AN ANALYSIS OF HOUSEHOLD CONSUMPTION PATTERNS IN ETHIOPIA

A Thesis
Presented to the
School of Graduate Studies
Addis Ababa University

In Partial Fulfillment
of the Requirments for the Degree
Master of Science in
Economic Development and Planning

---

by
Dejene Aredo
June 1982

ADDIS ABABA UNIVERSITY

School of Graduate Studies

AN ANALYSIS OF HOUSEHOLD CONSUMPTION PATTERNS IN ETHIOPIA

By

Dejene Aredo

College of Social Sciences

Approval by Board of Examiners:

Fisseha Tegegne

Chairman, Department Graduate Committee

Teshome Mulat

Advisor

Examiner

Examiner

Examiner

ABSTRACT

The point of departure of this study was an examination of the limitations of the traditional approach to consumption analysis in the developing countries. An alternative approach was developed and applied to the socio-economic realities of post-revolutionary Ethiopia. The approaches permitted one to analyse household consumption patterns of the country from different angles. The study suggested that those who are concerned with consumption planning could be able to contribute more to the development of the national economy by reconsidering their approach to the subject.

ACKNOWLEDGEMENTS

I wish to express my grateful thanks to Dr. Teshome Mulat, my advisor, who has been a constant source of helpful guidance during the preparation of this thesis.

I am also indebted to all those who have helped me in one way or another in the preparation and completion of this study.

ACKNOWLEDGEMENTS

I wish to express my grateful thanks to Dr. Teshome Mulat, my advisor, who has been a constant source of helpful guidance during the preparation of this thesis.

I am also indebted to all those who have helped me in one way or another in the preparation and completion of this study.

TABLE OF CONTENTS

		PAGE
ACKNOWLEDGEMENTS		i
LIST OF TABLES		ii
CHAPTER		
I	INTRODUCTION	1
	NOTES	3
II	A CRITICAL EVALUATION OF THE POSTULATES OF-TRADITIONAL CONSUMPTION THEORY	4
	A. The Theory of Consumer Behabiour	
	B. The theory of Aggregate Consumption Functions	
	NOTES	11
III	AN ALTERNATIVE APPROACH TO CONSUMPTION ANALYSIS	13
	NOTES	21
IV	CONSUMPTION MODELS AND NATIONAL ECONOMIC PLANNING	22
	A. The Theory of Optional Saving	
	B. Structural Change and Consumption	
	C. Planning the Structure and Volume of-Consumption	
	D. Consumption Planning in Ethiopia?	
	NOTES	30
V	THE CHANGING ENVIRONMENT: INSTITUTIONAL DEVELOPMENT IN SOCIALIST ETHIOPIA	32
	NOTES	40
VI	THE IMPACT OF THE RURAL LAND REFORM ON-CONSUMPTION OF FARMERS: A PREUMINARY ANALYSIS	41
	NOTES	48
VII	THE CONSUMPTION OF FOOD IN ETHIOPIA	49
	NOTES	54
VIII	ESTIMATION OF COEFFICIENTS OF INCOME ESLASTICITIES FOR SAMPLE HOUSEHOLD URBAN WAGE AND SLARY-EARNERS	55
	A. The Importance of Family Budget Analysis	
	B. The Sample	
	C. Specification of the Model	
	D. Interpretation of the results and policy-implications	
	NOTES	70
IX	CONCLUSIONS AND IMPLICATIONS OF THE STUDY	71
	BIBLIOGRAPHY	74

LIST OF TABLES

TABLE		PAGE
1.	The Intertemporal Method of Acceleration	23
2.	Purchase and Selling Prices of Selected Agricultural Products for 1973 E.C.	36
3.	Income Distribution before and after the Rural Land-Reform Proclamation	43
4.	Average Income from Crop Production Per/Household-before and after the Rural Land Reform Proclamation	43
5.	The MPC and MPS of sample household in Chilalo Arbagugu and Ticho	45
6.	Average Annual Expenditure Per Household.....	46
7.	Production of Selected Industrially Processed Food-for 1981	50
8.	The Share of Food in total Budget of Urban and Rural Areas	51
9.	Food Supply (excluding fish) in Ethiopia (per caput per day)	52
10.	Size of the Data	57
11.	Aggregation of Outlays during the Survey Month, 1975.	61
12.	Expenditure Eleasticities and Other Results	64
13.	International Comparation-Expenditure Elasticities..	67

CHAPTER I

INTRODUCTION

Consumption is an important determinant of the level of material well-being of the people, and as such it can be taken as one of the important success indicators of the performance of an economy. Personal consumption accounts for about 79 per cent of the GDP in the country. It can be assumed that it will assmume more and more important as the economy grows. Extensive and intensive research into the factors that determine the changes in the level and composition of future demand constitutes an important aspect of national economic planning.

However, so far researcher attempt to analyze the patterns of consumption in the country by following the conventional approach in spite of the fact that Ethiopia, being a developing country, has certain features which may lessen the importance of traditional consumption theory as a framework for practical research. For example, Ostby and Taye Gulilat[1], and Asmerom Kidane[2] attempted to make demand analysis in Ethiopia within the context of traditional consumption theory. Moreover, institutional factors may be important determinants of consumption patterns. Thus, an examination of all the relevant factors may be in order. In socialist Ethiopia old institutions are giving way to new ones. These institutions and their effects on personal consumption must be studied. In addition, trends in the development of consumption should be identified.

In this study, it is hoped, the possibilities of exploring an alternative approach to consumption analysis in a transitional society, such as Ethiopia, will be examined. In addition, this study may be an eye-opener to policy-makers and planners by examining the problems of the political economy of the transition period as far as the contraditions betwen consumption and accumulation are involved.

NOTES

CHAPTER I

1. Ostby and Taye Gulilat, "A statistical Study of the Households Expenditure in Addis Ababa", Eastern African Economic Review, Vol.1, No.2, December 1969.

2. Asmerom Kidane, The Demand and Price Structure for Selected Food Products in Ethiopia: An Econometric and Spectoral Analysis (Ph.D. Disertation), The Penaylvannia State University, 1973.

CHAPTER II

A CRITICAL EVALUATION OF THE POSTULATES OF TRADITIONAL CONSUMPTION THEORY

A. THE THEORY OF CONSUMER BEHAVIOR

In what follows an attempt will be made to present a critical evaluation of the assumptions of the neo-classical theory of consumer behavior as had been developed by Slutky[1]; Hicks and Allen[2] and Samuelson.[3] The evaluation will be made in relation to the problems of national economic planning in developing countries in general, and Ethiopia, in particular without claims to a formal account of demand theory and the critique of its logic.

First, we will consider the implicit assumptions of consumer theory. An important assumption of the theory is the doctrine of consumers' sovereignity. One form of this doctrine is that consumers' choices influence the patterns of allocation of resources through the free market system. The implication of this postulate is that primacy is given to consumption via-à-vis production. However, the primacey of production cannot be doubted when we consider the laws of socio-economic development, let alone the objective conditions of developing economies. Marx, for example, stated that production determines consumption in different ways. He noted, that "...production produces consumption (1) by creating material for it (2) by determining the mode of consumption (3) by developing consumer needs for those products which only it has created as an object."[4] However, this is not to deny the importance of consumption. Thus, Marx stated that "without production there is no consumption; but without consumption there is no production. It is consumption which by destroying the goods gives it a finishing touch; the product is a product not only as an activity transformed into an object but only as an object for an active subject."[5]

The doctrine of consumers' sovereignity postulates that the individuals choices can be taken as the dominant factor that determines the allocation of resources in a free market economy.[6] However, the relevance of this doctrine, perhaps, becomes even more questionable when we consider developing economies such as that of Ethiopia where the market mechanism itself is imperfect and the allocation of extremely scarce resources is expected to be guided largely through plans. One aspect of these plans is to allocate resources efficiently between the present and the future generation. However, it is unlikely that planners, say, in Ethiopian can mobilize investible funds by relying primarily upon individual preferences in an effort to maximize future consumption. Mouric Dobb, for example, notesthat "when it comes to choices extending over time, individual preferences are notoriously irrational and exhibit a tendency to myopic understimation of the future, due to what Professor Pigou has aptly termed 'deficiency of telescopic faculty' in individuals a consideration which is relevant not only to the choice between present consumption and saving, but also to the choice between durable and non-durable goods."[7]

A related assumption is that of independence of consumers' choices. It seems unlikely that the individual's preferences are originated and shaped in insolation. The formation of preferences is to a large extent a social process, in which imitation and differentiation are important elements. Duesenbery's relative income hypothesis and the Veblenesque effects can be cited.[8] Thus Dobb, for example, argued that "the consumer and his wants are a social product, moulded both by the commodities which enter into his experience and by the social standards and customs among which he has been reared.[9] The practical importance of this proposition is that planners and policy-makers can shape consumers' preferences, for example, through the production of new products or restriction of the production of old ones.

The theory of consumer behavior is to a large extent abstracted from some institutional set-ups that are today important in developing countries in general and in the socialist ones, in particular. The disregard of price control is a case in point. Any theory that purports to be realistic within the context of national economic planning in developing countries must incomporate price control as one of its datum to the system.[10]

Traditional consumption theory explicitly assumes that tastes (covering all non-economic factors such as age, family size, social class, geographic location etc.) remain stable in the short period. That is, patterns of consumption in the short period are assumed to be essentially influenced by economic factors (prices and income) alone. This postulate may pass empirical test, in particular, in developed economies.[11] However, tastes may significantly change in fast-growing economies even inthe short period.[12] For example, substantial migration of people from rural to urban areas may take place in a period of less than ten years thus affecting the overall consumption parameters. In the second place, national economic planning in developing countries is to a great extent concerned with long term dynamics of consumption instead of concentrating on the problems of marginal adjustment around a stationary equilibrium. An economy that is experiencing a structural transformation in likely to be characterized by displacement, uncertainity and a disequilibrium path of growth. Dobb, for example, noted that "it becomes apparent that dynamic growth-path may be highly unstable; that so called adjustment processes may involve fluctuations which can even be cumulative, or at least self-perpetuating; and even when fluctuations are of self-damping kind, the process of convergence may occupy quite a long stretch of time."[13] Thus, it seems self-evident that possibilities of changes in tastes should be incorporated into consumption models. Later on we shall see that empirical demand analysis

takes into account possible changes in tastes through the use of the disaggregated approach of family budget analysis.

Rationality of the consumer is another assumption of traditional theory of the consumer that deserves some mention. This assumption has already been subjected to vehement attacks by some orthodox economists.[14] The main weakness of this assumption is that it is based upon the premises that the consumer is a culculative economic agent who maximizes unitility subject to the budget constraint. However, the consumer is usually influenced by impulse, tradition, habit, etc. in the process of decision-making. The assumption of rationality of the consumer may be more unrealistic within the context of developing economies where rational utilization of extremely scarce resources is one of the burning issues. Most Ethiopians, for example, could have boosted their consumption of proteins and, directly or indirectly, constributed to the effort of capital formation by increasing their consumption of fish not only during the fasting periods, but also during the non-fasting periods. One can also imagine the possible effects of the use of school uniforms on household expenditure on children's clothing.

B. THE THEORY OF AGGREGATE CONSUMPTION

The Keynesian consumption model is essentially devoid of its own theoretical basis. Shigetu Tsuru, for example noted that "the aggregate relations such as consumption function... has first been established as an empirical relation based upon statistical observations and has no claim for theoretical bais except as it is supported by facts."[15] The ultimate theoretical foundation of macroeconomic theory is essentially micro-economics. Keynes' "fundamental phychological law."[16] can be cited as an example, Individualism, the paradigm of orthodox economics, no doubt, constitutes the starting point of traditional consumption theory though the economist is little interested in the behavior of a single individual.

The micro foundation of macro economics of consumption creates some theoretical and empirical problems. Some of the problems may be raised in the form of questions. Is aggregation over individuals possible in view of the existence of different individual unility functions? Do Linear Engel curves for individuals imply a relation between aggregate consumption and aggregate income? To what extent is the approach of using "the representative consumer" theoretically and empirically plausible?[17]

In what follows an attempt will be made to examine the relevance of traditional consumption theory to developing economies in general and that of Ethiopia, in particular.

Traditional consumption functions were originated and developed within the content of matured capitalist economies that were subjected to periodic recessions mainly due to insufficienty of effective aggregate demand (of which personal consumption is a major componant.)[18] Developing countries, on the other hand, are experiencing insufficiency of not aggregate demand but that of production. Moreover, these countries are characterized by dualistic economies in which, in most cases, traditional agriculture plays a dominant role in the generation of exmployment possibilities.[19]

In the traditional consumption theory income is commonly regarded as the most important determinant of private consumption. However, there is little agreement among economists either on which concept of income is most relevant for this purpose or on the precise way in which private consumption and income are related. The most important hypotheses can be grouped into three categories, namely the current or absolute income hypothesis of Keynes,[20] the relative income hypothesis of Duesenbarry[21] and the permanent income hypothesis of Friedman[22] and others.

One of the implications of the current income hypothesis of Keynes is that the ratio of consumption to income falls as the level of income rises.

However, the validity of this proposition with regard to developing countries is not yet conclusively established.

Duesenberry's relative income hypothesis may have relevance to developing economies in view of the fact that it takes into account interdependence of patterns of consumption (e.g. the demonstration effect) and the effects of income distribution on consumption, consequently, on the rate of saving.[24]

The relevance of the permanent income hypothesis of Friedman can be questionable in view of the possibility that a significant number of people in developing countries largely live at or near the subsistence level without having a cushion against a sudden fall in income thus depending on current income to a large extent. Moreover, a lack or weaknesses of social welfare provisions and financial intermediaries in developing countries may reduce the importance of permanent income. In addition, the planning horizon of the peasant may be short (perhaps as short as a crop year) depending upon the vagaries of nature.[25]

The life-cycle hypothesis of Ando and Modigliani[26] which can be included under the permanent income hypothesis, also suffers from certain shortcomings. The implication of this hypothesis for developing countries is not clear. For example, it is not clear wether the hypothesis implies that the consumption-income ratio tends to be low (hence a high rate of saving) in the countries where the proportion of young people is large.[27]

So far we have been concerned with the relationship of aggregate consumption (hence aggregate saving) and aggregate income. However, this type of approach may not sufficiently explain the patterns of consumption in developing countries that are largely characterized by socio-economic dualism. The structural approach to consumption patterns may be of some relevance to these countries. The basis of this approach is the hypothesis that rural people and urban dwellers have different patterns of consumption.[28]

One implication of this propostion is that consumption behavior may also depend on other things other than income. For example, the income and spending time horizon for many farmers may be as long as a year in a country where agriculture is single-crop-a year type while this may be a month in the urban areas. Consequently, the marginal propersity to consume may be lower in rural areas. Moreover decisions to spend my be influenced by the decisions concerning farm production.[29]

The policy implications of the aggregate approach and structural approach seems far reaching. The hypothesis that consumption (hence saving) is determined by the level of current income implies that the rate of aggregate saving can be increased by a policy of income redistributuon in favour of the saving class, ie. the rich section of society.[30] However, such a policy seems unlikely in view of the possibility that the traditional ruling class utilises the economic surplus unproductively.[31] On the contrary, the rate of accumulation can be accelerated by egalitarian type of income distribution by reducing or eliminating excess consumption.[32]

To sum up our discussion regarding the applicability of traditional consumption theory to developing countries that are attempting to transform their economies through plans we will refer to Janos Kornai who has long and fruitful experience in national economic planning in Hungary:

> Undeniably, consumption theory has achieved many valuable results and the sophistication of its apparatus is impressive yet, in the course of working out the long term plan, planners found that, indeed, they did not receive much help from consumption theory. May, be the theoreticians of consumption have devoted too much energy to analysing the interrrelations between prices and income and to fitting the theoretical construction of the demand functions into the exiomatic utility theory. But there is as yet little empirical material and theoretical gneralisation about the long-term historical main streams' of the consumption patterns, about their internationally valid tendercies. Theory gets entangled--- in the 'tactical' problems of consumption while the 'strategy', the study of fundamental complementarity phenomena gets lost.[33]

It seems that it is high time to develop a consumption theory that takes into account the realities of developing economies.

NOTES

CHAPTER II

1. E.Slutsky, "On the theory of the Budget of the consumer" Readings in Price Theory, eds. Stigler et al (1915)

2. J.R. Hicks and D. Allen, "A Reconsideration of the Theory of Value," Economica (1934). See also Hicks Value and capital (1939)

3. Samuelson, P.A. Foundations of Economic Analysis (Harvard University Press, 1947)

4. Marx, Introduction to the Critique of Political Economy

5. Ibid

6. The weakness of this doctrine with respect to capitalist economies is also questioned for example, Dobb Wondered whether "few, surely could seriously maintain that the amount of and sort of music to be played by the B.B.C. should be decided by a market mechanism?". Dobb, On Economic theory and Socialism (1953)

7. Ibid

8. H.S. Houthakker, "The Present State of Consumption Theory: A survey of Articles, " Econometrica vol.28 p.733

9. Dobb, Ibid

10. H.K. Manmohan Singh, Demand Theory and Economic calculation in a Mixed economy (London, George Allen and Unewin Ltd. 1963), this is one of the few works that examines the relevance of traditional economic theory to developing countries. The approach of this section partially draws from Singh

11. See, for example, H. Wold, Demand Analysis (1953); R. Stone, Consumer wants and expenditure: A Survey of British studies since 1945 Cambridge 1961)

12. The short period in assumed to be less than ten years. See Kelley et al Dualistic Economic Development. Dobb, Welfare Economics and the Economics of socialism O.227. Problems of long term dynamics of consumption are occasionally raised in traditional economic theory but under a different context. See, for example Houthakker op cit.

13. Dobb, Ibid. pp.122-123

14. See for example F.H. Knight, "Ethics and the economic interpretation" Q.J.E. 1922 and G. Katona, Psychological Analysis of Economic Behaviour, 1951. Fortthe defense of this assumption see stigler, the Theory of Price,(1941)

15. S. Tsurn "Keynes VS Marx- The Methodology of Aggregates" in D. Horowitz ed, Marx and Modern Economics (New York: Monthly Review Press) pp 176-202

16. J.M. Keynes, The Geveral Theory of Employment, Interest and Money (Harcourt, Brace, 1936)

17. For systematic work on the problems of aggregation see Theil, Linear Aggregation of Economic Relations (Amesterdam: North Holland, 1954). See also K-Fox, Intermediate Economic Statistics pp.495-536. Cramer, Epirical Economietrics; Sen "Interpersonal Aggregation and Partial comparability," Econometrica 38; H. Theil, Principles of Econometrics; Luch et al. Patterns in Household Demand and Savings (Oxford University Press, 1977)

18. Keynes op cit

19. For up-to-date examination of the theory and practice of dualism see Kelly et al, op cit.

20. Keynes, op cit

21. James, S. Duesenberry, Income, Saving and the Theory of consumer Behaviour (Cambridge, Mass.; Harvard University Press, 1949)

22. Milton Friedman, A Theory of the Consumption Function, Princeton University Press, 1957) The life-cycle hypothesis of Ando and Modigliani can also be included under the permanent income hypothesis. Both hypothesis are similar in principles. Both stress the importance of normal income vis-a-vis current income see John Lindauer, Macroeconomics, (John Wiley and Sons; 1976)

23. See, for example H.S. Houthakker, "On Some determinants of saving in Developed and undeveloped countries: Problems of Economics Development ed.. E.A. Robinson (New York: Macmillan, 1965)

24. See, for example, Ajikk - Dasgupta, Economic Theory and the Developing Countries (New York, St, Martin Press, 1974) p.39

25. See for example Dasgupta, op cit and Byung-Nakson " Empirical Research on consumption Behaviour: Evidence from Richard Poor LDCs, "Economic Development and Cultural change; vol.29 no.3, April 1981

26. A. Ando and F. Modigliani, "The Life-cycle Hypothesis of Savings: Aggregate Implications and Tests, "American Economic Review, LIII (March 1963)

27. U. Tun Wai, Financial Intermediaries and National Savings in Developing countries (New York: Praeger, 1972)

28. See, for example kelley op cit; Lluch op cit, Song op cit

29. Ibid

30. See, for example, W. Arthur Lewis, "Economic Development with Unlimited supply of labour, The Manchester School (May 1954)

31. See Paul Baran, The Political Economy of Growth, the concept of "The economic surplus' in particular. See also Ausgupta op cit pp 40-3

32. Haran op oit

33. Kornai, op cit pp.34-35

CHAPTER III

AN ALTERNATIVE APPROACH TO CONSUMPTION ANALYSIS?

In the last chapter we saw that traditional consumption theory in important respects fails to explain the realities of the developing countries. This problem may be even more serious when we consider the objective conditions of traditional societies such as that of Ethiopia. The developing countries, in the words of Gunnar Myrdal, "should not accept this [traditional economic theory] uncritically but remould it to fit their own problems and interest."[1] Therefore, it seems the duty of the young economitsts in the developing world to develop new approaches to the problems of economic development. The duty of the young economist in this sense was, for example, enanciated by Myrdal as follows:

> I would instead wish them the young economists to have the courage to throw away large structures of meansingless, irrelevant and sometimes blantly inadequate doctrines and theoretical approaches, and to start their thinking a-fresh from a study of their own needs and problems... They would then find that many old and familiar arguments and theorems become useful when adjusted to fit into a new frame.[2]

Obviously, it may be presumptious to develop a new approach to consumption analysis in this study. However, an attempt will be made to make some tentative departure from the traditional approach by introducting the following propostions which will constitute the main approach of this study:

1. The Lancaster Framework[3] can be useful in constructing consumption models in developing economies. That is, efficiency in consumption can be attained theoretically and practically in a more or less similiar fasion as efficiency in production.
2. All relevant factors, including social, political, cultural factors must be taken into account in consumption analysis.

3. Consumption analysis can be meaningful and practical, if carried out within the context of national economic planning.

4. The longterm dynamics and also the complexity of consumption should be taken into account in consumption analysis.

5. Some use can be made out of traditional consumption theory.

In what follows an attempt will be made to explain these propositions one by one, the first one in particular.

Efficiency in Consumption (the Lancaster Framework): There is abundance of evidence concerning production efficiency while almost none exists on consumption efficiency.[4] Kelvin Lancaster[5] attempted to show that in consumption, alike in production, inputs can be combined in alternative ways to produce given level of output (characteristics" to use Lancaster's term). Thus, Lancaster noted, "the set of all possible consumption activities forms the consumption technology... the consumption technology will relate goods on the one hand with characteristics on the other."[6] Hence, the applicability, of this model to a planned economy cannot be over emphasized as we shall see in chapter IV in connection with the normative method of consumption planning. The model can also explain consumer behavior during war economy such as that Ethiopia is experiencing to day, where circumstances (shortage of goods and services and the accompanying rationing system and queues) can preasurise consumer to be efficient in consumption mainly due to changes in relative prices of commodities. A striking example can be the efficiency in the consumption of injera that was forced upon Addis Ababans during the Somali war of aggression. Injera could be prepared either from white teff (the most expensive and the most preferred one, perhaps, not the most nutritious), red teff, sorghum, barley or maize. Injera made from maize (considered to be inferior) was rarely consumed in Addis Ababa before the revolution. People used to say that maize was for horses not for human beings. However,

during the war there was extreme shortage of grain, in particular teff virtually disappeared from the markets. It was at this time that housewives, out of necessity, started experimenting in the technology of consumption. They were able to prepare white injera from maize. Not only that, they combined sorghum and teff to produce a good type of injera. Perhaps, they knew by intuition that "in a society at subsistence level the in efficient consumer may not survive."[7] Thus almost the same characteristics were produced by attaining the most efficient combination of the input under the given constraints.

An important implication of the Lancaster model is that consumption should be subjected to planning. Knowledge of all possible alternative combinations of consumption inputs and efficiency in its management are not only desirable but possible. Otherwise inefficiency in consumption may reduce the quality and (or) quantity of the characteristics. Thus, Lancaster noted that "in consumption, as in production, the prime reasons for inefficient use of the existing technology are ignorance and lack of managerial skill."[8] Hence, the technology of consumption should be mastered at the level of macroeconomic planning as well as the micro level (the kitchen). The later level of planning underlines the importance of home economics as far one of the most abhorred subject in the comprehensive high schools through-out the country.

One of the basic elements of the consumption efficiency approach is knowledge-knowledge of the existence od alternative imput of consumption, knowledge of all possible combinations of input, knowledge of relative prices, etc. Thus, Lancaster observed that:

> The consumer may not be aware of that a certain good possesses certain characteristics or that certain goods may be used in a particularly combination to give a specified bandle of characteristics. Producers or sellers may use advertising to ensure that no characteristics of their product regarded as particularly desirable should go unoticed by consumers. They will go to less pains to ensure that consumers are aware of some other characteristics of their product.[9]

Hence, the importance of education in influencing the patterns of consumption cannot be overemphasized. A simple example can drive home this point. It is well-known that the consumption of fish in Ethiopia is extremely low in spite of the fact that the country presumably has a huge reserve of fish and that this food item is highly nutritious. Education of consumers' therefore, combined with other factors such as the provision of complementary goods (e.g. food-oil), can boost the consumption of fish in the country. To cite another example, many of us may think that the only source of commercial milk is the cow. However, the Ethiopian Nutrition institute (ENI) has already produced milk from soya beans. Soya-milk can supplement natural milk and can, in particular, be used widely during the long fasting periods of the members of the orthodox church.

Consumption efficiency, which has its precursor in the problems of minimization of cost in dietary planning[10] is today applied to consumption planning in the Soviet Union within the context of the national budget as we shall see in chapter IV.

Factors that can Influence Consumption Patterns: Traditional consumption theory, as was shown above, considers income and prices, as the major determinants of consumption. However, even if we take income as one of the major determinants of consumption problems may be encountered in the practical problems of demand projections due to the assumpiton that income is given. This problem was for example, raised by delegates from Latin American countries at a meeting held in Santiago in 1969 concerning FAO's methods of demand projections. Several delegates thought that the income elasticities of demand used in FAO study, "and consequently, the demand projections were themselves unrealistically low and that the main reason why Indicative World Plan (IWP) applied low elasticities was because its calculations did not take into account the impact of possible changes in income distribution."[11] It was after this meeting that the FAO started

considering the possibilites of income distribution in its models. The Ethiopian realities, as we shall see below, can be a further testimony to this proposition. In addition price control which is implicitly assumed non-existent in the theory of consumer behavior can be an important institutional factor that can influence consumption patterns. Moreover, both income and price can be used as policy instruments for equating the demand and supply of consumer goods.

Economic factors alone (income and prices) may fail to explain consumption patterns. Eshag and Rosmarry, for example noted that "the operation of any economic measures in a country is strongly influenced by the institutional factors and by the political and economic donditions."[12] That is, perhaps, why Janos Kornai[13] mentioned five factors as the important determinants of consumption. These are income itself, social circumstances (e.g. urbanization, migration, taking of jobs by housewives, reducation in working hours), technical progress, inertia (custom and conservatism that acts in the opposite direction against the other factors) and relative prices. Thus, "economic analysis will have to deal with all the relevant factors if it want's to be realistic: general economic theory will have to become social theory."[14] The objective that the individual seeks to maximise and to a very large extent the motives that activates him are "not derived from human native or any instinct's or any other supposed but essentially indefinable causal constants. They have their roots in a certain social order, a definite class structure, a determined historical background. It follows that the intelligent analysis of human behavior can never be separated from the question of the social system and its past history."[15]

That is why we have included such factors as land reform, foreign exchange control, distributional organizations, etc., in this study as can be discussed below.

The Relevance of National Economic Planning: The neo-classical theory of consumption theory largely disregards the possibility of national economic planning. However, planning is today institutionalized in almost all developing countries (not only in the socialist countries). Hence the possibility (and reality) of conscious, deliberate determination of consumption patterns whould be incorporated into consumption analysis. However, this does not mean that consumers' sovereignity will be disregarded in a plannned economy. An authority on economic planning has to say the following on this vital point:

> It is obvious that economic planning as it is generally understood has no intention of abolishing this freedom [freedom of consumers] It would not be abolished except by the introduction of a rationing system such as comes in during war time, allowing each consumer to acquire only definite amounts of various products: but rationing and planning are not the same thing. We shall see, on the contrary, that national planning is not possible except within the framework of a certain freedom of consumption, in the sense in which the words were used just now ["in the sense..." refers to freedom of choice. Emphasis original]

Thus in this study the place of consumption in national economic plannning and consumption planning itself will be discussed in chapter IV

The Long-term dynamics of Conusmption and its Complexity: Things and phenomena are always in a state of flux. There is no reason why the laws of dialectics cannot be applied to consumption patterns. The Ethiopian realities can substantiate this propostion and we will attempt to apply the dialectical approach in our analysis. The assumption of static equilibrium may fail to help us. Moreover, patterns of consumption cannot be neat, elegant and uniform as the indifference curves-analysis purports to suggest. Consumption patterns is real life in complex and diverse. Thus, the constantly changing tastes of consumers, regional, occupation variations, etc. need to be taken into account.

The Relevance of Traditional Consumption Analysis: To criticize traditional consumption theory does not necessarily mean rejecting it intoto. There may be some useful techniques and analysis that can be useful to the planner in a developing country be it a socialist one. This point is usually misunderstood and a rather lengthy quotation from two of the world's celebrated Marxist economists may clarify the confusion:

> From the view point of political economy of socialism there is everything to be said for the adoption of all the advanced mathematical and non-mathematical techniques of ovservation and analysis developed by bourgeois economices. So long as care is taken to cut off the capitalist perversions [Lenin] much of what has been established in bourgeois economics (but constitutes under capitalism a manifestation of naive, a historical rationalism and turns inevitably into apolegetics for the status quo) can be effectively used under socialist planning. The take one example among many: the theory of consumer's behavior conveys under capitalism the false, ideological nation that the 'autonomous' consumer is the sovereign ruler of the economy, while in fact it is the capitalist system itself that determines the nature of his wants, tastes, standards, spending habits, and so forth. The very same theory of consumers behavior, however, can be employed (and developed) under socialis, as a powerful means for acertaining needs and wants of consumers within an entirely different social setting. Such adoption and adaptation of elements of bourgeois economic research and theorizing to the needs of socialist planning not only do not constitute 'concessions' by Marxian political economy to bourgeois economics: they do not even bear any relation to its subject matter and its interest.[17]

Thus in chapter VIII we will attempt to estimate coefficient of income elasticities within the framework of orthodox consumption theory.

To sum up the methodology that we are going to emply constitutes two elements. The first is a combination of the first four proposition which were discussed above. Accordingly we will concentrate on explaining the background information, the environment of our subject by considering institutional changes that occured as a result of the on-going revolution. In addition, we will try to shade some light on the trends of the development of consumption in the country. In this way we attempt to apply the science of political economy as was aptly defined by Engels: "The task of economic science is to demonistrate the newly emerging ills in society as the necessary consequence of the existing mode of production, but also as

indication of its impending disolution, and to discover within the dissolving economic structure the elements of the future, new organization of production and distribution under which those ills will be abolished."[18] /Emphasis added/. The second element is constituted by the use of the convensitonal econometric method of consumption analysis. The two approaches will be integrated in such a way that the whole picture of our subject can be revealed.

NOTES

CHAPTER III

1. Gunnar Myrdal, Economic Theory and underdeveloped Regions (London: University Paperback, 1963), p.99

2. Ibid. pp.101-102

3. Kelvin Lancaster, "Change and Innovation in the Technology of Consumption." American Economic Reviews, vol.LVI, No.2, May 1966. The Lancaster framework, was later developed by Jeftry James and Frances Steward:" New Products: A Discussion of the Welfare Effects of the Interoduction of new Products in Developing countries," Oxford Economic Papers (New Series) vol.33 March 1981 No.1.

4. For details see James ans Stewart, op.cit.

5. Lancaster, op cit.

6. Lancaster, op cit, p.15

7. Ibid. p.20

8. Ibid. p.28

9. Ibid. p.18

10. See Stigles "The cost of subsistance." Journal of Farm Economics, May 1945, XXVII.

11. FAO, "The Impact on Demand of changes in Income Distribution: A case study of Eleven Latin American countries," Monthly Bulletin of Agricultural Economics and Statistics, vol.21, No.3, March 1972

12. Eprime Eshag and Rossemany Throp, "The Economic and social Consequences of Orthodox Economic Policies in Argentina in the Post-war years," Bulletin of the Oxford University Institute of Economics and Statistics, February 1965, p.394

13. Janos Kornai, Rush versue Harmonic Growth (North Holland Publ Cop.) pp.30-36

14. Myrdal, op cit, p.100

15. Paul Sweezy, "Marxian and Orthodox Economies," Science & Society, Summer 1947

16. Charles Bettelheim, Studies in the Theory of Planning (London JK Publishers, 1979), p.6

17. Baran & Sweezy, "Economics of Two Worlds," Monthly Review, March 1967

18. Engels, Anti-Duhring, Part II, section 1

CHAPTER IV

CONSUMPTION MODELS AND NATIONAL ECONOMIC PLANNING

A. THE THEORY OF OPTIMAL SAVING.

Although socialist Ethiopia is endeavouring to mobilize its resources in an effort to attain structural transformation, the prevailing rate of saving has been very low.[1] Moreover, so far no clear cut investment policy is formulated.[2] In other words, the dynamic relationship between accumulation and consumption is yet to be defined. Therefore, a brief survey of some of the theoreitcal works will be made in accordance with the fourth proposition of the last chapter.

Some of the essential questions of national economic planning centre around the question "how much should a nation save? The other side of the question can be: "in what manner should a nation allocate its scarce resources between the present and future generation?". Put differemtly" What will the ratio between present and future consumption be?" The literature abounds with different models that were formulated in the hope of answering this vital question.[3] The Soviet Economist Fel'dman,[4] for example, attempted to show that the rate of consumption can be an exponential function that is greater the fraction of investment allocated to the capital-goods sector in a two sector model producing capital goods and consumer goods. This model probably helped in formulating the strategy of heavy industry priority which contributed to the suppression of the potential growth of consumption during the period of all-out industrialization effeorts in the 1930's in the Soviet Union.[5]

The optimizing approach to planning implies the existence of a criterion for complete ordering of alternative-time-paths of consumption flows resulting from various policies. The choice of social welfare function is one of the widely discussed issues in the literature.[6]

A related problem can be the question of defining time preference of consumption. The specification of an intertemporal welfare function

for society involves the problems of defining a discount rate that applies to future consumption. The justification of attaching a positive discount rate of future consumption is perhaps not yet firmly established.[7]

However, the question of intertemporal allocation of resources can be tackled by using a different approach which was developed by the well-known Hungarian Economist J'anos Kornai.[8] According to Kornai, "it is not simply present consumption that must be confronted with present investment and, by implication with future consumption."[9] Instead policy-makers and planners should distinguish between sacrifice, postponment and neglect. The differences between these concepts can be seen from table 1 which summerizes Konai's approach.

TABLE 1

THE INTERTEMPORAL METHOD OF ACCELERATION

Sacrifice	Postponment	Neglect
Renunciation of present consumption (of flow)	Renunciation of present consumption capital formation (of stock)	Renunciation of present consumption and consumer capital formation
The non-satisfied need doesnot accumulated.	The non-satisfied need accumulates	The non-satisfied need accumulates.
It is no burden cr not damaging to the furture	It is a burden on, but not damaging to the future.	It is both a burden on and damaging to the future.

Source: Kornai, p.73

To take some examples from the Ethiopian case, it may be sacrifice if we forego the consumption of meat beyong what is required to meet the minimum physiological need. It may be "postponement" if we forego the construction of additional means of transportation. However, the future generation will bear the burden of building transportation system which we had failed to do for the sake of accumulating capital in the interest

of the same generation. On the other hand, it may be "neglect" if we disregard improving the standards of education in the country and, say, let a high school student join a university without even mastering elementary arithmetic. Thus Kornai observes, "in the final analysis, it can be established: the growth of the near future can be increased not only at the expense of present consumption (sacrifice) but also at the expense of the future (postponment, neglect)"[10] (Emphasis Orginal).

A policy of optimum saving may not be operational in practice due to the limited obsorptive capacity of an economy. In the case of Ethiopia a lack of skilled manpower, difficulties in coordinating investment projects, limited administrative capacity etc. may hold down the potential growth of accumulation. Hence, it seems plausible to talk about the feasible rate of saving rather than optimum rate ot saving.

The relationship between consumption and accumulation can be discussed in a different context other than within the theory of optimum investment. The patterns of sectoral allocation of resources and the problems of choice of techniques of production for example, involve the problems defining the ratio of accumulation funds to consumption funds. A policy of 'light industry first' for example, may mean the encouragement of present consumption vis-à-vis future consumption. Similarly, a policy of adopting labour-intensive techniques may be accompanied by an increase in consumption.

B. STRUCTURAL CHANGE AND CONSUMPTION.

In this section the effects of transfer of technology to developing countries on consumption patterns will be examined within the frame-work of the Lancaster model (efficiency in consumption) as was discussed in the third chapter.

Modern economic growth is usually accompanied by urbanization, changes in the type of occupations and income distribution.[11] "Consequently, the demand for existing and now consumer goods can increase substantially. For example, the growing urban population require additional food, hounsing, social services, etc. This may be a well-known fact. What is perhaps usually given less importance in the literature can be another important aspect of structural change-technological change. The effect of technological change on the level and structure of consumption may merit separate treatment. Technological change (including the introduction or new or modified goods and knowledge with respect to consumption) may reduce the effectiveness of the traditional method of demand projection, thus kuznets observes;

> Changes over time in consumer preferences may be seen to be caused largely by technological achievements bringing into existence new or changed consumer goods, and in party by additions to the stock of useful knowledge on the properties and effects of consumption, and by changes in conditions of life and work. Given these changes over a period of time, trends in the structure of consumer purchases accompanying economic growth and increased purchases per capita may show numerous variations from trends suggested by studies of responsiveness of demand to income at one point of time. (emphasis added)[12]

Technological change, when considered from the point of view of developing economics, may have far-reaching consequences that may not be limited to the problems of demand projection; perhaps James and Stewart[13] were not exaggerating the matter when they stated that "one of the most important ways in which advanced countries have changed poor countries is through the impact of new products. Products designed in industrialized countries have transformed consumption and production patterns, culture and society."

It seems obvious that the literature on the transfer of technology concentrates on the production of side of the issue while paying less attention to the field of consumption. Problems of cost of technology are widely discussed. On the other hand, effects of new technologies on consumption are rarely mentioned.

In the first place new products that are developed and produced in developed countries are largely directed towards satisfying the needs of high income consumers.[14] The exceptionally high demand for volkswagon cars (even before the skyrocketing of price of fuel) in Ethiopia and the limited demand for other types of cars may be a strking example.

The introduction of new products in poor countries is usually accompanied by promotion effect and the demonstration effect. Consequently consumers may divert resources from basic needs to the new products (which a re often consumer durables) thus experiencing under consumption of basic necessities.[15] A survey carried out in Brazil for example, showed that nutritional intake of sample conumers dropped as the share of expenditure on consumer durables increased.[16] Perhaps, there may not be few Addis Ababans who watch their children grow without enogh milk so that they can pay back the debt they had incurred to buy a family car.

New products may be in efficiently consumed by inexperienced consumers, since the learning process can apply to consumption, too. Thus, James and Stweart ovserved that "lacking the learning experience related to many new products social (including government) protection and information service, there is a systematic tendency for inefficiency of consumption of new products in poor countries."[17] The reckless use of tablets in Ethiopia may be cited as a fitting example.

Internal proportions of consumption may be violated as a result of the introduction of new products. That is, new products may be used without their complementary goods. For example cars may be introduced in the absence of sufficient and convienient roads. Another striking example is the case of powdered baby milk which "is being used by women with no knowledge of hygience, no ability to read the instruction on the can, and

no money with which to buy sufficient powdered milk. Thus diluted powdered milk from dirty bottles and dirty teats is substituted for breast milk. This leads to mulnutrition and dietary disorders such as marasmus diarrhoea and vomitting."[18]

It should be noted that the above-mentioned propostions can also be extended to the consumption of old products, by new consumers, say, due to migration of people from rural to urban areas since it takes time to learn how efficiently to consume certain goods which are usually restricted to urban areas.

Therefore, such policies as indigenous product development (where possible), selective approach in import policies, government standardization (specification) for new products, limitation on promotional efforts, taxes, subsidies, etc. can be used to minimize the problems of lopsided growth in consumption.[19]

C. PLANNING THE STRUCTURE AND VOLUME OF CONSUMPTION.

One of our propostions, as was discussed in the tlast chapter, was that consumption patterns should be analysed within the framework of national economic planning. In this section and to some extent in the following one we will briefly consider an aspect of sectoral planning-consumption planning-by incorporating the Lancaster model in the form of dietry efficiency.

The tecniques of planning the standards of living of the population (material and cultural requirments) can be classified into two broad categories-the statistical method and the normative method. The first method, interalia, involves forecasting the distribution of the population according to income and estimating consumption requirments of the population by using demand projections.[20] However, this method suffers from certain weaknesses. For example, in the case of Ethiopia it may be extremely difficult to project future patterns of consumption by using data that were

collected before the revolution since important consumption parameters (distribution of income, price structure, institutional set-ups) are radically transformed. Nor is it easy to use even the present data since the economic and non-economic environment of the country is in a state of flux. It seems that the country is experiencing a sort of war economy where the possibility of having stable data basis seems unlikely. Moreover, the philosophy of socio-economic planning implies the determination of rational requirements of future consumers in addition to the satisfaction of existing consumption patterns. That is, the determination of baskets of goods and services a family or an individual of an average type need under a given stage development of society can be incorporated into the macroeconomic plans.

The normative method of consumption planning, therefore, involves the determination of scientifically substantiated consumption norms. This method, though is still in its formative stage, is being used in the Soviet Union in combination with the statistical methods.[21] The normative method, moreover, can be used as a standard against which current consumption patterns can be checked. Thus, the rational consumption budget (the long-term standard consumption budget required to satisfy the people's demand for mass consumer goods) consists of a set of in-dicators reflecting, first, all the rates and norms of consumption and aviallability of consumer goods, housing and paid services; second, the volume and structure of individual consumption (expenditure) in money terms; third, the volume, structure and sources of individual consumption; fourth, the norms for the provision of free services.[22] Linear programming is being used to define the optimum market basket of food products that could be obtained with minimum cost in such a way that the intake of the nutrients is maximized given such factors as physiological requirments, religion, national differences, food habits, etc. of section of the population.[23] The use of computers is required to deal

with thousands of variables involved.

D. CONSUMPTION PLANNING IN ETHIOPIA?

Ethiopia has not yet formulated national economic plans as such, Thus, it may be very difficult to speak about consumption planning in the country. However, personal and social consumption were referred to in the second five year development plan (1963-1967) and the third one (1968-1973). In both cases rough estimation of per capita consumption was made. The plan envisaged expected "diversification of the consumption.[24] Hence the importance of the possible growth of demand for manufactured goods was taken into account. The plan gave priority to the growth of social consumption for it was thought that there would be enough food while, on the other hand, economic progress demanded expansion of education facilties, health services, etc. The estimated rate of growth of personal consumption was 3.3 per cent over the plan period.[25]

In the 3rd Five Years Development Plans (1968-1973) the dynamic relation between monetary consumption and non-monetary consumption (of rural people), the possible problems of balance of payment that might arise due to possible growth of the marginal pro-persity to consume, the gross and rate of monetary and non-monetary savings were explicitly considered. Accordingly, GDP at current factors cost was expected to grow at a rate of 83.4 percent over the period (1967-1973) while total consumption would grow at the same rate (public consumption 16.3! and private consumption 67.0!) and gross domestic savings were expected to grow at 16.7% over the same period.[26]

The National Revolutionary Production and Cultural Development Campaign in its three annual plans placed production of consumer goods and services at the top of the list of its objectives.[27] Accordingly, targets of production of consumer goods and services were indicated in the annual plans. Consumption planning, it is hoped, will be given special consideration in the Ten Years Perspective Plan that is just going to be prepared.

NOTES

CHAPTER IV

1. Socialist Ethiopia Provisional Military Government, National Revolutionary Production and Cultural Development Campaign: Third Year Plan (1973 E.C.) pp.471-484.

2. Ibid.

3. See. for example Sukhamoy Chakravarty, Capital and Development Planning (Cambridge, Mass.: M.I.T. Press, 1969)

4. See Dornar, Essays in the Theory of Economic Growth (O.U. Press, 1957)

5. For a detailed discussion of the relation between the rates of growth of consumption and accumulation in the Soviet Union, see Philip Hansen, The consumer in the Soviet Economy (London: placmillan, 1968); Morris Bornstein, The Soviet Economy: A Book of Readings (Ruhard D. Irwin, Inc. 1970)

6. For discussion of the problems of aggregating individual preference functions into social preference function see, e.g. K.J. Arrow, Social Choice and Individual Values, rev. ed. (New York: Wiley, 1964) For the problems of defining the theoretical foundation of planning see U.N., Macro-Economic Models for Planning and Policy Making (Geneva: Economic Commission for Europe, 1967). See also Leif Johnsen, 'An Examination of the Relevance of Kenneth Arrow's General Possibility Theorems for Economic Planning', Economic of Planning, IX, 1-2 (1969). The relationship between planners and policy-makers is aptly discussed by Janos Kornai in Blitzer, clark and Taylor, eds. Economy-wide Models and Development Planning,(Oxford University Press, 1975).

7. See. F.P. Ramsey, 'A Mathematical Theory of Saving,' Economic Journal (Dec. 1928) A.C. Pigous, Economics of Welfare, (London: Macmillan, 1952) T.C. Ksopmans, 'Stationary Ordinal Unitlity and Impatience', Econometrics (April 1960). Chakrovarty, op.cit.

8. Janos Kornai, Rush Versus Harmonic Growth (North Holland, 1972),pp.67-76.

9. Ibid, p.68.

10. Ibid, p.75.

11. Simow Kugnets, Modern Economic Growth: Rate, Structure and spread (Bombay: Vakis, 1966), An Adaptation.

12. Ibid, pp.133-134. See also Kornai, op.cit pp.31-33.

13. James and Stewart, op.cit p.81.

14. Ibid, p.88.

15. Ibid, p.91

16. Ibid, p.95

17. Ibid, p.92

18. Ibid, p.96. For further discussion of the problems of complemenrarity see Kornai, op.cit. pp.30-39.

19. See James & Stewart, Op.cit. for a discussion of policy implications.

20. See A. Anchishkin, ed. National Economic Planning (Moscow: Progress Publishers, 1980), pp.108-126. Ya Be Berry Planning A Socialist Economy, vol.2 (Moscow: Progress Publishers, 1977), pp.140-193. Abdul Qayum, Techniques of National Economic Planning (Indiana University Press, 1975) Pessim.

21. For a detailed and instructive discussion of the normative method of consumption planning see V.I. Raitsin, Planning the standard of living According to Consumption Norms', Problems of Economics, Oct-Nov. 1968, vol.XI, No.607.

22. Anchistikin, opcit. p.20

23. For a discussion of the relevant factors that should be taken into account in consumption planning see Zielinski, Lectures on the Theory of Socialist Planning, (Ibadan: 1969)

24. Second Five Years Dev't. Plan (1963-1967), p.86.

25. Ibid.

26. Third Five Years Development Plan (1968-1973), pp.53-55.

27. Socialist Ethiopia Provisional Military Government, National Revolutionary Production and Cultural Development Campaign First, Second and Third Plans.

CHAPTER V

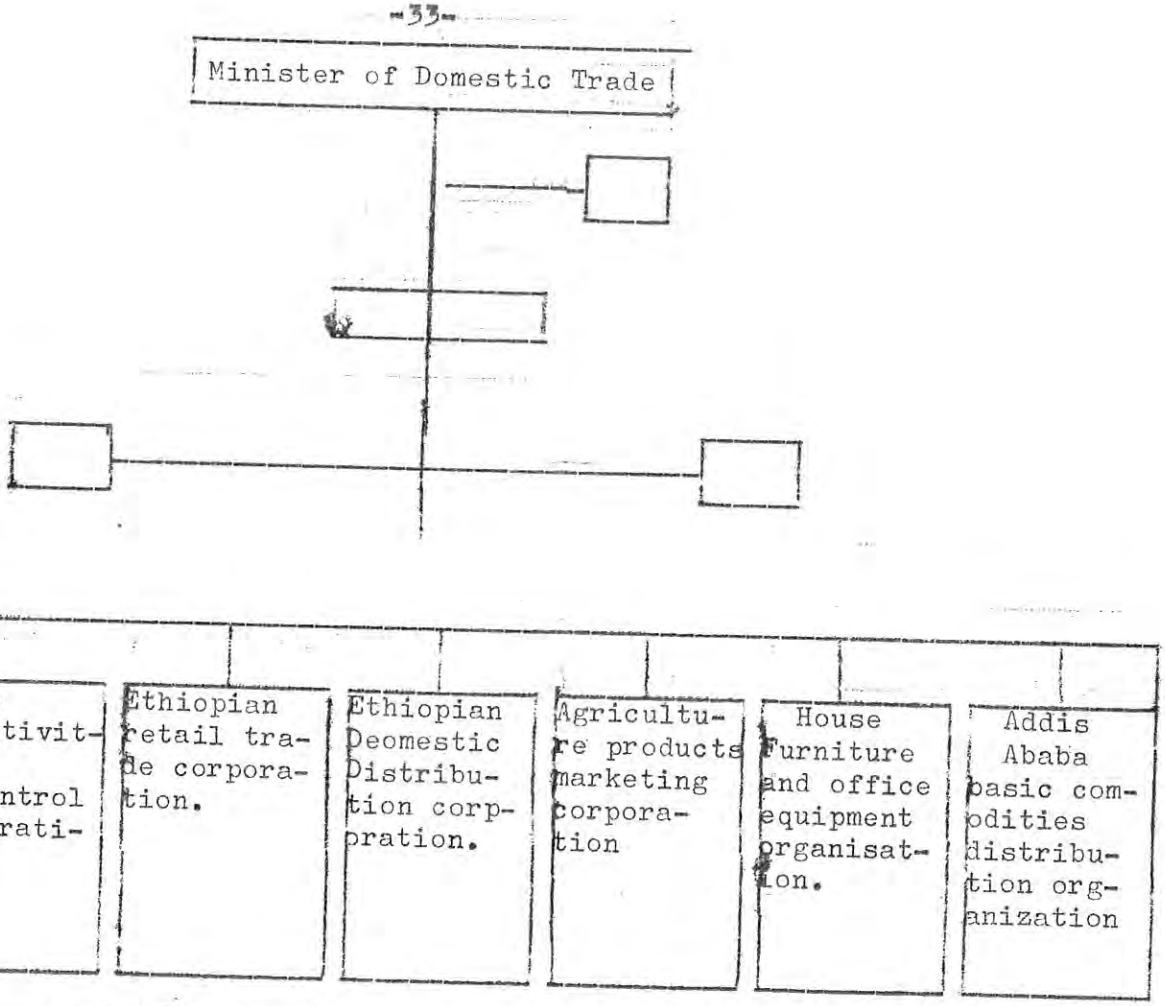
THE CHANGING ENVIRONMENT: INSTITUTIONAL DEVELOPMENT IN SOCIALIST ETHIOPIA

Traditional consumption theory, as was discussed above, largely fails to consider institutional changes. It was, perhaps, due to the development problems of emerging third world countries that Western economists began to consider the desireability and possibility of institutional changes.

In socialist Ethiopia, some old institutions have disappeared and in their place new institutions have sprang up.

There are important proclamations and legal notices and other measures which might affect consumption pattern in the country. The rural land reform Act of 1975, the urban land and Extra houses Nationalisation Act of 1975, the nationalisation of basic industries and financial institutions, the promulgation of a new labour law, the framing of new taxation policies (progressive taxes, the surtax, etc) can be cited. In what follows, however, we will be restricted to a brief examination of some newly set up public institutions. The effect of rural land Nationalisation will be examined under a separate heading.

The newly set up public institutions in which we are interested are those concerned with either the distribution of consumer goods or their prices, (see the chart below). In addition, a related institutional variable, viz-foreign-exchange control and related institutions will be treated here.



Source: PMGE Structure and Guidelines-Institute of Management and training Addis Ababa 1981.

In waht follows we will attempt to examine a few of the institutions that are shown in the chart and the likely trends of the development of consumption in the country.

DOMESTIC TRADE ACTIVITIES AND PRICE CONTROL ADMINISTRATION (DTAPCA)

The functions of this organization inclueds: 1) control of distribution of basic commodities; 2) control of prices of goods and services; 3) control of illegal trade, and 4) issuing of trade licence.

The organization does not issue new licences for trade for a number of basic neccessities including trade in food items, beverages, bread and cakes; retail trade in clothes, establishment of hotels and bars etc. In addition new licences will not be issued for whole sale trade in domestic products and in import items which are being imported by National Importing Organization.[2]

More over private trade is restricted by fixing maximum capital for whole sale trade at 300,000 birrs and for retail trade at 200,000 birrs.[3]

It is expected that this organisation can influence patterns of consumption by controlling distribution of goods and services and their prices. For example, the institution may be in a position to make sure that goods and services flow not only to areas (e.g. Addis Ababa) where there is a high purchsing power, bu alos to areas where there is need for the goods and services.

Today the responsibility for price control is mainly enthrusted to this institution and there is no more chaos in this respect.[4]

However, the effectiveness of the institution is reduced by the fact that about 90% of trade in manufactured goods is still in private hands.[5] Moreover, it seems that shortage of goods has given rise to black market and profiteering. The organization has limited control on trade activities. For example, there are not more than 30 inspectors for the Addis Ababa area.[6]

ETHIOPIAN DOMESTIC DISTRIBUTION CORPORATION (EDDC)

The function of this corporation is to distribute basic commodities in particular food items, clothing and goods that are required for the construction of shelters.[7]

The total sales of the corporation for 1981 was 524,449,000 birrs out of which 295,018,000 birrs worth of goods were bought by its 51 branches which are spread throughout the country.[8] Goods that are scarce (e.g. salt, soap, canvas shoes) are old on qouta basis. Certain goods (example, yarn, matches, certain kinds of blanket, soap canvas shoes) are not sold to private traders. In addition, in case of shortage of goods, priority is given always to mass organizations and public institutions.[9]

The EDDC is expected to influence consumption patterns in different area of the country by rationalising the distribution system.

Agricultural Products Marketing Corporation (APMC): The functions of this corporation includes pruchasing, storing and distributing of goods crops.[10] Thus, the APMC is expected to stablize the supply and prices of agricultural products in a similar fashion that the procurement agencies did in most socialist countries during their transition periods. Moreover, it should be noted that the activities of the APMC can have far-reaching socio-economic consequence in that it attempts to operate as a government machinery for holding down the potential growth of consumption of the peasantry so that the process of socialist primitive accumulation of investible funds can be enhanced. However, it seems that the government sets up this corporation out of conventional wisdom to cope up with the shortage of agricultural marketed surplus, perhaps, without envisaging the ultimate consequences of this measure on the ratio of consumption to accumulation funds.

The APMC buys agricultural products from private farms, state farms and merchants at fixed prices (which are the same throughout the country) and sell to public institutions, and other distributing organizations. The corporation's purchases price from private farmers is different from purchase price from merchants and mass organizations. The farmer is lower. This is, perhaps, to encourage agricultural producers' cooperatives and at the same time tolerate private trade in accordance with the provisions of the National Democratic Revolution. A sample of purchases and seeling prices is shown below in table 2.

Table 2

PURCHASE AND SELLING PRICES OF SELECTED AGRICULTURAL PRODUCTS FOR 1973 E.C. (in Birrs per quintal)

Items	Purchase Prices from		Selling price
	Private farmers	merchants and mass organizations	
White Teff	41.00	46.00	63.79
Sergegna Teff	35.00	40.00	57.25
White Wheat	34.00	39.00	56.16
Black Wheat	29.00	34.00	50.71
White Barley	28.00	32.00	48.51
Maize	17.00	21.00	43.76
Nug	45.00	50.00	68.15

Source: AMPC.

The total annual purchases of the AMPC have shown significant progress in the recent years. The 1981 purchases (4.4 million quintals) are more than five times the 1975 purchases (.74 million quintals.)

Some of the main problems encountered by the APMC are shortage of storage facilities, transportation, communication system, and impurities of the agricultural products.[11]

Perhaps, more problems may arise from presumably unexpected quarters as the experience of other socialist countries suggest. The peasantry may resist the programs of compulsory deliveries of agricultural products by, say, reducing production to the subsistence level and by shifting to the production of items that are exempted from the program.[12]

Urban Dwellers' Associations and Peasant Associations are expected to further consumer protectionism by participating in the distribution of goods. It may be beyond the scope of this study to go further into this topic.

By way of conclusion one important point can be mentioned. The above mentioned public institutions and mass organization are today either grabbing the distribution activities from privatetraders or are attempting to control them in accordance with the principles of the political economy of the transition period (weakening of the capitalist sector of the economy) by restricting the activities of private capitalists, ie. by denying them investment outlets in certain fields. However, unless, concomitant measures are taken, merchants and other businessmen may misuse their excess capital/by increasing expenditure on luxury consumption. If it is impossible to find outlets for the excess capital of the businessmen, it may be plausible to find ways and means of pumping these excess resources to the state sector. For example, compulsory loans may be set up for this purpose.

The Ministry of Foreign Trade, The Ethiopian National Importing Corporation and Foreign Exchange Control: Foreign exchange component of total investiment of the country was as high as 36 percent in 1981.[13] However, the balance of payment has been running in deficit for a long period of time with the exception of 1973. The balance of payments position of the country went on deteriorating until the foreign exchange reserve dwindled to the extent that it hardly would cover mere three months' import payments in 1981.[14]

Desperate measures were taken from time to time to thwart off possible disaster in the field of foreign trade. In 1977 the custom tariffs (Amendment) regulations No.52/1977 were issued. The regulations provided for the imposition of heavy duties on imported luxury items. For example, 200 percent duties were imposed on articles of personal adornment and jewellry. Further restrictions were imposed on imports in 1978 when the National Bank suspended the availability of foreign exchange for a 12 page-list of imported in 1979 by the legal notice No.68 of 1979.

In all the cases import of luxury goods was either suspended or heavy duties were imposed. On the other hand, essential commodities received mild duties (e.g. infant food got 10% in 1979 while insecticides was left free).

New institutions, in addition to the existint one such as the NBE, are being set-up in post-revolutionary Ethiopia to regulate foreign trade. A new ministry, the Ministry of Foreign Trade, interalia, is enthrusted with the task of controlling and regulating import and export of goods. The Ethiopian Importing Corporation was set-up, among other things, to import essential consumer goods and stratetic producer goods. These institutions can play important roles in influencing the patterns of consumption in the country, say, by regulating the introduction of new products, by influencing the demonstration effects, etc.

However, it is very difficult to assess the effects of the new measures on actual import of consumer goods, foreign trade statistics indicate that the share of those goods in total imports has shown a steady decline in recent years. The share of consumer goods in total imports has fallen from a peak of 38.4 per cent in 1974 to 24.5 and 23.9 per cent in 1979 and 1980, respectively. This decline, perhaps, can partially be explained by the growing share of fuel imports in total imports. The later has increased from 6.2 per cent in 1968 to 24.8 percent in 1980.[16]

The policy of foreign exchange control on import of consumer goods may have significant influence on consumption patterns of the country. By restricting the supply of foreign goods it may be possible to divert consumers to-wards the consumption of domestic products. However, unless domestic production has sufficiently expanded to meet the growing demand some undesirable consequences may be encountered. The upper income class, the intelligentia, in particular, may lose incentive in working hard in the

absence or shortage of luxury items, in particular, consumer durable More-over, smuggling may thrive in the absence of badly needed imported items. On the other hand the austerity programme may narrow the gap between the consumption level of the rich and the poor. In addition, the policy of import restriction may reduce the effectiveness of exotic goods by restricting the demonistration effect.

NOTES

CHAPTER V

1. World Bank Publications, for example, a bound with literature on the need for land reform in developing countries.

2. Socialist Ethiopian Provisional Military Government, Structure and Guidlines, Institute of Management Training, Addis Ababa, 1981.

3. Domestic Trade Activities and Prcie Control Administration.

4. PMACSE, Economic Policy of Socialist Ethiopia.

5. The evolution of price control and price policy formulation in the post-revolutionary period was perhaps, characterized by experimentation and choos. In the Easter of 1977, for example, a group of Kebeles on their own initiatives, attempted to fix prices of sheep at very low level, Revolutionary squads were assigned to the market places to make sure that the pricing "policy" was implemented. As a result, sheep disappeared from the market within hours until a detachment of troops intervened and normalized the situation.

6. Domestic Trade Activities and Price Control Administration (DTAPCA)

7. Ibid.

8. Socialist Ethiopia Provisional Military Government Structure and Guidelines, Institute of Management Training, Addis Ababa, 1981.

9. Ethiopian Domestic Trade Corporation (EDDC).

10. Ibid.

11. Socialist Ethiopia Provisional Military Government Structure and Guidelines, Institute of Management Training, Addis Ababa, 1981.

12. Agricultural Products Marketing Corporation (APMC).

13. See, for example M-Madzar, Agricultural Mechanization in Rumania (mimeo, Addis Ababa, 1980)

14. Socialist Ethiopia Provisional Military Government, National Revolutionary Production and Cultural Development Campaign, Third Plan (1973 E.C.) p.25.

15. National Bank of Ethiopia, Notice of Importers No.1/1978.

16. National Bank of Ethiopia, Quarterly Bulletins.

CHAPTER VI

THE IMPACT OF THE RURAL LAND REFORM ON CONSUMPTION OF FARMERS: A PRELIMINARY ANALYESIS

The traditional theory of consumer behavior which we discussed above largely disregards possibility of income distribution within the short term period. Thus, income is usually taken as given. This assumption makes traditional consumption theory less relevant to the realities of developing countries that are usually characterized by radical institutional changes within a relatively short period of time. The rural land reform Act of 1975 of Ethiopia can be taken as striking example. The reform, interalia shows how non economic factors can significantly influence the pattern of consumption. In other words, the egalitarian land reform proclamation of 1975 can be considered as an apt illustration of our second propostion (that non-economic factors can significantly influence household consumption patterns) as was discussed in the thrid chapter.

Paucity of data, as usual, hampers an indept and systematic analysis of an impact of this historic change in the rural areas. It is high time that relevant data collected and analysed. In the meantime it may be of some use to make preliminary analysis of the subject from the scanty data that are available.

Statment of the Problem: One of the basic soci-economic constradictions of the trasitional period (to socialism) exists in the agricultural sector. In what follows we will attempt to shade some light on the character of the contradiction between consumption and accumulation within the content of agraian revolution. The motto of "land to the tiller" can be considered as expression of the socialist principles of egalistarian distribution of income. Accordingly, the proclamation (No.31 of 1975) abolished feudalism in the rural areas and provided the peasants with de facto private ownership of farm lands up to a ceiling of ten hectares.

The peasant no more shares his produce with the landlord. In other words, he may retain the equivalent of the ground-rent. That is well known. The basic question, however, is the use to which the additional income of the peasant is put. Is the peasant going topay more taxes so that the agricultural surplus is syphoned off towards the industrial sector? Or, is he going to increase on farm-investment so that surplus is retained withing the agricultural sector and used for the purpose of accelerating the contribution of the sector to the national economy? Or, is he going to use the additional income for raising personal consumtion?

A closely related question-what is the impact of a radical land reform on the size and structure of the marketed surplus? These burning questions constitute the frame work for the following discussion which is mainly based upon a recent survey of Arsi Rural Development unit(ARDU).

Income Distribution: It can be hypothesized that the land refom has redistributed income in favour of the lower income stratum of the agricultural population. This can be shown in the 1979 survey that was carried out be ARDU in three of Arsi Awrajas-chilalo-Arba Gugu and Ticho.[1] Table 3 clearly shows that incomes of the sample households are less uneverly distributed after the land reform. For example, in the case of Chillalo the proportion of those households who used to earn from 501 to 750 birrs, annually, has now fallen from 20.11 to 13.97 percent while the propostion of those who earn more than 1000 birrs has increased from 36.14 to 52.10 percent.

Table-3

INCOME DISTRIBUTION BEFORE AND AFTER THE RURAL LAND PROCLAMATION. (RLP)

	500 Birrs		501-750 Birrs		751-1000Birr		1000 Birrs	
	B%	A%	B%	A%	B%	A%	B%	A%
Chilalo	26.59	14.16	20.11	13.97	17.16	19.78	36.14	52.10
Arbagugu	51.28	37.54	28.46	31.52	9.78	14.65	10.48	16.30
Ticho	37.95	18.74	19.81	30.12	21.04	24.59	21.18	26.63

B= Before the LRP

A= After the IRP

Source: Investigation on the impact of the Agrarian Reform on Peasants' Income and Expenditure Pattern, 1980. Planning Evaluation and Budget section, Asella, October 1981. ARDU Publication No.18 p.61.

Monetary income per sample household has almost doubled as is indicated in table 4 below. However, an increase in monetary income does not necessarily guarantee a coresponding increase in the well-being of the consumers. The quality and quantity of goods purchased with the additional money income, for example must be taken into account.

Table 4

AVERAGE INCOME FROM CROP PRODUCTION PERHOUSEHOLD, BEFORE AND AFTER THE RLP (Birrs)

Survey Area	Average income before the RLP from owned and rented land	Average income after the RLP.
Chilalo	875.01	1,647.16
Arbagugu	639.86	1,352.45
Ticho	765.65	1,378.80

Source: Same asia table 5,

Consumption and Savings: Many responsible sources suggest that consumption of the rural masses has increased as a result of the land reform.[2] Although no systematic and indept survey is so far been carried out to substantiale this proposition, the scanty data that we have seem to suggest possibility of an increase in the volume of consumption of the peasantry. The ARDU survey which was cited above, for example, showed that more than 83% of sample farmers felt that their standards of living have improved since the land reform. The reasons they gave were: they otained land, do not have to share their produce with the land lord and (or) do not have to pay for grazing land.[3] Similarly, 68.1% of the interviewees in a survey carried out in Ada Woreda indicated that they were purchasing more manifactured goods after the land reform than they did before.[4] In addition, peasant associations buy about 28% of sugar alloted to the Administrative regions through out the country.[5] It seems that peasants are being encouraged to consume such allusing manufactured goods as sugar.

However the ultimate goal of production is consumption, it may be eterimental to the effort of capital accumulation if alluring manufactured goods are introduced into rural areas at this time. Of course, it can be argued that the marketed surplus of agriculture can be increased by providing the farmers with manufactured goods. However, it does not seem plausible to introduce new goods in the rural area (e.g. sugar) when the demand for old goods (e.g. clothes) is not yet satisfied. Therefore, a clear cut and consistent policy is required to satisfy the consumption demand of the peasantry stage by stage so that the contradiction between accumulation and consumption is minimized.

The possible effect of the land reform on the marketed surplus can be considered as one of the intriguing questions of the transition period from the point of view of economic development. The URDU survey shows that the sample households have marketed almost the same percentage

of grain (about 21%) output.[6] Similarly the Ministry of Agriculture and Settlement has estimated that only 11.2% of major crops from private householdings was marketed in 1977/78.[7] This may be due to the high marginal propensity to consume of the rural people. The MPC of the sample households of the ARDU survey, as computed by the authors of the resport is shown in table 5 below. It is obviously very high.

Table 5

THE MPC AND MPS OF SAMPLE HOUSEHOLDS IN CHILALO ARBAGUGU

	MPC	MPS
Chilalo	0.817	0.183
Arbagugu	0.855	0.145
Ticho	0.833	0.167

Source: Same as in table 6.

The high level of income elasticities (.82, 1.15 and .82 for cereals, pulses and sugar, respectively) also suggests the possibility that additional income of the sample households may be used for consumption purposes.[8]

Thus, it seems that per capita annual saving might have fallen due to the high level of the MPC of the farmers who gained from the egaliterian type of income redistribution. For example, the survey of consumption patterns in Etheya extension area (in Chilalo) undertaken in 1972 showed the mean saving per sample farmer to the 170.39 birrs. This amount was drastically dropped to 64.55 birrs in the 1979 surveys.[9]

Patterns of on-farm investment seem to corroborate what was discussed above. Investment in livestock, farm implements, etc. constituted a small share in the total budget. Beverages and stimulants have a higher share (about 9% against 6.7%) than on-farm investment. Food accounts for about 65% of the budget (see table 6 below)

Table 6

AVERAGE ANNUAL EXPENDITURE PERHOUSEHOLD -

Items	Amount in Birr	Percent
Food	822.96	65.00
Clothing and Foot wear	120.41	9.51
Begerages & Stimulus	109.48	8.65
Livestock	56.91	4.50
Social & Traditional fees	50.57	3.99
Taxes, Contribution, gifts	28.97	2.29
Light and fuel	23.86	1.88
Miscellaneous	18.54	1.46
Other farm inputs	17.49	1.35
Farm implements	11.19	0.88
Household goods	5.69	0.49
Total	1266.06	100.00

Source: Same as in table 6.

Thus is seems high time that policy-makers and planners formulate appropriate policies inoder to moblize the agricultural surplus wile at the same paying due attention to the growing consumption demand of the rural masses. Some policy measures are already being implemented. For example farmers in the three Awrajas of Arsi are organized into 143 service cooperatives and 1,108 peasant associations so that they are now able to raise their initial capital of 1,761,420.60 Birrs to 5,144,933.90 Birr within three to four years.[10]

On the other hand, certain policy instruments (other than-tax) may help hold down the potential growth of consumption of the peasantry for the shortrun period in an effort to moblize investment funds. Comulsory procurment of agricultural products is a case in point although it is unlikely that it was initially intended for this purpose. It should be noted that compulsory procurment is not limited to grain; it includes commercial crops of which coffee can be considered as the most important one. The Ethiopian Coffee Marketing Corporation buys coffee throughout the country at fixed prices.

An egalitarian type of land reform can be desireable from the ideological and political point of view. However, seen from economical point of view it may negatively affect capital accumulation unless appropriate measures are taken in due time.

NOTES

Chapter VI

1. ARDU, Investigations on the Impact of the agrarian Reform on Peasants Income and Expenditure Patterns, 1980, Planning, Evaluation and Budget section, Asella, Octover 1981, ARDU Publication No.18. This sample survey may not be representative of socio-economic lives in the rural areas in particular because of the fact that this region had benefited from CADU and ARDU programmes.

2. See, for example Meskerem June 1981; Reports of Trade Activities and price control administration, 3 ARDU, op.cit.

3. ARDU, op.cit.

4. IDR, Economic Condition in Ada Wereda Ethiopia 1975-76

5. Sugar Marketing Corporation. Quotas of major towhy are excluded. It may be possible some sugar, somehow, may find its way to tejbets.

6. ARDU op. cit. pp.33-37

7. Ministry of Agriculture and settlements, Areas, Production, yield Use of Fertilizers and Marketed Production of Major crop. Vol.1 A.A. August 1978, p.62

8. ARDU, op. cit.

9. Johan Holmberg, survey of consumption Patterns in Etheya Extension Area, (CADU Publication No.90) October 1973, ARDU, op. cit. p.93

10. ARDU, op. cit, p.89

CHAPTER VII

THE CONSUMPTION OF FOOD IN ETHIOPIA

The patterns of consumption of food in the country merits separate treatment because of the following reasons: (1) Food accounts for the bulk of family budgets in Ethiopia: (2) The productivity of labour dempends, interalia upon the extent of intake of nutrients: and (3) the existence of sufficient and reliable food surplus constitutes one of the preconditions for economic development. The first proposition was discussed in the preceding chapter and in this one. The second one will be discussed in what follows. The third one seems to be historically validated and theoretically substantiated.[1]

Per capita food consumption can be taken not only as the main indicator of the standards of living of thepeople but can be considered as one of the factors that can explain the possibilities and limitations of the process of capital formation during the initial period of economic development.

The planning of a rational food balance sheet for the whole population requires the determination of the minimum level of calory and protein intake, the identitication of the possible and actual sources of food and the factors that determine its consumption, estimation of income elasticities etc. In what follows an attempt will be made to shade some light on a few of the above mentioned points.

THE EFFICINECY WAGE HYPOTHESIS: The efficiency wage hypothesis deals with the relationship between food consumption and productivity of labour. The postulated productivity consumption relations states that productive services of a worker supplied per unit of time is a function of his level of food intake.[2] Translating food intake into energy.

$$p = f(e)$$

Where p = productive service

e = Energy intake

Thus improvement of nutrition intake can be considered as productive venture leaving aside even the ethical and political arguments which are usually discussed. John R. Turrent an expert in food polcies, for exapmle, observed that "nutrition is as much of a ligitmate investment in economic development as is mechanisation, irregation,,and fertilizer in terms of its potential for increasing output."[3] With this in mind let us consider patterns of food consumption in Ethiopia.

Source of food in Ethiopia: Different kinds of food are consumed in Ethiopia depending upon the geographic, cultural, religious, etc. variations within the country.[4] The main source of food supply (about 96%) originates from the private sector.[5] State farms account for about 3% of the total. The share of cooperative farms and settlements in insignificant. It seems interesting to note that state farms and settlement farms cater to the needs of food indistries to a great extent. In 1981 about 42.8% of state farms output, was directed towards the requirments of the food industries while only 1.1% of the output of private farms was used as industrial raw materials (in food industry).

At the present time, only less than 1 percent of domestic grain output is used in the food industry. The output of industrially processed food is extremely low as is shown in table 7. Per capita production for urban population, let alone the whole population, is insignificant. In short home made food constitutes the bulk of food consumption.

Table 7

PRODUCTION OF SELECTED INDUSTRIALLY PROCESSED FOOD FOR 1981

	Unit	Quantity	Per capita(urban population
Flour	tons	159,824	0.09
Maccaroni and Pasta	tons	18,328	0.004
Eddible Oil & Glue & Butter	Kgs.	10,092,261	2.22
Bread, Galleta & Biscuit	tons	15,475	0.003
Jaffa and Products	tons	10,088	0.002

Source: Food Corporation and Statistical Abstracts.

This fact may have far reaching policy implications: 1) millions of housewives will, for the near future, be restricted to the kitchen being partially barred from productive field work, and possibly may find it difficult to gain their social freedom, 2) the state may find it difficult to influence patterns of food consumption as long as it is unable to control the means of food processing, e.g. preparation and implementation of the rational food balance sheet may be very difficult and 3) The PID component (processing, transportation and distribution) in total food purchase will remain small. The last point may have important policy implications for pricing of food stuffs.

Food import of the country for the last ten years has never been greater than 9 percent of total imports and the share of food import has been declining in recent years, perhaps, because of government policy of energetic foreign exchange control).[6]

Food aid per capita for the period 1974-1976 was not more than 1 kilograms as compared to 9.4 for Somalia and 27.9 kg. for Egypt in the same period.[7] However, food aid may gain importance due to the growind needs of drought and war affected population. The 1981 food requirment, as released by the Relief and the Rehabilitation Commission, was as high as 1,029,300 metric tons,[8] or about one firth of the total annual output of major crops in the country.

Share of Food in total Budget: The proportion of total budget allocated to food seems very high

The food balance sheet is dominated by cereals in both rural and urban areas as is shown by the same sam lesurvey.[9] This may show that the intake of proteins and vitamins can be very small thus contributing the consequential health hazards.

In the case of rural areas purchased food accounts for a small part of total food consumption. The CSO rural survey of 1967 for example; showed that only 36% of the total food was purchased.[10]

Selected Indicators of Food Consumption: Percapita food production in Ethiopia has shown steady decline in the past years. Morehover, per capita food production of the country is much below that of all East African countries with the exception of Mozambique.[10]

Per caput nutritional intake has shown a steady decline as is shown in table 9 below.

Table 9

FOOD SUPPLY (EXCLUDING FISH) IN ETHIOPIA PER CAPUT PER DAY

Nutrients	1966-68	1969-71	1974-76	1977-79
Calories	2,012	2,027	1,822	1,737
Protien	68.6	68.8	69.8	67.5
Fat (grams)	32.8	32.7	28.5	28.0

Source: FAO production year book vol.34, 1980 pp.247-48

The conditions of food requirment can be seen from a some-what different angle. Estimate made by the Ministry of Agriculture and Settlement shows that the urban population was running short of the supply of major food crops by about 468,200 tons in 1978.[11] Moreover, drought and war which had already claimed the lives of some 5,623,000 heads of cattle are not still over. Some 4,348,000 people in 12 of the 14 administrative regions are still affected by natural and social calamities. Food and clothing requirments for these regions have been estimated to be as high as 1,029,300 metric tons and U.S. $631,000,000, respectively.[12]

To conclude the data that we attempted to put together shows that: (1) the marketed food surplus may not meet the demand of the growing industrial secror; (2) further income distribution policy may cause more demand, for food; (3) what can be taken away from the masses in the form of, say taxes seems scanty, a slight error in food policy formulation may cause irreparable damage (e.g. further intensification of the grain procurment effort may drive thousands of peasants into the hands of the Relief and Rehabilitation Commission, or a slight increase in prices of food may cause a significant drop in standards of living); (4) policy makers and planners as well as all those concerned with that problems of economic development of the country have a dual task-the task of accelerating furture consumption as well as present consumption, perhaps, with more emphasis on the later.

NOTES

CHAPTER VII

1. William H. Nicholls, "The place of Agriculture in Economic Development" in Carl Eichet and L. Witted, Agriculture in Economic Development (New York: Macraw-Hill Book Company), 1964, see also E. Mandel, Marxist Economic Theory, vol.I.

2. A through review of the theory as it now stands may be found in Bliss and N. Stern, Productivity, wages and Nutrition, Part-I, the theory, Journal of development Economics vol.5, pp.331-362.

3. John R. Tarrant, Food Policies (New York: John Wiley 1980) p.217.

4. For a detailed and instructive discussion concerning variation in food supply and consumption in Ethiopia see Westphal, E. Agricultural Systems in Ethiopia (Wageningen: centre for Agricultural Publishing and Documentation) Agricultural Research Reports No.826, 1975.

5. PMCSE, National Revolutionary Production and cultural Development campaign third year plan (1973 E.C.) p.81.

6. NBE Quarterly Bulletins

7. Tarrant, op-cit p.251

8. Relief and Rehabilitation Commission.

9. See C.S.O. Addis Ababa, Asmara and Dire Dawa Household Expenditure Surveys 1975, ARD, op-cit, C.S.O. Rural survey of consumption, 1967.

10. F.A.O. The state of Food and Agriculture, 1980

11. Ministry of Agriculture as settlement, op-cit, p.63

12. Relief and Rehabilitation Commission.

CHAPTER III

ESTIMATION OF COEFFICIENTS OF INCOME ELASTICITIES FOR SAMPLE HOUSEHOLD URBAN WAGE AND SALARY EARNERS IN ETHIOPIA

On of the advantages of the alternative approach that we have attempted to develop in the third chapter is that it may make possible a consideration of all important aspects od consumption patterns in a country, in particular, in the absence of sufficient and reiable data for an econometric research from different angles by using the method of political economy as well as the traditional techniques of demand analysis. Accordingly, in this chapter we will attempt to estimate coefficients of income elasticities (or expenditure eleasticities) for selected items for sample urban wage and salary-earners. It should be noted that we have already considered the consumption patterns of sample rural people in connection with the agrarian revolution by using the available data. In addition, we have also considered the changing invironment of consumption in connection with a discussion of the institutional factors and policy instruments that are shaping consumption patterns in post-revolutionary Ethiopia. Thus, it can be evident that our design is to look into the subject from different angles by using different methods.

The coefficients of income elasticities which we are going to estimate can be used (1) to show the features od consumption of urban dwellers in contrast to that of rural people; (2) can be employed by people concerned for formulating certain important policies such as policies of income distribution and pricing and (3) can be used for comparing income elasticities for the pre-revolutionary and post-revolutionary period when another study is made based on the data pertaining to the later period.

It is beyond the scope of this study to make a survey of the development of empirical demand analysis.[1] We will rather be restricted to family budget analysis.

A. THE IMPORTANCE OF FAMILY BUDGET ANALYSIS

The demand for a specific commodity can be estimated by using aggregate time series data and cross-section data.[1] The first approach has attempted to explain temporal differences in aggregate demand in terms of prices, largely to the exclusion of household characteristics such as age, occupation, family size, geographic location, etc. though aggregate income does appear in such functions. Thus, this approach may hide the effects of household characteristics on consumption. Family budget analysis, on the other hand, can show the effects of these characteristics. It should also be noted that markets, in developing countries, are largely imperfect due to, perhaps, the dominance of natural economy and institutional set-ups such as price control. In addition, data on prices and quantity may be insufficient and costly in their collection. The estimation of price effects may ve subjected to serious statistical problems. "The estimate of price elasticity resulting from an ordinary multiple regression analysis is likely to have a wrong sign, and the price effect as such is not distinguishable from income effect due to the collinearity complication."[2] A further complication may arise due to collinearity between price of substitutes. The panel method is one of the approaches used to overcome such a complication. That is, independent estimates of income elasticities derived from family budget data are inserted into an aggregate time-series demand relation as extraneous estimators. Moreover, family budget analysis can be abstracted from the effects of prices since consumers included in a given survey are all exposed to the same set of prices.

In short, family budget analysis may be pertinent to the realities of developing countries. To take a simple example, family budget analysis can take into account the difference between consumption patterns of rural and urban consumers. It should also be noted that the disaggregated results (e.g. elasticities) can be used to measure some of the economic effects of changes in income distribution.

The disaggregated approach has been increasingly used in recent years in estimating consumption parameters in developing countries. Consumption coefficient for rural and urban sectors are separately estimated.[3] In recent years dissatisfaction even with the rural urban dichotomy has led to the sub-division of consumers into major groups. Byung - Nak Song, for example, has developed the trichotomy system in his recent research work in which he classified consumers into farmers, urban wage earners and urban capitalists.[4]

B. THE SAMPLE.

The present study will be based upon family budget survey which was carried out in Addis Ababa, Asmara and Dire Dawa in 1975 and was published later on under the following titles:

Report on the Addis Ababa Household Expenditure Survey 1975, Bulletin No.19, February 1979, by the C.S.O. and Report on the Asmara Dire Dawa Household Expenditure Survey 1975, Bulletin No.24, January 1980, by the C.S.O.

The budget survey covered source and size of income, patterns of expenditure, demographic and general particulars. The size of the data can be shown by the following table.

Table 10

Town	Number of Income Groups	Number of Households	Number of Persons
Addis Ababa	32	295	1,701
Asmara	20	162	1,115
Dire Dawa	20	164	3,702
Total	72	621	3,702

Source: Bulletin No.19 and No.24 C.S.O.

C. SPECIFICATION OF THE MODEL

The only explannatory variable that our data can generate is income or total expenditure. The dependent variable is expdenditure on a specific commodity.

The fact that income or toal expenditure is the explanatory variable takes us to the realm of problems of Engel curve analysis.

About ten types of mathematical forms of Engel curves are frequently used.[5] Selection among these alternative formulas is made inter alia, upon consideration of the following factors.[6]

Composide characteristic of a given commodity concept is the first criterian considered. In the present study one of the commodities for which elasticities is going to be estimated is total food. This item is a composite commodity. It is composed of creals, injera, meat, fish dairy products, pulses, etc. Hence, a symptotic formulas (e.g. the log-normal, the log parabola) may not be appropriate.[7] It should be noted that other commodities for which elasticities will be estimated are also composite in nature. These are services (medical care, transportation, communication, reading and recration) and household items (fuel and light, water, domestic utensils, household textiles, household durables).

In the second place the fact that consumption is measured in expenditure (in Birr) rather than quantities may rule out the use of asymptotic formulae.[8] It should be noted that income or expenditure eslasticity is usually greater than quantity elasticity.[9] We therefore expect that the elasticities which are going to be estimated will be biased upwards in general.

The additivity criterian can also be considered. This condition is satisfied by linear Engel curves and a few other special types.[10]

Computational simplicity, too, can be taken into account in view of the prevailing circumstances.

Considering the above-mentioned conditions and the limited nature of the data the following formulae will be used in the estimation of consumption coefficients.

The Linear Form

$C = \quad + \quad Y$

Elasticity coefficient = $\frac{B.Y}{C}$

One of the weaknesses of this equation is that it does not show the saturation level of income. This equation was one of the earliest mathematical form s that were used in Engel curve analysis. Allen and Bowley, for example, used this form in their pioneering work in family budget analysis.[11]

The Double-log Function

$\log C = \quad + \quad \log Y$

Elasticity coefficient = B at all levels of income

This form may be satisfactory for nearly all non-food items.[12] Thus, it is expected that this form may be useful in the estimation of coefficients for services and household items. The fact that consumption is expressed in value (monetary) terms lands support to the use of this form. One of the shortcomings of this formula is that its does not show variations in elasticities at different income levels. This problem may be important when the income range is very wide. In the present data the range of income is quite wide. It ranges from 20 Birrs up to 1650 and above in the case of Addis Ababa consisting as high as 32 income brackets. Thus an attempt will be made to narrow down the income range by partitioning the data into two groups and estimating coefficients for the two parts separately. This method can also have others advantages such as the minimization of the effects of heteroscedasticity. The other weakness of this formula is that it does not show level of expenditure at the level where income is zero. That is, expenditure on good i = 0 at zero level of

income However, this problem may not be serious since no expensive luxury items are included in the data under consideration with the exception of, perhaps, durables which are included under household items. The point is that for some goods (e.g. expensive luxuries) income must reach certain levels before any expenditure on the goods is possible.

The Semi-log Function

$$C = \alpha + \beta \log Y$$

Elasticity coefficient = $\beta / (\alpha + \beta \log Y)$

It is expected that this formula may fit the data of expenditure on food for food is a basic necessity that usually shows failling index of elasticity as income increases. This formula has been widely used by FAO for estimation of elasticities of food items.[13]

The Variables: The non abailability of data has largely determined the choice of the explanatory variables. We selected per capita total expenditure as the only explanatory variables. The theoretical justification for using total expenditure as a proxy for income was discussed by Prais and Houthakker.[14] The coefficient of linear correlation between total expenditure and income is about .84. The corresponding scatter diagram suggests a strong positive correlation betwen the two variables.

Total per capita consumption expenditure is not exactly equivalent to per capita current income because the latter includes current saving besides consumption expenditure. As a result, elasticities estimated by using expenditure may have an award bias. However, in as much as total consumption expenditure could be financed from current income, past saving, and borrowing (this is significant in our data) it may be a good explanetory variable. The main reasons why we take total per capita expenditure instead of income are that: (1) conceptual problems and errors in measurement may be involved if income is used; (2) respondents are usually

reluctant to reveal the true size of their incomes because of fear of taxes, modesty, etc. The data under consideration is not free from those problems.[15]

The fact that the explanatory variable is limited to total per capita montly expenditure may be considered as one of the serious limitations of the study. Possibly relevant explanatory variables such as education mfamily size may be excluded thus creating problems of misperification of the model. However, this approach has been widely and increasingly in use in the field of family budget analysis.[16]

Elasticity coefficient will be estimated, separately, for par capita expenditure on food, household items and services. These items account for a large proportion of the budget of the consumers as is shown in the table below.

Table II

AGGREGATION OF OUTLAYS DURING THE SURVEY MOHTS, 1975

Outlays	Addis Abeba		Asmara		Dir Dawa	
	Amount in Birr	% of Total Outlay	Amount in Birr	% of Total Outlay	Amount in Birr	% of Total Outlay
1. Consumption Expenditure	140513.04	68.2	71705.00	75.7	46833.00	67.12
Food	46212.51	32.9	30113.00	42.0	20003.00	42.7
Service	27057.60	19.7	8635.00	12.0	4921.00	10.5
House-Hold item	19670.38	14.0	9844.00	13.7	4993.00	10.7
Clothing & Footwear	11550.46	8.0	7383.00	10.3	2875.00	6.0
2. Saving*	16002.00	7.8	684.00	00.7	1365.00	0.19
3. Transfer	21607.89	10.5	12576.00	13.3	9875.00	14.5
4. Others	27786.69	13.5	9726.00	10.3	11698.00	16.7
Total	205909.62	100.00	94691.00	100.00	69771.00	100.00

* including 'ekub'

Source: Bulletin No.19 and 24, C.S.O.

Effects of family size may be accounted for by taking per capita total expenditure.

Finally, problems of simulataneity in the variables may arise due to the fact that total expenditure is the sum of the dependent variables (i.e. expenditure on individual items). Liviatan[17] has shown that this may cause a bias in the estimate of the regression coefficient. One method of overcoming the problem is by using income as an instrumental variable.[18] However, "this bias is likely to be small for individual food items and may be disregarded for all items except modern durables like cars, refrigerators, etc."[19] Modern durables constitute a negligble proportion of household items.

The Model: Three alternative functional forms (the linear, the double log and the semi-log) will be used to estimate elasticity coefficients for total food, services and household items by using total per capita monthly expenditure as the explanatory variable. The model will be:

$$\frac{Cij}{nj} = f\left(\frac{Ej}{nj}\right)$$

where Cij = Expenditure by persons in jth income bracket on ith commodity;

nj = number of persons in jth income bracket

Ej = total expenditure in jth income bracket and

($i = 1,2,3$, $j = 1,2,3...32$ for A.A., j=a,s,3,...20 for Asmara, Dire Dawa and pooled data, and j=1,2,3...16, when the data is partitioned.)

The Procedure: We will first estimate coefficients for the sample employmees (wage and salary-earners) in Addis Ababa. Secondly, elasticity coefficients will be found for pooled data. It is hoped that this approach may increase the size of the data. Moreover, such data may generate elasticity coefficients which may be used as points of reference for evaluating the Addis Ababa coefficients.

Pooling of the separate regional data may be plausible in view of the fact that the surveys were of the same design. That is in all cases the subjects were wage and salary-earners and that the surveys were conducted in the same period. In addition, the patterns of consumption in the three urban areas is more or less similar (see Table 11). For example expenditure on food accounts for a large share in total consumption expenditure in all cases. On the hand, per capita total income is much higher in Addis (14.24 Birrs) as compared to that of Asmara (78.22 Birrs) and Dire Dawa (82.25 Birrs). This may create some problems. For example, the coefficients of the pooled data may be baised towards Addis Ababa.[20]

The other important step is to split the data, for Addis Ababa, into two parts and estimate elasticity coefficients separately and compare them. The reason for this procedure was discussed above.

D. INTERPRETATION OF THE RESULTS AND POLICY IMPLICATIONS

Estimated expenditure elasticity (E), the regression cofficient (B), the standard error of the regression coefficient (SB), computed value of t (t) and the coefficient of determination (R^2) are presented in table 12 below.

Table 12

Expenditure Elasticities and Other Results

	Linear Function					Double log Function					Semi Log Function				
	B	SB	E	t	R^2	B	SB	E	t	R^2	B	SB	E	T	R^2
Pooled data															
Total Food	0.33	0.02	0.82	18.99	0.95	0.79	0.03	0.79	24.84	0.97	18.45	1.37	1.38	13.48	0.91
services	0.16	0.02	1.22	6.54	0.70	1.56	0.16	1.56	9.53	0.83	9.34	1.50	-1.17	6.25	0.68
household items	0.15	0.02	1.10	6.86	0.72	0.98	0.07	0.98	14.21	0.92	7.61	0.91	-1.48	8.33	0.79
Addis Ababa (whole data)															
Total Food	0.17	0.03	0.59	6.79	0.60	0.55	0.07	0.55	7.58	0.66	13.63	2.16	0.06	6.32	0.57
services	0.21	0.02	1.18	8.84	0.72	1.43	0.19	1.43	7.98	0.68	14.44	2.60	-2.97	5.57	0.51
household items	0.16	0.03	1.05	6.11	0.55	0.85	0.14	0.85	6.16	0.56	10.52	2.54	-3.30	4.14	0.36
Addis Ababa (lower income group)															
Total Food	0.16	0.01	1.16	13.18	0.92	0.52	0.12	0.52	4.45	0.57	11.18	0.99	0.76	3.74	0.50
services	0.20	0.03	1.40	5.88	0.71	1.09	0.29	1.09	3.72	0.50	6.90	2.67	-1.94	2.59	0.32
household items	0.16	0.01	1.16	13.18	0.93	0.61	0.20	0.61	3.07	0.40	4.92	1.80	-8.09	2.74	0.35
Addis Ababa (Higher income group)															
Total Food	0.07	0.04	0.30	1.66	0.16	0.47	0.19	0.47	2.78	.36	16.04	[illegible]	0.93	2.43	0.30
services	0.20	0.03	1.08	6.12	0.73	1.49	0.33	1.49	4.48	0.59	25.42	7.33	-1.87	3.47	0.46
household items	0.08	0.06	0.42	1.24	0.09	0.83	0.36	0.83	2.30	0.25	18.40	9.40	-1.62	1.96	0.21

B= the regression coeficient

SB= standard error of the regression coefficient

E= estimated expenditure elasticity

t= computed value of t

R^2= coefficient of determination

As can be seen from the table, the semi-log function seems to be of poor fit on the basis of: (1) relatively low value of R^2 in general (with the exception of pooled data); (2) negative, values of expenditure elasticities for services and household items which suggest that these commodities are inferior goods contrary to realities and (3) relatively low value of t.

On the other hand, in broad sense, the other two functions (the linear and the double-log functions) seem to be of good fit on the basis of: (1) significance of the regression coefficients at the 1 per cent level and (2) high value R^2 (which, however, may be due to grouped nature of the data) with some exceptions. For the Addis Abeba upper-income group both the t value (which shows insignificance of the regression coefficient at the 5 per cent level) and the R^2 value suggest that the linear form does not fit well.

The plot of residuals for some of the equations exihibited fair degree of randomness,

The estimated coefficients suggests the presence of some differences between upper and lower income groups in Addis Abeba as per expectations.

For example, considering the double-log function, expednditure elasticity for food (0.47) for the upper-income group is lower than that of the lower income group (0.52). This can be compared to whole data (Addis Ababa) which is 0.55 for the same function (double-log).

The value of R^2 for the upper income for Addis Abeba group for almost all functions and all items, is lower than that of the lower income group, perhaps, indicating the possibility of ommission of relevant explanatory variables such as education which may be important variables in determining the consumption behavior of upper income classes. Consequently, the corresponding least square estimators may be biased and inconsistent.

Comparing the elasticity coefficients for Addis Ababa with that of pooled data, one can observe some differences, For example, expenditure elasticity for Addis Abeba (for food) is much lower than the pooled data for both the linear and double-log functions. Perhaps, this is because of the influence of the Asmara and Dire Dawa data on the pooled data. The share of food in total budget (42%) in Asmara and Dire Dawa is much larger than that of Addis Abeba (32%). In addition, average incomes in the two cities are lower than that of Addis Abeba. In other words, Asmara and Dire Dawa may have higher income elasticities for food.

Considering the individual items, income elasticities for services, in all cases, are greater while those of total food in almost all cases, are less than one. Services (telephones, reading materials, recreation, etc.), may be considered as luxury goods in Ethiopia. On the other hand, elasticities for householditems (fuel, light, water, domestic utensile,etc.)

are, in almost all cases, between those of total food and services. The high elasticities for services (and to some extent for household items) indicate a shift to those luxury goods from basic necessities (total food) as income rises.

Perhaps, the coefficients may be more meaningful if we compare them the results of previous studies as is shown below in table 13.

Table 13

INTERNATIONAL COMPARISON - EXPENDITURE ELASTICITIES

Items	Present study		A.A. Ostby and Taye 1968	Chana, Urban 1967/ 1968	Zambia Urban 1966/ 1968	Kenya Momba-ssa 1968/ 1969	Tanzania Urban 1969
	Linear function	double log function					
	0.82 (pooled)	0.79 (pooled)	0.768*	0.42*	0.44*	0.60*	0.55*
Total food	0.59 (A.A.)	0.55 (A.A.)					
Services	1.22 (pooled)	1.56	0.902*				

* double-log function

** linear function

Source: FAO, Inocme Elasticities of Demand for Agricultural Commodities. Rome 1972. Ostby and Taye Gulilat: "A Statistical Study of the Household Expenditure in Addis Abeba", Eastern African Economic Review, vol.1, No.2, Dec. 1969.

The coefficitnts of elasticities which are estimated in this study are much higher than those of other African countries. The higher income elasticity for Ethiopian urban areas may be due to the lower per capita food consumption in the country as compared to other African countries as was discussed in the last chapter. On the other hand, the results of present study, in a broad sense, are similar to that of Ostby and Taye.

However, these results should be interprested with a most precaution. The results of the study, suffers, interilia, from the outdated nature of the data, possibility of seasonality due to the shorts period of the survey (one month only) and possible commission of relevant variables. Most important, as was indicated above, it may be presumptious to take the data as a stable one since radical changes have been made in both the economic and non-economic environment since the carrying of survey.

However, the results of this study can be put to use within the content of institutional change and national economic planning. A simple example can illustrate this argument. In this study we have found that the (income) elasticities for relatively luxury goods (services and household items) are higher than that of basic necessities (total) food. Policy makers and planners can and should make use of this possibility. A policy of income distribution in fabour of the lower-income group should be accompanied by an increase in the production of the basic necessities (e.g food). If not, shortage of these goods may occur. On the other hand, government policy of salary and wage-increment (which may be likely in the immediate future) should be accompained by reasonable supply of durable goods. Therefore, the policy of foreign exchange control

must be examined in this context. Today, the size of the intelligensia has been increasing in Ethiopia. This social stratum has a high demand for consumers' durables such as TV set, cars, furniture, etc. If it is unable to find these goods in the market, it may be dissatisfied and as a result its incentive to work may be lessened. Therefore policy-makers may be in a dilemma or may find ways and means of taking away (temporarily) extra incomes from the upper-income group. For example compulsory loans, as was the case in several socialist countries, may be used to curb the purchasing power of this stratum in the short run period.

NOTES

CHAPTER VIII

1. Survey of the literature on empirical demand analysis can be found in Philips, Applied Consumption Analysis (North Holland, 1974) and Theil, Theory and Measurement of Consumer Demand (North Holland)

2. UN, "Analysis and Projections of Consumption Demand: Methodological Notes" Industrialization and Productivity Bulletin No.9, 1965, p.63 For details see Walter, Introduction ot Econometrics.

3. See for example, Lluch op.cit., B.M. Desai, Analysis of Consumption Expenditure Patterns in India. Occasional Paper No.54, Cornell University, August 1972, song, op.cit.

4. Song op.cit See also Vidosor Trickovic, Theoretical and Methodological Aspects of Demand Analysis in a Socialist Economy: The case of Socialist Yugoslavia. (Mimeo), Addis Ababa Univeraity, 1980.

5. U.N., op.cit. p.52.

6. See C.E.V. LeSer 'Forms of Engel Function's, Econometrica vol.31, No.4, Oct, 1963; UN op.cit. p.53.

7. UN, op.cit. p.53

8. Ibid.

9. This can be easily proved. Quantity elasticity can be useful for the purpose physical planning.

10. UN. op.cit. p.54

11. Allen and Bowley, Family Budget Expenditure (1935)

12. UN. op.cit. p.53.

13. FAO, Income Elasticities of Demand for Agricultural Products, 1976, Rome.

14. S.J. Prais and H.S. Houthakker, The Analysis of Family Budgets (Cambridge University Press, 1955).

15. C.S.O. Bulletin No.19, ev.24

16. FAO op.cit. Desai op.cit.

17. Nissan Liviation, "Errors in Variables and Engel Curve Analysis", Econometrica, Vol.29, No.3, 1961.

18. Ibid.

19. Desni, op.cit., p.7

20. No attempt is made to conduct covariance analysis.

CHAPTER IX

CONCLUSIONS AND IMPLICATIONS OF THE STUDY

In this study, an attempt has been made, first, to examine the relevance of the traditional approach to consumption analysis to the realities of developing countries and to show the urgency of developing an alternative approach; second, to analyse household consumption patterns in post-revolutionary Ethiopia in an unorthodox way by combining the conventional method of family budget analysis with the method of political economy so that it was possible to show that the conventional consumption parameters (income and prices) can actually be used as policy instruments in a socialist - oriented transitional society and, third, to investigate the dynamic relationship between present consumption and future consumption (accumulation) in an invironment where policy makers and planners can significantly influence consumers' behaviour, inter alia, by setting up new institutions and by formulating new policies.

However, claiming to have achieved direct and definite findings in this thesis may not be possible due to certain limitations due to which the study suffers. The nature of the approach adopted here and the shortage of adequate data did not permit the making of an indept analysis of each topic covered here. The family budget analysis made in this study sufferes from the substantially out-dated nature of the data and from omission of certain possibly relevant explanatory variables.

Despite these and, possibly, other limitations in the background, it may be possible to draw some tentative conclusions from the study and attempt to point out the corresponding policy implications.

The traditional theory of consumption seems to be largely irrelevant to the realities of developing countries in general and to those in their transitional periods such as post-revolutionary Ethiopia, in particular.

It is, thus, high time to develop an appropriate theory of consumption. The attempt made to develop and apply the tentative approach to the Ethiopian realities seems to be effective in analysing household consumption patterns in an economically backward agrarian country that is experiencing socio-economic transformation.

Household consumption patterns in post-revolutionary Ethiopia, under the influence of the newly set-up institutions and policy instruments, seem to be in a state of flux. However, it is not clear whether these institutions and policy instruments are based on clear-cut and consistent short-term and long-term consumption policies or on conventional wisdom that is employed to find solutions, pragmatically, to pressing economic and social problems

In this study, special attention has been paid to the consumption of food for reasons stated in the text. The different methods employed seem to have shown that (1) the size of food surplus in the country is very small, to say the least, and (2) income elasticity - of food, per expectations, is substantially high. The implications of these possibilities may be far-reaching. The pace of economic development of the country can be slowed down if the production of food is not substantially increased to meet the growing demand of the expanding urban population, to mention but one case. A policy of belt-tightening may cause unexpected disasters if the insufficient state of food surplus is not take into account. It is hoped that the proposed ten-year perspective plan will give due attention to this problem. Perhaps, the production of grain can be taken as the leading economic link in the proposed plan.

It should be remembered that one of the propositions of the tentative approach was to incorporate efficiency in consumption into the study. However, it seems that there is no definite and direct evidence that shows that Ethiopian consumers and authorities concerned

are paying due attention to the rational budget. It is, therefore, high time that appropriate policies are formulated and the right institutions are set up to achieve efficiency in consumption on an increasing scale. Such measures as the expansion of social consumption, up-grading of the teaching of home-economics and the expansion of processed food may significantly contribute to the achievement of this objective. Mass organizations, especially the Revolutionary Ethiopian Women's Association (REWA), can play important role in improving traditional consumption patterns in such a way that costs of consumption are minimized and the benefits derive from it are maximized.

All through the discussion of several critical issues, for example, the possible increase in the consumption of the peasantry in the face of shortage of manufactured goods, the restriction of imports in the face of ever-growing size of the intelligentsia, the institution of compulsory deliveries of agricultural products and the introduction of alluring manufactured goods into the village, attempts have been made to shade some light on one of the major contradictions of the transition period: the contradiction between consumption and accululation. However, it seems that the optimal ratio between the consumption funds and the accululation funds is not clearly defined. Hence, the proposed ten-year perspective plan may offer a solution to this problem.

Finally, it may be worth mentioning that what has been analysed here may begin to reveal its stable and true form as peace is gained and the country's resources are concentrated on the attainment of the objectives of the proposed ten-year perspective plan.

SELECTED BIBLIOGRAPHY

Allen and Bowley. Family Budget Expenditure, (1935).

Anchishkin, A. (ed.). National Economic Planning. Moscow: Progress Publishers, 1980.

ARDU. Investigations on the Impact of the Agrarian Reform on Peasant' Income and Expenditure Patterns, 1980. Planning, Evaluation and Budget Section, Asella, October 1981, ARDU Publication No. 18.

Arrow, K.J. Social Choice and Individual Values, (ref. ed.). New York: Wiley, 1964.

Asmerom Kidane. The Demand and Price Structure of Selected Food Products in Ethiopia: An Econometric and Spectoral Analysis (Ph.D. Dissertation, The Pennsylvania State University), 1973.

Baran, Paul. The Political Economy of Growth. Monthly Review Press.

Baran, Paul and Paul Sweezy. "Economics of Two Worlds", Monthly Review, (March 1967).

Berry, Ya. Planning a Socialist Economy, Vol. 2. Moscow: Progress Publishers, 1977.

Bettelheim, Charles. Studies in the Theory of Planning. London: JK Publishers, 1979.

Bliss and N. Stern. "Productivity, Wages and Nutrition, Part I, The Theory". Journal of Development Economics, Vol. 5.

Blitzer et al (eds.). Economy-wide Models and Development Planning. Oxford University Press, 1975.

Bornestein, Morris. The Soviet Economy: A Book of Readings. Richard D. Irwin, Inc. 1970.

Central Statistical Office. Addis Ababa Household Expenditure Survey 1975. Bulletin No. 19.

_____ 1975. The Asmara and Dire Dawa Household Expenditure Survey Bulletin No. 24.

_____ Rural Household Expenditure Survey of 1967.

Chakravarty, Sukhamony. Capital and Development Planning. Cambridge Mass.: M.I.T. Press, 1969.

Dasgupta, Ajit K. Economic, Theory and the Development Countries. New York: St. Martin Press. 1974.

Desai, B.M. Analysis of Consumption Expenditure Patterns in India. Occassional Paper No. 54, Cornell University, August 1972.

Dobb, Maurice. On Economic Theory and Socialism. 1953.

----------. Welfare Economics and the Economics of Socialism. Cambridge at the University Press, 1970.

Domar. Essays in the Theory of Economic Growth. O.U. Press, 1957.

Duesenberry, James S. Income, Saving and the Theory of Consumer Behaviour. Cambridge Mass.: Harvard University Press, 1949.

Engels, Frederik. Anti-Duhring, Part II, Section 1.

Eshag, Eprime and Rosemary Throp. "The Economic and Social Consequences of Orthodox Economic Policies in Argentina in the Post-War Years", Bulletin of the Oxford University Institute of Economics and Statistics. (February 1965).

FAO. "The Impact on Demand of Changes in Income Distribution. A Case Study of Eleven Latin American Countries", Monthly Bulletin of Agricultural Economics and Statistics, Vol. 21, No.3, (March 1972).

----------. Income Elasticities of Demand for Agricultural Products. Rome, 1976.

Friedman, Milton. A Theory of the Consumption Function. Princeton University Press, 1957.

Hansen, Philip. The Consumer in the Soviet Economy. London: Macmillan, 1968.

Hick, J.R. and R.G.D. Allen. "A Reconsideration of the Theory of Value". Economica. (1954).

Hicks. Value and Capital. (1939)

Holmberg, Johan. Survey of Consumption Patterns in Etheya Extension Erea. CADU Publication No. 90, October 1973.

Houthakker, H.S. "The Present State of Consumption Theory: A Survey of Articles", Econometrics, Vol. 28.

----------. "On some Determinants of Savings in Developed and Under-developed Countries", Problems of Economic Development, (ed.) E.A. Robinson, New York: Macmillan, 1965.

Institute of Management Training. Socialist Ethiopia Provisional Military Government Structure and Guidelines. Addis Ababa, 1981.

James, Jettry and Francis Stewart. "New Productal A Discussion of the Welfare Effects of the Introduction of New Products in Developing Countries". Oxford Economic Papers (New Eeries), Vol. 35. No. 1. (March 1981).

Johansen, Leif. "An Examination of the Relevance of Kenneth Arrow's General Possibility Theoreum for Economic Planning", Economics of Planning, IX, 1-2 (1969).

Katona, G. Psychological Analysis of Economic Behaviour, (1951).

Kelley et al. Dualistic Economic Development.

Keynes, J.M. The General Theory of Employment, Interest and Money. Harcourt Brace, 1936.

Knight, F.H. "Ethics and the Economic Interpretation". Q.J.E., 1922.

Koopmans, T.C. "Stationary Ordinal Utility and Impatience". Econometrics, (April, 1960).

Kornai, Janos. Rush Versus Harmonic Growth. North Holland: 1972.

Kuznets, Simon. Modern Economic Growth: Rate Structure and Spread. Bombay: Vakis, 1966. (An Adaptation).

Lancaster, Kelvin. "Change and Innovation in the Technology of Consumption", American Economic Review. Vol. LVI. No. 2, (May 1966).

Leser, C.E.V. "Forms of Engel Functions". Econometrics, Vol. 31, No.4.

Lewis, W. Arthur. "Economic Development with the Unlimited Supplies of Labour", The Manchester School (May 1954).

Liviatan, Nissan. "Errors in Variables and Engel Curve Analysis", Econometrics, Vol. 29, No. 3 (July 1961).

Lluch Constantino et al. Patterns in Household Deman and Savings. Oxford University Press, 1977.

Madzar, M. Agricultural Mechanization in Rumania. (Mimeo), Addis Ababa, 1980.

Mandel, Ernest. Marxist Economic Theory. Vol. I. New York: Monthly Review Press, 1970.

Marx, Karl. Introduction to the Critique of Political Economy.

Ministry of Agriculture and Settlements. Area, Production, Yield, Use of Fertilizers and Marketed Production of Major Crops. Vol. I. Addis Ababa, August 1978.

Nyrdal, Gunnar. Economic Theory and Underdeveloped Regions. London, University Paper backs, 1963.

National Bank of Ethiopia, Quarterly Bulletines.

Nicholls, William H. "The Place of Agriculture in Economic Development" in Carl Eicher and L.Witt, (eds.) Agriculture in Economic Development. New York: MacGraw-Hill, Book Company, 1964.

Cetby and Taye Gulilat. "A Statistical Study of the Household Expenditure in Addis Ababa", East African Economic Review. Vol. 1, No. 2 (December 1969).

Philips. Applied Consumption Analysis. North Holland, 1974.

Pigou, A.C. Economics of Welfare. London: Macmillan, 1952.

Prais, S.J. and H.S. Houthakker. The Analysis of Family Budgetts. Cambridge University Press, 1955.

Qayum, Abdul. Techniques of National Economic Planning. Indiana University Press, 1975.

Raitsin, V.I. "Planning the Standard of Living According to Consumption Norms", Problems of Economics, Vol. II, No. 6-7, (Oct.-Nov. 1968).

Ramscy, F.P. "A Mathematical Theory of Saving", Economic Journal, (Dec. 1928).

Samuelson, P.A. Foundations of Economic Analysis. Harvard University Press, 1967.

Second Five Year Development Plan, (1963 - 1967).

Singh, H.K. Manhohan. Demand Theory and Economic Calculation in a Mixed Economy. London: George Allen and Unwin Ltd., 1963.

Slutsky. "On the Theory of the Budget of the Consumer" in Readings in Price Theory, (ed.) Stigler et al, 1915.

Socialist Ethiopia Provisional Military Government. National Revolutionary Production and Cultural Development Campaign. Third Year Plan (1973 E.C.)

Song, Byung-Nek. "Empirical Research on Consumption Behaviour: Evidence from Rich and Poor LDCs", Economic Development.

Stigler. "The Cost of Subsistence", Journal of Farm Economics, XXVII. (May 1945)

Stigler. The Theory of Price. (1941).

Stone, R. Consumer Wants and Expenditures: A Survey of British Studies. Since 1945. Cambridge, 1961.

Sweezy, Paul. "Marxian and Orthodox Economics", Science and Society. (Summar 1947).

Tarant, John R. Food Policies. New York: John Wiley, 1980.

Theil, Linear Aggregation of Economic Relations. Amsterdam: North Holland, 1954.

----------, Theory and Measurement of Consumer Demand. North Holland.

Tsuru, S. "Keynes Vs. Marx - The Methodology of Aggregates" in D. Horowitz (ed.) Marx and Modern Economics. New York: Monthly Review Press.

U.N. "Analysis and Projections of Consumption Demand: Methodological Notes", Industrialization and Productivity Bulletin, No. 9, 1965.

----------, Macroeconomic Models for Planning and Policy Making. Geneva: Economic Commission for Europe, 1967.

Uni. U. Tan. Financial Intermediaries and National Savings in Developing Countries. New York: Praeger, 1972.

Westphal, E. Agricultural Systems in Ethiopia. Wageningen: Centre for Agricultural Publishing and Documentation. Agricultural Research Reports, No. 826. 1975.

Wold, H. Demand Analysis. (1953).

Zielinski, Lectures on the Theory of Socialist Planning. Ibadan, 1969.

D E C L A R A T I O N

I, the undersigned, declare that this thesis is my work and that all sources of material used for the thesis have been duly acknowledged.

Name Dejene Aredo

Signature

Place and date of submission

College of Social Sciences, A.A. University.

June 14, 1982.