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World Bank and Food Security issue in East-Africa: Case Study of Eritrea

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The Issue of Food Security in Eritrea

General Introduction

Drought has affected in many parts of the East Africa as far back as 253 B.C.¹ Large parts of the region are arid and semi-arid, with an average annual rainfall of less than 500mm. The rainfall is subject to a high degree of unreliability, both from year to year and in the distribution within each year.

In the last 30 years the region witnessed at least one major drought episode in each decade. Serious droughts occurred in 1973/74, 1984/85, 1987, 1992 to 1994 1999/2000 and now 2008. In 1984 alone, the drought affected 8.7 million Ethiopian people, out of which 1 million died and 1.5 million livestock also perished. In the Sudan, 8.5 million people were affected by the same drought, with the result about 1 million people and 7 million livestock died. In 1987, about 2 million people in the Sudan, more than 5.2 million in Ethiopia, 1 million in Eritrea and 200, 000 in Somalia were severely affected.² As FAO stated, the current drought, which started in 1998, is affecting about 16 million

¹ FAO CORPORATE DOCUMENT REPOSITORY TECHNICAL COOPERATION DEPARTMENT. THE ELIMINATION OF FOOD INSECURITY IN THE HORN OF AFRICA -FINAL REPORT. AVAILABLE FROM: [HTTP://WWW.FAO.ORG/DOCREP/003/X8406E/X8406E01E.HTM](http://www.fao.org/docrep/003/x8406e/x8406e01e.htm). ACCESSED 15 SEPTEMBER 2008.

² FAO CORPORATE DOCUMENT REPOSITORY TECHNICAL COOPERATION DEPARTMENT. THE ELIMINATION OF FOOD INSECURITY IN THE HORN OF AFRICA -FINAL REPORT. AVAILABLE AT: [HTTP://WWW.FAO.ORG/DOCREP/003/X8406E/X8406E01E.HTM](http://www.fao.org/docrep/003/x8406e/x8406e01e.htm). ACCESSED 15 SEPTEMBER 2008.

people in the Horn of Africa.³ Drought is, therefore, a recurring phenomenon in the region.

Drought and other climatic extremes could be stated as major factors contributing to vulnerability to food insecurity. In the Horn of Africa, there is no year or season in which the whole region receives normal rainfall. Drought is the most catastrophic natural event that causes widespread periodic famine in the region, but it is by no means the only natural hazard facing the people of the area.

So far, the main factors contributing to vulnerability and extreme food insecurity of this region are drought, conflict, traditional agricultural activity, poor rainfall distribution, weak human knowledge and unavailable capital for modern agricultural mechanizations. Other natural disasters, such as floods, locusts or contagious human and livestock diseases have also a significant impact to food insecurity.

East Africa (including Eritrea) is one of the most food-insecure regions of the world. As FAO noted, “Out of a total population of almost 160 million, around 45 percent live in areas that have been subject to extreme food shortages”.⁴

The vulnerability to food insecurity of this region is caused by different reasons for different contexts of the concerned countries. Some countries such as Ethiopia and Kenya are yet vulnerable due too high population pressure, corrupt and uncommitted

³ FAO CORPORATE DOCUMENT REPOSITORY TECHNICAL COOPERATION DEPARTMENT. THE ELIMINATION OF FOOD INSECURITY IN THE HORN OF AFRICA -FINAL REPORT. AVAILABLE AT:
[HTTP://WWW.FAO.ORG/DOCREP/003/X8406E/X8406E01E.HTM](http://www.fao.org/docrep/003/x8406e/x8406e01e.htm). ACCESSED 15 SEPTEMBER 2008.

government and combined with poor land management. Others such as Eritrea and Djibouti are due to scarce and barren land resource, lack of access to the assets and technologies that are needed to intensify production.

Promises had been made in a number of global summits with regard to poverty reduction for the developing world including the horn of Africa. However, understanding the connection between poverty and food insecurity is important to solve the main causes of food insecurity.

In Eritrea, food production is significant for the majority of the poor, because agriculture is the main source of livelihood and 80 percent of the Eritrean population is classified as agricultural. However, it is only when poverty can be alleviated or diminished that the level of food insecurity is reduced. Hence, an important aspect of the solution to food insecurity lies in the long-term cooperative work between the World Bank and Eritrean Government.

This paper will discuss some issues concerning to Eritrean ecological and administrative zones, economic base, economic policy in the agricultural sector, food security policies, strategies, actions, causes of food insecurity and rational for intervention. Finally the paper concludes with conclusion and recommendations.

⁴ FAO CORPORATE DOCUMENT REPOSITORY TECHNICAL COOPERATION DEPARTMENT. THE ELIMINATION OF FOOD INSECURITY IN THE HORN OF AFRICA -FINAL REPORT. AVAILABLE AT: [HTTP://WWW.FAO.ORG/DOCREP/003/X8406E/X8406E01E.HTM](http://www.fao.org/docrep/003/x8406e/x8406e01e.htm). ACCESSED 15 SEPTEMBER 2008.

Ecological and Administrative Zones

A century ago, Eritrea was endowed with an abundant wildlife and vegetation. However, due to mismanagement reasons during the successive periods of colonial rule, the long armed struggle leading to independence, and recurrent droughts, these natural resources have declined dramatically. Forest resources in particular, which are an integral part of the natural resource base of the country, have been devastated.

The vegetation which once covered some 30% of the total land area of the country has been drastically reduced in less than a century. By 1952, that figure had declined to 11%, and in 1960 the forest cover was estimated 5%.⁵ As the pace of forest cover declines across the ages so do the fertility of the land and its productivity. This condition affected the long term objective of food security of this country in the followed years up to current day.

1. Ecological Zones

Eritrea is classified into six ecological zones based on altitude, vegetation, and other ecological and geographic factors. Based on different studies made by different scholars in Eritrean biodiversity such as Pagini, the Eritrean vegetation could be viewed from an angle of six zones.⁶ Eritrea is a country of great topographical diversity. Highland areas

⁵ PAGINI, 1952. (CITED IN) BEIN AND OTHERS. USEFUL TREES AND SHRUBS IN ERITREA. "IDENTIFICATION, PROPAGATION AND MANAGEMENT FOR AGRICULTURAL AND PASTORAL COMMUNITIES", TECHNICAL HANDBOOK NO 12. REGIONAL SOIL CONSERVATION UNIT (NAIROBI: 1996).

⁶ PAGINI, 1952. (CITED IN) BEIN AND OTHERS. USEFUL TREES AND SHRUBS IN ERITREA. "IDENTIFICATION, PROPAGATION AND MANAGEMENT FOR AGRICULTURAL AND PASTORAL COMMUNITIES", TECHNICAL HANDBOOK NO 12. REGIONAL SOIL CONSERVATION UNIT (NAIROBI: 1996).

stretch between the eastern and western lowland plains. AS THE Ministry of Agriculture (MOA) notes, altitudes range from the highest peak of Mt. Soira, 3,018 meters above sea level, down to the Denkel Depression, about 100 meters below sea level.⁷

According to FAO, Eritrea is also divided into six agro-ecological zones: Central Highland Zone (CHZ), with altitudes over 1,500m with over 500mm of rainfall; the Western Escarpment Zone (WEZ), with altitudes between 750 and 1,500m and annual rainfall of 400 to 600mm; the South Western Lowland Zone (SWLZ), with altitudes between 600 and 750m, and annual rainfall of 500 to 700mm; the Green Belt Zone (GBZ), located between 750 to over 2000m, with rainfall ranging from 700 to more than 1000mm; the Coastal Plains Zone (CPL), from below sea level to 600m, with less than 200mm rainfall; and the North-Western Lowland Zone (NWLZ), with an altitude from 400 to 1,500 m, and up to 300mm of rainfall.⁸

Due to its geographic setting, Eritrea has diverse climates ranging from hot arid, adjacent to the Red Sea to temperate sub-humid of the eastern escarpment of the Highlands. About 72% of Eritrea is classified as very hot, with mean annual temperature exceeding 24°C, while not more than 14% is classified as mild or cool with mean annual temperature below 21.5°C.⁹

⁷ MOA. EVALUATION OF CURRENT FORESTRY SITUATION AND FUTURE VIABLE METHODOLOGICAL APPLIANCES "A REPORT OF AFFORESTATION COMMITTEE OF THE MINISTRY OF AGRICULTURE OF THE STATE OF ERITREA" (ERITREA, ASMARA: 1994).

⁸ FAO. AGRICULTURE SECTOR REVIEW AND PROJECT IDENTIFICATION FOR ERITREA (FAO: 1994).

⁹ FAO. NATIONAL LIVESTOCK DEVELOPMENT PROJECT FOR ERITREA (ROME: 1996).

The majority of the country receives rainfall from the south-west monsoon, from April to September. Some rain falls in April/May, while the main rain season begins in June, with the heaviest precipitation in July and August. Only the coastal plains and the central part of the eastern escarpment of the central highland receive winter rainfall, November through March.

The rains are caused by the north and south-east continental air streams that carry some moisture until affected by the Red Sea. The total annual rainfall tends to increase from north to south, from less than 200 mm at the northern border with the Sudan to more than 700 mm in the south-western part of the country. The Green Belt Zone receives the highest annual rainfall averaging about 900 mm.¹⁰

2. Administrative Zones

Eritrea is located in the north eastern Africa and covers an area of 124,320 km². It is bordered by Sudan on the west and North West, Ethiopia on the south, Djibouti on the south east, and the Red Sea on the east. Administratively, Eritrea is divided into six zones (zobas) namely: Makel, Debub, Gash-Barka, Anseba, Semenawi Keih Bahri, and Debubawi Keih Bahri. There are also nine linguistically categorized ethnic groups namely: Afar, Bilen, Tigre, Saho, Tigrigna, Kunama, Nara, Hidareb, and Rashaida.

¹⁰ FAO. AGRICULTURE SECTOR REVIEW AND PROJECT IDENTIFICATION FOR ERITREA (FAO: 1994).

Current estimation of the Eritrean population range from 3.2 to 3.9 million, of whom about 0.5 million live in Asmara, the capital.¹¹ Some 80% of the population is estimated to live in rural areas, practicing a range of agricultural and pastoral activities depending on the ecological zone stated. Population densities vary considerably, from very high densities in the central highlands (up to 200 persons/km²), where about half of Eritrea's population lives, to very low densities (sometimes fewer than 10 persons/km²) in the coastal plains and parts of the western lowlands.¹²

“Eritrea is a unitary State divided into units of local government” called *Zobas* as the Eritrean Constitution stipulates. The *Zobas* are also made up of sub-*Zobas*, in turn made up of *Kebabis* or villages/areas. However, the powers and duties of these units are not determined by law. Each *Zoba* is represented in the central government by its own representatives/parliamentarians called *Biatos* who were elected at the *sub-Zoba* and Village levels. On the top of this there are other bodies like *Megabaaya* for the villages made up of adult residents. However, there seems to be a weakness in a structure at the sub-*Zoba* level to represent the people and help to bridge the communication between *Biatos* at the *Zoba* and village levels.

Economic Base

The population of Eritrea is about 3.5 million out of whom 80% live in rural areas and derive their livelihood from agriculture.

¹¹ ERITREA PROJECT CONCEPT PAPER ERITREA – PROJECT CONCEPT PAPER BACKGROUND, FINDINGS & ANALYSIS ANNEX 11.

Due to the prolonged liberation war, the economy of the country progressively declined. Between 1985 and 1990, real gross domestic production (GDP) declined by 0.7% per annum, but since independence it was rapidly increasing (e.g. in 1997 an increase of 8% was reported).¹³ Later this progress was also hampered due to the border war with Ethiopia.

Agriculture is the most important sector of the Eritrean economy. It accounts for about 50% of the GDP, and most of the exports.¹⁴ More than 80% of the population earns their living from farming and livestock production. In view of this, the Government has made agriculture as its top priority.

According to FAO, out of the total area of Eritrea, about 3.2 million hectares only 26% is suitable for agricultural use out of which approximately 12.5% (400,000 ha) of the potential is being cultivated. Nearly 49% of the country's mountainous land supports over 75% of the people living on it. The people who occupy this land are agro-pastoralists and pastoralists.¹⁵

Economic Policy in the Agricultural Sector

Eritrea is a food deficit country. According to the remark made by OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA), Eritrea produces only 50 to 60 percent of

¹² ERITREA PROJECT CONCEPT PAPER ERITREA – PROJECT CONCEPT PAPER BACKGROUND, FINDINGS & ANALYSIS ANNEX 11.

¹³ FORESTRY AND WILDLIFE DIVISION MINISTRY OF AGRICULTURE. FORESTRY DATA REPORT ON ERITREA ASMARA. AVAILABLE IN [HTTP://WWW.FAO.ORG/DOCREP/003/X6684E/X6684E09.HTM#P1520_132212](http://www.fao.org/docrep/003/X6684E/X6684E09.htm#P1520_132212). ACCESSED 21 SEPTEMBER 2008.

¹⁴ FORESTRY AND WILDLIFE DIVISION MINISTRY OF AGRICULTURE. FORESTRY DATA REPORT ON ERITREA ASMARA. AVAILABLE IN [HTTP://WWW.FAO.ORG/DOCREP/003/X6684E/X6684E09.HTM#P1520_132212](http://www.fao.org/docrep/003/X6684E/X6684E09.htm#P1520_132212). ACCESSED 21 SEPTEMBER 2008.

its total food needs “cereal production” even in good harvest years. However, with commercial imports and food assistance it normally fills the gap.¹⁶ Mostly, poverty and food insecurity are dominant features of rural life. However, the people and the Government are determined to reverse this situation.

Agriculture is expected to make the greatest contribution and as such the Government has accorded high priority to the sector. There is a desire by the Government to achieve food security and socio-economic development largely through sustainable agricultural development programs. To realize its food security strategy the MOA set out its Long-term objectives as follows:¹⁷

- increase the level of food security by increasing the production of crops and livestock;
- enhance employment and income levels of the rural population;
- boost foreign exchange earnings through the export of high value agricultural and agro-industrial commodities;
- increase the production of raw materials for domestic industries;
- halt and where possible reverse the environmental degradation.

¹⁵ FORESTRY AND WILDLIFE DIVISION MINISTRY OF AGRICULTURE. FORESTRY DATA REPORT ON ERITREA ASMARA. AVAILABLE AT [HTTP://WWW.FAO.ORG/DOCREP/003/X6684E/X6684E09.HTM#P1520_132212](http://www.fao.org/docrep/003/x6684e/x6684e09.htm#p1520_132212). ACCESSED 21 SEPTEMBER 2008.

¹⁶ U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT, BUREAU FOR DEMOCRACY, CONFLICT, AND HUMANITARIAN ASSISTANCE (DCHA). OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA) ERITREA – COMPLEX FOOD SECURITY CRISIS SITUATION REPORT #2, FISCAL YEAR (FY) 2005 (SEPTEMBER 30, 2005). AVAILABLE AT: WWW.USAIID.GOV/OUR_WORK/HUMANITARIAN_ASSISTANCE/DISASTER_ASSISTANCE/COUNTRIES/ERITREA/FY2005/ERITREA_CF_SR02_09-30-2005.PDF. ACCESSED IN SUNDAY, APRIL 05, 2009.

- revitalize forestry and wild life resources.

The Ministry had drawn appropriate long-term objective with regard to increasing livestock production which could be exported to Saudi Arabia and Yemen for meat and hides to Europe, production of high value agricultural and agro-industrial commodities for export such as Alebu Dairy product and production of raw materials for domestic industries such as cotton from Aligider for Barako Textile Factory. However, the Ministry had missed to include fishing sector in its long-term objective as the best method of food security practice.

The Eritrean society with the exclusion of the settlers of the Red Sea Coast, are not used to eat fish as a culture and fish had been expensive for them to buy for diet. A large part of the society is used to eat tef. This crop commonly grows in Eritrea and Ethiopia and largely consumed in the Eritrean market. With the current border conflict between Eritrea and Ethiopia, tef is not coming to Eritrea and what is produced locally is not sufficient. To make matters worse the current global food crisis had affected the food availability of the country.

This is the appropriate moment for the ministry to work at shifting the eating habits of the society by providing fish at fair prices and maximize its fish export to have a higher income of hard currency.

¹⁷ FORESTRY AND WILDLIFE DIVISION MINISTRY OF AGRICULTURE. FORESTRY DATA REPORT ON ERITREA ASMARA. AVAILABLE AT: WWW.FAO.ORG/DOCREP/003/X6684E/X6684E09.HTM#P1520_132212. ACCESSED 21 SEPTEMBER 2008.

a. Land Tenure System

There are three types of land owning system in Eritrea. The exceptional one that has a negative contribution at soil conservation and water management had been the traditional land tenure system termed as “Dessa” System (village ownership). This system provides equitable access to all members of the villages and is conducive for subsistence agriculture. It allows for periodic redistribution of land every 5-8 years. This system has the following disadvantages.

- A rotation period of 5-8 years is too short to make long term investments such as tree planting, agro forestry and digging wells
- There is no sense of ownership of land among the people and this serves as major disincentive for making any investment on the land.

The livelihood of the majority of the rural population depends on land for food and livestock. The cash and industrial crops that are essential for the national economy are also produced on the land. It is important therefore that the land resources of the country be preserved. The absence of a land use policy during the long periods of foreign rule led to the destruction of vast areas of natural resources. The new land law which was proclaimed in 1994 was designed to address the issue of land ownership among other things. The objectives of the new land policy are to establish a revised tenure system to encourage long-term investment in agriculture and promote commercial agriculture.

Under this proclamation the government is the ultimate owner of the land and retains the right to distribute land to the villagers. In the new policy the old boundaries between villages are abolished leaving all the available land for redistribution among the neighboring villages.

This system is fair and can create an opportunity land ownership, long-term investment and encourage the formation of co-operative farms that farmers can share resources such as irrigation facilities, machinery and other agricultural amenities that are individually unaffordable. However, the implementation of the land policy is not yet effective as far as it should be.

Food Security Policies, Strategies and Actions

Agriculture is an important sector of Eritrea's economy; yet as it is the primary source of livelihood, employment and food security for the majority of the people and the poor in particular. Two thirds of the population of 3.5 million is poor and food insecure.¹⁸ Considering this, the government promulgated food security strategy is part of its national Poverty Reduction Strategy Paper (PRSP) and its main objective is to reduce the number of poor people by half by 2015.

The food security strategy has three pillars:¹⁹

¹⁸ FORESTRY AND WILDLIFE DIVISION MINISTRY OF AGRICULTURE. FORESTRY DATA REPORT ON ERITREA ASMARA. AVAILABLE IN [HTTP://WWW.FAO.ORG/DOCREP/003/X6684E/X6684E09.HTM#P1520_132212](http://www.fao.org/docrep/003/X6684E/X6684E09.HTM#P1520_132212). ACCESSED 21 SEPTEMBER 2008.

¹⁹ FORESTRY AND WILDLIFE DIVISION MINISTRY OF AGRICULTURE. FORESTRY DATA REPORT ON ERITREA ASMARA. AVAILABLE IN [HTTP://WWW.FAO.ORG/DOCREP/003/X6684E/X6684E09.HTM#P1520_132212](http://www.fao.org/docrep/003/X6684E/X6684E09.HTM#P1520_132212). ACCESSED 21 SEPTEMBER 2008.

- Raising agricultural productivity and improving marketing of agricultural output
- Improving national capacity to import food, including keeping adequate strategic reserves
- Using international food assistance more efficiently and effectively as a measure of last resort during emergencies to fill the food gap.

The government recognizes agriculture as the most important sector of its economic policy. However, as had been stated by FAO out of the total area of Eritrea, about 3.2 million hectares, only 26% is suitable for agricultural use and approximately 12.5% (400,000 ha) of the potential is being cultivated. Almost half of the country's land is mountainous which is difficult for farming too. What is cultivated is around half of the total area suitable for cultivation. Yet, the country is beyond reach to food security. Therefore, the World Bank's intervention would have a paramount importance.

Taking into account the above mentioned facts, the World Bank could support the government to be able to cultivate at factorized level from the available land the country has. It could also support it to introduce modern technology in agriculture, build the national capacity of importing and managing food storage and distribution systems or provide guidance if there is any other priority policy option that the country should adhere.

The government from its side needs to review its food security policy and try to approach the target from the angle of other sectors like fishing and livestock which are

yet untapped from the economic point of view of the country. In his interview with state-owned television, President Issias Afewrki himself revealed the fact that the country could narrow the looming food gap by exporting only 25,000 tones of fish annually from its fish stock which can supply the country about 80,000 tones of fish annually with out severely affecting the overall fish stock of the nation.

However, currently it is only 15,000 tones that can be fished annually. This is only 20 % of the potential fishing target. According to FAO, in the fifties, Eritrea was managing to catch about 25,000 tones of fish which is equivalent to the current amount of fish catch required to narrow the prevailing food gap in the nation.²⁰

Fishing requires heavy investment for infrastructure, skilled fishers, enough fish catching vessels, storage and inspection facilities and other necessary outlets which could not be met by the country only but by multilateral organizations such as the World Bank to effectively exploit the marine resources.

If Eritrea could meet the maximum fishing potential not will it solve the food security problem of its local needs only but could boost the economic growth of the country by bringing hard currency through export.

In addition, the livestock sector is not yet adequately exploited. As 80% percent of the people are agriculturalists and pastoralists, they depend on livestock for a living. Therefore, the country needs to establish proper infrastructure and hygiene for livestock

and poultry sectors by considering its internal needs and as well the demands that are kept rising from around the region including Saudi Arabia and Yemen.

The World Bank in its turn could finance the private sector to establish modern livestock and poultry farms. It could help at establishing cooperatives and corporations to support the poor pastoralists to sell their livestock at fair price and be encouraged to raise more. Insurance companies could also be established with the assistance of the World Bank on behalf of pastoralists to guarantee their livestock in times of drought and famine.

Causes of Food insecurity and Rational for Interventions

Eritrea remains one of the world's poorest countries though it made significant strides in its economy since independence. According to the 1999 Human Development Index, Eritrea is ranked 167th out of 174 countries.²¹ GNP per capita in 1998 was estimated at only US\$ 200 and is unlikely to have increased much since then due to border conflict with Ethiopia and the effect of oil price and global financial crisis that came up in 2000's .

²⁰ MILLION S., DID ERITREA SET ITS PRIORITY RIGHT TO ACHIEVE FOOD SECURITY IN TIMELY FASHION? AVAILABLE AT: WWW.EPHREM.ORG/~EPHREM/ARCHIVES/2003/JUN-JUL03/ATT-0763/01. ACCESSED IN 3 OCTOBER 2008.

²¹ ERITREA PROJECT CONCEPT PAPER ERITREA – PROJECT CONCEPT PAPER BACKGROUND, FINDINGS & ANALYSIS ANNEX 11.

Clearly, food security is a major issue in Eritrea. The country currently experiences structural food production deficit. As maintained by MOA, a combination of factors explains Eritrea's inadequate production of food:²²

- low and erratic rainfall in much of the country: most farmers depend on rain fed agriculture in a country where close to 70% of the total area has average annual rainfall of less than 400mm. Elsewhere, in areas with more rain, significant inter-annual variations in rainfall can result in periodic crop failures.
- declining soil fertility (especially in the highlands) as a result of reduced or non-existent fallowing cycles, deforestation, severe erosion, and minimal inputs of organic or other fertilizers.
- insufficient capital for investment in agricultural inputs or infrastructure. Only a small percentage of the total cultivated area is under irrigation, few farmers can afford to use chemical fertilizers.

As a consequence[s] of this, domestic food production is not sufficient to meet demand. In times of good year, the harvest can meet up to two thirds of national requirements, while in bad years less than a third of national requirements are satisfied by production.

The ministry recognized recognizes that 70% of the Eritrean land gets less than 400mm water annually and that this is not enough for crop production. It also noted the

²² ERITREA PROJECT CONCEPT PAPER ERITREA – PROJECT CONCEPT PAPER BACKGROUND, FINDINGS & ANALYSIS ANNEX 11.

poor soil it had in the highlands but yet achieving food security from crop production is the first priority in government's development strategy.

This national strategy cannot be realized through traditional farming. Hence, significant interventions such as modern farming techniques, introducing abundant fertilizers, establishing transparent, democratic and accountable institutions (up to the village level), efficient crop management, qualitative storage facilities, developing human capacity, efficient infrastructural network, securing funds and founding cooperative work with multilateral organizations, such as the World Bank and civil societies are the imperatives.

From the economic point of view, humans are driven by incentives. One can produce the desired quantity if he/she has the motivation to do so. If high production is required in agriculture, it is a must to tune the target with the stated human behavior on economics. The proclamation of land reform done by the government of Eritrea is one aspect that reflects this. This policy, though states all land is owned by government, it gives room for citizens the right of usufruct to use the land, to invest in it and to lease it for profit.

However, current practices of crop management do seem to contradict with this human behavior. The government is buying all the produce from the farmers and selling it to the society at a lower price than the market price. Farmers are with their grievances and the government is with its justifications. If the government cannot handle this problem early, farmers might be reluctant to produce and affect the food security

strategy that the government aims. The government has also the social obligation to distribute food to the society at fair price particularly in times of food crisis like what we have today.

Considering that the Eritrean agricultural methods are still largely dependent on rain, the government outlined strategies that would enable it sustain food security and control the current food price hikes and regulate food consumption. To ensure fair and equitable distribution of grains across the nation, plans have been laid out and accordingly working to step up the production of food items that can play crucial role in achieving food security.

From the economic distribution standpoint, in times of economic crisis like today in 2008 the global crisis which is affecting the whole world, the country's decision to buy and manage all harvests is an appropriate policy. In this case, the government should attempt to strike a balance between the societal and the producers' needs. On the top of this, the government needs to involve the *Meagabaes* and the *Biatos* at collecting and managing the harvest. Due to crop mismanagement, the country witnessed low harvest in 2007.

The World Bank's role will be establishing modern storage systems, training for those responsible for storage and crop management and subsidizing the farmers.

MOA by itself set forth the following measures to boost the private investment in increasing production;²³

- Expanding rain-fed cultivation in high potential areas
- Expanding areas under irrigation in the high potential areas
- Promoting improvements in land use in dry highland areas
- Enhancing livestock development
- Developing the fisheries sector
- Improving agricultural marketing and distribution.

The ministry had missed one measure to include and that is the aspects of loan scheme and credit issue that are important ingredients and have a considerable impact on boosting the private sector at production. This could be realized more with the intervention of the World Bank and other multilateral organizations that play a great role at financing big food security programs that can free a country from food dependency and make it self-sufficient if the fund is targeted on long-term developmental strategy.

In an interview made with the VOA, Eritrea's presidential spokesman, Yemane Gebremeskel, once commented on the issue of funds of these multilateral organizations saying, "The country is pursuing a long-term food security strategy that largely shuns

²³ MOCHOGE AND ZZIWA. AGRICULTURAL AND FOOD SECURITY CHALLENGES FOR THE IGAD REGION (PAPER PRESENTED AT THE NEPAD/IGAD REGIONAL CONFERENCE) "AGRICULTURAL SUCCESSES IN THE GREATER HORN OF AFRICA" CONFERENCE PAPER

foreign food aid as a way of making the country self-sufficient." He further added "While international efforts can be funded addressing current shortages, if this is not related to longer-term strategy, if it's not going to enhance the government's efforts to attain sustainable food security, then it would only create a culture of dependency" ²⁴

Ensuring self-sufficiency not only comes from the long-term strategy one adheres but more from the administrative structures, systems, and infrastructures, democratic and participatory institutions one builds.

Eritrea had done more on this aspect. It was able to establish a legitimized public administration at all *Zobas* and *sub-Zoba* levels in accordance to the constitution. *Biatos*, which are the regional assemblies or parliamentarians, represented the people in the central government. However, considering the country's historical aspect and developmental context, much is not done and is not expected from the parliamentarians with regard to their role in the aspects of planning, budgeting, preparing regional programs, monitoring and evaluating the programs.

The World Bank could play a great role here in establishing an efficient and democratic institution by developing the capacity of the parliamentarians to take part in accomplishing their task and share their responsibilities as the constitution and the law stipulates.

NO. 3 (NAIROBI: NOVEMBER 22-25, 2004).

²⁴ MAJTENYI. ERITREAN PRESIDENT STRIVES FOR SELF-SUFFICIENCY IN FOOD SECURITY (NAIROBI: 27 APRIL 2006). AVAILABLE IN [HTTP://WWW.VOANEWS.COM/ENGLISH/ARCHIVE/2006-04/2006-04-27-VOA50.CFM](http://www.voanews.com/english/archive/2006-04/2006-04-27-VOA50.CFM). ACCESSED IN 14 OCTOBER 2008.

However, in some administrative structures there awaits much to be done from the government's side. For instance, there are no *sub-Zoba's Biatos* in the structure but only at the *Zoba* level. There is also the *Maegabae* which represents the people at the village level, obviously far from the *Biatos*, which makes the communication between them hard to be bridged, though unlikely, bearing in mind the Administrative Zonal division, the country's topography and all kinds of infrastructural obstacles.

The World Bank's intervention could make a difference here as well. It could support the regional administration to bridge the gap they have between the *Maegabae*s and the *Biatos* so as to be effective in its development program down at the village level and meet its target for the needy people.

Conclusion and Recommendations

Eritrea has a long history of food insecurity, both at national and at household level. The society is highly rural. The majority of the population relies almost exclusively on rain fed agriculture and pastoral activities. As a consequence, the national food availability is chronically insufficient. The dominant production system is traditional subsistence agriculture, characterized by the use of local varieties of crops and livestock, manual labor and animal traction. It is a low input low-output system. Rainfall is unreliable, both in total amount and distribution

Moreover, the lack of adequate harvesting infrastructure, skilled manpower, modern technology, administrative and management system, storage capacity and

shortage of credit and loan schemes for the farmers contributes to high levels of food insecurity.

Eritrea is not only constrained by its environmental feature but also by its own topography, as almost 3/4th of its landscape is mountainous inconvenient for agricultural activity and only around 26% of its land is useful for cultivation. As the population of the country increases the demand of land for cultivation will increase. As a result, the limited land resource will coerce the country to make heavy investment on modern mechanization of agriculture, fertilizers, crop variety, irrigation system and skilled manpower to increase its production capacity.

Currently, investing in and prioritizing agriculture as an economic priority policy is viable, option bearing in mind 80% of the society is in agricultural activity. However, it would be more appropriate if this policy could be taken for a short term plan. Looking in to the Eastern African region, Eritrea would have a least comparative advantage in crop production with the exception of Djibouti. Producing non strategic crops for the sake of internal consumption with heavy investment will also put the country in payment deficit. Putting into account the regional capacity in crop production, the country has to make use of the economic specialization.

Therefore, it would be profitable for the country to invest more on the cash and industrial crops, fishing and livestock sectors on the longer-term which gives it a comparative advantage and maintain food security sustainability.

Hence, the government with the support of the World Bank needs to categorize its agricultural economic activity as strategic and non-strategic crop production. In the transitional period it could deal with the non-strategic crop production. However, those crops do not have a long term effect on food security. To make food security sustainable, it should invest more on the strategic crops such as Sugar in Af-Himbol, cotton (as what had been in Aligider), Fruits in Ailaberid and Flower Plantation in Adi-Nefas and establish light agro-industries such as a Dairy Factory in Alebu which could bring hard currency for the country.

Moreover, investing and prioritizing in fishing and livestock sectors as economic policy on the longer-term would advantage the country not only to be food secure but also to be a leading country in the region which will make food insecurity a history.

Therefore, in order to amplify the agricultural production and guarantee food security as sustainable, the government needs to cooperate with the World Bank and make use of its capital and human knowledge. It has also to make an in depth research to review its economic priority policy and make cost-benefit analysis on its agricultural sector regarding the fishing and livestock sectors, in coordination with the World Bank.

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