

Towards the Summit commitments

Acting to combat hunger

Rehabilitating degraded lands

In most developing countries, hunger is concentrated in degraded and marginal areas. Concerted efforts to rehabilitate degraded lands and use appropriate technology have yielded remarkable gains in productivity and food security in a number of countries.

In China, the government has rehabilitated 5 million ha of low- and medium-yielding land since 1996. Soil fertility has been improved through better farming practices, expanded irrigation facilities and increased use of organic fertilizers. Crop yields in these areas increased by 2 200 kg per ha on average, spurring gains in both incomes and food security.

China has also expanded animal raising and fish farming in barren hills, grasslands, and coastal areas that are better suited to grazing and aquaculture than to intensive agriculture. Livestock and aquaculture production increased by almost 20 percent between 1996 and 1998, significantly improving the diversity of both diets and incomes.

In India, a watershed development project successfully brought nearly 1 000 ha of severely degraded land back into production, improving food security and sustainability in an area where 52 percent of all households lived below the poverty line.

Water availability was also enhanced considerably, allowing farmers to expand irrigated areas from 11 percent to 79 percent of the total cultivated land. Farmers were able to start growing high-yielding, high-value crops that require more reliable water supplies, such as wheat, groundnuts, soybeans and vegetables. Average crop yields increased more than ten-fold and farmers more than doubled the average number of crops grown on the available land, from 0.7 to 1.7 crops per year.

The higher productivity helped boost farmers' incomes by over 600 percent. Employment generated by the scheme helped landless members of the community increase their income from less than US\$40 to US\$360 per year – a nine-fold gain in a span of just seven years.

Increasing rice production

Rice was one of the first crops to benefit from Green Revolution technology. But productivity gains began to slow in the early 1990s, falling below the rate of population growth.

In partnership with other international, regional and national organizations and research institutes, the International Rice Commission has mobilized a campaign to reverse declining trends in productivity on a sustainable basis. Key elements of the campaign include:

- technical support for the development and use of hybrid rice outside China;
- rapid transfer of improved rice technologies to farmers in West Africa;
- Integrated Rice Crop Management for sustainable rice production.

Efforts to increase rice production have scored significant gains in West Africa, where rice is the staple food for most of the population (see graph).

The West African Rice Development Association (WARDA), has succeeded in crossing hardy African rice species with

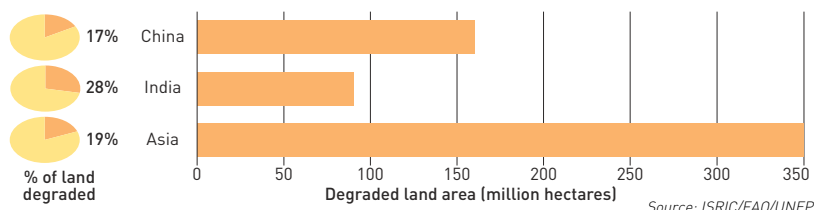
Meeting the challenge of land degradation

Land degradation threatens the sustainability of both agricultural production and food security in many developing countries. A recently completed study of human-induced soil degradation in Asia found that almost 20 percent of all land suffers from moderate to extreme degradation in the 17 countries that were covered. Agricultural productivity is greatly

reduced on moderately degraded land. Land where degradation is classified as strong or extreme has been largely and irreversibly destroyed and can no longer be reclaimed for farming.

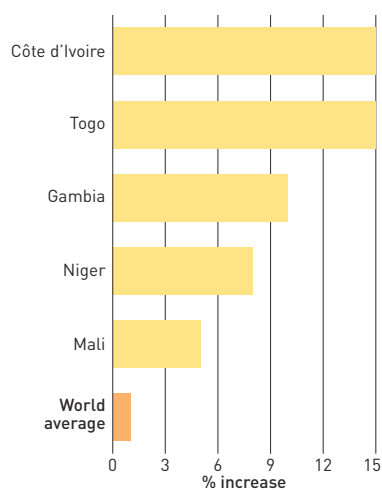
Combating land degradation, as China and India have done in the projects described here, could relieve the pressures that create vulnerability, reduce productivity and worsen poverty in marginal areas.

Extent and proportion of land classified as moderately to extremely degraded, 1997



Increasing rice yields

Annual average, 1994–2000



higher-yielding species imported from Asia. The offspring of this scientific breakthrough is New Rice for Africa (NERICA), varieties that can out-compete weeds, resist many African insect pests, and tolerate disease, drought and acid soils.

Research shows that NERICA can increase yields in the area's uplands and rainfed lowland areas significantly – by 25 percent with low inputs and by as much as 250 percent with a minimal increase in fertilizer use. UNDP has reported that adoption of NERICA could increase production in West Africa by 250 000–750 000 tonnes per year and save the region up to US\$187 million per year on its import bill.

Diversifying income

The Co-operative Dairy Development Programme in Bangladesh has demonstrated that a sound diversification programme can improve food security by creating income and employment-generating opportunities. The programme targeted small farmers and the landless with a package of technologies, training and infrastructure support to improve and expand milk production, collection, processing and distribution.

The cooperative started modestly with 4 300 very poor, landless households. It has now grown into a thriving enterprise, involving 40 000 farmers organized into 390 primary cooperatives. In addition to the cooperative members themselves, the programme has improved the livelihoods and nutritional status of an estimated 300 000 family members and nearly 2 000 people employed by the cooperatives, dairy plants and offices.

Regular earnings from milk have increased ten-fold in real terms to US\$0.65 a day, helping to lift household earnings well above the poverty line.

Extending micro-credit

Tunisia has combined micro-credit and social safety nets to help poor rural households, elderly and disabled people and other vulnerable groups. The National Fund for Solidarity and the Tunisian State Bank for Solidarity provide micro-credit to small producers, especially women. The government has also

guaranteed access to basic social services, increased the minimum wage in rural areas and maintained affordable prices for basic foodstuffs. Safety net programmes have improved the food security and nutritional status of more than 114 000 families.

Mexico has also improved access to credit in rural areas. The Programme of Direct Payments to the Countryside (PROCAMPO) was designed to help farmers during the country's 15-year, planned transition to free trade after the North American Free Trade Agreement of 1994. The programme covers an average of 14 million ha of farmland each year and reaches nearly 3 million producers. In the year 2000 alone, PROCAMPO provided payments of over US\$1 billion, with an average of US\$68 per hectare.

Forty-five percent of beneficiaries are small producers who had previously been unable to invest adequately to improve their productivity and income. Overall, every peso of PROCAMPO payments generated another two pesos of income.

Realizing the right to food

At the World Food Summit: *five years later*, 182 heads of state and government or their representatives reaffirmed that everyone has the right to have access

to safe and nutritious food. The final Summit declaration invited the FAO Council to establish an Intergovernmental Working Group, with the participation of stakeholders, charged with elaborating voluntary guidelines to support countries in their efforts to “achieve the progressive realization of the right to adequate food in the context of national food security”.

The World Food Summit in 1996 invigorated efforts to translate the right to food from a moral imperative into a clear and enforceable right under national and international law. At the national level, over 20 countries have included the right to food specifically in their constitutions. South Africa, for example, has incorporated the right to food into its Constitution as part of its Bill of Rights. All economic and social rights have been declared enforceable through the courts under South African law.

South Africa is one of several countries that organized national seminars during 2002, seeking ways to implement the right to food at the national level. Other seminars have been held or are planned in Brazil, Uganda, Mali, Nepal, Norway and Germany. A synthesis of the lessons learned from the seminars held during 2002 will provide the basis for other nations to launch similar efforts.

CFS reviews and spurs progress towards WFS goals

The Intergovernmental Committee on World Food Security (CFS) is the UN forum for monitoring progress towards the 1996 World Food Summit (WFS) goals and recommending actions that could help achieve them more rapidly. At its 28th Session, held at FAO headquarters in Rome from 6 to 9 June 2002, the CFS:

- noted that the decline in the number of hungry people has fallen far short of the pace needed to achieve the WFS target of reducing the number by half no later than 2015;
- encouraged countries to monitor progress more closely as part of the process being established to follow all of the Human Development Goals endorsed at the Millennium Summit in 2000;
- backed a twin-track strategy proposed jointly by FAO, IFAD and WFP for

reducing, and eventually eliminating, food insecurity and poverty. The strategy combines emergency action to give millions of hungry people access to food with longer-term measures to stimulate agriculture, rural development and sustainable livelihoods. The Committee cited supplying food assistance programmes from local production as an example of “maximum synergy” that can expand market opportunities, farm output and employment, while providing food to the hungry;

- prepared the ground for a call issued the following week by the World Food Summit: *five years later* for countries to establish voluntary guidelines for achieving “the progressive realization of the right to adequate food in the context of national food security”.

Towards the Summit commitments

Addressing the risk factors common to conflict and food insecurity

CONFLICT is one of the most common causes of food insecurity. The displacement of people and disruption of agricultural production and food distribution leave tens of millions of people at risk of hunger and famine. War and civil strife were cited as major causes in 15 of the 44 countries that suffered exceptional food emergencies during 2001 and the first quarter of 2002. Conversely, food insecurity may lead to or exacerbate conflict, particularly when compounded by other shocks and stresses. The interface between food insecurity and conflict has critical implications for food security and conflict prevention programmes alike.

Conflict as a cause of food insecurity

One of the most direct effects of conflict on food security is the displacement of people. In 2001, there were more than 12 million refugees, 25 million internally

displaced people (IDPs) and an unknown number of people trapped in combat zones. Most of these people need temporary food assistance until they can return to their homes and fields or find new livelihoods. More than 30 percent of the recipients of food aid from the World Food Programme in 2000 were refugees, IDPs and returnees.

Conflict is also a major cause of structural food insecurity. Armed conflict may prevent farmers from producing food and may cut off access to food by disrupting transport, trade and markets. According to FAO, conflict in sub-Saharan Africa resulted in losses of almost US\$52 billion in agricultural output between 1970 and 1997, a figure equivalent to 75 percent of all official development assistance received by the conflict-affected countries. Estimated losses in agricultural output for all developing countries averaged US\$4.3 billion per year – enough to have raised the food intake of 330 million

undernourished people to minimum required levels.

Conflict, often combined with drought, triggered six of the seven major African famines since 1980. Early warning and response usually prevent famine arising from drought and other natural disasters. But in war zones, lack of security and disruption of transport and social networks impede delivery of relief aid.

Risk factors underlying both food insecurity and conflict

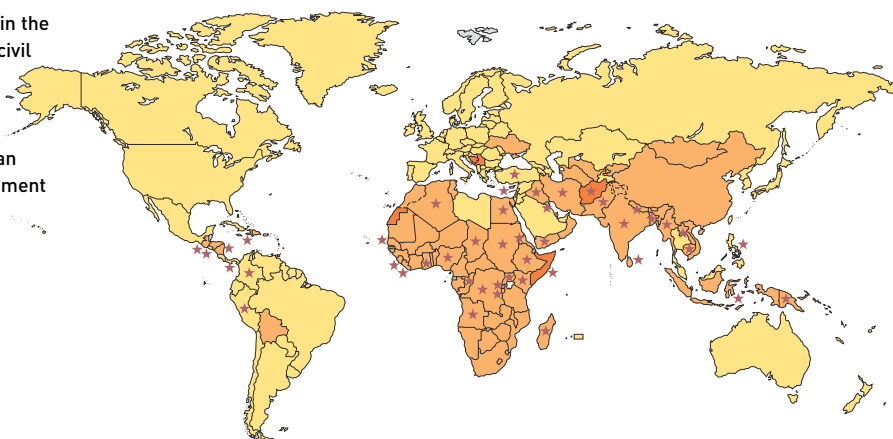
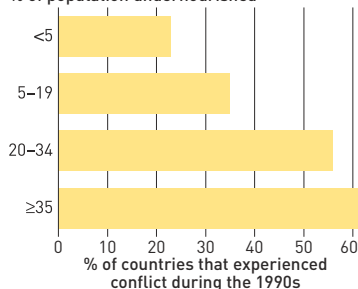
While the impact of conflict on food security can be identified and quantified with some degree of certainty, the way in which food insecurity contributes to conflict is more indirect. What can be documented is that food insecurity and conflict tend to be prevalent in the same locations (see graph) and that they are both consequences of a common set of risk factors (see chart).

Hunger and conflict often occur together

The vast majority of armed conflicts are domestic. Of the 118 conflicts worldwide in the 1990s, 100 were primarily or exclusively civil strife. More than 80 percent of these armed conflicts took place in countries in the bottom half of the UN Human Development Index in 1999. And more than half of the countries where undernourishment is most prevalent experienced conflict.

Undernourishment and conflict

% of population undernourished



- Countries ranked in the top half of the HDI
- Countries ranked in the bottom half of the HDI
- Not ranked in the HDI
- ★ Countries that experienced conflict between 1990 and 1999

Source: FAO

Some analysts have argued that underdevelopment and poverty, which are closely related to food insecurity, make countries more prone to conflict. As evidence, they point to the fact that more than 80 percent of wars and civil strife in recent years have taken place in countries ranked in the lower half of the United Nations Human Development Index (HDI) (see map).

Others contend that objective measures of social grievance, such as inequality, lack of democracy and ethnic and religious divisions have no systematic effect on conflict risk. One analysis of civil wars from 1965 to 1999 concludes that conflict risk is mainly correlated with the degree to which rebels believe they can fare well out of war.

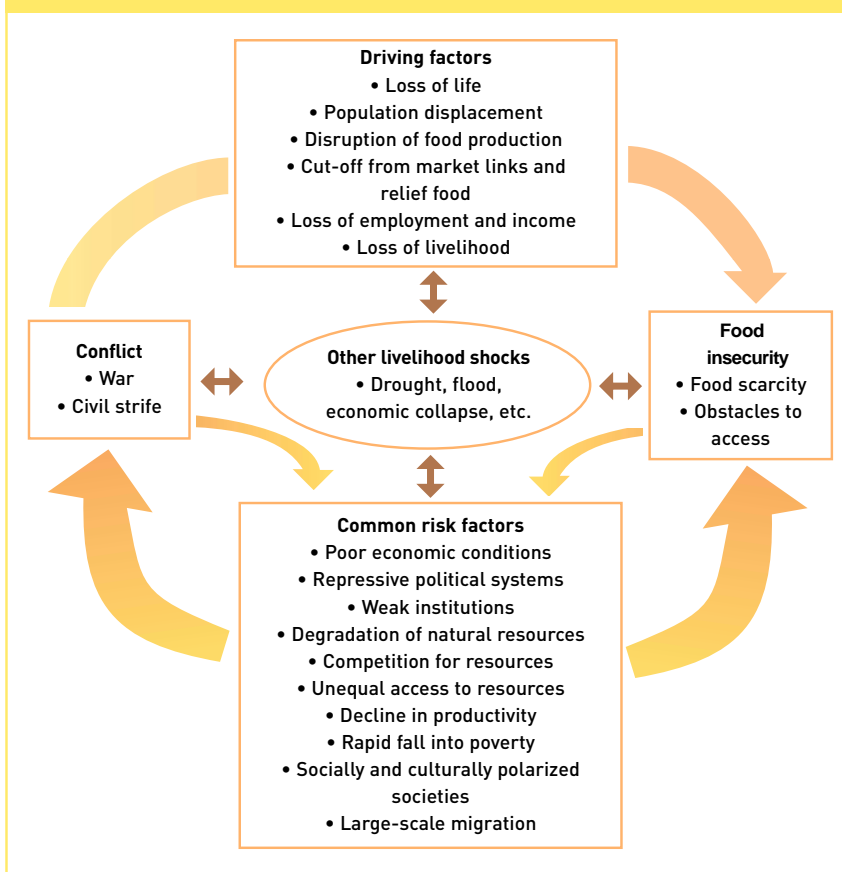
Still others emphasize the rapid loss of livelihood as a key common denominator in many recent internal wars. Disillusioned, frustrated young men, unable to reach a status in life that earlier generations had achieved, are easily and cheaply recruited by warlords.

Yet another important factor contributing to both food insecurity and conflict is environmental scarcity. Degradation or depletion of natural resources, unequal distribution and population pressure can trigger competition for scarce resources, in particular arable land and water. Increasing competition for resources may spur farmers to abandon sustainable methods and exploit marginal lands in a desperate effort to secure their incomes and feed their families. When this process leads to deepened poverty, large-scale migration, sharpened social cleavages and weakened institutions, the depleted environment and resulting food insecurity become fertile ground for conflict.

Common risks require coordinated action

Food insecurity and conflict feed upon a common set of risk factors, which they can also exacerbate. If war-related hunger is to be reduced, development aid is not to be consumed in conflict and food is not inadvertently to become a factor in fuelling conflict, a concerted effort is needed to make conflict prevention an integral part of food security

The interface between violent conflict and food insecurity



and agriculture policy and programming in conflict-prone areas.

Assessing and addressing the risk factors common to food insecurity and

conflict, as well as the livelihood dynamics in conflict-prone areas, can serve as a mechanism both for preventing conflict and reducing hunger.

Measures to address common risk factors

- Incorporating conflict prevention and mitigation into regional food security strategies and policies.
- Mainstreaming conflict prevention in food security and agricultural investment programmes in conflict-prone countries.
- Profiling vulnerable livelihood groups to identify disparities among them that might trigger conflict.
- Implementing programmes so as to minimize rivalry for aid resources and benefits and to foster cooperation among rival communities or groups.
- Protecting the natural resource base and promoting equitable access to resources through effective, sustainable institutions.
- Integrating conflict analysis and conflict indicators into traditional food security early warning systems.
- Monitoring crisis potential in resource-poor areas and, in particular: the state of key livelihood systems; the interests and concerns of the principal social or political groups; and the preparedness of communal, country-level or international organizations to prevent hunger and conflict and provide support services to resource-poor households.
- Assessing the impact of food and agricultural programmes on the various stakeholders in conflict contexts and on the development of the conflict itself.

Towards the Summit commitments

Confronting the causes of malnutrition: the hidden challenge of micronutrient deficiencies

OVER 2 BILLION PEOPLE worldwide suffer from micronutrient malnutrition, often called "hidden hunger". Their diets supply inadequate amounts of vitamins and minerals such as vitamin A, iron, iodine, zinc, folate, selenium and vitamin C. Deficiencies usually occur when the habitual diet lacks diversity and does not include sufficient quantities of the fruits, vegetables, dairy products, meat and fish that are the best sources of many micronutrients.

Micronutrients are essential for human growth and development as well as normal functioning. The three most common forms of micronutrient malnutrition are deficiencies of vitamin A, iodine and iron. In developing countries, deficiencies of micronutrients often are not present in isolation but exist in combination (see map).

Children and women are the most vulnerable to micronutrient deficiencies – children because of the critical importance of micronutrients for normal growth and development, women because of their higher need for iron, especially during child-bearing years and pregnancy.

Between 100 and 140 million children suffer from vitamin A deficiency. That figure includes more than 2 million children each year afflicted with severe visual problems, of whom an estimated 250 000 to 500 000 are permanently blinded.

Lack of vitamin A also impairs the immune system, greatly increasing the risk of illness and death from common childhood infections such as diarrhoea and measles (see graph).

The most devastating consequence of iodine deficiency is reduced mental capacity. Some 20 million people worldwide are mentally handicapped as a result of iodine deficiency, including 100 000 born each year with irreversible brain damage because their mothers lacked iodine prior to and during pregnancy.

Iron deficiency and the anaemia it causes are the most widespread of all forms of micronutrient malnutrition. Anaemia results in fatigue, dizziness and breathlessness following exertion.

Children with anaemia are less able to concentrate and have less energy for play and exploratory behaviours. In

adults, anaemia diminishes work capacity and productivity by as much as 10–15 percent (see graph, page 11). And for pregnant women, anaemia substantially increases the risk of death in childbirth, accounting for up to 20 percent of maternal deaths in Asia and Africa.

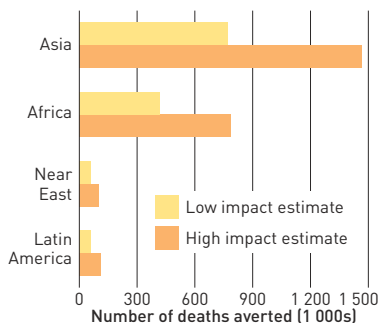
The three main strategies for reducing micronutrient deficiencies are dietary diversity and food fortification along with supplements.

Most micronutrient deficiencies could be eliminated by modifying diets to include a greater diversity of nutrient-rich foods. Promoting home gardens, community fish ponds, and livestock and poultry production can contribute to increasing dietary diversity, while improving food supplies and incomes at the same time (see box on dietary diversification).

Another important food-based strategy is food fortification. The most successful of these initiatives is fortification of salt with iodine (see box). Other micronutrients can also be supplied to populations by enriching widely consumed foods such as milk and flour. In addition,

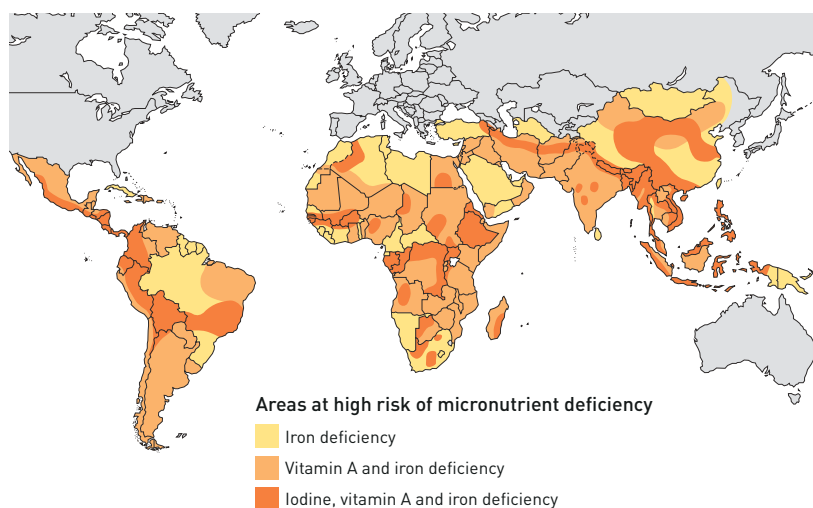
Vitamin A and mortality, 1992

A World Health Organization study concluded that improved vitamin A nutrition could prevent 1.3 to 2.5 million deaths each year among children aged six months to five years in the developing world.



Source: WHO

Prevalence of micronutrient deficiencies in developing countries



Source: USAID

2 “We will implement policies aimed at ... improving ... access by all, at all times to sufficient, nutritionally adequate and safe food ... ”

recent advances in crop breeding and biotechnology have heightened the prospects for “biofortification” – developing crops with higher concentrations of micronutrients (see box).

Supplementation involves treating and preventing micronutrient deficiencies by administering capsules, tablets, syrups

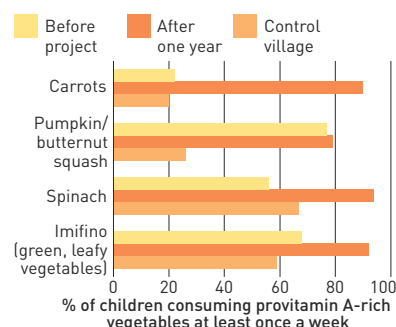
or other preparations. This medical approach is the method of choice when the deficiency is severe and life-threatening or when access to regular intake of the deficient micronutrient is limited. Use of high-dose vitamin A supplements can reduce mortality from acute measles by up to 50 percent.

Successful campaigns to eliminate micronutrient deficiencies often combine all of these strategies. Vitamin A intake, for example, can best be increased over the long term by adding nutrient-rich foods to the diet and fortifying staple foods, while providing supplements to high-risk groups in vulnerable areas.

Dietary diversification reduces vitamin A deficiency

A home gardening programme focusing on production and consumption of vegetables rich in vitamin A and its precursor, beta carotene, has been successfully

Home gardens boost consumption of micronutrient-rich food



Source: Faber et al.

demonstrated by the Medical Research Council of South Africa in a mountainous, rural village in KwaZulu-Natal.

Prior to the programme, the diet of children in the village consisted mainly of maize porridge, bread and rice. The lack of variety and vitamin-rich foods resulted in high incidence of vitamin A deficiency. The programme changed that by promoting cultivation of vegetables, such as carrots, pumpkins and spinach, that are rich in beta carotene and by teaching villagers, especially women, the importance of including them regularly in their diet.

After only one year, the percentage of children consuming vitamin-A rich vegetables had increased significantly. And the increased diversity in their diets led to measurable improvements in vitamin A status.

Iodine deficiency disorders

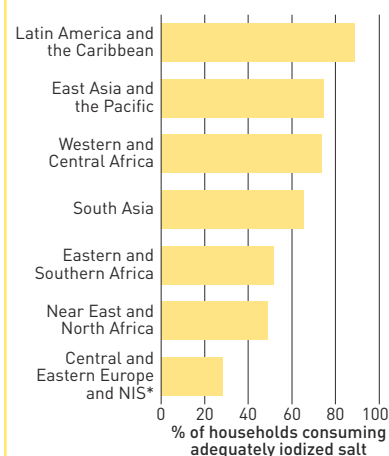
Iodine deficiency disorder (IDD) is particularly prevalent in the mountainous regions of the world.

The areas with the most severe deficiencies include the Himalayas, the Andes, the European Alps and the vast mountains of China. IDD is also common in frequently flooded lowlands. In both mountains and flooded areas, iodine that is naturally present in the soil is leached away, reducing the iodine content in locally grown crops.

Iodization of salt has virtually eliminated IDD in the mountainous regions of industrialized countries in Europe and North America. Three-quarters of the countries in the developing world have enacted legislation for iodizing salt, mostly over the past 15 years. More than two-thirds of households now get adequately iodized salt. But access varies considerably (see graph below).

Increasing access to iodized salt and improving quality control of its iodine content hold the key to eliminating iodine deficiency worldwide.

Access to iodized salt, 1995–98



NIS = newly independent states

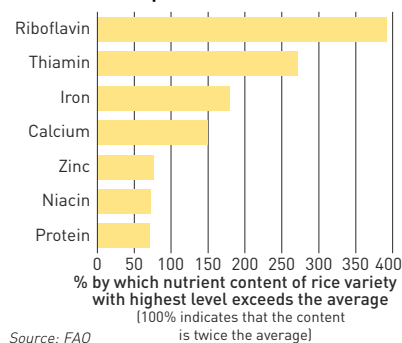
Source: FAO

Biofortification increases nutrient content of staple foods

Both conventional plant breeding techniques and genetic engineering can be used to develop varieties of staple food crops that are enriched with essential minerals.

“Golden rice” offered proof that biotechnology can produce both nutrients

Varietal differences suggest high biofortification potential for rice



Source: FAO

and controversy. Golden rice owes its colour and its name to beta carotene, introduced by transplanting genes from daffodils and bacteria. Critics have charged that the enriched rice will not provide enough beta carotene to satisfy vitamin A requirements. But supporters argue that it could provide 15 to 20 percent of daily requirements and significantly reduce the incidence and severity of vitamin A deficiency, particularly if consumed in conjunction with other nutrient-rich foods.

Conventional plant breeding also holds promise for enhancing the nutrient content of staple foods. Varieties of crops differ considerably in the quantities of nutrients that they contain (see graph). Advances in plant breeding techniques and biotechnology may make it possible to cross varieties that are relatively rich in micronutrients with high-yielding varieties preferred by farmers.

Towards the Summit commitments

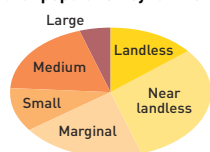
Land reform and secure land tenure: keys to food security and sustainable rural development

PROVIDING SECURE ACCESS to land for the rural poor represents one of the key factors in achieving food security and sustainable agricultural development.

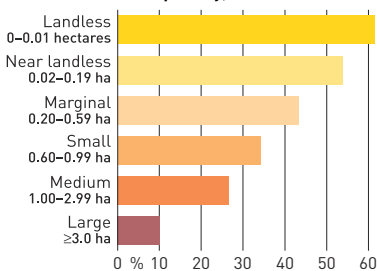
Poverty profile by landholding

More than 45 percent of the rural population of Bangladesh own less than one-quarter of a hectare of land. And more than half of these landless and near-landless farm families live in extreme poverty.

Share of rural population by farm size, 1988–89



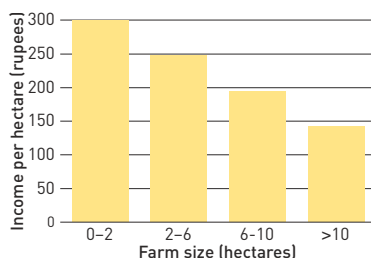
Headcount index of poverty, 1988–89



Source: Bangladesh Bureau of Statistics in IFAD, Rural Poverty Report 2001

Farm size and land productivity

A study in India (1971) confirmed that small farms produce around twice as much per hectare as large farms.



Source: Berry and Cline, cited in Netting

Nearly three-quarters of the world's poor and hungry live in rural areas in the developing world. Not surprisingly, severe poverty and hunger are concentrated among those who are landless or farm plots too small to provide for their needs.

More than 30 percent of the rural poor in Latin America and the Caribbean are landless. A study in Bangladesh found that more than half of all landless and near-landless rural households live in extreme poverty. By contrast, only 10 percent of farmers with more than 3 ha of land experienced extreme poverty (see graph). Numerous other studies have confirmed that reduction in or loss of access to land leads directly to reduced income and access to food.

For the poor and hungry in rural areas, access to land resources tends to be both inadequate and insecure. Many work as tenants or sharecroppers. Impoverished smallholders face the constant threat that they may be forced to sell their land and other assets to buy food.

Lack of secure rights to land perpetuates poverty and hunger. And vice versa. Food insecurity often drives poor farmers to make decisions that may jeopardize their ability to retain control of their land. Farmers who are struggling to feed their families are frequently forced to choose between short-term survival and longer-term economic and environmental sustainability – between buying food or fertilizer, for example, or between growing subsistence foods or potentially profitable commercial crops. Studies in Chile, Guatemala and Paraguay found that a boom in non-traditional export crops led to a significant loss of land by food-insecure smallholders, who were unable or unwilling to shift from subsistence production to cash crops.

Secure land tenure is also essential to sustainability. Without land that could be used as collateral, smallholders often cannot obtain the credit they need to maintain and improve their land. Nor can they be confident they would benefit from

their efforts, since they may lose rights to the land. Failure to invest in improved soil and water management results in land degradation and soil loss, threatening both the livelihoods of millions of people and future food security.

Land reform and reduction of poverty and hunger

Numerous studies confirm that improving access to land can have a major impact on reducing poverty and hunger. An exhaustive analysis in India found “a robust link between land reform and poverty reduction”. The study examined the history of land reform efforts initiated at the state level between 1948 and 1990 and compared rates of poverty reduction and overall economic growth between states that had instituted meaningful land reforms and those that had not. The study confirmed that land reform significantly reduced rural poverty and stimulated growth in agricultural wages. Both smallholders and the landless labourers who constitute a major fraction of the rural poor benefited.

Another study of data from 20 developing countries found that concentration of land ownership explained 69 percent of the variation in poverty levels.

Analysis of FAO data suggests that food security and land distribution are also related. Developing countries where land was more equally distributed in 1980 have made more rapid progress in reducing the prevalence of hunger over the past two decades (see graph, next page).

Land reform and higher productivity

Improving access to land and reducing the concentration of land ownership yield benefits that extend far beyond the farmers themselves. Small farms in poor areas are usually more productive and efficient than large estates (see graph). Smallholders typically put far more labour into their fields. They are far more likely to

plant more than one crop per year on their plots. And they rarely leave land lying idle, as is often the case on larger estates.

In Brazil, for example, less than 15 percent of the land on estates larger than 1 000 ha is planted in crops. A study in northeast Brazil found that output per hectare was 5.6 times higher on farms of 10–50 ha than on farms of more than 100 ha. In other countries, small farms have commonly been found to produce two to three times as much per hectare as large commercial estates.

Even poor people who remain landless benefit from more equal distribution of land. Small farms generally employ more people per hectare. And the income generated is more likely to be spent on local, non-farm products that provide employment for the landless and land poor.

The impact extends to the national level. A World Bank analysis of land distribution and GDP shows that countries with more equal distribution of land have achieved more rapid and sustained economic growth (see graph).

New directions and momentum

People who have rights to land are more able to enjoy a sustainable livelihood than those who have only partial rights of access. And those who have partial rights are, in general, better off than those who are landless. To promote rural development many countries are stressing the importance of improved access to land and increased tenure security.

Tenure reform has long been on the

Indigenous rights

Several countries in Latin America have undertaken major initiatives to recognize and protect the land rights of indigenous people. Particularly in lowlands, large areas have been recognized as inalienable territories that are collectively owned and, in some countries, self-governed by the indigenous population. Secure tenure for indigenous people has been recognized as an important precondition for effective conservation and sustainable management of tropical forests.

Bolivia and Colombia have pioneered formal agreements between environmental agencies and indigenous authorities to share responsibility for managing protected areas. In highland areas, indigenous landholdings are highly fragmented, making it more difficult to recognize collective ownership. But some titling projects have proved successful.

Keys to success included baseline studies that took indigenous tenure into account, backed up by land agencies with the political will and capacity to demarcate and title the land. Indigenous communities have also undertaken innovative initiatives for sustainable development by producing their own maps detailing customary land use, occupancy and knowledge of natural resource management.

Women’s rights

In much of the developing world, women produce most of the food consumed by their families and communities. Yet women rarely have secure tenure to the land they work. A study in India, Nepal and Thailand, for example, found that less than 10 percent of women farmers own land.

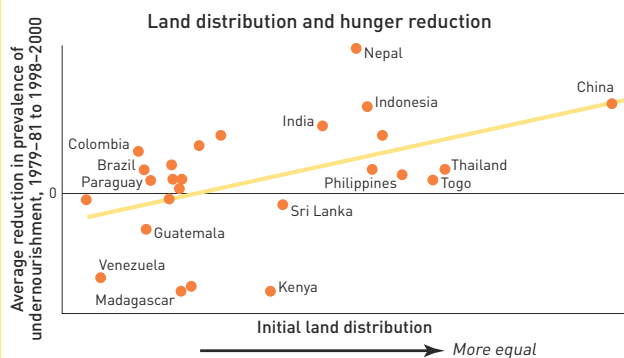
Although traditional land tenure systems rarely granted women outright ownership of land, they frequently protected their rights to work and manage enough land to provide for their families’ needs. In many cases, those rights are now being eroded by changing socio-economic conditions, land shortages and titling programmes that fail to recognize the value either of customary tenure practices or of women’s contributions to agriculture.

Improving access to land for women is essential to increase both food security and sustainable production. Without secure tenure, women lack both the collateral and the security to improve the land they work and to invest in new technology. Yet numerous studies confirm that women dedicate more of their land and labour to producing staple foods and more of their income to providing for their families.

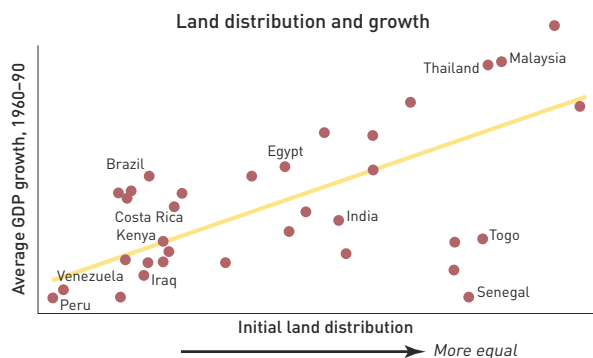
international agenda. Rather than a traditional top-down approach, however, modern reforms emphasize participatory, decentralized approaches that target

disadvantaged groups, particularly indigenous groups and women (see boxes) and facilitate land market transactions, including leasing.

Land distribution linked to progress in reducing hunger and to economic growth



Source: FAO



Source: World Bank

Towards the Summit commitments

Financing for development: the critical role of hunger reduction and agricultural development

THE SUMMIT-LEVEL CONFERENCE ON Financing for Development convened by the United Nations in March 2002 marked a new level of commitment to the goals set by the Millennium Declaration of September 2000. These Millennium Development Goals restated and consolidated the commitments made by the international community at a series of conferences and summits that took place in the 1990s. Reducing human misery and promoting social development are the heart of the commitments. And reducing both extreme poverty and hunger by half by the year 2015 constitutes an overarching goal.

The Conference on Financing for Development proposed concrete actions in a number of areas aimed at increasing the level of resources mobilized for development and poverty reduction.

The three Rome-based UN agencies concerned with food, agriculture and rural development presented compelling arguments for giving priority to reducing hunger and supporting agricultural and rural development. FAO, the World Food Programme and the International Fund for Agricultural Development documented the debilitating effects of hunger on both individual productivity and overall economic growth. They showed clearly that, unless hunger is dealt with effectively, prospects for achieving other goals, such as universal education, maternal health and environmental sustainability, will be severely compromised (see pages 10–11).

The Rome-based agencies also offered evidence that combating hunger and extreme poverty requires renewed and expanded commitment to agriculture and rural development. Overall, some 70 percent of the poor in developing countries live in rural areas and derive their livelihoods from agriculture directly or indirectly. This dependence on agriculture is greater in those countries where hunger is most prevalent (see

graph). Growth of the agricultural sector, therefore, is essential to reducing poverty and ensuring food security.

Investment in agriculture lags where hunger is most prevalent

An overview of the data on private investment, public expenditures and external assistance to agriculture in developing countries shows that the sector receives less investment and support in the very countries where hunger and poverty are widespread.

Most of the investment required to stimulate growth in the agricultural sector comes from private sources, mainly farmers themselves. A look at capital stock per agricultural worker in the primary agriculture of developing countries shows that it is extremely low and stagnant in countries where prevalence of undernourishment is high, as compared to those that have managed to reduce hunger (see graph).

And the investment gap is growing. Good performers in hunger reduction have had strong growth in capital stock in agriculture since 1975. In all other categories, investment has increased little, if at all. And in the group of countries where more than one-third of the people are undernourished, the value of capital stock in primary agriculture has declined in real terms over the past quarter century (see graph).

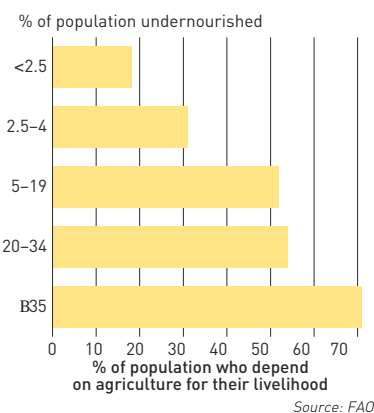
Public investment fails to reflect the importance of agriculture

Public investment in infrastructure, agricultural research, education and extension is essential in stimulating private investment, agricultural production and resource conservation.

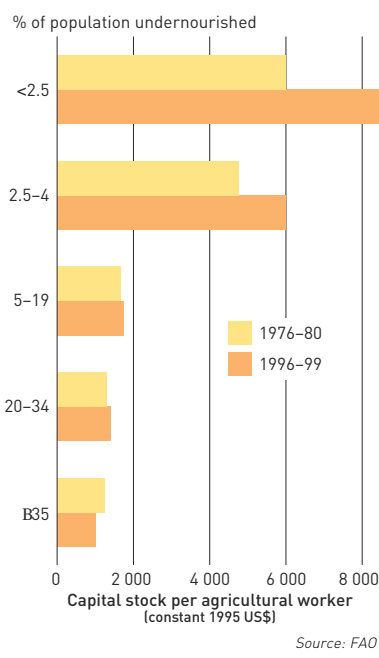
But actual public expenditures for agriculture and rural development in the developing world do not reflect the importance of the sector to the national economies and the livelihood of their

Dependence on agriculture

Undernourishment and dependence, 2000



Capital stock in agriculture



populations. In fact, government expenditures on agriculture come closest to matching the economic importance of the sector in those countries where hunger is least prevalent. For the group of countries where undernourishment is most widespread, the share of government spending devoted to agriculture falls far short of matching the sector's importance in the economy.

The trends are also discouraging. During most of the 1990s, the agricultural orientation index (calculated as the ratio of the share of agriculture in total public expenditures to the share of agriculture in GDP) increased in the countries with the lowest prevalence of undernourishment while decreasing in the countries where the prevalence was highest.

Development assistance does not target neediest countries

Development assistance is critical for very poor countries with limited ability to mobilize domestic private and public savings for investment. It is particularly critical for agriculture, which is largely bypassed by foreign private investors.

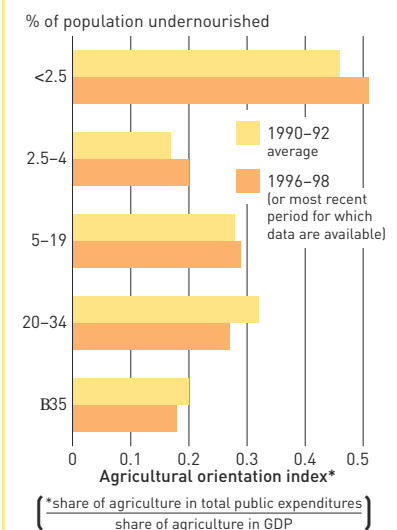
And yet official development assistance to agriculture declined by an alarming 48 percent between 1990 and 1999 in real terms.

It also appears that external assistance to agriculture (EAA) is not related to need. Data on EAA for 1997-99 indicate that countries where less than 5 percent of the population was undernourished received more than three times as much assistance per agricultural worker as countries where more than 35 percent of the population was undernourished. Moreover, although EAA per agricultural worker declined across all categories in the 1990s, the countries with the highest prevalence of undernourishment were the hardest hit. In those countries, EAA declined by 49 percent in real terms, leaving it at less than 40 percent of the level per agricultural worker in countries with the lowest prevalence of hunger.

The message is clear. Directing sufficient resources to agriculture and rural development will increase productivity, employment opportunities and access to food, particularly in the rural areas and countries where hunger is most common. Many of these countries are badly starved of investable resources.

International assistance to them, starting with a lasting solution of the debt problem, would be a tangible sign that the commitments to reach the World Food Summit goals are being honoured.

Expenditure for agriculture



Source: FAO

Bringing hunger reduction on track – what should it take?

To accelerate progress in reducing hunger and reach the goals of the World Food Summit (WFS), FAO has estimated that additional public investments of some US\$24 billion annually are needed in five priority areas. The investments would be focused on poor countries with large numbers of undernourished people.

Coupled with steps to create an enabling policy framework, the additional resources are expected to stimulate private investment and bring about substantial and sustainable reductions in hunger and poverty. The proposal estimates that the benefits of reaching the WFS goal would be at least US\$120 billion per year as a result of longer, healthier and more productive lives for several hundred million people.

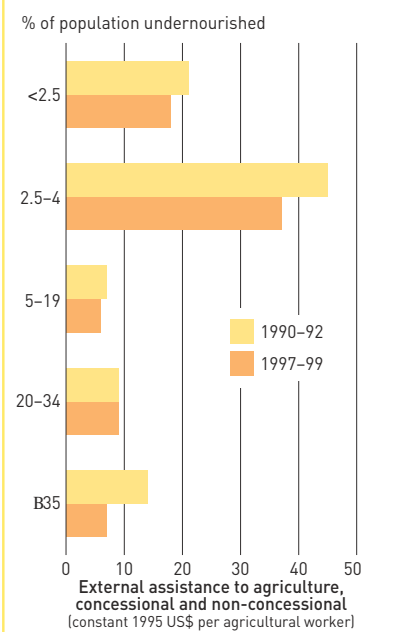
The proposed package aims at increasing productivity (including through providing food assistance to

people debilitated by hunger), enhancing knowledge and protecting and sustaining the resource base. Financing for the programme would be divided more or less equally between official development assistance and recipient country budgets.

The priority areas and estimated annual investments outlined in the proposal include:

- to raise farm productivity in poor rural communities – US\$2.3 billion per year;
- to promote sustainable use of natural resources – US\$7.4 billion per year;
- to cover investments in rural infrastructure and market access – US\$7.8 billion;
- to support agricultural research and extension and nutrition education – US\$1.1 billion;
- to improve direct access to food for the most needy – US\$5.2 billion.

External assistance



Source: FAO