

Policy

What Bread for the World can do to end hunger?

Food security as a goal of poverty reduction and humanitarian aid

Imprint

Editor

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Preface

For six decades, Bread for the World and Diakonie Katastrophenhilfe have been working to end hunger, poverty and injustice in the world. We have achieved some notable successes, but much remains to be done. One person in nine is still hungry, millions live in poverty, countless men, women and children are being persecuted, humiliated or excluded, and wars, conflicts, climate change and unjust economic structures are worsening hunger and need. As Christians, we believe that the abundant gifts of God's creation, fairly distributed and equally accessible worldwide, allow us all a life in dignity and fulfilment. There really is enough for everyone.

We cannot accept a situation in which 815 million people went hungry in 2016 and almost 850 million people still lack access to clean water. That is a scandal in a world in which wealth is increasing. In order to reach the international community's goal of ending poverty, hunger and malnutrition by 2030 and achieve food security for everyone, development is essential, not only in the societies in the Global South but also in our own. The fact is that our own lifestyle and economic system are bound up with living conditions in other parts of the world.

In this policy paper, *What Bread for the World can do to end hunger – Food security as a goal of poverty reduction and humanitarian aid*, Bread for the World and Diakonie Katastrophenhilfe map out the broad outlines of a coherent and focused food security policy. The paper identifies the global challenges in ending hunger and achieving food security, defines core principles for Bread for the World and Diakonie Katastrophenhilfe, and sets out key strategies, methods and areas of action for our agencies' engagement on food security, food sovereignty and the right to food. Working with its partner organisations, Bread for the World aims to contribute to food sovereignty by engaging in advocacy and lobbying for self-sustaining, low-carbon agroecological farming, sustainable artisanal fishing and the realisation of the right to food. Diakonie Katastrophenhilfe, for its part, will respond to food insecurity in crises by supporting rapid, needs-based emergency relief, reconstruction assistance and disaster risk reduction and strengthening communities' resilience in accord-

ance with its own and international standards and codes of conduct for humanitarian aid.

This food security policy for Bread for the World and Diakonie Katastrophenhilfe links in with other statements made by the Church on this issue. This paper provides a long-term basis for more detailed positions and strategies, statements and guidelines on food security. In some cases, these documents already exist. In accordance with the strategic objectives of Bread for the World and Diakonie Katastrophenhilfe, this inter-agency food security policy takes account of the international community's Sustainable Development Goals (SDGs). In its strategic priorities and areas of action, it focuses especially on SDG 2: "End hunger, achieve food security and improved nutrition and promote sustainable agriculture".

We hope that this policy paper will provide support and guidance for our own and our partner organisations' staff in their engagement for more justice and an end to hunger and need.

Cornelia Füllkrug-Weitzel

President, Bread for the World and
Diakonie Katastrophenhilfe

1. Background

The purpose of this paper is to map out the broad outlines of a coherent and focused food security policy for Bread for the World, Diakonie Katastrophenhilfe and their staff. The paper identifies the global challenges in ending hunger and achieving food security, defines core principles for Bread for the World and Diakonie Katastrophenhilfe, and sets out key strategies, methods and areas of action for our agencies' engagement on food security, food sovereignty and the right to food, so that these challenges can be addressed. With this food security policy, Bread for the World aims to support national, European and global efforts to achieve food sovereignty by engaging in advocacy and lobbying for self-sustaining, low-carbon agroecological farming, sustainable artisanal fishing and the realisation of the right to food. Diakonie Katastrophenhilfe, for its part, will respond to food insecurity in crises by supporting rapid, needs-based emergency relief, reconstruction assistance and disaster risk reduction and strengthening communities' resilience in accordance with its own and international standards and codes of conduct for humanitarian aid.

In accordance with Bread for the World's Strategic Plan for 2016-2020, this inter-agency policy takes into account the international community's Sustainable Development Goals (SDGs). In its strategic priorities and areas of action, it focuses especially on SDG 2: "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" (see Box: Sustainable Development Goal 2). The policy is also intended to provide funding guidance, as food security is one of six focal areas of project and programme support.

The policy paper links in and has consistent and coherent overlaps with the Church's other statements and studies or with other sectoral themes of relevance to food security that are being addressed by Bread for the World and Diakonie Katastrophenhilfe. Examples are the studies by the EKD's (Evangelical Church in Germany) Advisory Commission on Sustainable Development: *Give Us This Day Our Daily Bread: Setting a New Direction for Agricultural Development and Global Food Security* (2015), *The earth is the Lord's and all that is in it – Biopatents and food security from a Christian perspective* (2012), and

Food Security and Sustainable Development (2000). Other Commission documents are also relevant: *Leitlinien für eine multifunktionale und nachhaltige Landwirtschaft. Zur Reform der Gemeinsamen Agrarpolitik (GAP) der Europäischen Union* [Guidelines for multifunctional and sustainable agriculture: the reform of the European Union's Common Agricultural Policy] (2011), the Declaration of the 11th Synod of the Evangelical Church in Germany "There is enough for everyone" – *World Food Security and Sustainable Agriculture* (2013) and the joint text by the EKD and the German Bishops' Conference *Neuorientierung für eine nachhaltige Landwirtschaft. Ein Diskussionsbeitrag zur Lage der Landwirtschaft* [New Guidelines for Sustainable Agriculture: A contribution to the farming debate] (2003). Various experts from Bread for the World have collaborated on all these texts. Sector papers by Bread for the World – Protestant Development Service and its predecessor organisations are other key building blocks for this policy paper: *Wer ernährt die Welt? Bäuerliche Landwirtschaft hat Zukunft* [Who feeds the world? Small-scale farming has a future] (EED 2008), *Fünzig Jahre Brot für die Welt. Standortbestimmung und Selbstverständnis eines kirchlichen Entwicklungswerks* [Bread for the World at 50: Status and self-perception of a church development agency] (Brot für die Welt 2008), *Humanitäre Hilfe weltweit. 50 Jahre Diakonie Katastrophenhilfe* [Humanitarian aid worldwide: Diakonie Katastrophenhilfe at 50] (DWEKD 2004) and *Nachhaltige Landwirtschaft. Orientierungsrahmen für eine sozial- und umweltverträgliche Landwirtschaft aus Sicht der kirchlichen Entwicklungszusammenarbeit* [Sustainable agriculture: Guidelines for equitable and sustainable farming from a church development perspective] (Brot für die Welt 1997). This policy paper provides a long-term basis for more detailed positions and strategies, statements and guidelines on food security. These documents already exist for some issue areas, such as green genetic engineering, EU agricultural policy and bioenergy.¹

¹ In order to keep within the scope of this paper, it does not include an in-depth discussion of all aspects of food security (e.g. farm trade policy or the influence of German agricultural development on international agricultural policy). For a detailed discussion of these issues, please refer to the studies, statements and sector papers mentioned above.

Sustainable Development Goal 2: “End hunger, achieve food security and improved nutrition and promote sustainable agriculture”

2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

2.A Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries

2.B Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

2.C Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

2. Ending Hunger, Achieving Food Security: The Challenges

2.1 The world food situation and the scale of hunger

Food security, food sovereignty and the right to food: definitions

Food security, as defined by the Food and Agriculture Organization of the United Nations (FAO), exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs for an active and healthy life. Based on this definition, the FAO identifies four pillars of food security: (1) availability, (2) access, (3) utilisation, and (4) stability of agricultural and food systems.

Food sovereignty is a political concept developed by social movements, with our partner organisation La Via Campesina leading the way in 1996. Food sovereignty goes further than food security and includes the right of farmers and peasants to decide what to grow and how to grow it and the right of consumers to decide what to eat. The concept of food sovereignty directly challenges the neoliberal model of agricultural development, including the liberalisation of agricultural markets, the privatisation of rural services, and the appropriation and concentration of productive resources such as land, seed, water, natural assets and fisheries in the hands of a small number of individuals or enterprises. Instead, it offers a vision of small-scale, multifunctional and sustainable agriculture and artisanal fishing. The concept of food sovereignty is relevant to every country (see also Section 4.2).

The right to food encompasses the legal dimension of availability and access to sufficient food, defining the state's obligations and enabling legal steps to be taken and civil society pressure to be exerted through political campaigns. The right to food was enshrined in the Universal Declaration of Human Rights in 1948 and was elaborated in the International Covenant on Economic, Social and Cultural Rights (ICESCR) in 1966. In 2004, the FAO adopted the Voluntary Guidelines on the Right to Food, which is a tool for the enforcement of the right to food. More detailed Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security were adopted in 2012. Almost every country has ratified the ICESCR. This means that states may not obstruct access to food (duty to respect), must prevent third parties, e.g. private enterprises, from obstructing such access (duty to protect) and must mobilise all their resources to safeguard access to food (duty to fulfil) wherever people cannot provide it for themselves (see Section 4.1).

The international community has pledged to reduce the number of people suffering from hunger on many occasions in recent decades. Some notable progress has been achieved: according to figures from the Food and Agriculture Organization (FAO) of the United Nations, 25 countries have halved the number of undernourished people since 1990. Despite these partial successes, there were still 815 million chronically undernourished people in the world in 2016 – 38 million more than the previous year. In absolute terms, the number of hungry people has remained more or less constant at around 800 million for 40 years. Globally, the international community's half-

hearted target for the Millennium Development Goals (MDGs) – to halve, between 1990 and 2015, the proportion of people suffering from hunger in the developing countries (MDG 1) – was narrowly missed². The Sustainable Development Goals (SDGs) adopted in 2015 set a much higher level of ambition: targets for SDG 2 include

² FAO projections indicate that the proportion of undernourished people in developing countries fell from 23.3% in 1990-1992 to 12.9% in 2014-2016. For a discussion of the problems measuring hunger, please refer to the main text.

ending not only hunger but all forms of malnutrition by 2030.

However, sustainable progress on combating hunger is put at risk by armed conflicts and other crises. In the World Development Report 2011, the World Bank pointed out that the development progress achieved in the previous 30 years had bypassed 1.5 billion people in conflict regions. Furthermore, violence and destruction, hunger and poverty in countries affected by civil war, armed conflict and fragility have left more than 66 million people displaced (FAO 2017). Many have to contend with localised food insecurity. Food aid therefore continues to be important in providing for highly vulnerable groups during emergencies. In 2016 alone, the World Food Programme (WFP) assisted more than 82 million hungry people in 76 countries. In December 2016, according to the FAO, 39 countries, including 28 in Africa, were reliant on external food assistance – nine more than in the previous year. Many famines and food crises are caused by conflicts and adverse local weather conditions, which reduce harvests and damage crops.

In addition, the figure of 815 million hungry does not adequately convey the true scale of under- and malnutrition. The FAO merely counts the calories available to feed a population. However, a balanced diet that is sufficient to maintain all body functions must include not only proteins, fats and carbohydrates, but also vitamins, trace elements, fibre and minerals. The FAO and the World Health Organization (WHO) estimate that around 2.5 billion of the world's people suffer from chronic deficiency of essential micronutrients due to poverty. The failure to realise the right to food is therefore a grave violation of human rights. Given the scale of the problem, it requires urgent political, social and economic action.

Chronic hunger has devastating psychological effects, for those affected face a constant struggle for survival. The daily search for food dominates their lives and limits their horizons. The United Nations estimates that each day, hunger and malnutrition claim the lives of 24,109 people – 8.8 million people every year. The number of hungry people varies, however, depending on which calorie requirement is taken as a basis for the calculation. The FAO recommends a minimum intake of 1,800 calories per person per day, whereas the WHO calculates that 2,100 calories per person per day is the minimum required to lead an active and healthy life. The FAO defines a person as hungry if they do not consume sufficient nourishment to reach the required minimum daily energy intake. Its calculation

of daily calorie requirements is based on “light physical activity”, normally associated with a sedentary lifestyle (e.g. office work). However, women and men living in poverty in developing countries are mainly engaged in hard manual labour, such as working in fields or transporting water or firewood on foot. They thus have much higher calorie requirements. Another problem with the FAO's calculation method is that it only includes people who have been undernourished continuously for at least a year. However, for vulnerable groups such as pregnant or breast-feeding mothers, small children and the chronically ill, even a few months of severe undernourishment – or less – can have adverse health effects.

Women and girls are disproportionately affected by hunger: 70 per cent of the hungry are female. This is due to structural discrimination against women and girls and their lower social, educational and economic status. This is also visible in the agricultural sector. Women undertake a substantial proportion of the agricultural work in developing countries and are committed to doing all they can to improve their children's situation. However, they rarely own land or have a say in production decisions. As a result, their conditions of work are very poor. Gender inequality and the problem of hunger are interlinked.

Approximately 80 per cent of all people suffering from hunger live in rural areas. Roughly 50 per cent of them are smallholders, 20 per cent are landless farm workers, 10 per cent are gatherers and pastoralists and the remaining 20 per cent are classed as urban poor.

Even in countries with good average figures, there may be regions or at-risk groups which are severely affected by hunger. In sub-Saharan Africa, the number of hungry people rose from 176 million in 1990-1992 to 216 million in 2014-2016. Sub-Saharan Africa thus has proportionally the highest rate of undernourished people worldwide, i.e. 26 per cent.

Asia is home to 65 per cent of the world's hungry – 533 million people. In East Asia, the number of hungry people fell from 295 million in 1990-1992 to 213 million in 2014-2016. Particular success in reducing the high number of undernourished people has been achieved by China. Over the same period, India was only able to reduce the number of hungry people from 210 to 191 million; it still has more hungry people than any other country in the world. In addition, India has a very large proportion of chronically undernourished children. Great successes in the fight against hunger were achieved by Vietnam, Thailand and

Indonesia. In Latin America, the number of undernourished people decreased from 58 million to 41 million in the same period, with impressive results in the fight against hunger achieved by Peru and Brazil.

In absolute terms, the food available globally is sufficient to provide everyone with an adequate calorie intake. Global agriculture currently produces enough food for everyone in the world to consume 4,600 kcal/day. Of this figure, however, 600 calories are wiped out by post-harvest losses, 1,200 calories are used for animal feed and 800 calories go to waste or are spoiled during transport and storage. On average, this leaves just 44 per cent – 2,000 calories – for human consumption.

2.2 Food security: causes and challenges

Hunger is mainly a poverty issue. Most people suffering from hunger have little or no income to buy basic foodstuffs and have no way of growing their own food. However, in addition to lack of access to available foods and the means of producing them, hunger may be caused by wastage, post-harvest losses and the use of crops for purposes other than human nutrition. The FAO estimates that global agriculture could provide enough food for 12 billion people by growing crops solely for human consumption.

Another key factor is the local availability of foods for groups affected by poverty. The international markets have proved to be an extremely precarious basis for a food supply. This was demonstrated by the world food crises, caused by the sharp increases in average world food prices in 2007/2008. Structural agricultural surpluses in the EU and the US, which for many years were sold cheaply on the world market due to export subsidies, had resulted in rock-bottom prices for most foodstuffs over previous decades. As a result, small-scale farmers in developing countries found it almost impossible to invest profitably in food production, particularly since they often lacked political and financial support such as trade policies that provided them with adequate protection. After the global food crisis in 2008, there was a reversal of the trend in global agricultural prices, which led to a boom in agricultural investment in recent years. Investment in agriculture is urgently needed in countries of the Global South, but as a result of the global food crisis and rising prices, it is often major international or national investors that are now turning to agriculture, operating large-scale single-crop farms (monocultures). Since the world food crisis, wealthier countries

which have limited potential for crop cultivation and depend on food imports, such as the Gulf States and China, have been particularly concerned about the possibility that, in the future, the world market will no longer be a reliable source of a food supply. Consequently, some of them have begun to invest heavily in agriculture abroad (land grabbing), in order to secure long-term provision for their own people. Other investors produce foodstuffs or agricultural raw materials for industry, with a view to exporting them to the world markets. This is happening on a vast scale, but there is very little reliable data available, as most of these transactions are negotiated and signed behind closed doors. According to the Land Matrix Initiative (LMI), around 54 million hectares of land around the world have been handed over to investors since 2000 – and this figure only includes land concessions covering an area of 200 ha or more. In many instances, the previous users of the land are evicted and resettled elsewhere. Rural communities' formal and traditional land rights are often not recognised or are ignored, resettlements take place against their will in many cases, and it is not uncommon for the state or private security forces to resort to violence during the evictions.

One of the greatest challenges will therefore be to halt the new land grabbing boom, end the human rights abuses and manage land use in a way which ensures that local communities' food sovereignty is not put at risk and highly vulnerable groups are not overlooked. Even with the new investment, hunger may well increase as a result of land conflicts. In 2012, the UN Committee on World Food Security (CFS), newly mandated during the 2009 crisis, therefore adopted the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. The purpose of the Guidelines is to promote human rights-based governance of these natural resources, secure legitimate tenure rights and stop investors from grabbing land in violation of human rights standards.

Besides price volatility, another reason why hunger has continued is the failure to prioritise agricultural policy and rural development in many countries of the Global South in recent decades. There has been a lack of public investment in infrastructure, in market access (roads and transport), in agricultural extension, research and training, and in storage facilities, weather information, veterinary care and legal safeguarding of access to land. Due to the lack of funds to invest in natural resource conservation, yields have declined. In 2016, fewer than 10 African countries were spending 10 per cent or more of their na-

tional budget on agriculture and rural development, which was the target agreed by the African countries in the Maputo Declaration in 2003. In addition, there are insufficient income generation opportunities in food processing and marketing. All this contributed to a situation in which many countries that had previously been able to feed themselves started to buy low-cost staple foodstuffs on the world markets, opting instead to grow export products for which higher prices could supposedly be obtained (coffee, cocoa, feedstuffs, biofuel feedstocks, vegetables, cut flowers). The World Bank had been recommending this type of trade-based food security strategy since the 1986 World Development Report. It also formed the basis for the liberalisation provisions of the Agreement on Agriculture (AoA) adopted by the World Trade Organization (WTO), which was founded in 1995. As a consequence of these market liberalisation strategies, the number of net food-importing countries rose from around 30 in the 1980s to more than 110 in 2008.

In order to satisfy the anticipated demand of an estimated 9.6 billion people in 2050, the FAO predicts that production will have to increase by 70 per cent. This projection is problematical in that it takes the developed countries' current demand structures and lifestyles as the global baseline and assumes that post-harvest losses and food wastage will remain constant at their current very high level and that demand for biofuels and the needs of the bioeconomy will rapidly increase. However, it also makes it clear that focusing solely on production increases will not achieve universal food security. Governments also have a role to play by developing strategies and programmes to improve food distribution and realise the right to food through access to adequate nutrition.

At present, achieving food security poses major challenges for many countries. Dietary habits are changing, with a significant increase in the consumption of high-calorie, industrially produced and processed foods, particularly fats and sugar, while the consumption of micronutrients is decreasing. This increases susceptibility to health challenges associated with a Western lifestyle, such as cardiovascular disease, diabetes and obesity; it also makes people more prone to infections. This change in dietary habits is partly driven by urbanisation. Projections from the United Nations Department of Economic and Social Affairs (UNDESA) indicate that two-thirds of the world's population will live in cities by 2050. Eating healthily is a particular challenge for the urban poor, most of whom have no access to land and therefore have no option but to buy food. The global expansion of the major supermarket

chains makes this increasingly difficult and more expensive. These chains are squeezing out the – often informal – local markets where family farms from the surrounding area sell their home-grown produce, whose size and appearance may not meet supermarket standards but which is tasty, nutritious and, above all, affordable. Family farming plays a major role in the urban food supply: in many countries, it produces as much as 70-80 per cent of staple foods and thus feeds most of the urban population as well.

Looking at natural production conditions in global farming, it is apparent that climate change acts as an accelerant, fuelling many of the problems described above. However, climate change itself threatens to become the greatest obstacle to ending hunger and malnutrition. Unless global warming is held below 2°C, it will become impossible to balance out the negative impacts on agriculture in many regions, even with adaptation measures. According to projections from the Intergovernmental Panel on Climate Change (IPCC), yields of staple food crops in some parts of Africa could decrease by more than 50 per cent. The United Nations Development Programme (UNDP) predicts that an additional 600 million people could be impacted by climate change-induced hunger and malnutrition by 2080. However, it is not only the diverse impacts of global warming that worsen existing conflicts over the distribution of natural resources such as land and water and jeopardise food security. The growing significance of the agricultural sector for climate protection creates major potential for conflict. Land use is increasingly becoming a key issue in international climate policy. Conversely, climate policy is increasingly influencing land use. Large-scale afforestation and bioenergy production, combined with carbon capture and storage (CCS) technologies, are meant to contribute to meeting climate targets. In this context, there is a growing debate about carbon sequestration in agriculture as a means of offsetting emissions in other sectors and thus achieving carbon neutrality. Soils and forests are increasingly the focus of the expanding carbon offset markets. All this intensifies the pressure on fertile arable land and is likely to conflict with other land use goals and realities, such as food production and the conservation of biodiversity and the habitats of indigenous and other communities.

Like other climate change impacts, water scarcity also puts food security at risk. The Organisation for Economic Co-operation and Development (OECD) predicts that global water usage will more than double by 2050, worsening the existing problem of freshwater scarcity. By then, around 40 per cent of the world's population could be living in

regions with water shortages. There is a risk of more conflicts over access to water and to land with a good water supply. In tropical and subtropical latitudes, changing rainfall patterns and melting glaciers will reduce crop yields, cause harvest fluctuations and crop failures, and adversely affect arable farming, livestock husbandry and fishing. Access to and use of appropriate irrigation technologies, cultivation of water-saving crops and varieties, access to aquiferous pastures and to other services of relevance to agriculture, such as insurance against harvest failure, will be crucial in enabling poor farmers and pastoralists with very little agricultural land to grow enough food in the long term. In water-poor regions, the cultivation of water-hungry feed crops for livestock farming should be reduced in order to lessen the food-feed competition.

(Agro)-biodiversity has been severely impacted by intensive farming, large-scale land use change and deforestation in recent decades. In some cases, the damage is irreversible. Modern breeding methods used in the cultivation of crops and in animal husbandry have steadily reduced the biological diversity of crop varieties and livestock breeds. The diversity of varieties or breeds within a single species is losing out to a small number of high-yield crop varieties or animal breeding lines with identical genetic properties. However, it is particularly important, in terms of food security, to halt the rapid loss of biological diversity of genes, varieties, breeds, species and entire ecosystems. Progress in plant and animal breeding relies heavily on the availability of a wide pool of genetic material. This great biological diversity is mainly found in wild varieties, on traditional farms or in the wilderness in countries of the Global South. With today's technology, it is possible to harness the old genetic properties, combining, for example, the robust, undemanding nature or stress tolerance of traditional varieties with the yield properties of modern strains.

Many mineral resources and fossil fuels, mainly oil, will run out in the next few decades or will no longer be economical to use. The bioeconomy concept attempts to counter this trend by replacing them with biomass resources, which are supposed to be renewable. If this concept takes hold, the resource-intensive lifestyle maintained by much of society, together with population increases, will create high demand for agricultural commodities. It will thus become even more important to consider the social and environmental impacts of the bioeconomy. Otherwise, there is a risk that poor groups will no longer have secure access to a balanced and adequate diet. In addition, the

pressure on natural resources and ecosystems will substantially increase, with adverse impacts on the natural systems on which agriculture and food security vitally depend. These effects can already be observed in the substitution of bioenergy crops for fossil fuels since 2008; however, if the bioeconomy concept comes into widespread use, very different orders of magnitude and economies of scale can be expected.

In parallel to the developments described above, concentration processes are taking place on a large scale in capital-intensive, highly mechanised industrial agricultural systems, which use vast quantities of mineral fertilisers, pesticides and feed, and in up- and downstream sectors of the agricultural economy. These processes are accompanied by qualitative leaps in the application of "modern" agricultural technologies. In order to increase production and offset the negative environmental impacts of modern farming, efforts are being made to make cultivation techniques more efficient. Precision agriculture, for example, aims to optimise yields and make resource- and eco-efficient use of every square metre of arable land by applying information technology and collecting data on soil, growing and climate parameters and thus enabling inputs such as machines, fertiliser and pesticides to be applied in the exact quantities required. Biotech processes such as genome editing have made it possible, in recent years, to decode the genetic properties of plants and animals and reengineer genes to tailor-make plant varieties and organisms that achieve better environmental performance and higher yields. However, these developments are only possible with even more mechanisation and capitalisation of agriculture. The necessary capital is increasingly being supplied by non-agricultural financial service providers and enterprises and a small number of agrochemical and farm equipment companies – sectors where strong monopolies and oligopolies are currently emerging. It is likely that in the areas favoured by "modern" agriculture, small-scale and family farming will be squeezed out and many farmers will go out of business. All that will be left will be a very few large, capital-rich agricultural enterprises which will then produce the majority of agricultural commodities. The consequences for farmers in the poor countries and for local food security cannot yet be predicted and are rarely considered. However, here too, the structural transformation of the agricultural sector will gather pace and many people will lose their livelihoods. As agriculture is the mainstay of the economy in many poor countries, this will affect very large numbers of people. Around 2.6 billion people – a third of the world's population – depend on farming. The question of where and how these people will

then earn a living is unclear, as is the degree of risk to which this “modern” capital-intensive agricultural system is exposed.

In conclusion, the risks to food security will not diminish or become less diverse in future. They are the result of rising global meat consumption, which requires increased cultivation of animal feed, the demand for biofuels, and the bioeconomy, which aims to shift the economy away from oil-based products to biomass. These global trends and market dynamics may worsen existing distribution problems and put local communities’ social cohesion at risk. This in turn may well intensify conflict dynamics, with adverse impacts on food security. Those affected

often lack a political voice, the capacity to implement constructive solutions and the income security needed to break this vicious circle. Their economic, social and political marginalisation and lack of participation are therefore key factors driving hunger and violations of the right to food. Furthermore, civil society organisations that are engaged in advocacy for the rights and protection of local communities and are campaigning for safeguards on these communities’ access and tenure of land and other natural resources are increasingly being threatened, criminalised and put under pressure. As a result, the scope for political participation and freedom to express critical opinions is becoming increasingly constrained on a global scale.

3. Core Principles for Bread for the World and Diakonie Katastrophenhilfe

The following core principles of church-based development cooperation serve as the normative framework and as guidelines for Bread for the World and Diakonie Katastrophenhilfe in their engagement for global food security.

3.1 Justice for the poor and the realisation of human rights

The Bible promises that all “may have life, and have it to the full” (John 10:10) and this spurs us on to stand with the impoverished and the marginalised and to work for just and sustainable development in our One World. This solidarity is rooted in the Christian duty to show compassion to all who are suffering, in the Bible’s message to create a society which gives justice to the disadvantaged, the weak and the oppressed, and in respect for universal and indivisible human rights.

The Parable of the Good Samaritan shows that sensitivity to others’ suffering is the key to a life in justice and reconciliation. The sight of others’ suffering causes us to feel compassion, which transcends all limits, prejudices and ideologies and identifies people of all cultures and nations as children of God. Recalling God’s mercy, we ourselves are called to show compassion and solidarity with the poor and the weak. And yet in the resistance of the oppressed, in the anguished cries of the tortured, in the suffering of those in need, we hear again and again that justice does not yet prevail. Our development engagement does not take the form of individual assistance and care for the disadvantaged but aims to overcome the structural causes of poverty, marginalisation and lack of social participation. Ending discrimination is about justice. God’s option for the poor sets the benchmark for solidarity according to our understanding of justice in society: “Defend the weak and the fatherless; uphold the cause of the poor and the oppressed. Rescue the weak and the needy; deliver them from the hand of the wicked.” (Psalm 82). The measure of a just society is how it treats its weakest members.

It follows from this that the realisation of the right to food, as one of the economic, social and cultural rights, is ulti-

mately a description of the goal of “food security”. In order to end the many forms of hunger and extreme poverty caused by discrimination, marginalisation and violations of people’s rights, it is necessary to defend the rights of each and every individual and call those responsible for injustice to account. However, development efforts will not succeed unless rights of participation, codetermination, access to grievance mechanisms and justice, and appropriate forms of governance also exist. Assistance in times of acute need or during disasters must also put the rights of the affected persons first; otherwise, already marginalised groups risk facing even more discrimination, this time in their access to aid.

If governance is weak and public services are poorly functioning, local civil society organisations step in and perform many of these tasks, building local self-help capacities at the same time. In addition, they engage in lobbying and advocacy with the aim of improving conditions, and campaign for the state to take over the long-term task of delivering basic services with appropriate funding. All forms of international support should be designed in such a way that they do not undermine self-help and self-organisation capacities and the functioning of local structures and markets or lead to long-term aid dependency. A combination of direct aid and a rights-based approach is particularly helpful in determining which functions should fall within the scope of civil society engagement and where there is a need for government or statutory responsibility. Human rights also have an extraterritorial dimension: they impose an obligation on states to ensure that no harm is done and no human rights are violated in other countries as a consequence of their own policies or the commercial activities of companies and organisations based on their territory. In relation to food security, this applies particularly to violations of the right to food as a consequence of trade agreements, WTO rules, the over-exploitation of resources and labour by transnational corporations, or EU agricultural policy. However, development cooperation can also lead to human rights violations. For example, the New Alliance for Food Security and Nutrition, launched by the G8 countries in 2012, aims to liberalise African markets in order to improve access to agricultural commodities and land and make it easier to

sell commercial seed, fertiliser and pesticides. Human rights standards, such as active stakeholder participation and a rights- and needs-based approach to marginalised groups, are ignored.

3.2 Justice, peace and integrity of Creation

There is no prospect of a just and lasting peace wherever there is hunger and inequity. Only when there is an end to hunger, inequality and extreme poverty, based on equitable distribution of the Earth's bounty and resources, can peaceful and harmonious social relations be sustained. And without protection of natural resources, we deprive ourselves and others of our livelihood bases and constantly create new causes of conflict. For church-based development cooperation, the interconnectedness of peace, sustainability and justice is a main point of orientation. This triad guides us also because it is holistic and contains an unchanging truth: hunger, injustice and poverty pose a threat to peace, just as war and violence hinder development and constantly reverse the progress made in the fight against hunger and poverty.

Sustainable food security and development are impossible without a just peace that also aims to end poverty, promote freedom and cultural diversity and prevent violence. At Bread for the World and Diakonie Katastrophenhilfe, we are committed to upholding the "do no harm" principle, in order to ensure that no damage results from our actions. The fact is that in the context of development, humanitarian aid and social change, conflicts of interest can frequently arise between individuals or groups within a system. International support always constitutes some form of intervention in a system and thus becomes part of it. If the system is conflictive, then the intervention becomes part of the fabric of the conflict as well. Depending on how sensitively the intervention is implemented, it may contribute to peaceful development; however, it may also unwittingly exacerbate the conflict dynamics. The aim of the "do no harm" principle is not to avoid or suppress these conflicts but to transform them and develop constructive solutions.

Every person has the same rights as a guest on this Earth, and each and every one of us is equally entitled to utilise its resources within ecological limits. However, this right also creates a responsibility towards God's creation. A healthy and undamaged environment is a key prerequisite for decent living conditions. However, God's creation

cannot be preserved if we continue to ruthlessly exploit the Earth's resources and destroy biodiversity. This recognition has implications for our understanding of development. Since the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992, the term "sustainable development" has come into widespread use. It means development that is self-sustaining, both globally and locally; in other words, it may not be achieved at the expense of other people or the natural environment. Given the finite nature of the Earth's resources and planetary boundaries, it also encompasses social and ecological justice in the sense of equitable distribution and sustainable use of the natural environment within the limits of the Earth's carrying capacity. For Bread for the World, peace, justice and the preservation of the natural bases of life are the three pillars of sustainable development, underpinned by efforts to end global poverty.

3.3 Participation and empowerment

Development can only succeed if it encompasses all the essential dimensions of human existence, which include culture, spirituality and religion. If life's multidimensionality is to be taken seriously, efforts to achieve individual and collective development cannot focus solely on satisfying material needs and giving people their "daily bread". Society cannot transform itself unless this process is connected to inner growth. This is where the spiritual dimension comes in, looking beyond technological and economic modernisation.

Efforts to support development must always start with the specific situation of the target groups and build on their ideas on how to improve their lives and end poverty and oppression at the local level. This requires strategies and measures which increase people's self-determination and agency and enable them to act as their own advocates. Key elements here are empowerment strategies, which enable individuals or communities to (re)assert their interests on the basis of autonomy, ownership and self-determination. Empowerment should therefore be understood as an organised, grassroots process whose purpose is to transform power structures. It is a political and holistic approach which allows disadvantaged individuals to gain a voice and make it heard. It is closely associated with help towards self-help, which builds people's capacities to help themselves and enables them to organise any assistance they may need. Here, social and economic development is not

dominated by externally imposed programmes but aims to harness individual and/or local potential. Social security systems can support or enhance self-help strategies.

During globalisation processes, changing political, economic and financial conditions worldwide or the interests of global players can often jeopardise or reverse the positive outcomes of self-determined development endeavours. Powerful political and economic elites secure advantages for themselves at the expense of the poor and the marginalised, who are denied access to essential goods and services. Any resistance from their side is crushed by illegal private violence or the use of force by the state, in some cases involving deliberate and gross violations of human rights.

Development processes will only be successful if they are based on stakeholder self-determination and are locally embedded. Genuinely sustainable engagement is only possible through cooperation based on equality and trust. Equal partnership means respect for the partner organisation's ownership and must be based on a cooperative strategy which aims to build people's self-help capacities. In the context of food security, this means, for example, that on issues concerning the development and application of technology, external experts and partner organisations must recognise that local farmers possess essential knowledge of local conditions. Project strategies, new technologies and cultivation methods should therefore be developed in conjunction with farmers and build on their experience.

3.4 Safeguarding survival at the local level

Livelihood approaches at the local level focus holistically on the smallest economic units (households, small farms, collectives) and their capacities, assets, resources, access and activities, and look at how the connections and interaction between them can be utilised to secure day-to-day survival. This strand of research, which goes back to the 1980s, counters the "catch-up development" paradigm's claim to universal validity by offering a coherent and holistic perspective on all the various factors which help to improve rural development, reduce poverty and build a sustainable green economy. The aim is to achieve livelihood security for diverse groups in rural or urban regions based on their available resources, strategies and institutional processes. Livelihood security approaches are sustainable if they equip people with coping strategies that

enable them to overcome life challenges (e.g. illness or death) or external crises (floods, famines) while preserving essential resources for future generations, improving preparedness and reducing the time it takes to recover from crises (resilience).

This holistic approach can deliver key insights showing how the use of a diverse range of skills and resources enables people to develop complex strategies to safeguard their livelihoods in the broadest sense, not only in relation to food security.

3.5 Gender equality

Equality between individuals must include equality between the genders. Ending gender inequality is a key step towards social justice and sustainable development. Food and nutritional security for women and girls depends on the realisation of their human rights, including the right to food. As the first step, this means recognising women's vital role in feeding their families and in food production. Food security programmes, rural development, agricultural policy, capacity building for smallholder farming and artisanal fishing must be gender-sensitive. The goal is to ensure that women themselves are in a position to decide what and how much to produce and are empowered to increase the productivity of their economic activities, whether they work in agriculture or a non-farm sector. To that end, their access to production factors – particularly their access to and control over land – and to labour-saving, productivity-boosting resources and technologies and to education, advice and information must be improved and safeguarded with appropriate funding. Women must also have the same opportunities as men for political participation and decision-making. The violence to which many women are subjected within their families and communities must also be considered. Women experiencing violence cannot have agency in the fight against hunger and food/nutritional insecurity. This needs to be recognised by men as well. Gender equality requires not only women's empowerment but also a change in men's behaviour and men engaging for gender justice.

3.6 Humanitarian assistance and Linking Relief, Rehabilitation and Development (LRRD): principles and standards

In implementing disaster relief programmes, Diakonie Katastrophenhilfe is committed to compliance with the

International Federation of Red Cross and Red Crescent Societies (IFRC) Code of Conduct and the Humanitarian Charter defined in the Sphere Project. The Code of Conduct (IFRC 1994) sets out the core principles governing engagement by the International Red Cross and Red Crescent Movement and humanitarian NGOs. The core principles state that the humanitarian imperative comes first and that aid is given regardless of the race, creed or nationality of the recipients. Aid priorities are calculated on the basis of need alone. Aid will not be used to further a particular political or religious standpoint and should not act as instruments of government foreign policy. Culture and custom are to be respected and disaster response built on local capacities. Ways are to be found to involve programme beneficiaries in the management of relief aid. Relief aid must strive to reduce future vulnerabilities to disaster as well as meeting basic needs. There is accountability to those being assisted and those from whom resources are accepted. In information, publicity and advertising activities, disaster victims are recognised as dignified human beings, not hopeless objects.

The Sphere Project (The Sphere Project 2011) is a voluntary initiative that brings a wide range of humanitarian agencies together around a common aim – to improve the quality of humanitarian assistance and the accountability of humanitarian actors to donors and affected populations. In the Sphere Handbook, the Humanitarian Charter provides the ethical and legal backdrop, defines the role of humanitarian agencies and identifies a number of established rights, such as the right to life with dignity, the right to receive humanitarian assistance, and the right to protection and security. The fundamental moral principles are humanity and the primacy of the humanitarian imperative, which states that action should be taken to prevent or alleviate human suffering arising out of disaster or conflict, and that nothing should override this principle. The Sphere Handbook also includes minimum standards for key life-saving sectors such as food security and nutrition, as well as the Livestock Emergency Guidelines and Standards (LEGS) for livestock welfare during humanitarian crises.

Linking Relief, Rehabilitation and Development (LRRD)

Emergency aid and disaster relief should establish the basis for self-sustaining development from the start. The reverse also applies: development cooperation should help to mitigate disaster vulnerability and build people's self-help capacities. Emergency aid is provided in the immediate aftermath of a disaster or in an ongoing crisis in order to safeguard people's survival in the short term and supply them with basic essentials as quickly as possible. However, these measures should not undermine the key factors required for development. They should be followed immediately or be accompanied by rehabilitation and reconstruction programmes. One example is the concurrent distribution of food and agricultural equipment: peasant families receive enough food to see them through until the first harvest, at which point they become self-sufficient again.

The rehabilitation phase is about restoring affected communities' livelihood bases and laying the ground for medium- to long-term development. In the case of food security, people should be given access to basic productive resources (seed, land, tools) during this phase. However, these strategies will not be successful for long unless they are combined with marketing opportunities, income generation or agroecological farming and are adaptable in the context of disaster preparedness, with modified seed or flexible sowing regimes, for example. It is also important to ensure that LRRD strategies are gender-sensitive.

In the recent debate, the LRRD concept has been expanded to include resilience, defined as improved individual, household, community, local or regional capacity to prepare for and recover (more) rapidly from stress, disasters and crises. Here too, it is important to look at resilience from a humanitarian, development and governance perspective during the various phases of a crisis or emergency.

4. Improving Food Security: Action Areas and Strategic Priorities for Bread for the World and Diakonie Katastrophenhilfe

In engaging for an end to hunger and for long-term food security, Bread for the World and Diakonie Katastrophenhilfe focus on the following strategic priorities and action areas:

4.1 Realising the right to food

As a fundamental principle, people must be in a position to grow their own food or have the means to purchase it. If the prevailing conditions make this impossible, the right to food is violated. A rights-based approach starts from the premise that people are not passive recipients of aid but are right holders, able to claim and assert their civil and political, economic, social and cultural rights vis-à-vis government institutions and non-state actors. They also have a right to participate in society and have a say in the political process. A rights-based approach emphasises the state's responsibility to ensure the progressive realisation of human rights. It analyses not only the needs of disadvantaged groups but also the structural factors which make fulfilment of basic needs difficult or impossible.

The right to food was enshrined in the Universal Declaration of Human Rights in 1948 and was elaborated in the International Covenant on Economic, Social and Cultural Rights (ICESCR) in 1966. The Vienna Declaration, adopted by the World Conference on Human Rights in 1993, recognised the equal value of civil and political rights, on the one hand, and economic, social and cultural rights, on the other. In 1999, General Comment 12 on the implementation of the Covenant further clarifies the right to adequate food. In 2004, the FAO adopted the Voluntary Guidelines on the Right to Food as a general toolkit for governments and civil society to use in realising the right to food. More detailed Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security were adopted in 2012. Almost every country has ratified the ICESCR and has thus the obligation to respect, protect and fulfil the right to food. This means that states may not

obstruct access to food (duty to respect), must prevent third parties, e.g. private enterprises, from obstructing such access (duty to protect) and must mobilise all their resources to safeguard access to food (duty to fulfil) wherever people cannot provide it for themselves.

Several countries have enshrined the right to food in their constitutions or have defined it in more detail in legislation and other provisions, thus facilitating its direct implementation in national law. Many partner organisations of Bread of the World have adopted the rights-based approach and are therefore familiar with international human rights commitments and national legislation on the right to food. They lobby governments to fulfil their human rights obligations and monitor implementation measures. These partner organisations' target groups are supported and empowered to assert their right to food and demand that it be respected, protected and fulfilled. This means, for example, that they are able to defend themselves against land grabbing, which denies them access to food, or are entitled to welfare benefits that fulfil the right to food.

4.2 Facilitating food sovereignty

Food sovereignty is a political concept developed by social movements. It directly challenges the neoliberal model of agricultural development, including the liberalisation of agricultural markets, the privatisation of rural services, and the appropriation and concentration of productive resources such as land, seed, water, natural assets and fisheries in the hands of a small number of individuals or enterprises. Instead, it offers a vision of small-scale, multi-functional and sustainable agriculture and artisanal fishing. The concept of food sovereignty was developed in 1996, with our partner organisation La Via Campesina leading the way. It was intended to criticise the external interference that resulted from the WTO's international trade rules and the neoliberal conditionality imposed by the World Bank and International Monetary Fund (IMF),

with the resulting monopolisation and concentration of power in the hands of agribusiness and food corporations. The starting point for food sovereignty is self-determination in food production and consumption. Food sovereignty describes a pathway towards democracy in both these areas. Its core principles are the right to food, with a focus on its production, strengthening of local markets, fair trade and fair prices, decent incomes, freedom to organise, education, debt relief, secure access to fertile land, grazing, fisheries, forests, water and soil – if necessary through agricultural and land reform – and management and maintenance of natural resources (commons) by local communities. The concept of food sovereignty is relevant to every country.

4.3 Promoting agroecology

Smallholder farmers, like other food producers such as fishers and pastoralists, play a key role in ending hunger. They already make the largest contribution to food security. However, their harvests are often not abundant enough for them to generate an adequate income from the market. Agroecology is the best option for supporting smallholder farming: it can be adapted to natural, social, economic and political conditions, protects productive resources in a sustainable manner and supports adaptation to climate change impacts. In addition, agroecology aims to curb the outflow of rural dwellers to megacities and protect rural economies from the ruinous effects of industrial, resource-intensive agriculture. Intensive industrial farming hinders rural development; indeed, the number of people earning a decent income from it is steadily decreasing. The agribusiness model with which it is associated has devastating impacts due to its intensive use of mineral fertilisers, pesticides and genetically modified seed. It creates smallholder dependency on agribusiness and causes the loss of local traditional knowledge. Intensive agriculture depletes soils, decreases biological diversity and produces large quantities of methane, nitrous oxide and carbon dioxide. Intensive farming thus makes a major contribution to climate change, putting present and future generations at risk. Strengthening this resource-intensive sector is not a viable option for feeding humanity now and in future.

Agroecology, by contrast, offers clear and robust alternatives based on the rediscovery and refinement of a multitude of traditional farming systems. It is based on a holistic approach which considers the needs of farms, communities and ecosystems and aims to satisfy local needs. “Business as usual is not an option” was the clear message presented in the 2008 IAASTD (International Assessment

of Agricultural Knowledge, Science and Technology for Development) report, a comprehensive study commissioned by the United Nations and the World Bank in which more than 400 scientists from around the world summarised the state of global agriculture. The message reflects a fundamental paradigm shift in agricultural research and farming practices. The IAASTD prioritises agroecology with minimal external inputs, with a particular emphasis on support for small-scale farming and recognition of the multifunctionality of agriculture. This broadens the remit of agriculture: it should not only produce healthy food and create jobs and income, but also facilitate sustainable, future-proof rural development that conserves natural resources and protects the climate, helps to preserve landscapes and supports global food security and an end to poverty. The future viability of agriculture will depend on the extent to which it can increase resilience to crises. The FAO has therefore set up an Agroecology Knowledge Hub to support its introduction and rollout.

Agroecology is based on the development of biomass and nutrient cycles as a means of maintaining and improving soil fertility, reducing the losses caused by wind, water and exposure to solar radiation and maintaining or increasing biodiversity. Agroecology supports biological processes which minimise the use of inputs such as mineral fertilisers, pesticides and fossil fuels. Agricultural intensification based on agroecology aims to increase yields and yield stability (risk avoidance instead of profit maximisation), reduces dependency on external inputs (reducing the risk of indebtedness) and strengthens local systems. In the tropics, the lack of farmyard manure is often a cause of declining soil fertility, so the integration of livestock husbandry into farming operations plays a key role in establishing well-performing closed nutrient cycles. Other agroecological principles include seed and breed diversity, crop rotation, mixed cultivation and agroforestry, natural plant protection, post-harvest management and ecologically sound plant and animal breeding. The cultivation of a range of varieties and species, combined with animal husbandry and forest use, creates a species-rich system capable of minimising environmental stress.

Investment in diverse small-scale farming has the potential to combat poverty, improve nutrition and preserve biodiversity. As a consequence, small-scale farms are better equipped to adapt to climate change, which is already having devastating impacts on agricultural production. Productivity per unit of land and energy is higher on small diversified farms than on large farms or plantations. The

higher labour requirement is an advantage in regions where few other employment opportunities exist (Agrar Koordination 2014). A shortage of labour, combined with an improved financial position and capitalisation, may allow simple, site-appropriate mechanisation and the purchase of tools and machinery for communal use. Agroecology promotes social justice, equality, political and economic autonomy, respect for the natural environment, and the diversity of local cultures and traditions. Supporting small-scale agroecology is a triple win scenario: it improves the food situation through low-impact, sustainable farming; it reduces poverty; and it minimises greenhouse gas emissions and mitigates the impacts of climate change.

4.4 Improving access to natural resources

Land

Secured rights to use natural resources, including land, water and seed, are a key prerequisite for production and long-term investment. However, vital resources such as land, water and forests are increasingly being appropriated for infrastructural, speculative or agroindustrial purposes, depriving families whose livelihoods depend on smallholding, animal husbandry and artisanal fishing of their tenure rights. In the interests of livelihood security, it is essential to safeguard individual or communal – including informal – land tenure and prevent further evictions. Agricultural reforms and land redistribution, with prioritisation of smallholder families, are also necessary in many countries. Conserving natural livelihood bases, especially fertile soils, is particularly important. Forms of land uses that cause progressive land degradation and large-scale loss of soil fertility must be replaced by sustainable land management systems.

Water

Land grabbing is often accompanied by loss of access to water. However, freshwater is a scarce and precious resource and is vital for survival. Access to safe drinking water is recognised as a human right. Access to water – a key agricultural production factor – forms part of the right to food. As with land tenure, it is essential to safeguard local communities' water usage rights. As its availability is limited and the number of water conflicts is increasing, equitable local and transregional water resources management is essential. In addition, the scope and efficiency of water utilisation in the agricultural sector must be im-

proved and agroecological practices deployed to increase the soil's water retention capacity. The aim is to prevent overexploitation and degradation of this natural resource. Simple water collection systems and investment in appropriate irrigation technology can do much to safeguard productive farming.

Seed

Seed legislation is increasingly prioritising protection of seed producers' and corporations' intellectual property rights over the farmers' rights enshrined in the FAO's International Treaty on Plant Genetic Resources for Food and Agriculture (International Seed Treaty), limiting farmers' scope to save, use and exchange their own seed. This reduces genetic diversity and causes the loss of traditional knowledge as farmers are forced to abandon their customary seed production, saving and storage practices. However, small farmers rely on these techniques to ensure their survival when faced with particularly challenging environmental and climatic conditions. The Sustainable Development Goals, in Target 2.5, also emphasise the importance of national, regional and international seed banks, whose work is neither sustainable nor meaningful without farmers' seed practices and traditional knowledge in the context of farmers' rights. The modern hybrids and genetically modified seed sold by commercial suppliers are often unsuitable for small-scale farming and are not necessary for world food and nutrition security.

Forests

Vast areas of forest are being cleared and converted to non-forest use. This not only destroys key ecosystems and their rich biodiversity but also contributes to climate change, disrupts the hydrological balance of entire regions and causes extensive erosion damage. Countless people, particularly indigenous communities, depend on resource-conserving forest use, so the loss of forest areas deprives them of their livelihoods and food resources. Most traditional forest use is communal, without individual rights of ownership, and undocumented, making it highly vulnerable to resource grabbing. It is therefore particularly important to assist affected communities to assert their forest usage rights. The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, along with the provisions on Free, Prior and Informed Consent (FPIC) in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), are useful tools in this context.

The aquatic and marine environment

The use of coastal waters for shipping, port infrastructure, resource extraction, aquaculture and now also for wind farms is causing the shrinkage of the world's artisanal fisheries and is displacing coastal dwellers from their communities near the sea. These usage conflicts are accompanied by attempts to privatise fishing rights within defined fisheries and allow trading of these rights. Industrial fishing fleets would then appropriate these fishing grounds as well. In response to these developments, it is essential to preserve artisanal fishing in rivers, lakes and coastal waters, as it provides a livelihood for millions of people and makes a significant contribution to a healthy diet, as fish-based meals supply valuable protein and micronutrients.

4.5 Building climate resilience

Diversified agroecological farming is an important factor in building ecosystem resilience and increasing food security in the era of climate change. Smallholders have a key role to play in supporting the transition to climate-resilient agricultural systems. Not only are smallholders particularly vulnerable to the impacts of climate change; their traditional knowledge and innovation capacities are important for the development of appropriate adaptation strategies. Smallholders should therefore be involved in research and development and be given research tools of their own, along with opportunities to share their knowledge through networking.

However, climate resilience requires much more than suitable seed and improved growing methods. It links in with human rights-based approaches which support rural development, gender equality, solidarity-based resource distribution and the reform of agricultural trade. This is the only way to overcome the structural causes of small producers' high vulnerability to the impacts of climate change. A successful adaptation agenda must therefore complement existing strategies to strengthen food security and food sovereignty.

Climate change adaptation has its limits, however. If global temperatures rise by more than 2°C, the climate impacts in many parts of the world will be irreversible, according to projections from the Intergovernmental Panel on Climate Change (IPCC). The poorer countries' adaptive capacities will therefore ultimately depend on a whole-hearted climate policy commitment and drastic emissions reductions, mainly in the industrialised and newly emerg-

ing countries. It is important, in this context, to avoid any use of the agricultural sector for offsetting industrial emissions and to prevent any conflict between agricultural land use and natural resource conservation in the climate context. Carbon markets, which are solely focused on cost-effective emissions reductions, are not a suitable mitigation and adaptation mechanism for the agricultural sector, given its importance as a provider of diverse livelihood resources.

4.6 Strengthening organisational development

The provision of a rural infrastructure that is conducive to agriculture, such as paved roads, a local energy supply, access to land and other productive resources, access to credit and financial services, the type and scope of agricultural extension services and access to grievance mechanisms, will generally remain a matter for policy- and decision-making at the national level. However, for countries to align their agricultural and food policies to the human right to food, organisations which advocate for the rights of smallholders, the landless, women and producers, persons affected by food insecurity and civil society must be involved in problem analysis and in policy development, planning and implementation. Networking and capacity building for farmers play a key role in self-organisation. Small family farms will only be able to assert their rights against governments, corporations and the international institutions that are driving globalisation and forcing the modernisation and industrialisation of agriculture if they engage in joint advocacy for their political interests and continue to expand their collective capacities at local, national and international level.

4.6.1 Creating prospects for rural youth

Young people, as producers, food processing industry workers and consumers, will play an even more important role in achieving food and nutrition security in future. Although projections indicate that two-thirds of the world's population will live in cities by 2050, large areas will continue to be predominantly rural in many countries. At present, two billion people worldwide are under the age of 15 and 1.2 billion are aged 15-24. An estimated 440 million young people will enter the labour market by 2050 in Africa alone. In order to respond to this demographic and economic challenge, it is essential to create attractive long-term livelihood prospects for young people, including rural youth, with a particular focus on agriculture. This will require international and national policy frameworks

that prioritise rural regions and enable the majority of young people to become farmers and produce food using appropriate agroecological technologies and machinery or to find paid work in the artisanal food processing sector.

4.7 Promoting education, agricultural extension services and agricultural research

Education, knowledge, agricultural training and extension services are prerequisites for sustainable farming and income security. Free exchange of information and experience is a priority here, along with the protection, constructive development and dissemination of traditional knowledge. Agricultural extension methods should be adapted to local conditions and should therefore include advisory services in local languages, farmer-to-farmer advice and information from associations and cooperatives, for example. A sufficient number of agricultural experts should be trained in agroecological and participatory methods to ensure that systematic support, in the form of appropriate agricultural advice, is available to smallholders. New non-university agricultural education pathways should be established to provide regular and sustainable access to professional training and make the sector more appealing to young people. Smallholders need better training so that they are aware of and understand their options. The training and advice should also raise awareness of processing, storage, transport, marketing of food products and balanced nutrition.

Agricultural research should mainly target low-income smallholder families with few resources of their own, who have missed out on benefit-sharing. It should address local farming communities' social, economic and environmental needs and build on their knowledge. It should also consider the growing pressure on natural resources and the impacts of climate change, with agricultural research particularly focused on agroecological strategies that make farming more equitable and sustainable.

4.8 Improving the rural economy and marketing

Smallholder farming must form part of a comprehensive rural development strategy. Depending on the local and regional conditions, stabilising the rural subsistence economy and/or enhancing it through sustainable market production must be the main focus of attention. Agricultural programmes should prioritise food production for

domestic markets, preferably based on sustainable agricultural models which do not result in smallholder families becoming dependent on agribusiness. In parallel to promoting smallholder farming, local and regional processing and marketing of farm produce should be supported; this will increase value added chain opportunities in rural regions, reduce post-harvest losses, create jobs and generate incomes in non-farm sectors. Education for farmers' organisations and cooperatives has a particularly important role to play, along with savings and credit schemes tailored to the needs of very low-income groups. Better market access can also be achieved through cooperation with private enterprises, provided that smallholders' interests and bargaining power are considered and the risks they face are minimised during market integration. For example, they should have more influence on pricing and be offered fair purchase contracts. Unfair business practices must be stopped. The development of stable markets and local value chains builds productive capacities at the local level and offers young people prospects for the future. In promoting economic activities, the environmental impacts should also be considered. Projects which promote fair and sustainable economic activity will be prioritised for support.

4.9 Promoting artisanal fishing and sustainable aquaculture

Artisanal fishing in rivers, lakes and coastal waters provides food and income security in many developing countries. Around 20 million fishers worldwide depend on artisanal fishing for their livelihoods, and an estimated 40 million people, especially women, are employed in (mainly local) fish processing and trade. Fish is an important source of protein and contains a relatively high proportion of the micronutrients and vitamins that are essential for a healthy diet. Nevertheless, only around 50 per cent of global sea fisheries are accessible to artisanal fishers for income generation or to local communities as a source of food. The remaining 50 per cent of marine wild stocks is fished by around 30,000 industrial trawlers, comprising just 1 per cent of the global fleet, which supply the lucrative fish markets in Japan, the US and Europe. This does not include unreported illegal catches, which do not appear in the statistics. Industrial fishing in particular has emptied many of the world's seas of fish. This overfishing threatens to swiftly decimate catch levels, which have been stagnating for the past 15 years. It particularly affects species of relevance to artisanal fishing and the food security of low-income groups. Tonnes of dead fish – the by-

catch, mainly species that are rich in fatty acids, such as herring and sardine – are thrown overboard to make space on the fishing vessels to store the high-quality fish that is in demand in industrialised countries. This has devastating environmental impacts in coastal fisheries and has led to a massive decline in the artisanal catch.

Aquatic and marine ecosystems face other threats as well. Mass fish die-offs frequently occur in rivers heavily polluted by industrial and agricultural discharges. Dam construction and climate change disrupt the inflow of water into lakes, leading to silting and the decline of fish stocks. Artisanal catches are decreasing as a result of chemical and plastic pollution of the marine environment and are also impacted by major infrastructure projects and tourist resorts in coastal areas, which in some cases destroy landing ports. The expansion of marine protected areas (MPAs), wastewater treatment, more rights of participation in major projects, and better management and privileged rights of access for artisanal fishing are important lobbying goals to preserve small-scale fisheries. Sustainable use of fisheries would ensure that fish maintains or regains its status as one of the most affordable and low-impact sources of high-quality protein in the human diet.

Global fish production from aquaculture – managed rearing of fish and crustaceans in seas, ponds, rivers and flooded fields – has increased from 3 million to 41 million tonnes annually in the last 30 years. In developing countries, however, shrimp and crustacean farming has devastating impacts on the environment, destroying mangrove forests and increasing soil salinity. Women and children employed in larvae hunting or shrimp processing work in appalling conditions.

The economic benefits of fishing and its contribution to food security are routinely underrated. For that reason, efforts should be made to strengthen the artisanal fishing sector, with a particular focus on building its human and institutional capacities so that fishers are empowered to have a say in the use of their land and water resources. The FAO's Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication show how artisanal fishing can be developed in a participatory and sustainable manner and integrated into national strategies. In rebuilding livelihoods after disasters, support should be provided for artisanal fish farming based on non-carnivorous species. Development institutions should promote low-impact fish farming as an sustainable option for boosting rural food security.

4.10 Establishing fair conditions at national and international level

4.10.1 The right to food as a guiding principle for national and international agricultural policy

Smallholder farming has not yet reached its potential. This is due to the policy frameworks in place at global, regional and national level, which are geared primarily towards large-scale industrial agriculture. Smallholder families need protection against dumping, import surges and other cheap and unfair imports, against unilateral agricultural policies and global corporations' market power. Agricultural, investment and trade policies and international cooperation on ending hunger and promoting agriculture should therefore focus more strongly on the local needs of smallholder families.

Since the World Food Summit in 1996, it has increasingly been recognised that every state has a human rights responsibility to provide for people facing acute or chronic hunger. The Voluntary Guidelines to support the progressive realization of the right to adequate food in the context of national food security, adopted by the FAO in 2004, emphasise the responsibility and opportunities of states to utilise agricultural and economic policy in order to create an enabling environment in which as many individuals as possible can feed themselves. Despite the existence of these Guidelines, World Bank and World Trade Organization (WTO) policy recommendations prioritise market liberalisation and deregulation. Coupled with national governments' lack of interest in investing in agriculture and rural development, this has contributed to a situation in which smallholders make up 50 per cent of the world's hungry. These countries were correspondingly vulnerable during the world food crisis in 2007/2008, when world market prices of food soared. Key agricultural exporting nations reacted by prioritising the need to feed their own people at affordable prices and scaled down their exports accordingly. The crisis abruptly demonstrated the importance of rural development, family farming and adequate domestic food production.

The crisis also revealed the weakness of global governance in world food security and agricultural development. The FAO failed to predict the scale of the crisis and lacked the legitimacy to mobilise and motivate international stakeholders; in consequence, it was unable to coordinate a

rapid response. However, as the number of hungry rose above one billion, there was a growing willingness to set up a central steering and coordination body tasked with responding to emergencies. In 2009, the existing Committee on World Food Security (CFS) was therefore newly mandated and given an enhanced political role in coordinating not only the work of the UN organisations but also engagement by other institutions such as the World Bank, bilateral donors, civil society, non-government organisations and the private sector, and in implementing harmonised policies. As part of the CFS reform in 2009, the Civil Society Mechanism (CSM) was established, in which Bread for the World and some of its partner organisations actively participate. One particularly challenging aspect is that some organisations, including the World Bank itself, are seeking to play a key role in international food security and nutrition; the same applies to growing numbers of independent initiatives by the private sector and charitable foundations. For example, the Bill and Melinda Gates Foundation, which has connections with Monsanto, is investing substantial sums of money in restructuring the African seed market. Bread for the World regards the Committee on World Food Security, with its Civil Society Mechanism, as the international community's foremost inclusive platform for addressing the world's food security and nutrition problems at present. Its authority should not be undermined by other governmental or private initiatives.

However, it is the national governments which still play the most significant role in improving food security. They are responsible for determining which policies are pursued in rural regions, to what extent the law is enforced, and which national agricultural priorities are pursued. Yet international developments and agreements such as the WTO's Agreement on Agriculture (AoA), speculation in agricultural commodities and EU agricultural policy can also have considerable influence on the national policy-making environment in areas including foreign trade, tariff setting and subsidies.

4.10.2 The WTO's Agreement on Agriculture (AoA)

Advocates of agricultural trade liberalisation argue that free movement of goods between countries guarantees national food security. For the developing countries, however, these expectations have not been met. The only beneficiaries are a small number of major agricultural export countries such as Argentina and Brazil; many Asian and African countries which had already been granted trade

preferences have lost out as a result of liberalisation. Only unilateral agricultural and trade liberalisation by the industrialised nations – without any reciprocity – offers any benefits to developing countries as a group.

Even if the developing countries were to fully exploit all the special and preferential rights available to them, low-income countries (LICs) with a predominantly small-scale farming sector would still count among the losers of liberalisation because the productivity levels achieved by smallholders, many of whom farm marginal soils, are rarely improved by competition with global agriculture unless they are given additional support. The same applies to the many bilateral free trade agreements concluded or negotiated by the industrialised nations with developing countries since the collapse of the WTO's Doha Round. Examples are the Economic Partnership Agreements (EPAs) between the EU and the African, Caribbean and Pacific (ACP) group of countries.

Although the WTO's Agreement on Agriculture (AoA) defines food security as one of its objectives, the current WTO rules are ill-suited to deal constructively with a situation of global food scarcity, rising prices and necessary state intervention in support of food security. They should therefore be reformed. The rules on reducing agricultural support are a good example: the developing countries should – as a matter of urgency – be investing more, not less, in boosting food production and should be spending more on food security programmes. However, the Agreement on Agriculture stipulates that all agricultural support measures are to be reduced substantially in line with a specific formula, other than those that “do not distort trade or are minimally distorting”. This also applies to food security networks, social protection programmes and food reserves, all of which are urgently needed at a time of food shortages, food insecurity in many developing countries and highly volatile world agricultural prices.

In future, the WTO should not treat agricultural policy measures that promote food security, poverty eradication and the protection of the environment as barriers to trade. The liberalisation resulting from trade agreements should not conflict with Agenda 2030 and its Sustainable Development Goals (SDGs).

4.10.3 Speculation in agricultural commodities

Food crises and global financial crises are often connected. In 2007/2008, for example, the prices on the food futures markets rose just as confidence in stock markets and

property funds was eroding due to the US housing crash. At this time, large financial volumes were reallocated, and new investment opportunities sought within the raw materials economy and in speculation at the commodity futures markets. When interest rates are particularly low, those with financial capital look for profitable investment opportunities, and this has the potential to strongly affect the prices of land and agricultural commodities.

That is not to say that financial markets, commodity futures markets and speculation are objectionable in themselves. There is, however, a need for regulations to limit the harmful effects of speculation in basic foods, which can worsen price volatility and affect real-world (spot) markets. Volatility, especially if it is driven up artificially by investors, allows speculators to generate substantial profits at the expense of farmers and consumers. Price hikes that are caused solely by speculation can cause or worsen hunger and food insecurity.

Many factors contribute to the volatility of food prices on the spot and futures markets, including the weather, political developments, economic trends, consumption, monetary policy and the levels of global food reserves. However, major harvest failures and export bans – actual or predicted – can cause price jitters on the futures markets. Indigenous staple foods grown in the developing countries, such as sorghum, millet and root crops, are not traded internationally. However, developments in the world market can have negative effects on these crops, as examples from Cameroon, Ghana and Congo show: during the world food crisis in 2007/08, many consumers opted to buy these affordable indigenous foods instead of the more expensive imports. This new demand pushed up prices on the domestic markets. Farmers were keen to exploit what appeared to be new markets and expanded their production. However, before the new investment potential was realised, prices dropped. A year later, farmers were unable to sell their increased crop yields and pay back their loans.

The German Government should therefore work with the international community to curb speculation in foods. Food should be banned from the portfolios of commodity index-linked deposits, and only traders engaged in the real-world agricultural trade should be licensed to operate on the futures markets.

4.10.4 The European Union's agricultural and raw materials policies

The European Union is the world's largest importer and exporter of agricultural commodities, so policy decisions taken by the EU and its member states have a considerable impact on developing countries' food security, not least due to the EU's high demand for animal feed imports, on the one hand, and its excessively high agricultural exports, e.g. of chicken offcuts, on the other. Similarly, the effects of energy crop exports for the EU's biofuel production on the environmental, social and nutrition policies of the cultivating countries are not given sufficient consideration in EU legislation. Despite calls for coherence and the political commitment to end hunger, European interests carry more weight in the setting of priorities than development policy issues do. Yet the EU can play a constructive role in relation to the developing countries, as shown by Everything But Arms (EBA), which gives 48 least developed countries almost full duty-free and quota-free access to the EU's agricultural markets. Overall, however, the EU's agricultural policy should be more closely aligned to the vision of a sustainable, multifunctional and diverse farm sector which fulfils its responsibility not only to producers and consumers in the European Union but also to the populations of the developing countries. To that end, the following aspects should be considered:

- Direct payments to European farmers must not have trade-distorting effects, and no goods should be exported using dumping methods.
- High world market prices should be an opportunity for developing countries to mobilise their own agricultural potential. The EU should refrain from conducting export campaigns that would impact on the developing countries.
- In international trade agreements, the EU should argue the case for reform, so that there is sufficient policy flexibility for food security in developing countries, instead of merely pursuing the opening of markets to serve European export interests.
- The energy system transformation needed in the EU must be structured in such a way that Europe does not rely heavily on biomass produced in the developing countries.
- The Voluntary Guidelines to support the progressive realization of the right to adequate food in the context

of national food security should be the roadmap for EU agricultural trade with the developing countries.

- The developing countries must have access to a grievance mechanism to address trade practices which are detrimental to development.

Poverty reduction, food security and agricultural development should be overarching and coherent government policy objectives in the EU and Germany, in line with the Sustainable Development Goals.

4.10.5 National agricultural and food policy

Agricultural policy and rural development have, once again, become central themes for the donor community and developing countries. However, agricultural development models and innovative project ideas that focus particularly on the promotion of smallholders receive little support. Instead, there is a reliance on private sector initiatives to balance out the decades of under-investment in rural development. Often, the state is merely assigned an ancillary role, with market liberalism setting the agenda. The state is needed to provide basic social security, ensure the functioning of the markets, establish the legal frameworks for the introduction of technologies, and participate in public-private partnerships. However, to ensure that less privileged producers have fair access to markets, investment in public infrastructure is vital. As a large proportion of the world's hungry and poor are smallholders living in rural regions, investment by small-scale farmers and support for them through a public infrastructure have an important role to play. Increasing the incomes of these groups is essential to end hunger. The following measures are therefore required:

- States should continue to have an array of regionally specific policy tools at their disposal in order to counter market developments which conflict with food security, as a purely market-based approach cannot meet the challenges of rural development and food security.
- Technology transfer should focus on sustainable forms of use. Agroecology and full participation by farmers are important factors in improving support to disadvantaged farms.
- Agricultural policy should not focus exclusively on the needs of large, well-performing producers but should attempt to include as many farmers as possible, as many poor farming households currently have very lit-

tle financial leeway. It should also allow for the participation of marginalised rural groups, particularly women, who can only be reached through social measures. To that end, initiatives targeted at smallholders should be coupled with basic social security programmes and investment in regional development and rural services (education, health, water, public storage facilities).

- A rapid sell-off of national resources to foreign companies must be countered with a concessions award policy that include rules on public tendering, land use planning, protection of traditional land rights and transparency. Public-private partnership programmes must be integrated into effective marketing and processing strategies that make supplying domestic markets a priority.

4.10.6 Food standards

Corporate influence in the world food system must be reduced in order to avoid high concentrations of power in supply chains. Multinational corporations are increasingly influencing every stage of the food production chain in developing countries. These corporations set standards for the products they trade internationally, dictating the choice of seed and the use of fertilisers and plant protection products, as well as conditions at each stage of the production process, including harvesting, storage and record-keeping. They also operate a product categorisation scheme for pricing purposes. This type of system has existed for the "classic" tropical products, such as coffee, tea and cocoa, for many years; however, a new element is the inclusion of smallholders in developing countries who grow fruit and vegetables for developed country markets. These small-scale producers are required to meet the same multitude of standards as their counterparts in the developed countries. In many cases, only a small number of highly skilled producers are able to do so. Consumers' increasingly high expectations, especially in the developed countries, are resulting in the formation of farming elites and the exclusion of the poorest producers from lucrative markets. Standardisation in food production worsens this exclusion as the standards applicable to the international supply chains also become the benchmark for local supermarket chains. In developing and newly industrialised countries where there is a growing middle class, the multinational corporations are increasingly dominating the market, and although they include local goods in their product range, they force their smallholder suppliers to comply with their system of international standards.

Governments and donors are systematically neglecting the development of the informal markets still in existence. By doing so, they not only destroy income generation opportunities for millions of small-scale producers; they also reduce seasonal food diversity for low-income groups, shifting the balance in favour of processed foods, many of which are imported. Legislation is required to regulate corporate standard-setting; among other things, it should address the way in which corporations apply their criteria and standards to small-scale producers. Corporations should be obliged to provide training and support in order to give the poorest producers the opportunity to access and benefit from their value chains. Government authorities and corporations should take note of the many years of experience with the fair trade system, which – despite highly volatile world markets – has succeeded in providing long-term income security for small-scale farmers.

4.11 Achieving urban food security and expanding urban agriculture

The key basis for feeding the urban population is income security. Fair minimum wages are an important prerequisite here. However, large sections of the urban population in developing countries, particularly women, are employed in the informal sector, with no access to fixed wage or social structures. Furthermore, many lack secured access to housing, appropriate and high-quality healthcare, clean water and sanitation. They are highly vulnerable to crises and risk undernourishment and malnutrition. Income generation and livelihood measures therefore directly support food security; advocacy for secured housing with a basic infrastructure, the promotion of cooperatives, strengthening of labour rights and lobbying for the development of social security systems also contribute. For people with limited self-help capacities (such as the elderly and people with disabilities), social security programmes promote food security. Furthermore, reliable social security programmes support food production, as non-seasonal livelihood security reduces producers' risk aversion and increases their investment capacities.

In cities, healthy and affordable foods must be available in sufficient quantities. This requires well-functioning production, transport, storage and marketing systems. Food production close to the cities must be the aim, particularly for fresh produce. High post-harvest losses can be reduced with appropriate preservation techniques; well-functioning cool chains have a key role to play here. Many

urban dwellers would like to start growing some of their food themselves again, so space for urban horticulture and small-scale animal husbandry must be created within or close to cities. Space-saving cultivation systems for urban agriculture should continue to be developed and new areas accessed (roof gardens, fruit cultivation in parks and recreation facilities). Educated urban consumers are increasingly keen to know where their daily diet comes from and how it is produced. New forms of networking and cooperation between producers and consumers are therefore emerging. Organic box schemes, community-supported agriculture, solidarity-based agriculture and fair trade support a transparent and sustainable urban food supply and are key elements of food systems that are characterised by democratic decision-making and "food councils"; these systems should therefore be expanded.

4.12 Guaranteeing food security in conflicts and crises

Food security is an integral element of humanitarian aid. It aims to ensure that affected communities have short- to medium-term access to adequate, safe and nutritious food before, during and after an emergency. In the humanitarian context, the issue of food security is addressed in relation to the impacts of natural disasters and conflicts, with a particular focus on protracted and complex crises. In regions with chronic food insecurity, the priority is to narrow the acute gaps which cannot be closed by development programmes. In armed conflicts and during natural disasters, which may occur unexpectedly or build up over time, particularly vulnerable individuals and households facing acute food insecurity are given priority in aid provision.

Food security measures should be timely and needs-based and should be adequate in scope, with a particular focus on children and women. Food aid should suit local dietary habits and preferences and adequate access should be provided through the availability of food at local markets and farms. The priority is to source food locally. Appropriate mechanisms to support the affected communities should be chosen with care (e.g. choice between in-kind or supplementary food, voucher-based systems, cash-based systems with or without conditionality). In addition, special measures may be implemented; for example, setting up emergency gardens in communities cut off from the outside world by armed clashes in the locality can help to safeguard the food supply, and surpluses can be sold at local markets.

Development programmes in conflicts

Many partners work in countries affected by protracted conflicts and violence (e.g. Horn of Africa) and run structural development programmes that include food security. In many cases, food insecurity linked to the systematic exclusion of certain groups and inequitable resource distribution is one of the main causes of conflict and violence; examples are violent clashes between nomadic herders and settled farmers, attacks on other ethnic groups, and violence against refugees and displaced persons. Development programmes in the food sector should not intensify these conflicts but should have an ameliorating effect. This means recognising the causes of conflict and implementing measures sensitively, for example by giving equal consideration to the needs of the various user groups that rely on scarce resources and developing new compromise models such as shared land use. Legal frameworks must also be established so that disputes relating to food security and natural resource use can be addressed and resolved through consensus. In countries without the rule of law or an independent justice system, this may take the form of extrajudicial mechanisms, grievance and arbitration procedures, which in some cases may already exist locally in a traditional form; in others, new forms may have to be established.

Food security and peacebuilding

Efforts to end hunger will only be successful and sustainable if development cooperation and humanitarian aid for food security are conflict-sensitive and linked to peacebuilding measures. If there is to be any prospect of a durable peace and food security, the main causes of conflict, such as disputes over the availability of natural resources, must be addressed. For local people, safeguarding their families' survival after the experience of violence is tied up with secure access to food and resources. In order to achieve lasting successes here, it is essential to end the inequality and marginalisation of certain groups. Non-violent conflict resolution mechanisms should be discussed with local peacebuilders. It is also important to focus on women and their specific needs in relation to their families' food security and consider the issue of their access to and control of natural resources. International actors must include and listen to local stakeholders who have in-depth knowledge of the complexities of the local context and understand the potential not only for conflict but also for peace in relation to the food sector.

4.13 Facilitating access to a healthy balanced diet

There is still an alarming gap between North and South and between rich and poor in relation to the disease burden and conditions for a healthy life. Around half of the world's people have no access to even the most rudimentary healthcare. An inadequate diet and health risks are often mutually reinforcing. Malnutrition is becoming a problem for an increasing number of emerging economies and developing countries. A chronic lack of vital micronutrients in the diet, caused by poverty, makes people highly vulnerable to disease. An adequate, culturally appropriate, nutritious and tasty diet that maintains all body functions and health must therefore include not only proteins, fats and carbohydrates, but also vitamins, trace elements, fibre and minerals. Alongside the goal of ending hunger, the problem of hidden hunger, i.e. a chronic deficiency of essential nutrients, must therefore also be addressed. The business practices of multinational food corporations which run aggressive marketing campaigns to promote unhealthy foods, especially in lower-income countries, must therefore come under scrutiny and drawn to the public's attention. Nutrient deficiency has a particularly critical impact on women during early pregnancy and on babies and small children up to the age of 24 months. The damage done to young children's health is rarely reversible in later life. Their growth may be stunted, their mental faculties impaired and their resilience and achievement potential severely impacted. Stunting is the indicator for chronic undernourishment or malnutrition. The children affected are too small for their age, having received insufficient nourishment or eaten an unbalanced diet over a lengthy period of time. A difference is made between this indicator and wasting, which identifies children who are severely underweight.

Malnourished people are especially prone to disease. For people already in poor health, a balanced diet is essential to strengthen the immune system and maximise the efficacy of medication. Agricultural programmes must therefore include measures which specifically target malnutrition. Smallholder farming and artisanal fishing can make an important contribution: diversified crop production, low-impact livestock farming, aquaculture and fishing all help to ensure that people have access to a balanced and healthy diet. As many nutrient-rich plant varieties have been lost in recent decades, revival of traditional crops and local cultivars is essential. However, food supplements and fortification with micronutrients, perhaps combined with

the targeted provision of micronutrients to groups at risk, may be necessary to combat hidden hunger if the situation is critical. These measures cannot be deployed in isolation but must be combined with efforts to safeguard genuine food diversity for all. Food and health education should be integrated into schools and training curricula to raise awareness of the importance of nutrition. Information campaigns targeted at families can do much to improve knowledge of good nutrition outside the formal education system.

4.14 Strengthening social security

Social security systems provide benefits – in cash or in kind – which are intended to provide livelihood security for people facing life challenges such as illness, loss of income, accident, old age or disability. Currently, around 80 per cent of the world's population is not adequately protected against the negative impacts of sickness, old age, loss of income or unemployment. Crises such as crop failures, overfishing, natural disasters and conflicts also put the food security of individuals, families or entire communities at risk. Government-funded social security systems have a vital role to play in guaranteeing universal food security and reducing hunger:

- Social security schemes directly support access to food by raising the level and safeguarding the continuity of disposable income. This is especially important if incomes are seasonal. For welfare recipients, buying food is a priority, so most of the money is spent on this.
- Social security also increases people's capacity to deal with crises such as crop failures, avoiding the need to resort to survival strategies that put long-term livelihoods at risk, such as selling possessions or tools.
- Social security schemes also support smallholder food production by greatly increasing the willingness to invest capital in farming.

At present, welfare benefits are often linked to conditionality; for example, some are means-tested to assess whether applicants fall below the poverty line. Other conditions may require school attendance or participation in health screening and vaccination campaigns. The problem here is that the various schemes often fail to reach the intended target groups, for example if proof of attendance at health screening is a condition for qualifying for welfare benefits but no health facilities offering this service are within reach. Benefits without conditionality are therefore now

under discussion. They require far less administration and could be funded from taxation, from income generated in other sectors such as mining, or from a financial transaction tax or tourism levy, etc.

4.15 Stepping up education and awareness-raising to support a transformation of food and farming systems in the Global North

Education and awareness campaigns, along with product labelling (certification), can help consumers to consider environmental, social and ethical aspects in their consumption decisions. Sustainable consumption should be low-impact, future-proof, equitable and healthy and should not put global food security at risk. "Shopping basket politics", with consumers making informed and conscious choices, supports the transition to a new food awareness and influences the supply and the conditions under which food is produced. Suppliers are sensitive to consumer demand and the market responds accordingly. For example, the introduction of certified GMO-free foods came about as a result of pressure from consumers. A sustainable diet can be summed up in three words: "less, different, better". "Less" means reduced resource consumption. This starts with food planning at home, to avoid large amounts of food ending up in the bin. Reducing consumption of meat (including processed meats), dairy products and fish is another key lever in bringing about a shift towards sustainable consumption. Eating less meat shrinks the carbon footprint and reduces consumption of resources such as imported feed. Eating less fish reduces global overfishing. This allows more staple foods and less feed to be grown in developing countries and more protein-rich fish to be caught. However, "less" also applies to energy consumption: less packaging, less transportation of goods, less travelling to the shops, less fishing effort, less energy input to produce and store processed foods. "Different" means selecting foods not only on the basis of price but considering sustainability and consciously choosing products which are seasonal, local and eco-friendly. "Different" also means opting for fair trade products, which directly support producers' food security. Fair trade guarantees better conditions and pays fair prices to producers. "Better" means more enjoyment and better health by sharpening the focus on the quality of products such as meat and dairy products and raising awareness of production conditions, fishing practices and type of fishery. How-

ever, it can also mean rediscovering local cuisine with its diverse range of regionally produced foods – vegetables, meat or fish. A greater appreciation of this type of produce can help to create a new food culture.

A sustainable diet should be encouraged through education and awareness-raising, which should focus on the links between social, environmental, agricultural, trade, development and climate policy. Education projects and campaigns in conjunction with governments and environmental, consumer, farmer and other development organisations can initiate a transition towards sustainable consumption. Goals include improved product labelling so

that consumers can identify sustainable products more easily. Like the EU Ecolabel, this should be spearheaded by government: private certification schemes and standards can then go a step further, e.g. by requiring independent external audits to verify compliance. However, these certification schemes are often expensive and are unaffordable for smallholders. Low-cost participatory certification schemes should therefore be expanded, based on peer-to-peer certification by producers and random checks by external auditors. In addition, food prices should reflect the real costs of production; this can be achieved through an eco-tax on particularly resource-intensive products or reduced VAT on organic foods.

5. Conclusions

Overall, it is clear that food security is influenced by a very complex array of factors. International financial capital plays a substantial role, along with climate change, conservation of natural resources, the increase in the cultivation of genetically modified crops such as soybean, cotton and maize, and the change in dietary habits. Achieving food and nutrition security and combating hunger are not just about calorie intake; they must also address the problems of malnourishment and under- and overnutrition. It is also apparent, however, that programmes which aim solely to increase agricultural productivity (e.g. GMO production) and rely on substantial profit-driven investment are bound to fail unless they also strengthen social participation by groups affected by hunger and make improving their situation a priority. National agricultural, fishing and social policies have a key role to play in this context, along with international governance regimes. Without a shift towards rural poverty reduction, with more support for

rural regions and rights-based social policies, it will be impossible to realise the right to food and reduce the numbers of hungry. Complex problems require complex, integrated and multisectoral strategies which attach equal weight to the social and environmental dimensions.

With their programmes, projects and advocacy, Bread for the World, Diakonie Katastrophenhilfe and their partner organisations are working to realise the right to food, increase food security and achieve more food sovereignty, so that the groups most affected by poverty and hunger can improve their conditions of life. In accordance with our core principles, the strategies, methods and action areas described in this policy paper are intended to provide guidance for the programmes and policy work undertaken by Bread for the World, Diakonie Katastrophenhilfe and their partner organisations in the broad area of food and nutrition security.

6. References and further reading

Agrar Koordination (2014): Das ist moderne Landwirtschaft! 1001 Möglichkeiten, 9 Milliarden Menschen zu ernähren. Hamburg: Forum für internationale Agrarpolitik e.V.

https://www.agrarkoordination.de/fileadmin/dateiupload/PDF-Dateien/Broschuere/AK_Heft_Mod.Landwirtschaft.pdf

Albrecht, Stephan/Engel, Albert (2009): Weltagrarbericht: Synthesebericht. Hamburg: Hamburg University Press

<https://www.amazon.de/Weltagrarbericht-Synthesebericht-Stephan-Albrecht/dp/3937816682>

Arbeitsgemeinschaft Frieden und Entwicklung (FriEnt) et al.: Eine Welt ohne Hunger in einer Welt voller Konflikte? Dokumentation der Podiumsdiskussion zum Internationalen Friedenstag 2014. Bonn: FriEnt

[https://www.frient.de/publikationen/dokument/?tx_ggfilelibrary_pi1\[container\]=16&tx_ggfilelibrary_pi1\[action\]=show&cHash=0120c4206c4541397b3d77967729d2fe](https://www.frient.de/publikationen/dokument/?tx_ggfilelibrary_pi1[container]=16&tx_ggfilelibrary_pi1[action]=show&cHash=0120c4206c4541397b3d77967729d2fe)

Badgley Catherine et al. (2007): Organic Agriculture and the Global Food Supply. In Renewable Agriculture and Food Systems 22 (2), pp. 86 – 108. Cambridge: Cambridge University Press

http://s3.amazonaws.com/academia.edu.documents/39075622/Catherine_Badgley_2006.pdf?AWSAccessKeyId=AKIAJ56TOJRTWSMTNPEA&Expires=1480413095&Signature=4%2BHn5DHDv1GTIE2pYauJDH8OhQo%3D&response-content-disposition=inline%3B%20filename%3DCatherine_Badgley_2006.pdf

Berne Declaration (2013): Agropoly – A handful of corporations control world food production. Zürich: Berne Declaration (DB) & EcoNexus

http://www.econexus.info/sites/econexus/files/Agropoly_Econexus_BerneDeclaration_wide-format.pdf

Bertow, Kerstin (2011): Ist genug für alle da? Welternährung zwischen Hunger und Überfluss. Analyse 23. Berlin: Brot für die Welt

https://www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Fachinformationen/Analyse/Analyse_23_Internet.pdf

Brot für die Welt (1997): Nachhaltige Landwirtschaft. Orientierungsrahmen für eine sozial- und umweltverträgliche Landwirtschaft aus Sicht der kirchlichen Zusammenarbeit. Stuttgart: Brot für die Welt

Brot für die Welt (2008): Fünfzig Jahre Brot für die Welt. Standortbestimmung und Selbstverständnis eines kirchlichen Entwicklungswerks. Stuttgart: Diakonisches Werk der Evangelischen Kirche in Deutschland e.V. für die Aktion Brot für die Welt

Brot für die Welt (2008): Fünf Jahrzehnte kirchliche Entwicklungszusammenarbeit. Wirken – Erfahrungen – Lernprozesse. Frankfurt am Main: Brandes & Apsel

http://www.brandes-apsel-verlag.de/cgi-bin/germinal_shop.exe/VOLL?titel_id=8300876&titel_nummer=8300876&caller=brap&backpage=brap_topliste.html&verlag=83&caller=brap&session_id=B11B7B63-67F5-47B3-B400-053922A83722

Brot für die Welt (2009): Soziale Grundsicherung als Instrument der Armutsbekämpfung. Leitgedanken zu unserem Engagement für soziale Sicherheit. Berlin: Brot für die Welt

https://www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Fachinformationen/Profil/Profil_04_Grundsicherung_Internet.pdf

Brot für die Welt et al. (2015): Konzernmacht grenzenlos. Die G7 und die weltweite Ernährung. Berlin: Forum Umwelt und Entwicklung

http://forumue.de/wp-content/uploads/2015/05/Konzernmacht_grenzenlos_Broschuere_A4_web.pdf

Brot für die Welt (2016): Stadt-Land-Essen. Wer ernährt in Zukunft die Städte? Berlin: Brot für die Welt

https://www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Themen/Ernaehrung/SING_Ernaehrung_in_der_Stadt.pdf

Buntzel, Rudolf/Mari, Francisco (2016): Gutes Essen – arme Erzeuger. Wie die Agrarwirtschaft mit Standards die Nahrungsmärkte beherrscht. München: Oekom

<https://www.oekom.de/nc/buecher/gesamtprogramm/buch/gutes-essen-arme-erzeuger.html>

Curtis, Mark (2015): Fostering Economic Resilience: The Financial Benefits of Ecological Farming in Kenya and Malawi. Johannesburg: Greenpeace Africa

<http://www.greenpeace.org/africa/Global/africa/graphics/FoodForLife/Fostering%20Economic%20Resilience.pdf>

Deutsches Institut für Menschenrechte (2005): Die „General Comments“ zu den VN-Menschenrechtsverträgen. Baden-Baden: Nomos

<http://www.nomos-shop.de/Deutsches-Institut-f%C3%BCr-Menschenrechte-General-Comments-VN-Menschenrechtsvertr%C3%A4gen/productview.aspx?product=1756>

Diakonisches Werk der Evangelischen Kirche in Deutschland (2004): Humanitäre Hilfe weltweit. 50 Jahre Diakonie Katastrophenhilfe. Stuttgart: Diakonisches Werk der Evangelischen Kirche in Deutschland

Edwards, Sue/Berhan Gebre Egziabher, Tewelde/Araya, Hailu (2010): Successes and Challenges in Ecological Agriculture: Experiences from Tigray, Ethiopia. Rome: FAO

<http://www.fao.org/docrep/014/i2230e/i2230e09.pdf>

Evangelischer Entwicklungsdienst (2008): Wer ernährt die Welt? Bäuerliche Landwirtschaft hat Zukunft. Bonn: Evangelischer Entwicklungsdienst

Evangelische Kirche in Deutschland (2000): Ernährungssicherung und Nachhaltige Entwicklung. Eine Studie der Kammer der EKD für Entwicklung und Umwelt. Hannover: EKD-Texte 67

http://www.ekd.de/download/ekd_texte_67.pdf

Evangelische Kirche in Deutschland (2011): Leitlinien für eine multifunktionale und nachhaltige Landwirtschaft. Zur Reform der gemeinsamen Agrarpolitik (GAP) der Europäischen Union. Hannover: EKD-Texte 114

http://www.ekd.de/download/ekd_texte_114.pdf

Evangelische Kirche in Deutschland (2012): Die Erde ist des Herrn und was darinnen ist. Biopatente und Ernährungssicherung aus christlicher Perspektive. Eine Studie der Kammer der EKD für nachhaltige Entwicklung. Hannover: EKD-Texte 115

http://www.ekd.de/download/ekd_texte_115.pdf

Evangelische Kirche in Deutschland (2013): Kundgebung der 11. Synode der EKD, Düsseldorf. Es ist genug für alle da – Welternährung und Landwirtschaft.

http://www.ekd.de/synode2013/beschluesse/s13_beschluss_kundgebung.html

Evangelische Kirche in Deutschland (2015): Unser tägliches Brot gib uns heute. Neue Weichenstellung für Agrarentwicklung und Welternährung. Hannover: EKD-Texte 121

http://www.ekd.de/download/ekd_texte_121.pdf

Evangelische Kirche in Deutschland, Deutsche Bischofskonferenz (2003): Neuorientierung für eine nachhaltige Landwirtschaft. Ein Diskussionsbeitrag zur Lage der Landwirtschaft. Gemeinsame Texte 18. Hannover/Bonn

<http://www.ekd.de/EKD-Texte/44662.html>

FAKT (2011): Gesamtbericht – Förderbereichsevaluation Ländliche Entwicklung / Naturre Ressourcenmanagement Evangelischer Entwicklungsdienst (EED). Synthesebericht aus Desk-Studie und Fallstudien. Teil I – Bericht. Berlin: Brot für die Welt

https://info.brot-fuer-die-welt.de/sites/default/files/blog-downloads/TEIL_I_SYNTHESBERICHT_FBE_LE_NRM.pdf

FAO (1996): World Food Summit. Rome: FAO

<http://www.fao.org/docrep/003/w3548e/w3548e00.htm>

FAO (2013): Organic Agriculture: African Experiences in Resilience and Sustainability. Rome: FAO, Natural Resources Management and Environment Department

www.fao.org/docrep/018/i3294e/i3294e.pdf

FAO (2015): Undernourishment around the world in 2015. The global trends. Rome: FAO

<http://www.fao.org/3/a-i4646e.pdf>

FAO (2016): Crop Prospects and Food Situation. No 4. Rome: FAO

<http://www.fao.org/3/a-i6558e.pdf>

FAO (2017): The State of Food Security and Nutrition in the World 2017. Building Resilience for Peace and Food Security. Rome: FAO

<http://www.fao.org/3/a-i7695e.pdf>

Fair Trade Advocacy Office et al. (2015): Wer hat die Macht? Machtkonzentration und unlautere Handelspraktiken in landwirtschaftlichen Wertschöpfungsketten. Berlin: Forum Fairer Handel e.V.

[https://www.forum-fairer-](https://www.forum-fairer-han-)

[han-](https://www.forum-fairer-han-)

[del.de/fileadmin/user_upload/dateien/publikationen/andere_publikationen/studie_wer_hat_die_macht_langfassung.pdf](https://www.forum-fairer-han-del.de/fileadmin/user_upload/dateien/publikationen/andere_publikationen/studie_wer_hat_die_macht_langfassung.pdf)

Giovannucci, Daniele et al. (2012): Food and Agriculture: The future of sustainability. A strategic input to the Sustainable Development in the 21st Century (SD21) project. New York: United Nations Department of Economic and Social Affairs, Division for Sustainable Development

https://sustainabledevelopment.un.org/content/documents/agriculture_and_food_the_future_of_sustainability_web.pdf

Heinrich-Böll-Stiftung et al. (2015): Bodenatlas. Daten und Fakten über Acker, Land und Erde. Berlin: Heinrich-Böll-Stiftung

https://www.boell.de/sites/default/files/bodenatlas2015_iv.pdf

Höring, Uwe (2015): Ernährung für alle oder Profit für wenige? Die neue Allianz für Ernährungssicherung in Afrika. Analyse 51. Berlin: Brot für die Welt

http://www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Fachinformationen/Analyse/Analyse51_Ernaehrung_fuer_alle.pdf

Höring, Uwe (2014): Entwicklungspolitik goes Agrarindustrie. Eine kritische Analyse von Initiativen zur Förderung des internationalen Agribusiness im Landwirtschafts- und Ernährungsbereich. Berlin: Forum Umwelt und Entwicklung
http://www.fian.de/fileadmin/user_upload/dokumente/shop/landwirtschaft/AGRI_AnalyseAgribusiness_21102014_web-1.pdf

International Federation of Red Cross and Red Crescent Societies and the ICR (1994): The Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief. Geneva: International Federation of Red Cross and Red Crescent Societies
<http://www.ifrc.org/Global/Publications/disasters/code-of-conduct/code-english.pdf>

Intergovernmental Panel on Climate Change (2014): Climate Change 2014. Mitigation of Climate Change. Working Group III Contribution to the Fifth Assessment Report. Cambridge: Cambridge University Press.
https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_full.pdf

Kotschi, Johannes (2013): Bodenlos. Negative Auswirkungen von Mineraldüngern in der tropischen Landwirtschaft. Berlin: Heinrich Böll Stiftung und WWF Deutschland
https://www.boell.de/sites/default/files/2015_wwf_mineralduenger_de_web.pdf

Kürschner-Pelkmann, Frank (2015): „Unser tägliches Brot gib uns heute“. Neue Weichenstellung für Agrarentwicklung und Welternährung – Kurzfassung der Studie der Kammer der EKD für nachhaltige Entwicklung. Hannover: EKD
http://www.ekd.de/agu/download/Unser_taeglich_Brot_gib_uns_heute_-_Kurzfassung.pdf

Li Ching, Lim (2009): Is Ecological Agriculture Productive? TWN Briefing Paper No. 52. Penang: Third World Network
http://webs.chasque.net/~rapaluy1/organicos/articulos/ecological_agriculture_productive.html

OECD (Organisation for Economic Co-operation and Development) (2012): OECD Environmental Outlook to 2050. Paris: OECD Publishing

Parrott, Nicholas/Marsden, Terry (2002): The Real Green Revolution. Organic and Agroecological Farming in the South. London: Greenpeace Environmental Trust
<http://www.greenpeace.org.uk/MultimediaFiles/Live/FullReport/4526.pdf>

Pretty, Jules (2006): Agroecological Approaches to Agricultural Development. Background Paper for the World Development Report 2008. Essex: University of Essex
https://openknowledge.worldbank.org/bitstream/handle/10986/9044/WDR2008_0031.pdf?sequence=1

Stabinsky, Doreen/Li Ching, Lim (2014): Herausforderung Klimawandel. Eine Strategie für ökologische Landwirtschaft und Klimaresilienz. Analyse 42. Berlin: Brot für die Welt
www.brot-fuer-die-welt.de/fileadmin/mediapool/2_Downloads/Fachinformationen/Analyse/Analyse_42_Oekologische_Landwirtschaft_und_Klimaresilienz.pdf

The Sphere Project (2011): The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response. Geneva: International Council of Voluntary Agencies (ICVA)
<http://www.sphereproject.org/handbook/>

UNCTAD (2013): Trade and Environment Review 2013: Wake up before it is too late. Make agriculture truly sustainable now for food security in a changing climate. Geneva: United Nations Conference on Trade and Development
http://www.srfood.org/images/stories/pdf/otherdocuments/20130918_UNCTAD_en.pdf

UNDESA – United Nations Department of Economic and Social Affairs (2015): News July. New York: UNDESA
<http://www.un.org/en/development/desa/news/2015.html>

UNEP-UNCTAD Capacity Building Task Force on Trade, Environment and Development (CBTF) (2008): Organic Agriculture and Food Security in Africa. Geneva: United Nations
http://unctad.org/en/docs/ditcted200715_en.pdf

United Nations General Assembly (2010): Report A/HRC/16/49 submitted by the Special Rapporteur on the right to food, Olivier De Schutter. Geneva: United Nations
http://www.srfood.org/images/stories/pdf/officialreports/20110308_a-hrc-16-49_agroecology_en.pdf

Walter, Bernhard (2014): Der Energiepflanzenanbau gefährdet das Recht auf Nahrung. Die aktuelle Biokraftstoffpolitik aus entwicklungspolitischer Perspektive. Profil 15. Berlin: Brot für die Welt
<https://shop.brot-fuer-die-welt.de/entwicklungspolitik/Ernaehrung/Profil-15--Der-Energiepflanzenanbau-gefaehrdet-das-Recht-auf-Nahrung.html>

Walter, Bernhard et al. (2014): Stillen Hunger bekämpfen: Eine Investition in die Zukunft. Berlin: Brot für die Welt
<https://shop.brot-fuer-die-welt.de/Themen---Aktionen/Satt-ist-nicht-genug-/Stillen-Hunger-bekaempfen--Eine-Investition-in-die-Zukunft.html>

World Food Programme (2016). Den Hunger weltweit bekämpfen. Berlin: World Food Programme
<http://de.wfp.org/über-wfp>

Welthungerhilfe (2017): Hunger – Ausmaß, Verbreitung, Ursachen. Die häufigsten Fragen zum Thema. Bonn: Welthungerhilfe

World Food Programme (2017): The Year in Review 2016. You Trusted Us. We Delivered. Rome: World Food Programme
<https://docs.wfp.org/api/documents/WFP-0000019183/download/>

World Health Organization/World Bank (2017): Tracking Universal Health Coverage: 2017 Global Monitoring Report.
http://www.who.int/healthinfo/universal_health_coverage/report/2017_global_monitoring_report.pdf?ua=1

Weltbank (1986): Weltentwicklungsbericht 1986. Der verhaltene Aufschwung und die Aussichten für ein dauerhaftes Wachstum - Handels- und Preispolitik in der Weltlandwirtschaft - Kennzahlen der Weltentwicklung. Washington: Weltbank
<http://documents.worldbank.org/curated/en/633691468782075169/Weltentwicklungsbericht-1986-zusammenfassung>
<http://documents.worldbank.org/curated/en/211801468779085578/World-Development-Report-1986-publication-summary>

World Bank (2011): World Development Report 2011. Conflict, Security, and Development. Washington: World Bank
<https://openknowledge.worldbank.org/handle/10986/4389>

Vereinte Nationen (2015): Entwurf des Ergebnisdokuments des Gipfeltreffens der Vereinten Nationen zur Verabschiedung der Post-2015-Entwicklungsagenda. A/RES/69/315 Resolution der Generalversammlung. New York: Vereinte Nationen

<http://www.un.org/depts/german/gv-69/band3/ar69315.pdf> or

http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/69/315

Zukunftsstiftung Landwirtschaft (2009): Wege aus der Hungerkrise. Die Erkenntnisse des Weltagrarberichtes und seine Vorschläge für eine Landwirtschaft von morgen. Berlin: Zukunftsstiftung Landwirtschaft

http://www.weltagrarbericht.de/downloads/Wege_aus_der_Hungerkrise_2.4MB.pdf

Glossary

Food security

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs for an active and healthy life. The four pillars of food security are: (1) availability, (2) access, (3) utilisation, and (4) stability. Due to its multidimensionality, food security cannot be achieved with stand-alone measures. Bread for the World is therefore engaged in projects in the following areas:

- Realising the right to food and nutrition and supporting food sovereignty;
- Increasing agricultural productivity through agroecology;
- Promoting agricultural education, extension and research;
- Improving access to natural resources;
- Promoting climate-resilient (smallholder) farming;
- Organisational capacity building in the farm sector;
- Promoting artisanal fishing and sustainable aquaculture;
- Advocacy for fair conditions at national and international level;
- Urban food security, expansion of urban agriculture;;
- Guaranteeing food security in conflicts and emergencies;
- Promoting a healthy and balanced diet;
- Lobbying, advocacy, education and awareness-raising in the Global South and Global North, with a focus on food security.

Food sovereignty

Food sovereignty is a political concept developed by social movements, with our partner organisation La Via Campesina leading the way in 1996. Food sovereignty goes further than food security and includes the right of farmers and peasants to decide what to grow and how to grow it and the right of consumers to decide what to eat. The concept of food sovereignty directly challenges the neoliberal model of agricultural development, including the liberalisation of agricultural markets, the privatisation of rural services, and the appropriation and concentration of productive resources such as land, seed, water, natural assets and fisheries in the hands of a small number of

individuals or enterprises. Instead, it offers a vision of small-scale, multifunctional and sustainable agriculture and artisanal fishing. The concept of food sovereignty is relevant to every country.

Hunger, malnutrition, micronutrient deficiency, overnutrition, overweight

There are various definitions of hunger, reflecting its diverse causes and forms. Hunger is commonly used as a term to describe the torment caused by lack of calories. However, this does not go far enough. It is possible to differentiate between the following forms of hunger:

Acute hunger means severe undernutrition over a definable period. It is the most extreme form of hunger and may arise in connection with crises and emergencies. This definition applies to almost 8 per cent of the world's hungry.

Chronischer Hunger beschreibt den konstanten bzw. regelmäßigen Zustand von Unterernährung. Es gibt qualitative und quantitative Unterernährung. Sie ist häufig auf den ersten Blick nicht sichtbar, hat aber dramatische Folgen: Der Körper gleicht unzureichende Ernährung dadurch aus, dass er körperliche und geistige Aktivitäten einschränkt, den Menschen ihre Initiative und Konzentrationsfähigkeit raubt und sie apathisch werden lässt. Bei Kindern kann die kognitive und physische Entwicklung unumkehrbar beeinträchtigt werden.

Hidden hunger is a form of undernutrition that occurs when intake and absorption of vitamins and minerals (such as zinc, iodine, and iron) are too low to sustain good health and development. This form of hunger is hardest to identify as it is not immediately visible. It afflicts more than two billion people worldwide.

What is the recommended daily food intake?

The minimum daily requirement per person varies between countries, age groups and the sexes. The FAO recommends a minimum intake of around 1,800 calories per person per day, whereas the WHO calculates that 2,100 calories per person per day is the minimum required to lead an active and healthy life.

When is a famine declared?

The United Nations has adopted a five-phase classification system for food security, with famine as the fifth and worst form of food crisis. According to the United Nations, a food crisis is defined as a famine if three conditions are met: 1) 20 per cent of households face extreme food shortages (less than 2,100 calories a day); 2) acute malnutrition rates exceed 30 per cent; and 3) the death rate exceeds two persons per day per 10,000 persons or four deaths per 10,000 children per day.

Malnutrition occurs when a person's diet does not contain the right amount of food energy (calories) and nutrients (carbohydrates, fats, proteins, vitamins and minerals). Intake may be too high or too low. Malnutrition is a broad term which includes undernutrition, overnutrition and micronutrient deficiency – the three most common conditions.

Undernutrition means a chronic deficiency of calories and/or nutrients. Children under five years of age are especially at risk. Undernutrition can cause low birth weight (below 2500g), underweight, wasting or stunting.

Micronutrient deficiency means a lack of vitamins and minerals and results from poor quality food. The most common forms are Vitamin A, iodine and iron deficiency.

Overnutrition is the result of excessive food intake (calories and nutrients) relative to dietary nutrient requirements. It causes overweight and obesity.

In many cases, these diverse forms of malnutrition tend to occur simultaneously. People whose calorie intake is too low generally do not have an adequate intake of other nutrients and therefore suffer from undernutrition and micronutrient deficiency at the same time.

The difference between overweight and obesity: Body weight is influenced by consumption of excessively fatty or sugary foods, the amount of exercise taken and the quantity of food eaten. The Body Mass Index (BMI) provides guidance on a healthy weight. BMI is defined as the body mass (kg) divided by the square of the body height (m) – $BMI = \text{weight (kg)} : \text{height (m)}^2$. According to the WHO, to achieve optimum health, the goal for individuals should be to maintain body mass index in the range 18.5 to 24.9 kg/m². A person is underweight if they have a BMI of less than 18.5. Overweight means a BMI in the range 25 to

29.9. Obesity begins at a BMI of 30 and severe obesity at a BMI of 40.

Smallholders or peasants

Family farms engaged in locally appropriate agriculture in countries of the Global South are usually “subsistence+” farmers. This means that their primary aim is to support their families with no reliance on markets. They may also grow cash crops, such as foods or luxuries, for the local, national or international markets; those who do so are most likely to be successful at the local or regional level. They have few prospects of gaining access to national or international markets via major commercial chains. Their operations focus mainly on livelihood security and sustainability, not maximising yields and profits. They play an ancillary role in industrial agriculture, generally as contract farmers or as rural workers on large farm enterprises. As a consequence, they are increasingly exposed to the growing market power of agribusiness, with women particularly at risk. Smallholding is defined by the amount of land available, usually less than two hectares.

Sustainable rural development

Sustainable rural development, as a funding area for Bread for the World, comprises all actions, projects and programmes which aim to improve the economic and social status of low-income rural groups and enable them to act as their own advocates, assert their established rights, gain access to productive resources and have a say in the political process. This is essential as more than two-thirds of the world's extreme poor live in rural regions. Two-thirds of people living in poverty are female.

Agriculture is the most important starting point and driver of integrated rural development, alongside forest use, livestock husbandry and fishing. However, these activities require a much broader approach, which includes:

- Fair access to land, water and natural resources (forests, fisheries), agricultural inputs, advice and local markets;
- Support for processing and marketing of foods for income generation;
- Establishment of local and regional value chains and the participation of disadvantaged groups in these value-adding processes;
- Promotion of non-farm trade and employment;
- Support for savings schemes, access to credit and insurance products;

- Building communities' climate resilience, e.g. through better linkage between disaster risk reduction and long-term climate adaptation measures;
- Lobbying, advocacy, education and awareness-raising in the Global North and the Global South, with a focus on food security issues.

Successful rural development should also include the provision of a range of well-functioning basic services, such as access to education and healthcare, water and domestic sanitation. Opportunities should also be created for rural youth. Social security programmes should be supported in order to cater for people with limited self-help capacities, unpredictable or inadequate incomes and precarious livelihoods. An enabling environment for agriculture can be achieved through peacebuilding engagement and conflict management, migration-related measures and efforts to address the causes of displacement, along with advocacy for fair trade rules that make it possible to protect local production and utilise export opportunities.

Sustainable Development Goal 2

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

The right to food

The right to food encompasses the legal dimension of availability and access to sufficient food, defining the state's obligations and enabling legal steps to be taken and civil society pressure to be exerted through political campaigns. The right to food was enshrined in the Universal Declaration of Human Rights in 1948 and has been elaborated in the International Covenant on Economic, Social and Cultural Rights (ICESCR) in 1966. In 2004, the FAO adopted the Voluntary Guidelines on the Right to Food, which is a tool for the enforcement of the right to food. More detailed Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security were adopted in 2012. Almost every country has ratified the ICESCR. This means that states may not obstruct access to food (duty to respect), must prevent third parties, e.g. private enterprises, from obstructing such access (duty to protect) and must mobilise all their resources to safeguard access to food (duty to fulfil) wherever people cannot provide it for themselves.

Abbreviations

ACP	African, Caribbean and Pacific Group of States
CAP	Common Agricultural Policy (EU)
CFS	Committee on World Food Security
CSM	Civil Society Mechanism
EKD	Evangelical Church in Germany
EPA	Economic Partnership Agreement
EU	European Union
FAO	Food and Agriculture Organization
FPIC	Free, Prior and Informed Consent
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development
ICESCR	International Covenant on Economic, Social and Cultural Rights
IFRC	International Federation of Red Cross and Red Crescent Societies
LRRD	Linking Relief, Rehabilitation and Development
OECD	Organisation for Economic Co-operation and Development
SDG	Sustainable Development Goal
UN	United Nations
WHO	World Health Organization
WTO	World Trade Organization