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Food Security and Rural Vulnerability In Ethiopia: A Development Perspective

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Abstract

This paper analyzes current food security and rural vulnerability situation in present day Ethiopia from a development perspective. In the sections that follow: (i) various issues relating to food security and vulnerability are presented, (ii) current food aid management policies and practices are reviewed and their implications for overall agricultural development policy are evaluated, and (iii) alternative strategies for combating the risks of future famines are suggested.

Keywords: Food Security, Vulnerability

JEL: Q11, Q55, Q13I.

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INTRODUCTION

Concern for food security is especially high in Ethiopia for eight basic reasons: First, Ethiopia has experienced large-scale famines for half a century. The famines of 1972/73, 1984/85, 1987, and 1998-2000 are all recent memories of mass starvations that affected the lives of hundreds of thousands of people and livestock population. Second, Ethiopia has third largest population (estimated at 62.8 million in 1999) in Africa, after Nigeria and Egypt. Given the current population growth rate of 2.4 percent per annum, Ethiopia's population will be 118 million by 2025. This will put Ethiopia in the 12th ranking in the world. Feeding such a large population with domestic and/or foreign food supply would be a burden especially during famines. Third, food distribution to affected regions at times of emergencies is a formidable task because Ethiopia is a large country with an underdeveloped road network. Only 20 per cent of the country is reached by modern road transport. Fourth, the vast majority of the market-dependent population and people vulnerable to famine live far away from ports that Ethiopia has already lost sovereignty. Even donors (Oxfam March 2000) have acknowledged that getting aid into landlocked Ethiopia could be difficult because the two main supply ports, Assab and Massawa, are lost to Eritrea. Fifth, agriculture accounts for more than half of GDP (52.3% in 1999) and about 85 percent of export earnings[2]. Over 85 percent of the population of the country is the agricultural labor force. It is implicit that a dismal performance of the agricultural sector will have a serious repercussion on the national economy. Sixth, Ethiopia is a country where food production on the peasant farms is highly vulnerable to climatic changes. Irrigation is negligible, contributing less than 3 percent to food production.

The author is an assistant professor of Development Studies currently teaching Business courses at University of Phoenix (Northern California Campus) and Geography at Ohlone College (Fremont, CA). Seventh, previous studies showed that food insecurity in Ethiopia is one of the highest in Africa (World Bank 1988; Hubbard et al 1992; Maxwell and Belshaw 1989; Debebe et al. 1992). These studies estimated that 46-55 percent total population are food insecure. Recent studies also indicated that more than 43 percent of farming households are food insecure even in relatively good harvest year, and about 50 percent of these are net-buyers of food grains (Clay, et al. 1998). At last, not least, assessment of current food security situation by the government and donors showed that famine is still looming in Ethiopia as we start the 21th Century. In 2000, it was estimated

[2] This figure was obtained from World Bank, World Development Indicators (April 2001).

that sustained drought left eight million people in food and water shortage[3], the worst affected area being the Somali (Ogaden) Region in the southeast which is known for being remote, fragile and vulnerable region (WFP/UN April 2000, USAID/FEWS June 2001, and DPPC). From the foregoing circumstances, no doubt that food insecurity and rural vulnerability have been and will be the most pressing issues in formulation of development policy in Ethiopia.

II. THE CURRENT STATE OF FOOD SECURITY

2.1 Positive Developments

On the positive, it appears that prospects for food security are bright. The first major development is record harvests in 1995-96 and 2000-01 crop years. The Ministry of Agriculture (MoA) reported that food national production has increased from 6.34 million MT to 10 million MT in 2000 due to favorable rains and the nationwide extension program. Subsequently, it was publicized that Ethiopia has closed the national "food gap" and transformed itself from deficiency to surplus. It is not clearly stated in official reports whether "green revolution" is already in effect. What is known is the nationwide extension program covers 3.7 million farmers and involves 15,000 development agents (MoA 2001). As a result of bumper harvests, in recent months producer prices for food grains has declined by a considerable margin from the previous year levels[4]. Analysts speculate that the decline in producer prices may benefit the consumers in the short-run but would create production disincentive in the long run. With a record harvest in the history of the country, in 1996 it was publicized that Ethiopia exported 100,000 MT of maize to markets in neighbouring Kenya. The official explanation for the export was stabilization of plummeting grain prices.

The second major development is the local grain purchase for food aid distribution that started in 1996 as a result of agreements reached between the Government and the European Union (EU). In 2001, the Ethiopian Grain Trade Enterprise (EGTE) and the EU purchased over 100,000 MT of wheat and maize from local grain traders to stabilize producer prices, fulfil domestic food aid requirements, and stock emergency reserves. This measure eliminates the logistics problems of importing food and creates more incentive to domestic food production.

The third positive development is the MoA 2001 statement indicating that agriculture has been growing at the rate of 3.4 percent per

[3] This estimate includes all internally displaced people due to drought and war as well 206,000 refugees from Somalia and the Sudan. 4 The decline was 21.5 % for teff, 21.4 % for white wheat, 25 % for sorghum. For maize it was reported that producer prices were depressed even farm below the cost of production (USAID/FEWS 2001).

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annum over the past 10 years. This is a good progress suggesting the current food growth is now higher than the current population growth of 2.4 percent per annum[5]. If all these official figures were reliable, there is a good reason to be optimistic with caution.

Added to the positive developments is that the government's and donors response to recent famines has been partially successful. The USAID/FEWS report (June 15,2001: 2) indicated that the Government, WFP, NGOs and donors have taken steps to mitigate food insecurity in South-eastern Ethiopia (viz. Fafen, Hartisheik, Kebribeyah, Denan, Gode, Afder and Warder woredas).

2.1 Negative Developments

Despite the positive developments mentioned above, the risks of mass starvation still persist. In early 2000, prolonged drought caused massive starvation in Ogaden that local grain purchases and the distribution of national emergency grain reserves could not stop**.**

To mitigate the situation, in January 2000, the Ethiopian government appealed for urgent international food aid of 639,246 MT at the time when international aid was overstretched due humanitarian crises in multiple countries. Ethiopia had to compete especially with Kovoso (in former-Yugoslavia) for food aid and was lucky to get its share. The World Food Program of United Nations (WFP/UN) alone had imported and distributed 490, 000 MT of food aid worth of US$220 million among 5.7 million drought affected people. To date, the lives of hundreds of thousands people living in various regions has depended on international handout[6]. Besides, the Ethio-Eritrean border conflict that lasted for two years has displaced more than 350,000 in northern Ethiopia, increasing the severity of food shortage. The negative image of all these is that Ethiopia's dependence on food aid has continued. A simultaneous occurrence of food self-sufficiency and famine has confused many including donors. In fact, Ethiopia's food insecurity is deep-rooted that even a record harvest cannot improve it.

The most recent reports were pessimistic in their prognosis of food insecurity in Ogaden. According to USAID FEWS (June 2001), in the short-run, food aid will reduce vulnerability but will not mitigate food insecurity for many thousands of people who are There is no official death toll of humans from the 2000 famine. Recent estimates by Centers for Disease Control and Prevention, Save the Children USA and UNICEF put the death toll at about 19,900 in Gode and about 78,000 in four other hard-hit areas. Most deaths were due to wasting and major communicable diseases and 77 percent of the deaths occurred before the humanitarian aid began in April 2000.

[5] This figure was obtained from World Bank, World Development Indicators (April 2001)

[6] Outside Ogaden, food insecure people in need of food aid in 2001 in other locations were estimated at 350,000 in Tigray, 58,000 in Addis Ababa, and 16,000 in East Gojjam (16,000). There may be others unreported cases. The estimates may be unreliable and vary depending on sources.

Field reports by relief agencies also predicted that despite much Government and donor attention, food security in Ogaden remains "fragile" [7] among certain populations because recovery process has not begun. While humanitarian conditions showed an improvement from the year 2000, food insecurity persists in many localized areas. UNICEF and NGO nutritional surveys in April 2001 showed alarmingly high rates of malnutrition and child mortality among internally displaced people. All these indicated that relief aid is insufficient to rehabilitate communities severely debilitated by drought and mass starvation. Livelihood recovery programs are needed to complement food aid and enhance coping strategies.

In April 2001 the WFP/UN, the world's largest food aid agency, reported launching an emergency operation of $203 million to feed 2.5 million people in Ethiopia. However, signs of donor fatigue, on the one hand, and increase in the number of food insecure people than originally anticipated, on the hand, forced the DPPC to cut the food rations in Ogaden by 17 percent. The reduction in July 2001 was from 15 kg per person per month to 12.5 kg. Relief agencies feared that the reduction in food rations coupled with acute shortage of vegetable oil and blended supplementary foods would further delay the recovery process of famine victims.

In brief, the current situation is one of food abundance co-existing with widespread food insecurity. In relative terms, one section of Ethiopia feasts from bumper harvests while another section fasts due to lack of food. This gives an impression that current food insecurity in Ethiopia has much to do marketing, consumption and entitlement problems, and not production. Is there a missing link between regional food surplus and regional food deficiency in Ethiopia? Will Sen's (1981) theory of entitlement[8] be helpful to explain why famine is back again in 2000-01?

Lastly, the negative developments remind us to pose five basic inter-related development questions. Why is famine back again? Why should the Government appeal for international food aid in the aftermath of much publicized bumper harvests and maize export? How can famines recur after record harvests in the country's history? Why food aid, used over the past years has not helped averting future famines? Is there something wrong with the management of food aid distribution or with the government's food aid policy? What agricultural development strategies would be effective to combat drought and famine effectively?

III. THE ISSUES

[7] Here, "fragile" implies that the people are unable to maintain household food security in the short and long term perspectives 8 Sen's (1981) seminal work on poverty and entitlement is helpful to understand this link between food insecurity and poverty.

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In the Ethiopian context, several research and policy issues dominate the academic and policy debate on "food security"[9] and "rural vulnerability"[10]. Perhaps, food security and "rural vulnerability" have drawn the attention policy makers, donors, international development agencies and scholars more than any other agenda.

Four major issues are relevant to the analysis of food security and rural vulnerability. These include: (i) understanding the roots causes of chronic food insecurity, (ii) iidentifying the ecological regions and social groups that are food insecure, (iii) targeting food aid and using resources effectively to avert chronic food insecurity or to promote the developmental impact of food aid, and (iv) defining the role of government in food security and disaster prevention.

The first issue requires examining whether the conventional cause of famine or mass poverty and structural constraints are more responsible for famine recurrence in Ethiopia. The second issue involves justifying the selection process or prioritization of certain geographical areas and certain social groups benefiting from investments and food aid programs.

How should food aid be targeted when and where everyone is not needy? Ideally, food aid targeting takes two forms, i.e., area-targeting and household-targeting. Again, household targeting can be administered in three ways – self-targeting, administrative-targeting, or. community-based targeting[11]. Selective investment in food security schemes sounds economical where and when resources are scarce and cannot be scattered everywhere. By doing this, places having less need or less value added return to investment may be excluded. In the Ethiopian context, the selection would mean investing in either highlands or lowlands, investing in either high-potential areas or low-potential areas, and

[9] "Food security" is defined as the ability for all people in society to be able to acquire food at all times to lead normal, active, healthy lives. It involves production, marketing, entitlement and nutrition (Maxwell and Frankenberger 1992:66-70, Jayne and Daniel 1995). In contrast, "food insecurity" implies the lack of access to enough food. It can be identified as chronic, transitory or cyclical in terms of time. Chronic is a long-term problem arising from poverty and structural constraints affecting resource base or means of survival of people. Transitory is of short term in nature and caused by a short decline in purchasing power due to inflation or a sharp rise in food prices. Cyclical is the one that recurs at a given time interval. Ethiopia has experienced all the three forms.

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[10] Unlike food security, vulnerability does not have a precise meaning varying from one field of study to another (Downing 1991, Longhurst 1994, Webb, et al. 1994). Here, rural vulnerability implies the risk of exposure of a given population or region to food insecurity and the ability of the population to cope with the consequences of that insecurity. It reflects lack of buffers against contingencies, disasters, physical incapacity, unproductive expenditure, and exploitation (Chambers 1986: 103-104).

[11] Administrative targeting means intended beneficiaries are selected using indicators as asset or livestock ownership, age and gender, nutritional status, access to resources such as land and family labor. Community-based targeting means eligibility of households for free food aid or project food aid is determined based on community members' prior knowledge of each household's food security situation and coping ability. Self-targeting is when only those who like to work for below-market wage and inferior goods avail

investing on either farm households or pastoral nomads. These are hard choices that policy makers have to make while trying to balance economics with politics.

The third issue requires using the best investment method (cash or non-cash aid) to maximize the short-term and long-term benefits of public projects. This means choosing either more cash-for-work or food-for-work project. It also means either giving free-food or project-based food to beneficiaries. In either case, it is interesting to know whether food aid contributes sustained development or puts the country into more and more food dependency. The fourth and last issue addresses the role of government in drought and famine mitigation. This should include evaluation of the current policies, practices and any shortcomings.

It is beyond the scope of this paper to discuss all the five issues listed above in detail. Nevertheless, attempts are made in following sections to address the major ones for which primary and secondary data were available.

IV. UNDERLYING CAUSES OF FOOD INSECURITY

Are the 20th century famines similar to or different from the current one? One similarity they have is that they are caused by the combined actions of humans and nature.

Previous studies on the 1972/73 and 1984/85 famines have revealed that both natural and human disasters cause all the three forms of food insecurity (chronic, transitory, and cyclical) but categorically put the human action being the major cause[12]. Sen (1981:96) argues that in 1973 thousands of the Wollo people in North-eastern Ethiopia starved to death without there being a substantial rise in food prices. This happened because their income and thus their purchasing power over food collapsed. This implies that analysis of poverty is key to the understanding of food insecurity. Mesfin (1984) demonstrated that rural vulnerability famine is a function of social forces claiming peasant resources and exposing them to famine and mass starvation in years of droughts. Similarly, Lappe and Collins (1986:16) assert that human not natural forces leave people vulnerable to nature's vagaries. He further states that famines are not natural disasters but social disasters or social effects, the results of human arrangements. Dessalegn's (1991) research showed. that it is in the years of recovery that the seeds of famine are sown. Are these findings helpful to explain the 21th century famines?

4.1 Impact of Drought

In developed societies, drought does not necessarily lead to famine because the institutions and resources needed to combat the disaster are already in place. Besides, food production in developed economies takes places in commercial farms using irrigation, not rains.

[12] According to Lappe and Collins (1986:22), asserting that famines are causes of nature's vagaries makes us feel helpless but believing that famines result from human-made errors makes us hopeful, thereby forcing us to search for solutions.

In developing countries like Ethiopia, the situation is the reverse. The risk of impending famine due to drought is still great since the link between drought and famine has not been broken. Drought has a major impact on food production on the peasant farms. The rain-fed peasant farms experienced erratic and unreliable rainfall disrupting food production. Drought-initiated production failures occurred in the 1984/85, 1987/88 and 1989/90. The 1984/85 was the most serious one. Production declined by 27 per cent from the level of the previous year triggered mass starvation. Consequently, famine occurred in most of the regions, affecting over eight million people and leaving about one million dead (RRC, 1985).

During 2000-01, the distribution of meher (main growing season) rains was favourable for crop production in highland parts of Ethiopia; the belg (short growing season) rains being normal in north central Ethiopia[13]. The exceptions were the lowlands of South Tigray and North Wollo where crop production has been lost.

In contrast to the highlands, in the nomadic areas of Southeast, belg rainfall was erratic and light, with some areas receiving insufficient quantities for renewal of pasture, browse and surface water resources. Specific areas of concern due to poor rainfall distribution include parts of Gode Zone, southern Liben and Afder Zones and eastern Warder Zone (USAID/FEWS, June 2001). There, failure of biannual seasonal rains for the past four years made life miserable. Drought turned the pastureland into a near desert, the temperature soaring above 105˚ Fahrenheit. As a result, 50 percent of the sheep and cattle and 20 percent of camels perished14 even long before international aid reached in March 2000. Either the early warning indicators were missing or relief response was sluggish to avert the death toll.

Livestock mortality is not limited to arid regions. A considerable of death cattle in the wetter Western lowlands is caused by African trypanosomiasis, a disease carried by insect vector known as tsetse fly. It was reported that, during 1994-97, draft animals purchased from the highlands for plowing season in the Bales Valley were immediately sold back at loss due to tsetse fly infestation (Kadir and Custer 2000). There, peasant cultivators living in one settlement area had to spend about Birr 85,000 (equivalent to US$10,625) per year on tyrpanocidal drugs.

The above-mentioned cases are all indicative of the situation that the marginal lowlands areas are more vulnerable to disasters compared with central highlands areas. This is

[13] Meher extends from June to September and accounts for 95 % of food production at national level, 5 % being Belg production in spring. But Belg production is more important than meher in highlands of Bale, Shewa, and Western Wello. The economic significance of Belg rains ranges from helping flowering of coffee plants to mitigating food shortages, and stabilizing grain and livestock prices in local, regional, and national markets until the Autumn Meher harvest. Belg rains are critical to the nomads for pasture and drinking water in the extensive pastoral areas of Southeastern lowlands of Ogaden, Elkere and Borena (Alemayehu 1991).

indicative that the lowlands (both wet and dry) are more vulnerable to environmental hazards.

4.2 Impact of War and Ethnic conflicts

During 1980s, the concurrence of drought, war and the restrictive economic policy had made the food supply situation much worse. In fact, one could hardly isolate the effects of war from those of restrictive policy or drought, or vice versa.

Since early 1990, the Military Government policy that restricted inter-regional grain flows was abolished but wars and famines have recurred. The two-year Ethiopia-Eritrea border conflict had coincided with the Ogaden famine, putting in fear that the war could hamper relief efforts in two ways: (i) by commandeering trucks needed to distribute food aid for military use, and (ii) by diverting international aid from relief to war operations. It is beyond the scope this analysis to prove either of the two has happened.

When viewed from outside, Ethiopia may look more stable and peaceful in 2000-01 than in 1980s. True, the long-civil war in Eritrea ended in May 19991 and the two-year border conflict with Eritrea that displaced more than 350,000 Ethiopians stopped as of June 2000. These are positive developments for improved food security in future. But the border issue is not settled yet and one cannot guarantee or foretell that Ethiopia will not have another conflict with its neighbors in the future. However, the inside look does not show stability even in areas hard-hit by recent droughts and famine. According to UNAID/FEWS (2001) report many NGOs are reluctant to enter into longer-term recovery programs in Ogaden, where safety problem reduces the viability of these efforts. There, clan politics and insecurity have constrained the relief and development programs. Recently, staff from aid agencies (including WFP/UN) has been killed near Gode, one of the areas in most urgent need of food aid. Continuing problems of insurgency by the Ogaden National Liberation Front (ONLF) has jeopardized food distribution and recovery efforts in Ogaden.

It is predicted that the only way recovery programs will succeed in Ogaden is if clan leadership allows them to succeed. Without local political support, donor recovery programs will never go beyond the provision of relief and localized food insecurity and malnutrition will persist. Thus, the previous studies' arguments that famines are not natural but social disasters seem very solid in the Ethiopian context.

In years of drought, shortage of pasture and water has created conflicts and tensions among nomadic populations and sedentary farming households. Reports from relief agencies in Ogaden also indicated that limited access to pasture has caused some conflict and forced some pastoralists to move their herds to areas with better pasture conditions. In the current year, similar conflicts among nomads of different clans were noticed between the Amharas & Afars, the Gedeos & Guji Oromos, and the Boranas & Gares clans along the Ethio-Kenya border. These incidents have

adverse political and economic effects for the nation, by disrupting rural livelihood, increasing political tensions, and affecting the livestock economy that the country depends for foreign earnings.

4.3 Impact of Ethnic-Based Regionalization

Since the Ethiopian People Democratic Revolutionary Front (EPDRF) took power in 1991, Ethiopia has been divided into seven major administrative regions (killils) based on ethnic distribution[14] . While conflicts among nomadic population over use of grazing land, water and pasture had occurred in past regimes, the introduction of ethnic-based regional administration has raised ethnic tensions to a high level. In the past few years, inter-ethnic and inter-clan relations have been strained in many pockets of the country, thereby increasing food insecurity and vulnerability. The recent displacement of Amharas from Wollega (Oromia) is a manifestation of such strained relations. Under the Killil system, members of one ethnic group are not expected to settle or work in another ethnic group's jurisdiction. This policy is not stated in the Constitution but the regional and local officials and politicians have pursued it for the past decade.

How does the Killil policy relate to food security and rural vulnerability? My personal observations and recent baseline surveys from densely populated ensete growing regions[15] help explaining the link. There are glaring evidences that ethnic-based regionalization is affecting livelihood and the traditional coping strategies of the rural poor.

In the past, scarcity of farmland land and lack of employment opportunities had forced young peasants from Kambata, Hadiya, and Wolaita regions of Southern Ethiopia to engage in off-farm seasonal employments outside their regions. This strategy had helped augmenting their meager farm incomes and coping with food shortages during planting season. The migrants were hired as casual laborers in coffee-harvesting (Keffa), cotton-harvesting (Tendaho), corn harvesting in commercial (state) farms in the Rift Valley, and in agro-industries.

However, since Killils were introduced, inter-regional migration of labor had ceased and off-farm earnings have been affected. As early as 1991, some unexpected incidents had happened. Farm households who settled in Arsi for decades were displaced for being in wrong killils and civil servants (school teachers, health assistants, etc.) who were employed in other regions either lost their jobs or were sent back to their home regions. As a result, the seasonal farm laborers could not go out of their home regions for job search in fear of discrimination.

[14] These are Afar, Amhara, Benshangul, Somali, Oromia, Southern Ethiopia, and Tigray. The Harari regional state and Addis Ababa are regional states are confined to their urban perimeters

[15] Ensete resembles banana and providing flour rich in starch, known locally as kocho. Some sources suggest that up to 20 per cent of the total population of Ethiopia depends on this crop as major staple

Recent development in the ensete regions reveal that population pressure is increasing day by day [16], traditional coping strategies are vanishing, and poverty is pervasive, pushing the people into "green famine." Unless measures are not taken to reverse the situation, ensete regions will the next to be hit by mass starvation. The gravity of the problem is serious in woredas with concentration of landless peasants and unemployed youth and in communities where either a food-for-work or cash-for work project is missing. Further research is needed on green famines in ensete regions. But the foregoing cases clear indications that the current Ethiopian government's ethnic-based regionalization policy has restricted free inter-regional mobilization of labor and increased rural vulnerability to food insecurity, thereby affecting traditional coping strategies of the rural poor.

4.4 Resources Constraints and Rural Poverty

According to The World Bank (April 2001), Ethiopia is classified among the poorest nations, with a per capita income of US$100. This leaves an average Ethiopian (rural or urban) with less than US$0.30 per day. Whilst urban poverty[17] is no less serious than rural poverty in Ethiopia, our focus here is on rural poverty.

Chambers (1983:103-104) provided four characteristics of the rural poor as: (i) vulnerable and exposed to diseases due to malnutrition and physical weakness, (ii) lacking assets as a buffer against natural and man-made disasters, (iii) isolated from the mainstream of national economic, social and political life, and (iv) powerless against the powerful political and economic forces that affect their lives. The current status of Ethiopian peasants is not different from the above.

There are ample evidences showing a close link between the resource degradation, poverty, and vulnerability to famine in rural Ethiopia. First and foremost, there are an ecological dis-equilibrium between environment and agricultural production, in both highlands and lowlands.

FAO's (1986) Ethiopian Highland Reclamation Study indicated that highland Ethiopia (above 1,500m) hosts about 88 percent of the total population (equivalent to 55.3 million in 1999), and 60 percent of

[16] Population density at national level was estimated at 62.8 person per sq. km in 1999. In comparison, enset growing areas have very high population densities. For example, baseline surveys in Kambata Zone revealed densities ranged from 413 persons per sq. km in Kacha Bira woreda to 499.9 persons per sq. km in Kedia Gamela woreda

[17] In June 2001, an International Labor Organization (ILO) disclosed that 27 % of the active urban population in Ethiopia is unemployed, most of them being between ages 15 and 24. The report attributed joblessness to the sluggish performance of the Ethiopian Economy and a rapid population growth. 19 It is common to see that cattle (including oxen used for plowing) die of lack of feed, a situation that puts peasants in a brink of destitution.

livestock population. As a result, the land is overworked and degraded, farm productivity is very low on non-fertilized plots, and there is an acute shortage of feed for the cattle population supporting the mixed farming[18]. The same report estimated that 3.7 percent of the highlands had been seriously eroded that they.could not support crop production, while 52 percent had suffered moderate or serious erosion. The report recommended that nearly 75 percent of the highlands need soil conservation measure to support sustained cultivation. Given the fact that total population has increased, from 42 million in 1986 to 62.8 million in 1999, it is expected that land degradation has increased significantly in that past 14 years. Daniel (1990) gave a clear explanation of how poor peasants on Ethiopian highlands accelerate soil erosion and how environmental degradation, in turn, makes people poorer. Another form of ecological dis-equilibrium prevails in nomadic areas due to over¬grazing, Traditionally, Ethiopian nomads keep a large herd of animals as a symbol of social status, without paying much attention to biomass or the carrying capacity of the land. This human action in turn puts too much stress on the environment, thereby resulting in droughts and famines like the one the happened in Ogaden.

The second equally serious problem is land scarcity due to increasing population pressure. Recently the average size of holding in the major producing regions has been reduced to less than one hectre. The degree of landlessness is increasing at an alarming rate due to population pressure, and about 5.7 million rural families have less than one hectare of land (World Bank 1992:72). As mentioned earlier, ensete growing areas have agricultural densities as high as 499 persons per ha. The outcome is that hundreds of thousands of farm households become landless. In many cases they arrange for informal land rents, which are becoming common nowadays. Landless peasants, therefore, account for a considerable number of rural food insecure populations (Getachew 1994).

Thirdly, security of land ownership is a key factor in stimulating food production. In the Ethiopian context, land is a determinant of economic growth as well as equity. The latter issue has received considerable attention of policy-makers since the March 1975 land reform. However, the reform has done little to attain food security. The new Constitution ratified in 1994 denies individual farmers' right to sell, lease and transfer their land to others. Prior to ratification, the advocates supporting state ownership of land argued vigorously that private ownership would result in distress sale of land by peasants (Dessalegn 1994). Their concern emanates not from past experiences but an implicit goal of tightening control over the peasantry and rural life. This shows that powerless peasants cannot decide for

[18] 19 It is common to see that cattle (including oxen used for plowing) die of lack of feed, a situation that puts peasants in a brink of destitution.

themselves as the state continues to play a paternalistic role.

Fourthly, lack of animal power is a major resource constraint to grain production and food security. Oxen used for plowing land show a highly skewed distribution among farming households. In some regions up to half of the farm households have no oxen, less than 20 percent have one ox, 25 percent have a pair of oxen, and the rest more than a pair. Also, a distress sale of livestock assets for food purchase and payment of debts has contributed to lack of animal power and, hence, rural poverty.

Destitute farmers cannot afford buying farm inputs (oxen, seed, fertilizer, tools, etc.). It would cost a minimum of Birr 800.00 (about US$100) on average to purchase an ox from local markets. If they invest less, output and income will be less, putting them back to a vicious circle of poverty. The reality is that ox-less peasants (usually young farmers, female-farm households, farmers without alternative sources of cash income, etc.) account for a significant proportion of the rural food insecure population (Alemayehu 1991; Getachew 1994; FAO/WFP 1994:3).

The foregoing arguments have revealed three important points: (i) famine will be severe on resource-poor peasants than those having land, oxen and cash resources, (ii) famine will recur and chronic food insecurity will persist as far as rural households remain poor, and (iii) a profound knowledge of resource degradation as well as the hidden and dynamic nature of rural poverty is key to understanding the causes of chronic food insecurity in Ethiopia. It is also an important element in designing strategies that help combating drought and famine in Ethiopia.

V. PROBLEMS OF IDENTIFYING THE FOOD INSECURE

A proper analysis of food security requires answers to three important questions: Who are food insecure? Where does the food insecure live? And why is that people are food insecure? The third issue has already been discussed in Section IV above.

Identification of the food insecure is not an easy task particularly in poor countries like Ethiopia where the majority of population live below poverty line. Besides, making a profile of vulnerable groups is complex since the analysis involves a wide range of variables: physical variables like rainfall and soil quality affecting crop production; economic variables like availability of land needed to produce food or level of income affecting purchasing power; social variables like entitlement to exchange food or receive it as gift; and other parameters like amount of calorie intake determining nutritional status and health.

In addition to the complexities of identification and measurement, it is relevant to understand at the food security status of people is dynamic, in temporal and spatial terms. A food secure person today may not be a food secure person tomorrow (Phillips and Taylor 1990:1304). This implies that the number of food insecure population changes from time to

time and from location to location. Similarly, national or regional food security does not imply household food security. A particular community may considered food secure in general at a given time. But, in a class society, all households within the community may necessarily not be food secure. It is, therefore, essential to analyze food security at different times and at a disaggregated level.

In the present day, bumper harvest can't be real measures of food security until all people have access to the minimum nutritionally recommended level of food intake. In this respect, per capital food availability is helpful to distinguish the food insecure households from those who are food secure (Table 1).

Table 1: Classification of Households by Food Availability

Category	State of Household Food Insecurity	Food Availability (kcal per person per day)
1	High Food Security	2,800+
2	Moderate Food Security	1,680 – 2799
3	Moderate Food Deficiency	1,000- 1,679

Source: Based on Clay, et al. 1998:4.

Assuming that households in Category 3 & 4 in Table 1 are food insecure, in the 1990s, it was estimated that Ethiopia had more than 11.6 million food insecure people. Of these, 4.8 million were farmers, 2.9 urban residents, 2.1 million nomads, 0.7 million people displaced by ethnic conflicts, 0.6 million refugees from Somalia and the Sudan, and 0.5 million demobilised soldiers and their families. The food deficit farm households accounted for more than half while nomads constituted about a quarter (Figure.1).

The food-deficit farm households are mostly found in Tigray, Wollo, Gonder, and North Shewa where agricultural land is seriously affected by deforestation and soil erosion. In addition, market-dependent grain-deficit farm households live in cash-crop growing regions where cash income from coffee and chat is used for the purchase of food grains. The nomadic population lives in the arid peripheral areas and in the Rift Valley.

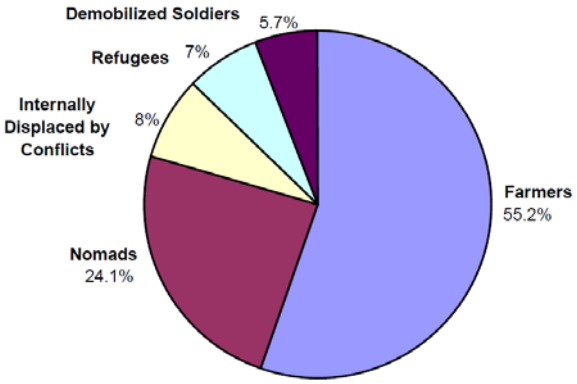

Figure 1 Food Insecure Rural Population in Ethiopia by Category (base on RRC 1992 & Clay, et al 1998 estimates)

From Figure 1, it is evident that rural Ethiopia has a large number of food insecure people. But the number of food insecure in urban areas is not negligible. Of the10.8 million urban residents, that is 17.2 % of total population in 1999, ILO estimation shows that 27 percent are jobless and by implication food insecure. Thus, food security is a problem of both rural and urban Ethiopia.

VI. POOR TARGETING OF FOOD AID

Ethiopia's dependence on food aid started in 1959 when a total of 72,500 MT of grain (wheat and sorghum) was donated by the US government, under PL-480. This was in response to famine in Tigray, Eritrea, and Hararghe caused by drought and locust infestation. During the1984/85 famine, food aid jumped to over one million tonnes per year. Since then, Ethiopia has received a considerable amount of food aid every year, the quantities increased in drought years.

Since the 1984/85 famines, there are a considerable number of international and local Non-governmental agencies (NGOs) involved in relief management, food-for-work and cash-for work projects[19]. The Disaster Prevention and Preparedness Commission (DPPC) controls the activities of NGOs and provides a general policy guideline. Each year, local authorities (the Kebelie officials), select the beneficiaries who participate in food aid programs. Self-targeting has been rarely used despite the fact that it has no disincentive effects on labor supply where it was used in combination with community-based targeting (Maxwell, et al. 1994).

It is asserted that a more efficient way to use food aid is to maximize its developmental impact, focusing the developmental programs on low-income groups and on particular kinds of investments. In the 1980s, more than two-thirds of food aid had been used as emergency

[19] The projects mainly include road construction, reforestation and soil conservation using stone and soil bunds.

relief aid, about one-quarter for development projects, and the rest for price stabilization and national grain reserve (Alemayehu 1988:73). This suggests that the allocation of food aid had largely dictated by emergency situations, leaving less for development projects.

In contrast, the current Disaster Prevention and Preparedness Policy shows a departure from the past. The food aid policy indicates that 80 percent of food aid will be used for projects and 20 percent for free distribution to those who are unable to work. It states "no able-bodied person should receive food aid without working on a community project in return." This suggests, on the part of policy makers, a desire to link food aid and development through employment based safety net schemes.

But, in practice, recent food aid distribution and management have suffered from serious targeting erorrs -errors of inclusion of unintended beneficiaries and errors of exclusion of intended beneficiaries. A review of different studies has also revealed five types of biases in the distribution of food aid. These included regional-bias, political-bias, gender-bias, and age-bias (Sharp 1997, Clay, et al 1998). First, households in Tigray region have received more food aid than households in another region (predicted mean kcal of food aid was 829 kcal per person per year in Tigray compared to 99 kcal in Amhara, 23 in Oromia, 30 kcal in Southern Ethiopia, and 35 in other killil). Tigray is historically a food deficit region but its share of per capita food aid availability has been far greater than any region. Field surveys showed that the regional concentration of food aid showed low correlation with regional concentration of food insecure people, thereby decreasing targeting efficiency (Clay, et al. 1998:4). In mid-1994, a study of grain market structure and performance by KUAWAB revealed that aid wheat that was distributed in Tigray was being sold at the Addis Ababa central market (USAID/Ethiopia 1994). This happened because the food aid beneficiaries in Tigray sold excess wheat in local markets to traders who, later, brought it to the central market where demand for grains was relatively higher.

Second, while new spots of food insecurity have emerged in the 1990s due to drought, layoff of civil servants, demobilization of soldiers, ethnic conflicts, etc., food aid has continued to flow to the same areas that have been receiving aid for decades. This suggests that attempts were not made to make area-targeting of food aid more flexible.

Third, despite RRC's guidelines of prioritizing food aid to the needy ones, local authorities have deliberately manipulated the selection of beneficiaries of food aid. This was common especially during national or local election campaigns (Hill 1994, Sharp 1997). Food insecure people who were eligible for food aid but who did not elect the ruling party members were denied food aid rations. Using food aid for political gains is a further reflection of the paternalistic role of state and the rural elite interest to control the powerless peasants.

Fourth, free distribution of food has prioritised women over men. This type of over-targeting

women can be attested by a disproportionate number of females receiving free food aid. The gender-bias resulted from the assumption that female-headed households are more vulnerable than men-headed household. Similarly, elderly people (60 years and above) received more aid than the working age people.

A recent evaluation of relief food aid in Ogaden also replicates the occurrence of targeting errors. Despite, varying social status among nomads, neither community-based targeting nor household targeting was used during 2000-01. There, food aid was shared across the breadth of the population rather than targeting the poorest and most food insecure households. Again, the practice has diluted the effectiveness of aid.

In all cases, poor targeting of food aid has reduced its development impact. According to one evaluation, only 22.3 per cent of households with "extreme" food deficiency have benefited free food aid or from project food aid. The bulk of deficit households (77.7%) have no food aid safety net (Clay, et al. 1998:2-3). This is imperative that food aid distribution and management has neither achieved efficiency nor equity. Thanks to donors, food aid in Ethiopia has saved many lives in times of emergency, with little or no developmental impact. There is still a missing link been relief food aid and development.

VI. POLICY IMPLICATIONS

The analysis of the current food security situation and evaluations of the food aid management practices discussed in the previous sections have several policy implications.

First and foremost, it is important to understand the state should play a significant role in mitigating famine. The responsibility of freeing starving people from hunger lies with the state and not with the private sector. The private sector can contribute to food security through food production, marketing and storage if well developed (Christensten 1991). But maintaining emergency national grain reserves, providing famine early warnings, stabilizing prices when vulnerable groups are unable to acquire enough food, developing infrastructure such as roads needed to distribute relief food aid in remote areas, maintaining security in areas where relief, recovery and development activities take place are all responsibilities of the state.

Secondly, it is essential to note that the Ethiopian Government and donors' interventions in disaster prevention and famine mitigation have been remarkable. Policy measures that: (i) increase domestic food production through nationwide extension program, (ii) use local grain purchases for relief distribution and for maintain emergency grain reserves, and (iii) conserve soils to protect land degradation are commendable. These measures should be pursued vigorously and in a cost-effective way.

Thirdly, it is absolutely essential to protect national gains obtained from economic reforms and better agricultural performance. These gains are fragile that a one-year drought

could easily remove the economic benefits unless protected. Besides, it is absolutely essential to build the domestic capacity for emergency response and gradually because to much reliance on international aid is risky for a landlocked country like Ethiopia.

Fourthly, drought and famine mitigation measures taken so far are not sufficient to avert future famines. More should be done to break the link between drought and famine and to end dependence of food aid as soon as possible. It is imperative that conquering drought and famine in Ethiopia takes time and requires a commitment from donors, government and the local people. Conquering famine may take longer as far as agricultural production depends on rain. To combat drought, well-studied and carefully planned projects such as dams, irrigation schemes, reforestation, pasture development, and land conservation measures are needed. These should be initiated wherever conditions permit their development in a cost-effective manner. Such investments will be costly for a poor country like Ethiopia but will have a high payoff in the future by transforming the present low potential areas into high potential areas (Maxwell and Alemayehu 1994). Project food-aid can be one source of funding. Again, donors and NGOs who like to see Ethiopia stand on its two feet can be invited to fund the projects. The recent debt cancellation by developed and developing nations (U.K, Russia, China, etc.) also gives an opportunity to use a portion of the national budget to fund these projects. To make this effective, the DPPC, donors, and NGOs should work closely and the local people must be allowed to participate in the design and implementation of the projects.

Fifthly, developing pasture and water conservation schemes in the lowlands may have multiple benefits. It will ease the current conflicts over the use of water and pasture land. A simultaneous development of feed in the highlands will help reducing draft-oxen mortality due to lack of feed and contribute to food security in the mixed farming system. Providing draft-oxen loan to poor peasants will not help reducing food insecurity unless the shortage of feed is tackled first.

Sixthly, it would be over-ambitious and unrealistic to think that chronic food insecurity at nation or regional level can be eliminated by a two-year bumper harvests. Surplus food production helps narrowing or closing the food gap. But, it can't be a real measure of attaining food security without improved purchasing power of the food insecure and the resilience of local food markets in remote areas. Tackling chronic food security and vulnerability is a long process that requires alleviating poverty in both rural and urban areas (World bank 1986). Without poverty alleviation famines may recur at any time. Creating off-farm employment opportunities and developing labor-intensive public projects may help reducing food insecurity for the landless, resources-poor, and jobless.

Seventhly, government policies that directly or indirectly make people and regions vulnerable to poverty and famine should be re-considered without much delay. These include the land policy that denies ownership rights to farm households, and the ethnic-based regionalization that strains ethnic relations and restricts a free inter-regional mobilization of capital and labor. Another serious policy flaw is the neglect of low potential pastoral areas and *ensete* growing regions in 1996 Food Security Strategy without adequate regional analysis of food insecurity and vulnerability mapping. It is wrong to think that food insecurity is a problem of mainly cereal producers and consumers.

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At last, there are a number of shortcomings in the current food security policy and in food aid management practices that need improvements or changes. These include:

(i) Developing vulnerability mapping for all agro-ecological zones,
(ii) Maintaining an accurate and up to date statistics on the number of needy people by geographical areas,
(iii) Developing institutional capacity for better forecasting of drought and famine,
(iv) Avoiding biases and misuse of food aid by local officials and elites for private or political gains,
(v) Closely monitoring food aid targeting at local levels, by allowing the participation of local people to select the needy one eligible for food aid programs,
(vi) Promoting traditional coping strategies that contribute to poverty alleviation and famine mitigation,
(vii) Designing and implementing

policies that are non-discriminatory in regional or ethnic terms,

(viii) Ending the paternalistic role of the state over peasants, and

(x) the disincentive effects of food aid.

(ix) Promoting an on-going research on the dynamics of rural poverty and on

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