subsidy transfer being phased out, the loss of power to purchase food has produced many destitute and street beggars (Palmer et al., 1992).

In the CL where the bond of family kinship is well defined and protected, not only is general impoverishment prevalent. So is social differentiation between economic strata and gender. Those rural households with ample off-farm remittances from migrants in the urban and/or mining centres often exploit the poor households without. The most exploited are female-headed households whose only income substitute may be beer-brewing. The well-off households also subject the underprivileged families to exploitation when these families need oxen to plough their fields or need wage labour or need food for work.

Third, Cliffe (1988) notes that, with the IMF-induced closure of some GMB depots in the CLs and the increased bargaining power of the unionized commercial farmers, the attention span given to the 'master farmers' (that is, those who broke away from native husbandry) in the procurement of loans, credits and extension services has resulted in more rural peasants becoming impoverished. It has also encouraged

the expansion of a landed aristocratic class. Most rural peasants have lost their means of food production to this expansion.

Stoneman (1994) states that "for the first time in decades...an undermining of the GMB's strategic role was a major contributing factor to the crisis of 1992 which required huge imports of grains - amounting to 2.5 million tons" (Stoneman, 1994:22). This point explains why intervention by external agencies and institutions can not be omitted from the analysis of Zimbabwe's food crises.

Fourth, as a beneficiary of the Lomé Convention, Zimbabwe has guaranteed markets in the EEC. "The down side of these advantages is that Zimbabwe, like other primary producers, has had to accept the closure of the European (and US) markets to dairy products, maize, soybeans ...even worse, it has found its external markets ruined by dumping" of the subsidized EC and US grain (*ibid.*, 1994:20-1). As a result, in the future, Zimbabwe may experience over production and a large stockpile of grain. This may result in a large GMB deficit.

The above assessment presented a vivid representation of the current food situation in Zimbabwe. Yet the fact remains, as asserted in the introductory chapter, that major policy reforms in agrarian and rural food security systems need to be expedited through a method of development planning and policy

control which addresses each sector of the system.

The method recommended in this thesis is the systems model of development planning. In the next section (Part Two), this model will be used to identify key elements of the food security system and to define the flow of input and output within the system. Furthermore, it is expected that the model will help evaluate the advantages and disadvantages or pros and cons of proposed policy alternatives. Whereas this is not a perfect model, it is believed that its study will foster further research in the systems approach to resolving most of the problems of development planning in Third World countries.

PART TWO:

THE ANALYSIS

A - INTRODUCTION TO THE ANALYSIS

The complexity and variety of socio-economic conditions in Zimbabwe make it difficult to formalize the inquiry into its food security problems based on a specific scientific developmental paradigm. Instead, these conditions require a broad, complex approach to elucidate the socio-political and economic factors influencing the organization and direction of the system.

Development analysts appreciate the urgent need to construct a scientific paradigm and methodological apparatus for forecasting and planning. In the present study, the fundamental approach is that of systems analysis whereby all food security issues are viewed in terms of inter-connected components such that change anywhere produces further changes throughout the system. It simply implies that the system can metamorphose, undergoing essential changes, when any of its sub-systems is affected.

El-Yacoubi (1976) has offered an in-depth application of the systems analysis to development in the Third World. Since the word system is a mental 'construct' used as an analytical device in exploring and explaining phenomena, integrity, direction and organization are some important principles for its survival. "A system's integrity depends on the degree to which its main characteristics represent a cohesive interconnexion between the functions of the system's different

elements in relation to the whole" (*ibid.*, 1976:216). Consequently, both the analysis and policy prescriptions must recognize these inter-connections (or feedback loops). How to define the elements in the system being analyzed depends on the nature and goals of the exercise.

The advantage of the systems approach is that it "simultaneously facilitates the investigation of empirical reality while keeping analysts working at the theoretical level... it is easier to go back and forth between abstraction and reality while trying to understand the internal machinery of development and its main motive forces" namely, the systemic properties and its major components (*ibid.*, 1976:215)

Systemic, or systems, analysis is an analytical technique that can provide insight into a general model of development planning as well as a means to determine the elements which Zimbabwe can use to influence purposefully its food security system. The technique will be used in the analysis of Zimbabwe's Food Security System in so far as it is suggested in this thesis that the structural organization of its component parts manifests patterned interactions which concomitantly impact on the system's performance and thereby subject rural household food security to changes.

Viewed as an open system³⁰, there are three underlying

Buckley, W. (1980), "That a system is open means, not simply that it engages in interchanges with the environment, but that this interchange is an essential factor underlying the system's viability, its ... continuity, and its ability to change"

assumptions that run through the analysis of the present food security system: it is composed of a set of interdependent parts, it has needs for survival, and it responds according to action commands given it at either the macro or micro level.

The food security system is seen as a system which maintains itself by moving towards a state of equilibrium. Since it is subject to stresses from its internal components or external forces, the food security system attempts to minimize these tensions or conflicts in an attempt to preserve or reattain equilibrium through adaptation and adjustment.

Unlike functionalists who seek the causes of change among factors exogenous to the system, the view held by this thesis is that exogenous and endogenous stresses can occur concurrently but act independently. It does not always follow that exogenous stresses lead to internal crisis and consequently, an adaptation of the system leading to crisis or normalcy. Therefore, each sub-sector and sector of the food security system will be assessed and analyzed from the point of view of the contributions made towards the survival and adaptation (that is, the equilibrium) of the general system.

Furthermore, the position taken by this thesis is one which recognizes that the problems of rural food security exist only in abstract. This means that they are subjectable (susceptible) to policy solutions. If they existed in concrete (impervious) states then no practical policy solutions can possibly eliminate them completely. Instead the food security

system is not stagnant but constantly in motion towards a certain direction. This means that the characteristics of the system can be understood by the analyst only within a given time limit.

In summary, systems analysis involves the determination of the system's structural features and an assessment of relationships between its component parts. In this case, the ultimate aim is to find appropriate ways and means of influencing the food security system; that is, to find purposeful use of the knowledge concerning Zimbabwe's set of socio-political, economic and ecological circumstances and objectives.

As in the previous chapters, this study will elaborate on this synthesis by asserting that the problems inherent in Zimbabwe's food security system do not exist in isolation although they can be isolated conceptually. While the system is affected by natural and policy-induced changes in its environment, the behaviour of its components may also alter its equilibrium. Accordingly, no single problem relating to food security can be eliminated by solving each sector's problems independently of the others, because a system's component sector can not be decomposed without destabilizing the equilibrium and performance of other sectors.

The following analysis is divided into three chapters: 1. **The systemic development of sectoral planning strategies;** this involves the characterization of the system and the analysis

to identify constraints. ii. **The systemic assessment of policy control instruments** ; this involves the evaluation of current policy instruments. And iii - **recommendations** for the formulation of effective, efficient, economically and ethically appropriate policy instruments and a model of development planning which will direct and safeguard poor rural household food security.

CHAPTER V

THE SYSTEMIC DEVELOPMENT OF SECTORAL PLANNING STRATEGIES

A. INTRODUCTION

The development of representative models of the current food security system requires the separate analyses of normal and crisis situations.

To assess systemic performance, the characterization¹¹ of elements which require policy controls is vital for starting the analysis. This is necessary because the transformation from normal to crisis situations, and vice versa, is governed by the impacts of planned policies which were initially formulated to direct, control and coordinate interactions between the system's sub-sectors and sectors.

Only an analysis to identify deficiencies can substantiate the argument that initial planning strategies and current policy instruments have failed to meet their target objectives. This view originates from two assumptions which the final synthesis is expected to confirm:

- i. either the system was not designed with the flexibility to accommodate additional elements of change (not an open system, *per se*), or;
- ii. original planning strategies omitted critical

Fitzhugh's (1987:6) first two principal steps: the characterization of the system, and the analysis to identify constraints and practical options for their resolution.

elements pertaining to rural household food security in particular.

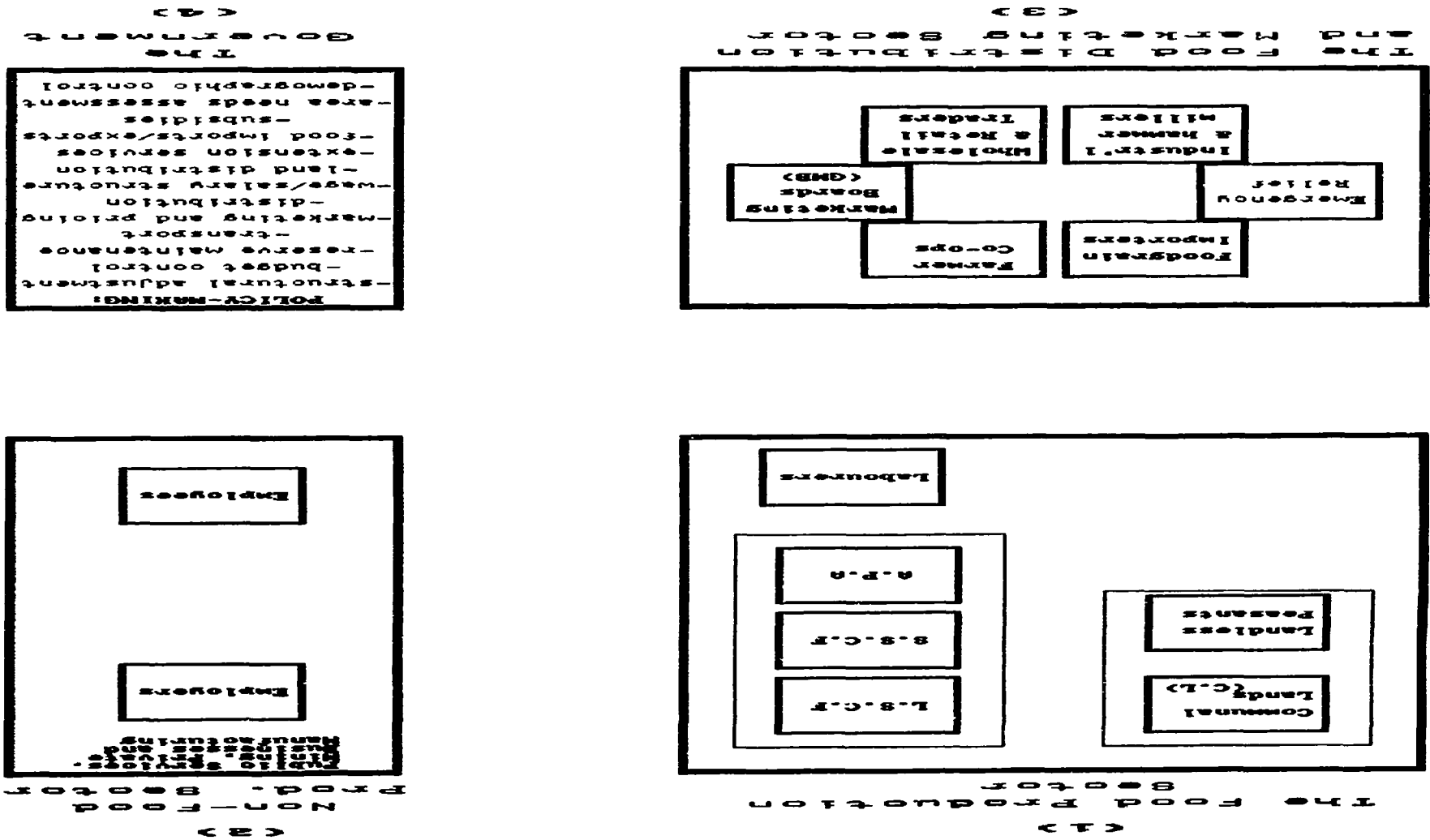
B. STATE OF ZIMBABWE'S FOOD SECURITY SYSTEM UNDER NORMAL AND CRISIS CONDITIONS.

The objective of this chapter is to develop a framework for identifying those sectors, sub-sectors and elements of the system that require policy instruments for control (Fig. 5.1). The determination of the sub-sectors and related policy elements is vital for pre-modelling the planning process. The system, as it is understood, does not affect only the socio-economic environment of the classes within which it operates. On the contrary, the system is also sensitive to changes taking place in its environment. Since the properties or components of the model can interact with one another in more than one way, care must be taken in determining both systemic and sectoral boundaries.

The principle underlying the systemic analysis of Zimbabwe's food security is a detailed adoption and expansion of the general equilibrium model used by Meghnad Desai (1990) to challenge Sen's entitlement approach to famine. A unique observation about the transition from normal to crisis (not necessarily famine) condition reveals that systemic sectors and most of their component sub-sectors do not disappear completely from the conceptual models. This is because each

SECTORS AND SUB-SECTORS OF ZIMBABWE'S FOOD SECURITY SYSTEM

(Fig. 5.1)



component sector of the system continuously strives to survive within the unit most immediately superior to it. Instead, it is the origin-destination (or direction) and the functions (or objectives) of systemic interactions (linkages or interconnections) which are altered during the critical transformation to crisis of the system.

A.) The *food production sector* (1) comprises communal land owners, large-scale commercial farmers, small-scale commercial farmers, African purchase area farmers, farm labourers, and the landless peasants. By class or population size and level of socio-economic differentiation, this sector is dominated by the focus group of this thesis; that is, the poor rural households. This is regardless of whether these households are located in agro-ecological and agro-climatic zones associated with high levels of food production - that is, surplus areas.

B.) The *non-food production sector* (2) comprises two sub-sectors, namely the employers and employees. The dominant employers are the public service, the mining establishments, small and large private business enterprises, and the manufacturing industries. This sector, as the name implies, is not involved in the direct production of food, although a significant amount of its manufacturing activity concentrates on processing food and non-food agricultural inputs.

Except for mining establishments, health centres and local government administrative offices in rural areas, the bulk of this sector's activity is concentrated in urban centres. The civil service, small and large private business enterprises, and manufacturing industries are all concentrated in urban areas. Consequently, it is not unexpected that the food security of households directly dependent on this sector is primarily derived from monetary entitlements - that is, earned wages or salaries - accepted by employees in return to labour input expended in production.

Furthermore, this sector's choice of food is influenced by the ever changing conspicuous consumption and prestigious tastes (often influenced by accumulated entitlement) of the urban populations. In circumstances when these food items are not produced or processed locally, food importers have prospered by providing foreign food substitutes.

C.) The *food distribution and marketing sector* (3) is involved in the handling, distribution, marketing, storage as well as a little processing of food. At any one time, this is the sector in which patterned increases or decreases in food sufficiency and availability can be forecast and verified based on available stocks. It is both a private and public food depository in that there are both private traders and government marketing agencies involved in the movement of food (food trade). It comprises the cooperatives, the marketing

boards (primarily the Grain Marketing Board), large-scale industrial millers, small-scale hammer millers, small and wholesale retail traders, food importers and emergency relief.

The emergency relief sub-sector is distinctive of the crisis situation. It changes in terms of the number of non-governmental organizations (NGOs) and voluntary agencies involved in the emergency operation, at both the national and international levels.

There are two suggestions to make about this sub-sector. First, its objectives change over the crisis period. It may emerge initially as an emergency relief food distributor, but as the crisis phases out, its objectives are transformed and diverted to a focus on designing and developing preparedness schemes against future eventualities. Second, its position in the food distribution sector is temporary. It can dissolve during normal conditions without affecting the composition and objectives of the system.

Except for those activities of farmer cooperatives, the Grain Marketing Board (GMB), retailers, emergency relief and small-scale hammer millers which are concentrated in rural areas, the bulk of all food-related transactions performed by food importers, industrial millers, commercial traders and the GMB are aimed at supplementing urban food requirements.

D.) Finally, there is the **government sector** (4). Politically and economically, all food-related activities in

sub-Saharan Africa are not only subordinated but subjected to government control. Once again, food security serves as a prime example. In the case of Zimbabwe, the production of food for household consumption and for cash is an activity for which this thesis would recommend lesser government parameters of control. While political and economic motives compels the government to react with a restriction on the commercial movement of food from surplus to deficit areas, austere measures adopted should balance both the necessity for rural household food security and the government's objectives.

By contrast to other sectors, the government's policy and administrative institutions are also its sub-sectors. Its role in Zimbabwe's food security system features as that of a unitary actor whose multiple objectives are realizable through the concerted activities of the other three sectors. In terms of economic development, food security is viewed as only one of the state's development objectives. Others include: the education system, the agricultural system, and the health system.

This sector's role in the food security system aims at securing a level of interaction among sectors and sub-sectors of the system which will represent, at the fore-front, its political and economic interests while the interests of other sectors are secondary. To achieve this, it has formulated policy-instruments governing food marketing and storage, food pricing, food distribution, land (re)distribution, food

subsidies, food imports and exports, transport and communication infrastructure, and structural adjustment (Socio-Economic Review, 1986; Government of Zimbabwe, January 1991).

C. LEVELS OF SYSTEMIC INTERACTION IN THE FOOD SECURITY SYSTEM

Two levels of systemic linkages are very important for understanding food production and its movement across different agro-ecological, agro-climatic zones and socio-economic groups. An examination of the system will indicate that they occur at the micro and macro levels representing systemic interaction between sub-sectors and sectors of the system, respectively.

Understanding the patterned network of systemic interactions is important because they form the basis for interpreting the strong and weak linkages that require policy interventions. The notion of strong and weak linkages helps to determine the nature of normal and crisis conditions in rural household food security. It is also important to know that the degree of systemic interaction described represents the level that is accepted by this thesis as constituting the normal rural household food security.

The following analysis is a synthesis focused on the systemic description of sub-sectors and policy elements which

determine the transformation from (a) normal to (b) crisis conditions at the (i) micro or "infimal" and (ii) macro or "supremal" levels of interaction. At the end of this section, the relevance of the systems approach for understanding structural-functionalism during systemic interaction will be highlighted.

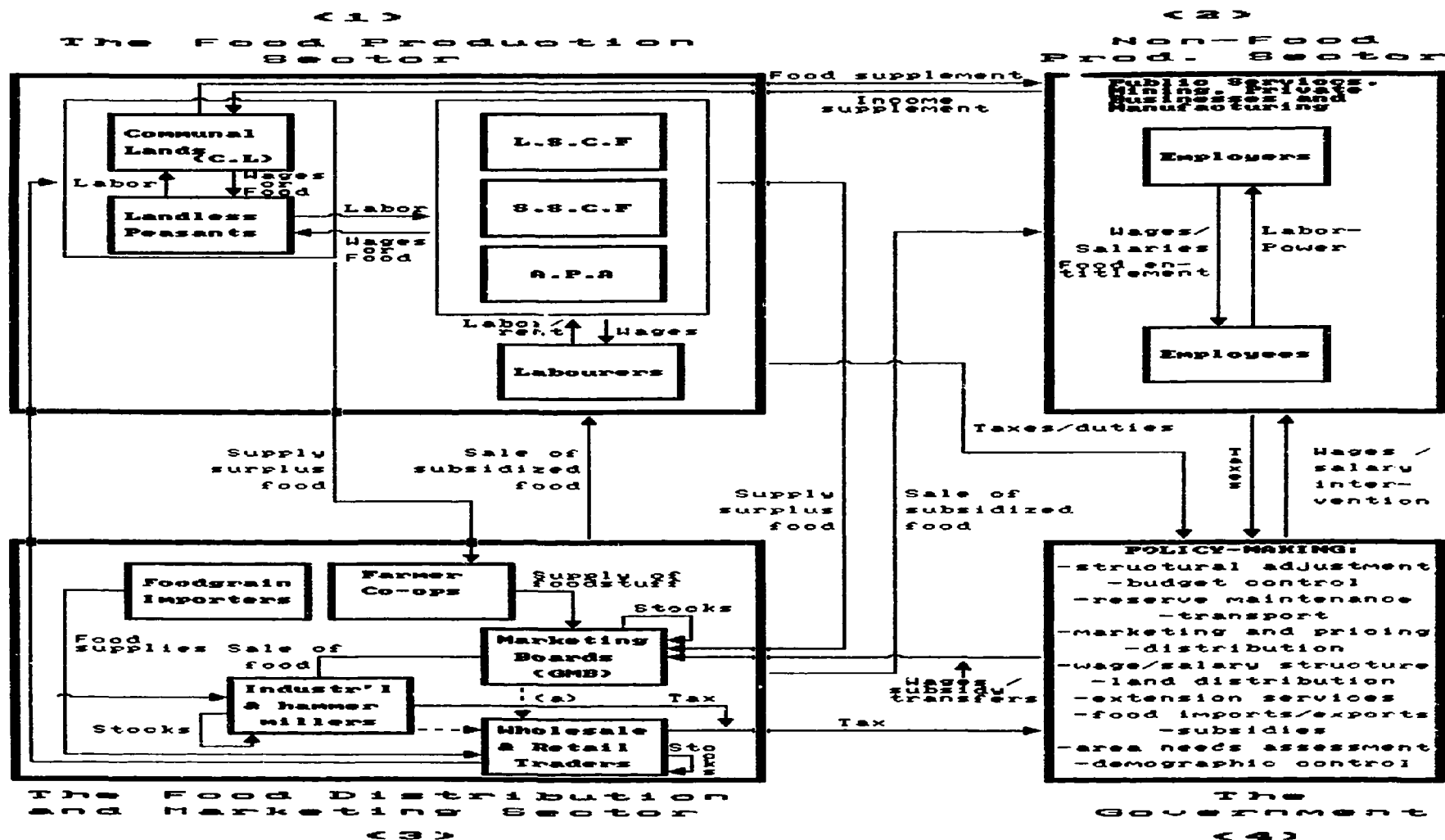
1 - Systemic Interaction During Normal Conditions.

Systemic interaction during normal conditions is represented in Fig. 5.2 on the next page. It shows two levels of systemic interactions. The first level of analysis deals with the identification of systemic properties and systemic interaction within each sector, that is at the micro level, and the second level, showing six sets of interaction in the general system, is at the macro level of analysis.

(i) At the micro/sub-sectoral level of interaction.

(A). Within the *Food Production Sector* (1), the exchange of labour and wages is higher than in any other sector. In the communal land (CL), there are those peasants who own land and those who are landless. Landless labourers in the CL attain household food security by selling labour to the landed peasants in return for cash wages or payment in kind - often in exchange for food.

(Fig. 5.2) **ZIMBABWE'S FOOD SECURITY SYSTEM
UNDER NORMAL CONDITIONS**



This exchange does not imply that the landed and landless communal peasants have complete insurance against food insecurity. What it represents is the situation that, although rural areas are sparsely populated, expansion is constrained by the limitation of areas that can adequately sustain food production. The pressure of population congestion in these limited areas forces both types of CL dwellers to complement their food requirements by supplying labour to commercial food producers if there are any.

It was asserted earlier in Chapter IV that the main providers of rural household food security and rural wage labour are peasant women and children. Understanding how they divide time between the family holdings and commercial farms is important because some landless peasants attempt to attain their food self-sufficiency by providing labour all year round to landed food producers without having the opportunity to produce on their own holdings, if they own any. But, where landed peasants own stretched-out and exhausted resources, their food self-sufficiency may fluctuate a great deal.

There is also a dominant group in the food production sector which, like the landless CL peasants, depends entirely on the supply of labour to commercial food producers. These are the farm labourers. This group earns wage entitlement or actual food by expending labour on commercial farms. Unlike some CL peasants who use wage labour merely to complement their food requirements, resident commercial farm labourers

are not seasonal employees. They may choose to live with their families on these entities or may have their families reside on smallholder farms in the CL areas. Since women and children dominate the smallholder scene, it can be concluded that the majority of commercial farm labourers are, therefore, males.

Systemic linkage between commercial food producers, viz., the LSCF, the SSCF, and APA food producers, does not indicate a high level of interaction. This is partly because the relationship is characterized by a high level of competition for the limited size of the present market.

Each entity of commercial and CL food producers is assumed to be in possession of a certain level of organization which facilitates the marketing of foodstuffs and the purchase of farm inputs. This is not explicitly represented in the model and neither is there any interconnection to suggest cooperation in storage, transportation or contract farming.

Policy factors Influencing The Food Production Sector.

Chapters III and IV provided important policy elements that influence the performance of the food production sector in the system. Since these elements determine food production, they require inclusion for policy considerations during planning.

These include: overpopulation in CLs, shortage of storage facilities, the low income entitlements of rural households, the rising price of foodstuffs at both national and

international levels, inarticulate marketing, pricing and distribution policies, the slow pace of land reform, the direct and indirect impacts of the structural adjustment program, frequent droughts, producer and consumer subsidy cut-back, male rural-urban migration, and the high cost of funding extension services.

(A) Within the *Non-food Production Sector* (2), multiple linkages exist. The one most relevant is that between employers and employees.

The real purpose of the traditional extended family structure commits most employees to fulfilling their cultural obligations. Earned wages or salary entitlements are extended to complement the food requirement of the entire extended family - that is, for the immediate household and for relatives in rural areas. The traditional pattern of responsibility implies that, in their relationship with rural households, urban dwellers play an important role in stabilizing rural household food security.

Policy factors influencing the non-food production sector:

The role of this sector in the food security system and its subsequent impact on rural food security are influenced by several policy factors, of which the following are significant: inflation, the structural adjustment program, consumer and producer subsidies, wage remuneration, and

currency devaluation.

(C) The *Food Distribution and Marketing Sector* (3) is only second to the *government sector* (4) in influencing rural household food security. Its component sub-sectors span both the rural and urban areas of Zimbabwe. Since the activities of co-operatives (farmer organizations), and those of small-scale retail traders and hammer millers are more concentrated in rural than in urban areas, their services are insufficient for stabilizing the food security of the 70% rural population of the country. Besides, almost all food-related activities in this sector are influenced by the marketing parastatals, principally the GMB.

Farmer organizations operate as co-operatives. Their objectives are to facilitate the marketing of food produced by peasant smallholder and APA producers. The organizations also facilitate the accessibility of these producers to farm inputs which, as individuals, are beyond their respective purchasing powers. Because of these two functional objectives and the fact that they relate closely to rural producers, farmer organizations are necessarily middle-men in the rural-urban food transactions.

Furthermore, since they contribute smaller amounts of foodstuffs, are close to few GMB handling depots, and lack efficient transport facilities, peasant and APA producers can supply larger volumes of surplus foods directly to GMB

collection points for better prices only if they pool into cooperatives.

Another of the GMB's roles derives from its role as collector of surplus food. From this surplus, a sufficient and reliable stockpile for averting imminent food crises is maintained.

By way of the systemic input-output processes, the method by which foodstuff flows back into the rural areas is a dimension which has led to direct controversy over bias in current policy. It is a dimension which has made it not only complicated but expensive for rural households to access food distributed by the GMB. The irony of this dimension is that it occurs during normal conditions of food security. One example is the restriction over the free movement of food from surplus to deficit rural areas.

The most visible of the GMB problems represented in the diagram is the direct supply of foodgrain to industrial grain millers. The use of heavy machine equipment by industrial millers produces large quantities of high quality maize meal. Although a large output would appear to imply an affordable price level to all socio-economic classes (especially, the poor rural households), the reverse is true. The high cost of technology inputs and the prestige attached to the consumption of fine-grind maize meal increases its final cost to poor rural households.

Because of the unofficial nature of their operation,

private traders and hammer millers obtain grain from either grain importers, their own holdings, or through the combination of these sources. With a substantial number of poor people in rural areas, it may be suggested that only a few mostly urban-based wholesalers and hammer millers can obtain licenses to trade directly with the GMB.

By the description of the present model, food importers ensure rural household food security in two ways: either by flooding the urban market with imported food, thereby confining locally produced food to rural areas, or by directly infiltrating food deficit rural markets with cheap imported foodstuff.

While food importers influence rural household food security, they none-the-less, operate through entities mainly associated with the mainly urban-based non-food production sector. This means that there is no reasonable amount of direct systemic interaction between food importers and the rural-based factors concerned with local food production.

In general, the expense involved in importing food puts its price at a level beyond the purchasing power of poor rural households. And, since the movement of food from surplus to deficit rural areas is restricted, there is no linkage which substantiates the magnitude of commercial food movement among the identified sub-sectors.

The movement of labour, wages and food in exchange for labour is clearly represented. Most food importers, however,

supply pre-processed foods suited for the income-earning urban classes. Like industrial millers and GMBs, most traders and hammer millers also account for food supplies intended for the low-income urban and poor rural household consumers.

Policy factors affecting the Food Distribution Sector:

Under the food production and non-food production sectors, some policy issues which also affect the food distribution sector are listed. The most important ones are: the distribution of GMB collection points, the distribution of transport and storage facilities, timeliness of payments to rural food producers, and producer price control.

(D) It is the Government Sector (4) that wields paramount control over the system as a whole. In this sector are key policy-making and administrative institutions whose decisions cause major systemic changes in other sectors and thereby, affect the general systemic equilibrium.

Since it is concerned with policy-making, policy implementation and the coordination of systemic interaction among the system's sectors, it could be suggested that an appropriate model is that which places this sector in an organization-like structure. This would give this sector control through an implied top-down delegation of power and authority. On the contrary, this is inconceivable because it ceases to represent a systemic-type relationship where the

flow of policy-controls and food-related activities is assumed to be horizontal rather than vertical. It also implies that no sector (not even the system) can be modified or directed by minor sectoral decisions without the prior approval of an outside agency or the general food security system.

Policy factors influencing the Government Sector:

Government decisions influence rural household food security more than any minor decisions made by a sector. Policy considerations should address: maintenance of buffer-stocks, rural transport and communication infrastructure, food distribution and storage facilities, food marketing and price stabilization, land (re)distribution, extension services, regulation of food import and export, producer and consumer food subsidies, GMB financing and deficit control, the structural adjustment programs (SAP), population control, and wage/salary restructuring.

(ii) At the macro/sectoral level of interaction

As mentioned earlier, there are six sets of systemic interconnections at the macro level. These are typified by a two-way flow of input and output, from and to each of the component sectors.

(A). Between the Food Production Sector (1) and the Non-

food Production Sector (2), there are basically two input-output interconnections whose roles are specifically aimed at ensuring food security at both ends. In fact, these two sectors also represent the rural and urban populations, respectively, but without establishing the disparities in their food supplies and level of entitlement power.

It is also important to understand the nature of this relation in terms of seasonal patterns. Its implication is that during harvest time surplus in rural food supplies is siphoned to family members in urban areas, and vice versa (in form of monetary entitlement) during rainy/planting season when food stock is near depletion in rural households.

This type of interaction, however, is limited to a few families. It is especially effective for those families whose male heads are employed in either urban manufacturing, in the public service, or in the rural mining establishments while their wives and children tend the family holdings in rural CL or APA areas. However, this crisis-coping arrangement is still vulnerable to policies which restrict the movement of food between differentiated zones.

The relationship between the food production and non-food production sectors requires policies on the following issues: land reform, food distribution and wage restructuring on the part of urban and mining employees, and transport.

(B). The systemic interaction between the Non-food

production Sector (2) and the Government Sector (4) affects rural household food security both directly and indirectly. It has direct effects through those employees with extended family members to support in rural areas. For these rural families, the food purchasing power of the urban-rural remittance depend on the competence of an appropriate wage structure. That employees in the non-food production sector are required to meet their tax obligation to the state is an additional stress on entitlement remittable to rural family members.

While one of the government's major objectives in rural development since independence has been the focus on increasing the horizons for rural household incomes, the realities of post-independence events indicate that there is, instead, a shift to a focus on safeguarding against the volatile political rhetoric of the urban-based non-food production sector. This is one reason why wage increases and food subsidies favour urban non-food producers over rural peasant producers. By the same token, the direct implication is that any hikes in urban food prices is bound to trickle down and affect rural household food supplies.

In planning food security, elements for policy consideration regarding systemic relationship between these two sectors should include: standards for wage/salary (re)structuring in the private and public sectors and, structure of taxation for each socio-economic class in the

population.

(C). The Government Sector (4) uses the full extent of parastatal powers delegated to the GMB and industrial millers³² to control the bulk of food-related activities in the *Food Distribution Sector* (3).

During normal food security, the industrial and hammer millers, and private traders become major sources of tax revenue. Some of this revenue is re-channelled to finance development incentives in rural areas. Thus, taxation is absolutely vital for ensuring the continuity of food-related programs in the rural areas.

A major structural controversy surrounds the viability of large subsidy transfers from the government sector to the food distribution sector. During normal food security, subsidies to parastatal millers and the GMB help in keeping food prices affordable by low-income households. However, the extent to which these transfers benefit rural households has been criticized by most researchers cited in the preceding chapters.

Policy measures capable of facilitating systemic interactions between these sectors should address the following: structure of taxation, the question of subsidy

Unlike the GMB which is completely parastatal, industrial millers include private operations. To ensure that private industrial millers do not undermine the profit margin of the GMB, their pricing and marketing strategies are regulated or controlled by the GMB.

transfers and deficit control and, consideration for permitting increased private food marketing.

(D). Systemic relations between the *Food Production Sector* (1) and the *Food Distribution Sector* (3) are vital parameters for understanding food availability and self-sufficiency in rural households. The interaction between these two sectors is the most symbiotic of the system's activities. Since the movement of food between different socio-economic and geographical entities is predetermined by the interaction between these two sectors, distribution is, therefore, a factor with immediate influence on the level of rural household food supply.

The supply of surplus food by food producers to the food distribution sector and its subsequent resale, is governed by a number of natural and policy factors. As a natural factor, droughts are frequent in the region but this is a subject outside the present analysis.

However, variations in the quality and quantity of foodstuff produced by the different groups of food producers determine their respective magnitude of interaction with elements in the food distribution sector. CL peasant food producers can only improve their access to the GMB and industrial millers by supplying larger quantities of foodstuff. As mentioned earlier, this has been achieved through the formation of farmer organizations (co-operatives).

Unlike small-scale producers, commercial food producers access the MBs directly because they have proximity to better transport and communications infrastructure, are close to GMB collection and distribution points and are bulk producers and suppliers. Since they form the privileged class of food producers, commercial farmers are also represented by powerful lobby organizations capable of influencing policies in their own favour. In fact, the attempt to increase rural household incomes is directly dependent on the spill-over effects of activities from pressure groups representing commercial food producers.

As food distributors, food importers operate on a competitive and entirely profit-oriented basis. Their imported food supplies penetrate rural households through extended families and traders - depending on the extent to which urban markets are fast flooded. The shift in urban taste also releases much of the GMB stock of locally produced food at affordable prices to rural households.

In developing plans for appropriate systemic interaction between these two sectors, areas of policy instrumentation should address the following: the regional/area distribution of storage and handling facilities, transportation, food imports and the market protection of locally produced food, movement of surplus food between zones, timing and control of buffer stock and, pricing.

(E). While the systemic relationship in (C) above typifies the actual distribution of food, the systemic interaction between the *Food Production Sector* (1) and the *Government Sector* (4) is dominated by policy issues.

To run its administrative instruments, the government sector depends, among others, on the food production sector for taxes, food export and import duties. In return, it provides rules, regulations and policy instruments to protect individual ownership of the means of production.

In a state of food security, the success of the above interactions requires the prior consideration of the following policy elements in planning: subsidies on farm inputs, marketing and pricing, land distribution, population control, extension services, transport, import regulations, wage control, controlling the effects of structural adjustment programs, and the appropriate extent of storage and handling facilities.

(F). Finally, there is the systemic relation between the *Food Distribution Sector* (3) and the *Non-food Production Sector* (2) of the food security system.

The increasing cost of living is responsible for the hefty consumer subsidy incurred in ensuring urban, and through trickle down effect, rural household food security. It is also based on the crude assumption that rural food producers are necessarily self-sufficient in food supplies.

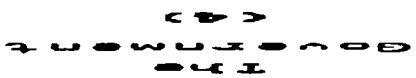
The concentration of the multiplier effects of food-related activities in urban centres has contributed to the increase in income, hence the food purchasing power of those rural households partly dependant on the non-food production sector for their food supply. As described above, the situation represented in this relationship is so complex that one wonders if valid policy-measures and their implementation are feasible.

Systemic interaction between these two sectors requires that planning include consideration for the redirection and reorganization of subsidy transfers to rural households, staffing and management of the GMB, wage and salary control, and mechanisms for food pricing.

2 - Systemic Interaction During Crisis Conditions.

A systemic examination of the food security situation during crisis conditions recognizes the explicit disappearance or reduction in the activities of many interconnections in the model and the emergence of newer ones performing different functions (Fig. 5.3). One such new feature is the emergence of the Emergency Relief sub-sector in food distribution. It simply means that local activities are unable to withstand crisis except with the augmentation of food aid and relief supplies. Also implied in the model is the stagnation of previously vibrant food-related activities.

**ZIMBABWE'S FOOD SECURITY SYSTEM
UNDER CRISIS CONDITIONS**



The notion of crisis and the resultant food insecurity is relative. The systemic model over-emphasizes its accurate representation. In fact, there is already a poor class of rural households who are constantly food insecure (undernourished and malnourished) and another who are constantly vulnerable due to natural and/or policy factors. It follows that systemic interactions may disappear completely or may be reduced drastically depending on the magnitude and extent of the factor or multiple factors responsible for the crisis.

Differentiating the various degrees of crises is a complex task but suffice it to mention that the intensity and duration of crisis depends on the number of factors involved, let alone the number of policy and technical instruments available to challenge it.

(i) At the micro/sub-sectoral level of interaction

(A). Within the Food production Sector (1), the interconnection represented by exchange of labour and wages and by the exchange of food for labour between the CL peasant food producers and the landless CL labourers is reduced (here, represented by dotted lines). It means that food-related activities between the sub-sectors concerned have drastically reduced, thus, the bulk of poor rural households face acute food shortage.

What factors destabilize the system's equilibrium and lead it to crisis? Chronic food insecurity alone (mainly resulting from the failure to direct policies where they are appropriate) does not necessarily lead to the disappearance of dominant interconnections or the reduction in food-related activities. Rather, population pressure, poverty and the limitations of productive land to rural peasant households create conditions which perpetuate the urban migration of the male heads, thereby resulting in the decrease in rural household labour and plummeting food production.

The relationship is also competitive in that rural families capable of complementing their food requirements through wage labour can maintain the *status quo* by working on privileged peasant holdings and commercial farms. Meanwhile, those who can not work, but have income-earning family members in the mostly urban-based non-food production sector, may choose to relocate closer to them.

At its worst stage, the 1991/92 food crisis represented a famine condition to which both drought and policy failures contributed significantly. The result was the near collapse of the food production sector.

During crisis, the disintegration of wage labour does not affect the interaction between CL households only. It also affects the interaction between rural (CL) wage labourers and the commercial food producers. Interaction either scales down or ceases completely. This is also represented in the model by

broken interconnections.

Privileged as they are, commercial food producers may also suffer the economic consequences of droughts and ill-addressed policies but hardly do their households face acute food shortages. Their strength is in accumulated entitlement and they will continue to resist the crisis by exploiting off-farm and resident employees.

(B). The *Non-food Production Sector* (2) is also affected by the rural food crisis. The incomes of employees in this sector may be stretched to the limit because rural family members become absolute dependants during the crisis period.

The dotted link represents the stage during which employees (mostly those in the mining, manufacturing and private business establishments) may start to divide their time between permanent and casual jobs or may choose to devote all their time to the food-for-work program.

(C). The *Food Distribution Sector* (3), is characterized by the decline in food-stocks held by the GMB, industrial millers and retail traders. This situation arises because the demand for food constantly outstrips its supply. Without actual food production, farmer co-operatives and commercial producers are unable to deliver surplus to the GMB.

In the presence of all the above, the GMB may still meet the grain requirements of industrial millers. The depletion of

local surplus from small-holders and commercial food producers is replaced with government-initiated food imports.

While industrial millers may continue supplying expensive *mealie* meal to the urban consumers, the notable absence of hammer millers serves to reinforce the level of the crisis confronted by rural households. Low-income rural households are forced to purchase not only expensive but also unfamiliar food. With time, their limited purchasing power fails and the crisis will intensify.

The urban-based food importers of this sector, while only vulnerable to local policy miscalculations, constitute the first alternative source of food supply to rural households. With CL peasant and commercial food producers constrained by the crisis, food importers have only the GMB's diminishing stocks to contend with. This results in the high cost of food sold by retailers to rural households.

The Emergency Relief sub-sector is generally associated with crises situations. During the 1991/2 food crisis, both local and international relief food agencies participated in averting the crisis. Most relief agencies are non-governmental organizations operating with funds generated from within Zimbabwe and/or exclusively from the developed Western countries. They help provide immediate relief aid and services, and later prepare rural households for similar occurrences.

(D). Crisis offers an opportunity for testing policy instruments. During this period, the Government Sector (4) is faced with the repercussions of its own policy miscalculations. As expected of a system, the resounding effects of the collapse of any one sub-sector will translate into the disequilibrium of the system as a whole. Other than natural factors such as droughts, it is possible to argue that all policy-related problems originate from this sector.

While policy-making and administrative institutions do not disappear from the conceptual model, their objectives may be curtailed by the dynamism of market competition. Consequently, policy instruments are circumvented as private dealers unofficially join in the determination of food prices and its distribution in an open market competition with parastatals.

During crisis, this sector bears the added cost of pumping subsidies to support urban consumers through the GMB. Since rural communities do not pose significant political challenges to the government sector, crisis in this area is prolonged because of the imperative need to satisfy the politically volatile urban non-food production sector. The return to normalcy in rural household food security may literally take a slow and painful pace.

Some controversial programs are continued by this sector despite the cost to rural household food security. They mainly pertain to the structural adjustment program (SAP). Of its

dominant conditionalities, trade liberalization and reductions in subsidy transfers to public agencies have directly stifled rural household food security.

(ii) At the macro/sectoral level of interaction.

(A). Systemic linkage between the *Food Production Sector* (1) and the *Non-food Production Sector* (2) during food crisis, constitutes the 'last resort' for households or families in both sectors.

While it is potentially easier for rural CL households to regain control over food supplies (especially after a country-wide drought) the reverse is true for family members in the non-food production sector. Most often, after a crisis is resolved, rural CL families return to meeting their own food requirements through direct production on family holdings. But for members in the non-food production sector, a prolonged recovery relying on rural food supplies may ensue. This is because once traders hike food prices with the intent of making high profits, the possibilities for lowering the same after the system resumes normalcy are bleak. This is only true in the short-term when rural producers attempt to regain control over their own household supplies first. Prices may drop in the immediate and long-terms if a food surplus ensues.

The uncertainties over future price control is a dilemma that challenges the initiative of most policy-makers. They are

often left with limited options regarding first, the prevention of further erosion of household entitlement and, second, the economic and political impacts of national dissatisfaction with present or wage structures. These include, for example, releasing more money into circulation, jeopardizing GMB monopoly by liberalizing trade and increasing subsidies, and setting ceilings on food prices.

(B). Systemic interaction between the *Non-food Production Sector* (2) and the *Government Sector* (4) during food crisis relates mostly to the roles of individual policy instruments and the interests of political elites. The collapse of the state administrative structures in rural areas is the worst form of debilitation the government sector should expect to confront.

The private components of the non-food production sector are the most affected by absenteeism and subsequent drops in production. The problems associated with the structural adjustment program (SAP) are uneven on majority households. It means, for example, that increasing public wages without understanding its repercussion on rural household food security may be a futile venture. Currently, the restructuring has entailed increases in tax revenues from employees and from private and public employers. The effect of which may lead to chronic food insecurity in rural households.

(C). Systemic interaction between the *Government Sector* (4) and the *Food Distribution Sector* (3) is influenced by changes in the structure and objectives of respective sub-sectors. First, farmer organizations require inputs in order to facilitate the recovery of smallholder and APA producers. During crisis, these inputs may be purchased as a part of the government's spending incentives to avert crisis, or may be donated by international agencies as part of a disaster relief package.

For rural CL food producers, these inputs include simple farm tools, seeds and fertilizers. They are essential because during food insecurity, farm implements are effectively converted to cash and stored seeds are promptly consumed - they serve as insurance.

The necessity to continue subsidy to the GMB during the 1991/92 food crisis indicates how difficult it is to eliminate such transfers. Even the growth of the emergency relief sub-sector did not help to deter GMB activities relating to the plight of rural households. Instead, the limited extent of GMB food supplies and the political volatility of the urban population forced the government sector to maintain, if not increase, subsidy to the GMB despite WB/IMF recommendations.

Procurement for GMB food stocks after the collapse of the food production sector was partly filled by food aid and food imports. Despite subsidies, the cost of importing food was shouldered by rural households through high food prices. The

other sources of government tax revenue were the wholesale and retail traders.

(D). Between the *Food Production Sector* (1) and the *Food Distribution Sector* (3), the sale of foodstuff to rural households never ceases during crisis. Limited by diminished entitlement power, rural households are severely inhibited from acquiring GMB marketed foodstuff even though it still constitutes a vital source of food supplies. One alternative is the emergency relief sub-sector which will supply cost-free food to reduce malnutrition, under-nutrition and possible deaths.

Food supplies to rural households by wholesalers and retail traders are expensive but become accessible due to competition among suppliers. Private suppliers are not governed by the GMB type of bureaucratic decision-making. Supplies and demands are determined by the purchasing power of rural households. It means that food prices should be able to exhibit a certain degree of flexibility. This flexibility is regulated so that efforts at free marketing are not extensively undermined.

The reduced activity of hammer millers in the model reveals the limitation of choices available to rural households during crisis. The inability of hammer millers to produce their own supplies of food-grain coupled with the disruption of food production on rural CL holdings, diminishes

production and the distribution of coarse and cheap mealie (maize) meal to both rural households and low-income urban dwellers.

Systemic relationships between rural households and the emergency relief sub-sector are the most crucial during crisis. Practically, food aid constitutes a vital substitute to dwindling rural household food supplies.

The emergency relief sub-sector is not only involved in the distribution of food but also in crisis preparedness. The latter is performed by providing rural food producers with farm inputs such as seeds, fertilizers and farm tools, constructing dams and water reservoirs, pilot irrigation schemes, and giving technical instructions on better techniques of water and soil conservation.

Most local relief agencies whose programs are directed at crisis preparedness provide their services through wage employment and food-for-work programs. Food is used as an incentive to involve the poor rural class in community development at the grassroots level. A similar program is also operated by the government sector. The difference between the two is that the former relies on funding from international and local NGOs while the latter relies on public coffers.

(F). Systemic interaction between the Food Production Sector (1) and the Government Sector (4) exhibits a form of exchange in which public spending and the need to maximize the

use of available resources requires that recipients of food aid return value for the amount of aid rendered. The food-for-work program makes the rural population dependent (at least, during the crisis period) on available food-aid while they contribute to government rehabilitation objectives. The program involves rural recipients of food-aid in the construction and improvement of rural infrastructure, as well as training them in famine preparedness, primary health-care and in the use of animal power in food production.

The CL households are currently confronted with two sets of major issues. First, population explosion, declining soil fertility and rural-urban migration have reduced food production, and second, food prices and taxes have heightened as a result of the structural adjustment program. The purchasing power of current incomes has plummeted to an incredible low. With the costs of health-care and education added onto rising food prices, rural household incomes have been stretched to the limit. The health-care problem issue provides a vivid picture of the impacts of IMF-engineered structural changes³³.

The thought of SAP as a misconceived set of policy elements affecting food security suggests that not only do policy problems arise from flaws in policy-making but they also emanate from external (environmental) interventions to

Refer to Dr. Timothy Stamps: Zimbabwe's Health Minister. In **Africa Report**. Nov./Dec., 1993.

which the country's policy instruments are susceptible.

The above section of this chapter has provided a framework and analysis relating the systems model to two aspects of the systems approach. First, it has facilitated the determination and analysis of the internal composition (structure) of Zimbabwe's food security system. Second, it has facilitated the recognition that all systemic interactions among component parts and properties depend on the availability of certain elements which, in turn, require policies to ensure their effectiveness and the general equilibrium of the system.

It is deducible from the foregoing analysis that no single sector or sub-sector can act independently of the others. Likewise, policies affect all sub-sectors and sectors by traversing sectoral boundaries. Moreover, at least two or more of the system's sub-sectors relate to any one policy element as shown in Table 5.a next page.

D - CONCLUDING REMARKS

Observation: Normal systemic interaction between sectors is the sum of all sub-sectoral activities and policy effects determinable during the pre-modelling and planning stages of developing the food security system.

Implications: (a). The observation suggests that food security can not be truly analyzed if a vital sector, sub-

POLICY ELEMENTS AND THEIR MOST INTENSE SYSTEMIC INTER-CONNECTIONS. (Table 5.a)

Policy element	Rural C.L. H'holds	Commer. Farmers	Employ- ees	Food Import	Farmer Co-ops	Millers	Traders	GMB	Govt
Land reform	*	*			*				*
Food subsidies	*		*	*		*	*	*	*
Food price decontrol	*		*	*	*		*	*	*
Infrastructure	*	*		*	*		*	*	*
Wages	*		*	*					*
Extension services	*	*			*				*
Buffer-stocks	*		*			*	*	*	*
Irrigation	*	*							*
E.W.S	*	*	*				*	*	*
Conservation & the Environment	*	*							*
Cash cropping	*				*		*	*	*
Group loans	*				*				
De-urbanizing food-related manufacturing	*		*					*	*
Non-restriction on the movement of food	*		*		*		*	*	*
Food-for-work	*		*						*

sector or a policy element is excluded from the conceptual model.

(b). Furthermore, since poor rural households are constantly food insecure, it may be argued that at no point in time has the totality of food security been attained in Zimbabwe. National surplus is not equal to individual or household self-sufficiency.

In the case of Zimbabwe, all these implications have been included during the pre-modelling and strategic planning stages of the food security system. This study has been able to identify numerous systemic properties and policy elements that are all vital in developing an effective, efficient, economically viable and ethically sound food security system. What it concurrently indicates, is that critical issues were neglected in the Zimbabwean system.

The continuing food crisis in rural households also suggests that many deficiencies can be attributed to the crisis of stalled policies after Independence. The incidence of food crises as well as the number of affected and vulnerable rural households have drastically risen since Independence in 1980.

To this point of the study, Fitzhugh's (1987) first two principal steps, viz., the characterization of the system, and the analysis to identify areas of constraints and practical options to their resolution, have been completed. These were supported by hypothetical models representing two conditions

of rural household food security in Zimbabwe: the normal and crisis conditions.

But while the present analysis draws a characteristic boundary between the two conditions, it should not be conceived as though they occur at two separate seasons. Such an assumption polarizes systemic relationships by implying that normalcy and crisis occur only during patterned intervals. This is incorrect. Rather, both conditions exist concurrently in varying degrees.

The next chapter of the analysis deals with the systemic approach to assessing and evaluating policy instruments that have direct effect on rural household food security. While infrequent natural factors are sometimes used as scape-goat, the root causes of Zimbabwe's rural household food insecurity lie in the country's policy imperfections; imperfections which reflect the frequency and the extent of food scarcity in poor rural households.

CHAPTER VI

SYSTEMIC ASSESSMENT OF POLICY CONTROL INSTRUMENTS

A. INTRODUCTION.

This chapter deals with the evaluation of present food security policy instruments. Their effects on the system and on rural household food security will be assessed and evaluated, based on the synthesis provided in the previous chapters. To show how systemic dynamics and related policies affect rural household food security, five principal considerations are used as the yardstick for assessing current policies. They are efficacy, effectiveness, availability, economic aspects, and ethical considerations.

It is expected that, by performing the above tests, it will be possible to determine whether the current system exhibits the five characteristics of a food system which offers security as proposed by Barraclough (1991). These characteristics comprise the following:

- a) the **capacity** to produce, store, and import sufficient food to meet basic food needs for all groups;
- b) **maximum autonomy and self-determination** in reducing vulnerability to international market fluctuations and political pressures;
- c) **reliability** such that seasonal, cyclical and other variations in accessing food are minimal;

d) **sustainability** such that the ecological system is protected and improved over time; and,

e) **equity**, meaning that, as a minimum, the food system is dependable and adequate for all socio-economic groups.

B. THE SYSTEMIC EVALUATION OF CURRENT POLICY INSTRUMENTS

As mentioned earlier in the present study, the evaluation of current policy measures is not necessarily followed by a recommendation to over-haul and replace them with completely new policies. Rather, this study recommends opportunities for the addition, subtraction and modification of policies as required by changes in the systemic properties and in the policy elements.

In their assessments Drummond, Stodart and Torrance (1987), Russell (1986) and Berman (1982) delineated five principal factors to be considered in the evaluation of public health measures. The five principal considerations are shown in *Figs. 5.3a-h*. These factors will be adopted in the evaluation of present policy measures in order to determine how individual policies affect rural household food security. This study suggests that there is always a dominant force which gives all policy measures directions. The force is represented by a decision-making system that is either centralized, anarchic and totalitarian, or competitive, democratic and liberal.

(Fig. 5.3a-h)

PRINCIPAL FACTORS IN THE EVALUATION OF FOOD POLICY MEASURES

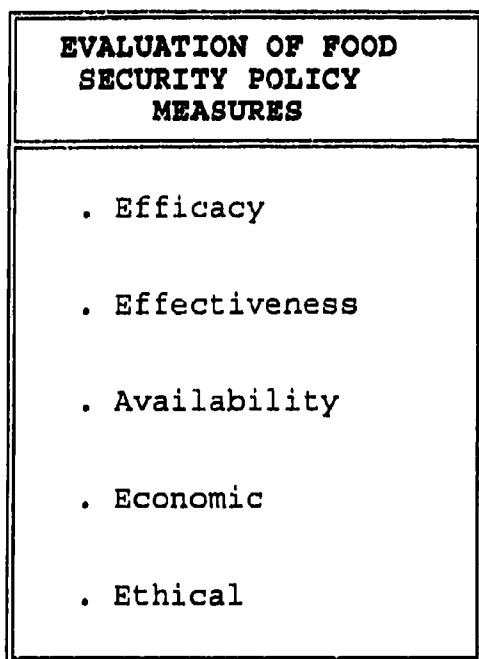


Fig. 5.3a.

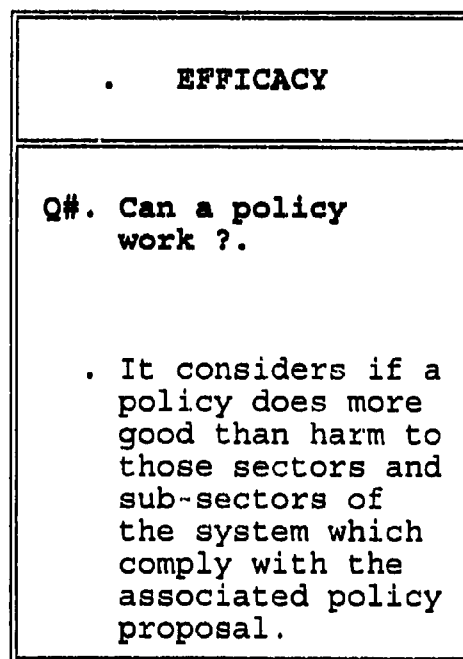


Fig. 5.3b.

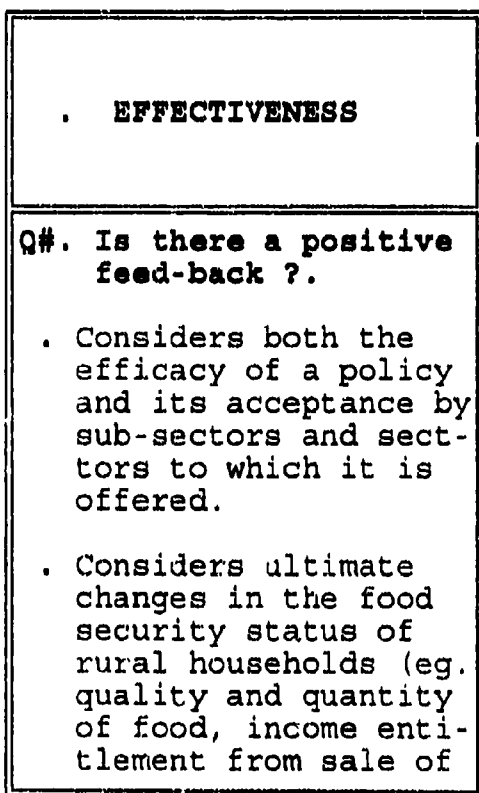


Fig. 5.3c.

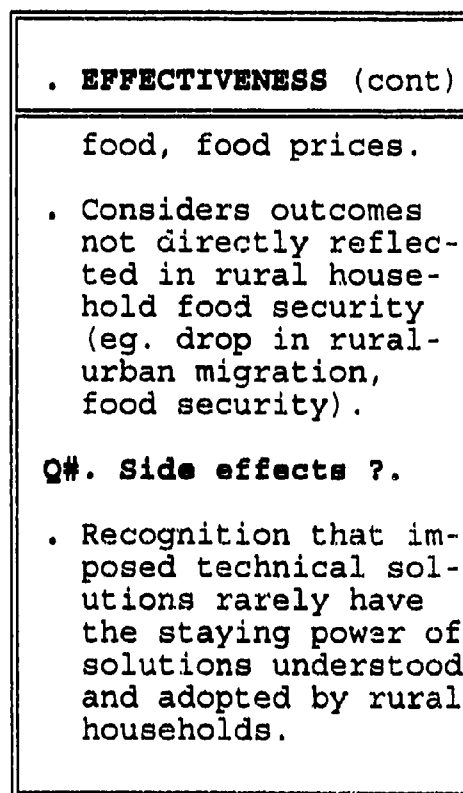


Fig. 5.3d.

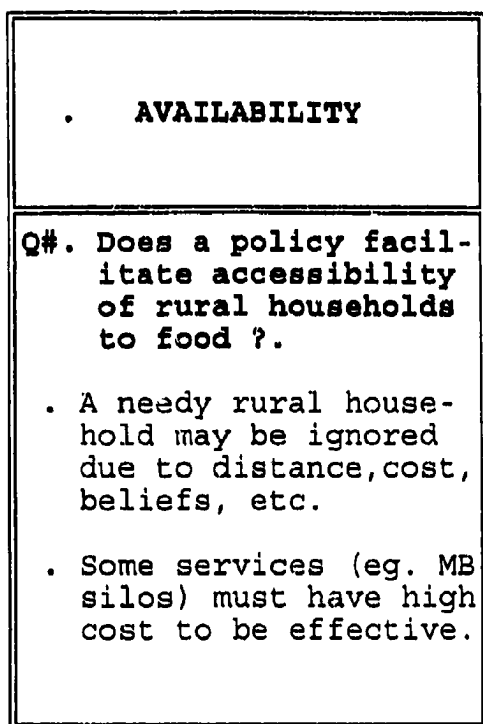


Fig. 5.3e.

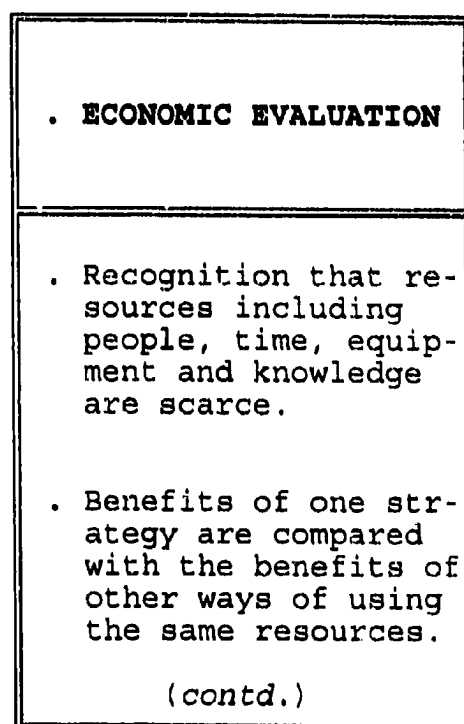


Fig. 5.3f.

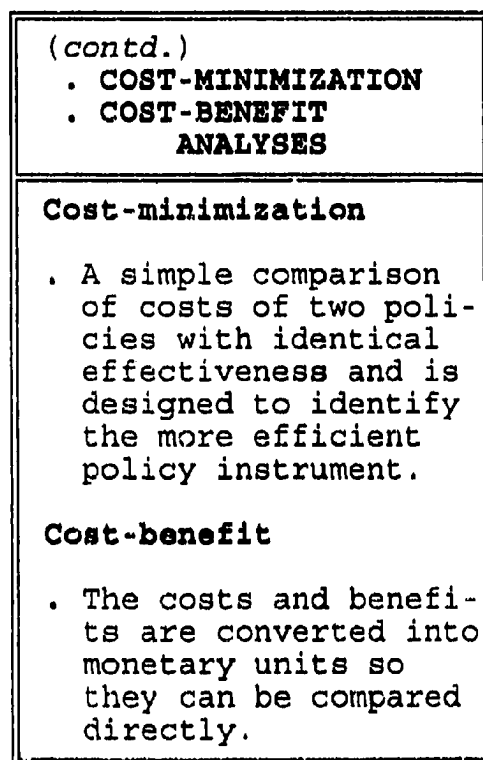


Fig. 5.3g.

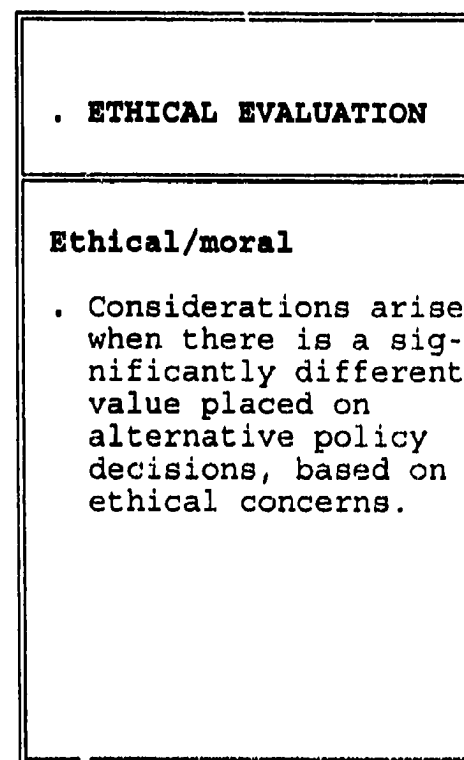


Fig. 5.3h.

Adopted from Drummond et al. (1987), Russell (1986) and Berman (1982).

Furthermore, the assessment and evaluation will emphasize the roles of individual policy dimensions in attaining, stabilizing and maintaining the equilibrium in Zimbabwe's food security system.

1 - Land Reform and Resettlement

Land reform is necessary and imperative. The massive disruption of economic activities which it entails are inevitable but short-term if competent policy tools are implemented. The problem with land (re)distribution is not with methodology and logistics but with the slow pace of a multi-faceted legal and bureaucratic red tape. It is also influenced by the unsubstantiated fear, uncertainty and opportunism on the part of landed pressure-groups and policy-makers.

Making land available to rural households is not a futile venture, particularly when commercial food producers under-utilize them. It is as costly to under-utilize land as it is for the government sector to import food substitutes for food deficit households during crises, and let alone the political and economic implications of international food aid from Western nations.

Prioritizing the resettlement program has both long-term economic and cost-effective advantages if accomplished at an early stage. The recognition that resource factor inputs

including people, land, time, and equipment which are required in food production are scarce, necessitates a focus on accomplishing this strategy early in order that recurrent and future costs of resettlement to the state are minimized. Moreover, in the long-term, fiscal costs can be increased by inflation and complicated by structural adjustments.

The changing face of the new international economic order has increased the vulnerability of sub-Saharan African nations to adverse social and economic consequences of satisfying IMF conditionalities. While the conditionalities have enabled cost-minimization by the government sector, the real 'success' is in fact the transfer of the costs of managing rural food security to rural households. For example, the SAP-engineered closure of many GMB depots in rural areas is one of the reasons for the reduction in output of food crops in peasant CLs. Once again, the economic demands of the predominantly well organized and privileged white commercial food producers are being protected through foreign-imposed policies which, otherwise, inhibit rural CL peasant food production.

2 - Pricing, Marketing and the Movement of Food.

Increases in food prices aggravated by the inflation problem and costs of delivery, have undermined the economic and ethical effectiveness of the system in making food supplies available and accessible to the low income class.

The current policy supports a predominantly one-way flow of foodstuff from rural producers to urban-based distributors. By doing so, it restricts accessibility by poor rural households to private trading channels. Needless to mention, such policy restrictions aggravate seasonal food scarcity, child malnutrition and under-nutrition in rural households, in contrast to the effect on households in the urban-based non-food production sector. Furthermore, in circumstances where private suppliers can circumvent official channels and restrictions, the risks and expenses incurred are added costs to the final food price in rural areas.

3 - Increasing and Stabilizing Rural Household Incomes

In terms of household incomes, the frontiers of financial insecurity have broadened to include the non-food production sector. For households with extended family members in rural areas, the ineffectiveness of income transferred to complement locally produced food has generated dissatisfaction and insecurity at both ends. Since the food security of the non-food production sector is also threatened by SAP incentives, chronic food insecurity has ceased to be a crisis problem of rural households only.

Government policies are marred by internal inconsistency and the inefficiency of those policies used to increase self-sufficiency and the availability of food to poor rural

households. The concentration of both employment and the multiplier effects of food-related industries in urban areas has left even the most practical approaches to increasing rural household incomes *per se*, unattempted.

4 - Institutions and Decision-making

The concentration of decision-making in the public sector poses serious obstacles to the market determination of prices, supplies and demand. On the one hand, characterized by over-staffing and mismanagement, the GMB's efficiency and effectiveness is questionable.

On the other hand, since the umbrella organization, the AMA, regulates much of the food supply using the GMB to perform the bulk of food storage and distribution, rural peasant food producers and the private sector are inhibited from competing in the profit and income-oriented transactions such as intra and inter-regional trade. This is one perspective from which to view the unitary approach by which the government sector has centralized the decision-making process and over-regulated systemic interaction between the food production and the food distribution sectors.

5 - Subsidy Transfers

The expected reduction of subsidy transfers from Z\$. 59

million in 1991 to zero in 1995 is itself, a new dimension to the current food crisis. It is not an effective cost-minimization tool because it merely shifts the burden of resolving the system's policy problems overwhelmingly to powerless rural households.

While it can divest itself of subsidy transfers, the government sector may not withstand the consequences of such austere policy measures. Unable to provide sufficient food to meet the health standards of the entire household, the government will also find itself confronted with other costs such as running school-feeding programs to keep children in school, reducing rising urban crime rates, providing social and welfare services to the unemployed, fighting mounting corruption in the public sector, reconciling inflation with rising cost of living, and stabilizing its revenue due to the increasing challenge from unofficial trade channels.

6 - Rural Poverty Alleviation

A policy aimed at promoting small-scale food production in the CL while maintaining incentive prices and credit to the commercial food producers was discriminatory right from its inception. Despite partial success after Independence, its rationale is continuously being undermined by irreversible economic and political tide from within and without Zimbabwe.

The IMF's structural adjustment program assumes that

development is attainable if the state relinquishes its role as public benefactor and concentrates available resources to meeting objectives of national economic growth.

The persistence of food insecurity in poor rural households suggests that the 'success story' in the mid and late 1980s were a result of the reorganization of the system and redirection of policy elements. But these improvements have been offset by major cuts in public spending. For example, the high cost of improved seeds, farm implements, fertilizers, extension services and irrigation, coupled with the marginality of peasant holdings, are reasons for the drop in current peasant food production.

7 - Wage/ Salary Remuneration

A vital contributor to rural household food security is the availability of wages and salaries in those households proximal to commercial food producing farms and/or to the non-food production sector. However, the growth of the small-scale sector is limited by the high cost of finance, limited land, and the presence of numerous licensing processes.

While women are the primary bread-winners, the gender bias in employment and traditional job placement also affects rural household food security. Casual and permanent farm labourers are poorly paid and the lack of a minimum wage policy still restricts them to less than the minimum of Z\$.

116.00 per month. Utter desperation compels labourers to accept the less than minimum wage because of the fear associated with losing the 'bread life-line' completely. Since farm labourers are the poorest, it also means that their household food security is the most vulnerable to crisis.

8 - Gender and Access to the Means of Production

Tradition co-exists with modernity in determining the present ownership of property, access to education, employment and wages. The risk associated with the ownership of land, houses and livestock has reduced rural women's involvement in exploring alternative avenues to securing household food supplies. Traditionalism versus modernity, legal versus customary practices, urban versus rural, Whites versus Blacks, rich versus poor are some extremes which generally pit women against men.

To take gender differentiation between men and women at face value is ethically and morally wrong. It is important that the incomes of the male and female heads are attached equal significance if the nutritional and health status of all household members are to be improved.

9 - Diversification of Agricultural Produce

The attempts at diversifying agricultural production to

the emphasis on producing crops with higher financial return has affected rural household food security significantly. In principle, the prices of primary agricultural commodities are the most affected by seasonal demand and climatic variations. Today, commercial producers earn more per hectare from the production of flowers and tobacco than maize.

The exposure of local consumers to foreign food supplies and the penetration of local products into outside markets is one of the ironies of structural adjustment. The resulting inflation and high food prices have siphoned financial resources out of rural to urban areas. The alternative is to follow these resources to urban centres where they are plentiful. Hence the rise in rural-urban migration, the depopulation of rural areas, population explosion in urban centres and the fall in rural household food production.

C. SUMMARY ASSESSMENT

A summary assessment of the above policy areas will be based on Barraclough's (1991) characterization of a system that offers food security for all.

Q 1. Does the system have the capacity to produce, store and import sufficient food to meet basic food needs for all groups?

The system does have the capacity to produce and store

sufficient food requirement to meet the basic needs of all groups. In general most sub-Saharan African food security systems (including Zimbabwe's) have the agro-ecological and agro-climatic potential to do so. Deficiencies leading to dissatisfaction with Zimbabwe's current food security system do not emanate *directly* from the limited means of production, lack of technological inputs, inadequate rural household incomes, inappropriate pricing and marketing mechanism or from natural factors. Rather, it emanates from irregularities and deficiencies in the policies designed for forecasting the behaviour of policy elements and for controlling the system's equilibrium.

For example, SAP incentives stipulate the closure of GMB depots in rural areas as one approach to cutting down public expenditures. Certainly, there is no reason to construct depots in rural areas without possibilities for recurrent surplus. However, where the surplus is regular and the regularity requires proximity to collection and storage facilities, more depots are warranted.

Q 2. Has the system maximum autonomy and self-determination in reducing vulnerability to international market fluctuations and political pressure ?.

It is deducible from the experience of the 1991/92 food crisis that the system has minimum autonomy and self-

determination in reducing vulnerability to international market fluctuations and political pressure. The notion of 'food as a weapon' was once used to force Zimbabwe into succumbing to Eurocentric orthodoxies of economic growth thereby distorting the system's equilibrium.

First, Zimbabwe, although a beneficiary of the Lomé convention, was forced to accept the closure of the European market to its dairy products and maize.

Second, its external markets, especially in southern and eastern African countries, were swamped by the dumping of EC and US grains since the 1980s.

Third, to facilitate deficit reduction and debt repayment, the World Bank forced Zimbabwe to export its stockpile of food-grain prior to the crisis. The subsequent crisis called for a massive 2.5 million tons of grain imports.

The above examination indicates that Zimbabwe does not wield maximum autonomy. External forces weigh heavily and are to blame for the failure of most policy interventions.

Q 3. Is the system reliable such that seasonal, cyclical and other variations in accessing food are minimal?.

The present analysis confirms the initial argument that the current system is not totally reliable, although it has the capability. In terms of food production, most rural households are partly self-sufficient because they meet the bulk of household food requirements through direct

cultivation.

However, rural household food security is mostly influenced by seasonal and climatic variations. Households also depend on the system's performance during the planting season and during prolonged droughts.

The variations in income entitlement also affect the reliability of the system in maintaining rural household food security. The rising cost of living in the mostly urban-based non-food production sector places an additional strain on those households that depend on rural sources of food supply. However, these variations minimally effect accessibility to food supplies.

Q 4. Does the system indicate sustainability such that the ecological system is protected and improved over time.

Ecological destruction is growing faster than the system is succeeding in curbing it. Ecological sustainability is not a question of the future but of the present. It is evident that over-population and over-stocking have resulted in the deterioration of agro-ecologically and agro-climatically endowed areas for food production. There is no place where the problem of ecological mismanagement is more visible than in the CL peasant areas. The increasing demands for wood-fuel and expansion area have created treeless expanses adjacent to the CL areas.

A potential solution to averting further ecological disaster is depopulation through resettlement. But since resettlement is proceeding at an alarmingly slower pace, ecological devastation and related problems are bound to intensify. The rise of shanty towns and slums in big cities can be attributed to ecological mismanagement in rural areas as well. Unhygienic environments are another characteristic feature of these unplanned urban outgrowths.

Q 5. Does the system promise equity such that as a minimum, it is dependable and adequate to ensure the accessibility by all social groups to available food supplies?.

No. The system does not appear to provide equity in the nutritional quality of food which individual households can access. Disparity in rural household incomes determines the quality and quantity of food consumed and the variations in the health status of household members. At its minimum, rampant child malnutrition provides a vital example.

CHAPTER VII

RECOMMENDATIONS

A. INTRODUCTION

This chapter is divided into two parts representing:

A. - a new systemic approach to the **reorganization** of the model for sectoral planning. This will introduce a new concept, namely co-ordination in the activity roles of the government sector. This new role attempts to reduce centralization and increase the level of power sharing among sectors of the food security system. It redefines state powers in the system as that expected of a coordinator rather than an authoritarian decision-maker with the capacity to make concretely binding policies. It decentralizes control but yet allows for the centralized monitoring and coordination of the system.

B. - **modification** to policy instruments. This stems from an examination of -: i - the extent to which a proposed policy modification or addition can appropriately handle a set of policy problem areas. For instance food pricing and low rural household incomes, or food distribution and rural infrastructure; ii - the extent to which the addition, modification or subtraction of policy elements such as taxation, producer and consumer subsidies, or reduction in the number of GMB rural depots can be undertaken without

jeopardizing the equilibrium and stability of the system; and finally, iii - the extent to which the system is capable of being reconstituted into different configurations in order to handle different sets of organizational and policy problems.

To develop appropriate policy alternatives, reference will be made to critics of the current Zimbabwean system and to lessons from other developing nations.

B. REORGANIZATION OF THE PLANNING AND POLICY MODEL

The food security system, as observed above, is under the influence of many organizations (sectors) with different properties (sub-sectors) and functions. It would be wrong to press forward the present analysis without determining the pattern of information and activities in the Zimbabwean system. It will require establishing, in the first place, the position of an agency concerned with planning. The analysis presented here will benefit from the model which Aydemir and Yarar (1987) developed for coordinating the transportation system in developing countries.

It was not until recently that Zimbabwe created the Planning Commission as a distinct division in the Ministry of Finance³⁴. This division is responsible for making decisions concerning the allocation of public resources to various

Telephone conversation with Mr. Dumba, W. Counsellor, High Commissioner of the Republic of Zimbabwe. Ottawa, Canada. October, 17th. 1994.

sectors of the economy. The real coordination responsibility of a national planning organization is to provide harmony and unity of action between all the different sectors of the national economy such that the country can achieve its overall socio-economic and political objectives.

Therefore, "it would be an error to expect the planning organization to assume, also, the duties of coordination required for the solution of detailed decision problems of specific sectors of the economy" (*ibid.*, 1987:43). For that matter, the solution to Zimbabwe's food security question will, first, require the creation of several levels of coordination, each superior to the other and each ultimately responding to a specific system with the appropriate set of policy elements for policy consideration.

While in Zimbabwe - as well as most African countries - the Planning Commission assumes the responsibility of coordinating the activities of those ministries whose roles directly impact on rural food security, the responsibility of coordinating the activities of the different sectors of the food security system is assumed almost invariably by the Ministry of Lands, Agriculture, and Rural Resettlement. The problem with this structure is that this Ministry is not only left to shoulder the responsibility of ensuring rural household food security, but it also tends to duplicate the duties of other Ministries, thus enlarging the bureaucracy. The inefficiency often incurred in running large bureaucracies

means that, in the final analysis, this Ministry will also bear the blame for the majority of policy flaws which infringe on rural household food security.

Based on the analyses Chapters V and VI, the major problem is that some policy instruments are responsibilities of Ministries other than the Ministry of Lands, Agriculture and Rural Resettlement. They include: the Ministry of Local Government, Rural and Urban Planning, the Ministry of Labour, Manpower Planning and Social Welfare, the Ministry of Industry and Commerce, the Ministry of Transport and Energy, the Ministry of the Environment and Tourism, the Ministry of Health, and the Ministry of Finance (Van Buren, 1993).

The preoccupation with the Ministries and the multi-level approach required in the pre-modelling stage of systemic planning is two-fold:

First, Ministries are the source of food-related policy elements which are tabled for consideration during the formulation of policy instruments.

Second, the multi-level approach to systemic planning means that, instead of concentrating decision-making in the Planning Commission, checks-and-balances will be established at all levels; that is, down to a level close to the target objective(s), namely the food security system and poor rural households. Therefore, the consistency, efficacy, economic and ethical appropriateness of a policy-instrument will be assessed and re-assessed by more than one planning level

(agency). These levels may also be sources of other policy elements.

This thesis suggests two possible alternatives to reduce the concentration of responsibilities on Ministry of Lands, Agriculture and Rural Resettlement, and the Planning Commission:

- i. setting up a coordination agency either subordinate to the Planning Commission or as a division within it but superior to all the ministries whose activities are food-related.
- ii. bringing all the specialized units directly involved in the formulation and control of food security from each of these ministries under a new ministry strictly concerned with national food security. This ministry could benefit from a parallel research and development (R&D) program to that of the Food Security sector program of the Southern African Development Community (SADC), whose headquarters are in Harare, Zimbabwe.

Implementing the first alternative is easier because experience indicates that it is extremely difficult to eliminate a ministry or curtail its activities. Specialized divisions in the Commission also saves time and avoids duplication of responsibilities.

On the other hand, nobody usually objects to setting up a new government agency. This is perhaps one explanation of

why the bureaucracy in developing countries always tends to grow and become costly to run. The second alternative is also important because it brings along greater advantages in terms of household food security. An enlarged bureaucracy presents the opportunity for more income through jobs with direct or indirect implications to rural household food security.

The determination of systemic properties and component parts and the analysis of how food-related activities are coordinated through multiple levels of planning and decision-making, permit the characterization of the system and the analysis to identify constraints.

The 'checks and balances' approach which facilitated the characterization of the system is better described by the expression "off-line, iterative" (Aydemir et al. 1987:436). It is "off-line" because no micro or subordinate unit of the system can implement a proposed decision before its purported effectiveness is assessed and approved by the unit immediately higher. It is "iterative" because the best policies are obtained by a closed loop of policy interventions, the solutions to decision problems, the corresponding proposals, and the evaluation undertaken by each higher unit. An acceptable policy instrument will be one which responds to coordinability among units and is consistent with the objectives of each of the Ministries and agencies involved and of the units (sectors and sub-sectors) of the food security system.

If the multi-level approach is adopted, the new planning model would incorporate all food-related elements as indicated in *Fig. 7.1*. Of importance is the position of the Food Security division as a specialized area of the Planning Commission, and its supremacy over food-related Ministries and the Food Security System below.

The model recommends the division of the Planning Commission into planning divisions focusing on specific areas of Zimbabwe's economy. Placing the Planning Commission (and the Food Security division) in a superior power and authority position means that these Ministries will respond to the Food Security System with the appropriate policy elements required for maintaining its equilibrium. Conversely, subordination of the Planning Commission to the Ministries would weaken the food security system immediately below it because its powers and authority will have been seriously curtailed.

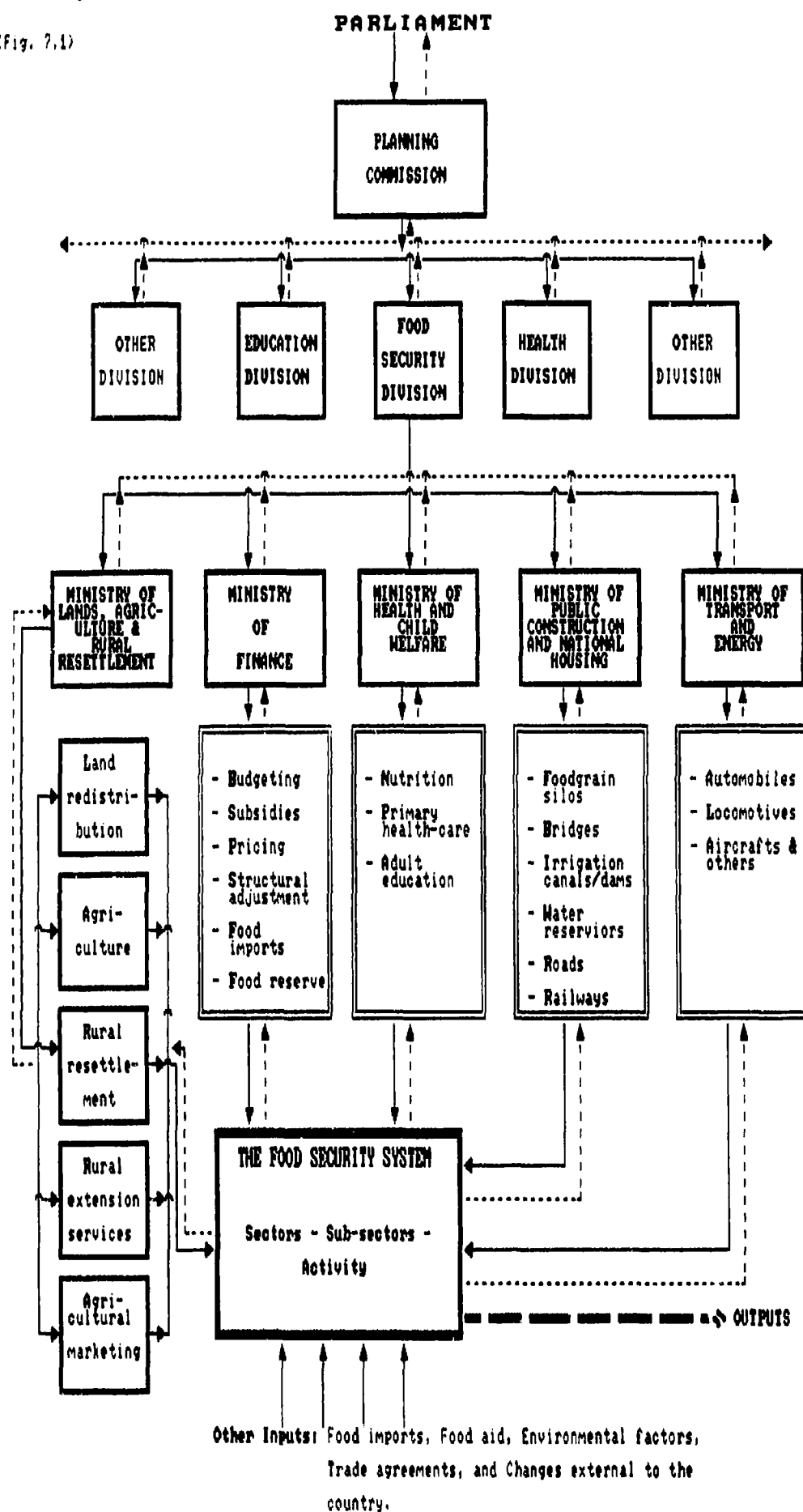
C. MODIFICATIONS TO POLICY INSTRUMENTS

The resolution to develop appropriate policy instruments in order to achieve rural household food security is a combination of several government objectives.

Since different policy instruments affect variously the many objectives which the government has, they should be identified clearly in the food security system. Accordingly, an analysis of the food security systems models (*Figs. 5.2 and*

Positioning the Food Security System and the Planning Commission in the Multi-Level Planning Systems

(Fig. 2.1)



5.3)), along with the objectives for developing the system, should facilitate the formulation of appropriate policy instruments that will ultimately benefit the food security of poor rural households in Zimbabwe.

The following food security policy instruments will be recommended, based on their expected contribution to the performance of the system. The discussion will be presented under four main objectives of development: 1) growth, 2) growth with equity, 3) stability and self-reliance, and 4) ecological sustainability. The effectiveness, efficacy, economic and ethical values of each instrument will be assessed based on the nature of response to the objective under which it is categorized.

1) GROWTH

The growth of the national economy is a prime objective only attainable by having, in the first place, a population that is healthy, well nourished and self-sufficient in the quantity and quality of available food. There are numerous policy instruments in Zimbabwe to realize growth.

a - Pricing of inputs and outputs

First, there is the pricing of inputs and outputs. The food pricing policy in Zimbabwe is working so well as to

enable the country to avoid the problems commonly found in other sub-Saharan African countries. However, the major problem of the relationship between producer prices and input prices is accentuated by the power difference between commercial and small-holder peasant (or communal) food producers.

Due to its organization and lobbying experience, the Commercial Farmers Union (CFU) has more influence over the allocation of resources than does the National Farmers Association of Zimbabwe (NFAZ) which represents the rural small-holder peasant food producers. Between them is the Zimbabwe Farmers Association (ZFA) representing the small-scale commercial farmers (Thompson, 1988)³⁵.

It would be advantageous to link these organizations, but as far as poor rural household food security is concerned, policy-makers should exclusively address the concerns of the NFAZ because it is this union's activities which have greater implications for the food security of the peasant rural class.

By 1988, food producers were paid within ten days, food produce was collected promptly, and costs were reasonably under control. This has changed drastically. Policy-makers are advised that the increasing pressure mounted by the World Bank

Refer to Thompson, Anne. 1988. Zimbabwe. In Charles Harvey (ed.). Agricultural Pricing Policy In Africa. Macmillan Publishers, for further information on the structure of setting agricultural output prices in Zimbabwe.

and the IMF might exacerbate the *reasonable*³⁶ efficiency of the GMB. A reduction in subsidy to the official food marketing parastatal, for example, entails a more or less proportional replacement by competition from private food marketing channels. In the long-term, maintaining GMB competence might require larger transfers from the public coffers.

Small-scale rural food producers should be paid producer prices based on incentives for rural household food security and economic growth. They should also be given the opportunity to obtain simple, inexpensive and appropriate farm inputs to increase their output and incomes. Experience indicates that so often the provision of subsidized inputs tends to favour commercial food producers at the expense of majority small-scale producers.

b - Extension services

The GMB is considered leader in extension, purchasing, collection and distribution of services to rural areas, but its services now suffer the consequences of budget cuts and the liberalization of the monopoly it once enjoyed in the movement of foodgrain. Subsidies to GMB services in the 1980s led to an increased share for rural peasant producers, in total foodgrain production.

³⁶ Reasonable because relatively little of the extensive criticisms faced by other African countries are applicable to Zimbabwe's food security problem.

Privatization rather than the closure of its rural depots is most likely to continue serving small-scale producers, and perhaps at even lower costs due to increasing competition.

c - Record Keeping

Since records and estimates of rural household food output are insufficient, there is a tendency to overestimate deficits and underestimate surpluses. Improvements in the collection and interpretation of statistics on food production is an integral input into policy. It also serves as a vital element for forecasting impending crisis.

d - The credit environment and subsidies

Inflation and the rising costs of living associated with the structural adjustment program (SAP) are indicators which tend to increase the uncertainty over returns on credit, hence the reduction in its demand. This incentive comes too late, at a time when bank credits and government spending are being limited (Thompson, 1988). Emphasis is placed on structural adjustment because the attempt at totally eliminating food subsidies is unrealistic and prejudices the quality and quantity of food available to poor households.

Cheap food for poor people is a fine objective. However, the problem is in the difficulty of keeping the cost within

what the government can accept. It also puts pressure on producer prices, and on the balance of payments equilibrium.

Food prices for rural households should be controlled in such that the transport and handling costs incurred by private traders do not add exorbitantly to its final price. Perhaps, this is the appropriate area to which available subsidies should be directed. What policy-makers may also need to know when revising food prices is that the disparity between rural and urban household food consumption habits is influenced, to a greater degree, by the wide gap in incomes, the cost of living, and the choice of food.

e - On institutions initiated by food producers

Food production, supply and distribution could be made effective if institutions were initiated by food producers rather than by the government. What has occurred in Zimbabwe is that the relationship between the farmers unions (the CFU, NFAZ and ZFA) and the food distribution sector is dominated and complicated by conflicting objectives.

There appears to be no ground for compromising the three unions because of issues concerning redistribution of commercial farms to the landless communal peasants. The vacant ground left due to the conflict has been taken over by the emergence of parallel markets.

Parallel markets continue to emerge because food

producers are being significantly underpaid at the official inflationary prices compared to unofficial market prices. The problem with parallel markets is that they disrupt household food production. They also narrow food production to items which sell the most in the illegal business. In the end, poor households will be left to depend on a single food item for both cash and household consumption.

To effectively accommodate parallel markets, this study suggests three alternative responses which Zimbabwe's policy-makers can adopt:

- a - they can legalize and encourage parallel markets while attempting to phase out official marketing completely;
- b - they can legalize parallel marketing while maintaining official marketing. The trouble with this response is that the official marketing channels may continue to demand public subsidy in order to withstand competition from the private sector; or,
- c - they can regard the existence of parallel marketing as an indication that the costs of official marketing should be reduced and that food producers should be offered better prices if their confidence is to be retained.

The first response is refuted because scarce foreign exchange, bureaucratic red-tape and the foreign debt burden

may prevent parallel marketing from growing fast enough to cover a large geographical area and provide the kind of facilities which official marketing can.

A combination of the second and third response appears more effective, because it indicates that official marketing agencies are inadequate or inefficient and therefore reform is imperative. While the solution is to encourage parallel competition with private agencies, as discussed earlier, there is a likelihood that official agencies will attempt to siphon into the competition the very element they are being driven to eliminate: subsidy transfers.

f - Infrastructure

The decontrol of food movement alone may not increase food trade between zones by a wide margin. Equally urgent is the development of transport and communication infrastructure linking surplus to deficit areas. For this reason, it is premature to promote irrigation in remote and arid areas when infrastructure in currently established zones is underdeveloped and inadequate.

Investments in transport and communication infrastructure between these areas could have greater potential in reducing food prices in deficit areas. There should also be policy provisions to advice on the expansion of new technologies which minimize food losses before, during and after harvest.

This includes food lost during storage to rodents and insect pests (Jayne et al., 1993; Brown University Faculty, 1990).

Structural adjustment has also resulted in the decline in purchasing power of the mostly urban-based non-food production sector and the dramatic rise in food prices. In some cases, remittances committed by this sector to complement the food supplies of extended family members in rural areas have also dwindled or phased out. A commitment by the government to introduce policies that could enhance decontrol on private foodgrain movement would possibly help in lowering prices and increase the availability of low-cost foodgrain to deficit zones.

2) GROWTH WITH EQUITY

Most economic development plans iterate that meeting the minimum need of the poor is an important objective even when it conflicts with the objective of growth. What constitutes perfect equity is inconceivable in any society but equity can be relatively enhanced by formulating policies which eliminate constraints to rural household accumulation.

Cousins, et al., (1992) suggest that such constraints in rural Zimbabwe include the following:

"growing unemployment; location of the CL population in semi-arid and drought-prone regions; population pressure which is near (or in some cases exceeds) ecological carrying capacity; inadequate development of irrigation potential, particularly for small-scale schemes; poor transport systems and input

supply services; the continuing bias of agricultural research towards the large scale capitalist sector; and authoritarian modes of extension work which result in the ignoring of local knowledge and an often inappropriate focus and content in technical recommendations" (Cousins et al., 1992:18-19).

While these constraints were not deliberately created, they definitely reflect the haphazardness and weaknesses in current policies. Many of them can be resolved through appropriate policies and should not be forcefully attributed to the acts of nature.

a - Land Reforms and redistribution

The vastly unequal ownership and distribution of land in favour of a few white commercial food producers calls for stringent measures regardless of the short-term consequences. The growth of peasant landlessness, increasing rural-urban migration and the increase in the number of poor rural households are all the consequences of the slow pace of land reform. The majority of the rural peasant households may not take advantage of higher producer prices and improved marketing infrastructure due to the scarcity of security, especially land, and the loss of household labour to urban and mining centres.

Effecting a stringent system of land tax based on acreage would force commercial farmers to meet the cost of under-utilized or unutilized farm land. It is expected that, in the end, high taxes might cause them to voluntarily relinquish

parts of their large farms for the resettlement of landless peasants.

b - Extension services

The government should also demonstrate its commitment to land reform and redistribution by establishing pilot irrigation schemes, training in the use of fertilizers, and funding the mechanization of soil conservation techniques in order to fully exploit the food potential the arid areas in food production.

Despite notable improvements in the extension of support services to communal peasant areas, there are untransformed discriminatory factors which are the inheritance of the larger political economy. For example, a recent announcement by the government stated that "the selection process for the 'post-Lancaster Constitution' land resettlement will favour CL households with access to agricultural capital who are perceived to be food farmers" (Cousins et al., 1992:20).

Altogether, this statement indicates that the prospects for land reform may either die very soon or may become a secondary objective or may transform into a focus on certain groups other than the truly landless peasants in congested CLs. Therefore, the issue is not merely to recognize the need for speedy reforms but an assurance of policy instruments that which enhance every household's capacity to produce and

accumulate sufficient food and effective entitlement power, respectively.

c - De-urbanizing food-related processing activities.

The dispersal of food-related processing activities from urban to the rural areas which exhibit higher output of certain agricultural commodities is an alternative which could reduce rural-urban migration, consolidate family labour and increase rural household incomes.

In addition, government policies which alter the rural-urban terms of trade in favour of urban consumers - for example, food subsidies - should be discontinued because they simultaneously perpetuate rural-urban migration and increase the consumption of imported foodgrain such as rice and wheat in poor rural households. As suggested by Jaeger (1992), the reduction in rural household labour force and the concomitant fall in domestic food production at national level will definitely lead to higher food imports and the neglect of local food production.

d - Social differentiation in communal lands

The notion of differentiation based on size of accumulated entitlement has reoriented the rural family-type organization into an emergent class-based system which

manifests at its minimum the class referred to as "poor rural households". Differentiation due to disparities in household accumulation is, however, transcended and complicated by first, gender inequalities (Kennedy et al., 1992; Adams, 1991; Pankhurst, 1991) and second, the political capture of available rural resources (Cousins et al., 1992). These studies indicate two aspects of the current system which require drastic policy interventions.

First, it is argued that the range of possible economic activities available to rural women in Zimbabwe is determined by that of their husbands (Pankhurst, 1991). Another study based on data gathered in Kenya and Malawi also suggests that, while income entitlement is a major determinant of rural household food security, the proportion controlled by women has more positive impacts than that of their male counterparts. The irony of this household differentiation is that even in instances where policy interventions are possible, they focus on helping women as self-employed producers of basic foods for their community and ignore the role of female wage labour in household food supply (Kennedy et al. 1992).

Female wage workers in rural Zimbabwe were discovered to have few advocates involved in formulating policies to improve their economic and social circumstances. Since they depend on wages, their economic and social conditions definitely differ from those of self-employed women. The disparity is aggravated

by the fact that rural women in general hold less land and fewer livestock or, by custom, are prohibited from owning any. Female headed households (widows and divorcees) produce even lower food crops for their households and own lesser entitlement (Adams, 1991).

It is true that there are credit facilities available to rural households, that extension support services are available, that market channels are abundant, and that female wage labour is a significant factor in rural household food security. Therefore, the role played by rural women in food-related reproduction necessitates that policies aimed at increasing the welfare of rural households should be designed with women in mind. These policies should focus on "efforts to reduce social and economic discrimination against them [because] rural investment and extension that ignores women will do little to boost rural incomes" (Philip Daniel, et al., 1985: 123-4).

In addition to creating income-generating projects which include women's participation, the rights to owning property should also entitle them to farm inputs, credits and support services, whether they are married, divorced, single or widowed, and whether they are self employed or are wage labourers.

Secondly, the political capture of rural resources represents the predominant conflict of interest which characterizes powerful individuals and groups. It has

perpetuated patronage and inequality in the ownership of rural resource inputs, especially land. Where political power resulted in the preferential access to development funding, uneven access is determined by relationship to a dominant ethnic lineage, or residence in a favoured village or a privileged district (Cousins et. al., 1992).

The tendencies for social differentiation should be prevented by legal instruments aimed at fighting corruption, patronage and nepotism among decision-makers. The use of political power and economic status to influence policy-making is unacceptable, morally wrong and disruptive to the system.

3) STABILITY AND SELF-RELIANCE

The new policy instruments should not only be capable of ensuring growth with equity, but should also offer stability to the system and make rural households self-reliant on available food supplies. Two areas which contribute to the stability and self-reliance are bufferstock maintenance and tackling frequent shortages of water by embarking on modest irrigation schemes.

a - Bufferstock operations.

Three types of food stocks may be distinguished: Pipeline or working stocks represent the minimum level of operational

(or pipeline) stocks required at the end of the marketing season by the private sector and by the government to enable the smooth working of the market (including public distribution). Reserve or emergency stocks are often used to meet various contingencies when domestic procurement and imports can not satisfy requirements in timely fashion and need to be replenished within the marketing year. Other stocks represent stocks carried over from one year to the next for a variety of reasons of which price stabilization or speculation against world market fluctuations are crucial (Sarris, 1985).

When crops fail, per capita income falls drastically, food prices rise, and poor rural households suffer even more due to persistent poverty. Moreover, unstable food prices and inflation disrupt confidence and economic growth. Thus, food price stability is necessary for equity, growth and even political stability. The 1991/92 food crisis in Zimbabwe indicates that unless surplus stocks are accumulated to cover surplus shortfalls there may be some years during which domestic production will be inadequate.

Bufferstock instruments should aim at cushioning the effects or completely averting any of the following undesirable circumstances which constantly threaten Zimbabwe's food security system:

- 1- *Hardship caused by extreme drought in one or several regions of the country.* Since the majority of rural households in Zimbabwe rely on incomes generated through food-

related production, droughts can result in massive loss of entitlement, famines and malnutrition.

2- *International price rises and foreign trade restrictions.* International food prices are virtually outside the control of Zimbabwe. However, when coupled with droughts, they may exacerbate the food availability problem first in urban populations and later, in rural households.

3- *Adverse intraseasonal domestic food price rises.* While in Zimbabwe these events are largely the result of droughts, current trends implicating the system emphasize the consequences of unfair marketing and distribution practices and inaccurate speculation concerning future shortages.

4- The Matebeleland crisis following Independence, and the crises in neighbouring Mozambique and Angola, indicate how vulnerable poor rural households are to the loss of food production and supply due to *civil wars*.

Furthermore, the mere identification of various undesirable and unpredictable natural circumstances and policy areas which Zimbabwe would want to insure itself against does not, on its own, constitute a solution to the food problem. In this case, two concepts focusing on the *flow and stock* of foodgrain between surplus and deficit areas offer the basis for understanding the value of an effective bufferstock policy. These are Grain-Flow Requirements (GFR) and Grain-Stock Requirements (GSR) (*ibid.*, 1985).

Grain-Flow Requirements, relates to making food supplies

available at the right place and at the right time so that a food and entitlement crisis can be circumvented. Grain-Stock Requirements is most vital in Zimbabwe because Grain-Flow Requirements, is constrained by several policy factors which have not been sufficiently addressed in the current planning and development strategy. For example, a drought in one region of Zimbabwe will require the flow of food supplies from surplus regions, but underdeveloped transportation and communication infrastructure may cause a long lead time in making food available at the right time and place.

The GSR is designed to solve this problem by drawing on local rural supplies and reserve it as emergency stock within the same region. The arrival of GFR from other regions will only serve to reinforce the GSR if the crisis is prolonged. An issue that stands out prominently, is that instead of closing down grain silos completely, they should be used for GSR and GFR purposes.

b- Droughts and Irrigation schemes

Much of Zimbabwe's southern and south-eastern regions are agro-ecologically and agro-climatically incapable of sustaining ample food production. Encouraging the wide use of irrigation could revitalize arid parts and put them into effective food production. This will also temporarily shift the focus from the emphasis on redistributing white-owned

commercial farms to extending scientific research in exploiting the potential of unproductive land. Prospective areas for the resettlement program could also be widened and peasants would be able to obtain hands-on training in better soil and water management techniques.

The 1991/2 drought had less marked effects on commercial food producers than it did on communal peasant producers. This is partly because many commercial farming areas have access to irrigation facilities. But in the communal lowland areas, where population density is high and soils are poor, irrigation projects are almost non-existent.

Irrigation schemes are not only vital in extremely arid areas but also vital for averting unpredictable droughts in those regions of Zimbabwe which are assumed to be agro-climatically and agro-ecologically rich and yet are, in fact, vulnerable to droughts. The growth of large-scale irrigation schemes in rural areas is expected to improve food self-sufficiency, food price stability and self-reliance on the system.

The effect of drought on rural peasant households could also be reduced by encouraging contract farming between commercial farmers and peasant cultivators. The latter will not only have access to unused land but will also benefit from a developed infrastructure, irrigation water, and modern methods of food-crop production.

4) **ECOLOGICAL SUSTAINABILITY OF THE SYSTEM**

The quality, quantity and productivity of agricultural land available to rural households are affected by both human activities and natural factors. Adverse human activities are by far the most critical and are influenced by more than one factor. The following are paramount policy areas.

a) **Limitation of monoculture and specialization**

Rural households in Zimbabwe have for a long time relied predominantly on maize as the staple food crop. Experience indicates that the monocultural production of maize alone can no longer prevent food crisis. The intensive cultivation of food-crops should be promoted by introducing drought resistant varieties such as cassava and yams.

While the introduction of new varieties is inhibited by the low level of research, unless proper training is given to peasant producers, the use of chemical fertilizer on smallholder farms every growing season may not only contaminate soils but its continued use prevents the natural rejuvenation of soils.

b) **Promotion of conservation practices**

Overpopulation and the increasing demand for wood fuel in

both rural and urban centres, coupled with the growing need for area expansion of cultivation land, have accentuated deforestation. In congested CLs, soil erosion has risen to such an alarming proportion that ecological sustainability should no longer be taken for granted.

Speeding the resettlement program will certainly ease the population pressure, and reduce soil degeneration and deforestation in the congested CLs. Other accompanying programs and policies should advocate: i. increased agro-forestry and other regenerative techniques to sustain food production, ii. improved water management and training in reducing soil erosion, waterlogging and desertification, and iii. increased access to developed or privatized resources such as grazing land, animal treatment centres and water-holes. Government initiated rural development projects should serve as demonstration facilities to rural peasant food producers.

5) OTHER POLICY INSTRUMENTS

The following are policy instruments which are not exclusively directed to any particular one of the four objectives discussed above, but may apply to all of them in varying degrees. They also facilitate systemic interaction by linking various sectors and sub-sectors of the system. Some of these policies are mentioned in Table 5.a which indicates the

intensity of how certain policy elements relate to sub-sectors of the system.

a) Rural public works, Cash-for-Work and Food-for-Work Programs

Rural public works are classified into four programs depending on their duration and on how they address the objectives of generating rural employment, increasing rural household incomes and building up the economic and social capital of rural communities.

They are: 1. *Relief works* - used in emergencies to supplement income reduced or lost in natural or civil calamity; 2. *Long-term employment programs* - used to provide livelihood for the unemployed 3. *Income augmenting programs* - often seasonal and aimed at supplementing below subsistence incomes in a particular period; and, 4. *Low-cost infrastructure programs* - emphasizes constructed assets rather than incomes of employed individuals (Clay, 1986)³⁷.

The reduction of food poverty requires, as a solution, the distribution, directly to impoverished households, of either food, cash or both. As stated above, it means providing new opportunities for employment income and expanding access

Clay also referred to the categorization of public works by some researchers in terms of functional assets created. 1. *Directly productive assets* such as irrigation, drainage, soil conservation measures, and reforestation, 2. *Economic infrastructure* including roads, bridges, and market development, and 3. *Social infrastructure* for example schools, clinics, community centres, and domestic water supply.

to resources for self-provisioning populations through their participation. Thus, rural public work, typically as food-for-work with part or whole payment in kind to project workers, is an important way of using food aid to provide employment opportunities to rural households.

Botswana's Drought Relief Programs - DRP (Asefa, 1991) offers Zimbabwe an important lesson in overcoming drought and its effects. Instead of food, cash-for-work can offer a positive long-term strategy. It is a preventive remedy because cash is allocated specifically to employ rural peasants in development schemes which will provide both cash and an improved rural infrastructure.

b) Early Warning Systems (EWS)

Information constraints are a major impediment to estimating food production, food consumption per household, marketed outputs, diminishing household assets, level of technology and other food-related activities (Chambers, 1989; Swift, 1989; Daniel, et al., 1985).

Vital records on programs and policy instruments should permit timely identification of problems and propose appropriate intervention. These include the following: a. records pertaining to nutritional programs in rural schools, b. records on changing weather patterns, c. records on average household income, d. records on patterns in the food trade

between deficit and surplus zones, e. records on population growth, f. records on infant mortality, g. records on drop-out rate among school-age going children in rural areas, h. records on dependency ratios, and i. records on annual food harvests. Policy-makers should also develop standards for measuring these indicators.

c) The Food security-Environmental complementarity

There exists a dominant complementarity between rural food security and the environment, because the food insecure households are often the most vulnerable to the effects of environmental degradation. Most developing countries are currently confronted with deciding which of the two concerns to optimize. Environmental entitlement or accessibility to natural resources is just as important to rural household food security as is income entitlement (Greely, 1991). However, the problems associated with environmental destruction, ironically, stem from the urge by rural households to be self-sufficient in both food and incomes.

Policy-makers in Zimbabwe should focus on the formulation of explicit instruments which link and at the same time enhance equitable trade-offs between these two concerns. One way of resolving the dilemma is to coordinate the activities of ministries, departments and agencies involved in protecting the environment, and the activities that rural households

input in the attainment of self-sufficiency in food supplies.

d) Cash crops and food security

In Zimbabwe, as in most sub-Saharan African countries, the dependence on food-related agricultural produce such as maize, roots and tubers, rice, and sorghum, is being affected by diversification, to the more profitable market for non-food agricultural items such as flowers, coffee, cotton and ostrich feathers. While cash cropping may increase surplus value for sale, emphasis on it is having repercussion on rural household food security, as scarce resources (especially land, farm inputs and investments) are diverted from food crops.

However, stated hypothetically, it is not cash crops *per se.*, "but the particular relations of production under which they are sometimes grown that can sometimes undermine... household food security" (Davies and Leach, 1991:47). However, on the contrary, expanded cash crop production may not reduce food availability if the foreign exchange generated can lead to increased food imports and if these imports are effectively distributed.

Another critical aspect of cash cropping is that the shift to it may drastically reduce women's control over household food security, because in most traditional societies, cash crops are in the domain of men. Maize in particular, is increasingly being tied to cash motives. While

little can be done with respect to women's access to cash returns from these crops, encouraging the production of both cash and food crops is only feasible if policy-makers in Zimbabwe (as indicated in d) above) are able to determine elements on which to make trade-offs without affecting the cash entitlement that each rural household allocates for the desired quantity and quality of food supplies.

e) Reducing rural household poverty

Poverty is the most significant factor inhibiting rural household food security, but the concept of poverty which influences policy-makers most is often that of the rich. Trade-offs which poor rural households can make between vulnerability and poverty (that is, between security and income) are often dismissed by policy-makers, such that measures to increase household purchasing power have resulted in major policy controversies.

For example, Zimbabwe could raise rural household incomes through increased loans but on the contrary loans aggravate indebtedness, hence vulnerability. This is one reason why poor rural households are reluctant to borrow. To address this problem, the introduction of group loans and insurance - instead of individual household borrowing - to cover debts can spread the risks and effectively reduce vulnerability.

The direct provision of monetary assistance to the poor

is not the only alternative to alleviating rural household poverty. Another is to address the redistribution goals through transparent public expenditure programs while at the same time allowing market forces to operate (Salop, 1992). For example, instead of rigid food price controls or general food subsidies, it is better to target food subsidies at products consumed mainly by poor households in both rural and urban areas.

As emphasized by Christensen and Witucki (1986), in most food policies in Africa, the problem associated with food subsidy is that it gives priority to urban consumer welfare while allowing limited actual spill-over to rural households. What it means is that, government-subsidized services mainly benefit the relatively affluent and well-placed urban classes, leaving few resources for services to poor rural households. In fact, even in urban areas, subsidy is not targeted. The general urban population benefits from a policy strategy designed to cater for the food security needs of the unemployed and low income groups. Thus, it is the food secure (including policy-makers) who ultimately add to their already favourable food security, the benefits of any new food policy.

Finally, public expenditure strategies for reducing poverty can be successful if they are capable of handling the dynamic content of poverty-reduction programs such as education, health care and family planning. The aim is to enable poor rural households to develop their talents, improve

their productivity, and achieve economic independence and autonomy.

In conclusion, if the above policy interventions are integrated in the planning and control of Zimbabwe's food security system, the end result of accelerated rural development will follow. This will spark a chain of projects which will benefit all rural households, through their participation and, moreover, with limited logistical and administrative support from policy-makers at the centre.

CHAPTER VIII

CONCLUSION

This study has endorsed a radical developmental approach which attempts to interlock sectoral planning and policy control of rural household food security by forging systemic interconnections. As a new paradigm, food security requires that the pursuit of political and economic development be subordinated to the pursuit of human development in which all people at all times have both physical and economic access to the basic food they need for an active and healthy life. This, as observed in the preceding chapters, demands the social, economic and political reorganization of Zimbabwe's current food security system and the redirection of all food policy instruments.

Given the preceding examination and analyses, it is possible to describe the current method governing food security in Zimbabwe as authoritarian-developmental. This character is manifested first, by the reliance on the government sector which, after all, is only one component of the food security system. Second, it is manifested in the unwillingness to redefine the boundaries or limits of state intervention.

To the extent that modification of the system is taking place, the unchecked concentration of policy-making powers in the hands of the state means that the management of rural food

security will continue to be guided by the marketing and resource distributing institutions which protect the political and economic interest of the central power - with minimal spill-over advantages - rather than the rural households' basic food requirements and entitlement power.

It is true from the foregoing analyses that centralization and over-regulation in Zimbabwe have proved to be dysfunctional (and thus detrimental) for the food security system and the political economy at large. However, on the other hand, leaving the system to the exploitation of and manipulation of the private sector and special interest groups, is also unhealthy. Therefore, the strategy for developing an appropriate food security system should be through public policy based on moderation and equal access. It is hoped that the socio-economic, political and moral interests of various groups will flourish by interacting with each other, thereby transforming the entire system.

There is no doubt that authoritarian-development has also transformed economic growth in the name of 'majority rule' since Independence, but it has not reduced the marginalization of rural households. Among other food producers, the powerlessness of rural peasants is still a big impediment to overcoming deficiencies in the system.

There is also no justification for the government sector to continue with the unilateral control the food security system because the 'success' story trumpeted by the surplus of

the mid 1980's was contradicted by the 1991/92 food crisis and found to be politically and economically 'incorrect'. In it is embedded a paradox that is accentuated by irregularities in the government's own policy tools.

By the same token, there is no convincing evidence that centralized decision-making can capably contain the economic, ecological (environmental), demographic and political changes occurring in rural areas of Zimbabwe. Equality, efficacy, effectiveness, mutual vulnerability, economic and ethical considerations are still far removed from the capability of the current food security system.

Furthermore, the supremacy of the government (state) sector in decision-making should not be underestimated. It is recommended that the Planning Commission be given a dominant role in the area of food security in order that the system can obtain, through established policy measures, all that is required to make the right quantity and quality of food available to poor rural households. In the final analysis, the question is how to ensure that the dominant role of the government sector over the food security system can handle persistent food insecurity in these rural households.

The third section of the analysis provided cogent reasons for accepting the proposition that actual increases (abundance or surplus) in national food production alone do not guarantee food security in all households. Zimbabwe's rural households are, unfortunately, part of a complex socio-economic food

security system in which resource distribution, rights to property ownership, food pricing, and food marketing are all superseded by the political interest of powerful parties and individuals. And this complexity needs to be unravelled and dealt with if poor rural households across the country are to be self-sufficient in the quantity and quality of food.

The analysis has indicated that improving the entitlement power of rural households through state-initiated means is an important strategy for reducing expectations and dependence on the government sector. There is no doubt that government-designed incentives, implemented without shared control, will not focus adequately on the differential vulnerability of households with respect to individual access to the available means of food production, reproduction, support services and infrastructure.

Through out this study, emphasis has been on two key issues, namely, the systemic approach to development planning, and institutional and policy practices. While it is true that some of the proposed policy modifications are currently under way, this thesis has repeatedly emphasized the usefulness of the systems approach as an alternative paradigm and model for resolving the problems of development in Third World countries.

The analysis has also managed to integrate the pre-modelling stage and the evaluation of policy control instruments. The main task of the systems approach has been to

study the basis of Zimbabwe's food security system, its structure and its developmental factors, with the intention that its normal development and future transformation can be redirected toward addressing rural household food security in particular.

Besides characterizing the food security system, identifying constraints and recommending alternative policies, another issue has been central in the analysis. Equitable progress in development requires that political, social and economic objectives are integrated when assessing effective, efficient, economically and ethically appropriate alternative policy instruments. This has helped to bring the issue of food security, rural development and the plight of poor rural households to the forefront in decision-making, and in a practical, institutional and policy-oriented manner.

APPENDIX

Country Profile

ZIMBABWE: Country Profile.

ZIMBABWE - POPULATION

Population 1980	7,100,000
Population 1991	10,720,000
Population 1992	11,031,000
Population 1993	11,351,000
Population 2000	13,865,000
Population Growth	2.9 %
Population Density	71 /sq mi
Pop'n Doubling Time	24 years
Urbanization	26.0 %

ZIMBABWE - GROSS NATIONAL PRODUCT (GNP)

GNP 1989 (millions)	\$6,076
GNP 1990 (millions)	\$6,228
GNP 1991 (millions)	\$6,384
Annual GNP Growth	2.5 %
GNP per Capita	\$596
%GNP for Agriculture	11 %
%GNP for Industry	42 %
%GNP for Services	47 %
%GNP for Defense	5.0 %

ZIMBABWE - CLIMATE

	Precipitation (inches)	Temperature (Degrees F) Low High	

JANUARY	7.7	60 78	
FEBRUARY	7.0	60 78	
MARCH	4.6	58 78	
APRIL	1.1	55 78	
MAY	0.5	49 74	
JUNE	0.1	44 70	
JULY	0.0	44 70	
AUGUST	0.1	47 74	
SEPTEMBER	0.2	53 79	
OCTOBER	1.1	58 83	
NOVEMBER	3.8	60 81	
DECEMBER	6.4	60 79	

ZIMBABWE - NATURAL RESOURCES, AGRICULTURE, INDUSTRIES

Natural Resources

Coal
Chromite
Asbestos
Gold
Nickel
Copper
Iron Ore
Vanadium
Lithium
Tin
Fish

Agricultural Products

Tobacco
Corn
Cotton
Beef
Sugarcane
Dairy Products
Wheat
Coffee
Soybeans
Sorghum
Tea
Cattle
Goats
Sheep
Pork
Chickens
Roundwood

Major Industries

Foodstuffs
Metal Products
Chemicals
Petroleum Products
Beverages
Tobacco
Textile Products
Clothing
Footwear
Paper
Printing
Vehicles
Nonmetal. Mineral Prod.
Lumber Products
Manufactured Goods
Publishing

ZIMBABWE - AGRICULTURE

Barley (1989)	30,000 metric tons
Coffee (1989)	14,000 metric tons
Corn (1989)	1,931,000 metric tons
Cotton (1989)	91,000 metric tons
Eggs (1989)	13,000 metric tons
Meat (1988)	78,000 metric tons
Milk (1989)	230,000 metric tons
Potatoes (1989)	30,000 metric tons
Soybeans (1989)	176,000 metric tons
Sugar (1988)	442,000 metric tons
Tea (1989)	17,000 metric tons
Tobacco (1989)	132,000 metric tons
Wheat (1989)	285,000 metric tons

ZIMBABWE - MANUFACTURING

Beer (1989)	1,100,000 hectoliters
Butter (1989)	3,000 metric tons
Cement (1989)	780,000 metric tons
Cheese (1989)	5,000 metric tons
Cigarettes (1989)	2,400,000,000
Newsprint (1989)	21,000 metric tons
Paper & Paperboard (1989)	54,000 metric tons

ZIMBABWE - History

The region, formerly known as (Southern) Rhodesia, has long been home to Bantu-speaking African tribes.

- 1897 - British South Africa Company under Cecil Rhodes completes conquest of region.
- 1923 - Company rule ends, British governor appointed (Oct. 1).
- 1961 - New constitution guarantees white-minority power.
- 1965 - Prime Minister Ian Smith's white-minority government unilaterally declares independence from Britain (Nov. 11); British maintain declaration illegal, call for black majority rule; British urge UN to impose trade sanctions, oil embargo.
- 1968 - UN approves trade embargo; South Africa, Portuguese Mozambique ignore embargo, maintain trade relations.
- 1970 - New republican constitution adopted (Mar. 2); blacks effectively denied voting rights.
- 1972-1978 - Black guerrillas battle Rhodesian troops; 6000 killed.
- 1979 - Constitutional conference held at London; factions work out terms for black-majority rule; British terms for cease-fire accepted.
- 1980 - British grant independence to Republic of Zimbabwe (April 18).
- 1988 - Robert Mugabe assumes presidency (Jan. 1).
- 1992 - Parliament passes bill enabling gov't. to redistribute white-owned land to black farmers.

**A framework for economic reform,
(1991 - 1995)**

ANNEX I

TECHNICAL NOTE: PUBLIC ENTERPRISE REFORM

Introduction and Background

1. Public enterprise (PE) reform will be high on the Government's policy agenda for the next five years. The main objectives of the macro-economic adjustment programme will be to encourage growth by investment in the productive sectors, increase export competitiveness and export earnings and increase employment. The costly and ineffective operations of the PEs are at present a major obstacle to the achievement of these aims. Not only do the PE absorb a large proportion of recurrent budgetary expenditure in direct subsidies, grants and advances from Government, but as a group they produce very small returns, if any, on capital invested. They receive large indirect subsidies in the form of concessional loans, customs duties exemptions and other tax exemptions which represent substantial foregone fiscal revenues. Many PEs not receiving direct subsidies, finance their recurrent deficits by borrowing from the financial sector, normally with Government guarantees, thereby potentially crowding out productive private investments and adding to the direct budgetary burden at a later date in case of inability to repay the loans. At the same time, the quality of services provided by many PEs needs improvement and this will be particularly important for those PEs which provide basic inputs, services and infrastructure for economic development.

2. The sector consists of around 40 state owned enterprises, some of which, however, would not normally be considered as PEs, such as research and social and cultural development organizations. Those receiving the largest subsidies and transfers from Government are the agricultural marketing boards through the Agricultural Marketing Authority (AMA), the National Railways of Zimbabwe (NRZ), and ZISCO (see Tables 3.1 - 3.3, pp.102-3 for details).

3. The reasons for poor PE performance in Zimbabwe vary from one enterprise to another but there are a number of common factors, most of them interrelated and having a compound effect. Firstly, Government pricing policies have not allowed a number of important PEs to cover their costs. This has been a long term problem affecting many PEs, but particularly those whose output prices have an important impact on the national economy. Recent price increases for NRZ, Air Zimbabwe and NOCZIM were a step in the right direction but the problem is currently acute in the case of the agricultural marketing boards, ZISCO, and also for NOCZIM which is still not passing full price increases on to consumers.

4. A second set of factors working against PE efficiency is the financial relationship between Government, as owner, and its PEs. This has sometimes manifested itself as the "soft budget constraint" enshrined in many of the parastatals' enabling Acts whereby Government is required to finance their deficits from the national budget even when these deficits are due to management inefficiencies. On the other hand, there are frequent instances where Government has required PEs to undertake investments or activities for social and other reasons which are not economically viable but has not paid for the costs of these investments or activities. This has also led to conflicting objectives for PE management. In addition the capital base of many PEs has consisted largely of loans with the consequent heavy burden of debt service on the enterprises.

5. The third set of factors concerns the relative lack of autonomy and accountability of PE Boards of Directors and managers. The involvement of line ministries in day-to-day decision making in PEs is widespread in areas affecting personnel and salaries, investment and purchasing decisions. The actions of Government in the pricing and financial areas mentioned above also have adverse effects on PE autonomy and, subsequently, on efficiency. Managers can therefore claim with some justification that poor PE performance is due to circumstances beyond their control. There are severe limitations on PE Boards' discretion to invest, purchase, hire and fire labor according to needs, set salary

levels, set prices, have recourse to the financial markets etc. Internal financial control systems and external monitoring systems for PE performance are inadequate and managers cannot be rewarded or penalized according to their performance. The composition of PE Boards, although recently improved in some cases, does not always include the expertise needed for the effective management of the enterprise concerned.

6. The quality of PE managers in Zimbabwe is noticeably higher than in many other developing countries. However, there is a need to combine adequate financial incentives with autonomy and accountability, in order to retain a sufficient number of well motivated managers.

7. Finally, individual parastatals have their own particular problems which need to be addressed. These may relate to the need for physical rehabilitation or improved organization structures and internal management.

Government Policy Framework

8. The Government's Economic Policy Statement of July 26 1990 presented the following objectives which are now setting the policy framework for parastatal reform:

- clear parastatals losses and eliminate subsidies, except losses related to social issues, by FY94/95;
- clear the present arrears in subsidy payments to parastatals by FY92/93;
- set up Task Forces to examine the rationale and operations of major parastatals and make appropriate recommendations;
require parastatals to prepare action plans and work programmes with quantified targets;
- review each parastatal's pricing policy, close the gap between consumer and producer prices and replace it with targeted subsidies to the needy;
- allow and provide equity finance to those parastatals involved in marketing goods and services in a commercial environment;

- introduce private participation in the management and ownership of parastatals especially where this can bring the necessary management expertise and know-how; and
- improve management autonomy, define respective roles of Boards and ministries and introduce performance incentives for management.

Strategy and Action Programme

9. General. The strategy being implemented by government combines reforms of a global nature with measures which are enterprise specific. The strategy is based on the premise that all PEs operating in a commercial environment, whether or not monopolies, will, on completion of the programme, be receiving no budgetary support from Government, except for the purpose of protecting vulnerable social groups. Loans from the banking system to these enterprises will be made at the discretion of the banks, based on bankable proposals and not subject to Government guarantees. There will be a clear separation between the social and commercial roles of PEs. The roles of all PEs are being examined and judgments will be made as to their appropriateness. Areas of overlap between PEs themselves and between PEs and central Government, particularly in the areas of social development, will be eliminated by closures or mergers. Whenever Government requires a PE to undertake a project or activity of a social or non-commercial nature Government will provide all of the finance for this activity through direct budgetary subsidy or grant. All commercial PEs will be capitalized with acceptable debt-equity ratios and be expected to pay a dividend to Government. PE Boards and managers will be given greater autonomy while being held fully accountable for the viability of their commercial activities and for operating within their allowed budgets for their non-commercial activities.

10. Government has already begun implementation of a reform programme within the National Railways of Zimbabwe (NRZ) which will reduce the NRZ's annual losses from Z\$201 million in FY89/90 to about Z\$78 million in FY90/91. This programme illustrates the types of reforms which will be applied to other PEs. The measures include:

- internal rationalization and operational and management improvements;.
- tariff setting mechanism;
- operational and financial performance target setting and monitoring;
- clear definition of role and accountability of the Board;
- staff development programme including succession planning;
- improved capital structure and reduction of subsidy backlog and direct transfers;
- greater flexibility and autonomy in procurement procedures;
- improved investment appraisal and approval of projects based on acceptable economic and financial rates of return.

11. Classification. PEs will be classified according to the type of action required to achieve the objectives of the reforms, i.e. the elimination of deficits and improved effectiveness. The following classification is tentatively proposed:

- strategic PEs which are already viable or potentially viable (such as the public service monopolies) which will continue in State hands but without budgetary support. In some cases there will be a need for rehabilitation programmes following which no further budgetary support will be provided.
- non-strategic viable or potentially viable commercial or industrial PEs - to be operated on a commercial basis and for which full or partial divestment will be sought;
- non-viable PEs with no strategic or social function - which will be liquidated;
- PEs with a social or developmental role which overlaps with another PE or Ministry or which is no longer required, - will be closed down or merged with other entities;

- non-commercial parastatals (strictly speaking not PEs) with a necessary social role - which will require budgetary support in the form of grants and whose budgetary allocations will be determined according to national priorities as part of the Budget preparation process. However, even in these cases attempts at cost recovery will be made and measures to improve efficiency implemented.

12. The inclusion of a PE in the strategic category will not exclude the possibility of participation by other investors in its ownership or management and active attempts to harness private sector initiative and capabilities in the activities of public service monopolies will be made.

13. Financing Policy. Reducing transfers from the budget is very important to the Government's target of reducing the central government fiscal deficit to 5 percent of GDP by FY94/95. By the end of the programme, commercial PEs will be receiving no budgetary support whatsoever. The essence of the macro-economic adjustment programme is the encouragement of economic and financial viability and efficiency. Indirect subsidies such as import duty exemptions, concessional loans and Government guarantees on commercial bank loans will be eliminated for all PEs and their customers or beneficiaries. An important part of the reform programme will be the implementation of a timetable for the progressive elimination of all direct and indirect subsidies to commercial PEs, including the monopolies. The only exceptions to these principles will be the provision of full cost explicit budgetary subsidies where a commercial PE is required to carry out a noncommercial function or in the case of temporary direct subsidies to specific target groups adversely affected by the adjustment process. The methods for appraising Government investments in PEs will be improved and only economically viable projects will be approved.

14. The timetable for the progressive elimination of direct subsidies and transfers to the PEs is shown in Attachment 3. In FY91/92 the level of subsidies and transfers to all major PEs will be reduced to Z\$360 million (Z\$160 million of which is a write-off of the anticipated

remaining carry over of past losses) and by FY94/95 to a maximum of Z\$40 million. This will result in a reduction in FY91/92 of 2.0 percentage points in the ratio of the fiscal deficit to GDP and of 3.7 percentage points over the entire period to FY94/95. The MFEPD will put mechanisms in place to ensure that provisions to write-off arrears payments are used by the PEs for their intended purpose i.e. the reimbursement of loans from financial institutions.

15. General Policy Environment. The role of Government vis-a-vis the PEs will be directed away from micro-policy decisions and towards setting the macro-economic and policy framework within which the PEs operate. Parastatals will be given autonomy in the setting of prices of PE raw materials, products and services, (except in the case of monopolies), in hiring and firing employees, in setting pay scales and in making investment and procurement decisions. At the same time, PE Boards and management will be held fully accountable for their actions (see paragraph 17 below). They will prepare corporate plans against which, after their approval by Government, their performance will be monitored. As long as PE Boards act within their agreed plans they will be subject to no interference from Government. In the case of the public service monopolies, such as power and water supply, tariff setting mechanisms such as that recently developed for NRZ will be applied. Once these formulas have been developed there will be no need for these PEs to go to Government each year asking for price increases. The monopolies of the state owned agricultural marketing and production entities will be reviewed and steps taken to introduce competition. Over time, industrial and commercial entities such as ZISCO will set their prices in free competition with other suppliers, including imports.

16. Legal and Institutional Reforms. The enabling Acts or Memoranda and Articles of Association of a number of PEs have already been modified e.g. NRZ and Zimbabwe Trade Development Corporation (ZTDC). The legal status of all PEs will be reviewed and changes will be made where necessary. In some cases this will involve bringing parastatals under the Companies Act. The method of appointing Boards, their composition and their rules of operation, will be modified to ensure their

effectiveness and appropriateness for the job to be done. The respective roles of management, Boards, Ministries and other Government agencies will be spelled out and adhered to.

17. Monitoring and Accountability. Along with greater autonomy will come better accountability. A central unit will be designated, staffed and equipped to manage a comprehensive information system on PE performance and to oversee the implementation of the PE reform programme. The information system will be used to assess the performance of the PEs and serve as the basis for determining incentives for managers. Since the monopolies are to be given full management autonomy and automaticity in setting tariffs for public services there will need to be independent mechanisms created to monitor their activities and the quality of service delivered to the consumers. The formulas developed for the automatic setting of monopoly tariffs will ensure that the enterprise can obtain a reasonable return on investment while at the time ensuring that consumers' interests are protected by the encouragement of efficiency and cost containment.

18. Possible Divestment. An assessment will be completed early in 1991 the best means of mobilizing private sector resources and skills in the running of the PEs and of generating revenue from the sale or lease of PE assets. The methods selected could vary from outright sale of shares or assets to leasing agreements, management contracts or the contracting out services. Employee ownership schemes will be used and small investors' savings will be mobilized through the issuing of shares in PEs to the general public through the stock exchange. Other methods such as debt-equity swaps, the creation of investment portfolio funds etc. will also be examined.

19. Measures for Individual PEs. Diagnostic studies will be carried out on the most important PEs and rehabilitation programmes prepared where necessary. In some cases studies have already been completed. The studies will cover in depth all aspects of the PEs' rationale and operations.

20. Social Dimensions of PE Reform. Measures will be prepared and implemented to provide targeted assistance for the population groups particularly vulnerable to the short term effects of price increases and the rationalization of PE structures. These targeted payments will be limited mainly to the poorer maize producers and consumers and to retrenched employee

Timetable

21. To determine precise details of the action programme, studies will be carried out during 1991 in the following areas: -

- a comprehensive assessment of the direct and indirect burden of the PEs on national finances and preparation of an action programme to eliminate it by April;
- a review of the legal and institutional framework governing the PEs and Government supervisory structures including mechanisms for setting and monitoring tariffs and price increases by April;
- an assessment of the possibilities for divestment and for greater private sector participation in the management of the PEs by April;
- design of an information system to monitor PE performance by June;
- individual PE diagnostic studies.

22. The timetable for action over the period of the adjustment programme is shown in the attached policy matrix. The main actions to the end of 1991 will be as follows:

- Designation of a unit to oversee the PE reform process and manage a PE information and incentive system - done November 1990
- Classification of PEs according to type of action required - done December 1990
- Completion of studies on PE budgetary burden, legal and institutional framework and possible divestment - April 1991
- Preparation of comprehensive action programmes for agricultural

marketing and production parastatals, ZISCO, Air Zimbabwe and ZESA June 1991

- Design of PE information system - June 1991
- Enactment of legal changes affecting all PEs - during 1991
- Implementation of PE information and incentive system - August

1991

- Initial programme of closure/merger of PEs with overlapping or redundant functions - June 1991

- Initial programme of liquidation of non-viable, non-strategic PEs June 1991

- Elimination of price controls on commercial PEs - end 1991

- Inclusion in the 1991/92 budget of the first stage of reduction of transfers to parastatals - July 1991

- Preparation of comprehensive action programmes for remainder of PEs September 1991

23. The programme will continue up to 1994/95 with the progressive reduction of the budgetary burden of the sector, the commercialization of many PEs and some of the activities of the others, the partial or total divestment of some PE or PE activities and the rehabilitation of those PEs to remain in state hands.

Attachment 4

TERMS OF REFERENCE FOR STUDIES FOR THE PREPARATION OF THE PE REFORM PROGRAMME

1. Study on the Financial Relations between the State and the PE Sector

The aim of this study will be to define and quantify the implicit and explicit financial flows between the State and the Public Enterprises and to prepare a detailed action programme and timetable for reducing significantly the budgetary burden of the PEs. Working with and including staff of the Ministry of Finance, Economic Planning and Development (MFEPD), the study team will compile information over the last five years on the following:

transfers from Government to PEs direct subsidies and grants

- direct transfers in the form of Government equity
- direct transfers in the form of loans from Government
- estimates of indirect subsidies in the form of:
 - import duty exemptions
 - other tax exemptions
 - loans from Government at subsidized interest rates
 - Government guarantees on commercial bank loans
 - non-payment for services provided by Government or other PEs e.g. rent on buildings, utilities etc.
 - arrears of payments due to Government or other PEs
- transfers from PEs to Government
- taxes and customs duties
- dividends on equity invested
- arrears, in payments due from Government or from other PEs to PEs e.g. subsidy payments, late payment for utilities etc.

A detailed timetable for reducing and/or eliminating the implicit and explicit budgetary burden of the PEs will be prepared with quantified target ceilings for each category of transfer with target dates. Care will be taken to ensure the compatibility of the recommendations with macro objectives and targets. The emphasis in the study will be on

actions to be taken by Government, in particular the MFEPD. Actions to be taken at enterprise level to ensure viability will be the subject of other studies.

The study will require an estimated two man-months of consulting assistance and should be carried out by staff of the MFEPD and consultants with experience in financial analysis, in particular with Government and public enterprise accounts. Local consultants should be available for this task. The timetable for the reduction of the budgetary burden should be prepared by the MFEPD.

2. Study of the Legal and Institutional Framework for the PEs

This study will review the legal and institutional environment affecting PE operations, identify the legal and institutional constraints to PE effectiveness, autonomy and accountability and draw up an action programme to be implemented as part of the general PE reform programme. The degree of autonomy given to PEs in the following areas will be examined:

- price setting
- recruitment and retrenchment of labor
- fixing of salaries
- investment and borrowing
- procurement
- day-to-day operational decision making

The enabling Acts of all the parastatals will be examined as would labor and other legislation affecting PEs. The possibility of incorporating parastatals under the Companies Act will also be examined.

The respective roles of central and sector ministries, Boards of Directors and general managers will be examined as will Government supervisory mechanisms and reporting systems. The composition of PE Boards and the rules governing their operations will be assessed as to their effectiveness.

Recommendations will be made and a timetable determined for necessary reforms in the legal and institutional framework to be implemented over the first two years of the adjustment programme with critical actions identified for immediate implementation.

The estimated duration of the study is three man-months and consultants will be qualified corporate lawyers with experience in public enterprise reform in developing countries and in Government supervisory structures and systems.

3. Potential-nor Possible Participation

This study will examine the full range of options available for PE privatization in its broadest sense. Options to be explored will include, but not be limited to:

- sale of shares
- sale of assets
- leasing
- management contracts
- contracting out of activities

The assessment will take full account of the need to attract foreign investment, know-how and marketing channels while protecting Zimbabwean national interests and harnessing and developing to the fullest extent local entrepreneurial skills. Mechanisms such as the sale of shares to PE employees, management and employee buy-outs, the selling of lands and property to tenants or small farmers and employee stock option plans will be included as will the possibility of the sale of shares in profitable companies to small Zimbabwean investors through the Zimbabwe Stock Exchange. In some cases the breaking of PE monopolies and the allowing of private operators to enter the market will be the best means of privatizing. In others the contracting out of activities by the public utilities such as customer administration and vehicle maintenance, will be appropriate. The consultants will also examine such possibilities as internal and external debt-equity swaps and the creation of portfolio investment funds.

Recommendations in the form of a series of options for each PE will be made and an action programme and timetable prepared.

The study will require an estimated three man-months and the consultants will need to have had up-to-date experience in the design and implementation of PE privatization and liberalization programmes in developed and developing countries, in corporate finance and in the operations of capital markets.

4. Design of an Information System to Monitor PE Performance

In the context of enhanced PE autonomy and accountability consultants will be needed to design and help implement a central information system for the monitoring of PE performance and for the determination of incentives to PE managers. The system will also be used to monitor general progress in the PE reform programme. The location of the system has yet to be determined but the MFEPD appears at present to be the most appropriate agency to manage it. The work of the consultants will be in three phases. Phase one will be the determination of information flow requirements and formats and the conceptual design of the system. The second phase will be the determination of the computer software and hardware requirements. Phase three will be the installation and commissioning of the system and the training of personnel to operate it.

Phase I will be completed by an economist and accountant/financial analyst with experience in the design of information systems for economic reform programmes and enterprise performance. It will require an estimated four man-months. Phases II and III will be carried out by a systems analyst and programmer whose work will overlap with that of the economist and financial analyst and will require a further four man-months. The estimated duration of the work from initiation to full operation of the system is six months.

5. Assistance in the Preparation of Comprehensive Action Programmes for Individual PEs

The PE reform programme will include actions to be taken at individual PE level. Much diagnostic work has already been done on the individual PEs. Some is up-to-date, much is out of date. The terms of reference for studies to help update work already done and prepare action plans for individual PEs and the qualifications of consultants needed will be determined by the individual Task Forces to be created by Government. In the first year of the programme it is likely, that assistance will be needed for the agricultural marketing and production parastatals, ZISCO, ZESA and Air Zimbabwe. An estimated 18-24 man-months of consultant time in total will be required.

ANNEX III

TECHNICAL NOTE ASSESSING AND ADDRESSING THE SOCIAL DIMENSIONS OF ADJUSTMENT

Introduction

1. The basic purpose and rationale of structural adjustment is to promote growth and improve social welfare, but to be fully effective the design of specific programmes needs to be deliberately focussed on making the adjustment process work in favor of the poor and vulnerable members of society. It has also increasingly been realized that there may be transitional social costs involved in the process of structural adjustment, and that corresponding compensatory mechanisms and programmes may be required to parallel the economic reform measures.

2. Concern about the social aspects of the proposed adjustment programme has already been highlighted by the Government. For example, in his Economic Policy Statement of July 1990, the Senior Minister of Finance, Economic Planning and Development said the following:

"Structural adjustment-programmes are usually accompanied by social problems, especially to the vulnerable segments of the poor, and unemployed. With market forces determining price levels, in the short term prices are bound to increase beyond the reach of the poor and this can lead to social unrest. Government will therefore take measures to cushion the poor against such possible adjustment effects. It is important that measures to reduce unemployment are introduced and that small investors are given incentives to expand and take on new employees. There will be need to examine and promote the activities of the informal sector which equally has a potential of creating employment.... There is need for targeted subsidies to be introduced to alleviate the hardships affecting the vulnerable groups."

3. - Following this clear policy statement, the Government has begun to ensure that the detailed plans of action for the implementation of the

structural adjustment programme are designed to follow the policy goals. To do this it has been necessary to (i) specify clearly the mechanisms and ways through which poor and vulnerable groups may be adversely affected; (ii) build-up socio-economic profiles of the vulnerable groups in Zimbabwe which may be affected; (iii) relate the specific proposed adjustment measures to each of these vulnerable groups in order to assess as accurately as possible how and to what extent they may be expected to be adversely affected; (iv) prepare compensatory programmes and policy measures to counteract any potentially adverse effects; and (v) design a system, of monitoring and evaluation to assess the socio-economic impact of the adjustment measures, and where appropriate to stimulate mid-course changes to be made in the programme. This note highlights the work done so far.

I. Potential ways in which vulnerable groups may be adversely affected

4. It is essential to stress that the overall impact of the adjustment programme will be to improve social welfare. Net employment effects will be positive, and over the long-term, disadvantaged groups will have greater opportunities to improve income, levels and welfare. Of particular importance for the poor will be the measures taken to deregulate the economy and to allow for the expansion of the small-scale and informal sectors. However, there will undoubtedly be some transitional social costs in selected areas, and compensatory actions are being designed for implementation to ensure that the poor and vulnerable groups do not suffer during the adjustment process.

5. Several different taxonomies could be used for assessing the potential negative effects of structural adjustment measures on the poor and vulnerable. Here the effects are considered under three headings: (i) employment and unemployment; (ii) inflation and removal of subsidies; and (iii) social services and increased cost recovery. For the first of these, while employment growth is a central objective of any adjustment programme, it must be recognized that unemployment also may be generated in some areas in the short term. This may be in the formal business sector (to the extent that industry is inefficient and cannot adjust to

increased competition), in the small-scale or informal sector (to the extent that increased efficiency in the formal sector displaces or discourages some previous small-scale or informal-sector activities), in the public sector (to the extent that civil service retrenchment is considered necessary), and in the parastatal sector (to the extent that restructuring induces worker lay-offs).

6. Secondly, the introduction of a structural adjustment programme is often accompanied by increased inflation (especially if fiscal deficits are not tackled aggressively). With exchange rate depreciation and the lifting of price controls, there may be a (short-run) increase in inflation -- though greater competition in production may also have a counteracting, opposite effect. In at least the medium-term, of course, one of the positive effects of a structural adjustment programme should be to reduce the rate of inflation. Besides changes in the overall level of prices, however, particular attention needs to be given to changes in relative prices -- and, in this context, of highest social concern is the crucial issue of the relative prices of the most essential items of consumption. An associated issue is the level of producer prices paid for items produced especially by poor farmers.

7. Thirdly, there is the question of whether the need to reduce public expenditures leads to reduced budgetary allocations to the social sectors, whether any such reductions translate into cut-backs in those basic services particularly used by the poor, and whether and how user charges for such services are introduced or increased for revenue reasons. Each of these mechanisms needs to be examined in order to assess the potential negative impact of an adjustment programme on the poor and vulnerable. Before that can be done, however, it is necessary to understand who are the poor and vulnerable people, and the nature of their socio-economic profiles.

II. Socio-Economic Profiles of the Poor and Vulnerable in Zimbabwe.

Introduction

In reviewing the socio-economic profile of the country, emphasis is placed on those groups who are dominant in the population, and who are least able to protect themselves from potential adverse effects of the structural adjustment programme. The identification of these specific segments of the population, their income and expenditure patterns, and the factors which contribute to their poverty, is necessary for the design of policy changes which are least likely to impact negatively on these vulnerable groups. With specific socio-economic profiles in hand, the task of targeting any necessary compensatory adjustment measures to cushion the adverse effects of adjustment is simplified.

9. The following table presents a general breakdown of the various groups to be discussed, based on the results of the Central Statistical Office's Household Incomes, Consumption and Expenditure Survey of 1985:

(See table next page)

10. Rural groups, either in the communal areas or employed on large-scale farms, comprise the bulk of the population and on average receive exceedingly low household incomes. A poverty datum line (PDL) was established by the Riddell Commission in 1981 to indicate the minimum income level needed to meet the basic food, clothing and shelter needs of a family of six. In 1985, as a result of inflation, this would have been equivalent to approximately \$210; and in December, 1989, the equivalent amount would have been \$356 per month. Given that the expenditure weights this measure have not been changed since 1981 and that there is no distinction made in the PDL between urban and rural areas, the PDL should only be taken as a rough indicator of a poverty cut-off point rather than as precise measurement. Given these problems with the PDL and in the absence of income distribution data, an estimate of the percentage of the population residing in poverty is unavailable. Anecdotal evidence suggests that almost two-thirds of the population within the rural areas were, and still are, residing in severe poverty. While average household

Socio-economic Characteristics by Household Type, 1985

Characterics	Communal Lands	Commer. Farms	Resettl. Areas	Small-scale Farms	Urban & semi-urban
Population	4.8%	15%	2%	2%	33%
Family size	6.2	5.0	5.0	4.9	4.1
Av. monthly income (Z\$)	70	72	92	119	72
Transfers in Income	43%	11%	89%	5%	7%
Expenditures					
Food	39%	43%	33%	27%	31%
Rent, fuel	2%	2%	3%	4%	17%
Transport	5%	5%	12%	13%	6%
Other	53%	50%	52%	46%	39%

incomes in urban and semi-urban areas were above the poverty line in 1985, there was, and still is, a considerable range of incomes, with a significant share of urban dwellers also counted among the poor. Due to their greater the:market economy and larger reliance on cash-based consumption patterns, the vulnerable groups in the urban areas may even be impacted by the structural adjustment programme more quickly than rural groups.

A. Urban Areas

11. Urban areas are home to more than one-quarter of the population of Zimbabwe. Rates of urbanization have increased tremendously since independence, although rural-urban migration is still limited by strict zoning laws and housing regulations. In 1989, over 2.5 million people were living in urban and semi-urban areas, with an estimated average of 4.5 people per household. Harare and Bulawayo dominate the urban profile, comprising more than 60 percent of the total urban population. Using the estimates of the size of Harare and Bulawayo would be 1,130,000 and 850,000 people respectively.

Urban low-income households can be divided by the type of employment of the head of the household in order to facilitate an examination of the impact of specific policy changes on different groups. Thus, it is useful to examine the characteristics of formal, sector workers (broken down into skilled and semi-skilled, and unskilled workers), and small-scale and informal sector workers separately. Approximately 800,000 people are employed in the formal sector--half at the skilled and semiskilled level and half at the unskilled level. Approximately 100,000200,000 people are employed in the small-scale or informal sector. A rough, but low estimate of unemployment in the urban areas is 300,000400,000 people.

(i) Urban Formal Sector: Skilled and Semi-Skilled Workers

13. Skilled and semi-skilled workers make up roughly one-half of the workers employed in the urban formal sector, or approximately 400,000

employees. They are most heavily represented in the following sectors: public administration, health, education, finance sector, and wholesale and retail trade. Average earnings in these industries are significantly higher than in agriculture, construction or domestic service. The per capita income level of this group is considerably higher than the country's average of Z\$1,400 per annum.

(ii) Urban Formal Sector: Unskilled/Domestic Workers

14. The other half of the labor force employed in the urban formal sector is made up of unskilled employees, numbering approximately 400,000 people. Over the course of the past decade, unskilled workers have suffered a decline in real earnings, which has probably placed a growing proportion of them and their families below the PDL. Average earnings for construction workers and private domestics fell well below the PDL cut-off point, with construction workers in December, 1989 averaging \$90 per month and private domestics averaging about \$80. However, where families have more than one income earner, the chances of being above the PDL are improved. Unfortunately, data on family employment is unavailable, and thus it is impossible to provide a clear picture of the number of households now below the PDL.

15. While average earnings in manufacturing and mining are well above the PDL, it can be assumed that the unskilled workers in these industries are earning substantially less than the industry-wide averages. In 1988, for example, 40 percent of employees (excluding agricultural workers) were earning less than \$250 per month, which was below the PDL estimated for that year. In other words, despite substantial increases in average wages in manufacturing and mining, those for unskilled workers have generally failed to keep pace with inflation and the poverty line.

16. The expenditure pattern of low-income workers differs substantially from the general pattern for urban areas as a whole. A worker earning the minimum wage in manufacturing in 1988 spent more than half (55 percent) of his total expenditures on foodstuffs, and nearly

one-fifth (18 percent) on rent, fuel, and lighting. The increased importance of food and shelter in total expenditures reflects the relative and absolute poverty of this group of urban low-income households.

(iii) Urban Informal and Small-Scale Sector

17. The 1986/87 Labor Force Survey indicate that workers in the informal sector accounted for only 7.7 percent of the employed population. This figure was probably an underestimate due to the likely unwillingness of survey respondents to admit that they were unregistered workers. As a rough estimate, it appears that employees in this sector in urban areas numbered between 100,000 and 200,000 in 1989. A nationwide survey of the informal sector was carried out in 1984, and the average monthly income was then found to be about \$260 (substantially higher than the minimum wage in unskilled occupations) in a number of different informal sector activities. While the average monthly income of informal and small-scale sector workers may be somewhat higher than the average of unskilled workers, there is probably a wide range of incomes within this sector with a large number of people earning substantially less than the PDL.

18. Women dominate in the informal sector comprising 64 percent of total workers, as opposed to 25 percent in the formal sector. Most (54 percent) of women surveyed in Harare in 1984 stated that they started informal sector businesses because they could not find other employment. Women are more likely to engage in home-based informal activities, such as handicraft or textile production, due to the demands of child-care. As in the formal sector, earnings for women in the informal sector fall below male earnings.

(iv) Unemployment

19. The current official estimate for unemployment is 26 percent of the labor force, but other estimates have ranged as high as 37 percent. The unemployed are predominantly young (in 1986/87 57 percent were under

25 years old), and educated (more than 75 percent had then completed primary school-and slightly more than one-third were form IV leavers). While the gender distribution among the unemployed is roughly equal, women dominate in the 25-59 age bracket, representing nearly two-thirds of this group.

20. A frightening trend, closely linked to the prevalence of unemployment, is the growth of child labor, particularly in urban areas. Unfortunately, there are no data available on the scale of the problem although for any urban resident it is becoming increasingly visible. A recent survey done of street children in Harare provides some limited information on the socio-economic situation of street children. More than half of the children responded that they were on the streets because of poverty or destitution. Most children used their money to buy food (33 percent), clothing (33 percent), or to pay for school fees (16 percent).

B. Rural Areas

21. The agricultural sector in Zimbabwe consists of four main groups: communal areas, large-scale commercial farms, resettlement areas, and small-scale commercial farms. Rural residents comprise three-quarters of the population of Zimbabwe, or about 7 million people. Households in communal areas and employees of large-scale commercial farms are the most vulnerable groups within the rural areas. The small-holder farming system established in the communal areas involves about one-half of the population of Zimbabwe, or about two-thirds of the total rural population. Approximately 300,000 people work on large-scale commercial farms. While great strides have been made by the Government particularly in the areas of health and education, the quality of social services in rural areas is still substantially lower than those available in the urban areas.

(i) Communal Areas

22. Average incomes in the communal areas are the lowest in Zimbabwe. In 1985, households in communal areas on average earned less

than one-quarter the amount earned by their urban counterparts, placing a significant proportion of households in the communal areas substantially below the PDL. Female-headed households are common in these areas, as survival strategies lead to split families and male emigration to mines, towns or commercial farms. Only 39 percent of communal farmers are men, and of this group nearly 75 percent are either under 25 or over 46 years

23. In aggregate terms, smallholder production in the communal areas has increased impressively since 1980. Marketed maize and cotton originating from this sector grew from 10 percent to more than 50 percent of total marketed output over the course of the decade. However, inequality of asset and income distribution within communal areas remains significant and in fact has probably increased. Maize production is concentrated in natural region 2, comprising 11 percent of the designated communal areas. And, even within these privileged areas, the top 20 percent of producers account for nearly two-thirds of total maize sales. A study of the Mutoko Communal Lands found that just over 50 percent of the income went to the richest 20 percent of the households, while the bottom 20 percent received only 3 percent of the area's total income. Many inputs are directed to the better-off communal farmers, leaving a continuing problem of food insecurity in those households with limited or no assets. Because of the need to encourage efficiency of farm production, a shift occurred in the resettlement programme in the mid-1980s away from the resettling of the poorest landless towards encouraging the "master farmers" to enter the programme. As these tend to be well off compared with other communal area farmers, there is a tendency for increased inequity.

24. Increasing unemployment and poverty in the urban areas has worsened the situation in the communal areas, as the regions are linked through flows of labor and capital. Three-quarters of the increase in the labor force between 1982 and 1987 had to be absorbed by the already saturated communal agriculture. Remittances from family members employed in the formal sector provide a further link with the urban economies: in 1985, gifts and transfers made up more than 40 percent of total household incomes in the communal areas.

(ii) Employees on Large-Scale Commercial Farms

25. Approximately 1.4 million people live on large-scale commercial farms. As of 1989, the minimum wage in this sector was \$116 per month, but for agriculture as a whole average earnings were \$91 per month. This discrepancy is most likely explained by the large number (90,000 in 1984) of casual and seasonal laborers employed at low wages in commercial agriculture. Of this group, over 60 percent are women. While household income levels may be underestimated due to the fact that some commercial farm laborers may also be members of communal area households, it remains clear that workers on large-scale commercial farms are among the poorest of the poor in Zimbabwe.

C The Socio-Economic Situation of women

26. Women outnumber men in some of the poorest and most-vulnerable sectors of the economy: agriculture, the informal sector, private domestics within the formal sector, and the unemployed. Women accounted for 53 percent of the urban unemployed in 1986/87, and most unemployed women are older than their male counterparts.

27. Agriculture in Zimbabwe is largely a female enterprise. Most (86 percent) women in Zimbabwe live in rural areas, and it has been estimated that they are responsible for 70 percent of total agricultural labor. Female-headship is prevalent in over 40 percent of households in communal areas, as there is substantial male migration to commercial farms, mines and towns, given the need for families to supplement extremely low income levels. In addition to providing the bulk of the labor on the family plot, women supplement farm income with non-farm income. They provide more than 60 percent of casual labor within agriculture and the bulk of the labor in the rural non-farm informal sector. Women are largely responsible for food crop production and labor-intensive tasks on other crops, as well as fuel collection, child-care and other domestic tasks. Despite their central importance in agricultural production, however, women continue to have limited access to land or other agricultural assets. Traditional communal property rights and inheritance systems

based on patrilineal kinship ties severely restrict women's abilities to capture productive resources.

III. Potential Negative Effects of the Structural Adjustment Programme.

28. There is no doubt that the structural adjustment programme is needed and should be implemented by the Government. At the same time, however, there are several ways in which the programme could have negative effects on poor and vulnerable groups in Zimbabwe. These potential effects are discussed below.

A. Employment and Unemployment

Introduction

29. The end result of the adjustment programme will be an increase in the employment generating capacity of both the formal and informal sectors. As far as the former is concerned, it is expected that the economic adjustment programme will, generally have positive effects. The increased utilization of current capacity as well as increases in investment will create new jobs over the length of the five year adjustment period. Currently, industry is operating at between 40 percent and 70 percent of existing capacity. It is expected that this figure will increase to 85 percent to 90 percent over the course of the adjustment programme. Increased levels of investment in manufacturing are expected to generate employment growth at one-half the projected 6 percent rate of growth of output, or approximately 3 percent per year. Thus, formal sector employment in manufacturing as a result of new investment could grow by approximately 5,000-10,000 additional jobs per year, or perhaps up to 50,000 jobs over the five year period. Skills shortages have already been felt by employers, and the demand for skilled workers is expected to increase with the implementation of the new economic reform package. The new manufacturing jobs created would be in addition to the existing trend rate of growth of non-manufacturing

employment, and do not take into account the replacement needs of the formal sector due to normal retirements and attrition. While the structural adjustment programme will not solve the current unemployment problem, therefore, it will aid in reducing it. In the absence of structural adjustment, furthermore, open unemployment would certainly increase.

30. Prospects for employment creation in the informal/small-scale sector are also good, though they will be contingent upon the pace of deregulation under the structural adjustment programme and the willingness of the Government to continue and strengthen its support of these sectors. Under an optimistic scenario which includes the relaxation of Governmental regulations (such as the zoning regulations, rules governing the licensing of small businesses, and the stipulation of what entails a factory), employment growth in these sectors could average 25,000-35,000 workers per year. Possible bottlenecks to growth in these sectors include the difficulty of raising start-up costs due to increased inflation, lack of credit, and the resistance of local governments towards deregulation. In general, it is not believed that any increase in efficiency in the formal sector will lead to retrenchment or new unemployment in the existing smallscale or informal sectors in Zimbabwe.

(i) Retrenchment in the Formal Sector

31. However, there may also be some negative effects on employment in the short-term. While it is difficult to furnish a precise estimate of the unemployment effects of the structural adjustment programme, it is possible to schematize them and provide some rough ideas as to their size. The potential, short-term negative employment effects can be broken down into three categories: (i) retrenchment in the formal sector; (ii) retrenchment in the civil service; and (iii) retrenchment in the parastatals.

32. In the formal sector some job retrenchment in inefficient and uncompetitive firms will undoubtedly occur, its extent depending on the pace of liberalization and the streamlining of labor regulations. On the one hand, the faster the pace of the adjustment measures, the greater the likely extent of retrenchment and short-term frictional unemployment. For example, if 10 percent of manufacturing were to close down due to inability to compete, roughly 20,000 workers could have to be retrenched. On the other hand, the faster and more effective the adjustment programme, the more new jobs will be created and the more the social costs of unemployment will be minimized.

33. Whatever the pace of adjustment, however, it is clear that there will be some retrenched workers requiring compensation and that some proportion of them will also seek retraining. The Ministry of Labour, Manpower Planning and Social Welfare is drafting guidelines on compensation and assistance to be provided by employers to retrenched workers and although it will be important for any retrenched workers to be compensated and assisted as much as possible, the guidelines will seek to balance this objective with the need to avoid any measures which would unduly discourage employers from hiring new workers. Regarding retraining programmes, the Government's strategy is to strengthen the existing public sector vocational and technical training colleges, and also to review and possibly improve the fiscal incentives provided to employers to conduct training themselves.

34. In conclusion, the social costs of adjustment in the form of retrenched formal sector workers could perhaps be about 20,000 workers joining an already large and growing pool of unemployed. These workers are likely to be relatively unskilled and older, and probably more than half will be female. The impact on the welfare and income levels of this group will depend upon the extent of retrenchment packages offered by employers, as well as on private and public programmes for retraining.

(ii) Retrenchment in the Public Sector.

35. Government currently employs approximately 189,000 workers. The Government has indicated that 25 percent of the civil service (excluding the education sector) would be considered for retrenchment. This strategy would suggest that the number of non-education civil servants would drop from about 104,000 to about 78,000 by the year 1994/95. In other words, about 26,000 workers would need to leave the civil service over the next four years. However, with a natural rate of attrition of about 3,000-4,000 civil servants annually, the need to find ways to accelerate attrition would be less. Specifically, the impact will be reduced to the extent that retirees are not replaced, or to the extent that they are replaced through redeployment within the civil service. However, over this period the Government may still have to find ways of reducing the size of the noneducation civil service by up to about 10,000 workers who would not otherwise have left the service. This could be done either through improved incentives for civil servants to leave voluntarily, or through compulsory retrenchment (with appropriate compensation). Counting teachers, whose total number is projected to increase from 85,000 to 92,000, the overall size of the entire civil service would only decline somewhat to 170,000.

36. The Government's present strategy is to identify those areas of the civil service which are non-essential, inefficient and/or duplicate other areas. Non-essential posts will be frozen as soon as they fall vacant, and other vacant posts will be filled wherever possible from within the civil service. Consideration will also be given to compulsory redundancies in some areas in order to achieve the fiscal and manpower targets. For example, there are 3,000-4,000 casual laborers whose workload is seasonal and who could be removed from the permanent establishment and contracted on a seasonal basis. Although this approach would contribute to the necessary budgetary savings and would improve the efficiency of the public sector, any compulsory retrenchment

of civil servants would require additional costs. Provisions already exist for civil servants whose posts are abolished to be compensated through commuted pensions. Officials are also currently discussing possible incentive schemes to encourage the early voluntary retirement of public employees.

37. The social dimensions of any reduction in the size of the civil service would depend on the details of its implementation. For example retrenchment could affect some people; in the lowest strata of the civil service, including the casual laborers mentioned above. Given the current wage structure and the fact that the bulk of these employees reside in rural areas, they would be among the most vulnerable to any decline in income level within the civil service. Assuming that casual laborers are currently each earning \$300 per month and that they would anyway shift to employment on public works at \$100 per month, the Government would only save approximately \$20 million or 0.15 percent of GDP by pursuing this policy. While these workers are only one of the groups who may face the prospect of compulsory retrenchment, the Government will need to find ways of carrying out its retrenchment policy while bearing in mind the net (as well as gross) fiscal savings, the administrative and political implications, and the need to make provision for the retrenched workers.

38. Another potential social (and efficiency) issue which arises is the possibility of a general skills reduction within the public service. In particular, incentives given for voluntary retirement tend to be most attractive to higher skilled and enterprising employees with the best potential for advancement in the private sector. Additionally, given the skills shortage expected to accompany growth in the private sector, the existing tendency for higher qualified civil servants to go to the "greener pastures" of the private sector may be accelerated. Any reduction in the size of the civil service, therefore, needs to take account of the necessity of retaining a competent civil service.

(iii) Retrenchment in Parastatals.

39. It is difficult to evaluate the impact of employment changes generated by the proposed reorganization and streamlining of the parastatal enterprises, in view of the fact that specific plans of action for most parastatals are still under preparation. Before the employment effects can be determined, it is necessary to know which parastatals currently are overstaffed, by how much, and whether or not retrenchment is part of the plan of action. However, it is generally believed that overstaffing may not be a major problem for the parastatals, and that significant retrenchment may not be required. The main parastatals where retrenchment is a possibility include the railways and perhaps ZISCO. As a rough indicator, though, it is believed that up to 2,000 parastatal workers would have to be retrenched as a result of parastatal restructuring.

(iv) Overall Effects

40. The long-term prospects for employment generation arising from the structural adjustment programme are good, but there will be some short-term social-costs of job retrenchment and some frictional unemployment. Also, despite the overall positive employment effect of the programme, Zimbabwe will continue to face a difficult employment problem in view of the present large and growing number of unemployed. Besides those currently unemployed, and the relatively modest number of workers expected to be retrenched as a result of adjustment (maybe 20,000 formal sector workers, 10,000 civil servants and perhaps 2,000 parastatal workers), there will be about 200,000 new entrants to the labor force each year. Of this group, under a growth scenario, up to 100,000 each year might be able to find employment in the formal sector, (from job vacancies arising from normal attrition as well as from any new jobs created), and 25,000-35,000 in the informal sector and in small-scale enterprises. The remaining 60,000 would

still have to find productive activities in the communal swell the ranks of the already crowded urban unemployed.

B. The Impact of Inflation and Removal of Subsidies.

Introduction

41. The social costs associated with inflation and subsidy removal can be broken down into three categories. First, there is the effect of an increase in the general price level. This effect will be felt most strongly by those groups who have fixed incomes, lenders and those whose nominal earnings do not keep pace with the pace of inflation. Secondly, there are effects in terms of consumer welfare resulting from changes in relative prices. Here, from a social point of view, the main concern is with possible increases in the prices of basic commodities (and especially maize) resulting from the reduction or removal of consumer subsidies. Finally, there is the issue of the effects of the removal of producer subsidies, particularly for items produced by the rural poor. Again, the main item of interest is the producer price of maize.

Inflation.

42. The Zimbabwean economy has experienced relatively high levels of inflation in recent years (13 percent in 1989), and over the past decade there has been a decline in the index on average real earnings from 100 in 1980 to 89 in 1989. The only industry where average real earnings increased was mining (which rose from 100 to 112). Even in the case of domestic service, where the increase in the Government minimum wage over the period was substantially higher than in any other industry, the index of average real earnings still declining from 100 to 82 over the course of the 1980's.

43. Inflation is projected to continue at the present rate of 16 percent per year during the first two years of the structural adjustment programme, and drop down gradually there after. It should be emphasized, therefore that the social costs of inflation are short-run costs and should diminish as the programme progresses. It should also be reiterated that the problem of inflation is not a result of the structural adjustment programme, but rather one of the problems that the programme is designed to combat. The effect of inflation on the incomes of salaried workers will be contingent upon the rate of nominal wage increases. The Ministry of Labour, Manpower Planning and Social Welfare has revised regulations concerning wage setting, and collective bargaining has already been introduced. Some Governmental intervention will continue in those sectors where collective bargaining is not yet feasible due to the weak organization of workers.

44. It is expected that at least half of wage earners, some 1,200,000 employees (including commercial farm workers), will suffer some wage erosion in the face of inflation. The groups most severely affected may be those with the weakest collective bargaining power- for example, agricultural laborers and unskilled workers. Average wage increases for civil servants will also be below the rate of inflation, given the Government's determination to pursue fiscal restraint in support of the adjustment programme. However, greater differentiation will also be introduced in its wage policy by the Government, in order to maintain and even increase the compensation of key workers who have better opportunities in the private sector. It is expected that approximately half of manufacturing workers (or perhaps 100,000 people) will suffer some drop in real earnings, the level contingent on the collective bargaining power of each industry. Ten percent of the workforce in manufacturing, or approximately 20,000 workers, might experience severe wage erosion and drop below the PDL. Unfortunately, given the lack of information on family employment, it is impossible even to estimate the existing

number of families below the poverty line, let alone future levels. In contrast, skilled and semi-skilled workers are unlikely to suffer adverse effects from real wage erosion. The combination of increased labor demand and their already strong collective bargaining power should ensure that their real wages keep pace with the rate of inflation.

45.- In terms of the social dimensions of the programme, the Government's basic strategy is to reduce the general rate of inflation as part of its demand management measures. However, particular attention will also be focussed on the price of the staple items of consumption, and especially maize.

(iii) Removal of Consumer Subsidies

46. Maize is the most important single item of expenditure by the poorest households. ns such, any possible increase in its price as a result of the structural adjustment programme and particular subsidy reductions is a major issue. In this context, the Government plans to cut the subsidy to the Grain Marketing Board (GMB) from Z\$ 59 million in 1990/91 to Z\$ 30 million in 1991/92, Z\$ 18 million in 1992/93, Z\$12 million in 1993/94 and to zero in 1994/95. Currently, the highest consumer prices for maize are already paid in low-income food deficit rural areas where controls on GMB marketing and distribution, limited development of rural markets and the high cost of transport all lead poor households in these areas to pay as much as twice, the urban price of maize and mealie meal in times of food scarcity. The issue is whether the GMB subsidy reductions will-make this situation worse, and what-can be done about it.

47. Wheat subsidies make up a large portion of the consumer subsidies currently provided by the GMB. Although the consumption of bread has been rising rapidly, the wheat subsidies do not primarily benefit the lowest income,groups whose staple food is maize rather than wheat. Similarly for beef and milk, those most

likely to be affected by removal of consumer subsidies are the middle and upper income urban residents, and it is possible that the supply response to decontrol in these areas would increase production of these goods and restrain the market price naturally any way. For these reasons, it is not proposed to focus attention on these other items of food expenditure, nor to moderate the strategy of GMB subsidy reduction in these areas.

48. Until detailed plans of action for deregulation or parastatal rationalization have been completed, there is little definite that can be said about the effects of changes in relative prices of other non-food items on the purchasing power of the lowest income groups. Increases can certainly be expected in the electricity tariffs, in the cost of rail and air transport, and in the price of steel for example. However, the social costs should not be unduly high, especially if specific attempts are made to cross-subsidize low-income households in urban areas and small-scale or informal businesses.

(iv) Removal of Producer Subsidies

49. As in the case of consumer subsidies, the crop of greatest concern is clearly maize, and the danger is that removal of producer subsidies might severely hurt low-income maize producers. Assessment of the social impact of the removal or reduction on producer subsidies will be based on the specific plan of action for the GMB. Nevertheless, several points should be borne in mind. First, much of the marketed maize is produced by large-scale commercial farmers who are far from being in the vulnerable group. Second, within the communal areas, most of the marketed maize is produced by relatively better-off farmers. While it should not be assumed that these farmers are not poor and vulnerable, they are mainly more prosperous than the majority of communal farmers. Third, the poorest of the rural poor (commercial farm laborers and their families, the poorer farmers in the better communal areas, and the majority of those living in food-deficit

areas) are mostly purchasers of maize and maize products. In short, -the reduction or even removal of producer subsidies on maize might not entail serious social costs, although a careful analysis of this issue is warranted.

C. Social Services and Increased Cost Recovery.

(i) Introduction

50. Tremendous advances have been made by Zimbabwe in the provision of social services in the first decade of independence. Infant mortality has dropped dramatically, fertility levels have started to fall, and there has been a vast expansion of schooling. While the gains were partly the result of communities' own efforts, the lead in these programmes was taken by the Government. Social sector spending continued to receive high priority even during difficult economic times, and years of drought, and expenditures were directed towards the poor people in remote areas. For the future, however, the Government has decided to reduce its net spending on the social sectors, both through tightening up expenditures and also through increased cost recovery by programme beneficiaries. In this context, the challenge for the social will be to adjust to the new fiscal realities and objectives, while at the same time protecting the impressive social gains made since independence.

(ii) Macro Context

51. Expenditure by the central government on the social sectors in fiscal years 1990/91 amounts to about Z\$, 1,991 million, or about 13.0 percent of GDP. This includes Z\$ 1,329 million budgeted for the Ministry of Education and culture \$ 203 million for the Ministry of Higher Education, and Z\$.459-million for the Ministry of Health. In the next few years, both health and education will have some reduction in their share of the budget, although the reduction for health will be smaller than that for education. The

main strategy of the Government will be to maintain existing activities to be highly selective about any new areas or items of expenditure, and to recover a higher proportion of costs from beneficiaries.

52. At present revenue from social service charges go to the Treasury, nor but the Government will review this policy to consider allowing the individual social sectors to keep such revenue. In a few cases (such as at Parirenyatwa Hospital) this is already the practice. The latter approach has the advantage that it provides the line ministries with incentives to raise charges and improve collection efforts, and also encourages further decentralization of management (in line with the broad policy statement of the Senior Minister of Finance, Economic Planning and Development).

Sectoral Budget Projections: Health and Education, 1990/91-1994/95

	<u>1990/91</u>	<u>1991/92</u>	<u>1992/93</u>	<u>1993/94</u>	<u>1994/95</u>
<u>Health Budget,</u>					
Nominal terms (Z\$m)	460	552	651	756	872
Real terms (Z\$m)	460	484	510	538	565
Prop. of GDP (%)	2.77	2.77	2.77	2.77	2.77
Prop. of Gov.					
Expenditure (%)	5.6	5.9	6.2	6.4	6.5
<u>Education Budget</u>					
Nominal terms (Z\$m)	1,532	1,797	2,097	2,408	2,747
Real terms (Z\$m)	1,532	1,576	1,642	1,714	1,747
Prop. of GDP (%)	9.97	9.72	9.47	9.24	9.01
Prop. of Gov.					
Expenditure (%)	18.5	18.0	17.6	17.1	16.7
<u>Memorandum Items</u>					
GDP growth rate (%)	4.3	4.4	4.6	4.8	5.0
GDP deflator	0.16	0.14	0.12	0.10	0.10

(iii) Health Sector

53. Over the first decade of independence, the health budget increased in real terms at an annual rate of 4.7 percent, roughly

50 percent faster than the rate of economic growth. Over the period up to 1994/95, the health budget is projected to grow annually at approximately the same rate, with the share of GDP remaining constant and the proportion of central government expenditure rising slightly. This will enable the Ministry of Health to continue to provide critical services throughout the country, and also to improve the quality of care. Managerial improvements, however, will be needed to ensure efficiency of expenditures. The Ministry of Health will also implement second family health project, which will be focussed particularly on 16 mainly remote districts of the country. This project will help to ensure that the rural population does not suffer as a consequence of the structural adjustment programme.

54. At present, revenue from cost recovery is about Z\$ equivalent to about three percent of expenditures) and Z\$60 (equivalent to about 10% of health expenditures or 0.2% of GDP) has been chosen as a target to be achieved by 1994/95. The strategy of the Ministry of Health to achieve this target is to: (i) strengthen efforts to collect fee revenue presently due; and (ii) review and raise upwards hospital fee schedules, at least in line with inflation. The Z\$ 150 household income exemption threshold will be maintained in order for poor people to continue to be entitled to free health care. However, more effort will be made to ensure that only those with incomes less than Z\$ 150 per month are treated with no charge.

(iv) Education Sector

55 The fiscal adjustment required of the education sector will be considerably greater than that of the health sector. At independence spending on education nearly doubled in one year and after that, over the first decade of independence, the trend growth rate was 10.3 percent annually. Together the Ministry of Education and Culture and the Ministry of Higher Education receive about Z\$1,532 million from the Treasury, equivalent to about 10

percent of GDP or about 18.5 percent of central Government expenditure. At present, the Treasury receives about Z\$35 million in tuition and boarding fee revenue from the students in Government schools. Over the period up to FY94/95, however, it is projected that spending by the Government on the education sector will be reduced by about 0.5 percent of GDP--ie to about 8.7 percent of GDP in 1994/95, equivalent to about Z\$1,778 million in constant prices. Even so, the proportion of central government spending on education would still increase from 18.5% to 20.7% of the total. The reduction in spending would be accomplished by a reduction in Government support to those schools that at present receive higher than average subsidies per student. In particular, this would include former A, trust and mission secondary schools. In addition, 0.5% of GDP (ie. equivalent to about Z\$160 million in FY94/95) would be raised through cost recovery, designed to be focussed at the relatively well endowed schools. The system;ns being designed in such a way as to be related to ability to pay and a 'system of exemptions will be introduced for those who cannot pay. Government's assistance will be weighted in favour of the less endowed schools. Scholarship programmes would also be expanded to assist most capable but poor students to attend the best schools.

D. Summary of Social Impact on Structural Adjustment on Vulnerable Groups

56. The following is a summary discussion, by social group, of the issues outlined above. In general, despite the many advantages to be gained through implementation of the structural adjustment programme, there could be negative short-term effects on some vulnerable groups. However, understanding the possible adverse social effects of the policy changes has allowed some fine tuning of policy change to minimize or eliminate the potentially deleterious effects on vulnerable groups, while additional compensatory measures have also been designed.

(i) Urban Formal Sector: Skilled and Semi-Skilled Workers

57. This group is the least likely to be adversely affected by the structural adjustment programmes but there is the possibility of some frictional unemployment for those workers employed in uncompetitive industries. However, given the current shortage of skilled labour, the expected increase in demand for trained workers and the already strong collective bargaining power of skilled and semi-skilled employees, it is expected that these workers in general will have no difficulty in achieving nominal wage levels that more than keep pace with inflation. In fact, given the likely relaxation of wage ceilings, the real earnings of many skilled workers are expected to increase substantially.

58. The removal of consumer price subsidies on such items as wheat, dairy products and beef, as well as increases in the rates charged by public utilities, will presumably raise the cost of living for skilled workers and their families. As food and shelter make up a relatively small share of the total expenditures of this group, however, the relative price effects are unlikely to be severe. An opposite price effect will result from the fall in the price of consumer durables brought on by trade liberalization. Cost recovery in the provision of health services and education will hit this section of the population hardest but in view of the current inequalities of income distribution, the necessity for fiscal restraint, and the fact that this group has previously been receiving significant subsidies when in fact they had the capacity to pay, the social costs involved should not be unduly high and the proposed measures are reasonable.

(ii) Urban Formal Sector: Unskilled/Domestic Workers

59. Workers and their families in this group will undoubtedly be among those who face mixed effects from the structural adjustment programme in the short term. Some unskilled workers may be laid off during economic restructuring, and they would then face great competition in finding new employment. Furthermore, women may be more likely than men to suffer from any retrenchment during the adjustment

process. Additionally, low skills levels and the large pool of unemployed limit the collective bargaining power of unskilled workers. Due to inflation, it is expected that the real earnings of some unskilled workers may be eroded quite significantly, and perhaps 10 percent of this group could drop below the PDL due to a fall in real earnings. As earlier stated, though, the prospects of this group would be even worse with no adjustment programme.

60. The drop in the earnings ability of this group of formal sector workers has clear implications for social welfare. The imposition/increase of fees for health services and especially education, unless carefully designed, could force hard choices to be made between the provision of basic goods and access-to social services. The-proposals for increased social service cost recovery, therefore, need to be accompanied by carefully designed exemption systems. Strategies to maintain the affordability of maize (and to a lesser extent other essential items of expenditure) will be particularly important for them too. The drop in the earnings ability of this group of formal sector workers, together with the difficulties encountered particularly by women in finding employment, reinforce the Government's objective to relax the current limitations on the growth of the informal sector.

(iii) Small-Scale and Informal Sector

61. The overall social impact of the structural adjustment programme for this group will positive, through the liberalization of regulations governing the licensing of small businesses, zoning and factory specifications etc. However, there are several areas where the adjustment programme could negatively impact on the poorest within this sector. First, inflation will raise the cost of inputs. Secondly, any increase in transitional unemployment in the formal sector will increase the number of job-seekers and competition among workers, and perhaps lower the level of average earnings. Finally, it is conceivable (though unlikely) that the increased efficiency of the formal sector, an

expected result of the adjustment process, might lead to a decrease of the market share of the small-scale and informal sector in a few, particular industries. In general, the informal sector is expected to benefit from greater prosperity in the formal sector, especially where there are positive linkages between the two.

(iv) Unemployed

62. Of all the urbana groups, the currently unemployed are likely to face the most severe difficulties during the adjustment process in the short term. The projected temporary increase in inflation, especially in the prices of basic goods, could have a serious negative effect on the standard of living of these most vulnerable group in the cash economy. Again it should be stressed, however, that such problems should be attributed more to the economic difficulties already facing the country, than to the structural adjustment programme itself. However, while the structural adjustment programme is expected to generate additional jobs to the benefit of the presently unemployed (as well as for any retrenched workers and new labour market entrants), this will take time and there will be continued, strong competition for these jobs.

(v) Communal Areas

63. The preponderance of low household incomes in rural areas suggests the need for careful design of any policy change which may negatively affect them. This applies particularly to the cost recovery programmes in the provision of social services and to the reduction in subsidies to the GMB. Specifically, any cost recovery scheme that increases fees in rural areas needs to be carefully examined with regards to its effect in worsening an already severe inequality in income and access to social services. In particular, the welfare and food security of the poorest rural households, in particular could also be threatened by the removal or reduction of consumer subsidies on maize. It is possible that the rationalization of the GMB could in fact lead to reforms in transport and distribution that mitigate any rise in the price of maize for the

poorest rural consumers, but other measures (such as the closure of collection depots in low-production areas) taken to accommodate the reduced subsidy from the government could have a potentially devastating effect on the welfare of poor people in those areas.

64. Rural-urban linkages in the form of labour and capital movements could also carry any negative effects of adjustment from the urban areas into the communal areas. Remittances, largely from urban areas, presently contribute a substantial share of total incomes in the communal areas. Thus, an inflation-induced fall in real incomes in the urban formal sector could also impact on the recipients of transfers in the communal areas, through a reduction in the amount available for remittances.

(vi) Workers on Commercial Farms

65. The overall impact of adjustment for workers on large-scale commercial farms may be mixed. A 10% increase in employment of workers on large-scale commercial farms, as a result of relaxation in the current labour regulations governing hiring and firing, has been predicted by an association of commercial farmers. However, existing farm labourers have limited collective bargaining power and may face wage erosion due to inflation and only modest increases in the minimum wage rate. With agricultural exports expected to expand, however, the potential for increased profits in the commercial farming sector also exists. As with the rural poor in communal areas, any increased cost recovery measures (especially in education) could have a strong adverse impact on commercial farm laborers and their families.

(vii) Women

66. Any negative effects of adjustment felt by the rural poor, unskilled urban workers and the unemployed would be particularly felt by women simply because of their disproportionate numbers. Furthermore, there may be gender differentials in the social costs of adjustment in a variety of other ways. For instance, additional cost recovery in the

education sector may erode progress made in improving the educational status of women. If families with extremely limited resources are asked to pay increased school fees particularly at the primary level, girls are likely to lose out more than boys in view of the existing socio-cultural value system. This is already happening in secondary schools, where tuition fees are charged. Second, the higher age profile of urban unemployed women suggests that women may have greater difficulties during any period of frictional unemployment and also that they may have less opportunities for retraining. Third, women may suffer more from any increased barriers to entry in the informal sector as they generally have less start-up capital than their male counterparts. For all of these reasons, particular care are being taken in considering gender implications in the specific details of the design of the structural adjustment-measures and also of the compensatory activities.

IV. Compensatory Measures

67. Although the overall effects of the structural adjustment programme will undoubtedly be positive, and while particular care has been taken to minimize any deleterious social effects on poor and vulnerable groups in the design of the programme, some compensatory activities and programmes will also be implemented to provide further protection for them during the adjustment process.

68. Training systems will be strengthened to ensure the provision of the necessary human resources for economic growth, as well as to provide for anyone retrenched by the adjustment measures. Currently, the Ministry of Higher Education (MHE) is working on a manpower development plan, and the Government strategy will include both measures to encourage more training to be financed and carried out by the private sector itself, and also measures to improve its own training programmes. At present, the MHE provides technical and vocational training at seven technical colleges located in urban areas throughout the country and at two vocational training centers (VTCs) located in Msasa and Westgate. Although the VTCs would be suitable for providing any Government-sponsored retraining efforts, currently they have the capacity to train

only 2,000 workers at any time. The VTCs do not have the necessary capacity to cope with the potential retraining needs, not to mention the training requirements for the unskilled workers and the currently unemployed. While strengthening of the TTC's and VTC's will be critical to the success of the structural adjustment programme, several innovations could be made to their programmes. For example, the capacity of the existing VTCs could be expanded through double-shifting and/or the design of short-term programmes focussed to meet the needs of target industries. Evening courses could also be established in the technical colleges to accommodate the needs of industry for upgrading programmes, and mobile training units could be attached to each technical college to allow the MHE greater flexibility in responding to specific on-site industrial training requirements.

69. To assist retrenched workers interested in establishing their own small-scale businesses, as well as existing and emerging entrepreneurs, the Government will make every effort to ensure greater credit flows from the formal banking system to the informal and small-scale sectors. Currently the Reserve Bank sets performance targets for commercial banks to provide 5 percent of their total lending small and newly established black-owned enterprises. Also, several banks have organized special schemes on their own for financing small enterprise development. The Government will widen the scope of such schemes so that greater amounts of credit from the formal credit system flow to new enterprises in the informal sector, thus supplementing financing which it derives from the existing sources such as the collective self-finance scheme, rotating saving and credit associations and the Zimbabwe Women Finance Trust, etc. These changes will be taken within the broader adjustment to be made in monetary policy.

70. The Government that small enterprises in the informal sector entail greater risks than the established firms in the formal sector. To alleviate the difficulties arising out of the perception by banks of high risk in lending to the informal sector, the Government will also extend the coverage of informal sector enterprises by the Credit Guarantee Company (CGC) and raise the guarantee of share of the

CGC. Bringing the informal sector increasingly within the orbit of the CGC will enable small business people to have greater access to the informal banking system. Since it is the access to such sources of credit more than its costs that is critical, the informal sector will develop more rapidly and healthily as access to credit improves.

71. The Government has also decided to set aside a provisional amount equivalent to 35% of the wages and salaries saved to be as a "safety net" to cover the costs of retraining any civil servants who want and request it. This retraining could be done in public or private training facilities. This amount would equal four months' salary on average for each retrenched worker and the total would come to Z\$ 14 million in 1991/92, Z\$ 21 million in 1992/93, Z\$ 24 million in 1993/94 and Z\$10 million in 1994/95. However, this sum would be additional to the commuted pensions which would be paid in line with existing provisions for any civil servant whose post is abolished.

72. As far as the parastatals are concerned, if retrenchment is required for them to be efficient then the respective parastatals would also make any necessary compensatory payments to their workers in line with existing provisions. The costs of these payments would be covered from the parastatals' normal budgets without any additional support from the government. As early stated, retrenchment within the parastatals is not expected to be a major problem but the issue will be handled as part of the individual restructuring plans for each of the.

73. In the case of the private sector, employers would be required to compensate any retrenched civil servants in line with the new guidelines. These guidelines balance obligations of employers to assist retrenched employees with the need to avoid overly generous provisions which might increase reluctance of employers to take on additional manpower.

74. The commitment to cut parastatal subsidies provides an excellent opportunity to review the system of grain marketing, while at the same time improving the efficiency of the GMB. In particular,

relaxation of the control of movement of grain among communal areas, use of GMB collection points as local distribution points, and the encouragement of small-scale rural distributors and millers (through relaxation of current transport regulations and the admission of small-scale buyers to the maize market) could significantly help to improve food security for low-income families and also reduce costs for the GMB. In this way, any potential increase in the consumer price of the staple food for poor people (due to the removal of GMB consumer subsidies) could be mitigated by policy change to increase the efficiency of grain marketing. However, reductions in transport subsidies could tend to raise the price of maize further, as could the pressure on the GMB to reduce its expenditures. The reduction of Governmental subsidies to the GMB, therefore, is being carefully coordinated with the process of grain market liberalization.

75. In view of the sensitivity of the maize price issue, the need to induce greater efficiency in the GMB, the critical importance of ensuring that poor people have access to grain at an affordable price, and the possible negative effects that a reduction or even removal of consumer subsidies on maize might have on some vulnerable groups, it has been decided that 30 percent of the fiscal savings resulting from the subsidy reduction for the GMB should be set aside as a further "safety net" to be used to cover the costs of any necessary continuing or new payments for social welfare purposes. The proposed subsidies to be provided to the GMB for "social" activities would amount to Z\$ 9 million in 1991/92, Z\$14 million in 1993/94 and Z\$ 18 million annually thereafter. As the reductions in the basic subsidy from the Government to the GMB would be falling at a faster rate, however, there would still be a decline in the fiscal burden for the Government.

76. Deleterious social effects of the fiscal strategy for the health sector should be minimal. The maintenance of the Z\$150 threshold will mean that very few people in rural areas (where the majority of the poor are located) will pay fees for health care. To the extent that the commercial farm workers, for example, have wage increases bringing their compensation above the threshold level, then some additional people

would have to pay - but this would probably not be a widespread phenomenon. Of more concern would be potentially adverse effects in the urban and semi-urban areas. By definition it is difficult for the unemployed to prove their status and income level, in contrast to poorly paid workers who could demonstrate that their wages are below the Z\$ 150 threshold level. In their efforts to try to minimize evasion of health fees, there would be a danger that genuinely poor patients might face charges. The Department of Social Welfare already has staff trained and deployed to identify indigents and to issue them with cards exempting them from paying health fees etc, and some of these will be based within the major health facilities themselves. While it is difficult to see any perfect solution to the problem of identifying the truly indigent and those unable to pay the basic fees, it is felt that the existing problem is not unduly large and that the present arrangements and procedures are manageable to protect at least most of those genuinely in need in the urban areas during the process of structural adjustment. This issue will, however, be kept under constant review.

77. In addition to the fee exemption level, the Government will also take further measures to protect and improve the welfare of a large number of people in rural areas through implementation of the recently-designed second family health project. An initial project has already been implemented by the Ministry of Health and Zimbabwe National Family Planning Council in eight selected districts of the country, and the new project will extend the approach into sixteen more districts (many of which are particularly poor and remote). Indeed, 40 percent of the entire population of the country is expected to benefit from the new project. The total cost of the project is estimated to be about U.S. \$100 million, and it will be supported partly by a World Bank loan. Some grant cofinancing has already been committed by several donors, but additional grant or concessional external support is now being sought.

78. Government strategy for cost recovery in education is to introduce a system of school fees based on ability to pay, and to design a system of assistance based on the relative endowment of each school. It is recognized that such a system is complex to design, and if it has

to be effective in catering for those who are unable to pay, it has to be thought out carefully. For this reason, Government has delayed the introduction of a comprehensive cost recovery system in education until late in 1991. When cost recovery is introduced, there will be measures to avoid low income and poor families being adversely affected. As part of the package, Government is proposing to set up a scholarship fund which will be used to pay school fees for those who cannot afford them.

V. Monitoring and Evaluation.

79. The effects of the structural adjustment programme monitored closely, not only retrospectively to assess whether the objectives have been achieved, but particularly to enable mid-course corrections to be made where necessary. Clearly monitoring is needed of the main economic aggregates, but of equal-importance is the need for monitoring of the social effects of the programme. In this context, it should be noted that poverty reduction is one of the specific aims of the programme, and also; that nutritional status has been chosen as a proxy indicator of social welfare.

80. In order to monitor the programme's effects systematically, there is need for baseline data on the critical indicators and a system for data collection and analysis over the period of the adjustment programme. As far as the social effects are concerned, particular use will be made of three monitoring systems--household income and expenditure surveys; an extension of the existing national household survey capability and the nutritional surveillance system, which is part of the national health information system. However, some strengthening of other data and information systems will also be needed.

81. Much of the existing information on socio-economic profiles in Zimbabwe is based on the 1984/85 income and expenditure survey. The Central Statistical Office is presently conducting a follow-up survey, with four quarterly rounds being conducted in the period July 1991. By March some data will have been processed from the first round of that survey, and it will help to establish a baseline for some of the

economic parameters to be monitored. When data from all four rounds of collection have been assembled by late 1991, a much more detailed information set will be available. Another survey will definitely be carried out towards the end of the current adjustment period in 1994/95, and intermittent additional surveys will also be considered. Second, supplementing these surveys will be an extension of the present system of household surveys. Thirdly, collection of time series data on nutritional status especially of under five year old children will add greatly to understanding the impact of the adjustment programme on poor and vulnerable groups. The existing nutritional surveillance system is already operating well, though some aspects of it will be strengthened to ensure rapid and disaggregated data processing. Nutritional data will be of particular importance in providing decision-makers with key information on potential adverse effects of the adjustment programme especially in rural and peri-urban areas. Finally, other data systems will also be strengthened to provide additional information for monitoring purposes. In particular, labor market information systems will be enhanced in order to generate more data on the extent of unemployment, new job openings and labor requirements. This will further help to reduce the extent of frictional unemployment.

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