

HEALTHY FOOD FOR HEALTHY PEOPLE ON A HEALTHY PLANET

Sufficient and healthy food for everyone that is produced by people who can earn a good living without looting the planet – we won't achieve this goal without transforming agriculture, be it industrial or smallholder-based. Our author outlines Germany's food policy approach in development co-operation.

By Stefan Schmitz

The achievements of agriculture, especially over the last half-century, cannot be denied. Never before has it been capable of feeding so many people. Despite a rapidly growing world population, the share of undernourished people has never been as low as it is today. But these developments also have their flip sides. And these flip sides can no longer be ignored. Otherwise we will be heading straight for disaster.

Climate change and species loss, the loss of fertile soil, the destruction of forests and the over-exploitation of water resources are among the greatest threats to the survival of humankind. The current global agricultural and food system is making a considerable contribution to these threats. The way in which the world is feeding itself and agricultural goods are produced is anything but sustainable. Agriculture has a roughly 25 per cent share in climate change, half of which is due to the fact that agriculture is reaching out more and more into natural landscapes with its areas un-

der cultivation, releasing enormous amounts of carbon that has so far been bound in the soil and in forests. Agriculture is responsible for around 80 per cent of global deforestation. Seventy per cent of the world-wide consumption of freshwater goes into agriculture. Moreover, within a mere 25 years, the fertility levels of a quarter of all soils under cultivation have declined significantly owing to too intensive or improper cultivation. Deforestation, over-grazing, excessive use of water resources and similar inappropriate practices have resulted to an inconceivable extent in the devastation of entire regions.

Many aberrations have to be attributed to the industrialised form of agriculture, with its intensive livestock farming, its monocultures and its frequently far too careless handling of fertilisers, herbicides and antibiotics. But in its present form, smallholder agriculture in the Global South, which is often referred to as backward, is not sustainable either. Degraded soils as a result of land use which is not adapt-

ed to local conditions reflect this unsustainable use. High population pressure and low area productivity not only exacerbate the lack of food but also raise pressure on farmland. Many smallholder families in the South in particular are still not in a position to earn enough to secure their livelihoods. They are the population group in which absolute poverty and hunger are most widespread.

Despite all the progress made in agriculture, more than 800 million people are suffering hunger, while two billion people lack vital micronutrients and almost two billion people are said to be overweight or obese. Thus, for a wide variety of reasons, around half of the world population do not enjoy healthy food. Partly, this is due to a lack of food, but partly also to its overabundance and an inadequate knowledge about a healthy diet. While the mass distribution of cheap, industrially processed food is critical, a growing global middle class is developing an ever greater taste for protein-rich animal source foods. Not only

SOIL PROTECTION AND REHABILITATION

The Global Programme Soil Protection and Rehabilitation for Food Security started in 2014 with the aim to support six partner countries in Africa and Asia in their efforts to conserve and restore soils. Technical approaches adapted to the local environment and livelihoods of rural populations are promoted through trainings of smallholder farmers and agricultural service providers. The Programme also assists in creating conducive policy frameworks that provide incentive mechanisms for sustainable land use. A variety of farming systems with integrated nutrient cycles allow for a substantial reduction of external inputs.

In Benin, crop rotation with nitrogen-fixing legumes and the construction of rock berms have significantly improved productivity and reduced erosion by wind and water. In Kenya, a combination of minimum-tillage, integration of cover crops and application of compost (see picture) have increased soil health, resulting in increased drought tolerance and crop yields. The Programme succeeded in protecting and rehabilitating more than 100,000 ha of agricultural land. It aims to achieve a total of 280,000 ha of rehabilitated land by 2022.



An innovative smallholder inspecting compost production in Gongo, Western Kenya.

Photo: GIZ/Jörg Böhling

does this often exceed a healthy measure for the individual, but in sum, it also represents an enormous consumption of natural resources.

Sufficient and healthy food for everyone that is produced by people who can earn a good living without looting the planet – this is the goal! This goal is clearly stipulated in Sustainable Development Goal (SDG) 2 (Zero Hunger), but also in the SDGs 12 (Responsible Consumption and Production), 13 (Climate Action) and 15 (Life on Land) of the global goals for sustainable development.

CRUCIAL IMPULSES HAVE TO COME FROM AGRICULTURE

Achieving this goal requires coherent collaboration between different policy areas. In addition to agricultural policy, these areas comprise e.g. trade, education, health, research, infrastructure and environmental policies. The most important entry point is agriculture, because it is agriculture via which the most effective and far-reaching changes can be reached, and this is where the crucial impulses have to come from.

The SDGs equally address the industrialised countries and the developing countries and emerging economies. According to the logic and philosophy of the SDGs, all countries are “developing countries” that have to head

for a common goal which has so far not been reached anywhere. Nowhere else does this become clearer than in the goal of healthy food for healthy people on a healthy planet.

The agriculture of the Global South, particularly in Africa, where it is still based largely on a subsistence economy, has to develop. However, it is essential for it to avoid the mistakes that today’s industrialised agriculture has made on its development path over the last decades. At the same time, this industrial agriculture needs to substantially correct the mistakes it has made in the past. The common goal is an agriculture based on agroecological principles. The chief characteristics of such a form of agriculture are: temporal and spatial diversification of agricultural production (crop rotation farming, intermediate cropping, integrated farming systems linking livestock keeping to area); varietal diversity; optimised production with low external input, farm-level and regional cycle economy; short value chains with minimum distances between fields, markets and plates.

Food and nutrition security, agriculture and rural development are among the top priorities of German development policy, which, provided that this has not already happened, will boost its investment in agricultural programmes in the partner countries according to the agroecological principles of agricultural production outlined above and the corresponding provisions in SDG 2 and SDG 15.

Important impulses have already been given, such as the projects focusing on the development of Green Innovation Centres, which are now being extended step by step to centres for the establishment of a knowledge-intensive rural economy, or the projects on soil rehabilitation and the conservation of soil fertility (see Boxes).

SUPPORT IS NEEDED AT ALL LEVELS

The emphasis here is not on an agroecological optimisation of individual, isolated projects. Rather, the goal is to participate in an agroecological transformation in developing countries via support measures at all levels, ranging from the implementation of a project at local level through agricultural policy advice at national level to engagement in achieving the right global framework conditions. This is an important contribution towards fending off a collapse of the global agriculture and food system and achieving the ambitious but urgently needed Sustainable Development Goals by 2030.

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GREEN INNOVATION CENTRES

Generating a sustainable food supply for an increasing world population requires agricultural innovation. The Federal Government has therefore set up 15 Green Innovation Centres for the agriculture and food sector: 14 in African countries and one in India. The project promotes sustainable, climate-adapted production and processing methods that protect natural resources.

In Cameroon, for instance, the Green Innovation Centre supports a Farmer Field School for the reduction of pesticides and has trained 3,000 smallholders in the use of ecological practices. Therefore, last year, 80 farmer companies were able to produce seven tons of certified organic cocoa beans. In Zambia, smallholders receive a ten per cent bonus from a local partner company if they can prove that they are growing their peanuts and soy products using resource-conserving methods – such as planting *Gliricidia* trees on their fields, which improves soil quality and water balance. The initiative has reached out to more than 100,000 smallholders.



Organic cocoa generates higher income for smallholders in Cameroon.

Photo: GIZ/Kaus Wohlmann