Geo Factsheet

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GLOBAL HUNGER - AN UPDATE

Introduction

Hunger can take many forms. Rarely is it outright starvation, more commonly it is a case of specific calorie, protein or energy deficiency, or a mixture of these leading to widespread occurrence *(see Fig. 1)*. Often it may be manifest only in a seasonal form. In general, a diet which is lacking in one essential food item is likely to be lacking in another.

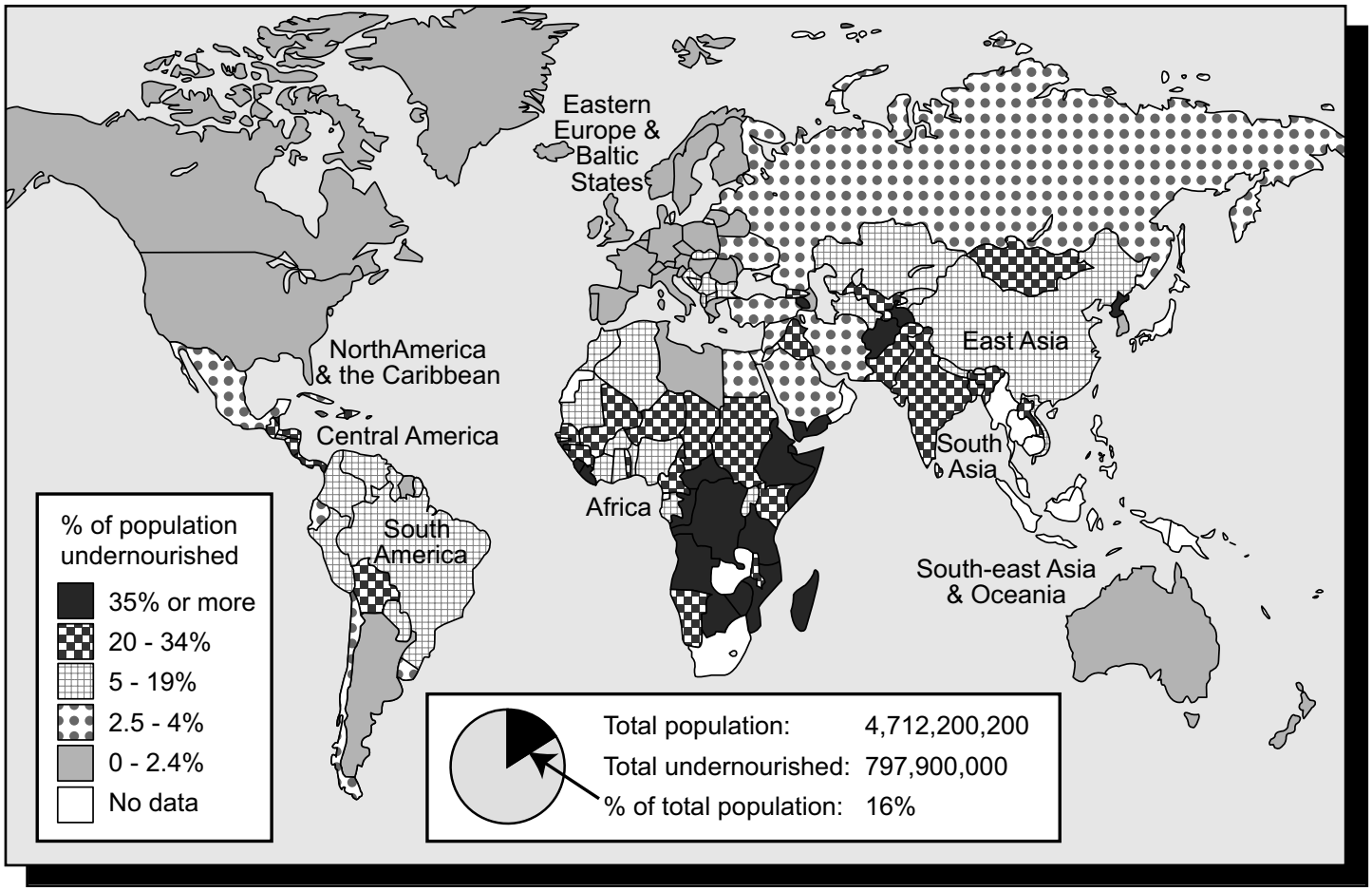
The effects of hunger are diverse and interrelated. On the one hand there is the lack of growth in an individual, higher mortality and morbidity rates, and on the other there are indirect effects such as the provision of health care services, reduced economic output and productivity, lower educational achievements and low incomes.

This Factsheet looks at variations in hunger at a global level, and examines contrasting case studies of Lebanon, West Africa, East Africa, North Korea and Myanmar (Burma).

Table 1 Types of global hunger and malnutrition.

	Definition
Starvation	limited/non existent intake of food
Deficiency diseases	lack of specific vitamins or minerals
Kwashiorkor	likely to be a lack of protein
Marasmus	lack of calories/energy
Obesity	too much energy/protein foods

Fig 1 The state of food insecurity in the World 2003.



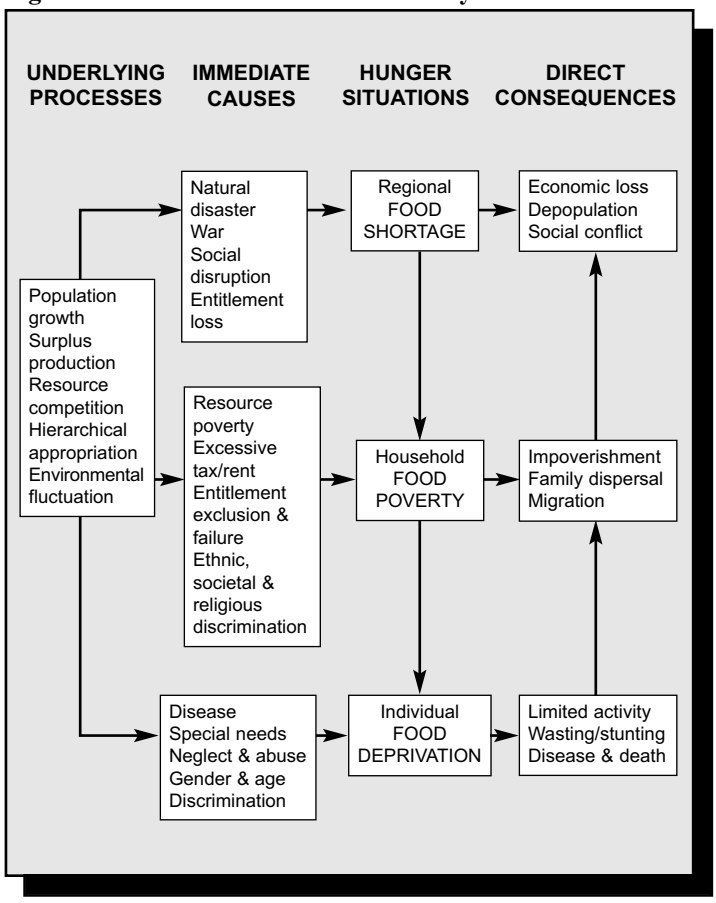
Approaches to the study of hunger

Much of the early literature on hunger, famine and hunger were reports on climate and its effect on food supplies, and on the problems of transport, storage and relief organisations. Such studies were often grouped under the umbrella term of **Food Availability Deficit (F.A.D.)**, which implied that food deficiencies were caused by local shortages due to physical factors.

More recently, the literature has been heavily influenced by political and economic factors. Sen (1981) observed that not all food shortages caused hunger, and increased hunger could be observed in areas where food production was, in fact, increasing. This has been seen in India, Ethiopia and Sudan. Food availability deficit could not therefore be seen as a complete explanation of the causes of malnutrition, nor did it link hunger with the distribution of resources and poverty. In the analysis of the population 'at risk' of malnutrition, it became clear that it was important to encompass the political and economic system in which food is produced, distributed and consumed. This included not just the physical factors which affected yield, but also people's access to food, and the conditions which cause that access to alter, i.e. **food entitlement deficit (FED)**. Sen's work has generally been accepted, although it is important to consider the physical factors, such as such as precipitation and environmental degradation, as a potential trigger of famines. *Fig. 2* summarises the causal content of human vulnerability to food insecurity and hunger

More recent studies have taken into account LEDC problems, North-South relations and environmental crises as having an important bearing on the issue. In addition the growing refugee problem has been identified as the 'new wave' of malnutrition. In certain cases, such as in Myanmar, Angola and Rwanda, the links between armed struggles and malnutrition is clear. In South Asia the high prevalence of childhood malnutrition is closely linked to the poor status of women.

Fig. 2 The causal context of vulnerability.



Global variations in hunger

Overall, there are over 800 million hungry people in developing countries. Of the total number of undernourished:

- 221.1 million live in India
- 203.5 million live in Sub-Saharan Africa
- 142.1 million live in China
- 519 million live in Asia and the Pacific
- 52.9 million live in Latin America and the Caribbean, and
- 33.1 million live in the Near East.

Up to ten million people die every year of hunger and hunger-related diseases. Only 8% are the victims of high-profile hazards such as earthquakes, floods, droughts and wars.

Three-quarters of all hungry people live in rural areas. Overwhelmingly dependent on agriculture for their food, these populations have limited alternative sources of income or employment and, as a result, are particularly vulnerable to crises.

The FAO calculates that of the LEDCs' 815 million hungry:

- half are farming families, surviving off marginal lands prone to natural disasters like drought or flood.
- one in five belong to landless families dependent on farming.
- about 10% live in communities whose livelihoods depend on herding, fishing or forest resources.
- the remaining 25% live in shanty towns on the periphery of the biggest cities in developing countries. The numbers of poor and hungry city dwellers are rising rapidly along with the world's total urban population.

Child hunger

Hunger still claims lives and scars the lives of those who survive it, especially young children. Malnutrition contributes to 53% of the 10.6 million deaths of children under five each year in LEDCs. This amounts to one child dying every five seconds. An estimated 167 million children under five years of age in the world are underweight. This means that one in five of all hungry people are children aged less than five.

All too often, child hunger is inherited: up to 17 million children are born underweight annually, the result of inadequate nutrition before and during pregnancy. Undernourished infants lose their curiosity, motivation and even the will to play. Millions leave school prematurely. Chronic hunger also delays or stops the physical and mental growth of children. According to the FAO, every year that hunger continues at present levels costs five million children their lives.

In adult life, child hunger gnaws away at the productivity of entire countries' workforces. Economists estimate hunger is responsible for reducing the GNP of some developing countries by 2-4%.

Women

Women are the world's primary food producers, yet cultural traditions and social structures often mean women are much more affected by hunger and poverty than men. Seven out of 10 of the world's hungry are women and girls.

While around 25% of men in developing countries suffer from anaemia caused by an iron deficiency, 45% of women are affected. Lack of iron means 300 women die during childbirth every day. As a result, women, in particular, expectant and nursing mothers, often need special or increased intake of food.

Maternal stunting and underweight are also among the most prevalent causes of giving birth to a low birth-weight child.

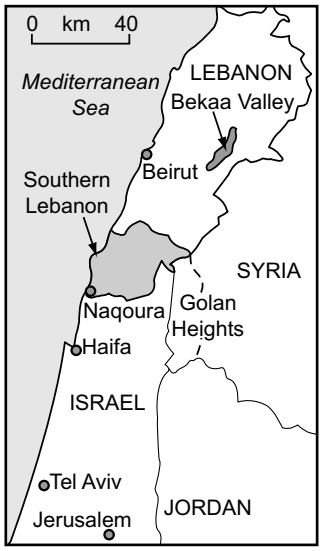
Case study 1: Hunger in the Lebanon

Lebanon was subject to sustained, heavy shelling and air strikes since 12 July 2006, especially around southern Lebanon, southern suburbs of Beirut and the Beqaa Valley (Fig. 3). A humanitarian crisis escalated rapidly as people were cut off and deprived of their normal means of subsistence, with the widespread destruction of infrastructure, including residential areas, hospitals, schools, road network, water supplies, fuel storage, and food storage sites. Air strikes led to a halt in trade and movement of goods, and rocketing prices as a result, making it impossible to secure essential supplies such as medicine and food.

In response to the crisis, the UN launched an appeal requesting close to US$ 150 million to provide shelter, food, water, sanitation and medicine to the 800,000 people worst affected by the conflict over the next three months. The WFP approved a preparedness Emergency Operation to allow for an initial team to be deployed to Beirut to assess the emergency food needs and logistics requirements. The initial assessment estimated 260,000 people in Lebanon, and another 50,000 Lebanese refugees in Syria, to be in need of food aid support for three months.

The regional Emergency Operation aimed to provide 10,605 tons of food to 260,000 people displaced within Lebanon, and 50,000 Lebanese seeking refuge in Syria. Due to the deteriorating situation, the WFP planned to expand the Emergency Operation to reach 500,000 internally displaced persons in Lebanon.

Fig. 3 The Lebanon



Case study 2: West Africa

Mali

In 2004 drought scorched the southern edge of the Sahara desert before locusts burst out of the oases around Kidal in Mali, settling on cereal crops there and nearby in Niger (Fig. 4). As a result of a meagre harvest, the cost of millet rose by 30%, sorghum by 50% and maize 60%. As a result up to 4m in the two countries risked starvation.

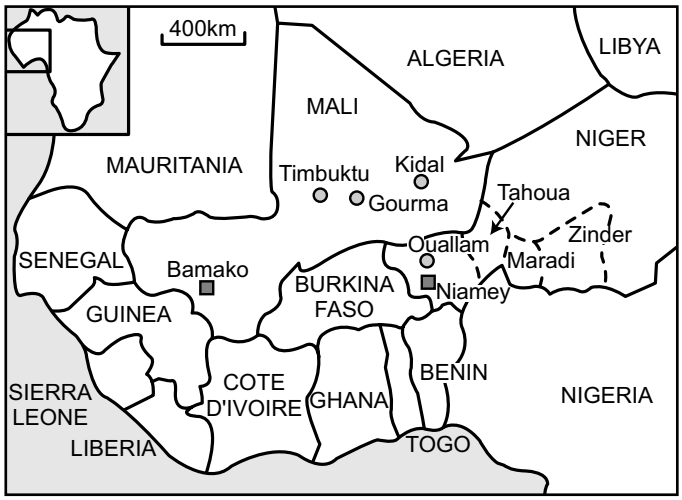
The damage locusts did to the scrub grasses was devastating. Hundreds of herdsmen and tens of thousands of cattle died. Survivors in Mali, whose population is 11m, gathered in unusually large numbers in the Gourma region, east of Timbuktu, raising tensions there and overgrazing the land. Mali's 1.7m nomads, already among the poorest in the world, were particularly hard hit. They used to trade a goat for a sack of millet, which now costs four goats.

Mali's is one of the poorest countries in the world and getting poorer. Mali is still paying interest on its debts. Mali is landlocked and is badly affected by the high price of oil and the low price of cotton, its main export. Transport costs have risen by 15%; civil war in Côte d'Ivoire has further raised costs since it has blocked off the route to Abidjan, the usual port for Malian trade. Road and rail links west to Dakar, in Senegal, are poor, so Mali's lorry drivers face a round trip of 2,000km or more through Benin or Togo to get any goods on to the world market.

Niger

The severe food shortages in Niger eased slightly after the first distributions of food aid by international agencies. However, aid action only intensified after the country's plight was brought to international attention in mid-July. Nevertheless, thousands of households continued to starve in the provinces of Maradi, Zinder and Tahoua (Fig. 5). Statistics released by Médecins Sans Frontières, the main NGO in the area, showed that 15 children were dying every week in Maradi. There were also geographical difficulties in getting food to the worst affected areas remain. Niger is a landlocked country, and most food aid has to be imported by bad road hundreds of kilometres from the ports of neighbouring Benin, Togo and Nigeria. And then only a few big cities and towns in Niger itself are connected by paved roads; 85% of the people live in remote rural areas.

Fig. 4 Hunger in West Africa



Even where there was food, it was often too expensive. Though food was imported to compensate for the damage to the harvest, caused by drought and the invasion of locusts, prices rose because of hoarding. Many nomadic herdsmen and subsistence farmers lost their animals, and thus the ability to sell their assets to buy food (Sen's entitlement theory), let alone survive another period of possible drought. Others became too weak to till their plots, reducing their chances of surviving.

Food shortages affected other areas in the region. According to Oxfam, 2.2m people have suffered food shortages in Mali, 700,000 in Mauritania and about 500,000 in Burkina Faso. But the problem was contained. This may reflect the fact that other governments in the region were quicker to alert international donors to the impending food shortages after the harvest failure than Niger's.

Niger's government was accused of trying to cover up the extent of the food shortages in order to save face. It was reportedly slow top distribute free food, and did little to encourage the substitution of failing local crops such as millet, sorghum and beans with other easily accessible crops such as potatoes and yams. These are the longer-term problems that the government needs to address.

Case study 3: The Horn of Africa

More than 20 million people (in the Horn of Africa) are at risk of famine. Millions of people in Kenya, Somalia, Eritrea, Ethiopia and the Tanzania (Fig. 5) are at risk because of current drought. The drought is particularly acute in the badlands of northern Kenya, south-eastern Ethiopia, and southern Somalia, with some 6m at risk of starvation.

In early 2006 the UN and the Kenyan government made a joint appeal for food aid worth more than £126m to fight starvation in the country's arid north-east region, where the worst drought in 22 years decimated livestock. Nomadic herders who depended on cattle and camels for their livelihoods were brought to the brink of disaster by the failure of five successive rainy seasons. In the worst-affected districts, one- third of people were receiving food aid. The areas hit hardest were in northern, north-eastern and eastern Kenya. Malnutrition levels among the under-fives were as high as 30%, double the level required to declare an emergency. The crisis has hit despite a surplus harvest in western Kenya. Those in stricken areas cannot afford to buy food from other regions, where farmers are more likely to export their food to neighbouring countries.

In Somalia the worst drought in more than a decade has left 2.1 million people in urgent need of food aid. Somalia has been without an effective government since the dictator was overthrown in 1991. As rival clan warlords fought to fill the vacuum the following year, hundreds of thousands of people died in a famine brought on by the fighting. Since then, years of conflict have seen the country sink to the bottom of the development tables. Even before the current drought, child mortality and malnutrition rates were among the highest in the world.

Humanitarian action has kept the starving alive, but it has not enabled them to recover their lives. The trend is an ever increasing need for food aid plus ever less money from donors to pay for it. WFP says that the number of Ethiopians on its books has doubled since the 1990s, in bad years to as many as 10m. Some 1.7m hungry people are reliant on food aid in south Somalia - when the WFP can get it to them. And 3m people in Kenya, mostly in the country's arid north received aid in 2006.

There are many interrelated causes of hunger. One is population growth. The Horn's uncontrolled population growth appears explosive. The borderlands have among the highest fertility rates in the world, particularly so among the Somalis. Women in these areas are likely to have six or seven children, against three in the cities. Over half the population is aged 15 or under. There has been little progress in family planning. In remote areas there is no provision for birth control at all. A recent study by the Ethiopian government, which is making tentative steps to reduce population growth, found that only 3% of Somali women in Ethiopia had access to contraception, compared with 45% of women in Addis Ababa.

The Horn is among the most degraded ecosystems in the world, with only 5% of its original habitat remaining. According to Conservation International, an NGO, the main culprits in the borderlands are overgrazing and cutting down trees for fuel and charcoal.

Conflict (increasingly armed) is another problem. Much of the region is a no-go area. Hardly a day goes by without a cattle raid, a retaliatory attack or a shoot-out over access to a watering hole or the distribution of food aid.

The 2005 drought heightened tensions. Some tribes in the borderlands bought guns and ammunition in preparation for battles they expect, when the cattle will be strong enough, after the rains, to be marched off by raiders into enemy territory.

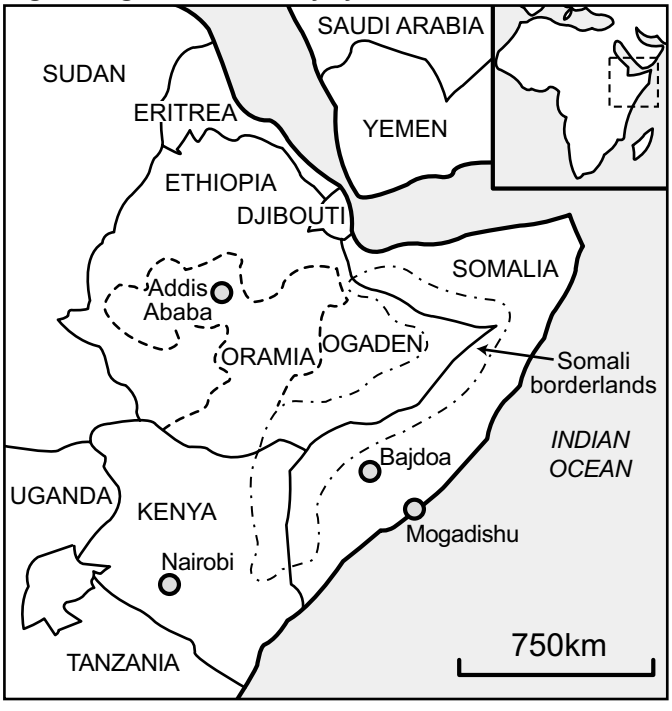
Some experts believe that without outside intervention whole stretches of the Horn will come to look as wretched as Darfur in Sudan, with its people fighting over water, grazing, firewood and other scarce natural resources.

There are a range of environmental problems. There are too many cattle for the capacity of the land but too few to sustain the community. Drought is another problem. The Horn appears to be drying up. This may or may not be a result of climate change, but experts give warning that if the predicted increase of just 1-2ºC in temperatures does come about the borderlands will become unsustainable. Rainfall is even less predictable. The drought cycle has shrunk from once every eight years to once every three years, according to the US Famine Early Warning System. That means no recovery time for the cattle, for the land, for the people.

Moreover, the short-term solution, food aid, is not without problems. One aidworker described it like 'crack' - addictive and creating an unhealthy dependency. Rough estimates of famine victims in the next few years range upwards from 10m.

The risk of whole areas of the Horn collapsing with famine and irreversible environmental damage, urged on by jihadist (Islamic fundamentalism) and tribal clashes, is clear cause for alarm. One obvious step is to deter the cattle raiders by improving security in the arid borderlands.

Fig 5 Hunger in the Horn of Africa.



Exam Hint: *These case studies are all very recent. Always read a newspaper or look out for articles in periodicals so you can have a good global knowledge of recent events.*

Case study 4: Myanmar (Burma)

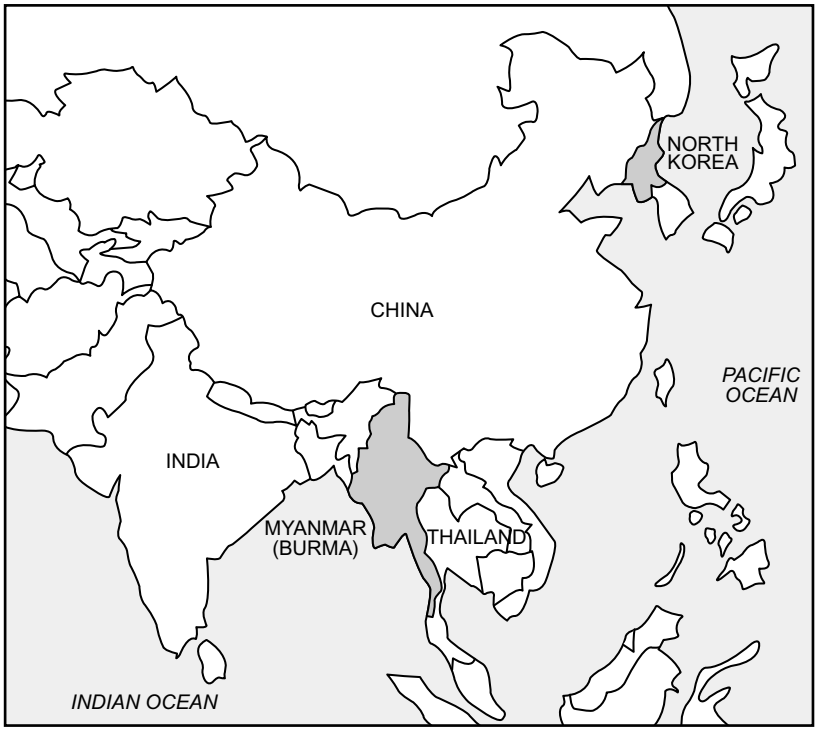
One third of Burmese children are chronically malnourished or physically stunted and the military junta is largely responsible for an escalating humanitarian crisis, the head of the UN's food agency has claimed. In some border areas, home to repressed ethnic minorities, malnutrition rates exceed 60%.

Many of the problems stemmed from the tight control the military regime exerts over the people. Agricultural and marketing policies, and restrictions on the movement of people, make it very difficult for many of those at risk merely to subsist.

The lack of political will to feed the population is also demonstrated by the government's enthusiasm for exporting food such as rice and seafood to China, India and Thailand (Fig. 6). The UN called for a radical overhaul of food supply policies.

Burma's severe and wide-ranging hunger issues cannot be solved without fundamental changes that promote the wellbeing of the population, which is the preserve of the government. There is also a health spending crisis. Burma spends less on health than any other country. In 1990 the figure was about 1% of GDP. It is now about 0.3%. That contrasts with about 50% being spent on the military.

Fig. 6 The location of Myanmar and North Korea.



Case Study 5: North Korea

Fears of a fresh humanitarian crisis in North Korea were heightened by reports that flooding in August 2006 may have killed thousands of people (Fig. 6). As many as 10,000 people may be dead or missing and 1.5 million were forced to leave their homes after typhoon rains lashed the country on July 10. The North Korean government, however, claimed that only 141 people were killed and 112 were missing. Isolated diplomatically by its recent missile test launches, it has refused international offers of assistance.

North Korea is a fiercely independent and militarist state, and has been reluctant to reveal signs of weakness to the outside world or its own people. But without help, North Korea may struggle to cope with the flood damage, which the government says has affected 26,000 hectares (65,000 acres) of land, ruining 100,000 tonnes of crops. Other organisations' estimates of the economic damage are four times higher. Many observers fear a repeat of the famines of the 1990s, which were caused by flood damage to crops and worsened by North Korea's reluctance to accept international support and monitoring.

Conclusion

Hunger is a widespread and complex phenomenon. Its causes are a mixture of social, political, economic, and environmental factors which vary spatially and temporally. As such it is a geographic feature which needs to be investigated in a way which takes into account the unique features of each case as well as the more general forces which generate nutritional distress. Geographers have an important role to play in explaining the nature and distribution of malnutrition. Without an understanding of its causes there is little hope of remedy.

Exam Question

With reference to a range of case studies (i.e. 3+) assess the role of physical or socio-economic and political factors in causing hunger (define).

Answer Guidelines

Read through the case studies and list the key factors using a pre-prepared matrix.

Further reading

Sen, A 1981 Poverty and famine, Oxford

Useful Websites

- www.wfp.org/english/ for the World Food Programme's homepage
- www.wfp.org/country_brief/indexcountry.asp?country=104 for WFP's Myanmar project
- HungerWeb www.brown.edu/Departments/World_Hunger_Program
- The State of Food Insecurity in the World 2003, Food and Agriculture Organization (FAO) www.fao.org

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This Factsheet was researched by Garrett Nagle, a well-known author.

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