

Vol 5, No 1 (2013) - pp (94-117), *Special Issue on the Ethiopian Economy*

The Challenges and Policies of Poverty Reduction in Ethiopia

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Abstract: *Poverty is a central challenge in Ethiopia. Public policies to alleviate poverty could be effective and sustainable only when they are directed to address the underlying causes of poverty in the country. The central theme of this paper is that sustainable poverty reduction requires both robust economic growth and fair distribution of income accompanied by fundamental reforms in the political institutions of the country.*

Keywords: poverty, public policy, economic growth, income distribution

JEL classification: I32, E65, O11

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1. Introduction

Poverty is a multidimensional and dynamic phenomenon. It has multiple causes that exhibit economic, social and political characteristics and hence poverty reduction policies require multi-dimensional approaches and strategies. Poverty reduction policies have become one of the priority policy targets of governments in developing countries and the pillar of external financial assistance from donor countries. The challenges to reduce poverty are formidable in developing countries where poverty is deep and widespread, income is extremely low, growth rate is weak and income distribution is uneven. These features of the production and distribution of output create systemic tendency for the poverty elasticity of income to be weak, making the growth induced poverty reduction less effective (Besley and Burgess, 2003; Burginon, 2003). In economies where the initial pattern of income distribution is highly unequal and vertical mobility is restricted by economic, social and institutional hurdles, economic growth – if it happens at all - tends to have limited impact on reducing poverty. Whereas income redistribution policies, when cautiously implemented, could be used to address immediate crisis situations, they have limited effectiveness in reducing poverty on a sustainable basis. Even economies with remarkable growth rate could not achieve sustainable poverty reduction if the growth process does not generate productive job opportunities, mobility, and accumulation of assets and capital for an increasing share of the population. The pattern, characteristics and sector composition and sustainability of growth rate are therefore as important for poverty reduction as the pace of growth performance.

Poverty in Ethiopia has economic, political, demographic, geographic, environmental, and policy roots and causes. Ethiopia is one of the poorest countries in the world where low income and productivity, weak capital accumulation and investment, high levels of unemployment and underemployment are the main features of the economy. The agrarian based subsistence economy has been subject to the vagaries of natural forces and it could not achieve sustained economic growth or structural transformation. When an economy finds itself in such a situation, chronic poverty and vulnerability defines life for the majority of the population. It takes structural change and fundamental reforms to enable economic agents realize their economic potentials and improve their productivity and generate improvement in living standards.

The Ethiopian economy could not achieve structural transformation and remains largely subsistence oriented mainly because of misguided economic policy and autocratic political regime. Agriculture generates less than half of the GDP while employing nearly 80 percent of the labor force and providing livelihood for more than 90 percent of the population. The central challenge of economic growth and poverty reduction in Ethiopia is essentially how to generate sustainable rise in the productivity of the labor force in agriculture, improve the application of modern technology and inputs in the sector, reduce its vulnerability to shocks, secure non-farm related activities to the rural residents and enable the sector play a leading role in growth process of the country. The agricultural sector is not capable of supporting a rapidly increasing rural population at its prevailing state of technology, labor productivity and policy environment. Productivity level of the peasants remain near subsistence level and peasants work hard on their fragmented and ever dwindling plots and an emerging army of landless peasants has become a critical issue of concern. Capital investment, application of modern and improved agricultural production technology, secured landownership, and effective financial services are some of the factors that could initiate and sustain improvement in productivity in agriculture.

The main impediments to poverty reduction in Ethiopia emerge from a complex web of interaction of economic, political, demographic, social, geographic, and institutional factors and hence poverty reduction policies should address these underlying forces to develop strategies with lasting effect (Moges, 2006; 2013). This paper addresses the political economic forces that have impeded sustained poverty reduction in Ethiopia. It examines what factors have constrained the escape route of the subsistence peasants from earning a decent living and improving their productivity and in the process generating resources for capital accumulation and sustainable economic growth of the national economy. The paper argues that the political economic forces have deprived the Ethiopian peasantry off earning a decent living and kept the economy in low level equilibrium poverty trap. It underlines the necessity for reforming the political institutions to achieve sustainable and shared growth that could achieve prosperity and poverty

reduction. The paper assesses and critically examines the poverty reduction efforts and attempts to highlight the central issues in addressing poverty reduction in the country. The main purpose of the paper is not to unduly criticize the collective endeavor of the nation to reduce poverty. It is rather to focus attention on a more realistic assessment of the extent of the challenge of poverty in the country and carefully outline the policy measures and reforms that would be necessary to achieve sustainable poverty reduction in Ethiopia. I am fully aware of the daily struggle of proud and hardworking Ethiopian families in their effort to earn a decent living. This genuine effort, however, could be successful and bear fruit only if it is not hampered by misguided economic policies that deprive millions of Ethiopians from earning a living and in the process contribute towards the development of the national economy. For quite a long period and under the disguise of several excuses, the majority of the Ethiopian population has not been able to work in an economic, political, social, and institutional environment that cultivates productive use of the limited economic resources that exist at their disposal. Faced with such a challenge and with a system which uses all kinds of coercive methods, it would not be surprising for most Ethiopians to live in destitution and abject poverty.

The rest of the paper is organized as follows. The next section briefly reviews the main conceptual and measurement issues of poverty and poverty reduction and draws implications for the Ethiopian situation. Section three addresses the economic, demographic, political and policy issues related to poverty and poverty reduction in Ethiopia. Section four deals with the broad policy issues and explore strategies for addressing the problems of chronic poverty in the country. The final section draws concluding remarks.

2. Poverty: Conceptual and Measurement Issues

Poverty is a multi-dimensional concept and phenomena. It generally refers to the inability of households to provide sufficient subsistence and to lead a decent economic and social life. The concept of poverty reduction, as currently used, has ambiguous features and imprecise meaning (World Bank, 2004, Chen and Ravallion, 2001, 2004, 2007; Deaton, 2001, 2002; Kanbur, 2001). It is always necessary to precisely define what one means and intends to capture by the concept of poverty. When a nation declares poverty reduction is its policy objective, it involves different processes of identifying the poor, counting the number of poor people, putting this figure in relation to the entire population, characterizing the nature, duration and causes of their poverty, and finally developing strategies to address the problem. All of these issues are complex enough by themselves and could even be more so when they interact with other political economy variables. The lack of precision and variations over time makes the concept vulnerable to political yard sticking in which actual poverty problems are not directly addressed. The headcount poverty index, for instance, could be reduced without necessarily reducing the absolute number of people struggling in chronic poverty. This is particularly relevant in countries where population growth is fast, life expectancy is short and more children are born into poverty than those born in non-poor families or escaping the poverty trap. Who is poor and who is not largely depends on the poverty threshold the country adopts and whenever this yardstick is not realistic enough, the resultant poverty indicator would be misleading and unrealistic. Even when the benchmark yardstick is realistic enough, the poor are not homogenous. There is diversity within the camp of the poor and a concept of poverty would be partial if it fails to capture this essential feature of differences within the ranks of the poor.

Moreover, the concept has inter-temporal fallacy in that the poverty reduction strategy might become the victim of its own success. If one assumes that public policies reflect the will of the majority, at least in a democratic political setting, decline in the poverty index reduces the incentive for public policies to emphasize on further reduction measures especially when such measures are financed by contributions from the non-poor segments of the population. It therefore becomes important to develop poverty elimination strategies that appeal both to the poor and the non-poor in society and emphasize the idea that eliminating chronic poverty is to the vested economic, social and political interest of the whole population in a nation. The implication of such a perspective is that poverty could be eliminated only if there is a national consensus and support for anti-poverty policies and strategies.

The change in the poverty indicators over time also needs careful analysis for it might suggest misleading causality. Poverty reduction could result from growth of income relative to the poverty line,

changes in the distribution of income in favor of the poor, reduction of the number of people living in chronic poverty, the propensity of vertical mobility in the system, the capacity of the system to shield the destitute from chronic poverty, shocks to the vulnerable non-poor who barely stand away from the poverty contour, increase in population, and the combination of all these factors. A strategy to reduce poverty should therefore be undertaken with a clear understanding of what mechanisms influence the situation and dynamics of poverty in a country.

The issues of poverty reduction could also be analyzed from the perspectives of the process of economic growth and distribution of economic opportunities across economic agents and households. The level as well as growth of mean income, relative to the poverty line, is an important factor in reducing poverty. An economy might find itself in a situation of generalized poverty where aggregate output is not big enough to provide decent living standard for all. In such a situation, average income falls short of the poverty line. This phenomenon emerges where economic agents and resources are underutilized, unemployed, underemployed or economic agents do not have sufficient capital or technology to work with for a number of institutional, policy, political, social and economic reasons. The first order of priority in such a situation is to unburden economic agents from such constraints and develop strategies to eliminate structural bottlenecks for the realization of the economic potential of the country. This in turn requires thoroughly examining the economic, social, political and behavioral factors and institutions that give rise to such under-capacity utilization of natural and human resources in the economy.

Even when an economy improves its productive capacity and where average income is higher than the absolute poverty line, output may not or could not be equally distributed across households. This is so partly because inequality and its root causes extend beyond economic forces. Observation of cross country patterns of income distribution suggests that even the most egalitarian societies have index of inequality in the range of 0.20 to 0.25 whereas the most unequal economies register about 0.60 to 0.66 (Milanovic 2003; WIDER, 2008). However, not all inequality in a system reflects injustice. When the rewards that economic agents receive adjusted relative to their effort, dexterity, and creativity are fairly balanced it maintains the incentives for higher efficiency and growth in national income.

Economic growth is indeed the most powerful instrument to reduce poverty provided that it creates employment opportunities to the poor, increases the demand for factors that the poor owns, and creates the condition in which the poor develop the capability to accumulate productive assets that prepare them for productive and better life (Kraay, 2004; Morduch 1998; Krueger and Lindhal 2001; Blis and Klenow, 2000). Economic growth has twin effects both of which have important effects on poverty indicators. From analytical perspective, economic growth could imply increase in the average income of all households without necessarily changing their relative income. There is also a distributional effect in which the growth process is accompanied by changes in the relative income with ambiguous effect on the poverty indicators (Ravallion, 2001; Kraay, 2004). Nonetheless, the growth process might exhibit anti-poor elements when economic agents are not positioned to equally participate and benefit from the growth process due to lack of appropriate training and human capital, access to financial services, weak business and investment climate, weak institutions, and restrictive economic policies.

Is economic growth distribution neutral? There are strong tendencies that cast doubt on the distributional neutrality of growth. The growth of income of a national economy does not benefit all economic agents equally for a host of reasons including differences in resource endowments; inputs market imperfections, government policies, institutions, and social relationships. Economic growth benefits first and for most those who have the capability to initiate growth and it eventually reaches those economic agents who get employment opportunities and those who produce factor inputs for the production processes. This process is gradual and its flow does not necessarily involve a significant portion of the population. It is possible that economic growth could be driven by a sector with very weak linkage with the rest of the economy and with inconsequential effect on employment generation. Such a growth process can give rise to deterioration in the distribution of income and worsens the inequality situation leaving the majority of the population behind.

In the context of developing countries, poverty reduction policies are complicated by demographic factors (Brown et al., 1998). These countries are characterized by rapid population growth

with high mortality and birth rates and large family size. These features in turn mean relatively young population composition that exerts considerable challenge as well as future opportunities to economic policy makers to take into consideration in their effort to address the issue of poverty. The marginal propensity of fertility with respect to income of families is negative unlike the historical cases in Europe and USA where it was positive (Guinnane, 2011). Poor families hence tend to have larger family size than their richer counterparts. In a system where population is growing fast and demographic transition is yet to materialize, most children are born into poor families that compound the problem further not only on current poverty situation but also on how to provide them with necessary health, educational, and other social services that creates opportunities and capital for productive life. In this situation, poverty becomes the only inheritance for children from poor families. If a system manages to equip its citizens with the necessary human and physical capital, it can sustain economic growth and could have opportunities to even eliminate chronic poverty. And yet, this requires considerable inter-temporal allocation of economic resources and employment creation that facilitates sustained investment and economic growth.

Poverty reduction could be achieved by the growth in the income of the poor or improvement in the distribution of income. These two features of the growth process and its implication on poverty indicators is an important analytical approach to decompose the relative importance of the growth and distribution components in the process of poverty reduction (Bourguignon 2003). The relative importance of these forces influences the extent to which growth could be translated into poverty reduction on a sustainable basis. It is also important to note that the dynamics of economic growth and its impact on the poverty situation in the country largely depends on the political economic forces that shape the economic and socio-political forces within a country.

2.1. Poverty Indices

The measurement of poverty as defined above could take various approaches. The most commonly used approaches involve establishing a distribution function of the aggregate output of an economy, arranging the distribution of income or purchasing power with respect to the distribution of the population and with the help of a separately determined poverty line to divide the population into poor and non-poor classes. This process is conceptually simple but could be complicated in practice unless it is used precisely and interpreted from the perspectives of distribution, dynamics, and responsiveness to policy initiatives.

Accurate measurement of poverty starts with a reliable measurement and ordering of income at group level and at national level as well as accounting accurately the size of the population and households in a country. Consider that the income or consumption expenditure level of a total of n -households in a nation is arranged in an ascending order and takes the following notation:

$$y = (y_1, y_2, \dots, y_m, \dots, y_n) \quad (1)$$

The aggregate value of income of households approximates the size of the national output that is available for consumption which closely approximates the disposable income in the national income accounting plus public services and goods that household members receive from the government. Hence the aggregate size of output is critically important. It is only when the total output that the economy generates is large enough that sufficient resources could be available for addressing poverty objectives. Income per household hence measures what could be available, on average, for members of households and is measured by dividing the gross domestic product (GDP) by the total number of households, n . Income per capita, which depends on the average family size of households, is equivalent to aggregate output divided by the size of the total population. Note that the aggregate output is produced by productively employed segment of the population and its productivity whereas this total output should support the consumption expenditure of the entire population. Therefore, the aggregate size of output and the total size of the population are two fundamental determinants of how much goods and services could be available on average for individuals to consume and invest for further production. If the average income of a nation falls short of the poverty

threshold, by necessity the majority of its population would be suffering from chronic and endemic poverty. This is an exceptional situation of generalized poverty. It captures the central challenge of a failed system that could not generate enough to provide the necessities of economic life as well as where economic agents are deprived off realizing their productive potential.

The average income is an important indicator in a sense that it shows the value of goods and services that a typical household and its members can command if income were fairly equally distributed. However, income is rarely distributed equally across households or economic agents. Households and its members have inherent inequality in age, productive capacity, incentive to work, dexterity, education, health, and the like that is reflected partly on their capacity to earn income. The dispersion of household income relative to the average income captures the distribution of income. However, the extent of inequality is a matter of public concern especially when differences in income do not reflect differences in productive attributes of households and their members. It is also possible that inequality might have functional influence on the growth rate of income of households and hence the inter-temporal dynamics of income and poverty indicators.

The simplest and quite interesting indicator of inequality is the gap in income between the richest households and the poorest. In our ordered ranking of households by their income level, this is depicted by $(y_n - y_1)$. The relative concentration of households towards the highest or the lowest in the income ladder generates the most obvious form of income gap in a country. This gap and its behavior over time would have important bearings not only on the relative poverty index but also how much members of poor households realize their deprivation relative to their fellows as well as in life. It is one thing to live in a community where everybody somehow lives in subsistence and quite a different story to live in a society where a few fabulously rich households live amidst extremely poor households. The behavior of the rich as well as the poor would be quite distinct in these different setting of communities. There is a stylized tendency of economic resource distribution which suggests that households tend to concentrate nearer to the lowest income somewhere below the average income level giving the overall distribution of income a skewed structure. The level of income that most of the households generate and consume - the modal income - is a typical barometer of interest in economic analysis for it reflects the most representative feature of a household and its members.

The next issue of interest is related to the distribution of income of households relative to the average income of households. If we consider y_m as the average income of households, the deviation of individual household income relative to the average indicates how income and expenditure capabilities are distributed across households. Measuring income distribution and inequality is a notoriously difficult and inaccurate business. In practice, nations gather vital information on the distribution of income by conducting national household surveys on income or expenditure but for a long list of reasons such sample surveys fail to provide accurate indicator of the pattern of income distribution. Moreover, the surveys are conducted infrequently and their outcome largely deviates from national income accounting based estimates of aggregate output and income. It is therefore customary to rely on expenditure surveys to derive indicators of income distribution and inequality and rely more on national income accounts to gauge the level of national economic activities and growth rate.

On the basis of the level and distribution of aggregate output of a nation, indicators of consumption or income deprivation are computed by applying a poverty threshold. A class of poverty measures were suggested and commonly used in poverty analysis (Foster et. al.; 1984). The poverty index summarizes the level of poverty and its extent for a given distribution of income and poverty line as follows:

$$P_\alpha(y; z) = \frac{1}{N} \sum_{i=1}^d \left(\frac{z - y_i}{z} \right)^\alpha \quad (2)$$

Where P_α ($\alpha = 0, 1, 2$) is the poverty index and is the function of income or consumption expenditure (y) and the poverty line, (z). As indicated earlier, there are N households arranged in increasing order from the

lowest to the highest income per household and household **d** has income exactly equal or below the poverty line.

P_0 is the indicator of the headcount poverty index which measures the total number of people in income deprived households which have income below the poverty line expressed as a share of the total population in all households, **n**. Households and their members whose income falls short of the poverty line would constitute the poor.

This is useful and yet it is highly dependent on the choice of the poverty yardstick that is used to designate households as poor or non-poor. The poverty line is drawn using a set of commodities that are dominantly used and affordable by poor households. However, one has to be aware of the problems of picking arbitrary threshold for it may not realistically reflect the choices that are available for poor households to allocate their limited resources. Poverty involves lack of choice and vulnerability to different shocks that are outside the control of the members of the household. This is particularly the case in absolute poverty even if relative poverty invokes considerable lack of freedom of choice. The way the poverty threshold is chosen and determined affects the classification of households in the two broad categories of the poor and the non-poor. This could take quite an arbitrary bend if those near or above the threshold are still deprived of the basic necessities of life and choices that would make their status of non-poor almost trivial. It is also critical to note that because the classification is undertaken on the basis of households rather than individuals, intra-household resource allocation would have a bearing on the extent to which members of a family are experiencing the deprivation of income and consumption capabilities. This is particularly relevant in societies where the family size is large and there is gender stereotype and discrimination in terms of access to resources and services.

A related concept of the measurement of poverty takes into consideration the extent to which the level of income or consumption expenditure of poor households falls short of the poverty line. The approach is commonly referred to as the poverty gap index, P_1 , and measures the relative short fall of household income below the poverty line as percentage of the poverty threshold level. This approach is sensitive to the distribution of income among the poor households for it measures the average deviation of income of poor households from the poverty threshold. This suggests anything that helps the poorest households relative to the rest would improve overall extent of poverty. This might involve income transfers, welfare programs, or income boosting approaches that would benefit the poorest segments of the society. And yet it does not directly address the extent to which households with income level higher than the poverty threshold would be vulnerable. This is quite an important concern particularly when the non-poor are concentrated above the poverty line but not far enough to be comfortable about their current and future economic status¹.

These two concepts of poverty index, headcount poverty index and the poverty gap, are the most commonly used, popular, and relatively simple approaches to describe the absolute poverty of a nation². In this study, we focus on the two concepts and their implication in the analysis of poverty.

It is apparent from the two concepts of poverty measurement that poverty reduction can be achieved by one or the combination of factors such as increase in the income of poor households, improvement in the distribution of income in favor of the poor, or improvement in the income of the poorest

¹ Consider a family of four whose current income and consumption expenditure is such that they are considered a non-poor household and yet they barely made it. If there is an intended pregnancy and a birth of a child, the family size expands by 20 percent while income most likely remains somewhat the same. In such a case, the family may soon be in poverty unless it compensates its purchasing power with a corresponding rise in their real income.

² The third concept is the measure of the severity of poverty which is the square of the poverty gap that attaches more weight for those households that fall far below the poverty line than those near the threshold

line: $P_2(y; z) = \frac{1}{N} \sum_{i=1}^d \left(\frac{z - y_i}{z} \right)^2$. However, its appeal is limited and its practical application in poverty analysis and policy has been marginal.

segment of the households, or changes in the number of households and population in the country. These factors could be combined in different ways and manners to influence how the poverty index changes over time or across households. This is particularly relevant in societies where population growth is fast and vulnerability to shocks is high even among the non-poor who could be pushed to the rank of poverty easily. Growth in the average income of the poor and the aggregate economy without a corresponding deterioration in the pattern of income distribution generate the most promising path out of poverty. However, there are complex set of issues that might hamper members of poor households from benefiting and contributing to the growth of income, productivity and employment in the economy.

The capacity of an economy to address the challenges of poverty hence depends on how much it can mobilize and invest in the productive capacity of its population and generate employment opportunities to most of the economically active population and especially for those from the poorest segment of the population. The elimination of poverty apparently translates into pushing the average income of the poorest household, y_1 , beyond the poverty line, z . In every society, even in the most advanced industrial nations, there are families that would barely secure income that covers the societally defined level of the poverty line and yet for most practical purposes achieving an average income or consumption expenditure for the poorest households that is beyond the basic necessities of life would tantamount to eliminating poverty at the national level. The process of shared economic growth would have the best chances of eliminating poverty on a sustainable manner and yet in most cases some forms of social safety net would be necessary to ensure that all families enjoy the basic necessities of life.

Nonetheless, there are possibilities in which national economies find themselves where the poverty threshold line, defined within an acceptable level of bare necessities of life, might be higher than the average income of households, ($z > y_m$). This is a typical situation of generalized poverty where chronic poverty is widespread and almost every family is in a poverty trap. This situation calls for an entirely different approach in addressing the challenges of poverty and overall economic underdevelopment. Even in such a dire situation, there would be a minority of households that are rich and yet their relative prosperity would have limited impact on the overall poverty situation of the national economy. Apparently, income redistribution policies would have very limited influence on the dynamics of poverty in this situation since the overall population has an egalitarian distribution of deprivation and poverty for its citizens. The challenge for policy here is a radical and comprehensive reform that would change the very nature of how households and their family members engage in productive economic activities and benefit from their endeavors. It takes radical institutional, political, and social reforms that break away the bottlenecks that deprived the population from earning a decent economic life and participate productively in the economic activities of their country.

2.2. Poverty Exit Time

The accurate conceptualization and measurement of poverty is the first step in dealing with poverty reduction efforts. The pace and extent of poverty reduction is dependent on the combination of factors that involve overall economic growth of the national economy, the growth rate of the average income of poor households, the distribution of income across households, the growth rate of family size across the income distribution pattern, and the extent to which vertical mobility is feasible for individuals from poor families to join the ranks of the non-poor.

The concept of poverty exit time is used to describe what it takes in terms of the growth rate of income for poor households to eliminate their income shortfall from the poverty line. Given the poverty gap, growth rate of income for the poor would translate into closing the income gap and joining the ranks of the non-poor. A concept of an average exit time that makes use of a modified version of Watts measure, both sensitive to distribution of income and decomposable across subgroups of the population, is used for our analysis (Murdoch, 1998). The Watts index has a common notation of:

$$W = \frac{1}{N} \sum_{i=1}^d [\ln(z) - \ln(y_i)] \quad (3)$$

where there are i individuals in the population indexed from 1 to N in increasing order of income and d captures the number of people with income y_i below the poverty line z .

Our concern is to develop a measure that captures the expected time it will take for a poor household to exit poverty or break the poverty trap if its income grows at an average rate of g per annum. The relationship between current income of the household, y_i , and the target of the poverty threshold level, z , could be depicted as follows:

$$z = y_t e^{(t_g^t g)} \quad (4)$$

Taking the logarithm on both sides of the equation and solving for t_g^t results in:

$$t_g^t = \frac{\ln(z) - \ln(y_i)}{g} \quad (5)$$

Given that there are d households with income below the poverty line and $(n-d)$ households with income at least equal to the poverty line, the average exit time for households, T_g , is hence the average time for the entire population to eliminate poverty. It is given by:

$$T_g = \frac{1}{N} \sum_{i=1}^N t_g^t \quad (6)$$

Note the fact that out of these households, $(n-d)$ households have zero exit time because they have already achieved the target level of the threshold income. Some households may be barely above the threshold and yet they and their family members would be included in the class of the non-poor. This would suggest that the effective average exit time is:

$$T_g = \frac{1}{N} \sum_{i=1}^d \frac{[\ln(z) - \ln(y_i)]}{g} \quad (7)$$

This is strikingly similar and related to the Watts index above in that:

$$T_g = \frac{W}{g} \quad (8)$$

The essential feature of this formulation is that provided that the income of the poor is assumed to grow at an average rate of g per annum, the short fall of income of the poor from the poverty line could be eliminated within a span of time that is equal to the total amount of the gap divided by the growth rate of income of the poor. So if there are policies that promote the growth of income of the poor, then the poverty in a nation could be reduced or eliminated within a specific period of time. This perspective, of course, assumes that income among the poor could grow equally or that the poor have equal opportunities to improve their income or consumption expenditure. With this qualification, the exit time provides an important point of focus for poverty reduction policy. Moreover, provided that the information on the pattern of income distribution across households could be credible enough, it would as well be possible to estimate the cost of eradicating poverty by such measures as cash transfers to poor households.

2.3. Measurement of Poverty

The measurement of poverty and its dynamics over time depends on accounting the aggregate output of the nation and its growth rate, the distribution of income across households, the size and growth rate of the population, and a realistic poverty yardstick. These factors in isolation as well as in combination influence the level and dynamics of poverty of a nation over time and across households.

The Gross Domestic Product (GDP) measures the aggregate market value of final goods and services produced in an economy within a year. This concept assumes that all goods and services produced within the national economy have market price and their quantities are known. The GDP measures as accurately as possible and as much as data availability allows the capacity of an economy to generate the necessities and conveniences of life for consumption as well as reproduction purposes.

The GDP includes in its measurement all goods and services produced within a territory of a nation irrespective of who produced them. So long as the production takes place within the nation, it is included in the measurement of domestic product. This implies that some of the output produced in the country may not be claimed by citizens if more foreign companies are engaged in the production process. Or conversely, a country may have access to consume and save more than its domestic product at least in the short to medium term.

The GDP of a nation could be observed from different perspectives. The share of sectors in aggregate output contribution at a point in time and over the years indicates the structure and relative importance of the main three sectors, namely agriculture, industry and services, in the economy. The experiences of economically developed countries suggests that the rise in the productivity of labor in agriculture allows labor power to move into manufacturing and services sectors without compromising their capacity to provide food, raw materials, and investment resources to the rest of the economy. This process of structural transformation is an essential process in which an increasing share of the labor force moves into industry and services sectors where the scope for increasing productivity is even wider. The higher labor productivity in industry and then services starts to reflect on higher share of these sectors in aggregate output relative to the agricultural sector. Agriculture loses its dominance through its success, not its weakness, for problems in the primary sector could prevent the economy from launching sustainable structural transformation.

The agricultural sector is somewhat unique in that it depends largely on the vagaries of nature and how much the society has managed to tame the unpredictability of natural forces. Societies and the labor force that engage in agriculture lead a pattern of life style that is shaped by the fact that primacy is given to securing the necessities of food and other necessities of life.

Given the size and growth of the national output, its distribution across sectors and households remains a central theme of economic analysis. The relationship between the size and growth of output on the one hand and the distribution of this output across economic agents is a recurrent issue of public policy and the optimum combination of these two forces is defined within the political economy and societal institutions of nations. Country experiences on the extremes of inequality as well as forced egalitarianism suggest considerable economic costs to families. Each country needs to pursue policies towards economic efficiency that rewards economic agents in line with their effort and contributions to national output and yet due considerable needs to be made to maintain social policies that would promote shared and sustainable pattern of income distribution. Whereas forced egalitarianism in poverty has limited appeals, extreme inequality in income and opportunity would also have adverse effects on the sustainability of economic growth over time.

The distribution of income across sectors and the pattern of concentration of households in terms of employment and income with respect to sectors provides an overall sketch of how households share out of the aggregate output. It is therefore possible to measure the size of national output that is attributable to the main sectors of the economy, and on the basis of the pattern of sector employment of households, the income share of households. It is plausible to consider that the combination of aggregate income, its

distribution across sectors, and the employment pattern of households could provide a way of identifying the amount of income or consumption expenditure of households and their ranks in the overall distribution of income. These are the main ingredients that are useful to depict the pattern of income distribution across households. Additional information on the family size of households would provide us with the idea of per capita economic welfare of households.

The third factor in the arithmetic of poverty is related to demographic issues. Even though the demographic dynamics and processes are somewhat independent and roots in the social and religious beliefs and values, public health, family planning, and the like, there are strong argument to be made about the close relationship between economic and demographic issues. The relationship between the economic status of households and their behavior in terms of deciding or just choosing the size of their family or the survival of the family members had binding elements and tensions. There is a tendency in which poor households to have a larger family size, higher mortality rate as well as ill health, and high illiteracy rate compared with their counter parts in higher income households. Given this demographic feature, it is possible that even egalitarian distribution of income across households may not translate into egalitarian distribution of income across the population. Demographic forces also play a role in the accumulation of human capital among household members in which poor households with large family size would have difficulty in providing the necessary education and health services to enable their children with more chances to escape poverty. These features of early childhood opportunities in education and health seem to have life-long effects on the physical and mental development of children and the life time earning capacity.

It is therefore important to take into consideration the size and growth of national income, its distribution across households and the demographic features of households to accurately capture the forces that shape the incidence of poverty in national economies. In the following discussion, we explore these issues in the context of Ethiopia from both economic as well as political economic perspectives.

3. Poverty in Ethiopia

Ethiopia has a subsistence agriculture dominated economy and most of Ethiopians live in remote rural areas in chronic poverty. The first striking feature of the economy is how small the aggregate value of goods and services produced in the nation. As of 2010/11, for which we have the latest information of interest, the official statistics of the country reported that the Gross Domestic Product (GDP) was Birr 506.08 billion (about US\$31.4 billion³) (MoFED, 2013). This nominal figure tells a surprisingly real, if not the entire, story about the state and performance of the economy⁴. The figure represents both market transacted and imputed values of goods and services that were produced within Ethiopia irrespective of who produced them. This of course includes all economic activities undertaken within Ethiopia by foreigners as well as Ethiopians. In an economy where production is largely oriented towards subsistence and is not intended for market, there would be some degree of underestimation of the overall volume and perhaps value of aggregate economic activity in the economy. All in all, most observers agree that even the official nominal figures⁵, which officials tend to paint a rosier picture, are dismally meager.

³ The average nominal exchange rate for the year 2010/11 was about Ethiopian Birr 16.12 per US dollar.

⁴ Economic data can be compared over time only if there is a realistic deflator of nominal values of economic variables. However, nominal values can still provide valuable information and have the appeal of easy interpretation.

⁵ Macroeconomic data in Ethiopia has lost a significant level of credibility that there is an urgent call for comprehensive data auditing so that the figures can retain any meaningful information to indicate the state and performance of the national economy. There was a recent revision of macroeconomic data and the base year as of March 2013 (MoFED, 2013). Even the revision relies on the faulty HCE Surveys to generate the revised series which is unlikely to improve the situation. Observers of the economy are in the dark when it comes to accurately measuring the various components of the national economy.

The Gross Domestic Product (GDP) at current market price represents the aggregate market value of economic activity, the productive capacity of a nation, and the nominal income of its population. It is a summary indicator of the collective effort and outcome of the productive forces and population of a nation over a period of a year. A nation with a population of more than 81 million people hence managed to produce and depend on only this much output suggesting an average income per person of around Birr 6,244 per year (or about Birr 17 per person per day).

If one is distressed by how small the total output size of the economy is, the real shocker comes with sector composition of aggregate output. What essentially emerges is a portrait of a sick and stunted economy whose economic muscles are minuscule while its expanding portion is unhealthy. Agriculture has always been the main stay of the Ethiopian economy and the source of livelihood to most Ethiopians. This sector is stunted and traps millions in its poverty grip with little chance of escape or improvement over time. It is subsistence oriented, performs on diminishing and fragmented plots, uses primitive technology, is dominated by rain-fed farming, and operates under an increasingly debilitated natural and policy environment. It is also the central stage where economic, social and political forces engage in a complex web of interaction to dictate the future development path of the sector and the nation.

The production of national output could be observed from the perspective of three major contributing sectors of an economy, namely agriculture, industry and the services sector. Despite such conventional classifications, however, the three sectors have distinct features and characteristics that would distinguish an economy and its structure. A brief review of the three sectors of the Ethiopian economy provides an important portrait of the national economy. Table 1 below summarizes the main features and compositions of nominal GDP of Ethiopia and its attributes by sector in 2010/11.

Table 1: Ethiopia: GDP by Economic Sector Classification at Current Market Price 2010/11

Description	Agriculture	Industry	Services	Total
Gross Value Added (million Birr)	212,577.85	49435.73	207,853.88	506,079.1
Sector output share (percent)	45.2	10.5	44.2	100.0
Labor Force share (percent)	79.3	6.6	13	100

Sources: Ministry of Finance and Economic Development, 2013; CSA, 2012b.

Agriculture contributed about 45 percent of GDP of the economy in 2010/11. However, it disproportionately employed about 79.3 percent of the estimated 40.8 million labor force. This is equivalent to about Birr 212.6 billion worth of agricultural outputs. This output had to support an estimated 12.7 million rural households with a population of about 64.2 million and supply food and raw materials for the rest of the national population. This amounts to an average agricultural income of Birr 6,564 per farmer which is equivalent to about Birr 3,307 per capita per year in peasant families (or just Birr 9.06 per person per day!). Here is the center of gravity of Ethiopian poverty. Poverty reduction in Ethiopia requires nothing less than breaking the vicious circle of poverty in the agrarian sector of the economy.

In subsistence dominated economy, egalitarian distribution of poverty across households is largely a norm. However, even here, the emergence of landless peasants has occasioned the formation of ultra-poor rural families with extremely dire food insecurity. Such meager level of average income does not provide any room for tolerable inequality for it implies destitution and possible risk of starvation for those at the bottom end of the income distribution.

Arable land scarcity is a real and emerging challenge for the Ethiopian peasantry. Land parcels are getting smaller and fragmented that farmers have to manage on average 3.9 parcels of diminishing fertility (CSA, 2012d). The nation has some uncultivated arable land and yet they are located in areas where human settlement necessitates considerable investment in environmental and health infrastructure. Ethiopia has about a third of its land very suitable, suitable or moderately suitable for crop cultivation, of which about half is very suitable or suitable for crop production so that a relatively minimum external input is necessary for crop cultivation. The rest is not suitable or needs extensive investment and irrigation schemes to be of use for agricultural activities (FAO, 2013). The population is also concentrated in the highlands where

almost 89 percent of the population lives in areas above 1500 meters above sea level. In these areas, land holding is too small and too fragmented and soil fertility is declining leaving farmers with recurrent food insecurity. Most of the land is used for cultivating staple food for the family and little is left over for marketable surplus. Recent estimates indicate that two-third of cereal production is used for consumption, and about 14 percent for seeds and only about 15 percent of cultivation sold to the market (CSA, 2012). The future of agricultural output growth hence depends largely on higher crop yield, increased crop intensity, and perhaps to a lesser extent on crop land expansion. It is critical that the productive capacity of the land, especially in the highlands where most farmers live, is addressed in time because rapid population growth, uneven distribution of population relative to arable land, and the shortage of fertile land makes increasing land under cultivation to boost agricultural output hardly feasible.

The agricultural production output and the pattern of output distribution across households leave little room for securing a decent life for any significant proportion of the rural population. Whichever way one slices the agricultural output of the country, it could hardly provide beyond bare survival for the peasant families. And yet, the future hope of improving standard of living in the country highly depends on improving the productivity of peasant agriculture in the country and accompanied by structural transformation of the economy.

The industrial and services sectors contribute about 10.5 percent and 44.2 percent of GDP, respectively as of 2010/11. This translates into an average income of Birr 19,564 per person per annum. It is hence evident that the non-agricultural sector is relatively more prosperous than the rest and within this sector there are pockets of economic activities with high stream of income and yet with limited capacity to create employment opportunities for the labor force. The overall shortage and limited choices that underscores the overall feature of the economy has made trading and scarcity induced extra profit to a small segment of the society. Hotels and restaurants and real estate sectors enjoyed a relatively buoyant performance not necessarily linked with value creation but rationing of limited supply and extracting rent from a noncompetitive market. Financial intermediation turned out to be one of the lucrative activities reflecting again the relative scarcity of financial resources and a highly repressed financial market in which access to credit and loan is rationed with high access price. Those economic agents who realize the excessive rent to be extracted from an artificially low interest rate on loans in an environment of rapid inflation made their best effort to secure loans both from the government owned as well as private sector operated financial institutions to generate excessive rent from the economy. This highly repressed financial sector and extremely distorted market has attracted Ponzi game players in the system whose economic role has been extracting rent and excess profit from the public with the facilitating role played by the government, its policy environment and the financial system. The sector has limited contribution to employment creation and has rather a distorting role in the allocation of limited investable resources to vital sector of the economy where marginal productivity and employment generation would have been much higher than the current level.

The fact that national income accounting has no alternative ways of accurately measuring the economic output of the services sector except the cost of service provision has limited the usefulness of the sector data to describe the level of economic activity. This argument extends to public sector service provision in which the cost of running the activity is considered as the value contribution of the sector under consideration. So long as the sector or subsector is not exposed to competitive forces and value creation in line with the demand in the economy, it would turn into an extractive activity in which the public ends up paying more economic resources especially when the service under consideration has limited substitutes and is essential.

As the previous section demonstrated, the exit from poverty depends how fast the income of the poor grows and how widespread the growth process is to involve most of the households and their members. In this section, we have noted the fact that poverty in Ethiopia is predominant in rural areas and also significant in urban areas. However, the nature of the source of poverty is somewhat different between the two categories. Part of the urban poverty situation could be attributable to lack of employment opportunities and inequality in income across households. In rural Ethiopia setting, poverty is generalized and its fundamental solution lies in improving the productive capacity of the peasantry by removing the

bottlenecks that they are burdened with so that an increasing share of them could escape the poverty trap. Leaving the details for later discussion in section four, rural poverty is the central expression of economic challenge in Ethiopia and its underlying forces are economic, political, demographic, natural and institutional. It is hence imperative to pursue multifaceted approach in addressing the problem.

3.1. On the Economic Evidence

Assessing accurately the state and performance of a national economy requires a credible evidence and data set. For this purpose, Ethiopia needs to undertake an economic census on the basis of which realistic policies and strategies could be designed. The current set of data is hardly credible to confidently assess the state and performance of the economy and its underlying problems. Addressing the problem of economic data unfortunately cannot be done by correcting part and pieces in the data set. One needs a comprehensive and independent data set on the basis of which further sample surveys could provide updates on the growth of the national, regional, sector, and household economic performance.

Recent official reports widely claim significant reduction in poverty indicators in Ethiopia (CSA, 2012b; MOFED, 2012b). The most recent estimate puts the poverty headcount index to 29.6 percent at national level, 25.7 percent in urban areas and 30.4 percent among rural households (MOFED, 2012b: 7). This implies that the share of non-poor households in the country constitute about 70.4 percent. This is incredibly too exaggerated an estimate to make any economic sense. How can an economy that is essentially producing an equivalent of merely US\$1.13 per capita per day⁶ can have a dominant 70 percent of its population as non-poor!?⁷

The base of data for the recent poverty index computation is the 2010/11 Household Income, Consumption and Expenditure Survey (HICES) conducted by the central statistical agency (CSA, 2012b). There are a number of thorny issues to be addressed before one takes the data seriously and make further and perhaps fallacious statements. First, it should be noted that the survey is a major effort with a sample size of 27,830 households. Given its overall sample size, the survey could have provided vital and nationally representative picture of the economic welfare of Ethiopian households. Second, the survey was intended to be nationally representative and as such supposed to implement basic sampling techniques that would yield unbiased estimates of the economic situation of households in the nation. It is therefore a basic sampling requirement to adopt a sound sampling technique that would be as representative of the national household as possible. Third, the sample selection of the survey divided the national sample into three categories in which 10,368 households from the rural domain, 9,216 households from major urban centers, and the remaining 8,448 households from other urban areas were selected. The survey managed to collect data on 10,320 rural households and 17,510 urban households.

Fourth, it is apparent that the sample, perhaps by design, was highly biased in favor of urban households. In a country as predominantly rural as Ethiopia, it is simply not possible to have such a sample structure and expect to get a fairly representative data from the survey. This compromises the degree of representation of the sample and distorts the true economic picture of households in the country. There are cost and manageability considerations that any survey must take into account when gathering data from a sample frame as wide as the Ethiopian household. However, too much vital data would be compromised by

⁶ This computation uses an average exchange rate of Birr 16.12 for 2010/11 for estimating the US dollar equivalent of the output per capita per day in the country.

⁷ There are three possibilities that one can think of: First, there is gross underestimation of the size of economic activity in the country that national income accounts fail to capture but household surveys could; Second, the distribution of consumption expenditure is such an egalitarian that income as well as non-income sources of consumption allow families to escape the poverty trap; and Third, the absolute poverty line, the yardstick to classify families into poor and non-poor, is so ridiculously and meaninglessly low that even unemployed and landless peasants can qualify as non-poor. Ethiopian officials contend that it costs an adult just Birr 1,985 per year (Birr 5.44 per day) to maintain his/her calorie needs (CSA, 2012c, 2012b; MoFED, 2012b).

taking the short cut and loading the final sample with urban households. The rural households are only 37 percent of the total sample and almost two-thirds of the sampled households were urban households. A well designed survey with even half the size of the actual sample size could have generated a nationally representative, a better, a more accurate, and a more credible data set from the survey.

Fifth, the problem is systematic and has gotten worse over survey rounds. For instance, the share of rural households in the total sample was about 44 percent in 2004/5 HICE Survey and 50 percent in 1999/2000 HICE Survey of a total sample of 17,332 households (CSA, 2007). It is apparent that deliberate uploading relatively well to do urban households in the sample may help to paint a rosy picture of an economy but it might as well distort the true economic welfare status of Ethiopian households.

It is important to recognize the fact that this survey data set is the basis to assess not only the consumption expenditure and income of households but also the pattern of income distribution and poverty in the country. Given the predominantly rural nature of Ethiopian households, the household surveys would have lost pretty little information if it had ignored the entire urban households and focused its resources and efforts in gathering data from rural households that represent the real economic and welfare story of the nation. The damage is serious and such a faulty sampling and surveying approach would leave us with almost no reliable data to make a credible analysis on the consumption, income distribution, and poverty of the country.

The credibility of economic data in Ethiopia is a major and increasingly daunting problem. There are no easy counterfactual data generation options. As we discussed earlier, the national income account data has its own limitations and credibility problems. And the household survey data is too biased to provide a credible picture. Correcting the problem is not an easy statistical gymnastic and the importance of credible and consistent socio-economic data to make effective policies could not be overemphasized. It is time to undertake a comprehensive economic census of Ethiopia. This is a costly endeavor and yet by far cost effective than gathering faulty information that leaves us in the dark about the state and performance of the national economy. It is amazing how tainted data could be picked up by naïve international technocrats and go through cosmetic make up and disorient even professional economists to understand the workings of the Ethiopian economy⁸.

In this short article, I make a careful reading of the economic data of the country and try to combine different sources in an effort to assess the state and performance of the Ethiopian economy. In the process, I explicitly forward my argument and my assumptions so that its premise and conclusions could be seen in light of the underlying weakness of the economic data and evidence to support the statements and conclusions of the study. I believe such an assessment is overdue for there are a number of unfounded and invalid claims that have been in circulation. Assessment of a national economy by necessity requires credible and consistent economic data. Gathering and reporting aggregate economic data is the responsibility of the government, and in some limited cases non-government, statistics agencies. Economic statistics is in short supply in Ethiopia and whatever data that is available lacks consistency and in some aspects credibility. In this article, the basis of my argument is my readings of the various pieces of data on the Ethiopian economy on the basis of which I endeavor to make my assessment of the economic state of Ethiopia.

The 2010/11 Household Income and Consumption Expenditure Survey reported a fairly egalitarian distribution of consumption expenditure capability across surveyed households. Accordingly, inequality as measured by the Gini-coefficient was 29.8 percent at national level whereas urban and rural coefficients were 37.1 and 27.4, respectively (MoFED, 2012b; CSA, 2012b). Can one trust the data on the pattern of expenditure distribution across households if the sample itself is lopsided as discussed earlier? This is a dilemma and yet household surveys are the most common sources of gathering data on income distribution

⁸ The World Bank, with all its experts and even country office in Addis Ababa, is the latest victim of such a misreading of the Ethiopian economy and naively endorsing an economic hearsay that does not make economic sense (see Geiger and Goh, 2012). One should admire the skill of current Ethiopian officials to deceit even a seemingly sophisticated audience. Perhaps, some of the Bank officials are willing collaborators or simply have little understanding of the fundamentals of economics and the economics of developing countries.

pattern that closely proximate the actual distributional pattern of economic capabilities across families. Accordingly, I make use of the income distribution data, poor as it is, and combine it with national income account data to assess the poverty situation of Ethiopian households.

Such an approach is not without its due share of problems. However, it has some advantages as well. The size of the national pie to be divided among households and individuals could be approximated by the national output (GDP) and for this purpose I make use of the official figure for 2010/11 (MoFED, 2013). Given this national output level, it is divided by sector to estimate the share of households which is derived from the consumption expenditure survey for 2010/11 (CSA, 2012b). This process enables us to impute the respective share of households by quintile from the national output. Once we have the structure of income distribution by households, we can further impute income per capita by applying an estimate of family size by quintile. This disaggregation and ordering exercise is useful to estimate the level of poverty by combining it with the poverty line threshold.

The recent official estimates of inequality in Ethiopia indicate that the Gini-Coefficient was 29.8 in 2010/11 as compared to 30.0 in 2004/05, 28.0 in 1999/2000, 29.0 in 1995/96 and 32.42 in 1981 (MoFED, 2012b; 2007; UN-WIDER, 2008). Urban inequality is reportedly on the decline from 44 in 2004/05 to 37.1 in 2010/11 which is unbelievably remarkable given the high level of urban unemployment, concentration of wealth and business opportunities in few areas, and inflationary pressures that pushed the middle income families into economic hardships. Table 2 below provides a counter perspective and estimates of the distribution of consumption expenditure capabilities of households in 2010/11 at national, urban, and rural clusters. It is evident from quintile share of households that inequality in consumption expenditure capability is already a serious problem particularly in urban areas. The top quintile households command 61.5 share of consumption expenditure as compared to just 2.36 percent for the bottom quintile of urban households. This indicates a whopping income share ratio of 26 fold between the richest and poorest urban household quintile clusters. The bottom 60 percent of urban households had a combined share of just 19 percent of consumption expenditure capability. Such a glaring urban inequality would put Ethiopia as one of the countries in the world with extreme inequality accompanied by widespread poverty. In the rural areas, inequality is relatively low but it is essentially egalitarianism in poverty than in prosperity because almost all rural families struggle for survival near bare subsistence.

Table 2:
Ethiopia: Pattern of Distribution in Consumption Expenditure by Quintile 2010/11

Quintile/Categories	I	II	III	IV	V
Ethiopia	0.0799	0.1278	0.1706	0.2265	0.3951
Rural	0.1034	0.1555	0.1977	0.2400	0.3034
Urban	0.0236	0.0614	0.1057	0.1942	0.6151

Source and Note: Author's computation from (CSA, 2012b, 2012c). The magnitudes are consumption expenditure share of households.

Before we discuss the implication of such pattern of income distribution on the poverty indicators, it is important to establish some salient features of the Ethiopian households that the 2010/11 survey seems to suggest. It is apparently puzzling to note that there is no consistent reporting even on the basic characteristics of the households in the 2010/11 survey. The summary report of the households by quintile for the same sample group is quite divergent as reported and no explanation was provided for changing the figures even if it is a significant adjustment or editing (see CSA 2012b the analytical report and CSA 2012c for comparison). The indicators of the household expenditure levels should be seen with this reservation and the accurate picture would remain inaccessible so long as the primary data of the survey remains not in public domain for detailed examination.

It is also evident that Ethiopian households, irrespective of their income status, spend a significant share of their household budget on food items and about 60 percent of their daily calorie comes from cereals and related products. This might be related to the food culture of the population but it might as well indicate the stress under which household budgets have to be managed. I suspect the latter to be the case on the basis of some back of the envelope calculation.⁹ Even the top quintile group generates less than 1 percent of its net calorie requirements from meat and meat products or other delicacies of life not because of dietary preferences but simply because they are not able to afford such basics of life.

⁹ In a country where eating meat or egg is such a luxury, the affordability of food is increasingly a concern even among families in the higher quintile. I live in a country where the cost of living is one of the highest in the world and yet a pack of 10 eggs could be purchased approximately at US \$2 (or Birr 32 or Birr 3.2 per piece). In Addis Ababa, the price for 2011 was about Birr 2.30 per piece. Note that an egg per day for a family of five costs nearly Birr 4200 per year! (Incidentally, this is about 10 percent of the average household expenditure of the top quintile group). No wonder Ethiopians love to fast for spiritual as well as economic reasons.

Table 3: Ethiopia: Household Expenditure and Features by Quintiles in 2010/11

Household Quintile	Household share (Population share)	Average household expenditure in Birr	Average Family Size	Kcal per capita per day (o/w cereals share)
	(percent)	(share in income)	National (Rural)	(percent)
1	20 (14.5)	8,496 (7.99)	3.45 (3.58)	1829 (60.96)
2	20 (17.8)	13,593 (12.78)	4.24 (4.49)	2157 (61.28)
3	20 (20.2)	18,136 (17.06)	4.82 (5.20)	2302 (61.96)
4	20 (22.3)	24,087 (22.65)	5.31 (5.92)	2507 (61.04)
5	20 (25.2)	42,000 (39.51)	6.00 (6.92)	2806 (59.33)
Ethiopia	100 (100)	21,263 (100.00)	4.76 (5.059)	2380 (60.74)

Source and Note: Author's computation from (CSA, 2012b). Average family size is computed indirectly from Tables B1.1-B1.3. Population share estimate was computed from Table A3.1. Net Kcal estimates are from Table B10.1b.

Combining the data from Tables 1 to 3 above, it becomes evident that there is gross underestimation of the extent and depth of poverty in the country. The economy as it stands now simply could not support a decent living standard for the majority of Ethiopians with an exception to a small segment in the urban areas that enjoy a relatively high command of income and consumption expenditure. The next section addresses some of the policy issues and strategies that the country faces and needs to consider in an effort to bring about a sustainable poverty alleviation process.

4. Policy Issues and Strategies

The issue of poverty could be seen from the perspectives of the process of production of national output, the distribution of this national income across households and sectors, and ensuring families earn income that is sufficient enough to command the necessities and conveniences of life. The impediments to poverty reduction are closely related to these factors and the underlying variables operating within a political economy setting of a nation. The underlying forces of poverty and its dynamics in Ethiopia have both production inefficiency and distributional inequity characteristics compounded by demographic features. Addressing the problems of poverty in the country therefore require efforts to improve production allocation efficiency, productivity, investment in human and physical capital, improving the distribution of resources and opportunities, and undertaking sound institutional reforms.

4.1. The Poverty Challenges

The central economic and poverty challenge in Ethiopia is how to transform the agricultural sector so that it would not trap millions of Ethiopians in its low level equilibrium and poverty. What does it take to achieve such a structural transformation in agriculture? Improving agricultural productivity requires investment in physical and human capital and improved farming practice and technology with which farmers operate their farm or livestock. Ethiopian agriculture is dominantly smallholding peasant farming

in which the decision making behavior of millions of vulnerable peasants, in combination with natural forces, determines the aggregate output. Production is dependent on the vagaries of nature and this dependency has not declined over decades. What has changed is the demand for farmland because of the rapid increase in population and demand for land to produce food for household consumption.

The vicious circle of poverty in rural Ethiopia is so vicious that investment in capital and improved farm inputs could not be generated from savings of farm households. Because of the combined size of such smallholder farmers, the only feasible way that they could improve their yield is through investment on their land by their labor effort such as building terraces, plowing their parcel of land well, and attending the weed and related production processes. Such a continuous effort, however, could not be sustained when peasants have no security of ownership of the land. The best and sure way of getting security of land is private ownership of land which remains the main and perhaps only means of production among the poor peasantry. This calls for an urgent action to ensure security of land and ownership right of farmers.

It is only under secured land ownership that farmers would finally be making the necessary investment to improve the fertility and productive capacity of their land. Land must never be politicized but as a course of political imperative, successive political regimes in the country have used land to strip the rights of peasants to control the most important factor in their production process. There is no compelling economic reason to oppose private ownership of land and the excuses for maintaining the status quo of land ownership by the state are at best spurious. The main bottleneck to address this issue is not lack of evidence in support of legalizing private ownership of land but the fact that land is an effective means of political control of the peasantry. So long as the peasants are not free from such a shackle, there is little hope of transforming the agricultural sector and by extension to generate sustainable economic growth and development of the national economy.

Addressing the issue of land ownership needs to be accompanied by further reforms and efforts. The agricultural sector is burdened by accumulating problems over decades and hence needs unburdening. First, there is widespread underemployment of the labor force for lack of land or off-farm employment opportunities. In this regard, it is vital to encourage rural based small scale processing, manufacturing, and industrial activities that could create seasonal as well as permanent job opportunities. Moreover, infrastructural activities that could improve the social capital stock of the nation could have multiple benefits both in creating job opportunities as well as in improving the vibrancy of the rural sector in generating income for households. Second, gradual and yet steady migration of the labor force from farming into other activities is necessary for the farmers to secure enough land and capital to work with. Urbanization accompanied by small and medium scale industrial activities should provide an outlet for the younger generation of rural residents to find alternative ways of employment opportunities instead of scrambling on an already fragmented, small and less fertile farm land. This process of labor mobility could be facilitated by providing basic training in skills that are suitable for industrial jobs. This does not necessarily be the sole responsibility of the public sector but also the combined initiative of the private sector with apprenticeship to young rural labor force.

Third, the demographic burden on the agricultural sector is considerable and measures to pursue realistic population policy are necessary and imperative. As of 2011, 56.9 percent of the population is younger than 20 years old (32.4 percent of the population younger than 10 years old). This indicates that the majority of the current population was born after the current political regime assumed power in 1991. This suggests one or more facts. The population is growing extremely fast supported by high birth rate, better survival rate of those born, and excessive death rate of those born before 1990. Decision on the size of the family ultimately depends on the choices, beliefs, and responsibilities of individual households. The long term solution to this intractable problem is when families take responsibility and bear the consequence of their decisions instead of externalizing their decisions to the community and society at large.

Fourth, those who survived the hostile economic and health childhood environment made it barely. 34 million (about 40 percent of the total population) are undernourished during 2010-12 compared to 35 million (48 percent) during 2004-6 and the figure for 1990-92 was 34 million (68 percent) of the estimated population of about 50 million (FAO, 2013). Despite the seemingly declining percentage, the number of people who are undernourished, debilitated, stunted, and face premature death is barely changing over the

past two decades. Still, most of Ethiopian children are born to languish in destitution and debilitating poverty.

Fifth, agricultural investment in smallholders farming comes only from the peasants themselves and could not be undertaken by external forces, including the urban sector, foreign direct investors, or the government. The only sustainable source of investment comes from the deliberate decision of smallholder farmers undertaking improvement in their land management and making small but vital investment in their production system. The main source of such investment is the annual output of the respective farmers perhaps accompanied by credit schemes that would enable the poor farmers to introduce appropriate technology in their farming practice. This process could further open market for small scale industries that could potentially attract and employ farmers without sufficient land to work in activities that service the smallholder farmers. Local entrepreneurs may seize this huge business opportunity by developing simple, appropriate and affordable farm technologies that could improve productivity of the farmers and increase their marketable output which would be the ultimate source of their investment.

Six, there is serious mismatch in concentration of population settlement in the highlands and the distribution of current and potential croplands in the lowlands. This calls for voluntary and gradual migration of families where opportunities are attractive. This process is complicated in practice, as recent crisis in the south west indicate, and again the main culprit is politics rather than social or economic. The national economic space has been fragmented into enclaves of ethnic boundaries that do not allow a more optimal and efficient allocation of economic and human resources across the country.

Seven, agriculture has been saddled with serious problems of lack of access to land, ownership right of the peasants to their land, deterioration in fertility, soil and land degradation, lack of access to credit services, poor agricultural and marketing infrastructure, and dependency on the vagaries of nature. All of these factors exert adverse influence on the growth of the sector and hence the national economy. The sector is geared to subsistence and even then only half of the peasants are currently self-sufficient in cereals. The ever-dwindling plot of farmland is simply not enough to produce sufficient crops for subsistence. As a result, the rural population has increasingly become net buyer of food items. Only about 20 percent of the peasants, mainly from grain surplus regions, generate nearly 80 percent of marketable surplus in the country. These indicators strongly suggest that the peasants are increasingly subjected to food insecurity over the years. The price of food items has been increasing and lack of political leadership to undertake appropriate policy action in time, coupled with external developments and shocks, might foreshadow the era of increasing food prices and further hardships for net food buyer peasant households and food deficit regions in Ethiopia.

The poverty situation in Ethiopia exhibits a number of unique features and characteristics that reflect the performance of the national economy, the dynamics of population growth, the distribution of opportunities, subsistence dominated agricultural sector, and the policy environment that hampered the realization of the economic potentials of the nation. These features do not allow a sustained rise in the productivity of labor. Not only is productivity very low but also it has been stagnant over time. This is particularly the case in the agricultural sector where the per capita food production has consistently followed a declining trend since its peak in the 1970s (World Bank, 2005).

Addressing the problems of poverty in Ethiopia requires setting the priorities in order and undertaking appropriate measures to improve the capacity of the economy to move out of the impossibility frontier it finds itself. The overall hostile investment climate, institutions and attitudes set a hurdle for sustained improvement in the productivity of labor. This problem is widespread and leaves its mark both in agricultural and industrial activities. An average industrial worker in Ethiopia, for instance, is twice less productive than their counterpart in China and 80 percent less productive than workers in Bangladesh. This stark difference in productivity of workers is largely attributable to total factor productivity differences (77 percent) whereas the remaining could be accounted for by differences in intensity of physical and human capital per worker (World Bank, 2005). Addressing the overall problems in the business climate and removing the burden of uncertainty, unpredictability, favoritism, and poor infrastructure for local entrepreneurs remains a critical problem calling for comprehensive policy reforms.

4.2. Policy and Strategy

Ethiopia formally embarked on anti-poverty reduction strategy in 2002 and the government put its objectives and policies in its poverty reduction strategy paper –Ethiopia: Sustainable Development and Poverty Reduction Program- which assesses the poverty situation in the country, the sources and constraints to economic growth, and outlines measures to address them (FDRE, 2002). This was followed by a revised policy plan to accelerate and sustainable development to end poverty (PASDEP) (FDRE, 2006). The revised policy stance recognizes the importance of non-agricultural sector in promoting overall growth and in addressing pressing poverty problems. Ethiopia is currently undertaking yet another ambitious economic plan within the framework of poverty reduction strategy. The Growth and Transformation Plan (GTP) is operational for 2010/11 to 2014/15 and envisages a rapid economic growth and structural transformation with emphasis on industrial development (MoFED, 2010). The core of the strategy is to achieve an average annual real GDP growth rate of 10 to 14 percent per annum with an estimated cost of US\$ 57 billion. The country has had no shortage of lofty and unrealistic plans in the past and yet all of them failed to address the fundamental problem of the economy.

Ethiopia and its population have a huge potential to overcome the challenges of the poverty trap and undertake sustained economic growth. The possibilities are immense given the fact that the level of economic underdevelopment and the gap to the rest of the world economy is so huge that considerable catch up process could be initiated and sustained. However, this demands serious reforms to dismantle the hostile economic policy and repressive political environment in which the millions of hardworking Ethiopians are struggling to earn a decent living.

This is most apparent in agriculture but would also apply to the rest of the economy to a lesser extent. Agriculture remains to be dominant for a foreseeable future in the economy and it is here that the most pressing challenges to poverty reduction concentrate. Ethiopian agriculture is burdened by lack of strategic policies that could transform the sector and enable the farmers to play important role in the economic development endeavor of the nation. The sector and peasants have little security in one of the core means of production, farmland. The current Constitution is and remains to be a central source of insecurity that has institutionalized and deprived peasants off the right to ownership of their productive asset. It is necessary to remove the monopoly of land ownership from the grips of the state. The government is a notorious landlord that uses land to exercise political control and coercion of the peasantry. This is a burdensome rent that the government and by extension the political party in control extracts from the poor peasantry.

The issue of ownership of farmland could not and should not be postponed given the pressing challenges in the sector. The current argument against or in favor of private ownership of land in Ethiopia largely misses the essence of the problem. There is no justifiable and compelling economic argument against the private ownership of farmland by the peasants. There is no more solid security to farmers than owning their essential productive asset. Ethiopian farmers have little else except rudimentary tools and perhaps oxen to plough their land. Farmers could not ensure themselves from political and economic risk by holding security certificate or the blessing of the political elite. The current Constitution prohibits private ownership of land. This is unfortunate and tantamount to enslaving the peasantry under the dictates of the state. The recognition of private ownership of land does not necessarily suggest the abolition of other forms of land ownership such as community or public ownership of part of the arable land in the country. The essential problem is when private ownership is constitutionally prevented and farmers are left with the ever insecurity to earn a living from their plots. One of the arguments that opponent of private ownership often forward is farmers would sell their land and would migrate to the cities creating further pressure in the already high unemployment rate in the urban centers. This argument is weak at best and does not appreciate the economic rationality of farmers and the value farmers attach to their land. Ownership of land in a poor society is beyond owning a piece of an economic resource. It is about freedom and rights to earn a living through hard work and a precondition for sustained investment effort to enrich the land and its supporting capacity at least by exerting more labor inputs and small investment that sustain its fertility and productivity.

Productivity of labor is consistently higher and more sustainable when the owner (and his family) operates the land. Ownership is the ultimate security and an insurance to command the output from the harvest.

Land reform could be complemented by measures that ensure an orderly land market regulation that protects farmers from speculative manipulations and concentration of farmland ownership. A number of countries pursued rules and regulations that stabilized the agricultural land market and make sure ownership remains within the active cultivators. Land transaction could be limited to exceptional cases and with the approval of the local farming communities. Such simple and transparent measures could ensure the stability of the land market and dries up the rent seeking behavior of economic agents who seek administrative allocation of land with modest or no payment. This regulated land market also serves to value land that reflects the prevailing market situation and the overall demand and supply of farmland in the economy.

Third, there is a concerted need to reduce the dependence of farmers on rainfall by expanding support services for small-scale irrigation systems and water management practices. This could increase productivity as well as equip the farmers with strong risk management capabilities. It is also time to promote support services for adaptation of appropriate farming equipment that fit smallholder farming. The supply of modern farm inputs and the integration of agricultural marketing networks with suitable infrastructure and services with the participation of private sector delivery of such services on efficient and competitive basis need to be promoted.

Increase in the productivity of labor in agriculture and its generation of marketable surplus are important enabling factors for industrialization. This critical contribution of agriculture for industrialization is possible only after the problems in the sector are addressed in time. Labor productivity in the non-agricultural sectors seems higher and a sustainable reallocation of the labor force from agriculture through education and training of the youth in the rural sector, building an enabling environment for the industrial sector to effectively use investment resources and generate employment opportunities, reducing the disguised unemployment both in rural and informal urban areas are important steps to address the problem.

The rural based agricultural sector is the most dominant and is likely to remain as such in the Ethiopian economy. However, a successful transformation of the subsistence agrarian sector requires additional measures to tame the pressure on the sector by improving the employment creating capacity of the industrial and services sectors. Pursuing effective industrialization policy is not only necessary but also the only way to ensure the burden of population pressure in rural areas and allowing an increasing share of the labor force earn its livelihood from industrial and services sectors. In this respect, the development of basic industries with extensive backward and forward linkage coupled with the establishment of small-scale labor-intensive industries becomes critical and feasible. The industrial sector is weak and yet with considerable potential not only to improve overall productivity but also to generate employment opportunities for the poor with sufficient human capital and training to take advantage of the opportunities. It is not possible to reduce poverty on a sustained manner without unburdening the agricultural sector from hostile economic policy, coercive political system, and demographic pressure.

5. Concluding Remarks

Poverty is a central public policy challenge in Ethiopia. It has multiple features and causes related to production, distribution, institutional, policy and political factors in the system. Poverty in Ethiopia could not be alleviated sustainably without fundamental political and institutional reforms. Sustained poverty reduction in the Ethiopian setting could be achieved only if the bottlenecks and insecurities for economic decision making are removed from the shoulders of the peasantry which constitutes the overwhelming majority of the population. Transformation of the agricultural sector from poor productivity and recurrent crisis is the only way out of the current poverty trap. And such a transformation in turn requires liberating the peasantry from hostile policy environment in which the right to own and develop its land and economic energy is recognized and legally protected.

Impediments to poverty reduction emerge from structures, institutions and policies that limit the capacity of the economy to achieve sustained and shared economic growth and engage the population in more productive endeavors. These forces limit the accumulation and efficient allocation of physical and human capital, the expansion of the productive base of the economy, and the innovation and adaptation of new technologies in production.

Poverty in Ethiopia is deep and endemic. Such a situation could prevail for generations only when hostile political, economic, social and institutional impediments in the country suffocate the productive energy of the population. The moderate rate of economic growth in recent years and the deteriorating pattern of income distribution in the country suggest that significant reduction in chronic poverty, let alone its elimination, would be unlikely without fundamental reforms. The problem could get even worse given the fact that population is growing rapidly, improving the pattern of income distribution, unlike the deterioration in inequality, is a slow and daunting process, and most children are born into poor families with limited opportunities for vertical mobility. It is therefore necessary to take timely action to accelerate the accumulation of physical and human capital, maintain and build upon endogenous social capital, undertake comprehensive policy reform measures that promote market forces and private sector development, pursue institutional reforms to reduce hurdles to full utilization of the potentials of the economy, and implement inclusive economic and political reform policies. These measures coupled with prudent social policies that cultivate the environment for collective prosperity could enable the system to reduce chronic poverty and put the economy on a sustainable development path.

REFERENCES

- Besley, Timothy and Robin Burgess (2003). "Halving Global Poverty" *The Journal of Economic Perspectives*, 17(3): 3-22.
- Bliss, Mark and Peter Klenow. (2000). "Does Schooling Cause Growth?" *American Economic Review*, 90(5): 1160-1183.
- Bourguignon, Francois. (2003). "The Growth Elasticity of Poverty Reduction: Explaining Heterogeneity across Countries and Time Periods," World Bank research paper memo.
- Brown, Lester, Gary Gardner, and Brian Halwell (1998). *Beyond Malthus: Sixteen Dimensions of Population Problems*, World Watch Institute.
- Central Statistical Agency (CSA-GOE).2012. Ethiopian Welfare Monitoring Survey 2011. Summary Report, available online at http://www.csa.gov.et/docs/wms_summary_report.pdf [Accessed on December 12, 2012]
- Central Statistical Agency (CSA) 2012b. Household Consumption and Expenditure Survey 2010/11, Analytical Report, Statistical Bulletin 563. Available online at <http://www.csa.gov.et>. [Accessed on March 7, 2013].
- Central Statistical Agency (CSA) 2012c. The 2010/11 Ethiopian Households Consumption Expenditure (HCE) Survey, Results for Country Level, Statistical Report, Statistical Bulletin, December. Available online at <http://www.csa.gov.et>. [Accessed on March 7, 2013].
- Central Statistical Agency (CSA) 2012d. *Agricultural Sample Survey 2011/2012, Volume IV, Report on Land Utilization*, Statistical Bulletin 532, May, Addis Ababa.
- Central Statistical Agency (CSA) 2007. 2004/5 Household Income, Consumption and Expenditure Survey (HICE), Volume II, Statistical Report, Statistical Bulletin 394, July. Available online at <http://www.csa.gov.et>. [Accessed on March 7, 2013].
- Chen, Shaohua and Martin Ravallion (2004). "How have the World's Poorest fared since the early 1980s?" World Bank Research paper, memo.
- Chen, Shaohua and Martin Ravallion (2007). "Absolute Poverty Measures for the Developing World, 1981-2004," World Bank Research Group, research memo, World Bank.
- Collier, Paul and David Dollar (2001). "Can the World Cut Poverty in Half? How Policy Reform and Effective Aid Can Meet International Development Goals." *World Development*. 29(11): 1787-1802.
- Deaton, Angus (2002). "Is World Poverty Falling?" *Finance and Development*. 39(2): 4-7.
- Deaton, Angus (2001). "Counting the World's Poor: Problems and Possible Solutions," *World Bank Research Observer*, Vol. 16 no. 2Pp:125-147.
- Dollar, David and Aart Kraay (2001). "Growth is Good for the Poor," *Journal of Economic Growth*. 7(3): 195-225.
- Diao, Xinshen, Alejandro Nin Pratt et al. 2004. *Growth Options and Poverty Reduction in Ethiopia-An Economic Wide Model Analysis 2004-2015*. International Food Policy Research Institute: Washington, D.C.
- FAO (2006). *The State of Food Insecurity in the World 2006 (Eradicating World Hunger-taking stock ten years after the World Food Summit)*, Rome, Italy.
- FAO (2013). *FAO Agricultural Land and Potential Database*, online at <http://www.fao.org/statistics> [Accessed March 2, 2013].
- Guinnane, Timothy. 2011. "The Historical Fertility Transition: A Guide for Economists," *Journal of Economic Literature*, 49(3), 589-614.
- Foster, James, Joel Greer, and Erik Thorbecke. 1984. "A Class of Decomposable Poverty Measures," *Econometrica*, Vol. 52, No. 3, Pp: 761-766.
- Geiger, Michael; Goh, Chorching. 2012. *Ethiopia Economic Update: overcoming inflation, raising competitiveness*. Washington D.C. (Available at

<http://documents.worldbank.org/curated/en/2012/11/17073947/ethiopia-economic-update-overcoming-inflation-raising-competitiveness> Accessed on February 20, 2013.

Hall, Robert and Chad Jones (1999). "Why Do Some Countries Produce So Much More Output Per Worker than Others?" *Quarterly Journal of Economics*. 114(1): 83-116.

Kanbur, Ravi (2001). "Economic Policy, Distribution, and Poverty: The Nature of the Disagreements." *World Development*. 29(6): 1083-1094.

Kraay, Aart. 2004. "When is Growth Pro-Poor? Cross Country Evidence" IMF Working Paper, WP/04/47.

Milanovic, Branko (2003). "Is Inequality in Africa really different?" draft document, (World Bank website: <http://www.worldbank.org>) [Accessed on December 10, 2012].

Ministry of Finance and Economic Development (MOFED). (2002). *Ethiopia: Sustainable Development and Poverty Reduction Program*. July, Addis Ababa, Ethiopia.

Ministry of Finance and Economic Development (MOFED). (2006). *Ethiopia: Building on Progress- A Plan for Accelerated and Sustained Development to End Poverty (PASDEP) 2005/06-2009/10*, Volume I, September, Addis Ababa, Ethiopia

Ministry of Finance and Economic Development (MOFED) (2003). *Ethiopia: Sustainable Development and Poverty Reduction Program-Annual Progress Report (2002/2003)*, December, Addis Ababa, Ethiopia.

Ministry of Finance and Economic Development (MOFED). 2012. *Growth and Transformation Plan 2010/11-2014/15*, Main Document, Volume I, Available online at: <http://www.mofed.gov.et> [Accessed on January 12, 2012].

Ministry of Finance and Economic Development (MOFED). 2012b. *Ethiopia's Progress Towards Eradicating Poverty: An Interim Report on Poverty Analysis Study (2010/11)*, May, Addis Ababa.

Ministry of Finance and Economic Development (MOFED). 2013. *National Economic Accounts Statistics of Ethiopia, Estimates of the 2010/11 Base Year Series*, April, Addis Ababa, Ethiopia.

Moges, Abu G. (2013). "The Elusive War on Poverty: Public Policy Issues and Concerns," *Journal of International Public Policy*, No. 31, pp: 25-48.

Moges, Abu G. (2006). "Impediments to poverty reduction in Ethiopia: Economic growth, Distribution and Policy," in Getnet Alemu, Atsede Assefa, Edilegnaw Wale, and Yihenew Zewdie (eds.) *Proceedings of the Third International Conference on the Ethiopian Economy*, Vol. I, Pp: 1-26. May, 2006.

Morduch, Jonathan (1998). "Poverty, Economic Growth, and Average Exit Time," *Economics Letters* 59, 385-390.

Ravallion, Martin (2001). "Growth, Inequality and Poverty: Looking Beyond the Averages," *World Development*. 29(11): 1803-1815.

Stedman Jones Gareth. 2005. *An End to Poverty? A Historical Debate*, Columbia University Press.

United Nations Conference on Trade and Development (UNCTAD). (2002). *The Least Developed Countries 2002 Report – Escaping the Poverty Trap*, United Nations, Geneva.

United Nations (UN) (2012). *World Population Prospects: The 2010 Revision Population Database* (on <http://esa.un.org/unpp/p2k0data.asp>). [Accessed on December 20, 2012].

UN-WIDER. (2008). "UNU-WIDER World Income Inequality Database, Version 2.0C, May 2008" Available online at (www.wider.unu.edu) [Accessed on December 21, 2012].

World Bank. (2004). *Ethiopia: A Strategy to Balance and Stimulate Growth- A Country Economic Memorandum, Poverty Reduction and Economic Management 2, (AFTP2)*, Africa Region, World Bank, Washington, D.C.

World Bank. (2005). *Ethiopia: Well-Being and Poverty in Ethiopia- The Role of Agriculture and Agency*, Report No. 29468-ET, Washington, D.C