

UNITED NATIONS
INTERNATIONAL RESEARCH
AND TRAINING INSTITUTE FOR THE
ADVANCEMENT OF WOMEN
(INSTRAW)



NACIONES UNIDAS
INSTITUTO INTERNACIONAL
DE INVESTIGACIONES Y CAPACITACIÓN PARA
LA PROMOCIÓN DE LA MUJER
(INSTRAW)

**ANALYSIS OF FOOD INSECURITY AND
WOMEN'S ROLES IN THE
AFRICAN REGION**

**JULIE ZIMET
CONSULTANT
INSTRAW
FEBRUARY 1997**

1987 R
DEV-AFR

TABLE OF CONTENTS

Section One: Introduction

I.	Overview	
1.1	What is Food Security?	page: 1
II.	Background	
1.1	When did the United Nations first address the importance of Food Security?	page: 1-2
III.	Efforts made to eradicate hunger	
1.1	What is the Food and Agricultural Organization's role?	page: 2
1.2	The World Food Summit	page: 2-3
1.3	How has the World Food Programme helped to create Food Security?	page: 2
1.4	International Fund for Agricultural Development and its contributions	page: 2
IV.	The severe problem of Food Insecurity in the African region	page: 3-5
V.	The vital role of women in creating Food Security in Africa	page: 6-7

Section Two: Target Areas to Help Women Improve Food Security

I.	Food Availability/Food Production	
1.1	Women must have access to land, education, resources/inputs, and financial credit	page: 7-19
II.	Income for Food Accessibility	
1.1	Poverty, the important cause of hunger	page: 19-22
III.	Nutritional Security	page: 22-25

Section Three: Causes of Food Insecurity

I. Natural Disasters

- 1.1 Drought and how it leads to hunger, poverty, and vulnerability page: 25-27
- 1.2 Environmental degradation page: 27-28
- 1.3 Deforestation page: 22-28
- 1.4 Preventive mechanism: Vulnerability Mapping page: 28-32

II. Man-Made disasters

- 1.1 interrupts distribution of food page: 32-34
- 1.2 hinders agricultural production page: 34-35

Section Four: Conclusion page: 35-36

LIST OF ACRONYMS

FAO	Food and Agricultural Organization
IFAD	International Fund for Agricultural Development
ILO	International Labour Organization
INSTRAW	International Research and Training Institute for the Advancement of Women
NGO	Non-Governmental Organization
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Social and Cultural Organization
UNEP	United Nations Environmental Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIFEM	United Nations Fund for Women
WHO	World Health Organization
WFP	World Food Programme

Preface:

The concept of Food Security was first addressed by the United Nations in their Charter, signed on 26 June 1945. In this charter all Member States agreed that the right to food was a human right. The Universal Declaration of Human Rights additionally recognized "freedom from hunger" as one of the "inalienable and inviolable rights of all members of the human family".

Universal Food Security, as defined by the Food and Agricultural Organization (FAO), exists when "all people at all times have access to the food they need for a healthy, active life." A food-secure household can be described as one which has access to enough food for each and every member of a household to lead a healthy and productive life.

This research study will address how food insecurity plagues the African region, and women's role in eradicating long-term hunger. Women are often the main food producers, income-earners and guardians of family health and nutrition at the rural level. In Africa today, 85% of rural women work in agricultural production and thus, produce 80% of the food consumed by the family.¹

Additionally, this study will address the two main causes of Food Insecurity; natural and man-made disasters. In conclusion, this study will review some strategies and recommendations that can and should be implemented at the rural and national levels to help end the hunger crisis.

¹International Fund for Agricultural Development, Providing Food Security for All, pg 89.

Section One: Introduction

Food security is the assurance of an adequate food supply over an extended amount of time. Specifically, it relates to the quantity, quality, regularity, and nutritional balances of food intake. Only when adequate food supplies are achieved in the long-run can people maintain a healthy, active, and productive life. "Hunger and nutrition deficiencies lower productivity, reduce health, and shorten life."²

The importance of food security with regards to overall human livelihood was first addressed by the United Nations Charter. Article 1, paragraph 3 addresses the importance of food security through its mention of human rights and fundamental freedoms. One of its purposes and principles is:

To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion.³

The Charter also characterizes the assurance of food as a key to sustainable peace and democracy. Chapter IX of the Charter entitled 'International Economic and Social Co-operation' states that "solutions to international economic, social, health, and related problems are necessary for peaceful and friendly relations

²United Nations Development Fund, Urban Agriculture: Food, Jobs and Sustainable Cities, pg 160.

³Charter of the United Nations and Statute of the International Court of Justice, 26 June 1945, pg 3.

among nations."⁴

Furthermore, institutions such as the Food and Agricultural Organization (FAO), the World Food Programme (WFP), and the International Food and Agricultural Organization (IFAD) were created for the sole purpose of monitoring nutritional health, hunger, distributing food to people who are unable to produce it themselves, alleviate poverty, and increase food production.

One important initiative that the FAO has undertaken to eradicate food insecurity is through the World Food Summit held in Rome from 13 - 17 November 1996 (a similar summit was held in 1974 in which population and poverty were linked to food insecurity). At this Summit, FAO set up a 7 part plan of action which focused on women, children, and other vulnerable population groups as key players in achieving food availability. These 7 initiatives are:

1. creating political, macroeconomic, and trade conditions that foster food security;
2. supporting policies and institutions that contribute to improving access to food;
3. meeting transitory and emergency food needs in ways that encourage development;
4. adopting approaches to agricultural and rural development that encourage adequate, stable food supplies;
5. ensuring equitable involvement of all people in

⁴Charter of the United Nations and Statute of the International Court of Justice, 26 June 1945, pg 30.

- decisions and actions that affect their food security;
6. investing in research, extension, infrastructure, and institutions for sustainable agriculture;
 7. providing international co-operation and assistance for food and agriculture.⁵

The FAO hoped that by initiating this 7 part plan, governments can achieve food security for everyone.

Food insecurity is most severe on the African Continent with Asia and Central America also potential danger areas. The General Assemble, in Resolution 39/165 addressed the "dramatic deterioration of African food and agricultural production and the resulting alarming increases in the number of people, especially women and children, exposed to hunger, malnutrition, and even starvation."⁶

Throughout modern African history, food insecurity has primarily resulted from declines in domestic production, natural disasters, and war.

Presently Africa faces many social, political, and economic challenges. These countries are challenged by the necessity for sustained economic growth as well as the need to eliminate widespread poverty, malnutrition, and food insecurity that inflicts its population. Currently, 800 million people in the developing

⁵Food and Agricultural Organization, "Fighting Hunger and Malnutrition", pg 16.

⁶ General Assembly Resolution 39/165.

world face food insecurity.⁷ Moreover, an analysis compiled by the FAO concluded that 200 million of the 800 million people suffering from food insecurity are located in Sub-Saharan Africa. Furthermore, by the year 2010 the WFP estimates this number will increase to more than 330 million if the current situation remains unchanged.⁸

The severity of food insecurity in Africa was reiterated in a study conducted by the IFAD in 1988, which stated that 21 out of the 37 "low food security" countries were in Sub-Saharan Africa. The IFAD defines "low food security" using the criteria of domestic production, fertility rates, and number of displaced people suffering from chronic malnourishment.⁹ The IFAD study also discussed the growing problem of malnutrition in many of the regions countries specifically, Ethiopia, Ghana, Mali, Mozambique, and Sierra Leone.¹⁰

For example, in Ethiopia, women are the most vulnerable part of the population. The status of women has been characterized by hardship, deprivation, and uncertainty. Only 3 - 7% are literate and 12% are married by the age of 14. Ethiopian women work an average of 17 hours a day, hauling water, fetching fuelwood and

⁷International Food Policy Research Institute, "Women: The Key to Food Security", pg 1.

⁸World Food Programme, "World Food Programme Annual Report 1994", pg 7-10.

⁹World Food Programme, "Tackling Hunger in a World Full of Food: Tasks Ahead for Food Aid", pg 10.

¹⁰International Fund for Agricultural Development, "The State of World Rural Poverty, a Profile of Africa", pg 4.

pounding grains for food. In addition to these household tasks, they are forced to work in the fields planting, harvesting, and transporting. According to a statistic taken by the IFAD, three out of four vendors in village markets are women. As producers they have no independent access to land, credit, technology, or extension resources.¹¹

African women play a key role in tackling the continent's food insecurity problem. Throughout history they have been shackled by political, religious, social, cultural, and economic constraints. Women and children are most directly affected by the lack of food.

At the Women's Conference in Nairobi, Kenya in 1975 Member States and participants encouraged women to "play a central role in the development and production of food and agriculture."¹² Through this role they could promote food security. Furthermore, governments were called upon to establish programmes that fully integrate and empower women by providing them with access to land, child-care facilities, and education.¹³

At the Fourth World Conference on Women held in Beijing, China in September 1995, the Platform for Action reached a consensus on the importance of "Equality, Development, and Peace" for women.¹⁴

¹¹International Fund for Agricultural Development, "The State of World Rural Poverty, a Profile of Africa", pg 8.

¹²The Nairobi Forward Looking Strategies for the Advancement of Women, paragraph 174, pg 43.

¹³Ibid, paragraph 176, pg 43.

¹⁴The Forth World Conference on Women, Beijing Platform for Action

This document stressed that women and girl-children face discrimination in education, health, and human rights. These forms of discrimination are exonerated by armed conflict and unequal economic institutions; 189 member states agreed to these inequalities.¹⁵

Additionally, governments were asked not to use food and or other humanitarian assistance as a political instrument. To uproot this predicament during armed conflict, the WFP has created special programmes for women, stressing leadership and training, in decision making areas to ensure an appropriate and adequate food supply.¹⁶

The consensus among the world development organizations is that the eradication of intense hunger can be achieved through the following areas in regards to women:

1. Food Availability / Food Production
2. Income for Food Accessibility
3. Nutritional Security¹⁷

Section Two: Target Areas to Help Women Improve Food Security

AREA ONE: FOOD AVAILABILITY / FOOD PRODUCTION

By providing food for the family, women play a dual role of both producer and consumer. Women are productive agents through the roles they play as both farm manager and workers. In both the

¹⁵ The Forth World Conference on Women, Beijing Platform for Action

¹⁶World Food Programme, "Participation and its Commitment to Women", pg 21.

¹⁷International Food Policy Research Institute, "Women: The Key to Food Security", pg 1.

rural village and the urban city. Currently African women are responsible for 80% of food production in rural regions, according to a survey conducted by the United Nations Development Fund for Women (UNIFEM).¹⁸

In the urban cities two-thirds of farmers are women. According to the United Nations Development Programme (UNDP), an urban farmer is most often a woman with a family who has lived in a city for at least five years. They utilize the areas near their urban dwellings to grow vegetables and raise small livestock to feed their families.¹⁹

Throughout Africa, women spend a majority of their time in food production and preparation. This is because women shoulder the responsibility of feeding the entire family and are "more conscious of deficiencies in food security and are the first to seek opportunities to augment food supply."²⁰ In Zambia, for example, women are more likely to produce food crops (food for self-sustainment) while men harvest cash crops (food to obtain income).²¹

In many African countries, women are forbidden from owning

¹⁸United Nations Development Fund for Women, "UNIFEM Annual Report 1994", pg 9.

¹⁹United Nations Development Programme, Urban Agriculture: Food, Jobs, and Sustainable Cities, pg 4.

²⁰Ibid, pg 67.

²¹Ibid, pg 68.

land either by cultural constraints or by law.²² If women had equal access to agricultural methods of production, substantial gains in production could occur. Studies conducted by the International Food Policy Research Institute support the belief that "reducing gender disparities by increasing women's physical and human capital promotes agricultural growth, greater income for women, and better food and nutritional security for all."²³

Although not able to own the necessary tools for maximizing production, African women working as farmers, farm workers, and resource managers still account for 75% of the regions basic foodstuffs and perform 90% of all agricultural work.²⁴ A World Bank study conducted in 1993 concluded that "increasing the productivity of women farmers will contribute directly to higher output and improved household food security."²⁵

The constraints faced by women must change at the government and policy levels. Currently, policy makers are neglecting women as productive agents by limiting their accessibility to land, education, resources/inputs, and financial credit, even though evidence shows they play a role disproportionately larger than men in agriculture production.

²²International Food Policy Research Institute, "Women: The Key to Food Security", pg V.

²³Ibid, pg V.

²⁴International Fund for Agricultural Development, "The State of World Rural Poverty, a Profile of Africa", pg 15.

²⁵Saito, Katrine, "Raising the Productivity of Women Farmers in Sub-Saharan Africa", pg ix.

LAND

Insecurity of tenure, the uncertainty of land ownership and use, with respect to women, has led to decreases in productivity not only for the African family but also for the agricultural market as well.²⁶ Katrine Saito, in her recent World Bank study, concluded that African women face uncertain land availability, decreasing size, and quality of land, as a result of growing population pressure:

A critical issue for small holders throughout Africa is the shortage of good quality farming land. Increasing population pressure and the fragmentation of holdings have sharply reduced the cultivated area per person. For women the situation is even more critical; faced with uncertain tenure and decreasing size and quality of plots to farm, they have an exceptionally difficult task maintaining levels of output and household food security.²⁷

Over population not only causes a decrease in land availability, but is also considered a cause of food insecurity. According to Thomas Malthus, an early 19th century English economist best known for his predictions of mass starvation, Malthus believed that population would increase too rapidly in comparison with agricultural output. "People are hungry because food is running short; food is short because the population is beginning to bump up against natural limits to output."²⁸ It is

²⁶Saito, Katrine, "Raising the Productivity of Women Farmers in Sub-Saharan Africa", pg 46.

²⁷Ibid, pg 46.

²⁸"The Economist: Into Zaire", Feeding the World, 16 November 1996, pg 20.

important to note that Malthus's research neglected the factor of future technological advances that could increase agricultural production in the long-run (most of these advances have not reached Africa).

Nafis Sadik, the Director of the United Nations Population Fund (UNFPA), also believes that population growth will be and has been the largest factor in determining future food needs. In an article Sadik wrote entitled Global Food Security Linked to Women's Rights, she wrote that heads of state and top officials "should keep in mind that stabilizing population growth and increasing food production are two key factors in the food security equation, both are dependent of promoting women's rights and meeting their needs."²⁹

In addition to the population growth problem in respect to land availability, recent survey revealed that legal rights limit women's access to land in many African countries. This study stated that only 17% of Nigerian women had the legal right to sell their land. In addition field interviews conducted by the UNDP confirm similar problems for urban women:

When the family moves to the city,
women's accountability to feed the
family continues in culture, but
the traditional usufruct to land
is lost with formal land titles and
land use laws.³⁰

²⁹Inter-Press Services Daily Journal, Global Food Security Linked to Women's Rights, vol.4 No.217, pg 4.

³⁰United Nations Development Programme, Urban Agriculture: Food, Jobs, and Sustainable Cities, pg 68.

Combining African women's typically low levels of education with legal complexities results in the final problem: they can not own land if they can not understand the legal obligations.³¹

EDUCATION

Another area with a very strong correlation to food security is education. Especially in rural areas, families tend to underinvest in girls' schooling if the opportunity cost in doing so is higher than that of boys. This typically results in lower average education levels for girls. In Nigeria, for example, women heading households have, on average 1.6 years of education compared to 3.0 years for men.³²

Lower levels of education have serious implications on agricultural productivity and income. Better educated farmers are more likely to adopt new technologies and to have access to extension services. Yet, two-thirds of the women in developing countries remain illiterate.³³ Kenya found that increasing the primary education of women farmers not only caused them to plant coffee trees more readily, but also increased the adoption of coffee by other women farmers.³⁴

Currently, the WFP initiates food-aid programmes that give families an incentive to send their girl-children to school. One

³¹Saito, Katrine, "Raising the Productivity of Women Farmers in Sub-Saharan Africa", pg 47.

³²Ibid, pg 22.

³³International Food Policy Research Institute, "Women: The key to Food Security", pg 6.

³⁴Ibid, pg 6-7.

families an incentive to send their girl-children to school. One such Programme, run jointly by the WFP and the United Nations Educational, Social, and Cultural Organization (UNESCO) gives food rations to girls at the end of the week or month that they attend school. These food rations are valued as an income since the family can either consume it or sell it for money.³⁵

Education leads to empowerment and greater social status. Educated women are more likely to have the status and power in a household to ensure proper prenatal care and delivery care, childhood immunizations, better diets for children, and better housing.³⁶ In conclusion, UNESCO states that "education is at the core of human development and is an indispensable tool for personal empowerment and for ensuring global human security."³⁷

RESOURCES/INPUTS

Like education, the accessibility of resources, such as technology and the means of modern production, is also critical for enabling women to become more effective productive agents:

Resources in the hands of women often have a greater nutritional benefit to children than the same resources controlled by men. Resources for women benefit whole households.³⁸

³⁵World Food Programme, "Food-Aid for Education", pg 10.

³⁶World Food Programme, "Tackling Hunger in a World Full of Food: Tasks Ahead for Food Aid", pg 15.

³⁷World Food Programme, "Food-Aid for Education", pg 5.

³⁸World Food Programme, "Tackling Hunger in a World Full of Food: Tasks Ahead for Food Aid", pg 3.

more equal substantial gains in agricultural output would occur, benefiting both men and women.³⁹

Currently, women's access to agricultural inputs and support services has not improved commensurate with their role as farmers. The result is considerable losses in agricultural activity and output. According to a study of Kenya, the loss in agricultural activity and output is as high as 20%⁴⁰ Governments in Africa should implement programmes in the area of accessibility to resources and inputs not only for equality in respect to women but to help prevent future food shortages:

If Sub-Saharan Africa is to revitalize the agricultural sector and improve household food security, raising the productivity of women farmers must be made the centerpiece of agricultural strategy.⁴¹

Initiating the eradication of the famine of hundreds of millions of people should commence with an increase in agricultural efficiency. According to the World Bank, food security can only be achieved if food production were to increase 4% annually. This goal can be met through technological and resource use changes. This would involve:

a more intensive use of chemical and organic inputs; the integration of livestock's into farming systems to use animal power and manure; the introduction of new higher-valued crops; better irrigation methods,

³⁹World Food Programme, "Tackling Hunger in a World Full of Food: Tasks Ahead for Food Aid", pg 1.

⁴⁰Saito, Katrine, "Raising the Productivity of Women Farmers in Sub-Saharan Africa", pg vii.

⁴¹Ibid, pg vii.

introduction of new higher-valued crops; better irrigation methods, hand tools, and crop storage techniques; and improved animal and crop husbandry.⁴²

This World Bank study points out that if these technological and resource use changes do not incorporate women, at all levels, the expected production rate of 4% would never be achieved.

Rwanda is one case study that had increased its agricultural development 4.7% annually during the years of 1966-1982. During this time, Rwanda initiated soil and forest conservation programmes, tree-planting programmes, and self-sufficiency in fuelwood.⁴³ Rwanda's recent decline in agricultural production is linked to the current civil war.

CREDIT

In a book published by the International Research and Training Institute for the Advancement of Women (INSTRAW), Credit for Women; Why is it so Important, the "key to improving the standard of living for women in developing countries, who are farmers, is through access to credit."⁴⁴ Although, it is important to note that women face social and political constraints that hinder them from obtaining credit.

Women are politically constrained from obtaining credit, in the form of a loan, because of legal requirements that require them

⁴²World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, pg 90.

⁴³Ibid, pg 105.

⁴⁴International Research and Training Institute for the Advancement of Women, Credit for Women; Why is it so Important, pg 23.

"considered inappropriate for a women to travel alone the long distances between her home in a rural area and the banks in town."⁴⁵

Credit is important for women to obtain because it raised income and employment, better access to food and medical services and improves their quality of life. Currently women try to access credit from the formal and informal sector.

The formal sector encompasses local male-oriented organizations such as agricultural cooperatives or social clubs, through which application procedures to obtain credit can be received. Currently, women are socially not accepted as farm managers and producers and therefore are not formally accepted in this sector. In Kenya for example, only 3% of female farmers have been able to obtain credit from a commercial bank.⁴⁶

Due to this discrimination in the formal sector women are forced to access credit from the informal sector. The informal sector consists of relatives, friends, moneylenders and pawnbrokers. There are several drawbacks to this sort of finance. The most important is the limited amount of credit available. Relatives can lend only as much as their personal savings permit. Additionally, availability is inconsistent and borrowers are often

⁴⁵International Research and Training Institute for the Advancement of Women, Credit for Women; Why is it so Important, pg 33.

⁴⁶Saito, Katrine, "Raising the Productivity of Women Farmers in Sub-Saharan Africa", pg 86.

exploited.⁴⁷

Women are disadvantaged from gaining finances through both forms therefore, Non-Governmental Organizations (NGO) should focus on helping women access credit. Currently the Women's World Bank (WWB) created in 1979 in the Netherlands works as an intermediary institution that provides services almost exclusively for women.

In addition, the IFAD, in its most recent publication, addressed the importance of obtaining credit because access to capital leads to economic empowerment of women. "It raises their status, reduces their absolute dependency on their husbands and improves their production."⁴⁸ In conclusion, if "women had the same human capital endowments and used the same amounts of factors and inputs as men, the value of their output would increase by some 22%."⁴⁹

AREA TWO: INCOME FOR FOOD ACCESSIBILITY

Income for food accessibility is achieved by allowing women the opportunity to earn an income for their labor. Efforts should be made at the local and national levels to increase women's ability to generate and control an income, since a household's access to food depends directly on its income.

Women have been traditionally viewed as "gatekeepers", or

⁴⁷International Training and Research Institute for the Advancement of Women, Credit for Women; Why is it so Important, pg 35.

⁴⁸International Fund for Agricultural Development, "Providing Food Security for All", pg 91.

⁴⁹Saito, Katrine, "Raising the Productivity of Women Farmers in sub-Saharan Africa", pg 97.

insurers of adolescent reception of an adequate share of the available food. As a result , income in the hands of women should contribute more effectively to household food security and child nutrition than income controlled by men:

Women relative to men, tend to spend their income disproportionately on food for their family. Moreover, women's income is more strongly associated with improvements in children's health and nutritional status than are men's income.⁵⁰

Therefore, reducing gender disparities by increasing women's physical and human capital promotes agricultural growth, greater income for women, and better food and nutritional security for all.

Strategies should be implemented towards increasing women's productivity both in paid work and in domestic production. Hence, women could increase their incomes without sacrificing additional time, their children's welfare, and/or their own health. Some approaches could include the more efficient use of time and more modern technologies, community child care facilities, education equality, efficiency training, and tenure/security of land rights.

An example of the successful implementation of similar policies can be seen in Rwanda, where there were no female-headed households with severely malnourished children. This is despite the fact that average female incomes were lower than average male incomes and men had more than 10 times as much off-farm earnings as

⁵⁰International Food Policy Research Institute, "Women: The Key to Food Security", pg 9.

women.⁵¹ Thus, displaying how income earned by women could be positively and significantly associated with household calorie consumption and food security.

Uganda is another example of the success of women-led households. In rural Uganda, more than a fifth of all households are headed by women and they are increasingly becoming the primary producers of food crops in the country.⁵²

Poverty is directly correlated with insufficient economic accessibility within Africa, especially in relation to women. Rural women in developing countries are among the poorest and most vulnerable people in the world, and the frequency of their poverty is increasing.⁵³ Out of the 1.3 billion people living in absolute poverty, over 70% of them are women.⁵⁴ Widespread poverty among women is largely a result of their suffering from cultural and political biases which undervalue their contributions to development and prevent them from increasing the productivity of their labor.

Income is undoubtedly a critical determinant of a households ability to obtain food and eliminate poverty. Poverty is a major

⁵¹The World Food Programme, "World Food Programme Annual Report 1995", pg 3.

⁵²International Fund for Agricultural Development, "The State of Rural Poverty", pg 8.

⁵³Ibid, pg 15.

⁵⁴United Nations Development Fund for Women, "UNIFEM Annual Report 1994", pg 17.

threat to household food security.⁵⁵ Chronic hunger breeds poverty by reducing the ability to work. As a result, the attainment of food security would help eliminate current hunger and reduce the risks of sustained poverty.

AREA THREE: NUTRITIONAL SECURITY

The importance of nutritional security was addressed at the Fourth World Conference on Women in Beijing, China, September 1995. During this Conference, the WFP pledged to reduce women's unequal access to food and address the specific nutritional needs of women.⁵⁶ Currently, 750 million people suffer from hunger and malnutrition, a majority being women and children.⁵⁷ The WFP concluded that 40% of Sub-Saharan's population presently suffers from chronic undernourishment.⁵⁸

Nutritional security is vital for women and children because malnourishment can lead to permanent and physical brain damage and an under-developed immune system.⁵⁹ Malnutrition can also lead to complications during pregnancy, childbirth, infant deaths, and life expectancy. According to the World Bank 150,000 mothers in Africa die each year due to birthing complications. In Burkina Faso, Ethiopia, Mali, and Nigeria only 70-77% of children live to the age

⁵⁵International Food Policy Research Institute, "Women: The Key to Food Security", pg 11.

⁵⁶World Food Programme, "World Food Programme Annual Report 1995", pg 1.

⁵⁷World Food Programme, "Food-Aid Works", pg 7.

⁵⁸Ibid, pg 2.

⁵⁹Ibid, pg 6.

of five.⁶⁰

The International Food Policy Research Institute suggests that this figure is so low because girls and women suffer from iron deficiencies, anemia, vitamin A deficiencies, general reproductive health care, and pre- and post-natal care. They suggest programmes in the areas of puberty, pregnancy, and lactation to decrease the amounts of premature mother and child deaths in Africa.⁶¹

In a statistic compiled by INSTRAW, two-thirds of the women in developing countries suffer from anemia and malnourishment. These forms of malnutrition can lead to viral, bacterial, fungal, and chemical illnesses. The lack of proteins, vitamins, and essential nutritional elements reduce the effects of the immune system to fight off illness.⁶²

Malnutrition is also affected by calorie intake. The FAO suggests that the average consumption per person should be 2100 calories a day. Unfortunately, the people of Sub-Saharan Africa consume less than 80% of the recommended daily intake. This number has a tendency to decrease due to natural disasters, such as droughts.⁶³

⁶⁰World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, pg 65.

⁶¹International Food Policy Research Institute, "Women: The Key to Food Security", pg 16.

⁶²International Research and Training Institute for the Advancement of Women, Training Package: Women, Environmental Management and Sustainable Development, pg 9.

⁶³World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, pg 72.

The World Bank suggests the implementation of health care at the local and family levels tend to eradicate nutritional insecurity and malnutrition: "individuals, families, and communities must take responsibility for their own health care. Governments, NGOs, and the private sectors need to provide support for these efforts. Communities must be consulted and encouraged to participate in setting their own priorities and in the design and delivery of health care programmes."⁶⁴ Additionally, strategies will only be effective if they include women who are the main audience and participants of such programmes, especially those dealing with child care.

Women in developing countries play a critical role in enabling adequate food and nutrition for their families and themselves through the three pillars of food security: food availability/food production, economic access to available food, and nutritional security. If the current barriers confronting women farm producers and managers were removed women could substantially contribute to the eradication of food insecurity. Women could play a leading role in food distribution and should be viewed as producers not just reproducers.

Section Three: Causes of Food Insecurity

Africa suffers from two main causes of food insecurity, natural disasters and conflict. The UN Charter written in 1945, addresses the distribution of food availability due to these two

⁶⁴World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, pg 75.

main causes. It is written that without the certainty of food there can be no sustainable peace, democracy or development.

To victims of conflict and natural disasters survival supersedes thoughts of long-term development; there is no longer-term solution without first a short-term solution. Action against acute hunger is therefore the first priority in addressing food insecurity; hungry people cannot wait for longer-term gains in productivity to resolve their problems.⁶⁵

Natural Disasters

The most common natural disaster within Africa is drought: "drought has been a recurring phenomenon throughout much of Africa. Of the natural disaster that afflict the region, drought has caused the greatest human suffering and economic loss."⁶⁶ According to the WFP, in the mid 1980s' over three million people died as a result of drought related disasters.⁶⁷ Droughts in Africa lead to food insecurity because they have long-term consequences on agricultural production which affects the macro and micro levels of the economy. It leads to a decrease in export earnings causing food import prices to increase.⁶⁸

Famine due to drought affects human livelihood through the manifestation of both poverty and vulnerability. It creates poverty because are forced to live in a short-term lifestyle. This

⁶⁵World Food Programme, "Tackling Hunger in a World Full of Food: Tasks ahead for Food Aid", pg 1.

⁶⁶Bancroft, John, "Aridland's Newsletter: a Special Issue on Disaster Mitigation", pg 3.

⁶⁷Ibid

⁶⁸Ibid

short-term lifestyle has a negative cyclical affect on the economy and the environment. It affects the economy because drought causes a decrease in agricultural production. Thus, people are forced to use their incomes on short-term elevation of hunger instead of long-term farm activities that would better promote both income and food storage.⁶⁹

The macro-economic effects of natural disasters on the African economy are expressed through decreases in Gross Domestic Product (GDP). Governments are forced to give large amounts of GDP to food-aid programmes to eliminate chronic hunger instead of using these funds to increase long-term agricultural production. In 1992, Zimbabwe's government spent \$215 Million US dollars in order to provide drought relief. At the micro level the household is affected because food availability declines due to drought.⁷⁰

Environmental degradation is a consequence of natural disasters as well. It causes both soil nutrient depletion and deforestation. In Burundi, Ethiopia, Kenya, Lesotho, Malawi, and Rwanda, droughts have caused severe depletions of soil nutrients which has hindered agricultural production.⁷¹

Additionally, man-made deforestation has lead to long-term famine. Families are forced to burn animal dung for survival, for heating and cooking, causing harmful effects on the environment.

⁶⁹Bancroft, John, "Aridland's Newsletter: a Special Issue on Disaster Mitigation", pg 31.

⁷⁰Ibid, pg 33.

⁷¹World Food Programme, "World Food Programme and the Environment", pg 7.

This is because animal dung could and should be used for soil conservation.

Currently, the WFP has been initiating projects to improve the environment while encouraging food production. A large portion of these projects target women because, not only do they grow an estimated 75% of food crops, but they are also responsible for most soil conservation.⁷² Some of the projects which highlight African women are:

1. checking dams to prevent erosion;
2. tree planting;
3. building of terraces and cutoff drains to conserve soil and water;
4. dung fixation to prevent deforestation.⁷³

In Zimbabwe, the Government has taken measures to increase women's status to allow them to have the power to create such programmes for their communities.⁷⁴

The most traumatic outcome of famine, in regards to women, is that it creates a sense of vulnerability. In a statistic compiled by the WFP, households headed by women were noted as being the most vulnerable group affected by food insecurity caused by drought and erosion. This study also characterized four main factors that create vulnerability:

⁷²World Food Programme, "World Food Programme and the Environment", pg 3.

⁷³Ibid, pg 3.

⁷⁴Ibid, pg 14.

1. the increasing frequency of drought and deforestation;
2. a declining natural resource base caused by growing population pressure and degradation of the environment;
3. exploitation of wetlands and dry areas;
4. government policies that do not address the effects natural disasters have on the livelihoods of their population.⁷⁵

Women become susceptible to vulnerability when governments do not predict or prevent famines caused by drought. A case study was conducted by Early Warning Systems (EWS) between 1990-1991 in the Sudan based on their inability to prevent a food crisis. The Sudan did not admit they were suffering from a food crisis because they wanted to be food self-sufficient and not have to depend on Western food donors. As a result, their population became severely vulnerable to food insecurity and malnourishment.⁷⁶

Mali's population on the other hand, has benefited greatly for their early detection and prevention programming. Mali is a country with a strong donor/government alliance which has developed programmes to ensure food security.⁷⁷

Prevention of food insecurity caused by natural disasters can

⁷⁵Bancroft, John, "Aridland's Newsletter: a Special Issue on Disaster Mitigation", pg 32-33.

⁷⁶Ibid, pg 20.

⁷⁷Ibid, pg 20.

be achieved through disaster mitigation and vulnerability mapping. Disaster mitigation, according to the "Aridland's Newsletter" published by the University of Arizona, "improves food security in the long-run by promoting sustainable agriculture and resource management by enhancing local capacities to cope with disasters."⁷⁸ Vulnerability mapping is used in conjunction with disaster mitigation.

Vulnerability mapping detects the early warning signs of a food crisis by identifying areas and sectors of the population most vulnerable to food insecurity. Its most common functions are:

1. to increase the efficiency of resource allocation by identifying the relative vulnerability of regions and groups to food security emergencies and;
2. to provide additional information for designing appropriate interventions that focus on factors directly impacting local areas and socioeconomic groups.⁷⁹

Zambia is a country which is presently using vulnerability mapping to detect early warning signs by:

1. identifying chronic and current vulnerability among geographical areas with respect to available food security and nutritional indicators;
2. highlighting districts, areas, and provinces that

⁷⁸Bancroft, John, "Aridland's Newsletter: a Special Issue on Disaster Mitigation", pg 4.

⁷⁹Bancroft, John, "Aridland's Newsletter: a Special Issue on Disaster Mitigation", pg 25.

(UNHCR), food distribution services should target women to ensure that all refugees receive adequate supplies of food.

Currently the UNHCR is enforcing distribution of food to women in many camps. In Somalia, women face no discrimination in access to food, and because of this, Somalia camps have little if no reports of women and children starvation cases.⁸³

The lack of long-term agricultural production also causes food insecurity in war zone areas and refugee camps. Conflict hinders production because war converts land into battlefields, male farmers are transformed into soldiers, and government spending is shifted toward military costs. This directly affects women because they lose their land, husbands, and income to war.

Current strategies and suggestions that the WFP has established include:

1. improving community and women's information regarding food entitlements and deliveries and access to mechanisms for voicing complaints about the programmes;
2. targeting food distribution directly to households, and where possible, to the senior female in the household;
3. learning before hand about dietary and cooking habits of beneficial populations to improve the use of foods provided;

⁸³United Nations High Commissioner for Refugees, "Issues and Options for Refugee Women in Development Countries", pg 3 & 16.

4. mobilizing resources to provide women with tools and labour-saving technologies of food preparation, and;
5. consulting with women as part of all implementation procedures.⁸⁴

The World Bank in a recent study conducted, stated two initiatives to pull Africa, in respect to food security, into the 21st century. First to improve its science and technology training and aim at the highest standards for at least a minimum core of specialists. Second to forge new partnerships with qualified firms and research institutes in developing countries.⁸⁵

Section Four: Conclusion

Food security is a complex problem which entails various aspects and actors of a given society. It is a global problem of the 21st century which does not have boundaries; it affects people in both developing and developed countries. It is a question of survival. Unfortunately, the poorest and the weakest are most severely affected; women, children, older persons, refugees, and migrants.

Women are directly involved in achieving food security because they burden the responsibility of being family managers in the areas of food availability/food production, income, nutrition, and care. Thus, they hold the responsibility of obtaining food to sustain food security for the entire household. Women could become

⁸⁴World Food Programme, "WFP: Participation and its Commitments for Women", pg 5.

⁸⁵World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, pg 4.

vital players in solving world hunger if given the right tools and support from the government and the community. This can be achieved by implementing strategies and guidelines that directly involve women. Programmes should incorporate all aspects of food security such as education, poverty, population, and access to credit.

Furthermore, women are not the cause of food insecurity: natural disasters and conflict although, they shoulder the burden of eradication. Governments must be sensitive to this and formulate solutions and strategies that target women and empower them as productive agents, farm managers and income earners. Only when this is achieved, at the governmental and grass roots levels, can the eradication of household poverty and hunger begin to end. In order to do this governments must stop using food and or other humanitarian assistance as a political instrument. Governments and communities should accept women as equal partners for achieving food security and overall sustainable development.

There is a need to develop further strategies and guidelines to prevent food insecurity in various regions of the world. It should also encompass a holistic approach to social economic development of a society. Protection of the environment is a crucial aspect of food security and food production. All actors of a society, particularly women, have a crucial role in food production, consumption, and distribution. More attention by the international community and governments should be placed on developing programmes that encompass emergency solutions to food

insecurity whether it is caused by natural or man-made disasters, in order to prevent mass starvation and famine. We are all aware, that there is no quick fix this problem. Therefore, further studies, programmes, and actions are needed to prevent further famine and enable societies to reach sustainable development. Women are a crucial target group to these strategies.

BIBLIOGRAPHY

Administrative Committee on Coordination-Subcommittee on Nutrition, Symposium Report 19th Session, Nutritional Policy Discussion Paper No. 12, "Nutritional Issues in Food Aid", hosted by the World Food Programme, 24-25 February, 1992, Rome, Italy, August 1993.

Almgir, Mohiuddin & Arora, Poonman, Providing Food Security for All, International Fund for Agricultural Development Studies in Rural Poverty No. 1, New York University Press, New York, New York, 1991.

Bancroft, John, "Aridland's Newsletter: A Special Issue on Disaster Mitigation", Sponsored by the World Food Programme, Office of Aridlands Studies, The University of Arizona, Tucson Arizona, Volume 34, Fall/Winter 1993.

Bellamy, Carol, Executive Director United Nations Children's Fund, The State of the World's Children, Published for the United Nations Children's Fund by Oxford University Press, Oxford, UK, 1996.

Charter of the United Nations and Statute of the International Court of Justice, signed on 26 June 1945, San Francisco, CA, published by the United Nations Department of Public Information, United Nations, New York, New York, March 1994.

"The Economist: Into Zaire", Feeding the World, page 20, London, UK, 16-22 November 1996.

Food and Agricultural Organization of the United Nations, "Food Outlook: Global Information and Early Warning System on Food and Agriculture", No. 3.4, Rome, Italy, March/April 1996.

Food and Agricultural Organization of the United Nations, "Foodcrops and Shortages: Global Information and Early Warning System on Food and Agriculture", No. 2, Rome, Italy, March/April 1996.

Food and Agricultural Organization of the United Nations, "Ceres, Social Security and Food Security: Who Can Afford to Eat", The Food and Agricultural Organization Review, No. 152, March/April 1995.

Food and Agricultural Organization of the United Nations, "Fighting Hunger and Malnutrition", prepared by the Food and Agricultural Organization for the World Food Summit, 13-17 November 1996.

International Research and Training Institute for the Advancement of Women & International Training Centre of the International Labour Organization, Training Package: Women, Environmental Management and Sustainable Development, prepared by Bulajic, Borjana, Duenas Loza, Martha and Guastavi, Adelina, INSTRAW/SRE.B/48/1995, Turin, Italy, 1995.

International Research and Training Institute for the Advancement of Women & International Centre for Research on Women, Credit for Women: Why is it so Important, prepared by Mehara, Rekha, Drost-Maasry, Annelies and Rahman Ruba, INSTRAW/SER.B/51, Santo Domingo, dominican Republic, 1995.

International Fund for Agricultural Development, "International Fund for Agricultural Development Annual Report 1995, Rome, Italy, 1995.

International Fund for Agricultural Development, "The State of World Rural Poverty, a Profile of Africa", compiled and edited by Haralambous, Sappho, New York University Press and Intermediate Technology Publications, Rome, Italy, 1993.

Inter-Press Service Daily Journal, "Global Food Security Linked to Women's Rights", Sadik, Nafis, pages 4-5, Vol. 4, No. 217, 11 November 1996.

Saito, Katrine, "Raising the Productivity of Women Farmers in Sub-Saharan Africa", World Bank Discussion Papers No. 230, Africa Technical Department Series, The World Bank, Washington, D.C, 1994.

United Nations, The Nairobi Forward-Looking Strategies for the Advancement of Women, as adopted by the World Conference to Review and Appraise the Achievements of the United Nations Decade for Women: Equality, Development, and Peace, Nairobi, Kenya, 15-26 July 1985.

United Nations Development Programme, Urban Agriculture: Food, Jobs, and Sustainable Cities, United Nations Development Programme Publication Series for Habitat II, Vol. 1, New York, New York, 1996.

United Nations Development Programme, Human Development Report 1995, Oxford University Press, Oxford, UK, 1995.

United Nations Development Fund for Women, "United Nations Development Fund for Women Annual Report 1994", A commitment to the World's Women, New York, New York, August 1995.

United Nations Development Fund for Women, "United Nations Development Fund for women Annual Report 1995", Twenty Years of Commitment to the World's Women, New York, New York, August 1996.

United Nations Department of Public Information, Platform for Action and the Beijing Declaration, Forth World Conference on Women, Beijing, China 4-15 September 1995, published by the Department of Public Information, United Nations, New York, 1996.

United Nations Environmental Programme, Poverty and the Environment, published by United Nations Environment Programme, Nairobi, Kenya, 1995.

United Nations Environmental Programme, "Our Planet", The United Nations Environment Programme Magazine for Sustainable Development, Vol. 7, No. 6, 1996.

United Nations High Commissioner for Refugees, "Refugees, the Internally Displaced", No. 103, Geneva, Switzerland, I-1996.

United Nations High Commissioner for Refugees, "Refugees, UNHCR's World", No. 104, Geneva Switzerland, II-1996.

United Nations High Commissioner for Refugees, "Issues and Options for Refugee Women in Development Countries", Refugee Policy Group, Geneva, Switzerland.

World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth, A Long-Term Perspective Study, The International Bank for Reconstruction and Development/The World Bank, Washington D.C, 1989.

World Food Programme, "Tackling Hunger in a World Full of Food: Tasks Ahead for Food Aid", Policy and Public Affairs Division, Rome, Italy.

World Food Programme, "Food Aid Works", The Food Aid Organization of the United Nations System, I/S 4920/E/10.87/1/20.000, Rome, Italy.

World Food Programme, "Food Aid Works for the Environment", published by the World Food Programme, Rome, Italy.

World Food Programme & United Nations Educational, Scientific and Cultural Organization, "Food aid for Education", prepared by Mayor, Federico, Director-General of the United Nations Educational, Scientific and Cultural Organization at the World Conference on Education for All, Thailand, 1990.

World Food Programme, "World Food Programme and the Environment", published by the World Food Programme, Rome, Italy.

World Food Programme, "Annual Report 1994: Linking Relief and Development", published by the World Food Programme, Rome, Italy, 1994.

World Food Programme, "Annual Report 1995: Ending the Inheritance of Hunger", published by the World Food Programme, Rome, Italy, 1995.

World Food Programme, "Rwanda/Burundi Regional Emergency", published by the World Food Programme, 30 May 1996.