

Problems and Prospects of the World Food Situation

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Although world food and agricultural production, based on current trends, will be sufficient to meet demand in the decades ahead, the world still faces a serious food crisis, at least as perilous and life-threatening for millions of poor people as those of the past. To this end, the main objective of this paper is to illuminate the world food situation and to provide a critical analysis of the core causes of world food insecurity by identifying the various misconceptions surrounding our understanding of hunger, starvation, and poverty. A clear and deeper awareness of the real causes of hunger and malnutrition in poor countries is imperative to enable and challenge policy makers and planners to lay the groundwork at the grass-roots level for appropriate policy measures and development programs designed to alleviate poverty and ensure food security.

Key Words: food distribution, food security, food supply, hunger, malnutrition, poverty

At the 1974 World Food Conference, government leaders proclaimed that “every man, woman, and child has the inalienable right to be free from hunger and malnutrition.” The 1974 Conference set an ambitious goal: to eradicate hunger from human society within a decade. At the time of the 1996 World Food Conference, two decades and two years later, many children still went to bed hungry, many families still feared for their next day’s bread, and many individuals’ potential continued to be stunted by hunger and malnutrition. Although world food production, overall and per capita, has risen, the goal of the 1974 Conference has not been fulfilled. In fact, today, the world faces a renewed food crisis, one at least as formidable and life-threatening as occurrences of the past.

No one knows exactly how many of the world’s people are undernourished today because there is a lack of reliable population counts from many countries. But, even in the absence of appropriate data collection and analysis, there is general agreement that the number of people who are severely affected by hunger and malnutrition is extremely large. According to a World Food Program estimate, hunger affects one

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out of seven people on the planet. In 1996, the World Bank estimated that more than one billion of the world's people do not have enough food to lead healthy and productive lives. Furthermore, another 1–2 billion are at risk of falling into the ranks of the hungry and, if trends continue, the number is expected to grow dramatically (World Bank, 1996; Foster, 1992).

Based on assessments by Population Action International (1997), more than three billion people, or half of humanity, subsist on less than \$2 a day, and both the number of people and the proportion of total population living in such extreme poverty are rising. According to the Food and Agriculture Organization (FAO, 1997), 840 million of the world's 1.1 billion poor live in rural areas, where 15 million die each year from starvation and related diseases. About 80 countries do not produce enough food to feed their populations. Sub-Saharan Africa produces less food per person today than it did 30 years ago (McLaughlin, 1984).

The latest assessment for only 93 developing countries indicates that there are nearly 800 million seriously and chronically undernourished people (INTERPAKS, 1996). Childers and Urquhart (1994) estimated that some 1.4 billion people now live in absolute poverty, 40% more than 50 years ago. Nearly one of every four human beings alive today is existing only on the margins of survival, too poor to obtain the food they need to work, or adequate shelter, or minimal health care, let alone education for their children. International Labor Organization data (Childers and Urquhart, 1994) also indicate that the world's population is increasing by about 250,000 every day—nearly 100 million every year. The number of those formally unemployed is already approximately 400 million in the South, equivalent to the entire population of Western and Northern Europe. Merely to hold employment at these levels requires the creation of some 40 million new jobs every year.

These numbers are more than just statistics—they represent real people suffering from poverty and hunger. The consequences of hunger and malnutrition are adversely affecting the livelihood and well-being of massive numbers of people and inhibiting the development of many poor countries. Incredibly, something must be wrong with the global food distribution systems, because millions of people should not be hungry when there is more than enough food in the world to feed them. How can this occur at a time when the “green revolution” has increased staple food crop production to a level that provides adequate energy to satisfy the needs of the global population?

The primary objectives of this paper, therefore, are to examine the current situation of world food production, to provide a critical review on the main causes of world food insecurity, and to identify the various misconceptions surrounding our understanding of hunger and starvation. The food crisis must be understood not only at the intellectual level, but also on an emotional level. We must acknowledge that behind the statistics there are real people feeling very real pain, and families whose lives have been turned upside down.

Food security is an important issue that will be faced by policy makers in the next millennium, particularly in the world's poorest countries with potentially large population growth (Johnson, 1998). A clear understanding of the causes of hunger

and malnutrition is imperative to enable and challenge policy makers to lay the groundwork at the grass-roots level for appropriate policy measures and the development of programs designed to alleviate hunger and its consequences.

Current World Food Situation

Food security depends on available world supplies of food, the income of the designated population, accessibility to the available supplies, the consumption rate of food, and the amount that can be set aside for future use (Johnson, 1998). Global food supply has improved enormously since the early 1960s. World food and agricultural production has never experienced more favorable conditions than in the 1980s and 1990s. The agricultural sector on average has kept up with population growth and demand for agricultural produce. Agricultural production has increased and world food supplies are 18% higher than 30 years ago (FAO, 1997).

The world grain harvest in 1994, at 1,747 million tons, was up 2.9% from the depressed 1993 harvest of 1,697 million tons. World grain production (mainly wheat, corn, and rice) has shown an upward trend, with the exception of slight fluctuations in some years due primarily to drought and other natural disasters (Foster, 1992). In the decade of the 1990s, global grain yields per hectare were nearly 2.5 times the 1.15 tons per hectare of the 1930s (Pinstруп-Andersen and Pandya-Lorch, 1994).

World meat production has shown an increasing trend with 184 million tons in 1994, up from 177 million tons in 1993. The impressive gain in overall meat output boosted per capita production to 33 kilograms, the highest ever achieved. Pork continued to widen its lead over beef as the world's most popular meat, and poultry production continued to be the most dynamic subsector of the meat industry. These increases in meat production are consequences of improvement in income levels, since meat becomes a more important component in diets as income increases (Rozelle, Huang, and Rosegrant, 1996).

Thus, it is evident that, more than ever before, an adequate amount of food is being produced today. Based on current trends and improved agricultural technology, world aggregate food production will be sufficient to meet demand in the decades ahead. By 2010, it is anticipated that world food supplies will be adequate to feed the global population. Right now there are viable alternative technologies in agriculture to secure the world food supply. Deputy Director General Hjort of the FAO observed that it is possible to increase agricultural efficiency without environmental degradation. He suggested that this could be accomplished through better research, more effective education and training, improved access to markets, and more ecologically suitable farming practices (INTERPAKS, 1996).

Johnson (1998), in an analysis of food security and world trade prospects, predicts that the world food situation will continue to improve, at least over the next two to three decades; there will be continued improvements in productivity, the rate of growth of supply will exceed that of demand, and real international prices of food will also decline. Johnson further contends that the real per capita incomes of the

majority of the populations in developing countries will continue to increase, contributing to an improvement in food security.

This optimistic forecast, however, does not mean that in every country food security will improve. It is evident that there is more than enough food for every man, woman, and child on the planet, but all too often the poor do not have access to that food. Despite the availability of viable technologies to increase food and agricultural production, economic and social progress is not expected to occur at similar rates across countries. This is because many of the poorer countries are unable to be self-sufficient in food and agricultural production due to various economic, social, and political constraints.

Misperceptions of World Food Shortages

Hunger, which is usually preceded by food shortages, is caused by a complex set of events and circumstances (social, economic, and political factors) that differ from place to place and from time to time. Though hunger has been a part of human experience for centuries and a dominant feature of life in many low-income countries, the causes of hunger and starvation are not very well understood. Our awareness of the main causes of hunger and starvation has been hampered by myths and misperceptions about the interplay between hunger and population growth, land use, farm size, technology, trade, environment, and other factors.

Population Growth and Land Use

There is a myth that the hunger and malnutrition afflicting many of the populations of poor nations are the direct result of rapid population growth and the persistence of traditional agricultural technologies. This perception implies that if population increases were to be curbed and modern technologies widely adopted, the problem would disappear. However, the population explosion is not the main cause of hunger and malnutrition, even though it exacerbates the situation. The growth of global food and agricultural production has been faster than the unprecedented population growth of the past 50 years. Hungry of the world suffer from a lack of food, caused mainly by poverty, and poverty remains deep-rooted among 65% of the world's population (Reutlinger and Sclovesky, 1986; Foster, 1992).

Poverty and rapid population growth are positively correlated. Where per capita income increases, population growth rates decline and vice versa. In other words, the higher the incidence of poverty, the higher is the population growth, and consequently hunger and malnutrition afflict relatively more people. That means poverty, rather than population growth, is the leading cause of hunger and malnutrition. It is also evident that most of the people afflicted by hunger and malnutrition live in the poorest parts of the world (particularly South Asian and Sub-Saharan African countries) where unemployment is high, income distribution is skewed, and the standard of living is low—reinforcing the obvious connection between hunger and poverty, not between hunger and population growth.

Scarcity of Arable Land

Scarcity of agricultural land is not the primary cause of food shortages, although it too exacerbates the problem. There is adequate arable land for cultivation and food production in the world. Lack of arable land for food and agricultural production is not the cause of hunger and starvation. For instance, Bangladesh, where starvation and malnutrition are prevalent, has just half the people per cultivated acre compared to Taiwan. Yet Taiwan has no starvation and malnutrition. Ethiopia, Somalia, Sudan, Mozambique, and Bangladesh have adequate arable land for food and agricultural production, but they have been thought of as the countries hardest hit by hunger and starvation for many years. China has twice as many people per cultivated acre as India. Yet people in China do not suffer from hunger to the extent experienced by people in India. China, with the world's largest population (around 1.2 billion), remains self-sufficient in food and agricultural products, and produces grain and meat in large quantities for the domestic and world markets (Rozelle, Huang, and Rosegrant, 1996; Lappe and Collins, 1977).

Hunger is a more complicated phenomenon than merely a problem that can be rectified by simply expanding agricultural production, although in most instances, expanding agricultural output is a necessary condition to feed the growing number of people. This is so because issues surrounding hunger go to the heart of the political economy of nations. The key obstacle to alleviating hunger is that the rural poor populations in most developing countries, who primarily depend and live on local agricultural production, exercise little control over the prices they receive and the productive resources they need to produce efficiently. When the control of resources is in the hands of the actual farmers and tenants rather than in the hands of absentee landlords, the farmers are likely to make efficient use of their land. When farmers own land and work for themselves, they have the motivation to work hard to make the land more productive.

Technology in Food Production

It is often assumed that world food shortages can be eliminated by increasing food and agricultural production through the application of modern technology. It is also argued that supplying modern inputs—such as large-scale irrigation, chemical fertilizers, farm machinery, and pesticides—can improve the productive capacity of the land. However, when a new agricultural technology enters a system characterized by unequal power relationships, it brings greater profits only to those who already have some combination of land, financial resources, creditworthiness, and political influence.

For example, a research study (Lappe and Collins, 1977) completed by the International Labor Organization (ILO) showed that in the South Asian countries (Pakistan, India, Thailand, Malaysia, the Philippines, and Indonesia), where the focus was on increased agricultural production and where the gross national product (GNP) has risen, the majority of the rural population was worse off than ever before.

In another example, an agricultural development program sponsored by the Swedish International Development Agency was implemented in the Chilalo district of Ethiopia. The purpose of the program was to introduce new technology by improving the traditional agricultural implements, seeds, and human skills (Gebremedhin, 1976). The result of this program was an increase in agricultural production. However, since 75% of the farmers were landless tenants, the absentee landlords evicted the tenants from the land when they realized that the increased farm income as the result of new and improved technology was accruing to the tenants.

In many cases, the structure of production agriculture has also created an impediment for increased food production. An increasing dependence of the food supply on stocks of fossil energy—energy sources that are being rapidly depleted—is frequently ignored by economists and agronomists in their praise of the achievements of technological progress in food and agricultural production. Improved technology cannot substitute for shortage of essential natural resources. But, technology can help by promoting better use of the natural resources.

There has been insufficient research on appropriate technologies adapted to the agro-climatic conditions of many developing countries. New technology can have positive effects on food and agricultural production only if appropriate technology evolves within the framework of existing agricultural methods of production by first understanding how these traditional and social institutions and economic systems operate. Moreover, maximizing yield through modern intensive technologies usually requires imported capital, a resource very scarce in poverty-stricken countries. Even if agricultural production increases as a result of new technology, most of the agricultural production will go to pay for the imported capital. Thus, while use of imported technologies is an important factor in increasing food production and reducing hunger, it is not sufficient and has costs as well as benefits.

Farm Size and Credit Services

The disparities in the availability of institutional support systems in the distribution of services between large and small farmers work to the disadvantage of the latter. Since large farmers are conventionally considered to be more productive than small farmers, the large landholders are provided with public subsidies and credit facilities. The small farm operators are usually disqualified from farm credit loans because of their disadvantaged economic condition and the generally conservative lending practices of financial institutions. Small farmers have low equity positions and can offer little security, which implies high cost for lenders. The lending institutions often limit access of small farm operators to the capital market by imposing rigid rules on lending in order to fully protect the loan capital. Small farmers are often excluded from the modern marketing process, and have high input costs relative to large farmers because they lack bargaining power and do not buy farm inputs in bulk.

In addition, tradition plays a large role in the system of production in developing countries. Agricultural and extension service systems consistently fail to serve the majority of small farmers effectively—especially in developing countries. This is

partly because small farmers lack the formal channels to communicate their needs and ideas to the public sector (INTERPAKS, 1996). New technology is very slow in replacing old techniques. One reason new technology is not adopted is that small farm systems are so highly diverse and location specific. Public institutions cannot afford to accurately adapt appropriate technologies to each local set of circumstances. Instead, the institutions rely on blanket recommendations. This causes small farmers to lose confidence in public agricultural research services (INTERPAKS, 1996).

Furthermore, the ownership and control over land and technology, plus distribution mechanisms, are increasingly concentrated in the hands of a few individuals in developing countries. Consequently, due to an increase in land concentration, many landowners are converted into landless agricultural laborers. As a result of this situation, rural communities comprised of these individuals are dying. The dual process of increasing land concentration and mechanization has contrived to cut small landholders, landless tenants, and farm laborers out of the food and agricultural production system. And to be cut out of the agricultural production system is to have less food to support one's family.

Import-Export Balance

Another misconception about the causes of world food shortage is that a developing country may not be fully exploiting its natural endowments to produce and export crops for acquiring foreign exchange to import food and industrial goods. However, in many developing countries, structural adjustment and economic development programs have tried to promote agricultural exports at the expense of basic food needs. The people who exploit the natural resources and produce agricultural exports are not the poor farmers who suffer from hunger and malnutrition. Those who need food are not the same people who benefit from foreign exchange earned by agricultural exports. Even when a portion of the foreign earnings is used to import food, the imported goods are not basic staples; rather, they consist of items geared to the eating habits of the more well-off urban dwellers, comparable to food preferences of those in more affluent countries.

Attempting to achieve the Euro-American standards of living is impossible for developing countries, based both on projections of their future resource availability and on population growth. According to research studies (Pimentel et al., 1994), each person in the United States consumes about 23 times more goods and services than the average person in developing countries. The high levels of prosperity and quality of life in the United States and Europe were achieved through high consumption of natural resources. However, these basic resources are finite and are not unlimited in supply in any country of the world.

Developing countries have not instituted economic incentives to produce enough food for domestic consumption, as well as to extend agricultural production for export, because they lack the necessary means of production. They have failed to promote food security through necessary measures to raise productivity, yield, and storage. For example, in many Sub-Sahara African countries, food self-sufficiency

declined steadily during the 1980s. Producers of food crops were hit hard by cheap imports. Many governments find it more expedient and economically advantageous to import food to cover deficits of staple food than to make the necessary investments to increase domestic production and to redistribute real incomes in favor of the poor. And because of embedded structural dependency relationships, these government decisions are reinforced by a confluence of interests of the local elite with those of foreign investors and international financial institutions (Danaher, 1994; Barraclough, 1977).

Environmental Issues

Poverty and environmental degradation are closely linked, often in a self-perpetuating negative spiral in which poverty accelerates environmental degradation, and degradation results in or exacerbates poverty while simultaneously reducing the productivity of the resource, and hence food production. While poverty is not the only cause of environmental degradation, it does pose the most serious environmental threat in many low-income countries (Pimentel et al., 1994). This problem is further heightened because many millions of people, living near the subsistence minimum, have exploited natural resources with inappropriate technologies in order to survive. The very success of export-oriented agriculture undermines both the position of the poor as well as the environment. When export commodity prices rise, small self-sufficient farmers are pushed off onto marginal land by cash crop producers seeking to profit from the higher commodity prices.

For example, when the International Monetary Fund (IMF) stabilization policies caused severe hardship and economic crisis for millions of people in Africa, the landless poor tried to survive by farming marginal lands. The result has been serious deforestation and soil erosion (Danaher, 1994). In Jamaica and the Dominican Republic, small farms, striving for survival, are dotted on steep mountainsides predisposed to extensive erosion, while the large sugar plantations and cattle ranches are located in the coastal plains and fertile valleys.

Generally, it is not only the quest for increased food production that threatens to destroy the environment; the damage to the environment is often inflicted by commercial cropping patterns of the large farms that export nonfood crops while pushing the rural majority to eke out a meager living on marginal lands. Thus, unless collaborative action is implemented to rapidly increase productivity, many more subsistence farmers living on the edge of poverty will be moving onto marginal lands, causing a considerable amount of natural resource degradation and ultimately leading to environmental damage.

Major Causes of World Food Shortages

The misperceptions about food and hunger stated above have made it difficult for policy makers to understand clearly the relationships linking food insecurity, poverty, and development. Food insecurity is not just a problem related to food

production; it is closely linked to poverty and economic stagnation. The persistence of widespread food insecurity underscores the futility of increasing production without addressing the underlying social, political, and economic structures that make or keep people poor and hungry. One obviously must look beyond farm size, arable land use, population growth, technology, international trade, and the environment in order to understand the long-term trends in food consumption, production, and distribution. National government policies have exacerbated domestic food shortages, poverty, and income disparities in developing countries.

National Government Policies

Development policies and strategies in many developing countries are often based on wishful thinking and rhetoric rather than on an understanding and analysis of complex, real-life situations because there is a lack of insight and reliable information. The root cause of problems can often be traced to policies prescribed by international bureaucracies and forced upon the developing countries. For example, the poor performance of agriculture and the insecurity of food supplies in Sub-Saharan Africa over the past quarter century have been due primarily to inappropriate policies—to policies that discriminated against agriculture and resulted in large-scale governmental interventions in international trade. When large numbers of African countries became independent, developing their economies was their avowed prime objective. Despite this sincere commitment, results have been disappointing. One of the major factors which has thwarted their development endeavors has been the failure of these countries to adopt the right policies at the right time in accordance with the objective reality in each country. The Ethiopian Ministry of Information and Culture (MOI&C, 1997) provides an explanation for this lack of success. The majority of African leaders have long embraced the colonial mentality, and lost the virtue of self-confidence over the long years of colonial rule. This entrenched attitude has influenced mapping out their government policies and administering their offices, making them heavily dependent on their former colonizers even after political independence has been attained.

Economic and agricultural policies in many African countries have adversely affected investment in agricultural production and marketing. For example, research evidence (Smith, 1991) indicates that inappropriate government policies have become a major barrier to increased food security and economic development in many Sub-Saharan African countries. The poor farmers, who bear the greatest burden of misguided government policy measures in many African countries, have responded rationally to damaging agricultural policies by turning to private market alternatives.

In the 1970s and 1980s, the failures of agricultural policies in Somalia, Ethiopia, and Tanzania quickly became apparent in declining output and productivity and a growing inability for these countries to feed their own people. In Kenya, small-scale coffee growers withdrew from government-sponsored coffee ventures that proved to be economically unattractive. Some of the farmers shifted their land into other

productive and useful purposes, and others simply migrated out of the agricultural sector into other sectors where economic opportunities were more appealing. In Senegal, when the government reduced the controlled price for groundnuts below the world market price, farmers shifted out of groundnut production into the production of food crops. In Sudan, farmers responded to higher taxes on cotton production by shifting their product mix into basic food crops (Hammond and McGowan, 1994; Ndiaye, 1994; Danaher, 1994).

These examples reveal the rational behavior and resourcefulness of farmers in the Sub-Saharan African countries even in the face of inappropriate government agricultural policies. In many of these poor countries, the major barriers to agricultural growth and development were the misguided agricultural policies (Poulson, 1994; Smith, 1991).

As an additional example, consider that North and South Koreans share a common cultural heritage of language and kinship patterns, but North Korea is severely food insecure and South Korea is relatively prosperous. Matters of power, national policy, and social organization help to explain the vast contrasts between the two populations. Faulty national policies in North Korea include failure to utilize markets and international trade. Thus, the removal of government or nonmarket institutions where they distort markets and food security may be a prerequisite to the evolution of free-market institutions that allow efficient allocation of resources for increased food and agricultural production. Appropriate policy reform is a high priority because it is a necessary, though not sufficient, condition for development in low-income countries.

International Development Programs

The bilateral and multilateral organizations that provide policy advice on and finance for international rural development have had a profound influence on the developing countries over the past two to three decades—in fact, since these countries became independent. Such organizations require certain policy interventions as preconditions for loan disbursement. However, this activity ignores the fact that in most developing countries the constraint on development is not economics but political problems, institutional weaknesses, and low levels of social awareness, and the frequently or totally ignored issues of education and health care. Currently, decision making is dominated or influenced by international organizations through their expatriates, with very limited technical and sociocultural know-how and insight about developing countries.

“Development” is a term that means something distinctly different to those *being* developed and those *doing* the developing. The economic structure of poor countries, particularly African countries, was developed not to feed their own people, but to meet the import needs of developed countries. Sudan, Africa’s largest country, is a good example of the kind of development that has made Africa a site of recurring famine and unpayable debt. Although never wealthy, the Sudanese maintained the

ability to feed themselves for centuries, but when Sudan became independent in 1956, Britain encouraged the new government to grow cotton to supply British textile mills. Using the latest in agricultural technology, Sudan, with the help of the British, developed huge cotton-growing schemes on its most fertile land. Two things happened: (a) over time, the world market price of cotton fell, and (b) Sudan's supply of foreign currency plummeted. Since agricultural resources were tied up in cotton, basic food production kept declining steadily. With little foreign earnings, the country was forced to take out loans to import food from abroad. Meanwhile, the textile mills of Britain had a constant supply of cheap Sudanese cotton (Smith, 1991).

Ghana, a cocoa-producing country in Africa, is often held up by the World Bank as an example of a successful structural adjustment program. Ghana first adopted a structural adjustment program in 1983, and by the late 1980s, the World Bank and IMF pointed to the growth of Ghana's cocoa as the chief agricultural export cash crop under the economic recovery program. Cocoa was responsible for more than 70% of Ghana's export earnings. Unfortunately, the world market price of cocoa has been dropping steadily since the mid-1980s. As a result, Ghana's food self-sufficiency declined because most of the resources were used to produce cocoa instead of food products (Hammond and McGowan, 1994).

When the misguided cocoa program did not work out, the World Bank advocated (and the government also agreed to) an emphasis on large-scale commercial fishing. Local fishermen, who were unable to obtain credit and compete in the industry, were squeezed out. Cheap fish, the primary source of protein for Ghana's people, began to disappear from local markets when the rich fishermen directly exported fish abroad. Since Ghanians obtain 60% of their protein from fish and fish by-products, the decrease in fish consumption resulting from higher prices has contributed to increased rates of malnutrition in the country (Hammond and McGowan, 1994; Smith, 1991).

There is ample evidence that international development programs have also failed in many other African countries. Since 1980, Africa has received billions of dollars in aid for development programs. However, Africa today produces less food and has more hungry people. It is no coincidence that over the last decades, some of the largest recipients of U.S. and Former Soviet Union aid in Sub-Saharan Africa (particularly Sudan, Ethiopia, Mozambique, Somalia, and Angola) have been nations where war, famine, and hunger were the most common. At best, the aid programs of the past were not very effective; at worst, they have been part of the problem. Aid programs have often helped destroy people's ability to feed themselves and have introduced a harmful spirit of submissiveness and dependency (Gebremedhin, 1996).

Food Distribution and Market Control

The major constraints inherent to the market conditions in most developing countries are small market size, poor infrastructure for transport and storage of goods, a small

and weak private sector, and limited access to information. Food shortages become a severe problem in developing countries because lack of effective local production and market structure continue to be major obstacles, creating great confusion and disorder within the food marketing and distribution sectors. The distribution of food and agricultural products, however, is but a reflection of the control of the productive resources that produce food.

The common threat over the production and distribution of the most basic human need, food, is the worldwide tightening control of wealth and power. The marketing, processing, and production of agricultural products entering national and international trade are becoming increasingly integrated vertically and horizontally. The control of farm products such as sugar, wheat, meat, feed grains, cotton, dairy products, and fruits that are sold in large local cities or abroad is generally concentrated in the hands of relatively few financial groups. Once this integration is achieved, multinational corporations are able to effectively manipulate the supply and prices on a worldwide mechanism through well-established monopolistic and oligopolistic practices.

Government interventions that affect imports and exports add to price instability in world markets (Johnson, 1998). Holding large stocks of food products to play a stabilizing role for world price is one method employed as a controlling mechanism. The net result of this integration is to reinforce the structural dualism in agriculture and to accentuate the deeply embedded dependency relationships reflected in economic, financial, and political structures (Ndiaye, 1994; Barraclough, 1977).

National Debts

Unbearable debt burden is accumulating in a large number of developing countries around the world, and the miseries and hunger caused by this huge debt are difficult to accept. The declining terms of trade and the misguided structural adjustment programs and poor performing project loans have created this unmanageable debt burden which has built up in developing countries. IMF and the World Bank have pressured 30 governments in Sub-Sahara Africa into implementing structural adjustment programs in order to acquire loans for development. These impoverished countries are made to pay their debts by surrendering the bulk of their export earnings, leasing out valuable resources at throw-away prices to generate extra income, and sacrificing social and environmental considerations to earn enough to repay their debts.

Many countries in Sub-Sahara Africa owe more money today than they did 10 to 20 years ago. In fact, in 1992, Africa's external debt had reached \$290 billion, about 2.5 times greater than in 1980 (Danaher, 1994; Gebremedhin, 1996). In other words, an entire year's GDP for these countries likely could not pay off the total debt. As a result of the misguided government policies and failure of international organization-sponsored development programs, most of the poorest countries in Africa are now considered too risky for any kind of loan procurement. They have

reached the point where they cannot take additional loans because they cannot service their current debts. Consequently, many of the low-income countries continue to experience serious debt-related problems, particularly hunger and malnutrition (Danaher, 1994). Thus, poverty, misguided local government policies, and international development programs have a lot to do with the existing conditions and situations in Africa, and these poor countries will remain under a crushing load forever if a reasonable solution is not found immediately to alleviate poverty and ensure food security.

Corrupt Governance and Civil Strife

Frequent civil wars, tribal rivalries, border disputes, and armed conflicts in a number of countries, including Ethiopia, Eritrea, Somalia, Sudan, Liberia, Rwanda, the Congo, Sierra Leone, and Senegal, have exacted and continue to exact a heavy toll on the people of Africa and other regions. Misgovernment plus civil and ethnic wars have added to food insecurity and created widespread local, national, and regional instability. Rural populations are frequently forced to flee for their safety, leaving agricultural lands uncultivated and crops and livestock untended. Animal herds are raided, crops are burned, and productive assets are stolen. When such problems arise, farmers find themselves at an enormous disadvantage in making effective use of their natural and human resources. Conflicts disrupt traditional agricultural and pastoral practices, thus exacerbating the effects of weather fluctuations. In turn, it is becoming increasingly clear that poverty, food insecurity, and natural resource degradation contribute to the initiations or prolongation of instability or conflicts (Pinstrup-Andersen and Pandya-Lorch, 1994). Until policies are changed and peace prevails, there will be little improvement in food security in most African countries as well as Indonesia, the Middle East, and other areas.

Concluding Remarks

As noted earlier, the world has ample food and there is a growth trend in food production. Yet many poor countries and millions of impoverished people do not share in this abundance. There is widespread agreement that a leading cause of hunger and malnutrition is poverty. Although poverty alleviation and food security have long been recognized as among the most central challenges facing the human condition, today—in an era of unprecedented plenitude—there are probably more human beings suffering from chronic deprivation than ever before in history. One of the problems of poor countries is lack of purchasing power among the poorest segments of the population. Purchasing power is made up of a combination of income and the price of goods and services purchased. Since income distribution in poor countries is skewed toward the high end of the scale, it is difficult for the poor to purchase adequate food supplies.

In addition, there has been relatively little motivation on the part of agricultural establishments and international organizations to examine fully the complex nexus of social situations and economic conditions that underlie the real needs of developing countries. Since international organizations and agricultural establishments have a profound influence on the development of poor African countries, it seems more logical to seek a long-standing solution to the present ills of these countries than to focus on world food programs.

Economic development is more than economic growth. It entails meeting basic human needs—food, shelter, clothing, education, and health services. The alleviation of poverty and ensuring of food security should be the criteria to alleviate hunger and malnutrition. Long-range solutions to food shortages and economic development in low-income countries, therefore, will require profound social, political, and economic changes.

In spite of the formidable difficulties of achieving such changes by deliberate government policy, particularly in market-type economies, evidence is accumulating to show what can be achieved, even in less developed countries. However, long-range solutions to poverty are multifaceted, with appropriate strategies required for each country based on its unique situation and location-specific characteristics. Moreover, alleviation of world food insecurity must come through such specific measures as (a) better distribution of control over food-producing resources, (b) instituting people-oriented public policies, and (c) sustainable and broad-based development at the grass-roots level which is socially just, economically efficient, and ecologically sound (Society for International Development, 1988).

We live in a world characterized by hunger, poverty, and increasing disparities. It is a world of disturbing contrasts—with hunger in some lands and waste of food in others—and with the disparity between many of the rich and poor nations widening constantly. We also live in a world of interdependence. This global interdependence has inescapable political and economic dimensions because boosting agricultural production in developing countries can stimulate commercial trade for developed countries. Likewise, security and peace for developed countries also depend on peace and stability in the developing countries. This is one planet. What happens to the least of us, happens to the rest of us. It should therefore be acknowledged that poverty is no longer a problem contained within the borders of the developing world alone. The problem has substantial effects on domestic policies, international markets, and world peace.

It is also evident that the globalization of the world's economy and the deepening interdependence among nations can present challenges and opportunities for sustained economic growth and development, as well as risks and uncertainties for the future of the world economy. However, unless there are dramatic new and appropriate strategies for bringing about collaborations among all countries, rich and poor, on a much larger scale and through better approaches than have existed in the past, the global problems of food insecurity and resource degradation, particularly in poor countries, will be considerable and enduring.

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