BMEL-Concept for Global Food Security and Nutrition

Agri-food policies: key to achieving the human right to adequate food
Dear Reader

At a time when more than half of the global population are suffering from hunger, malnutrition or are affected by overweight and obesity, we need concepts which focus on the complex causes of these problems and develop solutions accordingly.

The agri-food system is crucial to global food security and nutrition as well as to sustainable development. Sufficient quantities of quality food are necessary for child growth, learning, physical work, pregnancy, breast-feeding and for recovery from and resistance to disease. It is vital to have knowledge about healthy diet and to follow a healthy lifestyle. As the ministry in Germany’s Federal Government that holds the portfolio for agri-food and nutrition issues, the BMEL is very aware of its special responsibility and takes action to promote sustainability in agriculture and food systems at national, European and international level.

The aim is no longer just to eradicate hunger in the world; the goal is now to reduce and prevent all forms of malnutrition. To achieve this goal, we need to free ourselves from thinking within certain sectors, for instance focussing only on the agricultural or the health sector. We will also not be able to meet these challenges with national strategies alone. We need to work together with partners from politics, industry, civil society and academia, engaging in strong, sustainable cooperation that extends beyond national borders and beyond continents.
The key focus is on achieving the human right to adequate food. Every man, woman and child, alone or in community with others, must have the physical and economic access at all times to adequate food or means for its procurement. To achieve this right, we must make the agri-food system sensitive to nutrition and food safety. We must create opportunities to earn income in rural areas by making supply chains efficient and sustainable. This requires sustainable and responsible investment, particularly in developing countries.

We wish to assist these processes. This concept outlines our fundamental principles and goals. It represents the guiding vision for my ministry’s European and international policies.

I hope you find it an interesting and stimulating read. Because it is up to each and every one of us to make the vision of a world in which everybody can have adequate, sufficient and healthy food come true.

Christian Schmidt, Member of the German Bundestag
Federal Minister of Food and Agriculture
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Current situation and challenges

Global agriculture has for decades succeeded in feeding an additional 80 million people each year. The average number of people suffering from hunger has therefore declined despite the fact that the global population has increased. In purely mathematical terms, there is currently even enough food to feed everyone in the world. And yet each year a gap remains: more than 800 million people are starving; approximately two billion more are suffering from micronutrient deficiencies – so-called “hidden hunger”.

And the future will bring even greater challenges for global food security and nutrition:

- a global population of over nine billion people by 2050;
- a rising demand for energy and other products from renewable resources;
- a rising demand for food of animal origin;
- a growing number of overweight people; and
- the consequences of climate change.

To safeguard the future of humankind, agriculture and food systems must be made more sustainable and must sustainably use, preserve and conserve natural resources such as soil, water and biodiversity. To this end the agri-food system requires a secure policy environment in which all states fulfil their responsibilities to their respective populations and take concerted action at international and regional level. Agricultural and food policies can therefore help lay the foundation for long-term security and stability worldwide – for ultimately, food policy is also security policy.
The role of the BMEL

Achieving the human right to adequate food, and building a future where every individual worldwide has an adequate nutritional status, requires the interplay of many sectors and stakeholders, including the Federal Ministry of Food and Agriculture (BMEL).

The BMEL holds the portfolio within Germany’s Federal Government for food, agriculture and consumer health protection.

The agri-food system's importance for food security and good nutrition gives rise to the BMEL's special responsibility to promote sustainable agriculture and sustainable food systems worldwide, to support exchange between academia, civil society and industry and, in collaboration with other ministries, to take action to improve global food security and nutrition.

The BMEL's agri-food policies aim to create an environment that is conducive to varied and affordable foods in adequate quality and quantity being made available.

The BMEL's agricultural policy is also designed to help reduce poverty, especially in rural areas, and promote adequate nutrition for everyone.
The BMEL‘s tools and objectives

The BMEL’s overarching goal is to help achieve the **human right to adequate food** in Germany, Europe and the world. The human right to food will be achieved when all people, at all times, have physical and economic **access to sufficient, safe and adequate food** that meets their dietary needs and food preferences for an active and healthy life.

This gives rise to further goals for the BMEL:

› create a suitable environment for food security and nutrition;
› improve food security and nutrition worldwide, and sustainably increase production and productivity in the agri-food system;
› make agriculture and food systems sensitive to nutrition and food safety;
› develop long-term strategies for the sustainable use of resources and provide targeted support for research.
The BMEL has a number of tools to help achieve these goals and overcome adverse circumstances to permanently close the gap in supply on the ground:

For instance, BMEL employs its expertise and experience in food and agriculture and, as lead ministry for these fields, supports the work of the United Nations, especially the UN’s Food and Agriculture Organization (FAO) and Committee for World Food Security (CFS).

The Federal Republic of Germany is the third largest contributor to the FAO; represented by the BMEL. Germany supports the FAO’s work and backs an expansion of the FAO’s core competences, namely the creation of an international policy-enabling environment, the setting of standards and the provision of policy advice.

The BMEL also cooperates with the FAO under the Bilateral Trust Fund (BTF), supporting pilot projects designed to promote food security and nutrition. These projects are conducted in selected partner countries and develop strategies to improve the food and nutrition situation based on the human right to adequate food.

Another of the BMEL’s tools is the Bilateral Cooperation Programme (BKP), which it uses to support partner countries in establishing productive and resource-efficient agriculture and food systems. The projects target countries with high agricultural potential in order to make an optimal contribution towards ensuring the supply of food, both locally and worldwide. The focus is on political exchange, legislative advice and the transfer of technology and knowledge. Educational facilities, associations, research facilities and companies from the agri-food system are involved in the projects and contribute their expertise, while industry, in particular, also contributes benefits in kind.

The BMEL also uses bilateral and multilateral exchanges to help lay the foundation for making agriculture and food systems sustainable and market-oriented and for establishing the primacy of food security and nutrition.

Additionally, the BMEL conducts departmental research, allowing it to contribute towards important issues of global food security and nutrition; it also supports the establishment of research partnerships on these issues between domestic agri-food research facilities and those in partner countries.
Possible solutions

Food security and nutrition is an area where there are many conflicting interests, for instance regarding production, trade, health protection and the preservation and sustainable use of resources. This in turn results in conflicting aims which need to be resolved with careful consideration. BMEL sets the following priorities in this regard:

Create a suitable environment for food security and nutrition

1. The BMEL supports the adoption of international norms and guidelines in order to entrench food security and nutrition as a political priority worldwide.

Sustainable food security and nutrition will only become a reality if we realise and implement democracy, the principles of good governance, the rule of law, the protection and fulfilment of human rights, and the freedom from discrimination, and if governments are accountable to their citizens for their actions.

The international community has adopted international norms and guidelines within the United Nations and at regional level that act as a point of reference for governmental action in the field of food security and nutrition. These include the human right to food, the human right to water and sanitation, and the voluntary guidelines on the right to food.

Public and private investment in agriculture is urgently needed in developing countries and emerging economies. To ensure that this investment also benefits those suffering from hunger and malnutrition – i.e. that it sustainably boosts agricultural production, generates income and jobs, and empowers rural areas – the investment must be responsible, sustainable and in line with national strategies on
food security and nutrition. In October 2014, the Committee on World Food Security (CFS) adopted the **Principles for Responsible Investment in Agriculture and Food Systems (RAI principles)**. These will serve governments and enterprises as a guideline for their investment policies, legislation and business activities.

However, greater agricultural investment in developing countries and emerging economies has also meant that certain issues, such as the recognition and protection of existing rights of tenure over natural resources (particularly land and water) and the need for comprehensive land-use planning, have become more acutely relevant and more highly charged for policymakers and the local populations. In 2012, as a reaction to this, the CFS adopted the **Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT)**. They constitute the first-ever globally endorsed international instrument on politically sensitive issues related to access to land, fisheries and forests that involved all stakeholders and is based on human rights standards.
BMEL supports the work of the United Nations, particularly its Food and Agriculture Organization (FAO) and the FAO’s Committee on World Food Security (CFS). It provides political and financial support to relevant processes, for instance processes for improving the operation of these organisations and for developing new international instruments. The BMEL successfully supported the reform of the CFS into the most important platform worldwide for the coordination of national, regional and global strategies on food security and nutrition. During this reform, the high level of inclusion of civil society, business and academia was institutionalised in the CFS’s work.

The BMEL focused the Global Forum for Food and Agriculture (GFFA) 2013, the Foreign Trade Congress 2014 and the “Policies against Hunger” Conference 2014 on “Responsible Investment in Agriculture and Food Systems” in order to support the CFS negotiations on the RAI Principles in Rome. The BMEL provided EUR 2.1 m of funding towards the development of the VGGT and is currently supporting the FAO in advancing the implementation of the VGGT worldwide. The BMEL is financing the development of Technical Guidelines for applying the VGGT in certain sectors, for instance forestry and pastoralism (nomadic animal husbandry). As part of the German G7/8 commitment to implementing the VGGT, the BMEL is making concerted efforts with the FAO to establish partnerships between countries. These are intended to help improve legislation and administrative practice in the context of agricultural investments.

The BMEL is taking action to ensure that the elimination of hunger and malnutrition in all its forms is granted top priority in international processes such as G7/8, G20 and the UN, for instance in formulating the post-2015 agenda.
The BMEL wants European agricultural policy and global trading rules to support food security and nutrition worldwide.

Food and agricultural products are traded internationally. The international trading environment and the transparency of agricultural markets are crucial for this trade.

International agricultural trade has great potential for promoting food security and nutrition if due regard is given to the needs of developing countries and emerging economies. If developing countries are to be successfully integrated into global trade, the same rules must apply to all partners. The Doha negotiations in the World Trade Organisation (WTO) must be brought to a speedy conclusion in order to remove remaining trade distortions and reduce tariff barriers. Granting the poorest countries duty-free and quota-free market access, and concluding free-trade agreements with developing countries that take account of the latter’s level of development, increases these countries’ chances of generating income through export and thus of contributing to food security and nutrition.

The BMEL is committed to liberalised, rule-based trading on these markets, with particular regard given to developing countries. Developing countries’ access to European agricultural markets is particularly important. The BMEL particularly advocates, at both European and international level, the abolition of agricultural export refunds and the dismantling of trade-distorting subsidies. Through its role in formulating domestic and European agricultural policy, the BMEL also supports the development of sustainable agricultural production worldwide, which is crucial in securing food and nutrition globally.
The Federal Ministry of Agriculture advocates greater transparency on agricultural markets to curb extreme price fluctuations and their impact on food security and nutrition.

Extreme price volatility causes uncertainty and financial risk for all market operators. Extreme price fluctuations at times of low supply and high demand may put food supplies at risk, particularly in developing countries and emerging economies that are dependent on imports. As agricultural and financial markets are globally integrated, the EU, G7/8 and G20 have put the task of curbing extreme price fluctuations on agricultural commodity markets on their agendas. One particular aim is to establish transparency and appropriate regulation on financial markets in respect of trade development and market participants. This is intended to strengthen risk hedging and put a stop to the abuse and manipulation of prices. It is one way in which, together, states could help prevent excessive speculation with foodstuffs.
The BMEL supports the implementation of the “Action Plan on Food Price Volatility and Agriculture”, adopted by the G20 states in June 2011, by participating in the development of the global Agricultural Market Information System AMIS, which will improve the quality, reliability, accuracy and comparability of agricultural market data and, consequently, enhance market transparency worldwide. As well as gathering reported data, the aim is to provide improved short-term harvest forecasts based on better monitoring of crop growth (e.g. by using GEOGLAM remotely sensed data) and to supply more reliable information on stock levels. The political steering committee, known as the Rapid Response Forum, forms another element of this Action Plan. It was created with the objective of ensuring that market policies adopted as a reaction to critical market situations are coordinated internationally.

The BMEL also welcomes the progress made in regulating the financial markets. Agricultural futures markets are a useful tool for the agricultural and food industries for hedging against unexpected price fluctuations. They must, however, be protected against market abuse and excessive speculation. The appropriate legislation in Europe and the USA (where the main exchanges for agricultural raw materials are located) have already been adjusted.
4. The BMEL engages in multilateral and bilateral cooperation with the aim of improving food security and nutrition worldwide and sustainably increasing production and productivity in the agri-food system.

In many parts of the world, current agricultural yields lag far behind their potential (the so-called “yield gap”).

To boost food availability, yields need to be increased sustainably, especially in Africa, Eastern Europe and parts of Asia. This is why the BMEL has chosen countries from these regions in which to carry out the bulk of its projects. Modern, high-performance German agriculture is in many parts of the world regarded as a successful model for agricultural development. The experience that this sector boasts in Germany is in demand in many countries. Transfers of knowledge, methods and technologies are therefore an integral part of the BMEL’s bilateral projects. The projects carried out under the BMEL's Bilateral Cooperation Programme also support market development processes.
Under its **Bilateral Cooperation Programme (BKP)**, the BMEL conducts practice-orientated projects to provide targeted support for the development of nutrition, agriculture and consumer health protection in the partner countries. Over many years of collaboration with partner countries, three types of project have proved to be especially sustainable, and have therefore been continually refined and developed:

The **Agricultural Policy Dialogues (APD)** provide decision-makers in the partner countries with advice on issues of agricultural policy and the farming business. The projects are demand-orientated and flexible in terms of the topics covered (projects are currently being conducted in Ethiopia, Kazakhstan, Russia and Ukraine and prepared in China).

The **Economic Cooperation Projects (WKO)** provide agricultural experts and managers with practice-orientated training on demonstration farms and, in cooperation with the agricultural sector, with modern technology, adapted seed and other equipment (projects are currently being conducted in Ethiopia, China, Kazakhstan, Morocco, Mongolia, Zambia and Ukraine).

In **Cooperation Projects between Agricultural Associations (VKO)**, the BMEL joins forces with German agricultural associations and cooperatives to support and strengthen the organisational capacities of corresponding associations and organisations in the partner countries (projects are currently being conducted in Brazil, Kenya, Russia and Vietnam).

In bilateral technical cooperation projects conducted under international **sustainable forest management schemes**, the BMEL promotes sustainable forestry management in partner countries.

The **Bilateral Trust Fund of the Federal Government** and the FAO funds pilot projects, focusing on the following areas: implementation of the right to food; development of strategies for sustainable food security and nutrition in rural areas; strengthening of horizontal topics, such as the advancement of women, the promotion of a healthy diet and the compatibility of food security and nutrition with the use of agricultural commodities for materials and/or energy production.
5. The BMEL strengthens the role of women and family farms.

Family farms, especially those run by smallholders or women, are the backbone of agricultural production in developing countries and emerging economies. Small and medium-sized family farms produce 60 to 80 per cent of the food in developing countries. Yet smallholders and women frequently have little or no access to loans, natural resources such as land and water, markets, infrastructure or agricultural inputs. They need training, appropriate and up-to-date information and targeted advice in order to participate in the market effectively. The tenure rights of women and of small and medium-sized family farms must be strengthened and safeguarded, as must their involvement in investment decisions that could restrict these rights. Family farms must be given particular attention because of the scale of their contribution and their huge significance for feeding the world.

The BMEL is underpinning the development of family farming in developing countries and emerging economies by deploying an extensive range of resources, e.g. the Bilateral Trust Fund, numerous bilateral cooperation projects, and also the EU-financed instrument of twinning. Pilot projects that receive funding from the BMEL are required to accommodate gender aspects. This is to ensure that the projects incorporate the interests and needs of women and men in equal measure.

Under the Bilateral Cooperation Programme, the BMEL also supports cooperation between farmers’ associations and agricultural cooperatives at international level. Agricultural associations and cooperatives support farmers, including women farmers, by imparting knowledge. They help to improve the political standing and market position of small and medium-sized family farms, to open up financing opportunities, and to develop the businesses of these farms.
BMEL backs the development of efficient and sustainable supply chains from primary production to the final consumer.

One of the most important ways for rural populations in developing countries and emerging economies to generate value and income is by producing high-quality agricultural products and processing them into foods of high nutritional quality. To this end, local producers must be integrated into local and global supply chains. These range from primary production and upstream sectors to the avoidance of post-harvest losses, the development of a wide range of foods and the opening up of new markets. Ideally, local value creation leads to locally accepted foods of high nutritional quality being produced locally and consumed locally.

In addition to the challenges in rural areas, there is now increasing pressure to act on the issue of urbanisation, both in industrialised nations and in developing countries and emerging economies. The potential of urban farming and site-adapted horticulture must be utilised to help secure supplies of nutritional food to conurbations.
The BMEL conducts practice-orientated bilateral and multilateral cooperation projects to support pilot programmes for developing sustainable, economically viable supply chains at local level that actively help combat poverty. For instance, the BMEL is taking action in the “Sustainable Cocoa Forum” to improve living conditions for cocoa farmers and promote sustainable cocoa production.

To minimise post-harvest losses and food waste along the supply chain, the BMEL promotes data collection and the dissemination of knowledge and technology, for instance high-efficiency agricultural methods combined with practice-orientated training. The BMEL-funded FWF (Food Wastage Footprint) project is examining the environmental and socio-economic impacts of food waste at local and global level, and highlighting opportunities to reduce this waste.

In 2012, the BMEL launched an initiative entitled “Too good for the bin”, which aimed to increase appreciation for food in Germany, avoid unnecessary food wastage, and make people more aware that our behaviour in a globalised world impacts resources and structures in other countries.
7. The BMEL is committed to closer link agriculture, nutrition and health.

As part of its efforts to combat hunger and malnutrition in all its forms worldwide, the BMEL promotes agriculture and food systems that integrate nutrition objectives and indicators and aim to improve the nutritional situation worldwide (nutrition-sensitive food systems).

Adequate nutrition must be viewed in its social, economic, environmental and health-related context as a multi-layered phenomenon. The focus is on there being a diverse range of affordable and nutritional foods that find local and cultural acceptance and that are produced using methods adapted to local conditions.
The BMEL uses the pilot projects carried out under the Bilateral Trust Fund to promote high-performance, sustainable agriculture and food systems that have no negative impact on health, the environment or society along the entire supply chain. To this end, BMEL promotes an intensive exchange between experts from the agri-food system.

By supporting the “Nutrition – Diversified Agriculture for Balanced Nutrition in Sub-Saharan Africa” research programme under its Research Cooperation for Global Food Security and Nutrition scheme, BMEL is using innovative scientific approaches to improve the food situation.

At political level, the BMEL supported the Second International Conference on Nutrition (ICN2) held by the UN’s FAO and World Health Organization (WHO). The BMEL backs the implementation of the “Rome Declaration on Nutrition” adopted by ICN2 and “Framework for Action”, its global action plan.

8. The BMEL protects the health of humans, animals and plants by creating uniform, internationally acknowledged standards and assisting in their implementation.

Globalisation has made preventive health care and food safety an international task and an important element of global strategies on food security and nutrition. Global trade in food and agricultural products is expanding and new seed, ingredients and products are being developed, while new pathogens continue to emerge. There is therefore an internationally-coordinated safety system for food and food production. Preventive health care and food safety cover a large range of aspects, from
the preservation and conservation of soil, plants and the environment to health protection for animals and humans. The BMEL supports the practical application of international standards, for instance via bilateral cooperation and twinning projects with third countries (e.g. training food-safety experts and helping strengthen laboratory capacity).

The BMEL represents Germany in the development of the **Codex Alimentarius**, a collection of widely-recognised international standards for a large range of foodstuffs. The Codex Alimentarius has a major influence on the quality and safety of global food supplies. It contains requirements designed to ensure that consumers worldwide are provided with safe, unadulterated and properly labelled food, and provides guidelines and codes of practice for product manufacturing.

In many developing countries and emerging economies, rising incomes are fuelling demand for animal products. To satisfy this demand effectively, it is vital to have healthy animals for high-performance agriculture and safe foods. To stay **healthy**, **animals** require good husbandry conditions, suitable feed, effective disease prevention and control, and effective authorised veterinary medicinal products. It is also humankind’s responsibility to protect the lives and well-being of animals as our fellow creatures.
The BMEL supports the creation and application of international standards for soil conservation, plant protection, animal welfare and safe foods. The harmonisation of norms and standards plays an important role in twinning projects, bilateral cooperation projects and most especially the Agricultural Policy Dialogues.

Under the International Seed Treaty, the BMEL is committed to the sustainable use of plant genetic resources and the improvement and adaptation of seed to local conditions.

The BMEL and its subordinate bodies also ensure that risks to the health of humans, animals and plants are continually assessed and that regulations and structures are continually adapted to reflect new knowledge. To protect against the introduction and dissemination of harmful organisms, the BMEL and its subordinate bodies advocate and back international phyto-sanitary standards and actively support the work of the International Plant Protection Convention (IPPC).

The same applies to animals and animal diseases as they do not stop at national borders. The BMEL works closely with the veterinary authorities of other EU member-states and third countries, actively supporting the World Organisation for Animal Health (OIE) in its work, for instance on containing avian flu or developing animal-welfare standards. One priority for Germany's G7 presi-
dency in 2015 is to promote a rigorous and comprehensive reduction in the use of antibiotics in order to curb the global spread of antibiotic resistance.

The BMEL supports the Standards and Trade Development Facility (STDF), a joint aid programme established by the World Trade Organization and a number of partners such as the OIE, the IPPC and the World Bank. The STDF programme carries out training and other measures to develop plant protection services or animal health authorities in developing countries. This facilitates the implementation of international sanitary and phytosanitary norms in these countries, which leads to higher-quality foods for the domestic market and better opportunities on global markets.

With regard to special foods, such as baby formula, dietary supplements and fortified food, the BMEL actively supports the development and implementation of globally harmonised standards in the Codex Committee on Nutrition and Foods for Special Dietary Uses. These standards aim to ensure that infants receive high-quality foods containing all the vital nutrients during the critical first 1000 days.
Develop long-term strategies for sustainable use of resources and promote targeted research

9. The BMEL takes action to promote the sustainable use of scarce resources.

9.1 Conservation and sustainable use of biological and genetic diversity

The preservation and sustainable use of biodiversity in the agricultural, forestry, fisheries and food sectors are vital to our existence, and to the existence of future generations. The conservation and sustainable use of genetic diversity and the diversity of ecosystems is therefore crucial to the future strength of agriculture and to securing food and nutrition worldwide, especially in the context of climate change. The 2004 International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR) is vital, with contracting parties undertaking to promote the conservation and sustainable use of plant genetic resources for food and agriculture. This “International Seed Treaty” created the first global, legally-binding system for easier access to genetic resources and fair and equitable sharing of all
advantages arising from these resources. Access to these resources is the basis for developing site-adapted crops. The treaty also provides worldwide support for projects on conserving and adapting crops to new challenges. However, sustainable use of our crops is only possible if farmers, notably smallholders, also have the corresponding rights. The contracting parties also declare their commitment to protect and promote these rights.

The BMEL supports the FAO Commission on Genetic Resources for Food and Agriculture. The commission gathers basic information on biological diversity for food and agriculture, formulates worldwide action plans based on the data, and sets standards for the conservation and sustainable use of this biodiversity. The overarching goal is to secure sustainable agriculture and a varied, balanced diet for all people.

Germany signed up to the Convention on Biological Diversity (CBD) in 1993. The BMEL has formulated its own strategy to implement the aims in the convention.

Germany also provides political and financial support for the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR).
9.2 Conserving soil to secure food and nutrition globally

Soil is one of the most important resources for securing food and nutrition globally. At the same time there is only a finite amount of soil. Use of soil therefore requires special conservation. Soil fertility is under threat worldwide due to soil degradation that is caused by erosion (from water, wind and landslides), loss of humus and nutrients, acidification, salinisation, pollution, and reduced soil biodiversity. Fertile, versatile soil is vital for securing adequate nutrition for an ever-growing global population. In many countries, soil fertility must be improved significantly in order to produce sufficient food and feed.

The BMEL’s departmental research contributes both nationally and internationally towards the many aspects of soil conservation with the aim of achieving a productive and sustainable use of soil in agriculture, even under climate change. Counselling farmers is one important tool for promoting soil conservation; this creates an awareness of soil-conservation issues and sustainable soil use. Recommendations are drawn up based on existing knowledge and the experiences of local farmers; these recommendations include demonstration field trials and are available to everyone. The recommendations are adapted and developed to reflect technical and biological advances.

Germany is a member of the FAO Global Soil Partnership and is committed to achieving the partnership’s goals. The Global Soil Partnership focuses on a range of aspects: on sustainable soil management for the conservation and sustainable use of soil; on technical cooperation, training and soil policy; on soil research; on improving the scope and quality of soil data; and on the improved harmonisation of measurement methods and indicators for the sustainable use of soil.
9.3 The role of sustainable forestry and land management in food security and climate change mitigation

Around 1.6 billion people across the globe are dependent on forestry for their livelihoods. The forests supply these people with food, medication, building materials and energy. Sustainable forestry therefore also plays an important role in the fight against hunger, malnutrition and poverty. This is clearly reflected by local and regional markets in the tropics and subtropics, where a large range of fruit and other products from trees and shrubs play an important role in food security and nutrition. Some of these products also find their way onto European markets (e.g. cocoa, coffee and tea).

The potential of tropical forests as valuable sources of nutrition is at risk due to their gradual destruction and the over-exploitation of their products. Deforestation moreover has a negative effect on the climate and leads to the loss of a major source of biodiversity and an important source of raw materials. The damage goes far beyond the developing countries in which forests are being overexploited, impacting on the entire international community, including Germany. The causes are manifold. Measures therefore need to be taken by all stakeholders at national, regional and international level in order to call for and promote sustainable forestry.

The agricultural sector accounts for approx. 14 percent of greenhouse gas emissions globally, but around 74 percent in developing countries. A sustainable increase of production and productivity in the agri-food system to promote global food security and nutrition does not conflict with more climate-friendly agriculture and forestry. Global climate change goals and global food security and nutrition can and must be made compatible with one another.
In connection with its involvement in international forestry policy, the BMEL supports pilot projects and demonstration projects with international organisations, bilateral technical cooperation projects under international sustainable forest management schemes and cooperation in forestry research. The aim is to progress sustainable forest management in practice as well as in theory. One particular focus of BMEL policy is to promote forestry cooperatives and other similar forest management units. These are often self-help units formed by small-scale forest owners. They frequently prove to be the key to improved sustainable forest management and better food security and nutrition. The BMEL conducts projects in pilot countries to support the FAO’s “Forest and Farm Facility”, showing how effective sustainable forestry management can be in improving food security and nutrition.

The BMEL advocates using forward-looking cultivation practices to secure and sustainably increase yields and simultaneously reduce agricultural greenhouse gas emissions. Support is being provided under the Bilateral Trust Fund to projects across all sectors and levels of government that focus on integrating ideas on climate change more effectively into (national and donor-financed) agricultural investment projects and programmes.

9.4 Sustainable management of fish stocks

The oceans and their stocks of fish and other marine animals are used intensively as food resources. German fisheries policy aims to strengthen and improve food security and nutrition worldwide via sustainable management of global fish stocks based on the principle of the maximum sustainable yield (optimum annual catch which can be taken from a fish stock without endangering its existence).
The BMEL is taking action within the EU to strengthen regional fishery management organisations; these organisations regulate fishing on the high seas and are committed to fighting illegal fishing. The BMEL is also committed to strengthening the EU’s Fishery Partnership Agreements which govern the access of European fleets to partner states’ territorial waters and also always include development aspects. Specifically, this means that the catch levels are set according to the principle of the maximum sustainable yield. The surplus principle also applies, i.e. the EU fleets are only granted catching opportunities if these opportunities are not utilised by local fishermen.

9.5 A sustainable bioeconomy secures the primacy of food and nutrition and combats poverty

The fight against malnutrition must go hand in hand with the fight against poverty. This must be based on a strong, diversified and sustainable agriculture, which supplies agricultural raw materials for the non-food sector – for industry and energy – as well as food and feed.

The finite nature of fossil raw materials and the grave environmental problems which their utilisation entails are causing demand for sustainably-produced renewable raw materials to increase. The new jobs being created provide income opportunities, particularly in rural regions, and are effective in helping reduce poverty. On the condition that priority is given to securing food and nutrition, the BMEL is pushing for agriculture to use biobased, sustainable supply chains.
The BMEL has designed and launched the “Initiative for the Sustainable Supply of Raw Materials for the Industrial Use of Biomass (INRO)” network with the aim of ensuring and harmonising the sustainability of the entire range of renewable raw materials. German companies, interest groups, civil society and academia have joined forces to find a way of facilitating the sustainable production of biomass for industrial use as well. The network partners engaged in a “multi-stakeholder” process and succeeded in reaching a consensus on some important criteria for a sustainability certification system for biomass. The aim is to use the criteria drawn up in the INRO network to boost the demand for raw materials certified as sustainable, to raise the standards of existing certification systems, and ultimately to harmonise the standards.

The BMEL is using the example of sustainable palm-oil production to implement the INRO approach in practice in the Forum on Sustainable Palm Oil (FONAP). The members of the Forum on Sustainable Palm Oil make the following public and voluntary commitments: to be using only sustainably-produced palm (kernel) oil by the end of 2014; to use certified palm (kernel) oil-based raw materials, or to actively contribute to ensuring that 100 percent segregated and certified palm (kernel) oil and corresponding derivatives will be available as soon as possible.
10. The BMEL provides impetus to farmers and local populations through research, innovation and technologies.

Research is essential in order to improve the nutritional situation worldwide in the long term. Particular attention must be given to sustainably increasing productivity and production in agriculture and ensuring that agricultural raw materials are processed locally, in order to contribute to the fight against hunger, malnutrition and poverty. International networking of agricultural and nutritional experts is crucial to achieve this. Bilateral and multilateral research projects promote scientific exchange and partnerships between agri-food research facilities in Germany and developing countries. The objective is to enhance worldwide the direct benefit that German research on agriculture and nutrition provides for the development of a high-performance, nutrition-sensitive and sustainable agri-food system. The aim is to go beyond scientific progress and exchange per se by establishing enduring international alliances and making a crucial contribution to the capacity development of research facilities in developing countries and emerging economies.
The BMEL promotes research into innovative solutions via its “Research Co-operation for Global Food Security and Nutrition” programme. Bilateral, practice-orientated research projects are conducted in cooperation between German agri-food research facilities and corresponding facilities in selected developing countries and emerging economies in order to support BMEL policies for improving the world food situation.

A scientist exchange programme enhances research partnerships and provides training for PhD students from developing countries and emerging economies at German agri-food research facilities, especially in the BMEL’s departmental research establishments and Leibniz Institutes.

Effective and efficient cross-sector information and knowledge management is important for creating a bridge between science and the application of research results by industry and policy-makers.