



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

Strategy 2017 – 2020

Global Programme Food Security



Table of contents

1. The global challenge of food security and nutrition	5
2. Global response	7
3. Our commitment	9
4. Programmatic components and thematic priorities	10
5. How we act	18
6. The Agriculture and Food Security Network	21
7. Partners and cooperation	22
8. Resources	25
Annexes	
Annex 1 Food security and nutrition: a matter of definition	27
Annex 2 The way to the new strategy	30
Annex 3 Results framework	32
Annex 4 Indicative budget for the GPFS 2017 - 2020	35
Annex 5 Management and monitoring	36
Annex 6 List of acronyms	37
Annex 7 Selected references	38



1. The global challenge of food security and nutrition

Food security and nutrition continue to be a major global challenge despite the fact that as many as 72 developing countries out of 129 have reached the hunger target of the Millennium Development Goals (MDG) of the United Nations (UN). The proportion of undernourished people in the developing regions has fallen by almost half since 1990 (from 23.3 percent in 1990-92 to 12.9 percent in 2014-16), but almost 800 million people worldwide still suffer from hunger and are unable to consume enough food to conduct an active and healthy life. In addition to acute hunger, 2 billion suffer from micronutrient deficiencies. At the same time 1.9 billion are overweight, which is a growing trend, including in the global South. Scores for the Global Hunger Index, based on indicators related to undernourishment, wasting, stunting and child mortality show the greatest needs in sub-Saharan Africa and South Asia. Currently only 3 million people graduate out of chronic undernourishment annually, a figure that is far below the 60 million a year required to reach the target of 800 million by 2030 for a world without hunger.

Food insecurity from the people's perspective

Food insecurity is not an exclusively rural phenomenon. A growing proportion of food insecure people live in urban areas. Marginalized in various ways, most resource poor food insecure people are excluded from public decision-making. In the absence of effective education and training systems, they lack skills and access to information on jobs and market opportunities. The lack of access to credit makes investments in income-generating assets impossible. Not having a regular income, they are in constant need of cash in order to purchase food and other essential goods or to cover school fees and health costs. Hungry people neither have the possibility nor the information to provide their children a diverse and nutritious meal. Breaking the vicious circle of malnutrition means avoiding situations where children start their lives stunted, being too short for their age. Rural smallholder families often concentrate their agricultural production on few staple food crops and have very little material savings. Living in remote areas or not being in a position to afford paid services they tend to be neglected by advisory services and to lose the bargaining power required with market actors such as agro dealers or money lenders. Research rarely addresses improvement of crops and cultivation techniques that are particular to their economic and social situation or ignores their experiential knowledge. Access to land for smallholders and in particular for women is often not secured; land may be taken away by investors holding titles and by non-agricultural ventures. Common lands are becoming increasingly scarce. The children of rural poor people are tempted to migrate without having non-agricultural skills, and are often caught in a poverty trap. Traditional (family) safety nets and social norms may lose their cohesiveness. Having very limited assets – few animals and seeds – any shock endangers their survival. With the changing climate as well as growing political instability and economic volatility at the global and national levels, their livelihood remains extremely vulnerable. Nevertheless, reciprocity within traditional social (family) networks and – for rural producers – local experiential knowledge are assets to be utilized in strategies against food insecurity.

500 million family farms

Globally estimated 500 million family farms (over 88% of all farms) produce more than 70% of the world's food on 75% of the total agricultural land. Small farms (less than 2 hectares) operate about 12% of the world's agricultural land.

On 30% of the agricultural land in 83 countries in Asia, sub-Saharan Africa and Latin America, 380 million households are farming on less than 5 hectares. These households produce more than 70% of the food calories produced in these regions. They are responsible for 53% of the global production of food calories for human consumption and more than three-quarters of the planet's rice. Within these 83 countries, units of five hectares or less account for more than half of the production of eight staple crops by mass: rice, groundnut, cassava, millet, wheat, potato, maize, barley, and rye.

In environmental respects, projections by the UN Convention on Biological Diversity perceive agriculture as responsible for around 70% of the projected loss of terrestrial biodiversity globally. Agriculture is also seen as a major contributor to greenhouse gas emissions, with estimates of its contribution ranging from 10% to 45%. While large advancements in eradicating hunger have been made and food production has dramatically increased globally, it is telling that in a number of countries of high food insecurity the food production levels remain similar to those of the 1960s.

(Sources: CGIAR, FAO, IPCC, UNCTAD, UNCBD, Samberg et al 2016: Environmental Research Letter)

Food insecurity from a global perspective

People migrating to urban areas and to foreign countries in search of a decent life, and people living in situations of protracted crises and conflicts – and those escaping them – often face food insecurity and undernutrition. According to the 2015 Global Hunger Index, the countries with the lowest levels of food security are engaged in or recently emerged from war. Although war and conflicts remain a major cause of hunger and malnutrition, they are by far not the only one. Compounded with growing inequalities, migration places substantial stress on the global food system's capacity to provide affordable food for all. The pollution and degradation of air, soil, water, the loss of the genetic heritage, thus the substantial ecological footprint of agriculture and the changing and increasingly unpredictable climate continue to threaten the foundation of food production and the livelihood of the world's population. The current global food system does not provide all people with a healthy diet and does not generate adequate livelihoods for millions of people. Driven by international trade and intellectual property rights regimes, global

food markets often leave poor people exposed to volatile prices and instable supplies. The global food price crises in 2008 showed the fragility of the food system by pushing people into poverty and hunger and triggering political riots and major geopolitical changes. The increased volatility of staple food prices further evidenced the specific vulnerability of low-income, net food-importing countries. The system is furthermore destabilized by international trade of agricultural commodities subject to domestic support, to border protection in OECD countries to regions mainly depending on agricultural production in the global South, competing with local food production and supply systems. The global food system does not reflect the value of external benefits such as safeguarding agrobiodiversity that are created by the large number of low external input small farms. Conventional agricultural and food security policies tend to promote exclusively agricultural productivity, favouring input intensive conventional over more sustainable practices. Nutritional aspects addressing sustainable diets are hardly ever addressed by public policies. There is thus a pressing need to shift towards more sustainable food systems.



2. Global response

Global challenges need global responses. The global nature and public good aspects of the challenges require coordinated responses and urgent improvement at both levels of (1) the global governance of food security and (2) national policies and new solutions of individual farmers. The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD, 2009) initiated by the World Bank and the FAO has outlined in a comprehensive way the areas for action, including change in science, technology, policies, institutions, capacity development and investment.

Important debates and trends that the global community addresses are:

- Shift from research driven innovation with reaching and teaching farmers, towards a systemic view of innovation with the participation of different actors (e.g. farmers, scientists) and their interaction, promoting exchange of information and knowledge, co-production of knowledge, etc. on innovation platforms etc.;
- Shift from food aid to food assistance, and bridging the humanitarian and development divide through linking relief and rehabilitation with development (LRRD);
- Shift from a primary focus on increasing productivity and production, with little regard for the ecological functions of agricultural production, to a systemic view on food systems and key actors, including aspects such as ecological services, consumption and nutrition quality, and social safety;
- Shift towards addressing land tenure and resource governance as a consequence of the expansion of land used for purposes other than food production (e.g. biofuels, urbanization);
- Shift from a dominant role of the public sector in promoting agricultural development, viewing agriculture as a domain of the state, to perceiving agriculture from a business angle and joining forces with private economic actors in promoting it;
- Shift from a generally poverty-based perspective on family farming in the Global South to large-scale commercial agricultural production as well in the context of a more formal policy environment that conflicts with the interests of the large number of resource poor smallholders (e.g. farmers' rights in relation to access seeds and land);
- Shift from a primary focus on agricultural (and livestock) production and rural development to a perspective of rural transformation with a comprehensive perspective on rural-urban interlinkages.

The World Food Summit 2002 declared:

"Food security exists, when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life."

Availability: There is reliable and consistent source of quality food

Access: People have sufficient resources to produce and/or purchase food

Utilization: People have the knowledge and basic sanitary conditions to choose, prepare, and distribute food in a way that results in good nutrition

Stability: People's ability to access and utilize food that remains stable and sustained over time.



FAO, adapted

The global community addresses the underlying and resulting challenges with a number of instruments and global mechanisms. Of particular relevance to the GPFS are:

- The **Agenda 2030 for Sustainable Development**, with Sustainable Development Goal (SDG) 2 seeking to “end hunger, achieve food security and improved nutrition and promote sustainable agriculture” and other goals and targets with links to sustainable agriculture such as water, consumption and production, climate change adaptation and mitigation, land use/land rights and gender equality. Sustainable agriculture will play an important role in achieving these SDGs.
- The **10-year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP)** and its **Sustainable Food Systems Programme**, a global framework of action to enhance international cooperation to accelerate the shift towards more sustainable food systems, led by UNEP.
- The **Committee on World Food Security (CFS)** as a unique space for multi-stakeholder dialogue and providing evidence-based policy norms and recommendations as the result of inclusive processes, such as the ones leading to the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT) and the principles for Responsible Agricultural Investments (RAI).
- The **Human Rights Council** and the right to food instruments, including the Voluntary Guidelines on the Right to Adequate Food adopted by the FAO Council, which provide respectively recommendations and practical guidance to governments to progressively realize the right to adequate food.
- The **International Agricultural Research Partnership (CGIAR)** provides high-quality research in the areas of poverty and hunger reduction, improvement of human nutrition and enhancement of ecosystem resilience including addressing adaptation and mitigation challenges in the context of climate change.
- The **International Fund for Agricultural Development (IFAD)** focuses its investments on the poor in rural areas and contributes to an inclusive rural transformation, with a focus on youth and women.
- The **Scaling Up Nutrition (SUN) Movement** works across multiple sectors including highest levels of government and local community leaders. The **UN Standing Committee on Nutrition (UNSCN)** promotes cooperation among UN agencies and partner organizations to end malnutrition in this generation.
- The **UN Convention to Combat Desertification (UNCCD)** to reverse and prevent desertification and land degradation and to mitigate the effects of drought in drylands in order to support poverty reduction and environmental sustainability.
- The **International Treaty on Plant Genetic Resources for Food and Agriculture**, the **Commission on Genetic Resources for Food and Agriculture (ITPGR)**, the **UN Convention on Biological Diversity (UNCBD)** and the **Crop Diversity Trust Fund** aim at the in-situ and ex-situ conservation and sustainable use of genetic resources, including genetic resources for food and agriculture.
- The **Global Forum for Rural Advisory Services (GFRAS)** facilitates the dissemination of state of the art practices and the **Global Donor Platform for Rural Development (GDPRD)** enables exchange among development actors to promote harmonized approaches.
- On the African continent the **Comprehensive Africa Agriculture Development Programme (CAADP)** provides a policy framework aiming at increased agricultural performance and ending hunger in Africa by 2025.

3. Our commitment

Mission

By inducing change in public and institutional policies and regulatory frameworks, private standards and practices in food security and nutrition, promoting innovations in favour of smallholders families, facilitating institutional learning and awareness raising, and through its efforts to increase the coherence and effectiveness of Switzerland's foreign policy, the GPFs contributes to a world free of hunger and malnutrition in which smallholder rural and (peri-)urban farmers, women and men equally, produce healthy and nutritious food accessible to all while improving their income and safeguarding the environment.

In the **Dispatch 2017–2020** of the Federal Council, in addition to targeting the different forms of poverty, discrimination, exclusion and vulnerability, the mandate to help reduce global risks in the field of sustainable agriculture, food security and nutrition is outlined. Making reference to the Agenda 2030 as a major orientation framework and in particular to SDG 2, the mandate in the theme food security and nutrition includes: (i) support research and development in agriculture; (ii) implement international frameworks for land use rights and land tenure; (iii) improve access to healthy food; (iv) support seed systems; (v) promote sustainable growth of private and financial sector development and services targeted at smallholder farmers; (vi) increase efforts in biodiversity conservation, including increasing agrobiodiversity; and (vii) combat desertification, land degradation and drought. Engaging for systemic change towards more equality between men and women, as well as adhering to principles of good governance and fighting against corruption are to be respected in all projects. Furthermore, the Federal Council insists on striving for more policy coherence for development.

The strategy for 2017–2020 is guided by the **three principles of CONTINUITY, EMERGING ISSUES and COOPERATION**:

The strategic orientation of the previous Strategic Framework 2013-2017 remains valid and relevant. **CONTINUITY** is being ensured, in particular:

- in supporting the development and implementation of international soft law and other international regulatory and guiding frameworks advocating

for food security and nutrition, including the right to food, using international multi-stakeholder platforms and creating alliances with likeminded donors.

- in promoting innovations, scalable solutions testing new instruments, including partnerships with private sector actors.

EMERGING ISSUES

- Climate change: research and development of adapted cultivation methods including crop practices and new plant varieties (as the pace of climate change now exceeds the pace of the breeding progress).
- Political economy of land and seeds: for a large number of smallholders, securing access to land and seeds is becoming an issue of survival and of maintaining rural production systems.
- Urbanization: urban food insecurity due to rapid urbanization and rural-urban migration, exacerbated by competing interests for land, needs attention. (Peri-)urban food production is gaining in importance.
- Exotic and invasive species: as a side effect of globalization and industrialized agriculture, invasive species and spreading of exotic plant diseases threaten agricultural production and human health.

Related interventions will be identified within the thematic priorities outlined in the next chapter.

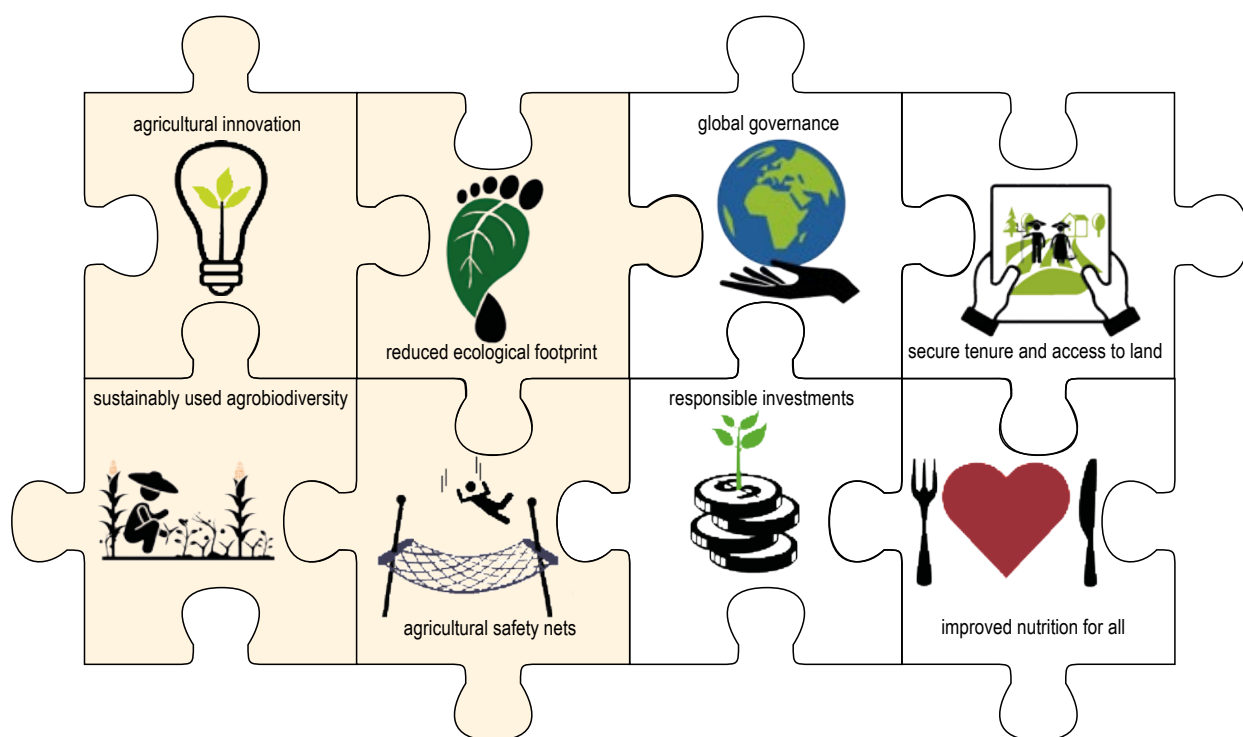
The promotion of **COOPERATION** between and coordination with GPFs partners at global and regional levels, with SDC partners in priority countries, and harnessing synergies between global programmes with bilateral and humanitarian cooperation will be crucial.

4. Programmatic components and thematic priorities

The GPFS considers food security and adequate nutrition as a basic human right and builds its strategy on all four dimensions of food security and nutrition: availability, stability, access and utilisation of food. The GPFS strategy is to positively shape the transformation of the global food system: increase in a sustainable manner the production and productivity of smallholders,

reduce food losses, increase stability and access to food, improve nutrition through a diverse diet, and improve the food security and nutrition of low income food deficit populations, particularly women and vulnerable groups.

The eight **thematic priorities** are structured into two **components**:



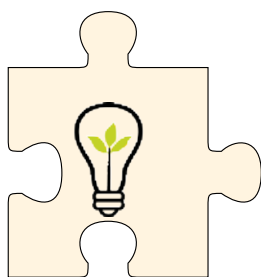
Component 1: Sustainable agriculture and food systems

The GPFS strives to induce more sustainable agriculture and food systems that provide healthy, diverse and nutritious food accessible to all, through

- › targeted support towards more effective agricultural research [systems] that respond to the needs and demands of the world's 500 million often vul-

nerable smallholder families, many of which are headed by women; and

- › influencing institutions and initiatives of more sustainable, resource efficient, and agro-ecological agriculture to reduce the environmental impact and to sustainably use agrobiodiversity.



Thematic priority 1.1 → Effective agricultural innovation and extension systems

International agricultural research in cooperation with national research and extension systems remain a cornerstone in GPFS strategy. Research delivers crucial new knowledge and solutions (e.g. drought resistant varieties, climate change sensitive cultivation methods, market integration of smallholder farmers) to face major challenges to global food security and nutrition.

Strategic orientation:

- The CGIAR, a unique global partnership of research institutions dedicated to reducing poverty and hunger, improving human health and nutrition, and enhancing ecosystem resilience, remains the cornerstone of GPFS efforts to support international agricultural research. Through its multilateral contribution, the GPFS advocates in particular for mainstreaming women's empowerment in agriculture and the integration of more agro-ecological approaches to reduce the ecological footprint of agriculture in programmes and policies of the CGIAR.
- The GPFS strives for the development of innovative solutions with the potential to benefit millions of smallholder farmers. Whether it concerns plant clinics to bring practical plant health advice, new mobile phone services, high-quality farmer-to-farmer training videos, better value chain processes, resource efficient rice production methods or other innovations with a massive range, the GPFS works with a series of public, private sector and civil society partners that bring change to the lives of smallholder farmers around the globe.
- Information provided through rural advisory services remains a key factor to agricultural production for millions of smallholder farmers around the world. Through its support to the GFRAS, a global network of continental and regional rural advisory federations, the GPFS supports the development and dissemination of more effective and efficient rural advisory services.

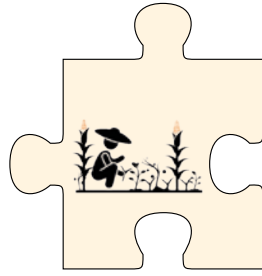


Thematic priority 1.2 → Reduced ecological footprint of agriculture

The world's deteriorating natural resource base requires a change in the overall course of agriculture towards more eco-friendly, resource efficient production patterns. Reducing the ecological footprint of agriculture and food systems is inevitable if long-term food and nutrition security is to be maintained. The GPFS focuses on initiatives and solutions that promote agro-ecological and resource efficient agriculture, including technical approaches to increase water efficiency.

Strategic orientation:

- The GPFS supports the mainstreaming of ecological organic agriculture and the related decision of the African Union in public policies and investment plans, in technical standards and certification procedures, in research agendas and training curricula, in advisory and information practices and in the organization of markets and value chains in eight African countries (Ecological Organic Agriculture (EOA) Initiative). This initiative is increasingly informed by complementary scientific and action based research on the viability of organic agriculture and planning methodologies for sustainable agriculture at national level.
- Efficient use of water in agriculture as a reconsidered focus of the GPFS builds on an innovative public-private partnership addressing inefficient irrigation practices in smallholder rice and cotton production. The GPFS will promote further initiatives and engage – in a complementary manner – in supporting the formulation of guidelines for good business practices.
- In order to increase awareness of the ecological impact of projects addressing agriculture and food systems funded by the SDC, the GPFS will develop a corresponding assessment and screening methodology.

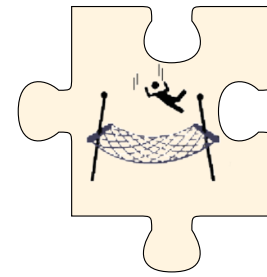


Thematic priority 1.3 → Sustainable use of agrobiodiversity

Agrobiodiversity plays a crucial role for food security and diverse nutrition, as well as in the provision of ecosystems' services and sustaining livelihoods. Nonetheless, the world's gene pool of cultivable crops is rapidly narrowing. The GPFS supports the conservation and sustainable use of agrobiodiversity and in particular smallholder farmers' access to local and quality seeds.

Strategic orientation:

- Bioversity International, a member of the CGIAR partnership, is a research-for-development organization that delivers scientific evidence, management practices and policy options to use and safeguard agricultural and tree biodiversity to attain sustainable global food and nutrition security. Through its support to Bioversity International the GPFS contributes to enhancing local crop genetic diversity through diverse seed production and distribution systems and policies that regulate such systems.
- Seed aid may impact substantially on existing seed systems, on food and nutrition security and on biodiversity. The rehabilitation of national systems after shocks and crises and avoiding negative outcomes of emergency seed aid are new areas of intervention of the GPFS.
- In working on integrated seed systems – global/regional regulations and policy guidelines for regulatory frameworks at national levels – the GPFS includes aspects such as access to quality seed, in particular farmers' rights; seed production and marketing; linkages between local and national seed banks; neglected and underutilized species including "women's" crops; (agro-) biodiversity hotspots; farmers' participation.

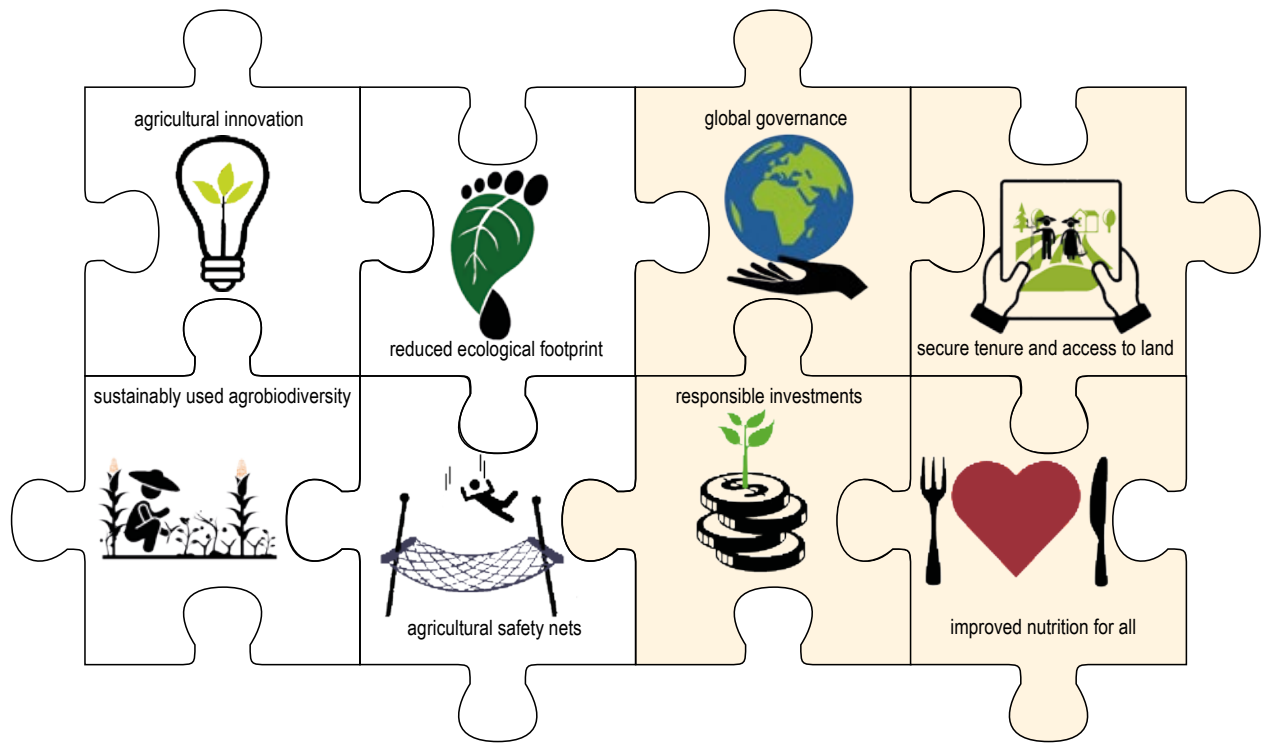


Thematic priority 1.4 → Innovative agricultural safety nets

Livelihoods of smallholders with limited resources and societies in countries which are unstable politically and economically are vulnerable to external shocks such as extreme weather events and price hikes that may develop into famine crises. Innovative mechanisms have recently emerged that provide new risk management options such as micro insurance for smallholder families or drought risk insurance for entire countries. The GPFS will support the development and implementation of such innovative safety nets that help smallholder families, in particular households headed by women, to increase their capacities to cope with such external shocks (resilience).

Strategic orientation:

- Risk transfer through crop insurance contributes positively to increasing resilience of smallholder farmers that are affected by natural disasters such as extreme weather events. As a preventive social protection mechanism they limit the loss of assets. The GPFS continues to engage in the RIICE public-private partnerships supporting the development of remote sensing-based information to forecast yields for both governments and companies providing crop insurance.
- As a specialized agency of the African Union, the African Risk Capacity (ARC) provides a risk transfer mechanism for African countries and a preventive instrument in the management of natural disasters at country level. The GPFS supports ARC in the modelling of natural hazards and the building of technical capacity at country level in risk transfer, data analysis and contingency planning. Given the scope of the initiative as well in the context of humanitarian aid and disaster risk management, options for the SDC for continued partnering with ARC will be specified.
- Agricultural safety nets are an area for the GPFS to promoting technical and institutional innovation, widening the experiences obtained with RIICE and ARC. The GPFS in close collaboration with the SDC Focal Point Employment + Income (E+I) envisages providing private partners' funding for promoting innovation in agricultural insurance.

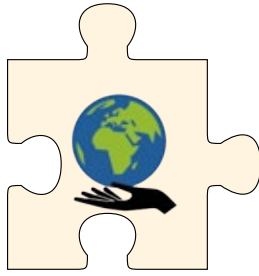


Component 2: Regulatory frameworks conducive to food security and nutrition

The GPFS seeks to contribute to a more favourable normative environment for food security and nutrition that *inter alia* allows smallholder families, women and youth in particular, secured access to land and other resources and balanced nutrition, through

- advocacy and support to the development and the implementation of international normative frameworks, voluntary guidelines and technical standards that guide both national public policies and private initiatives; and
- advocacy for the realization of the human right to adequate food for all.



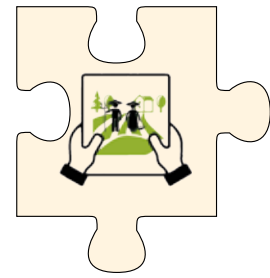


Thematic priority 2.1 → Global governance for food security and nutrition

Improving norms and regulations related to food security and nutrition is urgently needed at all levels. The GPFS supports the development, implementation and monitoring of international soft laws, including accountability for the right to adequate food, through international councils and platforms such as the Committee on World Food Security, the foremost inclusive international and intergovernmental platform for all stakeholders to ensure food security and nutrition for all, as well as the Human Rights Council.

Strategic orientation:

- The Committee on World Food Security (CFS) remains the key strategic partner for the GPFS in global governance for food security and nutrition. The GPFS supports the effective participation of civil society (Civil Society Mechanism, participation of farmers' organizations) and contributes – conceptually and financially – to the High Level Panel of Experts as well as a series of selected work streams related namely to nutrition, the rural-urban nexus and the monitoring of the implementation of CFS decisions.
- The GPFS promotes the implementation of the Agenda 2030 related to food security and nutrition at the international level. It fosters a strong link between the CFS and the High Level Political Forum (HLPF), the United Nations central platform for follow-up and review of the 2030 Agenda, working on a strong and authoritative input by the CFS to the thematic reviews of the HLPF.
- The GPFS is committed to the realization of the human right to food. It supports selected civil society organizations and cooperates with the UN with the objective to reinforce the justiciability of the right to adequate food. The GPFS supports the integration of a human rights perspective in the Agenda 2030 and the CFS.

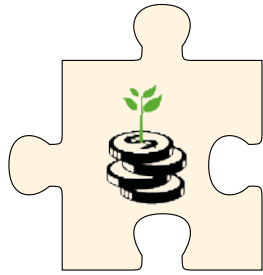


Thematic priority 2.2 → Secure tenure and access to land

Secure tenure and access to land are crucial for sustaining the livelihood of the majority of the world's smallholders. They are key requisites for economic and social development. Regulatory frameworks need to be put in place, enforced and monitored at all levels to ensure that the legitimate tenure rights of smallholder farmers, in particular of women and vulnerable groups, are duly respected. The GPFS supports policy initiatives, reforms and tools that lead to regulatory frameworks that protect and respect the access rights of smallholders.

Strategic orientation:

- The VGGT sets an international standard for securing tenure rights and equitable access to land, fisheries and forests as a means of eradicating poverty. The SDC supports a multi-donor FAO programme that assists countries in the application of these standards and their integration into their legislation by providing technical and institutional support. The GPFS also promotes the monitoring of the application of the guidelines through its involvement in the CFS.
- In relation to supporting the application of the VGGT, the GPFS partners with the International Land Coalition (ILC) that provides a unique space for civil society and intergovernmental organisations to influence national processes and observes the land governance status, e.g. through its Land-Matrix initiative. Furthermore, the GPFS intends to support the Global Land Tool Network (GLTN) of UNHABITAT, which provides methodologies and tools for responsible and equitable land governance, with a more specific focus on the peri-urban and urban contexts.
- The GPFS partners with the African Land Policy Centre (tripartite institution of UN Economic Commission for Africa / AU / African Development Bank) in supporting African countries and Regional Economic Communities in integrating both the VGGT and the AU Framework & Guidelines for Land Policy in Africa into national legislation, with a regional focus on West Africa, the Horn of Africa and a particular focus on the allocation of 30% of land to African women by 2025.

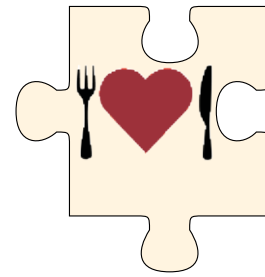


Thematic priority 2.3 → Responsible agricultural investments

Agriculture and food systems need investments to keep up with a multiple and increasingly complex demand. However, investments from both the state and the private sector have to be socially, economically and ecologically responsible. The CFS Principles for Responsible Investment in Agriculture and Food Systems (RAI) and other innovative business standards form a basis to guide investments for the benefit of all. The GPFS is embarking on this new priority to support the widespread implementation of these principles.

Strategic orientation:

- The GPFS is committed to enhancing responsible agricultural investments. It partners strategically with the FAO in the RAI umbrella programme designed to promote and apply the RAI principles. The GPFS also promotes the monitoring of the application of the principles through its involvement in the CFS.
- In conjunction with the VGGT, the GPFS promotes the application of the RAI principles and potentially other comparable business standards through new engagements and partnerships with the private sector and/or through participation in similar initiatives of bilateral and multilateral partners.
- Through its support to the International Institute for Sustainable Development (IISD), the GPFS contributes to providing capacity building and concrete tools for governments, parliamentarians and other stakeholders in Africa and Asia to build sustainable investment frameworks for agriculture and food systems.



Thematic priority 2.4 → Improved nutrition for all

Malnutrition of millions leads to stunted growth or overweight, leaving a heavy burden to future generations. Access to nutritious and diversified diets is particularly important for women and young children. The GPFS supports policies, initiatives and movements that seek to scale up nutrition sensitive sustainable agriculture and food system policies with the ultimate objective of increasing the nutritional value of diets for all, but particularly for women, children and other vulnerable population groups.

Strategic orientation:

- The GPFS contributes to the fight against widespread malnutrition through its strategic support to global nutrition related platforms that bring governments, civil society, donors, UN agencies, research, and private sector actors together to collaborate in support of country-led, multi-sectoral nutrition strategies. Dietary diversity and balanced nutrition throughout the lifecycle of a person is of particular importance to the GPFS.
- The GPFS supports on the ground action/research initiatives to improve access to sufficient nutritious food for rural communities in mountain regions through a network of actors facilitating innovation and diversification of proven nutrition sensitive practices. It also engages in understanding the links between diversified agricultural production and diversified consumption and nutrition status of consumers. The evidence generated in these interventions contributes to the global knowledge pool on nutrition and provides the scientific grounds for the integration of nutrition sensitive practices into service delivery and policies.
- The GPFS engages in a policy dialogue to develop solutions to tackle new global nutrition related challenges such as the double burden of malnutrition, when undernutrition and overweight/obesity occur in parallel in countries, cities and even within families, and the new challenges specific to ever growing urban areas. It further explores new ways of engaging with the private sector on innovative and alternative protein sources.

Former priority themes will see a reduced emphasis or will be gradually phased out:

- Support to farmers' organizations, pursued traditionally by programmes of the South Cooperation Department, will be limited to their participation in international policy fora;
- Post-harvest management and food loss reduction has seen a dramatic propagation in recent years in particular in Africa thanks to many efforts including those of the GPFS. Henceforth, implementation initiatives will be required at national level;

- Soil and land management, still of considerable overall importance, but with little critical mass within the GPFS portfolio;

The GPFS engages in all thematic priorities with different levels of intensity and depth, according to opportunities, as well across priorities, its internal capacities and financial resources. Flexibility for strategic decisions is necessary. For each thematic priority expected outcomes are formulated that reflect the impact hypotheses formulated (see Results Framework in Annex 3).

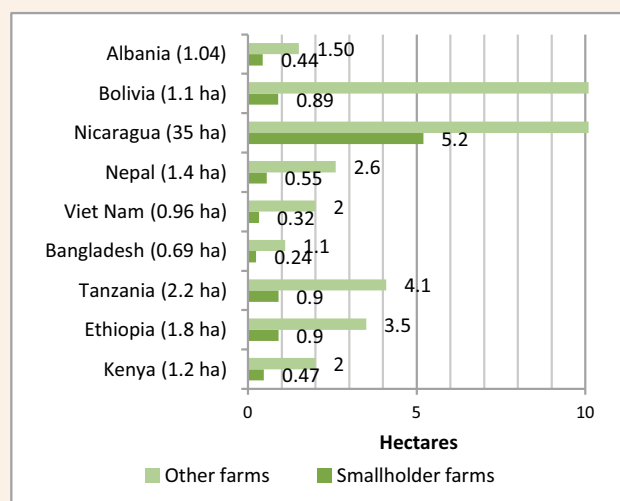
The following **approaches** are applied across all components:

The smallholder family farm

There is no unique and unambiguous definition of a smallholder. Often scale, measured in terms of the farm size, is used to classify farmers into small and large. A common classification of smallholders is based on a threshold size of 2 hectares. In many countries smallholder families live on farms that are even significantly smaller than 2 hectares (Figure). In Asia, farms are very small. The average size of a smallholder farm in Bangladesh and Vietnam is 0.24 and 0.32 hectares respectively. In Africa, smallholder farms can be relatively larger, but only marginally. Kenyan smallholders farm 0.47 hectares and in Ethiopia the average small farm size is 0.9 hectares. In Latin American countries, smallholder farms often tend to be over 2 hectares, as in Nicaragua where the average small farm size is 5 hectares.

Average small farm sizes, however, hide significant productivity differences across countries. These differences arise due to soil quality, technology and productive assets, such as irrigation. In general, farms in Asia are irrigated, while African agriculture is rain fed, as is agriculture in most of Latin America. Population growth rates in the rural areas and urbanization – driven by growth in other sectors of the economy – can also determine average farm size. The differences in smallholder farms between countries can be significant, and often reflect differences in the stages of development across countries.

Source: FAO 2015



- *Put smallholder (farmers) in the centre*: The generic term "farmer" includes men and women agriculturalists and pastoralists. Smallholders manage 80 per cent of the farmland in sub-Saharan Africa and Asia and their households are characterized by family- and family-network focused production and consumption patterns, and depend on limited external inputs. Smallholders are most vulnerable to climate change, suffering from limited integration in national, regional and global governance processes and are marginalized in agricultural transformation processes and in their access to rural services. However, their potential to build resilience into their coping mechanisms is generally high.

- *Promote gender equality and women's empowerment:* Women make up more than 40 per cent of the agricultural labour force in developing countries with increasing additional responsibility for tasks in rural livelihoods and household/farm leadership. Women are important drivers of change towards more sustainable production systems, and varied and healthier diets, provided they have equal access to education and health, rural advisory and financial services, productive resources and markets.

Women's empowerment as a tool against hunger and malnutrition

Rural women and girls represent a quarter of the world's population. In developing countries, women make up more than 40 percent of the agricultural labour force and in some regions, like in South Asia, over two thirds of women depend on agriculture for their livelihoods (FAO 2016). These rural women farmers often disproportionately experience poverty and exclusion and are among the most vulnerable. Two main channels perpetuate gender-based poverty: first, limited access to education and employment opportunities, linked to gender-determined unpaid domestic and care responsibilities, curtails women and girls' economic autonomy and weakens their bargaining position within the family. Second, women and girls face discrimination in terms of access to key productive resources such as land, housing, agricultural equipment, agricultural inputs, seeds, large livestock, machinery and vehicles. In turn, their ability to participate in food systems and agricultural value chains is restricted.

Climate change outpaces adaption capacities of smallholders

In general, changing climate and related variabilities have always led to the use of various coping and adaptation strategies by subsistence oriented smallholder farmers and herders. However, there is a growing recognition that the dynamics of climate change – the magnitude and unpredictability of its effects – are outpacing the ability of smallholder farmers and herders to adapt effectively.

Weather and climate obviously have a strong influence on agriculture with up to 50% of yield variability being attributable to climatic conditions. However, the exact effects of climate change on agriculture in different regions are less clear. This is mostly due to the complex and interrelated nature of the climate and differences in effects of the changes across the world.

The existing climate change projections highlight long-term changes in rainfall and temperature patterns as well as increasing frequency and intensity of extreme weather events, such as floods, droughts and storms. Higher temperatures might increase yields in high latitude locations, but will likely be detrimental to crop growth due to increased water loss and heat stress in seasonally arid and tropical regions. Such higher temperatures can further encourage weed and pest growth confronting resource-poor smallholder farmers with new challenges. Low precipitation has historically been one of the most important factors for falls in crop production. More generally changes in the existing rain patterns can increase the risk of short-term crop failures and lower yields in the longer term. Extreme weather events such as droughts, floods and storms create further risks for food production.

While the bio-physical and ecological risks brought about by climate change are more visible, socio-economic factors are crucial to determine the level of resilience of a farming system. This implies that both analysis and the mitigation of risks must be adapted to bio-physical and socio-economic local realities. An interesting example in this regard is the Sahel, which has long been seen as a low potential, degraded and fragile environment. New research instead indicates that dryland production systems have ecologically evolved to become more resilient through droughts. In the social realm, pastoralists and dryland farmers have developed strategies to increase their resilience by diversifying their assets and areas they are in.

Sources: IFPRI, IIED, IPCC

In 28 percent of developing countries, existing statutory and customary laws do not guarantee the same inheritance rights for women and men, thus institutionalizing discrimination. In an additional 52 percent of countries, laws guarantee the same rights, but discriminatory customary practices against women exist. For example, women can legally inherit land but are not the ones deciding upon the resource because of intra-household bargaining and norm setting. Moreover, one in three women in developing regions has no say about major household purchases and one out of ten women is not consulted on how their own cash earnings are spent. This kind of material deprivation also makes it more difficult for them to fulfil their vital productive roles which are crucial throughout the agricultural value chain, from production on the family plot, to food preparation, to distribution within the household and marketing activities. The FAO (2011) estimates that if women farmers had the same access to resources as men farmers, they could increase yield by 20 to 30 percent, nourishing 100 to 150 million more people. Challenging gender-based constraints must therefore be treated as a key component in the fight against hunger and malnutrition, and poverty overall.

Sources: FAO, UN

- *Adapt and reduce the effect of climate change:* The effects of climate change are undeniable, jeopardizing livelihoods and entire production systems as well as availability of and access to food. Developing climate-resilient production systems and livelihoods requires strengthening the absorptive, adaptive and transformative capacities of smallholders to assure global food security. This implies considering climate change aspects in an explicit manner by including measures that ensure productivity improvement, climate change adaptation and mitigation as co-benefits; linking with household and community resilience; addressing compensation mechanisms for environmental services; including research alliances and knowledge networks to valorise farmers' knowledge; and strengthening capacities of advisory services in integrating adaptation and mitigation in agricultural production systems while also enhancing productivity.

5. How we act

The GPFS makes use of the following *three major cooperation modalities*:

1. International policy and norm setting including implementation and monitoring at global, continental and regional level with a clear outreach to national levels

Norms in economic and social development are increasingly established at the global level to solve complex challenges on the ground. Whether in form of binding agreements and conventions or voluntary rules and guidelines (soft law), such norms are standards of expected behaviour about how different actors ought to manage public and private affairs on the ground and are deemed crucial for societies to flourish. International policies and norms can be established through a range of mechanisms including intergovernmental platforms, multi-stakeholder initiatives, global policy networks or transnational policy coalitions. The GPFS supports the establishment, the dissemination and the monitoring of selected frameworks, policies and norms with the objective of providing the international community, individual countries and private sector actors with better and more enabling food security and nutrition related policy frameworks (e.g. CFS RAI Principles).

2. Innovation of scalable solutions that have the potential to reach millions of smallholder farm families

Increasing the resilience and the livelihoods of millions of smallholder farmers and at the same time changing unsustainable consumption and production patterns towards more sustainability requires an array of innovations in virtually all dimensions at all levels of the global agriculture and food system. Innovation is understood to involve the successful introduction of new and better frameworks, processes, products or services into markets and societies. It also includes the introduction of proven approaches to new areas. The GPFS supports selected partners and projects that create and introduce innovation with the potential to reach millions of smallholder families (e.g. new agro-ecological production methods that increase farmers' incomes while reducing the ecological footprint, plant clinics that provide plant health advice to farmers, or bundled financial and information services on mobile phones for farmers) or that

improve existing innovation systems. The relevance of the innovations supported by the GPFS goes beyond the scope of priority countries of the SDC.

3. Knowledge management including generation, exchange and dissemination of knowledge

Knowledge, experience and capacities are the most important assets of humanity. They are not only a key resource to organizations but to each individual smallholder too. Both modern and traditional knowledge have to be generated, cultivated and passed on to others. Knowledge is a precondition for improved decision-making and higher performance at all levels of society. The GPFS advocates for and supports effective knowledge management in each of its programmes and projects. It also supports selected partners and initiatives which facilitate knowledge management, including the generation, exchange and dissemination of food security and nutrition related knowledge for the benefit of organizations and individual smallholder farmers. In addition, through its thematic *Agriculture & Food Security Network*, the GPFS fosters knowledge management and institutional learning within the SDC and its closest partners (see next chapter).

A **fourth working modality** refers to GPFS work on policy issues related to foreign policy of Switzerland. The GPFS helps to ensure that food security and nutrition perspectives of developing countries are taken into account in ordinary Swiss policy consultation processes with the objective of increasing the **Policy Coherence for Sustainable Development** of Swiss policy. It develops positions on food security and nutrition related issues such as agricultural subsidies, World Trade Organization (WTO) trade agreements (Agreement on Agriculture negotiations with "green box"), investment protection treaties, intellectual property rights and protection of new plant varieties, agrobiodiversity, synthetic biology, genetically modified organisms, digital sequence information, the human right to adequate food and others.

Geographically, the GPFS targets its activities at the world's hotspots of food insecurity and malnutrition. The lion's share of GPFS programmes and projects are located and active in sub-Saharan Africa and South-East Asia where hunger and undernutrition



are still widespread. Some of the public goods (agricultural research, international voluntary norms) are of a global nature.

The GPFS's **major aid instruments** are the following:

- Multilateral aid (CGIAR, IFAD, UNCCD)
- Jointly managed multi donor trust funds
- Bilateral project and programme support (mandates and contributions)
- New partnerships with the private sector (see box)
- Policy dialogue of GPFS staff (head office, liaison officers in Addis Ababa and Rome)

Engagement with the private sector

The Agenda 2030 calls for a global partnership of all stakeholders willing to invest in sustainable development to reach the SDGs. The private sector, ranging from small and medium sized enterprises up to multinationals, is a key stakeholder in this global partnership. Engaging with the private sector has the potential to bring more outreach and higher development impact. The GPFS engages in a flexible and selective manner in partnerships with the private sector. These engagements include different forms of cooperation such as public-private development partnerships, joint ventures on blended financing, impact investments and others. Engagements are considered with local, national, international and Swiss-based private sector actors ready to work with a common vision and striving for clear development objectives in the spirit of the SDGs.



6. The Agriculture and Food Security Network

The A&FS network is an important predominantly internal instrument of the GPFS for knowledge management, for providing strategic orientation on agriculture, food security and nutrition, and thus for maintaining and assuring thematic competence and quality within the SDC. The A&FS network is hosted and facilitated by the GPFS. The network focal point connects the GPFS with the different organisational units of the SDC as well as with partner organisations, interested actors of the private sector, the civil society and other donors, through coordination and relevant international knowledge platforms such as the GDPRD. Through learning journeys, experience capitalization and support to strategy development processes, the network contributes to internal institutional learning while communicating externally.

The mandate of the A&FS network is

- to promote learning and enhance professional and methodological knowledge;
- to provide theme-related operational advice to the SDC's organizational units;
- to capitalize on experience and formulate good practices;
- to link global initiatives and policy dialogue with field activities and vice versa.

Work modalities of the A&FS network and the focal point are the following:

- Online information: newsletter, events, reports;
- Online interaction: blogs, e-fora;
- Face-to-face meetings at regional and global levels;
- "Learning fora" providing a platform for exchange during workshops and conferences;
- Longer term (12 to 24 months) in-depth "learning journey" on priority themes;
- In-house advice on conceptual issues related to agriculture and food security.

The network has identified six thematic priorities:

› **Land governance** is at the centre of agriculture development and food security.

› **Rural advisory services and agricultural education** for many years has received little attention despite the high importance of reaching farmers, especially smallholders, with innovative practices and approaches.

› **Postharvest management:** Around 30% of food produced is lost or wasted. In the countries of the Global South, there is immense scope to improve the use of resources by reducing postharvest losses.

› **Nutrition:** Being aware of the almost 800 million people who are undernourished and the increasing number of overweight children and adults among the poor population in developing countries, this topic is linked to several of the other thematic priorities of the network.

› **Rural – peri-urban – urban dynamics:** Today, more than 50% of the world's population is living in the urban and peri-urban space. By 2050 this figure will reach more than 70%.

› **Ecological agriculture:** A sustainable world needs an agriculture that is based on ecological principles.

... and one methodological priority:

› **Result measurement** (monitoring) and evidence-based reporting require constant learning and improvement.

The focal point analyses regularly and thoroughly strategies and programme portfolios of SDC priority countries and regions and compiles the thematic reporting on achievements in the field of agriculture and food security.

7. Partners and cooperation

International and global partners

In line with its strategic orientation, the GPFS maintains a varied but targeted range of international and global partners. As of 2017, it is actively engaged with the following institutions, bodies and networks:

- The GPFS holds a seat in the governing council of the CGIAR, and the board of the IFAD, as well as in the Centre of Applied Bioscience International (CABI). The GPFS hosts Switzerland's focal point for the UNCCD, one of the three Rio Conventions, and of the Global Crop Diversity Trust.
- The GPFS is member of the European Initiative for Agricultural Research for Development (EIARD). The GPFS is also a member of the European Research Area – Agricultural Research for Development, where it is engaged in coordination and at programme level.
- The GPFS together with the Federal Office for Agriculture (FOAG) leads the Swiss inputs to the work streams and sessions of the Committee on World Food Security.
- The GPFS is a member of the Steering Committee of the AU's EOA Initiative and of the Governing Board of Africa Seeds, mandated by the AU Commission to coordinate and monitor the implementation of the African Seed and Biotechnology Programme.
- The GPFS coordinates the SDC's support and cooperation with the SUN Movement, which brings together governments, civil society, donors, UN agencies, research, and private sector actors to collaborate in support of country-led, multi-sectoral strategies to combat malnutrition.
- The GPFS maintains the SDC's dialogue with the GDPRD, a thematic network of bilateral and multilateral development agencies. Within this platform, the GPFS is an active member of the Global Donor Working Group on Land (GDWGL)
- The GPFS manages the SDC's contribution to the GFRAS and participates as an observer in the

governing body of the ILC, a global alliance of grassroots and international institutions that promotes a stronger commitment to a people-centred land governance agenda.

- The GPFS collaborates with further international organizations such as FIAN, Access Agriculture and Mercy Corps through project implementation mandates.

Partners in Switzerland

The GPFS is engaged with a number of units of the Federal Administration in order to coordinate activities with common partners and initiatives and to increase policy coherence for development.

Within the Federal Department of Foreign Affairs, close exchange and collaboration are established with the

- Human Security Division on the topic of the right to adequate food;
- Sectoral Foreign Policies Division on issues related to agrobiodiversity, sustainable land management, and intellectual property rights.

In addition to providing inputs to the Interdepartmental Commission for Development Cooperation (IKEZ), the main partners within other federal departments are:

- Federal Office for Agriculture (FOAG), with which the GPFS assumes a shared responsibility for the Permanent Representation of Switzerland to FAO, IFAD and WFP in Rome. The extensive collaboration with the FOAG refers to FAO, CFS, VGGT, CFS RAI, ITPGR, CGRFA, Crop Trust, UPOV; 10YFP Sustainable Food Systems Programme;
- Federal Office for Environment (FOEN) on issues related to biodiversity conservation, the 10 YFP programme, postharvest loss reduction, and others;
- Federal Food Safety and Veterinary Office (FSVO) on issues related to nutrition;

- State Secretariat for Economic Affairs (SECO) on issues of business principles, RAI, land governance, intellectual property rights, investment protection treaties, value chains of organic agricultural products.

Furthermore, the GPFS takes part in the work of the “Comité National Suisse de la FAO” (CNS-FAO), and works jointly with the FOAG on food security-related advocacy and knowledge sharing activities in Switzerland.

Within the Federal Administration, lead responsibilities of the following key institutions are with the GPFS: IFAD, CGIAR, CFS (together with FOAG), UNCCD, and Global Crop Diversity Trust Fund. Responsibilities for other key food security and nutrition partners at international level are with the FOAG (FAO) and the SDC’s Swiss Humanitarian Aid Department (WFP).

The GPFS is a member of both the Swiss Forum on International Agriculture Research (SFIAR) and the Swiss Forum for Rural Advisory Services (SFRAS), and it nurtures regular work relationships to the main competence and research centres for Agricultural Research for Development (FiBL, CDE, ETHZ/WFSC, HAFL, CABI, IHEID, Agroscope), food security and nutrition in Switzerland.

The GPFS relates to Swiss non-governmental organisations (Biovision, Swissaid, Helvetas, Brot für Alle) and institutions involved in food security and nutrition, agriculture and rural development through partnerships, implementation mandates and joint learning initiatives.

Private sector

The GPFS is committed to embark upon new partnerships with private sector actors in different forms of cooperation (see box chapter 5). It seeks to identify and test new instruments with the potential to increase and improve private investments in inclusive value chains in rural areas. The GPFS will also cooperate with IFAD on its strategic involvement with the private sector. As of 2017, the GPFS is engaged with a number of private sector actors directly and more often indirectly through its projects and programmes:

- Coop Switzerland and Mars Incorporated as partners and buyers of sustainably produced rice in the Water Productivity Project – a multi-stakeholder initiative to address water efficiency issues in rice and cotton production in Asia;
- Allianz Re, SwissRe and Sarmap SA, in a public-private partnership aiming to develop remote sensing technology and insurance to introduce risk management tools for private insurers and policy makers to reduce the vulnerability of rice smallholder farmers in low-income countries in Asia;
- African Risk Capacity Insurance Company Ltd, the financial affiliate of the GPFS co-financed ARC, a specialized agency of the AU and an initiative designed to improve current responses to climate-related food security emergencies of African countries;
- Private banks (e.g. Bank Andara, Bank Pesisir Akbar), input suppliers such as Syngenta, and mobile phone operators are brought together in the MercyCorps facilitated Agri-Fin Mobile project active in Indonesia, Zimbabwe and Uganda with the objective of developing bundled mobile phone services for smallholder farmers.



Partners within the SDC

In its cooperation with other SDC departments and units, the GPFS continues to foster complementary and coherent approaches. Policy work at the global and regional levels – as well as at the sub-regional level in some cases – seeks to be nurtured with technical and political experiences obtained by local and national actors. Vice versa, cooperation seeks to support the translation (“domestication”) of global (and regional) norms and regulations in national and local policies and practices.

Coordination and collaboration is sought namely *with other Global Programmes*

- Analysis and Policy Division → policy coherence for development; intellectual property rights, investment protection treaty;
- GP Water Initiatives → water efficiency and water for food; joint efforts at the Addis Ababa Global Cooperation hub;
- GP Health → health and nutrition;
- GP Climate Change and Environment → climate sensitive agriculture; mountain agenda;

with the South Cooperation Department

- West Africa and Focal Point Education Network → farmers’ organizations; land governance; Food Security and nutrition
- East Africa, Horn of Africa → land governance; agroecology, agrobiodiversity/seeds;
- South-East Asia → land governance; agricultural insurance;
- Latin America and Focal Point E-I Network → agricultural insurance; nutrition;

with the Swiss Humanitarian Aid Department

- joint programming related to food security and nutrition in protracted crises and conflicts, including innovative agricultural safety nets, cash-based transfers, LRRD-approach; balanced diets in food aid; partnerships with WFP, CFS, SUN);

and the A&FS Network *with all the SDC networks.*

8. Resources

Financial resources

The GPFS's indicative overall annual budget for the period 2017 to 2020 is projected to grow gradually from CHF 55.2 million in 2017 to CHF 56.8 million in 2020 with a slight dip in 2018 (indicative budget see Annex 4). The overall budget is divided into bilateral and multilateral resources. The larger part of the GPFS's resources (between CHF 32.2 million and CHF 29.8 million per year) consist of Switzerland's contribution to the three multilateral partners in the GPFS's area of responsibility: CGIAR, IFAD and UNCCD. Between CHF 23 million and CHF 27 million annually are allocated to bilateral cooperation. Within these bilateral resources, distribution among thematic priorities will not be even. Long-standing, resource intensive thematic priorities such as *effective agricultural innovation and extension systems*, *reduced ecological footprint of agriculture* or *secured tenure and access to land* will absorb considerably more resources than less resource intensive priorities such as *improved global governance for food security and nutrition* or incipient thematic priorities such as *responsible agricultural investment* or *sustainably used agrobiodiversity*. The GPFS keeps an adequate flexibility in managing its finances throughout the time horizon through an appropriate mix of instruments which allows for short-term increases and decreases of annual overall disbursements in line with potential changes in the overall budget allocated to the GPFS.

Human resources and locations

Working mainly from the SDC's office in Bern, the GPFS team consists of 13 permanent staff corresponding to roughly 1100% full time equivalents of which 190% are allocated to financial administration and programme assistance. Managed by one head and one deputy (or two co-heads), the GPFS is essentially run by a total of 8 programme officers. One programme officer is the Focal Point officer that leads, animates and moderates the A&FS Network. The team, and the A&FS Network in particular, counts regularly on the support of graduate interns.

Out of the 8 programme officers, two are international staff located abroad: since 2011, the GPFS has maintained a regional representation in Africa with one international staff member and one national staff member based in Addis Ababa, with the objective of increasing the effectiveness of its policy dialogue with a number of African and sub-Saharan African policy stakeholders. One international staff member of the Permanent Representation of Switzerland to FAO, IFAD and WFP based in Rome, Italy, is directly linked to the GPFS in accordance with established terms of reference. The objective of this liaison person to the GPFS is to ensure an effective policy dialogue with a number of Rome-based key international partners (CFS, FAO, IFAD, ILC, etc.) and to ensure the monitoring of a series of Rome-based initiatives and projects co-financed by the GPFS.



Annex 1: Food security and nutrition: a matter of definition

The GPFS uses the following working definitions:

Food security exists when all people at all times have both physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

According to this definition, food security is composed of four pillars: availability, stability of supply, access and utilization. In its focus on individuals, food security also embraces their energy, protein and nutrient needs for life, activity, pregnancy, growth and long-term capabilities.

The definition of food security has evolved over the last 30 years to reflect changes in thinking, knowledge and practice. The World Food Conference in 1974 defined food security in terms of food supply: assuring the availability and price stability of basic food stuffs at the international and national levels. Since then, the definition has been progressively revised to include the individual and household levels, the distinction between chronic food insecurity, associated with problems of continuing or structural poverty and low incomes, and transitory food insecurity, which involves periods of intensified pressure caused by natural disasters, economic shocks or conflict. On-going discussions within the Committee on World Food Security have aimed at further integrating nutrition into consideration by coining the concept of “food and nutrition security”.

Ethical and human rights dimension of food security have gradually come into focus. In 1996, a milestone was set with the consideration of the right to adequate food at the World Food Summit. It pointed the way towards the possibility of a rights based approach to food security. In 2004, the FAO Council adopted the “Voluntary Guidelines for the Progressive Realisation of the Right to Adequate Food in the Context of National Food Security”. Since then, the right to food has been promoted in various reference documents of global relevance such as the Declaration of the Summit on World Food Security (FAO 1996, 2002), the Updated Comprehensive Framework for Action (UN HLT 2010) and the Global Strategic Framework for Food Security and Nutrition (CFS 2012).

The concept of “Food sovereignty” is not firmly anchored in international discourse, but it is often misunderstood with “self-sufficiency”. A commonly found definition reads: It asserts the right of people and sovereign states to democratically determine their own agricultural and food policies.

Food insecurity exists when people lack access to sufficient amounts of safe and nutritious food, and therefore are not consuming enough for an active, healthy, and reproductive life. This may be due to the unavailability of food, inadequate purchasing power or inappropriate utilization at household level.

The **Ecological Footprint** is rooted in the fact that all renewable resources come from the earth. It accounts for the flows of energy and matter to and from any defined economy and converts these into the corresponding land/water area required for nature to support these flows.

The Ecological Footprint is defined as the area of productive land and water ecosystems required to produce the resources that the population consumes and assimilate the wastes that the population produces, wherever on Earth the land and water is located. It compares actual throughput of renewable resources relative to what is annually renewed. Non-renewable resources are not assessed, as by definition their use is not sustainable.

There is today no consensual and clear definition of **Agroecology**. Within the practice, we may include permaculture, organic agriculture, ecological organic agriculture, conservation agriculture, evergreen agriculture, minimum or no-tillage, etc. The Agroecology Knowledge Hub of the FAO defines Agroecology as “the use of ecological principles for the design of agricultural systems”.

It is based on applying ecological concepts and principles to optimize interactions between plants, animals, humans and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system. By building synergies, agroecology can support food production and food security and nutrition while restoring the ecosystem services and biodiversity that are essential for sustainable agriculture.

Agroecology can play an important role in building resilience and adapting to climate change.

FAO has developed 10 key elements of projects, programmes and policies in supporting agroecology:

- Optimizing the use of natural resources within farming systems.
- Securing favourable soil conditions and self-regulation inside the food system.
- Maximizing species and genetic resources across time and space within food systems.
- Local and traditional knowledge and innovation to create sustainable food systems based on local needs and local ecosystems.
- Reutilizing nutrients and biomass existing inside the farming system and increased use of renewable resources promoting a healthy food system.
- Designing food systems with an optimal crop/animal assemblage, while promoting ecological functions for self-regulation in foods system.
- Building food systems based on the culture, identity, tradition, innovation and knowledge of local communities and livelihoods, favouring social dynamics that focus on women's and youth's role in agricultural development.
- Local solutions and local markets creating virtuous cycles.
- Healthy, diversified and culturally appropriate diets deliver good nutrition while assuring the health of ecosystems.
- Recognizing and supporting smallholder food producers as sustainable managers and guardians of natural and genetic resources.

The term **Ecological Organic Agriculture** as applied by the African Union Commission in implementing the AU Decision on Organic Agriculture (2011) is defined as a "holistic system that sustains the health of ecosystems and relies on functional cycles adapted to local conditions, rather than the use of synthetic inputs which have adverse effects on total health (human, animal, plant and environmental)".

EOA refers to a production management system that considers the agro-ecosystem in all its diversity, focusing on biological diversity, healthy use of soils, air and water and relying on renewable resources in locally organized agricultural systems while minimizing the use of external inputs like agrochemicals and inorganic fertilizers that may have adverse effects on these systems. It combines modern science, innovative practices and traditional knowledge. Some of the farming practices in EOA include organic farming, conservation agriculture, bio-intensive agriculture, permaculture and ecological farming. EOA is less input intensive, and therefore more accessible for resource-limited rural people and has a high potential for improving the livelihoods of a large group of rural poor and particularly women.

Nutrition Security exists when all people at all times consume food of sufficient quantity and quality in terms of variety, diversity, nutrient content and safety to meet their dietary needs and food preferences for an active and healthy life, coupled with a sanitary environment, adequate health, education and care.

Undernutrition is the result of prolonged low levels of food intake and/or low absorption of food consumed. Generally applied to energy (or protein and energy) deficiency, but it may also relate to vitamin and mineral deficiencies.

Undernourishment or chronic hunger refers to the status of persons, whose food intake regularly provides less than their minimum energy requirements. The average minimum energy requirement per person is about 1800 kcal per day. The exact requirement is determined by a person's age, body size, activity level and physiological conditions such as illness, infection, pregnancy and lactation.

Malnutrition is a broad term for a range of conditions that hinder good health, caused by inadequate or unbalanced food intake or from poor absorption of food consumed. It refers to both undernutrition (food deprivation) and over-nutrition (excessive food intake in relation to energy requirements) and relates to imbalances in energy, and specific macro and micronutrients- as well as in dietary patterns.

Sustainable diets are those diets with low environmental impacts which contribute to food and nutrition security and to healthy lives for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair and affordable; nutritionally adequate, safe and healthy; while optimizing natural and human resources (FAO/Bioversity 2010).

Smallholders are small-scale farmers, pastoralists, forest keepers, fishers who manage areas varying from less than one hectare to 10 hectares. Smallholders are characterized by family-focused motives such as favouring the stability of the farm household system, using mainly family labour for production and using part of the produce for family consumption. (FAO 2012)

Family farming includes all family-based agricultural activities, and it is linked to several areas of rural development. Family farming is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family labour, both women's and men's. The family and the farm are linked, coevolve and combine economic, environmental, reproductive, social and cultural functions. (FAO 2014)

A **Food System** gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, marketing, retail, consumption and disposal of goods that originate from agriculture, including food and non-food products, livestock, pastoralism, fisheries including aquaculture, and forestry, and the inputs needed and the outputs generated at each of these steps. A sustainable food system reconciles ecological, social and economic imperatives, and is based on a

hierarchy of nested objectives such as equitable access to diverse and healthy food, local sustainable production, increased income and employment, safeguarded (agro-) biodiversity and many others. They involve a wide range of stakeholders, people and institutions, as well as the socio-political, economic, technological and natural environment in which these activities take place. (CFS/HLPE 2014)

Agricultural safety nets refer to the broader concept of “social safety nets”. Safety net programmes, as part of a broader social protection agenda, aim to address risks, vulnerability and social exclusion. They help vulnerable households be protected against livelihoods risks, maintain an adequate level of food consumption, improve food security, and prevent from damaging coping strategies and depleting assets. In the context of agriculture, they might also alleviate liquidity constraints for smallholders, boost demands for farm products, foster income-generating and innovation strategies, and create multiplier effects throughout the local economy.

Sustainable Development Goals (SDG)

The Sustainable Development Goals create the universal framework for sustainable development. The 17 goals are universally applicable and span from zero hunger to sustainable economic growth. There is a goal of particular importance to GPFS's work – Goal 2 to “End hunger, achieve food security and improved nutrition, and promote sustainable agriculture”.

The individual targets are:

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 five 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 the incomes of small-scale food producers, particularly 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 genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure 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 to enhance agricultural productive capacity in developing countries, in particular in least developed countries.

2.b. Correct and prevent trade restrictions and distortions in world agricultural markets including by 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.

These targets address key aspects of the work of the GPFS. However, the agenda will have to be considered in its entirety. Furthermore relevant are potential synergies and trade-offs with goals and targets in the realms of poverty (Goal 1), health (Goal 3), gender equality (Goal 5), water (Goal 6), decent work (Goal 8), responsible production and consumption (Goal 12), climate action (Goal 13) and life on land (Goal 15).

Annex 2: The way to the new strategy

Since its inception in October 2008, the GPFS has selected specific priority areas and initiated innovative partnerships, complementing the continued strong engagement in strengthening agricultural research for development: rural advisory services, ecological agriculture, agrobiodiversity, postharvest management, agricultural insurances, nutrition, and land governance. In these areas, the GPFS has contributed to influencing the setting, or the implementation of global or continental frameworks. It has established an outreach representation within the Swiss Embassy in Addis Ababa for increased policy dialogue and closer monitoring of regional initiatives in Africa.

The components and thematic priorities of the new Strategy 2017 – 2020 take into account

- › GPFS' existing strategy 2013-2017;
- › a review of SDC's overall agriculture, food security and nutrition portfolio;
- › an analysis of the most compelling global food security challenges;
- › recommendations provided by the 2015 evaluation of SDC's global programmes;
- › key requirements outlined in the dispatch of the Federal council 2017 – 2020; and
- › the vision of a world free of hunger as aimed at by the Agenda 2030.


The efforts of GPFS led to major achievements in the following, selected policy fields and areas of innovation:

- Being the 10th largest donor and holding one of the 15 seats in the System Council, SDC actively contributed to the reform of the governance of the **CGIAR**. GPFS chaired the European donor group (2011 – 2013) and, in 2016, acted as co-lead of the latest CGIAR governance system changes. The research led to large up- and out-scaling in supporting national research systems. Examples are: farmers in Southeast Asia have harvested an additional USD 1.46 billion worth of rice each year from improved varieties. Drought-tolerant maize has increased yields by 20-30 percent.
- Through its support to the GFRAS, SDC influences policies on **Rural Advisory Services** at the World Bank, IFAD and FAO. A policy compendium tool and over a 150 quality training videos translated into 60 local languages realized with Swiss support will guide policy processes for RAS worldwide and inform farmers. Other innovations include mobile phone services that now reach millions of smallholders. RAS is an integral part of any agricultural innovation system and of high relevance for rural transformation.
- **Land:** Through supporting the implementation of the VGGT, the RAI and the African Union land policy, SDC contributed to overarching frameworks for investments in agriculture and food systems and to securing access/tenure of land for smallholders. Changes in land governance need a long term engagement and complementary efforts at national level.
- SDC/GPFS is a catalyst for **Agroecology**. Through the Ecological Organic Agriculture Initiative, implementing the AU policy on organic agriculture, platforms in eight countries to mainstream EOA were established. The SDC co-funded scientific research of the FiBL shows the potential of organic agriculture. Related methods together with efficient water use are crucial to reducing the ecological footprint in agriculture.
- Switzerland is an alternate member of the Governing Board of the **International Fund for Agricultural Development**. For IFAD10 (2016-2018), Switzerland is the 10th largest contributor. Besides its multilateral contribution, it has played an important role in formulating the gender strategy and in setting up the independent evaluation function.
- In the preparation of the CFS Global Strategic Framework for Food Security and Nutrition, SDC in collaboration with FIAN was successful in incorporating the **right to adequate food**.
- Through its support to **Farmers' Organisations** in Africa and Asia, the GPFS ensured that the voice of rural populations is heard in global policy making mechanisms.

- With strong support from SDC, the **Scaling-up Nutrition Movement** has led to the creation of civil society alliances in 22 countries.
- **Postharvest management:** SDC/GPFS has been a driving force in reducing post-harvest food loss in Africa with FAO, operating a global level, IFAD and WFP as key partners. In 2014, the AU agreed to aim at reducing by 50 percent the post-harvest losses by 2025. Based on the substantial investment of the GPFS in African post-harvest management policies, implementation at national level is now required.
- Benefitting two million farmers worldwide, the **CABI-Plantwise** programme helps local agricultural services to set up and run plant clinics. Over 2000 community based plant clinics in 34 countries help farmers identify and combat plant pests and diseases. Plantwise won the OECD/DAC Prize 2015.
- Through the “Remote sensing-based Information and Insurance for Crops in Emerging economies” (**RIICE**) public-private development partnership project, agricultural production forecast (by Governments) and insurance for smallholder farmers can be more accurate and effective. The technical solution developed under RIICE is to be offered as a social enterprise venture to governments and (re-) insurance companies in India, Thailand, Vietnam, Cambodia and the Philippines. Other countries might follow.
- The **African Risk Capacity** is established as a specialized agency of the African Union. This insurance is an instrument of national disaster risk management. With SDC co-funding, ARC allows African countries to build their capacities to better respond to extreme weather events such as droughts and floods, therefore protecting the food security of their populations.
- The UNCCD recognised **WOCAT** of the Centre for Development and Environment (CDE) of the University of Bern as the primary database for best practices on sustainable land management technologies.
- SDC’s 16-year investment into the **Irrigated Rice Research Consortium** proved a 6-fold return to the benefit for rice farmers in South East Asia, reducing the ecological footprint of rice production through e.g. more efficient use of water and reduction of pesticides. The long-term engagement was one of the success factors.

The **Agriculture & Food Security Network** in collaboration with other SDC networks and external partners, successfully facilitated learning on postharvest management; making markets work for the poor; rural advisory services; land governance; pastoral economy; and gender equity. Thematic conferences organized jointly with Swiss NGO focused on themes such as GMO and food security for small holder; and agroecology in Africa.

Annex 3: Results framework

<p>Mission</p> <p>By inducing change in public and institutional policies and regulatory frameworks, private standards and practices on food security and nutrition, promoting innovations in favor of smallholders families, facilitating institutional learning and awareness raising, and by its efforts to increase the coherence and effectiveness of Switzerland's foreign policies, the GPFS contributes to a world free of hunger and malnutrition in which smallholder rural and (peri-)urban farmers, woman and men equally, produce healthy and nutritious food accessible to all while improving their income and safeguarding the environment.</p>	
<p>Major targeted SDGs</p> 	
<p>Component 1: Sustainable agriculture and food systems</p> <p><i>Policy impact hypothesis:</i> Targeted support towards more effective agricultural research and innovation systems that respond to the needs of the world's 500 million often vulnerable smallholder families, in particular to women-headed ones, together with the support to international frameworks and initiatives of more sustainable, resource efficient, and agro-ecological production to reduce the environmental impact of agriculture and to maintain agrobiodiversity, and initiatives to improve the resilience of smallholder livelihoods against external shocks caused by climatic variability and extreme weather events as well as socio-economic insecurities and political instability, will contribute significantly to a more sustainable agri-food system that provides healthy, diverse and nutritious food accessible to all.</p> <p><i>Partners (currently, 2016/2017):</i> CGIAR, IFAD, FAO, Biovision, Bioversity International, FiBL, African Union, African Risk Capacity, International, private sector (RIICE and others), other Swiss and international non-governmental organizations</p>	
	<p>Indicators</p>
<p>Thematic priority 1.1: Effective agricultural innovation and extension systems</p>	<p>Measurement Indicators will be determined in the course of the portfolio development.</p>
<p>Outcome 1.1.1: International agricultural research in cooperation with national agricultural research and innovation systems delivers knowledge and solutions that are scaled up reach the millions of poor small and medium sized farm households. Policy choices are influenced for a more diversified dietary choice, a more climate change resilient agriculture, a significant up-take of more sustainable cultivation methods, better performing markets and value chains, for the ultimate benefit of smallholder farmers and the nutrition of poor populations.</p>	<p>Empirical evidence provided by partners shows innovations such as improved advisory services, new crop varieties, new cultivation and transformation, new bio-pesticides, improved incomes through better market integration etc. accessible to smallholder families.</p>
<p>Outcome 1.1.2: Innovative and strengthened rural advisory services systems, which encompass public and private sector based service providers, deliver cost-efficient, effective and accessible knowledge and services to millions of smallholder families. The rural advisory services system connects agricultural research with the realities and livelihoods of millions of smallholder families.</p>	<p>Evidence on improved services and services' delivery including innovation of processes and services (i.e. training videos, mobile phone services, etc.)</p>

Thematic priority 1.2: Reduced ecological footprint of agriculture	
Outcome 1.2.1: Enhanced knowledge and knowhow about ecologically sustainable agricultural practices and food systems is available and shape policy frameworks, contributing to the reduction of the ecological footprint of agriculture and food systems at local, national, regional and global levels.	Evidence shows that agricultural and food system policies shift towards more ecological principles.
Outcome 1.2.2: Sustainable use of natural resources in agriculture, in particular the use of more efficient water management technologies and approaches, through other technologies and information exchange and networking.	Evidence show that promising practices of ecologically sustainable use of natural resources, in particular water use in agricultural production are disseminated and implemented.
Thematic priority 1.3: Sustainable use of agrobiodiversity	
Outcome 1.3.1: Seed systems and related policies reflect the needs and realities of poorer and vulnerable smallholders - women and men - stipulating the complementarity of informal and formal seed systems at local, national, regional and global levels.	Evidence shows increased awareness of decision makers and other relevant stakeholders about the benefits of informal seed systems; related policies reflect these systems in complementarity to the formal seed systems.
Outcome 1.3.2: Smallholders, women and men, increase their productivity and income and are more resilient to climate change and other shocks, through access to sufficient, affordable, diversified and locally adapted plant genetic resources.	Evidence shows increased number of crop varieties available in international collections; number of countries receiving samples. Evidence shows reduced vulnerability of smallholders through sustainably using diversified and locally adapted plant varieties.
Thematic priority 1.4: Innovative agricultural safety nets	
Outcome 1.4.1: National food security and natural disaster management policies / regulatory frameworks address risk management in agricultural production through innovative insurance approaches at household, community and national levels.	Evidence shows that national food security and natural disaster management policies and related legal and institutional frameworks promote innovative agricultural insurance approaches.
<p>Component 2: Regulatory frameworks conducive to food security and nutrition</p> <p><i>Policy impact hypothesis:</i> Advocacy and support to the development and the implementation of international normative frameworks, voluntary guidelines and technical standards that guide both national policy development and private sector based initiatives lead to a more conducive environment that <i>inter alia</i> allow smallholder families, women and youth in particular secured access to land and other natural resources and the realization of the human right to adequate and nutritious food for all.</p> <p><i>Partners (currently, 2016/2017):</i> Committee on World Food Security, IFAD, FAO, International Land Coalition, UNECA, UNCCD, FIAN International, continental farmers' federations, private sector initiatives</p>	
	Indicators
Thematic priority 2.1: Improved global governance for food security and nutrition	Measurement Indicators will be determined in the course of the portfolio development.
Outcome 2.1.1: International food security and nutrition norms and policies which support the progressive realization of the right to adequate food and nutrition at global, regional and national level established, implemented and monitored through strengthened, effective and more inclusive global and regional food security and nutrition stakeholders and platforms.	Evidence on influence of global norms on food security and nutrition at the national and local levels.
Outcome 2.1.2: Accountability mechanisms are reinforced to ensure that these norms and policies on food security and nutrition are formulated and implemented in a way that contributes to sustainable development and inclusion, in line with the Agenda 2030 and the international human rights framework.	Evidence of progress in establishing institutions and mechanisms that effectively formulate, implement and establish accountability mechanisms at global and regional levels.

Thematic priority 2.2: <i>Secure tenure and access to land</i>	
<p>Outcome 2.2.1: The promotion and implementation of regulatory frameworks such as VGGT, RAI and AU F&G lead to improved national policies and regulatory frameworks, responsible governance of land tenure and more equitable land governance, in particular to the benefit of vulnerable and marginalized people.</p>	<p>Evidence shows that national land policies and related legal and institutional frameworks reflect the principles of global/regional frameworks (VGGT, RAI, AU Framework & Guidelines of good land governance, in particular in the Mekong Region and in the Sahelian countries.</p>
Thematic priority 2.3: <i>Responsible agricultural investments</i>	
<p>Outcome 2.3.1: More sustainable investments in agriculture in developing countries at the benefit of smallholder farmers, both men and women, achieved through the promotion and application of the “responsible agricultural investment” principles (CFS-RAI) and other innovative business standards through public and private sector based international initiatives.</p>	<p>Evidence shows the successful implementation of parts or whole of FAO umbrella programme for RAI. Evidence shows increased investment in agriculture through mechanisms with clear due diligence requirements in line with the CFS-RAI</p>
Thematic priority 2.4: <i>Improved nutrition for all</i>	
<p>Outcome 2.4.1: Nutrition relevant agricultural and food systems’ laws, policies, strategies and plans are developed and implemented, improving nutrition for in particular poorer and vulnerable men, women and children.</p>	<p>Evidence shows that sustainable agricultural and food systems’ laws, policies, strategies and investment plans are nutrition sensitive.</p>

Annex 4: Indicative budget for the GPFS 2017–2020

1. Bilateral Resources		2017	2018	2019	2020	Total
Component 1	Committed	12'400'000	10'650'000	10'050'000	6'000'000	39'100'000
	To be committed	650'000	400'000	2'650'000	7'150'000	10'850'000
Component 2	Committed	7'200'000	10'350'000	9'100'000	4'300'000	30'950'000
	To be committed	800'000	900'000	2'600'000	8'050'000	12'350'000
General	Global credit, network, general support	1'950'000	1'700'000	1'600'000	1'500'000	6'750'000
Total		23'000'000	24'000'000	26'000'000	27'000'000	100'000'000
2. Multilateral Resources						
Multilateral	CGIAR	16'800'000	14'300'000	16'100'000	16'100'000	63'300'000
	IFAD	15'000'000	15'000'000	14'000'000	13'200'000	57'200'000
	UNCCD	400'000	500'000	500'000	500'000	1'900'000
Total		32'200'000	29'800'000	30'600'000	29'800'000	122'400'000
3. Total GPFS Resources 2017 – 2020						
Total		55'200'000	53'800'000	56'600'000	56'800'000	222'400'000

In Swiss Francs (projections as of March 2017; rounded figures)

Annex 5: Management and monitoring

Portfolio management

With the objective to increase GPFS' expertise and the effectiveness in its policy influencing in selected thematic priorities, the GPFS strategy 2017 - 2020 reduces the number of thematic priorities. A consolidation is also aspired at the programme portfolio level, i.e. in the overall number of financed projects and initiatives. In the medium term, each thematic priority shall encompass on average one to two multi-year flagship programmes that are ideally mutually reinforcing. Following the public procurement rules of the Swiss federal administration, open calls and tenders will be launched in particular for the identification of innovation and knowledge related programmes.

Short-term, time bound and opportunity driven actions may complement these flagship programmes including the GPFS' supportive advocacy work. The contract portfolio will also be closely monitored with the objective to limit the administrative burden and ensure sufficient capacity of programme personnel for knowledge related, concept based, and policy advocacy work. As the GPFS aims at structural change in complex issues such as e.g. regulatory frameworks or land issues, an important share of GPFS's programmes will have longer term project cycles (at least 8-10 years). Nonetheless, the GPFS maintains financial flexibility to cope with changes in the overall budget and to be able to react to upcoming investment opportunities in line with this strategy.

Risk & Risk management

The GPFS programme portfolio entails a series of noticeable risks. For policy and norm setting at the international or regional level, the non-adoption by national policy makers and other stakeholders can be considered as the most important risk. As the trickle down of international soft law is frequently slow and beyond the control of the GPFS, careful ex-ante selection of new projects is crucial. Lobbying and coordination with SDC's partners in priority countries at the national level can increase the effectiveness. Result and impact measurement will be difficult as attribution and causality is difficult to prove. Cost inefficiencies are occasionally an issue when working with large international institutions. Negotiations, strict cost controls and requirements regarding achieved results limit these risks. Fiduciary risks exist with smaller institutional partners that lack the sophisticated internal control mechanism large international and multilateral partners usually have put in place. Careful selection and specific audits do limit such risks. Reputational risks of the GPFS are limited in principal as international cooperation in food security still enjoys an excellent perception in the general public. However, programmes that can be related to genetically modified organisms bear a considerable reputational risk. The GPFS has one programme in its portfolio that can be related to GMO: CGIAR. The CGIAR estimates its GMO related research at one to three percent of the overall budget. The reputational risk is considered limited with the CGIAR as the GPFS contributes to a large multi-donor funded research endeavour where Switzerland isn't in a position to unilaterally dictate the terms of reference.

Monitoring & Evaluation

The strategy of the GPFS will be subject to regular monitoring to keep track of the relevance, effectiveness and efficiency of the programme portfolio. To the degree and periodicity possible, the results will be measured using the SDC's Food Security Reference Indicators and Aggregated Reference Indicators at the project and programme (thematic priority) outcome levels. International norms, policy frameworks, voluntary guidelines and also newly generated knowledge unfold their expected effects on farmers' livelihoods only after a considerable amount of time has elapsed and too often not entirely in the way they had been conceived at the outset. Strict causality and mono-directional attribution of such policies to farmers' livelihoods are difficult to identify and to prove. Despite the complexity of the chain of effects and the methodological challenges to measure such results empirically, the GPFS is committed to achieve and to account for measurable results. Annual reporting will continue to use anecdotal, non-systematic, descriptive methods to account for achieved results in particular for outcomes that cannot be measured quantitatively.

A backstopping arrangement will be put in place to strengthen the capacity of the GPFS to compile, monitor and account for results.

Communication

With targeted communication measures the GPFS intends

- to maintain the awareness of the ongoing food security challenge and the relevance of the GPFS;
- to increase awareness about the GPFS activities and results achieved;
- to illustrate the functioning of the Global Programmes (innovative projects, shared experience and policy influencing) of which the GPFS is part.

The communication objectives, targeted audiences, key messages and actions are described in detail in the GPFS Communication Concept (SDC/GPFS 2015).

Annex 6: List of acronyms

A&FS	Agriculture and Food Security Network, SDC	IFPRI	International Food Policy Research Institute
A&P	Analysis & Policy Division, SDC	IHEID	Graduate Institute of International and Development Studies, Geneva
AFAAS	African Forum for Agricultural Advisory Services	IKEZ	Interdepartmental Commission for Development Cooperation (IKEZ)
ARC	African Risk Capacity	IIED	International Institute for Environment and Development
ARI	Aggregated Reference Indicators	IISD	International Institute for Sustainable Development
AU	African Union	ILC	International Land Coalition
BvAT	Biovision Africa Trust	IPCC	Intergovernmental Panel on Climate Change
CAADP	Comprehensive Africa Agricultural Development Programme	ITPGR	International Treaty on Plant Genetic Resources for Food and Agriculture
CABI	Centre for Agriculture and Biosciences International	LRRD	Linking Relief, Rehabilitation and Development
CDE	Centre for Development and Environment, University of Berne	MDG	Millennium Development Goal
CFS	Committee on World Food Security	NGO	Non-Governmental Organisation
CFS/HLPE	Committee on World Food Security, High Level Panel of Experts	OECD	Organisation for Economic Co-operation and Development
CGIAR	International Agricultural Research Partnership	RAI	Principles for Responsible Investment in Agriculture and Food Systems
CGRFA	Commission on Genetic Resources for Food and Agriculture	RAS	Rural Advisory Services
CHF	Swiss Franc	RIICE	Remote sensing-based Information and Insurance for Crops in Emerging Economies
CNS FAO	Comité National Suisse de la FAO	SDC	Swiss Agency for Development and Cooperation, Switzerland
DAC	Development Assistance Committee of the OECD	SDG	Sustainable Development Goal
E+I	Employment and Income Network of SDC	SECO	State Secretariat for Economic Affairs, Switzerland
EIARD	European Initiative for Agricultural Research for Development	SFIAR	Swiss Forum on International Agriculture Research
EOA	Ecological Organic Agriculture	SFRAS	Swiss Forum for Rural Advisory Services
ETHZ/WFSC	Federal Institute of Technology Zurich, World Food Systems Centre	SUN	Scaling-up Nutrition Movement
FAO	Food and Agriculture Organization of the UN	UN	United Nations
FDFA	Federal Department of Foreign Affairs, Switzerland	UNCBD	UN Convention of the Conservation on Biological Diversity
FIAN	Food First Information and Action Network	UNCCD	UN Convention to Combat Desertification
FIBL	Forschungsanstalt für biologischen Landbau	UNCTAD	UN Conference on Trade and Development
FOAG	Federal Office for Agriculture, Switzerland	UNEP	UN Environment Programme
FOEN	Federal Office for Environment, Switzerland	UNHABITAT	UN Human Settlements Programme
FSVO	Federal Food Safety and Veterinary Office, Switzerland	UNSCN	UN Standing Committee on Nutrition
FTE	Full Time Equivalent	UPOV	International Union for the Protection of New Varieties of Plants
G DPRD	Global Donor Platform for Rural Development	USD	United States Dollar
GDWGL	Global Donor Working Group on Land	VGGT	Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests
GFRAS	Global Forum for Rural Advisory Services	WFP	World Food Programme UN
GP	Global Programme	WOCAT	World Overview of Conservation Approaches and Technologies
GPFS	Global Programme Food Security	WTO	World Trade Organisation
GLTN	Global Land Tool Network UNHABITAT	10YFP	10-year Framework on Sustainable Consumption and Production Patterns
GMO	Genetically Modified Organisms		
HAFL	School of Agricultural, Forest and Food Sciences, Zollikofen		
HLPF	High Level Political Forum UN		
IAASTD	International Assessment of Agricultural Knowledge, Science and Technology for Development		
IFAD	International Fund for Agricultural Development		

Annex 7: Selected References

- Abdulah et al. 2013. West African agriculture and climate change: A comprehensive analysis. IFPRI. <http://content.yudu.com/Library/>
- CGIAR 2015: Big Facts on Climate Change, Agriculture and Food Security: Food Emissions. <https://ccafts.cgiar.org/big-facts-climate-change-agriculture-and-food-security>
- Challinor et al. 2003. Toward a Combined Seasonal Weather and Crop Productivity Forecasting System: Determination of the Working Spatial Scale. *Journal of Applied Meteorology*. 42(2): 175-192 [http://journals.ametsoc.org/doi/abs/10.1175/1520-0450\(2003\)042%3C0175%3ATACSWA%3E2.0.CO%3B2](http://journals.ametsoc.org/doi/abs/10.1175/1520-0450(2003)042%3C0175%3ATACSWA%3E2.0.CO%3B2)
- CFS/HLPE 2014: Food losses and waste in the context of sustainable food systems. <http://www.fao.org/3/a-i3901e.pdf>
- CFS 2015: Global Strategic Framework for Food Security and Nutrition. <http://www.fao.org/3/AV031e.pdf>
- FAO Agroecology Knowledge Hub. <http://www.fao.org/agroecology/en/>
- FAO 1996, 2002: The World Food Summit. <http://www.fao.org/worldfoodsummit/english/index.html>
- FAO 2005: Voluntary Guidelines for the Progressive Realisation of the Right to Adequate Food in the Context of National Food Security. <http://www.fao.org/3/a-y7937e.pdf>
- FAO/Bioversity 2010: Sustainable Diets and Biodiversity. <http://www.fao.org/docrep/016/i3004e/i3004e.pdf>
- FAO 2011: The State of Food and Agriculture. Women in Agriculture. Closing the gender gap. <http://www.fao.org/docrep/013/i2050e/i2082e00.pdf>
- FAO 2012: Smallholders and Family Farmers. http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/Factsheet_SMALLHOLDERS.pdf
- FAO 2014: The State of Food Security in the World. <http://www.fao.org/3/a-i4030e.pdf>
- FAO 2015. The economic lives of smallholder farmers: An analysis based on household data from nine countries. <http://www.fao.org/3/a-i5251e.pdf>
- FAO 2015: A data portrait of smallholder farmers: An introduction to a dataset on small-scale agriculture. Retrieved from <<http://www.fao.org/economic/esa/esa-activities/esa-smallholders/dataportrait/en/>>.
- FAO 2016: The State of Food and Agriculture 2016. <http://www.fao.org/3/a-i6030e.pdf>
- Gornall et al. 2010: Implications of climate change for agricultural productivity in the early twenty-first century. *Phil. Trans. Of the Royal Society B. Biological Sciences*. Doi: 10.1098/rstb.2010.0158 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2935125/>
- Graeb, B.E. et al. 2016: The state of family farms in the World. *World Dev.* (87), Nov. 2016, 1–27. <http://www.sciencedirect.com/science/article/pii/S0305750X15001217>
- IAASTD 2009: Agriculture at a Crossroads. International Assessment of Agricultural Knowledge, Science and Technology for Development. https://unwgfandhunger.files.wordpress.com/2015/09/agriculture-at-a-crossroads_global-report-english.pdf
- IIED 2013: Managing the boom and bust: Supporting climate resilient livelihoods in the Sahel. <http://pubs.iied.org/pdfs/11503IIED.pdf>
- IFPRI 2015: Global Hunger Index. <http://www.ifpri.org/publication/2015-global-hunger-index-armed-conflict-and-challenge-hunger>
- IPCC 2007: Climate Change 2007. Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_full_report.pdf
- IPCC 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. https://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5_wgII_spm_en.pdf
- Leah H Samberg, James S Gerber, Navin Ramankutty, Mario Herrero and Paul C West 2016: Environmental Research Letters, Volume 11, Issue Number 12. <http://iopscience.iop.org/article/10.1088/1748-9326/11/12/124010>
- Lowder et al. 2016: The Number, Size, and Distribution of Farms, Smallholder Farms, and Family Farms Worldwide. *WorldDev.* 15, 16–29. <http://www.sciencedirect.com/science/article/pii/S0305750X15002703>
- SDC/GPFS 2015: Communication: Objectives, Measures and Key Messages. Internal Document.
- Secretariat of the Convention on Biological Diversity 2014: Global Biodiversity Outlook 4: A Mid-Term Assessment of Progress Towards the Implementation of the Strategic Plan for Biodiversity 2011-2020. <https://www.cbd.int/gbo/gbo4/publication/gbo4-en-hr.pdf>
- Tittonell, P. and Giller, K.E. 2013: When yield gaps are poverty traps: the paradigm of ecological intensification in African smallholder agriculture. *Field Crop. Res.* 143, 76–90. <http://www.sciencedirect.com/science/article/pii/S0378429012003346>
- UN High Level Task Force on the Global Food Security Crisis 2010: Updated Comprehensive Framework for Action. http://www.fao.org/fileadmin/user_upload/ISFP/UCFA_Final.pdf
- UN Sustainable Development Goals: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- UN Statistics Division 2015: The World's Women 2015. https://unstats.un.org/unsd/gender/downloads/Ch8_Poverty_info.pdf
- UNCTAD 2013: Trade and Environment Review 2013. http://unctad.org/en/publicationslibrary/ditcted2012d3_en.pdf
- UNEP: 10-year framework of programmes on sustainable consumption and production patterns. <http://www.unep.org/10yfp/about/what-10yfp>

Editor:
Federal Department of Foreign Affairs FDFA
Swiss Agency for Development and Cooperation (SDC)
3003 Bern
Switzerland

Design:
Mark Manion, Communication Arts

Graphics ("Puzzle"): Sophie Hirsig/SDC, Benjamin Gräub/SDC

Photographs:
Cover page: iStock.com/susoy
Page 4: Peter Lowe/CIMMYT
Page 6: Sophie Hirsig/SDC
Page 13: Bernard Zaugg/SDC
Page 19: Marlene Heeb/SDC
Page 20: Tingju Zhu/IFPRI
Page 24: Neil Palmer/CIAT
Page 26: Sophie Hirsig/SDC

Orders:
www.sdc.admin.ch (heading "Publications")

Specialist contact:
Swiss Agency for Development and Cooperation SDC
Global Programme Food Security
Tel. +41 58 462 30 78
gdfs@eda.admin.ch
www.sdc.admin.ch

Berne, 2017