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To the Graduate Council:

I am submitting herewith a thesis written by Harwood David Schaffer entitled "The Viability of the Economy of Oromia: A Point of Departure." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

Daryll E. Ray, Major Professor

We have read this thesis and recommend its acceptance:

William M. Park, Asafa Jalata

Accepted for the Council: Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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	Daryll E. Ray Major Professor
We have read this thesis and recommend its acceptance:	
William M. Park	
Asafa Jalata	
	Accepted for the Council:
	Anne Mayhew Vice Chancellor and Dean of Graduate Studies

(Original Signatures are on file with official student records)

THE VIABILITY OF THE ECONOMY OF OROMIA:

A POINT OF DEPARTURE

A Thesis
Presented for the
Master of Science
Degree
The University of Tennessee, Knoxville

Harwood David Schaffer August 2006

Dedication

This thesis is dedicated to my wife, Joanne J.M. Romeo, who was my mathematics study buddy 42 years ago at The Ohio State University.

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First and foremost, I thank my boss and major professor, Dr. Daryll E. Ray for all of his time and patience. Working with him in the Agricultural Policy Analysis Center has been one of the best experiences of my life.

I thank Dr. Asafa Jalata of the Sociology Department for challenging me to use my training in agricultural economics to think more deeply about issues that may be of benefit to the Oromo people in their struggle for justice and the establishment of a popular democracy in their land.

I express my gratitude to Dr. Bill Park from the Department of Agricultural Economics for his interest in my work and his willingness to serve on my committee.

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Abstract

The Oromo, an oppressed, colonized, ethno-national group within Ethiopia, are engaged in a struggle to achieve full political and economic participation within a national entity. Given an undernourishment rate approaching 50 percent and an agriculture which provides a means of livelihood for 80 percent of the labor force, any future leadership will have to address the interrelated issues of agriculture and economy. An examination of production numbers indicates that an independent Oromia would not be at an agricultural disadvantage when compared with remaining as a participating entity within the present boundaries of Ethiopia.

Policies directed toward overcoming undernutrition cannot be formulated apart from understanding the implications of the nature of economic exchange which is assumed to be non-coercive. In the case of food, this thesis argues that the non-coerciveness assumption does not hold, resulting in the lack of market access to food—undernutrition and death—for those lacking adequate monetary or production resources. Two additional constraints that must be taken into account are the lack of price responsiveness in aggregate agriculture which results in long periods of low prices for primary crop products and the fallacy of composition which calls into question the practice of assuming that a development activity that works in one nation will work well if others implement the same development activity.

While economic theorists argue that conventional economic theory is an objective, value-free description of a natural human process that is true for all times and

all places, there is sufficient basis to argue that conventional economic theory is valueladen and socially constructed in such a manner as to enhance and reinforce the dominant Western set of values and the existing power structures and mechanisms for the distribution of goods and services. If economic systems are socially constructed, then alternative socially constructed systems are possible. This thesis proposes using a dynamic concept of wealth in combination with the culture, values, and traditions of the Oromo as a point of departure for conceptualizing an economic system that may be better suited for establishing a viable economy of Oromia than the conventional model.

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Introduction

The continuing Oromo liberation struggle, particularly the popular uprising in Oromia that began on November 9, 2005 (Sudan Tribune) and continues into early 2006, raises the possibility that, in the near future, the government led by Meles Zenawi may fall, opening up the possibility of the establishment of a new democratic government. As the largest ethnic group within the Ethiopian Empire, the Oromo would bear particular responsibility for helping create a political process that would enable the full participation of members of all included ethno-nations in their own governance. The Oromo resistance takes place within the context of parallel struggles of the Sidamo, Shankella, Ogaden Somali, Afar, Gurage, and other colonized peoples living within the borders of the Ethiopian Empire. Depending upon the level of trust among the eight major ethno-nations that constitute the present territory of Ethiopia, the map and state structures could be configured in one of three general ways: (1) the present boundaries of Ethiopia as a single entity; (2) multiple national entities with one of them consisting of Oromia and one or more of the six other non-Habasha ethno-nations in present Ethiopia; or (3) multiple national entities with Oromia as its own state and the remaining ethno-nations establishing one or more independent countries. In any case the challenges facing the current and future Oromo leadership remain the same. The first challenge is to establish a clear political vision that will empower the Oromo people and other ethno-nations to determine their future by dismantling the current political structures and arrangements. The second challenge is to establish a vision of what it means to be a democratic, multinational state that respects Oromo culture and traditions as well as those of other included ethno-nations.

To address the issues inherent in attempting to meet those two challenges this paper is organized in three chapters that are further subdivided into sections. These chapters work through the various contexts in an orderly fashion (1) beginning with the specific, (2) addressing the general, and (3) exploring theoretical economic and social constructs with an eye on the policy needs of an emerging nation. The policy issues identified will need to be addressed not only upon achieving liberation but in the midst of the struggle as well. If these policy issues are not addressed during the struggle, decisions may be made that will limit the possibility of achieving the full potential for human liberation of the Oromo and other peoples.

The first chapter, The Oromo Context, provides information on the specifics of the reality facing the Oromo people and leadership. An examination of the political and historical background of the present conflict, beginning with the underdevelopment of Oromia by Ethiopian settler colonialism and global capitalism which has alienated the Oromo from their means of production and consumption and immersed them in poverty, disease, illiteracy, etc., sets the stage for the remainder of the analysis. Following that examination, the future options for the shape of a multi-cultural democracy in which the Oromo are full participants are examined. The final section in this division analyzes the agricultural and nutritional issues facing an Oromo leadership.

The chapter on the Economic Context provides a framework for examining some general issues that face not only the Oromo, but exploited and oppressed people in both

the global South and the global North as well. The first of these is an examination of the real-world constraints that provide the context within which economic policy is and should be developed. The next section describes the characteristics of crop production and food consumption and how those characteristics identify issues that are not faced by other economic sectors. The third section explores one of the most serious problem intrinsic to standard economic analysis, the fallacy of composition. The fallacy of composition is encountered when it is assumed that something that is true in individual instances will still be true when applied to the whole population. The fourth section examines a set of resources and impediments to development within the Ethiopian Empire that have been identified by the World Bank. Conventional wisdom policy recommendations constitute the fifth section.

The third chapter, The Theoretical Context, takes a fresh look at economic issues as a means of opening up the possibility of achieving economic justice for all people. The values that are implicit in the so-called value-free neo-classical economic theory are identified in this division's first section. The second section uses the sociological concept of social construction to provide a context within which economic theory can be placed. The third section uses some insights from Adam Smith to posit a dynamic theory of wealth, based on the labor of each member of society. Using the cultural and religious traditions of the Oromo and included ethno-nations, the fourth section identifies a set of values that provide a basis for the development of social and economic policy.

The conclusion uses the concepts developed in the three chapters to provide a point of departure for those engaged in the struggle for liberation and justice within the territory of the Ethiopian Empire..

I. The Oromo Context

Political and Historical Background

The popular uprising in Oromia that began on November 9, 2005 and continues into early 2006 raises the possibility that, in the near future, the government led by Meles Zenawi may fall, opening up the possibility of the establishment of a democratic government. The current unrest is a manifestation of more than a century of colonization by the Abyssinian (Amhara and Tigray) minority that constructed the Ethiopian Empire with the aid and support of European powers (Jalata 2001). Despite its exploitation and domination of other ethno-nations—of which the Oromo are the largest—within Ethiopia, the Tigray controlled Meles government is the ongoing beneficiary of financial and technical support from a United States government that engages in a discourse of democratization.

The Oromo are one of a group of Cushitic speaking peoples living in northeast Africa (Melbaa, 1999, pp. 11-15). Evidence points to the origin of Cushitic people along the upper stretches of the Nile River prior to the end of the first millennium BC. As the Cushitic population expanded and differentiated, part of the population migrated into the fertile agricultural lands of the interior of the Horn of Africa prior to the third century BC. The Oromo trace their origins to an eponymous ancestor, Oromo. His descendents gave rise to two moieties, the Borana and the Barento. Historically the Oromo were pastoralists and small scale agriculturalists. The establishment of the origins of the Oromo from ancient African stock is important because the Abyssinians have justified their taking of Oromo land by claiming that the Oromo are recent arrivals in the Horn of

Africa who captured land that does not belong to them. From the Abyssinian perspective this recent arrival theory allows them to argue—contrary to historical and archaeological evidence—that they are reclaiming historic Abyssinian land from outside invaders.

In addition to a common language, Oromo society is characterized by a democratic tradition called gadaa that organizes the male population into both 8-year agedetermined gada grades (hirya—determined by birth year) and 8-year generational gada sets (luba—entered into 40 years after father) (Jalata 2005, p. 18-19). Within the gadaa system, power is rotated every eight years and gadaa includes representation of many segments of society as well as a set of checks and balances that makes it difficult for any one individual or group to establish autocratic power over Oromo society and its institutions. Election to office is by universal male suffrage excluding members of a limited number of caste groups (Jalata 2005, p. 19). Women were able to exercise and protect their rights through a parallel institution called siggee. While the historical development of gadaa has not been thoroughly documented, it is clear that it was operational in Oromo Society at the beginning of the sixteenth century. However, as conflict over land resources within and among the Oromo and their neighbors (Tigray, Amhara, Somali, Afar, etc.) increased, the gadaa system began to break down. Eventually, under wartime pressure, some Oromo groups established kings, but even then the rights of kings was limited by the remnants of the gadaa system.

During the period from the sixteenth century until the middle of the nineteenth century, the various ethnonational groups in the Horn of Africa maintained a relative balance of power. All of this was to change with the introduction of firearms into the

region as European colonial powers sought to extend their power beyond the coastal areas of Africa and into the interior. In all of the continent outside of Ethiopia, the colonial powers established direct control over the interior. In the case of Ethiopia, the Abyssinians were able to use a Christian discourse in the context of a three way struggle among the British, French, and Italians to obtain weapons, infrastructure, and military knowledge that allowed them to colonize neighboring ethno-nations, including the Oromo, and establish an Ethiopian Empire in the Horn of Africa. As a colonized people, the Oromo saw their land expropriated and two-thirds given to Abyssinian colonial settlers and the church. The remainder was allocated to people "on the condition that they supplied services to the settlers and paid various taxes, dues and tithes to the church and the treasury" (Melbaa 1999. p. 63). Under successive rulers, the indigenous Oromo were dominated and exploited through the "forced recruitment of labor via slavery, ... the [semi-slavery] nafxanya-gabbar system" (Jalata 2001. p. 125), and the establishment of garrison cities. The Oromo were further oppressed through Amharization which included forced religious conversion, denial of educational opportunities, suppression of the Oromo language and culture, distortion or destruction of Oromo history, and the forced use of the Amharic language. While the hated nafxanya-gabbar system was abolished during the Italian Fascist rule (1936-41), the lot of the Oromo and other conquered peoples remained bleak through the restoration of the Haile Selassie I regime (1941-1974), and the communist backed Derg (1974-1992). The condition of the Oromo has deteriorated under the Tigrayan led regime of Meles Zenawi (1992-present).

The democratic discourse the Zenawi regime uses to obtain international governmental and NGO support belies the true nature of daily life in Ethiopia for most of its population. Zenawi uses all necessary force to suppress any and all opposition to his continued rule. While elections were held in May 2005, significant political forces were unable to participate in the election, and even with these groups excluded from participation in the election, the TPLF had to manipulate the results to retain power. Supporters of the Meles regime worked to suppress support for the Amhara dominated Coalition for Unity and Democracy (CUD) in Finfinne and other urban areas but were unsuccessful. As the result of restrictions put on CUD legislators, most of them refused to take their seats in the legislature. In protest of the repressive measures, taxicab drivers began a strike, resulting in a general show of opposition to the Meles Regime. The actions of the Meles regime triggered an uprising in Oromia led by students who protested the killing and arrest of students who were expressing their opposition to the election tally and subsequent domination of the political process by the TPLF and its allies. In turn, the torture and incarceration of the students increased further.

One of the results of this history has been the underdevelopment of the Oromo and other conquered nations within the Ethiopian Empire. In setting the stage for talking about the concept of underdevelopment, Walter Rodney writes: "Man has always exploited his natural environment in order to make a living. As a certain point in time, there also arose the exploitation of man by man (sic), in that a few people grew rich and lived well through the labor of others. Then a stage was reached by which people in one community called a nation exploited the natural resources and the labor of another nation

and its people" (Rodney 1982. p. 22). Underdevelopment results from exploitation that allows one group of people to grow rich at the expense of others and involves the extraction of surplus labor for the benefit of the rich and powerful. Slavery, colonialism, and neocolonialism have been key factors in the underdevelopment of Africa in general and Ethiopia in particular.

Under the *nafxanya-gabbar* system the gabbar

"paid a total of about 23 different kinds of taxes, dues and services in kind or cash or both. ... In addition to these, the gabbar had to work 2 or 3 days a week on the [nafxanya's] farm. The gabbar had to build and maintain the house and fences. He or his wife were to fetch water and firewood for the house and grass for the [nafxanya's] horse or mule, a given number of days a week. ... In fact the services that Oromo gabbar families owed to [nafxanya] families had no limits. Information does not exist on how much of his time a gabbar spent each year supplying these taxes, dues and services to the [nafxanya] and others, but in several localities it would not be less than 75 percent" (Melbaa 1999. p. 63-64).

As a result the gabber did not have the time, energy, and resources to attend to his/her own educational and economic development. While the nature of the underdevelopment changed forms with the elimination of the *nafxanya-gabbar* system under the brief Italian rule, underdevelopment of the Oromo and other ethno-nationalities within the Ethiopian Empire has continued to the present time with most of the resources being used for the benefit of the dominant group and its supporters.

Future State Options

In the context of a brutal history of suppression, exploitation, and domination, the development of a significant opposition to the Meles regime raises the question of the nature of the political future of Ethiopia and its people. As the largest single ethno-nation within Ethiopia, and with the core of the present unrest centered in Oromia, it is likely

that the Oromo would be a leading group in a successor government to that of Meles Zenawi. Depending upon the level of trust among the major ethno-nations that constitute the present territory of Ethiopia, the map could be configured in three general ways. (1) If the dominant groups for the last century, Amhara and Tigray, were to be willing to recognize the full and proportional participation of the other ethno-nations and if these peoples were to be able to trust the assurances of the representatives of these former colonial powers, the boundaries of Ethiopia with a new political structure could remain much as they are with the Oromo as the largest of these groups (40-50 percent) fulfilling a major leadership role in the formation of a new government. One of the crucial issues would be to determine the relationship between individual ethno-nations and the central government. (2) If the former colonial powers were to be unwilling to recognize the legitimate exercise of democratic power by their former "subjects" or if the level of distrust among the other ethno-nations were to be great enough to preclude power-sharing with the Abyssinians, a country could be formed by the Oromo and one or more of the other ethno-nations. The Amhara, Tigray, and any remaining groups would be responsible for making their own decisions about the political organization of the remaining territory. (3) The Oromo could decide to form a government in their historic territory within the bounds of present day Ethiopia, with the other groups making their own governmental decisions.

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¹ The main geographic centers of the Amhara and Tigray need to be fully willing to enter into this new structure, not forced. If they are forced they will be resentful and will work to undermine the system, seeing the Oromo as the new colonial overlords. If they have to be forced then they belong in their own geographic state(s) with their own leadership. For the minority Amhara and Tigray who as the result of settler colonialism and other factors are living within the territory with a majority Oromo population, trust building will be a major concern in the developing of a democratic, multicultural society.

Because there has been significant migration of various groups over the last century of colonial occupation, and because the nineteenth century ethno-national boundaries were not all that distinct, any territory in which the Oromo would be actively involved in the government would have to be inclusive and multi-cultural, if it were to be consistent with the highest ideals of Gadaa—Oromo democracy—with all of its inherent checks and balances.

Agriculture and Nutrition

The twin issues of agriculture and nutrition are of prime importance to any government in Ethiopia. Although the specific geographic resources would differ from scenario to scenario, the political, agricultural, and economic issues remain much the same. With undernourishment plaguing some 50 percent of the population (UNFAO 2004), the implementation of a viable agricultural and economic system that will allow people to earn a livelihood and meet their daily nutritional needs is a critical task that will confront any new government. This paper begins by looking both at the resources available for Ethiopian agricultural production and the current nutritional level of the population.

Ethiopia is an agriculturally dependent nation with 80 percent of the labor force primarily engaged in either agricultural production or agriculturally related activities like seed and fertilizer distribution on the input side and processing, marketing and transportation on the output side. As a result over 55 million people are dependent upon agricultural production for their livelihood. The bulk of the agricultural producers are engaged in a subsistence level, ox-plow based, rain fed agriculture that is vulnerable to

weather. This mostly non-commercial, peasant style agricultural production accounts for 52 percent of Ethiopia's gross domestic product (GDP) (Seifluaziz 2004. p. 4).

Of the 100 million hectares of land area (Table 1²) in Ethiopia, 32 percent is presently used for agricultural purposes. Of the agricultural area, a little over one-third is in crop production and two-thirds is used for permanent pasture. The proportion of agricultural land in Oromia will be examined at the end of this section.

The bulk of the cropland (Table 2), 7.5 million hectares, is dedicated to the production of cereals, primarily tafi, maize, grain sorghum, wheat and barley. The 2005 yield for all cereals was 1.24 tn./ha., which is less than half of the world average yield of 3.26 tn./ha (FAOSTAT). While the grain yields in Ethiopia and the world are not fully comparable because of the different ratios of various grains, it is clear from these numbers that Ethiopian yields are very low, and that higher yields are possible if the causes of low yields can be identified. Yield levels over the last decade have ranged from a low of 1.12 tn./ha. in 1999 to 1.35 tn./ha. in 2002. This variation is less than might be expected given the variability in rain patterns. For any one specific location the yield variation can be much larger than this, but for the country as a whole the yields are fairly stable.

Pulses, which includes a wide variety of dried beans, are produced on 1.2 million hectares and yield 0.88 tn./ha., slightly above the 2005 world average of 0.84 tn./ha. For Ethiopia, the production of oil crops is carried out on 0.732 million hectares with a total production of 460,000 tonnes. Most of the oil crops produced in Ethiopia are not export

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² All tables appear in Appendix A.

oriented crops like soybeans and rapeseed with high yields, but rather small seeded crops like safflower, sesame, and flaxseed (linseed) that are incorporated into local diets. Thus it is difficult to compare the Ethiopian oil crop yield with that of the world because of the wide variation in yield among the various oil crops.

One of the crop categories that deserves particular attention is roots and tubers which are planted on 6 percent of the cropland, 0.628 million hectares. The yield for roots and tubers is 7.75 tn./ha. (Table 2), far larger than that for cereals. Although roots and tubers are planted on only 6 percent of the land, they provide 12 percent of the per capita daily supply of calories for Ethiopians. In looking at the numbers, one needs to remember that roots and tubers contain more water than cereals and therefore the calorie content per ton of roots and tubers is about one-third that of cereals³. The world average yield in roots and tubers is 13.4 tn./ha., indicating that there is room for improvement in the yield of roots and tubers. This in turn could quickly provide needed additional calories to the average Ethiopian diet.

It is not surprising that for a food-deficit country like Ethiopia, imports of food crops exceeds exports (Table 3). Nearly 98 percent of all Ethiopian food crop production is used to meet domestic demand, leaving little for export. The bulk of the crop imports are cereals, accounting for 890 thousand tonnes, with 65 thousand tonnes coming in as pulses. The largest crop export category is stimulants like coffee, tea, and tobacco (Qat is not listed in FAOSTAT), with oil crops coming in second and pulses, third. Imports and exports of pulses almost cancel each other out leaving a net import level of 13 thousand

³ Measuring both cereals and roots and tubers on an equal calories per ton (dry matter) basis, cereals in Ethiopia yield 1.24 tn./ha. while roots and tubers yield 2.62 tn./ha.

tonnes. Any increase in the export of crops would likely come at the expense of the domestic consumption of foodstuffs unless the export crop is produced on land not now under cultivation.

In terms of tonnes produced, animal production is one-eighth the size of crop production even though pasture area is twice that of crop production. By way of contrast the production of bovine meat is less than that of raw sugar. Very little animal product is either imported or exported with the exception of hides for which the numbers do not appear in Table 4 because they are not tracked by FAO. The most significant animal products in terms of weight are milk and butter accounting for 1.54 million tonnes.

In 2003, Ethiopia's daily per capita calorie consumption level was 1,858 (Table 5), well below a minimal recommended 2,800, resulting in a malnutrition rate that hovers around 50 percent of the population. Vegetal products account for 1,762 of those calories or 95 percent of total calories consumed. The bulk of those calories come from cereals, excluding beer, starchy roots, and pulses (various dried beans). Most of the protein in the diet comes from cereals and pulses. The largest amount of fat grams comes from cereals and vegetable oils. While vegetables and spices provide a small portion of the daily calorie need they have the potential to provide other essential nutrients.

Meat and meat products are a very small portion of the diet providing only 96 calories per day and 6.3 of the 53.4 protein grams per day. Animal products also provide 6.6 of 19.7 grams of fat per day.

With 50 percent of the population undernourished and 80 percent engaged directly in agricultural population, serious attention needs to be given to agricultural and

nutritional policies. Research by Hiroyuki Takeshima (Takeshima 2004) indicates that countries that increased their per capita production of staple food crops as opposed to export crops show increased nutritional levels and decreased levels of malnutrition among the population.

One of the issues identified by Abebe Adugna, an economist at the World Bank, is the need for estimates on the contribution of Oromia to the economy of Ethiopia, particularly in the area of agricultural production which provides "the main means of livelihood for more than 90 percent of Oromiya's population" (Adugna 2006, p. 14). Of particular concern is the ability of an independent Oromia to be able to feed itself. An analysis of an Excel dataset (4EthiopiasdBaseWBank.xls) provided by the World Bank in conjunction with its background reports (Four Ethiopias: A Regional Characterization: Assessing Ethiopia's Growth Potential and Development Obstacles; Assessing Ethiopia Growth Potential and Development Obstacles: Maps (Zonal Level) and Technical Appendix; and Assessing Ethiopia Growth Potential and Development Obstacles: Risk and Potential Maps and Technical Appendix) shows the portion of Ethiopia's agricultural resources that are within Oromia. Table 6 compares agricultural production of two configurations of an Oromo state with that of Ethiopia. Oromiya Region consists of the zones currently defined as falling within that region and includes: Mirab Wellega, East Wellega, Illubabor, Jimma, Mirab Shewa, Semen Shewa (ORO), Misrak Shewa, Arssi, Mirab Harerge, Misrak Harerge, Bale and Borena. Oromia includes all of the zones

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⁴ In this paper the spelling "Oromiya" is used in reference either to the Oromiya Region or the Oromiya Zone as defined by the current government of Ethiopia. The spelling "Oromia" is used as a general term for the land of the Oromo or when speaking in terms of the traditional land occupied by the Oromo within the current bounds of the nation-state of Ethiopia.

within Oromiya Region plus Semen Wello, Debub Wello, Semen Showa (AMA), Oromiya, and the two administrative councils: Dire Dawa and Finfinne forming an area that encompasses the historic area of Oromia that lies within the boundaries of Ethiopia⁵.

The data in Table 6 are not without some problems that need to be recognized as the numbers differ slightly from the ones presented thus far. 4EthiopiasdBaseWBank.xls does not indicate the year represented by the data and the Ethiopian government sources are not fully documented. The FAO data that best matches that in the World Bank dataset are for 2003 and thus are presented in the table for comparison. The analysis for Tables 1-5 used the most current data available, which was 2003 for the Food Balance Sheet and a few crop export numbers, 2002 and 2004 for the remaining crop export data and 2005 for all remaining data so the numbers in Table 6 will be different from those presented in the earlier tables. The World Bank also used the term "Temporary Crop" without defining that term. The temporary crop area is clearly an area less than total FAO's designation of arable land. The dataset notes that "Other Crops" "include pulses and oil seeds." Using that information and comparing areas with FAO data, it would appear that the World Bank's term "Temporary Crops" includes cereals, oil seeds and pulses.

While the population of Oromiya Region is 35 percent of the population of Ethiopia, the area devoted to temporary crops is 44 percent of the national total. The total production of temporary crops is 49 percent of the production of Ethiopia, 14 percentage points above the population share. This indicates that yields in Oromiya are greater than

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⁵ The current zones do not line up exactly with historic areas occupied by various ethno-nations, so the listing in this paper is an approximation of the historic area of Oromia that lies within the boundaries of Ethiopia. For instance part of Gojam also should be included within Oromia.

those in the rest of the nation. The three grains—tafi, wheat and maize—share of production stand at 44 percent, 63 percent and 57 percent, respectively, all well above the population share. Oromiya Region's production of other crops, which presumably includes rice, barley, rye, oats, millet and sorghum in addition to pulses and oilcrops, stands at 42 percent. All categories of Oromiya Region's share of crop production exceeds its population share by at least 14 percentage points.

The numbers for historic Oromia within Ethiopia show a similar pattern with its population share being 45 percent of the national total while temporary crop area is 55 percent and temporary crop production stands at 60 percent. The production of tafi, wheat, maize and other crops are 57 percent, 75 percent, 60 percent and 56 percent respectively.

An independent Oromia of either of the studied configurations would not be at an agricultural disadvantage when compared with remaining as a participating entity within the present boundaries of Ethiopia. That is not to say that, given the issue of widespread malnutrition, the Oromo leadership will not have to be concerned with agriculture. They will. Production levels will need to be increased while at the same time soil erosion will have to be controlled. If soil erosion is not better controlled (virtually eliminated) in the near future than it has been in the past, Oromia will lose a major source of its wealth and the basis of the livelihood of most of its citizens.

II. The Economic Context

Constraints on Economic Policy Development

The potential for any new government in Ethiopia to develop its economic policy is constrained both by the international commitments and obligations made by previous governments and by the hegemonic, neoclassically-oriented capitalist economic system that governs international trade and finance. While it will be argued later that a new Ethiopian government may want to use the cultures, traditions, and values of the indigenous ethno-nations within its borders as a basis on which to influence the shape of a domestic economic system, particularly with regard to property rights, the government work in the international economic arena will have to take the hegemonic model into account.

While Ethiopia received US\$3.616 billion in debt relief on June 30, 2006, it still has a significant debt as the result of past development projects and loans by the International Monetary Fund (IMF) and the World Bank (WB). Unfortunately much of the benefit from these loans was squandered away and used to line the pockets of the ruling elite with little contributing to the real development of Ethiopia or any of its regions outside the home territory of the ruling elite. The need to earn foreign exchange that can be used for continual debt service often results in pressure on a country to increase its exports so as to achieve a positive balance of payments. For most developing countries like Ethiopia, agricultural products are the focus of an export orientation. If the debt level begins to reach unsustainable levels, countries are often required to engage in a structural adjustment program (SAP) as a condition of further development support.

Often the result of this is the privatization of public services and a cutting of governmental services that benefit the poor, resulting in an even more stratified society.

The Doha Development Round trade negotiations raise a number of issues that will be important to any future Ethiopian government. To fully participate in the WTO, even least developed countries like Ethiopia are required to sign on to a number of agreements like TRIPS (trade-related aspects of intellectual property rights) in which they agree to the adoption of a fully-developed-country style of patent regimen. Many of these agreements are far more complicated than would be required for a country at a lower level of development. In addition, in *Biopiracy: The Plunder of Nature and Knowledge*, Vandana Shiva argues that Western-style patent regimens do not recognize the importance of traditional knowledge systems like that of India.

In the process of encouraging economic development, least developed countries like Ethiopia often have to negotiate agreements with trans-national companies whose annual revenue are several times as large as the country's total GNP. In addition the countries often do not have access to as large a retinue of attorneys. All of this can create a power imbalance that enables the more powerful players to gain extraordinary concessions sometimes at the expense of the local populace.

Characteristics of Crop and Food Production

With the vast majority of the Ethiopian population engaged in agriculture and the current emphasis on the use of agricultural exports as a development tool, it is important to understand the unique economic characteristics of food and crop agriculture. The characteristics include (1) the reality that food is an absolute necessity for life as well as

(2) the price inelasticity of supply and (3) demand, and (4) the fixity of resources. The presence of these four characteristics in one economic sector, agriculture (particularly crop agriculture), results in a sector that behaves differently than other economic sectors where low prices cure low prices through increased demand and reduced production.

One of the assumptions of economic exchange between two actors is its voluntary nature: actors are equally free to enter or not enter into an exchange (Friedman, 1962. p. 13). For instance, a buyer in the gold market has the freedom to purchase from a number of dealers, or not to make a purchase at all, for whatever reason, and the impact of the decision of that single individual on the economic system is negligible. In this way economists emphasize the noncoercive nature of the free enterprise system of markets (Goodwin, 2005. p. 201). A person can live a whole lifetime and never make a purchase in the gold market, or the automobile market, or computer markets, or any number of other markets, for that matter, and be none the worse off. The same is not true for food. While one can choose to purchase yams instead of white potatoes, or chicken instead of beef, one cannot choose not to purchase food in some form or other unless one has access to knowledge, land, water, seed, sunshine, and climate sufficient to produce an adequate amount of food. Often, even in peasant production systems, access to these resources are limited. Food, like air and water, is a necessity of life. Without access to food on a regular basis people die. In a fully competitive food market an individual buyer will have the opportunity to purchase from any number of sellers, none of which have sufficient market share to determine the price. The buyer also has the opportunity to choose from a wide variety of substitutes in selecting the desirable mix of grains, meats, vegetables, etc.

But even if all of those market conditions are met, the purchase of food is a coercive act. If the price of food is too high, the purchaser cannot voluntarily drop out of the market and wait for the price to drop before reentering the marketplace. The purchaser of food is in a different position that the purchaser of gold. When a potential purchaser of gold or any other nonessential product is forced out of the market because of lack of adequate financial resources, the consequences are negligible. After all, the use of price as a means of rationing out scarce resources is a fundamental tenet of mainstream economic thought. However, when a potential purchaser of food is forced out of the food market because of the lack of adequate financial resources, the consequences are disastrous. Without an adequate intake of food on a regular basis the potential food purchaser will die.

One of the consequences of the coercive nature of food consumption is the low price elasticity of demand—people need it no matter what the price. Unlike a product like electronics, where lower prices result in significantly increased demand, lower crop prices do not stimulate a significant increase in demand. Total demand for food is relatively price inelastic. While lower CD prices will stimulate a teenager to purchase more CDs, lower crop prices do not result in people changing their eating habits, such as by going from three meals a day to four or five. Lower crop prices may allow the consumer to eat out more often and may encourage the consumer to purchase more highly processed food, but once people have access to an adequate diet aggregate food intake responds very little to prices. Lower insulin prices do not result in increased purchases among diabetics, and, likewise, lower crop prices do not result in a significant increase in aggregate food consumption. Similarly, when the supply of food is limited,

people will pay or do almost anything to ensure that they have an adequate supply of food. High food prices may reduce effective demand, but they do not significantly reduce total demand. Only death reduces total demand.

The same issue of low price elasticity is true on the supply side. In the years between 1996 and 2001, the US aggregate market price for the eight major crops' prices declined by 40 percent, while the total acreage planted to the eight major crops declined by less than two percent (Ray, De La Torre Ugarte, and Tiller, p. 19). Over the next two years, crop prices rose from 60 percent of their 1996 level to 86 of their 1996 level, while total acreage planted to the eight crops was virtually unchanged. For the most part, crop farmers plant all of their acres every year, consigning to the vagaries of weather the role of determining the final production levels. Farmers may change their mix of crops in response either to agronomic factors or greater relative income potential, but they plant all of their acres all of the time. Similar to the demand side, the supply side of crop agriculture is relatively inelastic. Farmers plant all of their acres whether the price is high or low. For peasant agriculturalists, it is not surprising that, allowing for fallow and crop rotation, they plant all of their cropland all of the time. They depend on that food to feed themselves and their family.

For commercial agriculturalists, the reasons may be different, but the results are the same. Commercial farmers often rent a significant portion of the land they farm and thus it makes no sense to pay rent for ground and then let it sit idle and besides that no landlord would tolerate they kind of behavior. On owned ground, the producer cannot afford to let the land sit idle either. Because the price at harvest time and the following

year is as much a function of significant crop failures elsewhere as it is of total demand, farmers cannot afford to idle land and take the chance on crop price. The only way to benefit from a crop failure elsewhere is to have a crop to sell. In addition, because no one crop producer can affect the price, and because fixed costs are relatively high compared to variable costs of production, the best strategy for any given producer is to try and spread the fixed costs out over as many units of production as possible as long as the selling price is above the variable cost of production.

For tropical crops like coffee, the low price elasticity of supply is exacerbated by the fact that coffee is grown on trees that have a productive life of 20 to 30 years. No coffee grower is going to cut down the grove and plant another crop just because coffee prices are low for one or two years. For tree crops like coffee and perennial crops like sugar it takes years of low prices to wring excess capacity out of the market. Given the low price elasticity of demand and in the absence of marketing controls, long periods of low are the norm for coffee and other tropical crops like sugar, cacao, tea, and bananas.

In addition to idling productive capacity, other industries also reduce productive capacity by abandoning buildings, land, and equipment, selling those excess resources or converting them to other use. With agricultural land there is often no alternate use for those resources that will allow them to come back into production when profitability returns. While a farmer who goes bankrupt usually quits farming, the land—the main productive capacity determining resource—is most often purchased by a neighboring farmer who then produces off that land. This concept is called the fixity of resources and makes the wringing of excess capacity out of the agricultural production system very

difficult and achievable only over a long period of time. Once land is brought into production, it is often decades before it is taken back out of production.

Taken together these four characteristics of agricultural production result in a sector in which markets do not self-correct in a timely fashion, resulting in extended periods of low prices interrupted by price spikes brought on by weather related production shortfalls. In the past, nations of the global North like the United States and the members of the European Union used a variety of policies to stabilize prices and production for crops like wheat and maize. Among the nations of the global South, mechanisms like the coffee agreement maintained price stability. In both cases the movement away from any sort of supply management program and toward liberalized markets has resulted in extended periods of low prices. Policy makers need to take these characteristics into consideration in the development of food, agricultural development, trade and economic policies. One movement in this direction is a June 7, 2006 proposal by the African Group to the special session of the Committee on Agriculture, WTO which begins by describing the results of the four agricultural characteristics just discussed. In their proposal they note that "the problems which African countries encounter in taking effective policy measures for alleviation of poverty and for improving living conditions in rural areas are compounded by the long term trends of declining prices of primary agricultural commodities and their volatility which adversely affect both producers and exporters" (World Trade Organization, 2006. p. 1). Their proposal calls for "supply management [systems], in which commodity-dependent producing countries only participate" (World Trade Organization, 2006. p. 3).

The unique characteristics of aggregate crop agriculture present Oromo policy makers with the twin problems of the inability of the extremely poor to gain access to an adequate diet while at the same time plaguing farmers with long periods of low and declining prices for crops. Market mechanisms, on their own, do not operate in such a way as to be able to mitigate or resolve these problems. Without some ensured access to land, job, or source of income that they can use to produce or earn income to buy food, a significant portion of the population will continue to be subject to chronic undernutrition. Without some means of supply and inventory management in crop production, farmers will be faced with long periods of low prices interrupted by short periods of very high prices. The management of supplies of storable commodities is important as a means both to ensure adequate prices for farmers and to protect the populace from famine and extreme price spikes. The four characteristics of crop agriculture when combined with issues of scale result in problems that exemplify the importance of understanding the fallacy of composition.

Fallacy of Composition

Oromo policy makers will be presented with economic analyses based upon neoclassical economic theory and then asked to make agricultural, trade, and industrial development decisions based on those analyses. In many cases cogent arguments can be made based upon positive results in small scale demonstration projects or the experience of other nations like one of the Asian Tigers. Care must be taken in reading these analyses because often they fail to take into account the fallacy of composition. The fallacy of composition can easily be understood by looking at the situation in which 100,000 people are seated in a football stadium on a Saturday afternoon. If one person were to stand up, that person would have a better view of the field. If a second person a few rows down or in an adjoining section were to stand up, that person would also have a better view of the field. Thus we can see that by standing up, one has a better view of the field. However, when we apply that reasoning to all 100,000 people in the stadium and they all stand up, only the tall people see better. Something that is true one event at a time may not be true when applied to all similar events at the same time. That is the fallacy of composition.

In an attempt to help farmers increase their profits by reducing crop losses, agricultural extension agents typically teach farmers how to identify yield robbing insect infestations and how to treat the infestation early before the plant is damaged and yield losses become inevitable. As a result the farmer is able to harvest more grain than was traditionally harvested and has more to sell into the marketplace, thus bringing about a gain in profit. If one or two farmers in a village adopt these techniques and if the additional yield is enough to cover the cost of the treatment, the extra production has little effect on the crop price. With those results in hand, the next step is to show the large number of remaining farmers how to gain the same results. When most farmers buy into the program, the marketplace reacts to the increased production with a lower price and suddenly the value of the increased production may barely cover the cost of the treatment. What worked for one or two farmers has different results when all farmers do the same thing—the fallacy of composition.

This is not to say that teaching farmers how to increase their yield and production is a bad thing, especially in a food deficit nation like Ethiopia. It does mean that we have to be clear about our goals and objectives. If the goal is to increase farmer income it will achieve the desired results for the early adopters of the new technology. However, once more farmers get on board the extra profits begin to vanish. On the other hand, if the primary goal is to increase food production so that the farming families and their neighbors can increase their nutritional levels to desirable levels, and those who have to buy the grain can afford it, then adopting the new technology makes sense. The key is to look at the whole picture and be clear about goals and objectives.

The coffee market is a classical case of the fallacy of composition. In the early 1980s coffee prices were much higher than they are today and Oromo farmers and farmers elsewhere in Ethiopia were able to generate some meaningful cash income from the growth and sale of coffee. The profits of coffee production attracted the interest of farmers in other countries. Banks were willing to give them loans so that their countries could enter the coffee export market, earning foreign currency that could be used to pay at least part of the interest on international loans. Soon the coffee agreement fell apart, production exploded, prices fell and the low prices did not induce people to drink more coffee each day. Coffee beans became a glut on the market as prices continued to fall. Coffee production can be very profitable for a limited number of producers, but when others try the same thing the limited market is quickly oversupplied with coffee and prices collapse—the fallacy of composition.

One of the analytical tools commonly used by economic researchers is partial equilibrium analysis. It is often used when the researcher wants to examine the impact of making a change in one variable with all other conditions remaining the same. As long as there is no interaction between the variable being changed and all other variables and conditions, the use of a partial equilibrium analysis is not problematic. But as soon as there is an interaction between the variable being changed and one or more of those being held constant we have the potential for the fallacy of composition. Let us return to our stadium example and conduct a partial equilibrium analysis selecting for our study sample every third row. We could have all of the people in every third row to stand up and then determine that all of them can see better. From that systematic test we could again conclude that standing up in the stadium allows one to see as well as or better than they did sitting down. But in this case there is an interaction with the unchanged variables—those sitting in the rows behind every third row. Suddenly their view, whether they are short or tall, is blocked by the action of those in front of them, but because those rows were missed in the partial equilibrium analysis, their problem goes on undetected and we have the fallacy of composition. One would hope that in real life economic analysis that problems as obvious as the stadium example would be caught, but sad to say they are not.

Let us now apply these principles to Ethiopian agriculture. One of the concerns of Ethiopian agricultural policy is the potential for irrigation development. In recent years rainfall in Ethiopia has been quite variable resulting in bumper crops in some years and famine conditions in others. The development of irrigation technology and infrastructure

has the potential provide water to fields in years of low rainfall, evening out production levels. With irrigation, production levels will be higher and farmer incomes will be higher as well, providing the extra costs are covered by the value of the increased production. Those kind of results would suggest that the promotion of the widespread adoption of irrigation is a worthwhile governmental policy. In this case the partial equilibrium analysis looked at production levels, variability in production and farm income. But what about the other factors. (1) If irrigation brings with it the need to have larger plots of land, what happens to the farmers who are being displaced, especially in light of the lack of industrial development to provide them with employment? (2) What are the maintenance requirements and will the farmers be able to maintain it over the long-run? (3) What happens to the downstream users of the water? That certainly has been an issue in the American Southwest with Mexico receiving no water at all from the Colorado River. In the American Northwest farmers have been asked to give up water rights because of the impact of the drawdown on the salmon population. Are there downstream users of the water who will adversely be affected if significant amounts of water are withdrawn from the stream? At this point, the argument is not for or against irrigation projects, only a reminder that those who develop and implement programs need to be aware of the factors that are left out of any analysis and aware of the potential of committing the fallacy of composition. Whenever someone is standing up to see better, the obvious question to ask is who is standing behind them. Or in the case of the aforementioned Asian Tigers is there a connection between the phenomenal development of the Asian Tigers and the underdevelopment of Africa over the same time period?

Development Resources

The World Bank has identified a number of what they consider impediments to development within Ethiopia (Seifluaziz 2004. pp. 1-7). First among what the World Bank sees as impediments is its subsistence economy that is dependent upon an ox-plow, rainfed agriculture. Most of this agriculture is concentrated in the highlands which encompass 95 percent of the country's cultivated land. Most of this land is dedicated to the production of cereal crops, the bulk of which is used within the household. What surplus production remains is sold in local markets, with little left for more distant markets. Crop yields vary from year to year as the result of unpredictable rainfall patterns, increasing the nutrition vulnerability of the population. With a 2.9 percent annual population growth rate and a relatively fixed cultivated land base, the land available per family has dropped in recent years. This has resulted in increased pressure on the environment and significant environmental degradation. Given the country's limited fossil fuel and electrical transmission infrastructure, the increasing population along with other factors, has also resulted in a loss of timber resources in the highlands of Ethiopia.

Some of the lowland regions of the country have adequate water and land resources but remain relatively undeveloped due to malaria and trypanosomiasis. Malaria is spread by mosquitoes while trypanosomiasis, also known as sleeping sickness, is spread by the tsetse fly. Trypanosomiasis infects both humans and large animals making ox-plow based agriculture nearly impossible in the lowlands. Effective public programs would be required for the effective use of these lowland areas. Two types of lowland

areas can be used for crop agriculture. The Western Lowlands receive adequate rainfall to support at least one crop a year while other lowland areas could be used for pasturage if animal as well as human diseases were brought under control. In addition these other lowland areas could be used for crops if the highland rainfall were captured in dams and used for irrigation projects. Given the potential of the lowland areas, the World Bank estimates that "less than a quarter of the potentially arable land is under crops" (Seifluaziz 2004. p. 4).

Ethiopia lacks the type of farm-to-market roads that helped transform agriculture in the US Midwest. As a result most rural communities remain relatively isolated from each other and from national markets. Not only does this lack of infrastructure make it difficult for farmers to deliver their products even to regional markets, it also reduces access farmers have to agricultural inputs like fertilizer. Even if infrastructure problems were to be solved, the country is not very highly capitalized, further limiting producers' access to farm inputs.

In addition to the impediments, the World Bank's May 24, 2004 "Country Economic Memorandum(CEM2004) (Seifluaziz 2004) identifies a three principle development resources that Ethiopia possesses. These are land, water, and an abundant supply of labor.

Conventional Wisdom Recommendations

Based on their identification of the impediments and resources within Ethiopia, the authors of the World Bank's CEM2004 then makes a number of recommendations to

reinvigorate the stalled development process. These recommendations can be organized according to the principle resources identified in the report.

With regard to water, the report argues that "multi-purpose water infrastructure for irrigation and hydropower is essential to sustainable agricultural and industrial growth and economic development in Ethiopia" (Seifluaziz 2004. p. 3). The irrigation projects include the development of small dams and micro-dams in the highlands for the purpose of water storage to be used during low rainfall times (Seifluaziz 2004. p. 23-24). In the lowland areas, larger multipurpose dams to provide for large-scale irrigation and hydroelectric power are envisioned.

With irrigation, variations in annual rainfall levels and timing can be mitigated in the highlands, making the land more productive. In the lowland areas, it is asserted that dams providing water for irrigation could open up some three million hectares of land for commercial crop production, increasing the total arable land in the country by nearly 30 percent. To make this irrigated land commercially usable requires the development of a transportation infrastructure to allow for the movement of inputs into the production areas while providing for the exit of products to distant markets. The use of tsetse fly infested areas will require on-going, large-scale government funded eradication programs to hold the disease at bay. The agricultural development envisioned for most of the new areas is large-scale mechanized agriculture producing for export markets.

Over and over again the report assumes a large scale internal migration from the populated areas of the highlands to urban areas or to the lowland areas with potential for commercial agricultural development.

III. The Theoretical Context

Values Embedded in Neo-Classical Economic Theory

The neo-classical economic theory which provides the foundation for most economic development concepts and the basic rationale for the present world financial and trading system is built upon a propositional scheme consisting of undefined terms, definitions, assumptions and a series of axiomatic statements that are logically derived from the definitions and assumptions. This tendency to treat economics as a "purely deductive science" (Samuelson, 1947. p. 21) can be traced to Paul Samuelson and his intellectual predecessors Alfred Marshall and John Maynard Keynes, figures who, each in his own way, moved economics from a descriptive activity in the mode of Adam Smith to an analytical activity modeled after physics (Weintraub, Nelson). As Lo notes, economics is caught up in a "cultural bias . . . also known as 'physics envy" (Lo, 2004. p. 20) so that Milton Friedman can write "positive economics is in principle independent of any particular ethical position or normative judgments" (Friedman, 1966. p. 4). What gets lost in all this is any awareness that all deductive systems of thought depend upon a set of undefined terms, definitions, and assumptions which by their very nature carry with them values. It is not possible to construct a "purely deductive system" ex nihilo as a means of identifying what is "objectively true" about economic activities or even the structure of the universe. Thus by its very nature as a rational, deductive system, and despite its protests of value-neutrality, economics carries within its own structure an implicit set of values that drive its analysis and conclusions. Princeton Theological Seminary theologian

Max Stackhouse makes that point clear in his foreword to Robert Nelson's Economics as

Religion: from Samuelson to Chicago and Beyond when he writes:

[Nelson's] insightful historical analysis [in his previous book *Reaching for Heaven on Earth: The Theological Meaning of Economics*] showed that many of the classic founders of the field of economics not only were guided by theological assumptions but also viewed the field in messianic terms, That is, they presumed that the primary reason for human pain, suffering, and death (what theologians identify as a consequence of sin in a fallen world) is that we are in a state of scarcity. Moreover, we can only be delivered from this perilous existence by the overcoming of material deprivation—a prospect that can only come from rightly formulated, rightly believed, and rightly lived principles and policies. Economics can deliver us, bring about a redeemed state of affairs on earth, and lead us to abundant living—the materially incarnate form of salvation. ...

In his new study of *Economics as Religion*, Nelson ... [takes] up the story as the redemptive schemes of Marx and Keynes fade [discerning] quite accurately, I think, the faith presuppositions that are behind the work of Paul Samuelson and other Harvard and MIT economists who represent the "Cambridge School," on the one hand, and Milton Friedman, Gary Becker, and other leading figures of the "Chicago School," including the younger figures poised to shape the immediate future. ...

This study ... shows that the foundations of the discipline are not self-evident, entirely based on fixed rational or empirical foundations, or proven by analysis or theorem. In fact, many are rooted in unexamined presuppositions that are more like faith commitments than in "pure" scientific hypotheses, and that they are often obscure and obscured by the advocates of the field itself. ...

There are, however, disadvantages to the lack of awareness of and attentiveness to [the foundations]. If and when they become distorted, there is very little philosophical, historical, or theological self-awareness in place to correct them. For instance, an enormous amount of economic theory ends up being focused on nationalistic policies, a tendency that makes certain culturally particular patterns of economic life appear to be more universal natural laws than they actually are, and that simultaneously blinds us to certain global and/or local patterns of belief and morality that have economic consequences (emphasis added). ...

[Nelson wants] economists, plus ethically alert citizens and socially active believers in religious traditions, to recognize that very profound assumptions about the ultimate issues of life are inevitably built into the apparently arid economic theories that shape how we live (Nelson 2001. p. ix-xiii).

One of the crucial places where values get embedded within neoclassical economic theory is in its anthropology—its understanding of the nature of human beings and the driving forces that characterize human life. Theologians call this one's "doctrine of man" (sic). At the center of standard economic theory is the assumption it makes that self-interest is an inborn characteristic of human beings that can be defined apart from the influence of culture, religion, traditions, family, community, and values. The self-interest of economics is then defined as a maximization function. The resulting system is quite different from one that would result if one assumed that cooperation and concern for others were the driving force that characterizes human life. Eric Roll, in his A History of Economic Thought, asserts that the developing industrial capitalists "recognize in the self-interest which [Adam Smith] put at the center of human conduct the motive which inspired their everyday business life. And they were delighted to know that their pursuit of profit was now to be regarded as unselfish" (emphais added) (Roll 1956. p. 150). Understanding a behavior like self-interest as either selfish or unselfish implicitly recognizes that the term is in and of itself value laden.

In this same vein, Adam Smith, in describing the origin of the division of labor, attributes to human nature "the disposition to truck, barter, and exchange" (Smith 1937. p. 16). The choice of terms he used carries with it a set of values. He could have described humans as having the "disposition to rape, pillage, and plunder." There certainly was adequate evidence to support this anthropology in the years before Britannia ruled the ocean. Contrariwise he could have ascribed to humans the "disposition to share, nurture, and provide care." Looking at the whole of humanity we

can see multiple instances of each of these dispositions. The nature of the development of the concept of the division labor might take a quite different route depending upon the fundamental disposition one uses as a starting point.

Formal economic theory begins with the fundamental assumption that in an exchange the two parties meet as equals and can freely exchange or not exchange as that decision serves their self-interest. Lacking from this description is an understanding of the function of power in an exchange relationship, even apart from a monopolistic situation. This lesson was impressed upon me very early in life when I watched my younger brother go to first grade with a couple of well-chosen marbles and some beads and a short section of lanyard put on a straight pin so as to resemble a sword. He would seldom place his marbles in a ring and shoot for them—that would be too risky. Instead he would take out his best marble and convince one of his playmates that this marble was worth three of the other child's less colorful marbles. The other child would make the trade with great satisfaction. He would do the same with the bead swords. At the end of the day he would end up with a bag full of marbles including his originals and a fistful of bead swords. The next day he would do the same thing all over again. In those exchange relationships he had the power of a glib tongue and that power gave him the ability to exploit those around him and leave them feeling like they got the best of the deal. Like the marble trades my brother made, most exchanges involve a power differential and that power differential is not afforded the sustained attention of economists and policy makers unless the power balance is extreme as in the case of minors entering into a contract where a guardian' involvement is required. But even small differences in power, when

multiplied by innumerable transactions, results in a skewed allocation of resources. To ignore the issue of power in the exchange relationship is a value decision that gives the advantage to those with greater power.

To wrap up this section on values, let us turn to the italicized portion Stackhouse quotation in the earlier part of this section where he asserts that making "certain culturally particular patterns of economic life appear to be more universal natural laws than they actually are, and that simultaneously blinds us to certain global and/or local patterns of belief and morality that have economic consequences" (Nelson 2001. p. xiii). Roll makes this same point asserting that "Smith was guilty of making the characteristic of the society of his own day valid for all time; he regarded as a natural human motive and made into a universal principle of explanation, a feature of contemporaneous social order which was historically conditioned" (Roll 1956. p. 155). The next section examines the concept of social constructedness as a means of understanding the relationship between a particular pattern of economic life and universal laws.

Neo-Classical Economics as a Socially Constructed System

As we have seen, neoclassical economists like Milton Friedman follow in the footsteps of Adam Smith seeing economic theory as a reflection of "reality," an objective description of the way the economic system works—a description that is true for all times and all places. For many, "to be a professional economist means to pursue scientific truth with respect to the operation of the economy and to apply this truth to improve economic performance and public policy more generally" (Nelson 2001. p. 14). The task of the economist as scientist is to describe the operation of the economy under various policy

options, pointing out the economic consequences of these policy options including any loss of economic efficiency, and leave the issues of justice, equity, and desirability of the various goals to the policy makers and the public at large. In this kind of setting, the economist's role is to give objective information that can be used by various groups to make the policy decisions. Nowhere in all of this is there any recognition that the tools of analysis themselves and the theory behind those tools are value statements in and of themselves—that the theories project a specific world view and the acceptance of a specific set of values. It is as if the analysts are shrouded in a veil of false consciousness that does not allow them to see the values that are implicit in every formula, regression and derivative that they take.

Before identifying an alternate view one needs to look at the structure of human society and the role that is played by institutions like economics. Jean Ensminger in her book, *Making a Market: The Institutional Transformation of an African Society*, on the Orma—an Oromo group in Kenya—argues that to understand markets, and by extension economics, one must understand "the role of ideology, institutions, organizations, and bargaining power" (Ensminger 1996. p. 4). "Ideology' refers to the values and beliefs that determine people's goals and shape their choices" (Ensminger 1996. p. 5). Ideology shapes the way people view the world and provides people with a means of making sense of the world around them. Ideology can be theistic or nontheistic and there is no requirement that a given ideology is internally consistent. Institutions are the operational rules of society that are derived from the ideology. Institutions offer stability and predictability to social life. Among the social institutions of society are family, religion,

education, economics, gender and race. Organizations are "groups of individuals bound by some common purpose to achieve objectives" (Ensminger 1996. p. 6). Churches, clubs partnerships, corporations, and professional societies are examples of organizations. Bargaining power consists of the ability of individuals and groups act in ways to achieve their goals as well as to change the existing relationship among ideology, institutions and organizations and is affected. Individuals within society are both shaped by ideology, institutions, and organizations and can use bargaining power to reshape their role.

Neoclassical economists see the economic sphere as something out there that they stand by and objectively observe and describe in the same way that an astronomer might describe the movement of the stars. An alternative to the positivist view of the institution of economics is to take the nature of a deductive system, with its implicit values, seriously and view the institution of economics as a social construction that has been shaped to meet the needs of a particular segment of society. Individuals and organizations that benefit from a given economic configuration can use their bargaining power over those with less power to reshape ideology and institutions like economics in ways that increase their power and benefit. Adam Smith understood this when he write, "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices" (Smith I. 10.82). Moreira gives a more contemporary account of this use of power in tracing the promotion of the neo-liberal ideology in the face of a dominant Keynesian paradigm in the period following WWII. He argues that the "[rising hegemony of the neo-liberal ideology] resulted from the concerted effort pursued by a coalition of academic and very wealthy people to conduct a program in order to combat the Keynesian paradigm, hegemonic at the time" (Moreira 2003. p. 2).

Thus, the use of power results in a dynamic relationship among ideology, institutions, and organizations in which individuals both shape and are shaped by these artifacts within a given society. Ideology is not a static set of values, institutions are not a fixed unchanging set of rules, and organizations are not limited to a given configuration for all times and all places. Human beings constantly use their power and portions of one or more of these artifacts to change the others. Within society values, institutions, and organizations are constantly subject to change in response to human action and changing needs. From a social constructionist point of view, the present neo-liberal/neoclassical economic system does not represent a comprehensive set of economic behaviors and actions that are true for all times and all places. Rather, the neoclassical economic system is the result of a dynamic process that reflects the values of the dominant groups in late 20th and early 21st century Western society. The neoclassical system of economics is a social construct that reflects a particular set of values that are not universal in the sense that they do not reflect those of large segments of the world population, nor are the institutional rules that are a part of the system true for all times and all places.

The social constructionist perspective is an epistemological methodology that serves as an alternative to the positivist epistemology long dominant in economic circles and lays bare the false dichotomy between positive and normative economics forcefully promoted by Milton Friedman (1962. p. 4). The major difference between Freidman's positive economics and his normative economics is that under his scheme the normative

economist is open about the values that underlie her arguments and analyses while the positive economist turns a blind eye to the values that are implicit in his system. In the end, both the positivist and the social constructionist claim to describe reality: the question is one of what is seen as reality. For the positivists things are as they seem and they can be described objectively in a manner that garners the agreement of most if not all observers. The social constructionist on the other hand argues that what we see as "objective reality" is the result of how we have been taught to see the world around us. What we see is conditioned on language, learned perception patterns as well as our socialization into the norms and values of society of which we are apart. Adopting a positivist or social constructionist perspective is in the end a metaphysical question—what are the undefined terms, definitions and assumptions we want to begin with in our analysis. Positivism begins with one set of undefined terms, definitions, and assumptions while a social constructionist epistemology begins with another.

To identify the neoclassical economic system as a social construct that reflects a particular interaction among ideology, institutions, and organizations is not to suggest that it is ephemeral or unreal. On the contrary, it is very real in its impact on the lives of people all around the globe. It is the mechanism that is used to allocate scarce resources and determines whether people live or die. As a social construct, neoclassical economic theory has the power to shape reality—what people see as true. Having said that it should become obvious that if neoclassical economic theory reflects the interaction of ideology, institutions, and organizations within Western society, then other social constructions of an economic system reflecting the values of other societies is possible and possible even

desirable. This paper begins this process by counterposing an examination of ideas implicit in the roots of classical economic theory with the values, culture and traditions of the Oromo people to embark on the identification of an economic system that might come closer to meeting their needs that the currently hegemonic neoclassical system.

Adam Smith and True Wealth

Adam Smith begins An Inquiry into the Nature and Causes of the Wealth of Nations with the assertion that "The annual labor of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes" (Smith, p. lvii). He then goes on to argue that this production depends upon the "skill, dexterity, and judgment" of those who labor as well as the physical resources of the nation. Per capita wealth, then, is a function of the proportion of those "who are employed in useful labor" and "those who are not so employed." From his Eurocentric perspective he then compares the limited production of "savage" (Smith 1937, p. lviii) hunter-gatherer societies in which "every individual who is able to work, is more or less employed in useful labor" to that of "civilized and thriving nations" where many do not labor and yet the output is such that those who do not labor can consume of one hundred times the production of one laborer and "yet the produce of the whole labor of the society is so great the all are often abundantly supplied, and a workman, even of the lowest and poorest order, if he is frugal and industrious, may enjoy a greater share of the necessaries of life than is possible for the savage to acquire. The causes of this improvement, in the productive powers of labor, and the order, according to which its produce is naturally distributed among the different ranks and conditions of men in the society, makes the

subject of the First Book of this Inquiry." Smith then analyzes that "the number of useful and productive labourers, it will hereafter appear, is every where in proportion to the capital stock which is employed in setting them to work, and to the particular way in which it is so employed."

Without getting wrapped up in an analysis of Smith's Eurocentric, racist, classist discourse I want to return to his starting point—a point whose implications he ignores as he gets caught up in an analysis of the workings of a developing industrial capitalist system. The starting point: the wealth of a society is the sum of the labor of all of the members of that society and without that labor there is no wealth, no food, nothing: no society at all. It is much more difficult to commodify people if they are the repository of wealth itself and not simply the rentee of their own labor. In his footnote on Smith's first sentence, editor Edwin Canaan notes that Smith has described a dynamic concept of wealth in contrast to a static concept of wealth as an "accumulated fund" (Smith 1937. p. lvii). In an ironic twist, after providing us with a dynamic concept of wealth, Smith in setting out his plan of work ignores his premise and resorts to a static concept of wealth as he looks at the employment of labor in proportion to "the quantity of capital stock." Wealth is once again limited by the size of the accumulated fund. The limited development that has taken place in Ethiopia over the last three decades suggests to me that rather than tinkering with various policies within an economic theory that has not served the Oromo and others very well, one needs to go back to the beginning and examine original premises. And, that original premise is one which determines whether one begins with a dynamic concept of wealth or a static concept of wealth.

In what follows I want to begin with Smith's original concept of wealth as a dynamic process and see what that might suggest in terms of foundational economic policies that could be used by an Oromo led government. I want to assert that true wealth is people working together to add to the production of society and the meeting of human needs—this is the "wealth of nations." The wealth of Oromo society is the sum of the labor of all of its citizens. To the extent that some of its citizens are unemployed or under employed, the wealth of the nation is diminished. Each person has exactly the same thing to offer to the wealth of the nation—one day's labor at a time. Smith is correct in asserting that the wealth produced by an individual is regulated by "the skill, dexterity and judgment with which its labor is generally applied" (Smith 1937. p. lvii). No two people have exactly the same skills, intellect and experience. Every person is an individual and at the end of the day, depending upon the task they undertake they will produce differing amounts of output. But everyone has just one day to offer, nothing more and nothing less.

Money is a means to facilitate exchange and signifies true wealth. To the point that it signifies stored up labor or the ability to command labor in the future it becomes transformed from being the representation of wealth to being wealth itself. And thus the dynamic becomes static. One of the problem with making wealth static is that human labor is a dynamic process and cannot really be stored up. It only exists in the present moment and must be renewed in the next. Thus the transformation of the dynamic wealth of human labor to a static form (money) involves a significant functional loss that has significant repercussions in the establishment of on ongoing economy which by

definition needs to be dynamic. It is because we use a static form to represent a dynamic reality that we can have recessions and depressions where the "stored up" labor is unable to provide meaningful employment opportunities to dynamic labor and thus a real loss of wealth for every day that a person remains unemployed. This is what Henry A Wallace was talking about in his 1945 book *Sixty Million Jobs* when he discussed the depression in terms of 88 million person-years of lost labor and \$350 billion in lost production and wealth for the United States (Wallace, p. 19).

This dynamic definition of wealth could be very important to a future Ethiopian leadership as they consider economic policy options. Ethiopia, collectively, and each of its ethno-nationalities, individually, are rich in this dynamic form of wealth, human resources, as well as a static form of wealth, natural resources. While Ethiopia lacks large capital resources, a static form of wealth, its people have access to another dynamic form of wealth, their cultures, traditions, and values. For centuries before Ethiopia's incorporation into the capitalist world system, the residents of the land used their culture, traditions and values in conjunction with the natural resources of the region to provide livelihood for themselves. And in this current setting, it is precisely this combination of people, cultural resources, and natural resources that provides the basis on which to build a stable economy that capitalizes on both the dynamic and static resources that are readily available to the many ethno-nations within the Ethiopian Empire as well as a democratic, multicultural Ethiopia itself.

In seeking to identify ways to put the dynamic and static wealth of Ethiopia to work for the benefit of the populace, I first want to return to Adam Smith and his wealth

focus—the nation. This focus has the potential to bias the analysis differently than if the focus is on the wealth of individuals. With a focus on the nation, the issue becomes ways to maximize national wealth, minimizing distributional issues and those left behind in the wealth creation process. As we have seen, Smith talks about those who do not labor at all and yet they consume one hundred times the production of one laborer while "the produce of the whole labor of the society is so great the all are **often** abundantly supplied, and a workman, even of the lowest and poorest order, if he is frugal and industrious, may **enjoy** a greater share of the necessaries of life than is possible for the savage to acquire (emphasis added)." One of the consequences of making the nation the focal point for the discussion of wealth is that the impact of the economic system on individuals is not taken as seriously as it would be if the individual were the focus of the analysis of wealth. There are no guarantees for individuals, so that while they are **often** abundantly supplied, there is the very real possibility that they won't be abundantly supplied with the necessities of life. It is possible, experience would say likely, that the worker of the lowest order can work hard and not "enjoy a greater share of the necessaries of life" note Smith's conditionals "if" they are "frugal and industrious" and may enjoy. Contrast that with the lack of conditions on the idle one who enjoys the hundred-fold benefits. Not only are here are no guarantees of benefit from the system, there is a significant likelihood that just as some consume one hundred times the production of a single laborer, there are some who will be worse off—to wit: the 50 percent of the Ethiopian population that is undernourished.

Let us now make individuals the focus of our analysis of wealth, using as our example the 50 percent of the Ethiopian population that is undernourished. Focusing on the individual requires making sure that individuals have access to the resources needed to provide a livelihood for themselves and their families. The static wealth that we have to work with is Ethiopia's set of natural resources. The dynamic wealth consists of the people along with their cultures, traditions, and values which for most of the population includes an understanding of agricultural production which can serve as a foundation for rebuilding an economy that has been devastated by forced migrations, the alienation of people from their land, discriminatory governmental policies that have made agricultural supplies available to a collaborator class while denying them to those who cling to their ethno-national traditions, and forced labor on land owned by others. In the absence of any significant industrial employment potential agriculture serves its traditional role as the employer of first and last resort. Given access to adequate land resources, agriculture is the only industry that has to ability to bootstrap itself. The primary capital resource is the land itself along with access to seed, plant and animal stock. With those resources in hand along with traditional knowledge, the populace will be able to engage in what Labao and Meyer term "agriculture as a household livelihood strategy" (ref). In the initial phase of development, small household sized units of production are to be preferred to larger mechanized units of production oriented toward export markets. Based on the earlier analysis of agricultural production, Ethiopia presently has adequate agricultural resources to be able to produce enough food to feed its population. One of the important considerations is to use traditional mechanisms for the allocation of land resources among

the populace where ownership was communal and responsibility was individual. Given the multiple expropriations and distributions of land in the past, including state ownership under the Derg, land allocation does not provide the same problems it would in areas where latifundias have been owned by limited number of families for centuries.

Once people have access to the basic resources needed to provide a livelihood for themselves and their families, attention can then be directed to steps needed to move the economy beyond the subsistence level. One of the tasks of any economic system is to identify the mechanism by which it motivates people to offer their best and most inventive skills in order that they might add to the wealth of society and its improvement. Typically there must be both carrots and sticks. In the capitalist economic system which lionizes individual self-interest and profit maximization, economic rewards are the primary means of inducing people to offer their best to society. At the other end of the scale the threat of economic deprivation and the loss of access to livelihood is the stick for those not motivated by the positive lure of economic rewards. On the other hand, even within the capitalist economic system there are, for example, those who are motivated by the desire to help others and are willing to forgo significant personal rewards to accept lesser paid positions that enable them to serve in positions that allow them to benefit others. Likewise there are persons who delay retirement, not because they need the extra income provided by working, but because they enjoy their work and find meaning in it. Conventional economic theory attempts to explain such behavior with utility theory.

It could be argued that the cultures, traditions, and values of the ethno-nations of Ethiopia, provide both the carrots and the sticks needed to move the development process

along without leaving a significant potion of the population to suffer from malnutrition as it now does. One important area for further research is to re-examine anthropological work on the ethno-national traditions of the Horn of Africa to identify the economic principles that are embedded within the various cultures and traditions.

Oromo Traditions and Values as a Basis for Social and Economic Policy

This section looks at Oromo culture, traditions and values as a means of critiquing an economic system that has led to the systematic underdevelopment of Ethiopia, much of sub-Saharan Africa, and most of the nations of the global south. It begins with an explicit look at economic theory and values, making explicit what conventional economic theory masks under the guise of value-freedom and a positive stance. After establishing an epistemological stance based on Oromo values, the issue of the nature wealth is examined using Adam Smith's dynamic concept of wealth, applying it to the Oromo context. In contrast to conventional economic theory, Gadaa is structured in such a way as to recognize the interrelationships among economics, power, and politics. If one rejects self-interest at the key motivating force in economics, then an alternative must be identified. Oromo survived for centuries, if not millennia, based on multiple motivating forces for social and economic activity. The striving for ever greater profits is viewed as a key incentive that drives innovation and invention. In the absence of profit maximization, other forces that provide incentives and drive innovation must be identified. One of the well-recognized, but underappreciated problems of conventional, neo-classical economic theory is externalities—positive and negative effects of an economic action that is not accounted for at the individual or firm level. The congruence of collective and individual interests within Oromo society holds the promise of viewing what otherwise would be externalities as "internalities." Given the pervasiveness of ox-plow based agriculture in Ethiopia in general and Oromia in particular, the last issue that is examined in this section is productivity.

Using the cultural and religious traditions of the Oromo and similar traditions of other ethno-nations included within final national boundaries, this section identifies a set of values that provide Oromo society and leadership with a point of departure for the development of a social and economic policies. Eschewing the need to mimic a supposed value-free science, we now look at some beliefs within Oromo religious and cultural traditions that provide the basis upon which to build a set of economic principles that are tailored to meet the needs of the people of a multi-cultural, multinational Ethiopia that has been liberated from the bonds of internal colonialism.

Human cultures and traditions, including those of the Horn of Africa, are not uniformly positive or negative in their operation, meaning that some principles within a tradition may support the oppression and exploitation of others, while other principles enable people to work within an environment of mutual support and equality. In deciding which traditions to draw upon, this paper seeks to use the best of the traditions of the ethno-nations that may be within the borders of a multi-ethno-national Ethiopia. The concept of the "best of the traditions" is defined in this thesis as the beliefs, values and traditions that brings about the liberation of all people and enables them to live with mutual dignity and respect within a multi-cultural, multinational environment.

An understanding of Waqaa, the divine being of the monotheistic religion of the Oromo, can serve as a starting point from which one can understand Oromo traditions. In Oromo religion, based on a belief in Waqaa, we find the ideology and principles that historically informed the institutions, organizations and systems of power balance within Oromo society. While in the past century and a half many Oromo have adopted Christianity or Islam as their religion, the ongoing traditions and cultural institutions have been formed in large part by the older, relative to Oromo society, Oromo religion based on Waqaa.

Waqaa is the creator of the universe and the source of all life. The universe created by Waqaa contains within itself a sense of order and balance that is to be made manifest in human society.

Oromos believe that society collapses unless a balance is struck between female and male, young and old, spiritual and physical power in the cosmic order of Waqaa's wisdom. The interdependence of the dominant and the liminal is considered a precondition for peace and prosperity in both metaphysical and practical sense.

Oromos refer to this concept of peace and order of Waqaa as safuu. Safuu is extremely important in Oromo religious and political thought. If the balance is disturbed, it is said that safuu is lost. (Kumsaa 2006)

This balance can be seen in the concept of property rights within the Oromo community where land is held in common and livestock are owned by the family. The men traditionally were responsible for raising the cattle and using them for farming and women do the milking and are responsible for the distribution of the milk. Waqaa is intolerant of injustice and crime, opposing the exploitation of both people and nature because injustice disrupts the peace and order of the cosmos. The present domination of the Oromo people and the non-sustainable use of the land that has resulted from

colonization by Abyssinians represents a loss of safuu and violates the precepts of Waqaa. The maintenance of safuu includes the responsibility of society to protect the weak and calls for the congruence of individual and societal interests.

Within Oromo society the precepts of Waqaa become institutionalized in social constructs like gadaa—Oromo popular democracy. The principles of Oromo popular democracy include: adherence to the rule of law, the full participation and equality of all members of society, a series of checks and balances between and within gadaa grades, the decentralization of the powers of government among various institutions, the regular review of societal laws to make sure they meet current needs, and the ability to recall leaders who do not live up to the responsibilities of their office. Similar institutions of popular democracy exist among other peoples within the Horn of Africa. If careful attention is paid to the implementation of popular democracy operating within a multicultural environment that enables people to use their full talents and if economic policies that strengthen a dynamic concept of wealth are implemented, the prospects for the development of a viable economy for the land and people of Oromia and all of Ethiopia are positive. With the resources of both the land and the best of the traditions of the people, there is no reason why poverty and malnutrition cannot be overcome.

An economics that would serve as the basis of a multi-ethno-national government with a significant Oromo participation needs to be value based and consistent with the values of Oromo democracy as found in gadaa and similar democratic traditions among some of the other ethno-nations in Ethiopia. This process does not depend on the reinstitution of the forms of a tradition that is rooted in a subsistence agrarian society, but

rather depend upon identifying the principles and dynamics that made gadaa what it was and is. At its best it included a system of checks and balances that included the popular election of leaders to office. In the present day, suffrage would need to be extended to those formerly proscribed from voting: women and people within some castes.

Having looked at some of the forces driving the capitalist world system and its inherent problems, this paper reaches back to the writings of Adam Smith to identify a principle that has the potential to result in a more just economic system. This basic economic principle is the idea that the wealth of Ethiopia is the sum of the labor of all of its citizens and to the extent that some of its citizens are underemployed or unemployed, the wealth of the nation is diminished.

Within the gadaa system, economic resources like land were held by the community and allocated to families in a manner that enabled them to engage in agriculture (crop, animal, or a combination thereof) as a household livelihood strategy, providing a balance between communal and individual responsibility. This balance reflects the essential cosmic balance that characterizes Waqaa. Livestock on the other hand was privately owned, but as we have seen involved a balance between male and female rights and responsibilities. Community ownership of land resources maintains this balance by preventing the alienation of a household from the means of access to a livelihood while the actual standard of living for a household still depends upon the industriousness of the members of that household.

Currently, ownership of much of the land in Ethiopia is held by the colonial Ethiopian government, having been nationalized under the Derg. As a result, land reform

in Ethiopia would not face the problems that countries with several hundred years of latifundias ownership confront. The neo-liberal development model recommended by the international Breton Woods institutions is to return most of the land to individual private ownership. Under this option there is no guarantee that the ownership of the land would be turned over to the current occupants of the land at an affordable sum if it could be sold for a greater amount to an individual or corporation with greater access to capital. If this were to happen in a peasant agricultural society like Ethiopia, the current occupants could be left without access to a means of livelihood.

On the other hand if property rights were to be defined in terms consistent with Oromo cultural patterns and values, the ownership of land would be returned to the community with gadaa principles ensuring that all households have access to sufficient resources to ensure them the opportunity to earn a livelihood for themselves and their families. In communities with burgeoning populations and dwindling per capita land resources, community leaders might, in a manner similar to US Amish Elders, scout out arable hectarage in the lowlands to stake young families and those willing to make a move in a quest for greater opportunity and food security. The home community would be expected to help to provide the needed resources for mosquito and tsetse fly control, while the staked community would be expected to reciprocate by providing the home community with surplus food resources. The combination of the provision of surplus food resources and a smaller number of people in the home community would take pressure off land resources in the highlands allowing for better erosion control and reforestation.

Gadaa contains within it an understanding of the interrelationship between the access to a livelihood and full democratic participation within society. It was on the basis of an equality of access to livelihood resources, particularly through the community ownership of land, that gadaa could enable an equality of participation in the democratic process not unlike the American concept of a Jeffersonian Democracy built upon yeoman farmers. The connection between access to land on which one can earn a livelihood and political power is a two way street. Economic stability provides people with the security needed to fully participate as an independent voice in democratic decision making. At the same time, the democratic process gives individuals the power they need to ensure that they have access to the land resources needed to provide a livelihood for themselves and their families.

In contrast to conventional economic theory, Gadaa is structured in such a way as to recognize the interrelationships among economics, power, and politics. If elected leaders were to act in ways that favored some members of the community by providing them with access to excess resources, safuu would be disrupted and the leaders could be recalled. Because safuu is critical to community self-understanding, the loss of safuu would stimulate action not only on the part of the aggrieved, but by the community at large.

In terms of Oromo society's need to maintain safuu, an interesting study could be made of the castes that are excluded from full social and political participation. Among the excluded castes are artisans and tanners whose livelihood is not exclusively dependent upon the use of land. Depending upon their skill level, members of these

castes have the opportunity to accumulate economic resources not available to subsistence agriculturalists. Unlike the Dalit of India who are at the bottom of the social and economic ladder, artisans and tanners can be at the top of the economic ladder while being at the bottom of the social ladder. Historically, members of these castes were not able to hold gadaa office or marry non-caste members. While not justifying social stratification or the means involved, one could posit that the limit on holding gadaa office is a means of balancing political and economic power by limiting access to political power in exchange for increased opportunity for economic gain.

The crucial issue from an economic policy point of view is that Oromo society recognizes the need to maintain a balance between social and economic power by preventing people with economic power from dominating the political arena. This is in contrast to the US and other Western democracies where wealthy people can use their considerable financial resources either to get them elected to public office or to gain them access to those in political office. As we have often seen, this can lead to policies that favor the very wealthy at the expense of the rest of society.

In the case of the function of castes within society, Oromo tradition has used an illegitimate means to achieve a legitimate end. The use of social stratification as the mechanism by which economic power is managed destroys safuu, it breaks the bond of harmony and mutual social responsibility within Oromo society. One of the challenges Oromo society faces is the elimination of discriminatory behavior with regard to castes while finding alternate means of constraining the use of economic power in the political arena. The continued maintenance of discriminatory behavior toward caste members

undermines the overall objective of the liberation of the Oromo people from colonial domination. Domination is wrong whether it is toward cast members or colonial subjects.

In his book, On Ethics and Economics, Amartya Sen identifies the issue of motivation as crucial to the operation of an economic system (Sen 1988). The nature of an economic system can look quite different, depending upon one's anthropology—one's identification of the motivating force(s) of human behavior. If one rejects self-interest as the key/sole motivating force that it is in standard economics, then one must identify alternatives. This is especially true if one is to use Oromo culture and values as the basis of an economic system. It should be self-evident that Oromo society has had a functioning economic system, otherwise it would not have survived for millennia. The task then becomes the identification of those motivating forces that have enabled Oromo society to survive even in the face of colonial oppression. Rather than looking for a single silver bullet like self-interest, Sen argues for multiple motivating forces for social and economic activity one of which may be self-interest. Moral precepts and community expectations, however, also cannot be ignored. One need only look at communities like the Amish and the Hutterites to see the importance of religion and beliefs as driving forces in human behavior.

In the case of the Oromo, work and contributing to community and family becomes a manifestation of the essential dynamic balance of the universe. To avoid work would mean that one would become dependent upon the work and resources of others with any reciprocal action. That lack of reciprocity would then disrupt the essential balance of the part of the universe which is the community. The need to maintain safuu in

one's life and community becomes an important motivating force in Oromo communities. For young men and women, the need to be seen as productive members of society is essential to one's marriage prospects. Once children are born, their well-being becomes a motivating force that drives parents to work harder than they would if they were responsible only for themselves. Social esteem must also be seen as a motivating force for individual action (Dahl 1979, p. 83).

It is argued that in the absence of profit people would not have the incentive to take the risks necessary to develop the inventions that improve health and reduce human drudgery. The striving for ever greater profits is viewed as a key incentive that drives innovation and invention. In the absence of profit maximization, other forces that provide incentives and drive innovation must be identified. Again the motivating forces of maintaining safuu, family, and social esteem are significant forces that can drive innovation in the absence of the profit motive. Religious forces such as the expectation that one will fully use their Waqaa given abilities to the fullest can also drive innovation and invention. One need look no further than the Amana Colonies with their Inspirationist religious tradition, communal living, and emphasis on industriousness to see the importance of belief as a force in driving innovation. It would be argued that within Oromo society that the castes of tanners and artisans are among the means by which Oromo society enables innovation.

One of the well-recognized but underappreciated problems of conventional, neoclassical economic theory is that of externalities—costs of an economic action that is not accounted for at the individual or firm level. The dead zone in the Gulf Of Mexico at the outlet of the Mississippi River is prime example of an externality. In order to increase crop yields, primarily corn, farmers in the Mississippi River watershed apply nitrogen fertilizer to their fields. While much of the nitrogen is used by the crops, a portion of it makes its way into surface and ground waters and in turn into the Mississippi River which empties its contents into the Gulf of Mexico. As a result "the excess nitrogen allows algae populations to explode. Dead algae in turn feed bacteria, which gobble up most of the oxygen in the water. Shellfish suffocate, and fish must swim for more healthful waters. The Gulf of Mexico's dead zone swells each summer to about 18,000 square kilometers--roughly the size of New Jersey" (NOAA 2006). For the farmers the cost of the nitrogen loss is accounted for internally as an expense that is usually more than offset by increased yields. While the farmer has to account for the loss for the value of the nitrogen fertilizer that washes off the fields, that farmer does not include in his cost accounting the loss of livelihood for the shellfish fishery operators in the Gulf of Mexico. In the end the Mississippi River Watershed farmer reaps the gain of increased yields, while the Gulf Of Mexico fishing operator experiences the loss. The loss to the fishing operator is an externality from the point of view of the farmer.

The issue of externalities looks quite different when viewed from the perspective of traditional Oromo religion in which the concept of safuu, the essential order and balance of the universe, is central. The concept of safuu can also be seen in the emphasis on the congruence of collective and individual interests within Oromo society. In each case, a threat to safuu is a threat to the stability of the society as a part of an ordered stable, balanced universe. This view of safuu holds the promise of viewing what

otherwise would be externalities as "internalities" because from the perspective of Waqaa, the universe is the "firm level."

From the perspective of traditional Oromo religion, the nitrogen fertilizer problem looks quite different given the knowledge that nitrogen loss can have a negative impact on people, fisheries, and the health of the seas itself at the outlet of the watershed. Setting aside for a moment the current problem of the loss of animal dung as fertilizer because of its fuel value, animal dung traditionally was an important source of nitrogen fertilizer. Unlike commercial fertilizers which are usually applied in one or two applications during the growing season, dung is supplied and applied on a continuous basis. Heavy applications increase the potential for runoff while the continuous application provides the nutrients as they are taken up by the crop. The other source of nitrogen comes from the practice of planting of leguminous crops late in the rainy season. Because the crop matures at the end of the rainy season, the chances of nitrogen loss into waterways is minimized, remaining available for the tafi crop that will be planted as soon as the next rainy season begins. Traditional agronomic practices in and of themselves have developed in ways that minimize the loss of nitrogen. As commercial sources of nitrogen become more commonly used and as Oromo farmers become aware of the potentially damaging effect of nitrogen-loaded runoff on fishers and sea life, they could institute the use of buffer strips around their commercially fertilized fields. The use of buffer strips around the fertilized fields would serve three purposes. Any nitrogen in the runoff would be absorbed in the buffer strip, stimulating the growth of the buffer strip plant material. Additionally, the grass could then be fed to the oxen. A further benefit of the buffer strip

would come in its role of erosion control. By slowing down the speed of water leaving the field buffer strips allow soil particles to settle out instead of flowing downstream.

Other areas where the concept of safuu would have an impact on mitigating externalities is in water management (balancing out the needs of highland and lowland water users, as well as the river itself), employment/unemployment (making sure that each member of the community has access to resources so that they can productively contribute to community wellbeing), and reforestation (balancing out the needs for agricultural lands, fuel, and the life of the forest itself). Because each person in Oromo society has a role in maintaining safuu, and because under Waqaa the universe is the firm level, individual decision making process are constrained by the knowledge of the impact of those decisions elsewhere in the universe.

One of the consistent development recommendations is to increase the amount of large-scale, Western-style, mechanized, commercial agriculture. Peasant-style, ox-plow based agriculture is viewed as a relic of another age that must be abandoned as quickly as possible. One of the assumptions driving this recommendation is the belief that animal powered agriculture cannot be as productive as mechanized agriculture. For those of us who have grown up with commercial agriculture, this reasoning seems logical, until we look around at what is happening in the US.

In the US we see Amish horse plow agriculture displacing the mechanized agriculture of the "English" as Amish communities expand and the children of the "English" go to town to find jobs. In 2003 there were 345 Amish communities in the US, half of which were formed since 1990. Every five weeks on average, a new Amish

community is being formed in the US (Donnermeyer 2005). Parties of Amish Elders are regularly traveling around the agricultural areas of the US looking for farmland that they can buy to begin the establishment of a new community. Rural communities in the agricultural heartland of Wisconsin, Iowa, Missouri, and Illinois are seeing land that had been cultivated by tractors for 80 years, returning to cultivation by draft animals as Amish communities increase in both size and numbers. If animal agriculture can displace mechanized agriculture in the US, both in terms of productivity and its potential to serve as a household livelihood strategy, there is every reason to believe that animal agriculture in Oromia and Ethiopia has a viable future.

Summary

The concepts of dynamic wealth, social construction, and coercive/non-coercive exchange provide a framework within which the ideas developed in this thesis can be examined and synthesized in the development of economic policies that have the potential to contribute to the development of the economy of a multinational, multicultural, democratic nation within the Horn of Africa that values the contributions of the Oromo and other currently oppressed peoples. At the present time, Ethiopia along with most of the other nations of sub-Saharan Africa are among the least developed nations in the world. Malnutrition rates in Ethiopia approach 50 percent and are nearly that severe in other nations in sub-Saharan Africa. This level of underdevelopment exists despite the infusion of large amounts of development aid over the last fifty years, in the form of both governmental and non-governmental activities, raising the possibility that the dominant neo-liberal economic model that has guided these ventures may not be well suited to meet the challenges that face peasant, agricultural societies in the twenty-first century.

The root of some of the mismatch between developmental activity and the disappointing results in places like sub-Saharan can be found in the socially constructed nature of the dominant, neo-liberal economic system that provides the framework within which most of the developmental activity in the neocolonial, post-World War II era has been conducted. Despite the assertions of economic theorists like Milton Friedman, the dominant neo-liberal economic paradigm is not value-free. Rather the values are often unseen, embedded in the nature of the undefined terms, definitions, and assumptions that form the basic foundation of the neo-liberal economic model. These values are those of a

competitive, self-interested, individualism operating in an atmosphere that gives no overt recognition to issues of culture, values, and power. The particular anthropology embedded within the neo-liberal economic paradigm and its lack of attention to issues of power and the importance of cultural forces may go a long way toward accounting for the failure of development efforts since the end of WWII.

In a recent World Bank Country Economic Memorandum for Ethiopia, Seifluaziz and El Aynaoui (2004) list its people as one of Ethiopia's important resources. This acknowledgment is consistent with Adam Smith's contention that the true wealth of a nation consists in the annual labor of the people. As has been shown in this paper, this annual fund of labor is a source of dynamic wealth as compared to static forms of wealth like currency and other capital resources. Capital resources that are not used on one day can be used the next day or the next year. Gold that is left unmined today remains valuable and can be mined tomorrow or any day in the future. Labor on the other hand that is not used today is lost forever. With labor we have a situation of use it or lose it. Thus Henry Wallace can talk about the 1930's depression and the US's loss of 88 million person-years of labor and \$350 billion in lost wealth. The same is true with regard to the ability of the population of Ethiopia to contribute towards its wealth.

Ignoring indigenous cultural motivators, neo-liberal economic policy depends upon capital investment to trigger job growth and development, a questionable process in a capital poor country like Ethiopia. In addition it is possible for capital investment to trigger a growth in GDP (gross domestic product) while impoverishing a large number of people if the development results in displacing a large number of people from their

the concepts of the socially constructed nature of economic activity and dynamic wealth, suggests looking not to outside capital investment but to the culture, traditions, and values of the peoples of Ethiopia to provide the motivating factors that enable them to offer their labor each day for the development of the nation. This suggests the need for conceptualizing development policies that are driven by dynamic forms of wealth rather than relying on development policies that are dependent on the use of static forms of wealth.

One of the most serious indicators of the failure of a half-century of development policies in Ethiopia is the high rate of malnutrition which leads to growth stunting and death. Development policies based on neo-liberal economic theory assume that free markets will provide for the optimal allocation of resources including food and labor. The problem with that assumption is the coercive nature of food markets. If price is used as the means of the allocation of scarce resources then some people may be priced out of the market and with food the consequences of being priced out of the market is malnutrition and death, especially if people do not have access to an adequate amount of land to provide a livelihood for them and their families. Neo-liberal policies have few if any tools to deal with markets that are by the nature of the product coercive. If a market is for a "want" like a gold ring, then it can be non-coercive and the consequence of being priced out of the market is minimal. If, on the other hand, the market involves "needs" like air, water, and food those markets are by their very nature coercive and thus not free markets. The same could be argued for labor markets that operate in the absence of a

subsistence alternative for workers. There needs to be an "employer of last resort" for labor markets to be non-coercive and that is seldom the case. Without an employer of last resort, labor is unable to make its wealth available for the betterment of the nation.

When combined with an understanding of the unique characteristics of crop agriculture and the fallacy of composition, the foregoing suggests some principles that need to undergird future economic and economic development policies for the Oromo and other ethno-nations in Ethiopia—principles that also apply to less developed countries in sub-Saharan Africa and elsewhere around the world.

Rather than attempt to apply the Procrustean bed of Western economic rationality to their situation, emerging leaders in the territory of the former colonial empire of Ethiopia would be better served if they were to look to indigenous traditions, cultures, and values for principles and customs regarding the allocation of resources and the motivation of people to labor and offer their dynamic wealth to the improvement of society. Given the availability of adequate resources, agriculture is the only industry that can bootstrap itself and at present is the employer of last resort and the primary source of the wealth of for the people of the Ethiopia. Traditionally land ownership has been held by the community with individuals being given responsibility for a particular parcel that they can use to provide a livelihood for themselves and their families. While individuals may have the freedom to use these parcels, community mores militate against activity that would lead to environmental degradation of the land. These same community mores also provide the carrots and sticks that are needed to ensure that each member of the

community carries out their responsibilities toward the community by offering their labor for the increase of the wealth of the community.

Given the significant gap between the current nutritional levels and recommended nutritional levels, production of local staples needs to be given priority over production for export. As Takeshima has shown, the single most important thing a country can do to reduce malnutrition levels is the increase the production of staple crops at a rate faster than the increase in population. As improvements in production of local foodstuffs begins to take place some producers will have surplus to sell on local markets and it is this surplus production that begins the development of vibrant local markets that over time can grow into regional, national, and international markets.

Full employment and the development of the true wealth of the country suggests looking to traditional concepts of land tenure that make land available to serve as the employer of last resort, seeing land as a basis resource to be used for the betterment of society. With community ownership individuals are not able to sell and thus commodify the land. While this land tenure pattern has its advantages it also means that individuals are not able to use the land as collateral for making improvements in the land and agricultural practices. Traditions need to be examined to identify mechanisms that will make resources available to the innovators in society so that improvements will not be stifled. Water projects, especially those micro projects described by Seifluaziz and El Aynaoui might well be they type of project that communities would look at as they seek to find ways to protect land while providing nutrition and livelihood for their members.

One measure of the success of economic policies based on local cultures, traditions, and values will be the elimination malnutrition. Other measures will need to be developed by the communities.

While struggling for self-determination and a multi-national democracy, Oromo political leaders and others should start to search for an alternative economic development policy that may liberate the people from malnutrition, famine, absolute poverty, and underdevelopment. This thesis identifies several theoretical issues and a number of policy recommendations as a part of this search.

Key among the theoretical issues is the coercive nature of food markets and thus agricultural markets. The whole neo-liberal argument that free markets and unrestrained international trade will alleviate malnutrition in the global South through the development of a higher value export oriented agriculture that will earn sufficient revenue to enable developing countries to purchase lower cost foodstuffs to feed its population falls apart once one understands the coercive nature of food markets. The fundamental theoretical support for free markets is that they are indeed "free"—that they are non-coercive, depending on the voluntary participation of both buyers and sellers. With food, the participation on the part of buyers is not voluntary, especially is they are denied access to sufficient land on which they can grow enough food to provide and adequate diet for themselves and their families. When 50 percent of Ethiopia's population goes to bed hungry at night it is not because they have voluntarily chosen to skip a meal. They go to bed hungry because they have been forcefully been excluded from the food marketplace, either through the lack of access to sufficient land or a job that pays enough

to enable them to purchase an adequate supply of food. The concept of the right to food and the concept of free markets are in direct contradiction with one another. The right to food asserts that all human beings have the inalienable right to an adequate culturally appropriate supply of food in a quantity sufficient to meet their nutritional needs. Free markets on the other hand are based on the necessity of excluding some people from access to scarce resources including food.

The policy ramifications of understanding the coercive nature of food markets are widespread and significant. At the most fundamental level, unless one believes in the moral correctness of starvation, it means that everyone in a society needs to have access to (1) a sufficient amount of land on which they can support themselves and their families or (2) a job that will earn a sufficient amount of money to provide them and their families with a livelihood. In an empire with a low level of capitalization and an adequate land base like Ethiopia the primary policy is to enable people to have secure access to an adequate sized plot of land. Returning to the historic pattern of community ownership of land with private responsibility for animals and production is an excellent way to achieve this policy goal. By making the land resource inalienable through community resource, individuals and families are not faced with the choice of selling their productive resource in order to eat. Thus land remains an ongoing resource for household livelihood.

The coercive nature of food markets also goes a long way toward understanding the low price elasticity of food demand. Because food is a daily requirement for human survival, people will pay almost anything for food when the supply is short. But once they have their bellies full, very low prices will do not entice people to significantly increase the amount of food they eat. We have seen the low price elasticity of demand at work in the market for agricultural products like coffee. As the supply of coffee has increased, the price has dropped significantly and the amount demanded has not sopped up the excess supply. This decades long price drop has had a negative impact on the households of the coffee producers of Ethiopia. One way for the government to deal with this problem is to work with other coffee producing nations to manage the supply of coffee at a level that will enable producers to earn an adequate livelihood for themselves and their families.

Step by step, citizens and their democratic leaders need to work together to develop economic policies that are rooted in their cultural heritage and take into account at least some of the economic and social issues that have been raised in this thesis.

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Appendix A

Table 1. Land use in Ethiopia. Source: FAOSTAT data, 2005. Last accessed February 2006.

Land Use	Area in 1,000 Ha.		
Total area	110,430		
Water area	10,430		
Land area	100,000		
Agricultural area	31,769		
Arable land	11,056		
Permanent crops	713		
Permanent pasture	20,000		
Non-agricultural	68,231		
Urban	NA		
Forests and woodlands	NA		
Other	NA		

Table 2. Ethiopia crops by major crop categories, planted area, production and yield, 2005. Source: FAOSTAT data, 2006. Last accessed May 2006.

Стор	Area in 1,000 Ha.	Production in 1,000 Tonnes	Yield in Tonnes/Ha	
Cereals	7,510	9,340	1.24	
Pulses	1,197	1,050	0.88	
Oil crops	732	459	0.63	
Roots and tubers	628	4,870	7.75	
Spices	291	118	0.41	
Coffee, tea, and tobacco	289	267	0.92	
Vegetables	200	895	4.48	
Fiber crops	92	35	0.38	
Tree nuts	64	75	1.17	
Fruit	57	731	12.82	
Sugar*	23	323	14.04	
Total	11,083	18,163	1.64	

^{*} Production in Raw Equivalent

Table 3. Ethiopia crops by major crop categories: production (2005), exports (2002, 2004), and imports (2002, 2004). Source: FAOSTAT data, 2006. Last accessed May 2006.

Crop	Production in	Exports in 1,000	Imports in 1,000	
Стор	1,000 Tonnes	$\mathbf{Tonnes}^{\dagger}$	$\mathbf{Tonnes}^{\dagger}$	
Cereals	9,340	13	894	
Pulses	1,050	52	65	
Oil crops	459	110	1	
Roots and tubers	4,870	6	3	
Spices	118	0	0	
Coffee, tea, and tobacco	267	135	0	
Vegetables	895	20	2	
Fiber crops	35	7	0	
Tree nuts	75	0	0	
Fruit	731	7	3	
Sugar*	323	16	0	
Total Food Crops [‡]	18,125	359	968	
Total All Crops	18,163	366	968	

^{*} Production in Raw Equivalent

Table 4. Ethiopia animal products by major categories, production, exports, and imports, 2005. Source: FAOSTAT data, 2005. Last accessed February 2006.

Animal Product	Production in 1,000 Tonnes	Exports in 1,000 Tonnes	Imports in 1,000 Tonnes
Bovine	304	0	0
Mutton and goat meat	66	1	0
Pork	1	0	0
Poultry	50	0	0
Other meat	127	0	0
Edible Offals	83	0	0
Butter	18	0	0
Animal fats, raw	15	0	3
Milk, excl. butter	1,518	0	13
Eggs	38	0	0
Fish, freshwater	15	0	0
Total Animal product	2,235	1	16

[‡]Total All Crops less fiber crops and tobacco

^{†2004} for all crops except 2002 for roots and tubers, vegetables, tree nuts, fruit

Table 5. Ethiopia nutrition by major food categories, daily calories per capita, daily protein grams per capita, and daily fat grams per capita. 2003. Source: FAOSTAT data – Food Balance Sheets, 2006. Last accessed May 2006.

Product	Daily calories/capita	Daily protein grams/capita	Daily fat grams/capita	
Grand total	1858	53.4	19.7	
Vegetal Products	1762	47.1	13.1	
Cereals excluding beer	1270	34.5	5.4	
Starchy roots	230	2.6	0.3	
Sugar and sweetners	45	0.0	0.0	
Pulses	114	7.7	0.7	
Treenuts	7	0.2	0.7	
Oilcrops	8	0.5	0.6	
Vegetable oils	37	0.0	4.2	
Vegetables	10	0.5	0.1	
Fruits excluding wine	14	0.2	0.4	
Stimulants	2	0.4	0.0	
Spices	14	0.5	0.8	
Alcoholic beverages	12	0.1	0.0	
Animal products	96	6.3	6.6	
Meat	44	3.2	3.2	
Edible Offals	4	0.6	0.1	
Animal fats	13	0.0	1.5	
Milk excluding butter	33	2.0	1.6	
Eggs	2	0.1	0.1	
Fish	0	0.1	0.0	

Table 6. A comparison of tafi, wheat, maize, and other crop production for Oromiya Region, historic Oromia within Ethiopia, and total national level (Ethiopia). Source: World Bank, "Ethiopia: A Strategy to Stimulate and Balance Growth", Country Economic Memorandum, Report No. 29383 - ET, the World Bank (June 2004), and FAOSTAT data, 2003. Last accessed March 2006.

Adm. Zones/ Economic Indicators	Total Population	Area (1,000 Ha.)	Temporary Crop Area (1,000 Ha.) - Calculated	Temporary Plus Permanent (1,000 Ha.) - Calculated	Total Production of Temporary Crop (1,000 Tonnes)	Tafi Production (1,000 Tonnes)	Wheat Production (1,000 Tonnes)	Maize Production (1,000 Tonnes)	Other Crop Production - Includes Pulses and Oilseeds (1,000 Tonnes)
OROMIYA REGION	24,395,000	31,048	3,566.8	3,834.4	4,431.6	740.7	759.8	1,423.7	1,507.3
	35.3%	27.6%	44.2%	45.2%	49.4%	44.3%	63.3%	57.1%	41.9%
OROMIA*	31,301,764	36,088	4,469.5	4,746.4	5,355.6	946.2	899.4	1,488.4	2,021.6
	45.3%	32.1%	55.3%	55.9%	59.7%	56.5%	74.9%	59.7%	56.2%
Total (National Level)	69,127,019	112,408	8,077.4	8,492.2	8,968.9	1,673.7	1,200.8	2,495.0	3,599.4
FAO Category			Cereals, Oilseeds, Pulses		Cereals, Oilseeds, Pulses	Cereals nes	Wheat	Maize	Balance of Cereals, Oliseeds and Pulses
Total National - FAO	70,678,000	110,430	8,505		9,686.3	1,419.6	1,400.0	2,800.0	4,066.7
FAO Year of Data	2003	2003	2003	2003	2003	2003	2003	2003	Calculated

^{*} Historic Oromia within Ethiopia includes Oromiya Region plus Semen Wello, Debub Wello, Semen Showa (AMA), Oromiya, Dire Dawa, and Finfinne

Vita

Harwood David Schaffer was born October 15, 1944 in Dayton, Ohio to Phillip D. and H. Ruth Schaffer (Scheid). He graduated from Fairborn High School in 1962 and entered The Ohio State University where he studied postulate geometry under Leslie Miller. He received his B.Sc. in Mathematics from The Ohio State University in March 1965.

After a brief stint as a high school teacher, Harwood entered The Hartford Seminary Foundation, preparing for ministry in the United Church of Christ. There he majored in South Asian studies and anthropology, studying under Herbert Jai Singh. He was ordained to ministry in the United Church of Christ on July 13, 1999. He served churches in rural agricultural communities for 30 years. While serving two of those churches, Harwood was publisher and editor of a Minnesota country weekly newspaper for ten years.

In the summers of 1978 and 1980, Harwood participated in the archaeological excavation of Tel Aphek and Izbet Sartah in Israel. He excavated and studied archaeology under Moshe Kochavi of the Institute of Archaeology, Tel Aviv University and Israel Finklestein of Bar Ilan University. He was the American Camp Manager at Tel Aphek and Izbet Sartah in 1980.

In February 2000, Harwood began his work as a Research Associate with the Agricultural Policy Analysis Center at The University of Tennessee where he works under Daryll E. Ray. Harwood works with Dr. Ray in researching and writing Dr. Ray's weekly agricultural policy column. He was admitted to the M.Sc. program in agricultural economics in 2002. Harwood received his M.Sc. degree in August 2006 and is currently enrolled in the PhD program in sociology at The University of Tennessee.