

HEKS/EPER THEMATIC FACTSHEET



SUSTAINABLE FOOD & AGRICULTURE SYSTEMS

**HEKS/EPER's strategy, activities, progress and perspectives
on sustainable food & agriculture systems**

ZURICH/LAUSANNE, MAY 2019

WHY SUSTAINABLE FOOD & AGRICULTURE SYSTEMS MATTER

Globally – unsustainable and imbalanced global food systems today

More than 800 million people worldwide suffer hunger. At the same time, obesity and overweight are increasing and cause major health issues. In many cases, food and farming systems around the world are driving environmental degradation, loss of vital ecosystem services, economic hardship for smallholders, socio-economic inequalities, or lead to food insecurity for many. Many of these problems are linked to 'industrial agriculture': input-intensive crop monocultures and industrial-scale production practices that now dominate many farming landscapes¹. New paradigms are required, rooted in fundamentally different relationships between agriculture and the environment, and between food systems and society².

Agroecology defines a holistic set of principles for redesigning food systems and captures the essence of this paradigm shift. While addressing the issues mentioned above, it can also contribute to reduce food waste, to close yield gaps, to reduce greenhouse gas emissions from agriculture and work against social unrest rooted in food shortages. It finally can also provide young farmers with a sustainable income option, lower the risk that young people do not want to work in agriculture anymore.



AGROECOLOGY

«Agroecology offers a unique approach to meeting the needs of future generations while ensuring no one is left behind. With family farmers, including smallholder farmers, indigenous peoples, fisher folks, mountain farmers and pastoralists at its heart, agroecology seeks to transform food and agriculture systems, addressing the root causes of problems and providing holistic and long-term solutions based on co-creation of knowledge, sharing and innovation, including the combination of local, traditional, indigenous and practical knowledge with multi-disciplinary science.³ »

¹ IPES-Food (2016). From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems. International Panel of Experts on Sustainable Food Systems, Brussels.

² IAASTD (2009). Agriculture at a Crossroads. International Assessment of Agricultural Knowledge, Science and Technology for Development Global Report. Island Press, Washington, D.C.

³ FAO (2018). FAO's work on agroecology. A pathway to achieving the SDGs.

In its projects and programmes HEKS/EPER is committed to strive for customised land and resources governance and production practices in accordance to the following ten principles of agroecology (acknowledging the wide spectrum of different understandings)⁴.



Diversity: diversification is key to agroecological transitions to ensure food security and nutrition while conserving, protecting and enhancing natural resources.



Resilience: enhanced resilience of people, communities and ecosystems is key to sustainable food and agricultural systems.



Co-creation and sharing of knowledge: agricultural innovations respond better to local challenges when they are co-created through participatory processes.



Human and social values: protecting and improving rural livelihoods, equity and social well-being is essential for sustainable food and agricultural system.



Synergies: building synergies enhances key functions across food systems, supporting production and multiple ecosystem service.



Culture and food traditions: by supporting healthy, diversified and culturally appropriate diets, agroecology contributes to food security and nutrition while maintaining the health of ecosystems.



Efficiency: innovative agroecological practices produce more while using less external resources.



Responsible governance: sustainable food and agriculture requires responsible and effective governance mechanisms at different scales – from local to national to global.



Recycling: more recycling means agricultural production with lower economic and environmental costs.



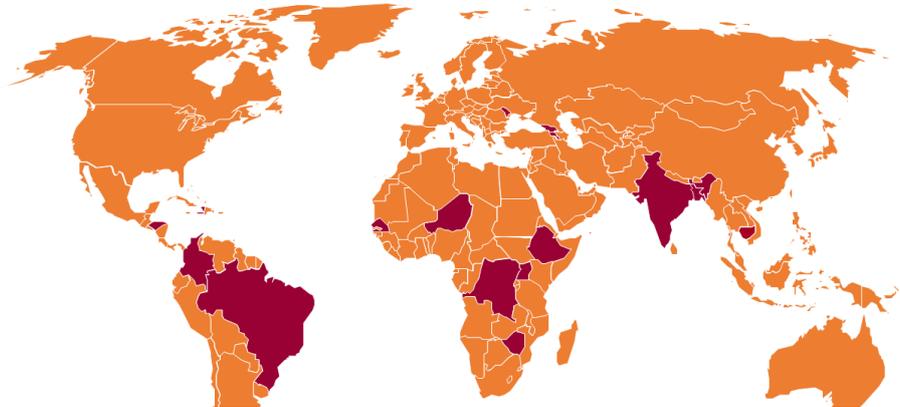
Circular and solidarity economy: circular and solidarity economies that reconnect producers and consumers provide innovative solutions for living within our planetary boundaries while ensuring the social foundation for inclusive and sustainable development.



⁴ FAO (2018). The 10 elements of Agroecology – Guiding the transition to sustainable food and agricultural systems. Rome, Italy.

HEKS/EPER WORK ON SUSTAINABLE FOOD & AGRICULTURE SYSTEMS

HEKS/EPER projects around the world



53 projects in **16 countries** striving for sustainable food & agriculture systems for **250'000 farmers**.
About 1/6 of HEKS/EPER funds committed to those projects in 2018.

HEKS/EPER's projects by the numbers

Selected project results

HONDURAS – CUSTODIANS OF TRADITIONAL SEEDS

In Honduras, twelve seed producer groups were established and trained to produce locally adapted seed. Yields from the new varieties increased in average by 15 percent.



NIGER – INCREASED YIELDS OF MILLET & COWPEA

About 8'000 producers were trained on agro-ecological production practices and could on average at least double the yields of millet and cowpea.



SENEGAL – AGAINST SOIL DEGRADATION

The population in seven villages took measures to protect soil from erosion: within three years, an area of 100 hectares could be protected and made usable for agriculture.



BRAZIL – TRADITIONAL AGRICULTURAL SYSTEMS

The management system of the flower pickers community in the Serra do Espinhaço is being recognised by the FAO as Globally Important Agricultural Heritage System (GIAHS).



Global results

INCREASE IN AGRICULTURAL YIELDS

Nearly **70%** of targeted population* state that they **could increase their agricultural yields** with contribution of HEKS/EPER project work.

CHANGE TO AGROECOLOGICAL PRODUCTION

Targeted farmers within HEKS/EPER projects applied in 2018 on about **¾ of the productive surface** the defined criteria of **agroecological production practices**.**

* based on data from 4'449 people in 17 projects worldwide for the years 2017 and 2018.

** based on data from 1'908 farmers in 11 projects worldwide in 2018 (2'962 ha of 3'911 ha monitored).

PROMISING PRACTICES

All over the world farmers use agroecological production practices, which are rooted in traditional and local knowledge. HEKS/EPER recognizes the importance of peasants managing human and natural capital to improve food security, nutrition, and rural development. We see them as constant innovators and researchers who contribute to develop sustainable agriculture and more resilient rural livelihoods. The following examples from HEKS/EPER projects describe how peasants are acting as the custodians of complex and innovative techniques that, through agroecology, combine local knowledge, traditional products and innovation and follow the ten principles of agroecology.

Brazil – Valuing traditional agricultural systems



The governance of territories and natural resources by indigenous and other traditional peoples and communities is in the centre of HEKS/EPER interventions in Brazil.

The Serra do Espinhaço, in the Alto Jequitinhonha territory in Minas Gerais, is home to traditional communities that, for centuries, have developed and practiced a complex agricultural production system. It combines the cultivation of highly diversified food production, particularly around their homesteads, and a collectively organized management system of the natural resources of their ancestral territories (non-timber forest products). The most important activities are the

gathering of wild fruits and medicinal plants of the Cerrado ecosystem and the collecting of dry wild flowers and grasses in the upper parts of the region.

The rural communities play an **important role as custodians of the enormous biodiversity and water resources** of the fragile ecosystem of the savannah rangelands, known as Cerrado. The flower picking, processing and selling is the most important source of income. Without access to these collecting areas, food security of the communities is threatened and their vulnerability to the impacts of climate change increases. Today, the access to their ancestral territories is increasingly threatened by green grabbing, the implementation of huge eucalypt plantations and mining activities. All this has led to increasing land disputes and violence in the region.

HEKS/EPER supports the *Commission for the Defence of the Rights of the Flower Picking Communities* (CODECEX), a regional movement of local communities, which integrates more than 50 different local organizations in their efforts to claim their right to land and develop sustainable land use strategies. In this regard, a process was initiated towards the recognition of the specific agricultural system as a **Globally Important Agricultural Heritage System (GIAHS)**, granted by the Food and Agriculture Organization of the United Nations (FAO), as Brazil's first candidacy.

The GIAHS dossier prepared by CODECEX and its network partners was officially submitted by the Brazilian Government to FAO's international GIAHS secretariat. The document includes a description and analysis of the traditional agricultural system of the flower picker communities as well as a dynamic work plan for the use of the natural resources. In addition, it proposes a set of participative instruments to promote inclusive land governance, such as Biocultural Community Protocols and the regulation of Free, Prior and Informed Consent processes.

Since the start of the GIAHS process in 2015, this agenda has contributed enormously to strengthening the communities' identities and their understanding of their role and responsibilities on the way towards more inclusive land governance based on collective land rights and land use practices. The interest of the FAO to give an international label to the flower picker communities has increased the visibility and recognition of the traditional communities, particularly by government authorities. **By putting the regional agricultural heritage in the centre of the political agenda, the GIAHS initiative was able to invigorate a positive, enabling environment.** Various stakeholders became part of the process, particularly governmental authorities at local and state level, national and regional institutions responsible for cultural and heritage issues, international organizations as well as civil society, research institutions and the tourism sector. All this has led to a better recognition of CODECEX as the legitimate interlocutor of the traditional local communities in the political negotiations with government authorities concerning issues of land governance and agricultural development.

Honduras – Seeds

In Honduras, smallholder farmers contribute about 80 percent to the food security of the population. The use of traditional seeds is of great importance for their food sovereignty. The promotion of traditional seeds guarantees on the one hand independence from transnational corporations, which contractually oblige their customers to buy patented seeds year after year; on the other hand, it promotes resilience of the smallholder families to the increasing impacts of climate change, such as periods of drought. Thus, a project implemented by HEKS/EPER partner organisation “Programa de Reconstrucción Rural” (PRR) promotes participatory seed breeding by smallholders. In order to expand the local seed supply and to guarantee biodiversity, the project also promotes the marketing and distribution of these seeds.

In 2017, substantial progress was made in the expansion of the producer groups involved, and in the selection and multiplication of traditional seeds. Twelve seed producer groups were established and trained and have their activities. The success is impressive: The yields of the new varieties have risen by 15 percent. In addition, the communities are increasingly willing to purchase traditional seeds from local farmers for their projects and programmes, rather than from large seed companies.

Niger – Multi-nutritional fodder blocks as basis for improved livestock production



A project implemented by HEKS/EPER partner Sahel Bio in Niger to **support food security through agroecological intensification** in the departments of Mayahi and Mirriah began its second phase in May 2017. The main objectives are the fight against the negative effects of climate change, agricultural intensification, the valorisation of agricultural products and the **production/sale of multi-nutritional fodder blocks (“BMND”)**. BMND are produced from agricultural residues and are an important supplement to livestock. They are made up of fodder materials that constitute the main part of livestock feeding habits in Niger. The blocks are condensates of nutrients essential for the growth and productivity of livestock milk, such as mineral salts, nitrogenous

materials, vitamins A and E. There is a significant demand for BMNDs and its production can improve the income for all involved along the value chain (purchase of raw materials, production, marketing, fattening, etc.).

To diffuse the technology, the project supported the instalment of 10 BMND production units in December 2017 to cover the livestock feed needs of the intervention area. At the level of each unit, a management committee is set up, composed mainly of vulnerable women. After nine months of operation, the production/sale of BMNDs generated significant revenues and a sufficient stock of raw materials. **Since start of operation, the 10 units allowed the production of about 21 tonnes of BMND. The sale of BMND already generated a turnover of about CHF 10'000.**

Senegal – participatory guarantee system for organic production

The certification of organic products in Senegal is mostly done by foreign companies, which is very costly and therefore unaffordable for most small farming families. This is why some non-governmental organisations have jumped into the breach and are now carrying out certifications under various labels. Even if the farmers and consumers receive a quality guarantee for the products, this is not officially recognised – neither in Senegal nor abroad. The different labels and certification criteria of NGOs are confusing consumers, there is a lack of transparency and not a uniform labelling of organic products.



Together with its partner FENAB – the national federation for organic agriculture – HEKS/EPER initiated a pilot with the **aim to introduce a new organic label called “BIO SENEGAL”** on the basis of a defined standard, recognised by IFOAM – Organics International, the umbrella organisation for the organic world,

and **set up an alternative participatory certification system for small producers (= Participatory Guarantee System, PGS).**

This allows the producers to market their products under a single organic label, and consumers can be sure that all products with this label have the same quality standard. The certification system is cost-effective and ideal for small farmers. It is based on production control by specially trained producers. There are successful examples of this system in many parts of the world, but it is innovative in Senegal.

In a first phase, the project envisages the introduction of the system in a single geographical region of Senegal (Niayes) and is limited to fruit and vegetables. Until now, about 250 producers have agreed to participate in the new system and have been sensitised on the content and procedures of the participatory guarantee system and a first 30 producers have been certified throughout 2018.

Zimbabwe – strengthening sustainable agriculture and marketing

A project with the aim to improve the food security and socio-economic status of women and men in Matobo district through increased sustainable agriculture and marketing of organic produce came to an end in 2017. The project focused on **improving skills and knowhow of farmer communities in sustainable agricultural practices with a focus on permaculture, beekeeping, goat rearing and conservation agriculture** taking into account changing environmental and climate conditions.

The end of phase evaluation revealed the evidence, that the participatory approach adopted by the project was conducive to long-term sustainability due to **high-levels of buy-in and engagement that was encouraged from the onset from all relevant stakeholders**. One of the strengths was demonstrated in terms of the projects capacity to mobilise communities and other key agriculture stakeholders in the implementation of sustainable agriculture.

Georgia – organic hazelnut production

In Georgia, HEKS/EPER has partnered with private businesses partners and a national NGO since 2013 to implement a **value chain project on organic and fair-trade hazelnuts** in West Georgia. The first phase of the project was mainly focusing on the following five areas: i) improvement of product yield and quality through training and extension, ii) mobilisation of farmers in agricultural cooperatives and their technical and organisational capacity building, iii) connecting cooperatives with buyer and organic input provider companies, iv) introduction of group internal control/management system and facilitation of organic and fair trade/UTZ certification, v) facilitation of export of organic and fair trade/UTZ certified hazelnuts to EU and Swiss markets.



Until end of 2017, 176 trainings were conducted on 12 thematic areas related to hazelnut production, attended in total by 3,067 participants (683 women among them). The project worked with demo plots in the frame of which drip irrigation, wind breaks, different types of organic fertilizers and organic pesticides were tested. Monitoring results showed that, as a result of training and extension activities, there was a drastic change in farmers' mindset and practices during these years: **up to 70% of target farmers started to perform pruning, sanitary activities and improved harvesting practices; soil and pest & disease management was improving.**

In addition, the project supported the establishment of 11 cooperatives with 721 members and affiliated farmers. It supported these cooperatives with management, financial trainings and coaching, development of business plans, and with facilitating negotiations with the buyer and organic input providers.

The project was also able to facilitate **organic certification and UTZ certification in starting in 2016**. It was able to involve 283 farmers in 2016 and 692 farmers in 2017 in this system.

Building on the solid foundation of a successful pioneer project, the consortium partners where able to convince DANIDA as a donor to invest in a next project phase between 2018 and 2023 with the aim to scale up the production and export volume of high-quality hazelnuts from organic, UTZ and fair-trade production.

PROGRESS 2018

In recent years HEKS/EPER developed a specific key indicator on the application of agroecological production practices⁵ by farming households. Throughout 2018, this indicator was monitored by 11 selected projects in 7 countries⁶ worldwide, which all have the objective to increase the knowhow and application of agroecological practices in the respective project regions. The 11 projects cover a total production area of 3'911 hectares, with an average of 2 hectares per producer⁷ (in total 1'908 producers). During 2018, it could be achieved that **75% of these surface (2'961 hectares) fulfil the set criteria of agroecological production practices.**

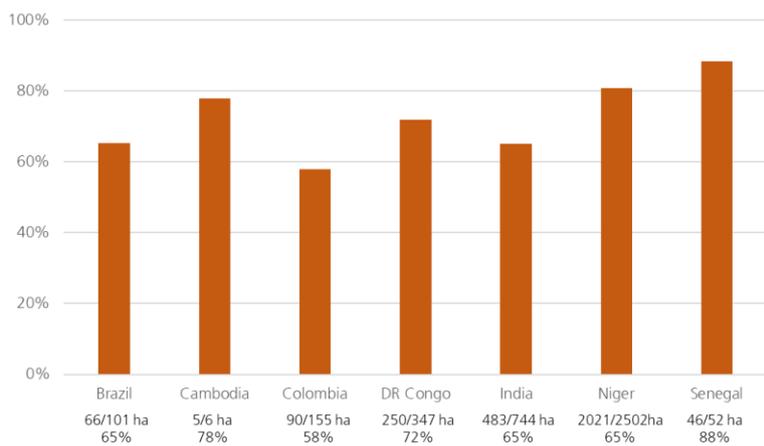


Figure 1 Percentage of total reported surface covered with agroecological practices (fulfilling all three defined criteria in selected countries)

Soil conservation measures are applied by almost all of the producers, more than 90% of the producers apply measures to manage ecological relationships such as integrated pest management, crop association or intercropping and nearly 100% of the monitored producers do not use GMO on their plots. More than 80% of the producers also do not use synthetic pesticides and fertilizers. However, there are some regional differences in the degree of fulfilment of all three criteria ranging from 58% of the covered surfaces in Colombia to 88% in Senegal (see Figure).

The most prevailing soil conservation methods applied compared over all different contexts are crop association (applied by 69% of the producers), minimal ploughing (57%), composting (48%), hoeing (37%), crop succession and rotation (36%).

Another HEKS/EPER key indicator measures the self-perceived change in agricultural yields and its explaining factors. Data from 12 projects in 8 countries show, that **71.7%⁸ of the asked producers state a medium or massive increase in their agricultural yields compared with their last agricultural season** (see Figure 2). The explaining factors for these increases in yield are quite diverse: about half of the producers' state that the increase in yield can be explained by improved technical factors such as better soil management,

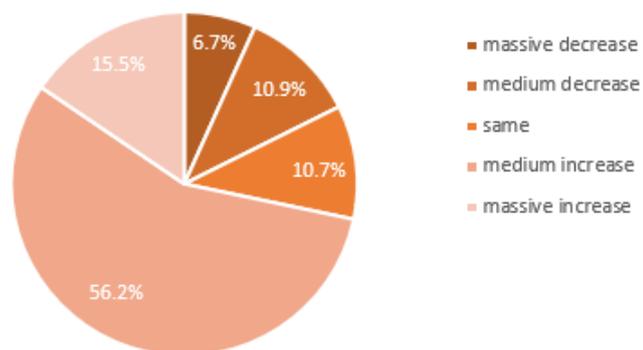


Figure 2: perceived change in agricultural yields (data from 2291 producers)

pest management, irrigation practices or general improved production skills. Additional factors mentioned are favourable climatic conditions or investment possibilities due to savings from last year. About 18% of the asked producers in the different regions state a decrease in their yields. Here, the main explaining factors are either production loss due to diseases or unfavourable climatic conditions

⁵ The indicator defines three criteria to be fulfilled for agroecological production practices: Application of at least one resource (soil, water, biodiversity) conservation method; application of at least one measure to manage ecological relationships such as integrated pest management, intercropping, crop/livestock integration; and guarantee that no GMO and no synthetic / inorganic pesticides and inorganic fertilizers are used.

⁶ Cambodia, India, Honduras, Brazil, Honduras, Republic of Moldova, DR Congo, Niger and Senegal.

⁷ Ranging from 0.06 ha in Cambodia to 3.5 ha in Brazil on average per producer.

⁸ 1'643 out of a total of 2'291 producers asked from the following 8 countries: Georgia, Armenia, India, Cambodia, Niger, Senegal, DR Congo, Honduras.

THIS IS HEKS/EPER

HEKS/EPER – Swiss Church Aid is the aid organization of the Swiss protestant churches and campaigns for a more human and equitable world supporting in 2018 with 100 partner organizations people and communities in economic and social need with 228 projects in 32 countries.

HEKS/EPER is active in **development cooperation** ameliorating in 2018 with 23 M (net costs) the life of 1'146'000 people focusing on access to land and resources, securing basic services, fostering sustainable production and inclusive market systems. It promoted also social inclusion of marginalized, inclusive governance structures and conflict transformation. HEKS/EPER's **humanitarian aid** supported with 9.5 M 290'000 people affected by disasters with emergency interventions, restoring livelihoods and rehabilitating infrastructure. In the frame of **Church Cooperation** HEKS/EPER enabled with 2.6 M social work of Reformed Churches in Eastern Europe and Middle East reaching out to 35'000 people. Striving for a **systemic change** and the **human rights-based approach** are the guiding principles – HEKS&EPER is cultivating constant dialogue with all relevant development and Government actors enabling civil society to advocate for their needs and rights.

In Switzerland, HEKS/EPER supported with 25.7 M CHF 60 projects in 15 cantons disadvantaged people in becoming socially and economically integrated by promoting equal opportunity, and assists jobless people, refugees and other individuals with providing day structures, legal advice, vocational trainings, language courses, dialogue platforms etc.



HEKS/EPER – Swiss Church Aid

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