



Food and Agriculture Organization
of the United Nations

2017 Results Partnerships Impact 2018



2017
**Results
Partnerships
Impact
2018**

2017 Results Partnerships - Impact 2018

This report captures selected results achieved by FAO worldwide in 2017. It reflects key impacts obtained thanks to a collaboration with a wide range of partners including Member Nations, other resource partners, civil society, the private sector, academia, research centers and cooperatives.

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Introduction

Profound changes in technology, globalization and demographics have set into motion a series of long-term trends that are reshaping the global landscape and the evolution of development cooperation. This reshaping has also been influenced by challenges such as the impacts of climate change, conflicts and distress migration.

The 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) are the international community's response to these trends and challenges. The SDG 2 calls for the eradication of hunger and all forms of malnutrition, and acknowledges that this is a fundamental condition for sustainable development.

Achieving SDG 2 will require continued investments as well as the introduction of innovative policies that will see an increased access to healthy food, complemented by measures to fight rural poverty. Such policies should, furthermore, ensure effective social protection to vulnerable communities, promote sustainable and resilient agriculture practices that help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and progressively improve land and soil quality.

The way the world produces and consumes food in the years and decades to come will be vital for sustainable development.

The 2030 Agenda is also redesigning the partnerships landscape with the incorporation of a wide range of new players. New financial instruments and frameworks are also transforming the development cooperation infrastructure, introducing a new dynamic to traditional resource mobilization.

The success of the 2030 Agenda will greatly depend on the capacity of the international community to build innovative and lasting alliances. FAO has started this process, which involves widening the partnership platform to ensure there are more effective responses to development challenges. This includes the United Nations System, civil society, the private sector, as well as academic and research institutions.

This annual report, *2017 Results, Partnerships - Impact 2018*, illustrates how the Organization, together with its partners, is contributing to the achievement of the 17 SDGs.

It does so by featuring a selection of FAO successes achieved last year, with an emphasis on partnerships and results on the ground.

In the pages that follow, you will read human-centered stories from the field in 2017, framed by FAO's five Strategic Objectives. The stories highlight real achievements and results in the pursuit of transforming lives and livelihoods.

While FAO's transformative interventions have consistently delivered value for money to our resource partners and the international community, more still needs to be done. There is too much at stake for us to waver in our commitment to achieve Zero Hunger.



FAO tackling global challenges



On track for 2030



Achieving Zero Hunger and ending poverty is a challenging task. Changes in how we do business make today's FAO a fitter, flatter and more flexible organization.

FAO is fully aligned with and supports multiple objectives of the 2030 Agenda for Sustainable Development and the 17 SDGs adopted by world leaders at the historic United Nations Development Summit in September 2015.

FAO's work contributes to all of the SDGs, with a special focus on SDG 2—Zero Hunger.

+
The Food and Agriculture Organization (FAO) is a specialized agency of the United Nations that leads international efforts to defeat hunger. Our vision is a world free from hunger and all forms of malnutrition where food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner.

FAO Strategic Objectives

FAO pursues five mutually reinforcing strategic objectives to achieve the SDGs



Help eliminate hunger, food insecurity and malnutrition



Make agriculture, forestry and fisheries more productive and sustainable



Reduce rural poverty



Enable inclusive and efficient agricultural and food systems



Increase the resilience of livelihoods to threats and crises

FAO and the SDGs

FAO is actively helping to structure the global indicator framework, with its 232 unique indicators, and is a 'custodian' United Nations agency for 21 progress indicators across SDGs 2, 5, 6, 12, 14 and 15 (see arrows in graphic on opposite page).

Greater emphasis on evidence-based decision-making in governments and organizations at all levels puts a greater focus on the role of statistics in measuring and monitoring progress towards national and international development goals and targets.



Statistics—a core function of FAO—give the Organization a fundamental role in providing data for global monitoring, developing methods and standards for food and agriculture statistics, and providing technical assistance services.

Allied to appropriate policies, sound and timely statistics are instrumental in making a positive impact on the lives of poor and vulnerable people.

FAO's Statistical System works at the forefront of these issues and plays an essential role in helping FAO Members reduce hunger and poverty by making informed decisions through access to the best possible data.

In 2017 the United Nations adopted the global indicator framework. SDG Indicators are markers that let countries know they are on the right path towards achieving each of the 17 SDGs.

FAO's work contributes to many of the SDGs but its main focus is SDG 2 - Zero Hunger.

FAO is a 'custodian' United Nations agency for 21 progress indicators, across the following six SDGs.

Critical to achieving the SDGs is the monitoring of progress through markers, known as indicators.



Global challenges

2017 witnessed a multitude of complex global challenges. In particular, the year recorded a rise in global hunger despite international commitments to eradicate hunger.

FAO, together with its partners, tackles pressing and complex challenges every day — challenges that call for urgent actions that leverage FAO's unique experience, knowledge, and technical expertise.

Zero Hunger, migration, sustaining peace, youth, climate change, nutrition, gender, transboundary pests and diseases, and biodiversity continued to be priority areas at the center of FAO's work around the world last year.

Working for Zero Hunger



After declining for over a decade, global hunger recorded a rise in 2017, with 815 million people chronically undernourished.

Migration

258 million people were living in a country not of their birth in 2017. Among them, 33% were aged 15 to 34.



Sustaining Peace

In 2017, the number of conflicts around the world was on the rise and post-conflict countries with high food insecurity were 40% more likely to relapse into conflict within a 10-year span.



Youth

In 2017, almost 88% of the world's 1.2 billion youth—people aged 15 to 24—lived in developing countries; Globally, young people accounted for approximately 24% of the working poor.



Nutrition



In 2017 some 159 million children under 5 years of age were stunted—meaning too short for their age.

Transboundary pests and diseases



In 2017 agriculture faced an alarming increase in the number and intensity of outbreaks of transboundary animal and plant pests and diseases, affecting food crops, causing losses to farmers, and threatening food security.

Climate Change



Over the past decade 26% of total damage and loss caused by climate related disasters in developing countries was in agriculture.

Biodiversity

As of today, of the 8 800 breeds known, 7% of breeds were extinct, 24% at risk of extinction, 10% not at-risk and 59% had an unknown risk status.



Gender



As of 2017 women made up over 40% of the agricultural labor force in developing countries, but often faced greater constraints compared to men in access to productive resources.

Contributions to FAO

Members and partners
investing in results



Top 50 contributing Members in 2017



	Total Contributions	Assessed	Voluntary	All figures are in USD
United States of America	289 868 869	39%	61%	
European Union	281 552 988	0%	100%	
United Kingdom	76 875 716	34%	66%	
Germany	69 269 586	53%	47%	
Japan	62 135 581	89%	11%	
Norway	60 388 422	7%	93%	
China	38 864 618	68%	32%	
*Colombia	38 038 641	3%	97%	
Italy	37 781 919	60%	40%	
Australia	30 479 383	35%	65%	
France	30 220 425	95%	5%	
Sweden	27 552 504	18%	82%	
*Saudi Arabia	26 764 402	17%	83%	
Switzerland	24 768 793	22%	78%	
Spain	18 029 520	84%	16%	
*Pakistan	17 884 417	2%	98%	
Belgium	16 578 855	31%	69%	
Canada	16 424 370	93%	7%	
Russian Federation	15 937 116	78%	22%	
Brazil	15 810 859	95%	5%	
Netherlands	15 652 767	54%	46%	
Korea, Republic of	13 240 880	77%	23%	
*Mexico	13 072 490	72%	28%	
*South Sudan	10 020 465	0%	100%	
*Angola	9 351 253	1%	99%	
*Mozambique	6 978 296	0%	100%	
Turkey	6 794 281	100%	0%	
Austria	6 620 806	62%	38%	
*Afghanistan	5 323 822	0%	100%	
Ireland	4 841 893	44%	56%	
Poland	4 711 998	100%	0%	
*Democratic Republic of the Congo	4 286 765	0%	100%	
*Libya	4 226 497	17%	83%	
Denmark	3 551 772	97%	3%	
India	3 407 374	100%	0%	
Greece	3 264 121	100%	0%	
Venezuela (Bolivarian Republic of)	3 207 843	100%	0%	
United Arab Emirates	3 044 125	100%	0%	
Finland	2 899 330	92%	8%	
Portugal	2 425 068	100%	0%	
Kuwait	2 396 716	58%	42%	
*Mali	2 270 465	1%	99%	
*Sierra Leone	2 224 210	0%	100%	
Argentina	2 210 189	100%	0%	
*Lebanon	2 143 969	10%	90%	
Singapore	2 055 789	93%	7%	
South Africa	2 056 232	96%	4%	
Czech Republic	2 051 890	96%	4%	
Israel	2 026 006	100%	0%	
Liberia	1 849 584	0%	100%	

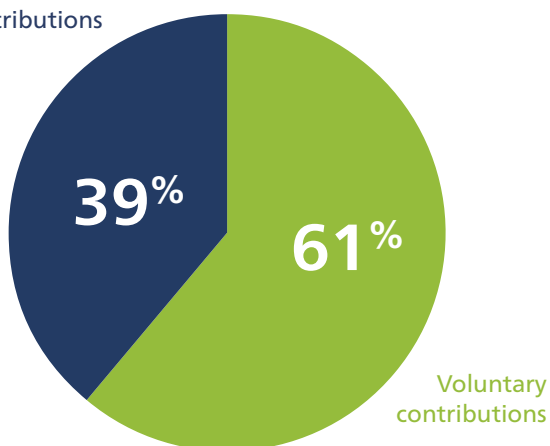
*Countries that contributed through Unilateral Trust Fund (UTF) agreements established between the government of a given country and FAO. UTF is a funding modality financed entirely by a government for programmes or projects to be implemented in the country.

FAO's delivery in 2017

1.4^{BN}

USD was the total amount
delivered by FAO in 2017

Assessed
contributions



FAO's overall programme of work is funded by assessed* and voluntary** contributions.

In 2015, the Conference approved the Programme of Work for 2016-17 and voted a budgetary appropriation of USD 1 005.6 million.

Extra budgetary contributions in 2017 amounted to USD 1.2 billion. This represents an increase of 44 percent compared to the previous year. This exceptional result was led by a significant increment in development and resilience field-based projects. In 2017 they represent almost 80 percent of the voluntary contributions. Unilateral Trust Funds (UTFs) saw a significant increase (238 percent) with respect to the previous year.

*Member Nations' assessed contributions comprise the regular budget, set at the biennial FAO Conference.

**The voluntary contributions provided by Members and other partners to support governments for clearly defined purposes linked to the results framework, as well as direct support to FAO's core work.

Technical Cooperation Programme (TCP) in 2016-2017

TCP projects support catalytic development efforts or provide emergency and rehabilitation assistance responding to crises. Projects ensure essential sustainable impact through their catalytic nature, address critical gaps, and transfer technical knowledge. TCP projects support changes, processes, foster capacity development and assist countries in mobilizing resources, in line with the Country Programming Frameworks (CPF) agreed upon with governments.

FAO Strategic Objectives



Help eliminate hunger, food insecurity and malnutrition



Make agriculture, forestry and fisheries more productive and sustainable



Reduce rural poverty



Enable inclusive and efficient agricultural and food systems

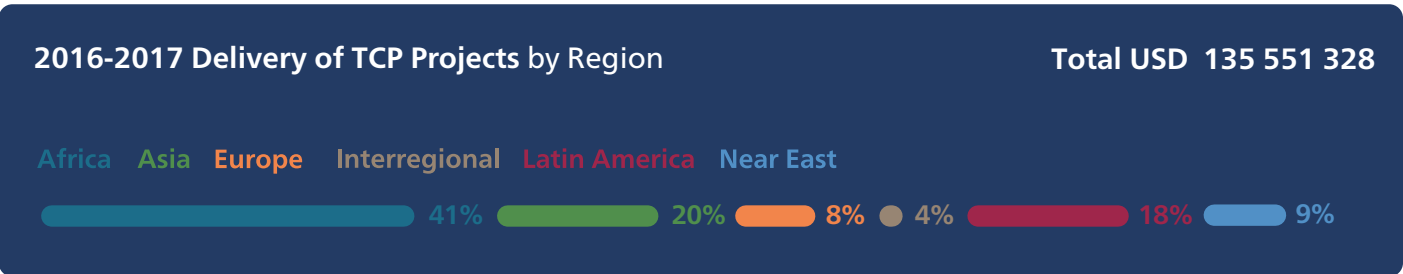
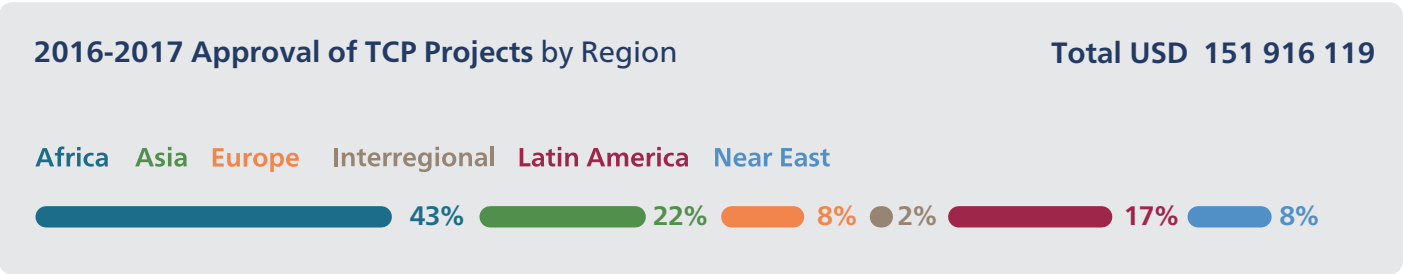


Increase the resilience of livelihoods to threats and crises



Ensures quality and integrity of FAO's core technical, normative and standard setting work, including statistics, and the cross-cutting themes on gender, governance and nutrition.

2016-2017 TCP Projects



Voluntary contributions mobilized in 2017

Record figures reached in 2017, making a difference around the world

Determined to achieve results under each of its five Strategic Objectives and in line with national, regional and global priorities, in 2017 FAO worked with a variety of resource partners from national governments, International Financing Institutions (IFIs), the private sector and foundations.

In 2017 an historic USD 1.2 billion was mobilized through voluntary contributions from Members and other resource partners—a 44 percent increase compared to 2016.

FAO's resource partners provide both financial support and in-kind contributions, as well as knowledge-sharing and expertise. Last year FAO also promoted several partnerships through South-South and Triangular Cooperation.



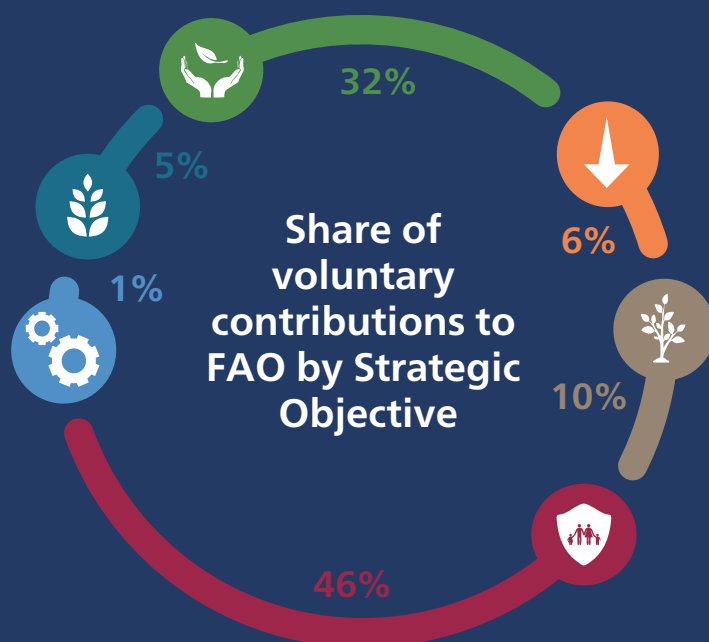
USD 1.2 BN
voluntary contributions mobilized



Share of voluntary contributions mobilized by region

43% **Africa**
20% **Interregional**
14% **Asia and the Pacific**
12% **Near East and North Africa**
7% **Latin America**
4% **Europe**

10 year trend in Members' contributions to FAO



Strategic Objective 1

Help eliminate hunger, food insecurity and malnutrition

Strategic Objective 2

Make agriculture, forestry and fisheries more productive and sustainable

Strategic Objective 3

Reduce rural poverty

Strategic Objective 4

Enable inclusive and efficient agricultural and food systems

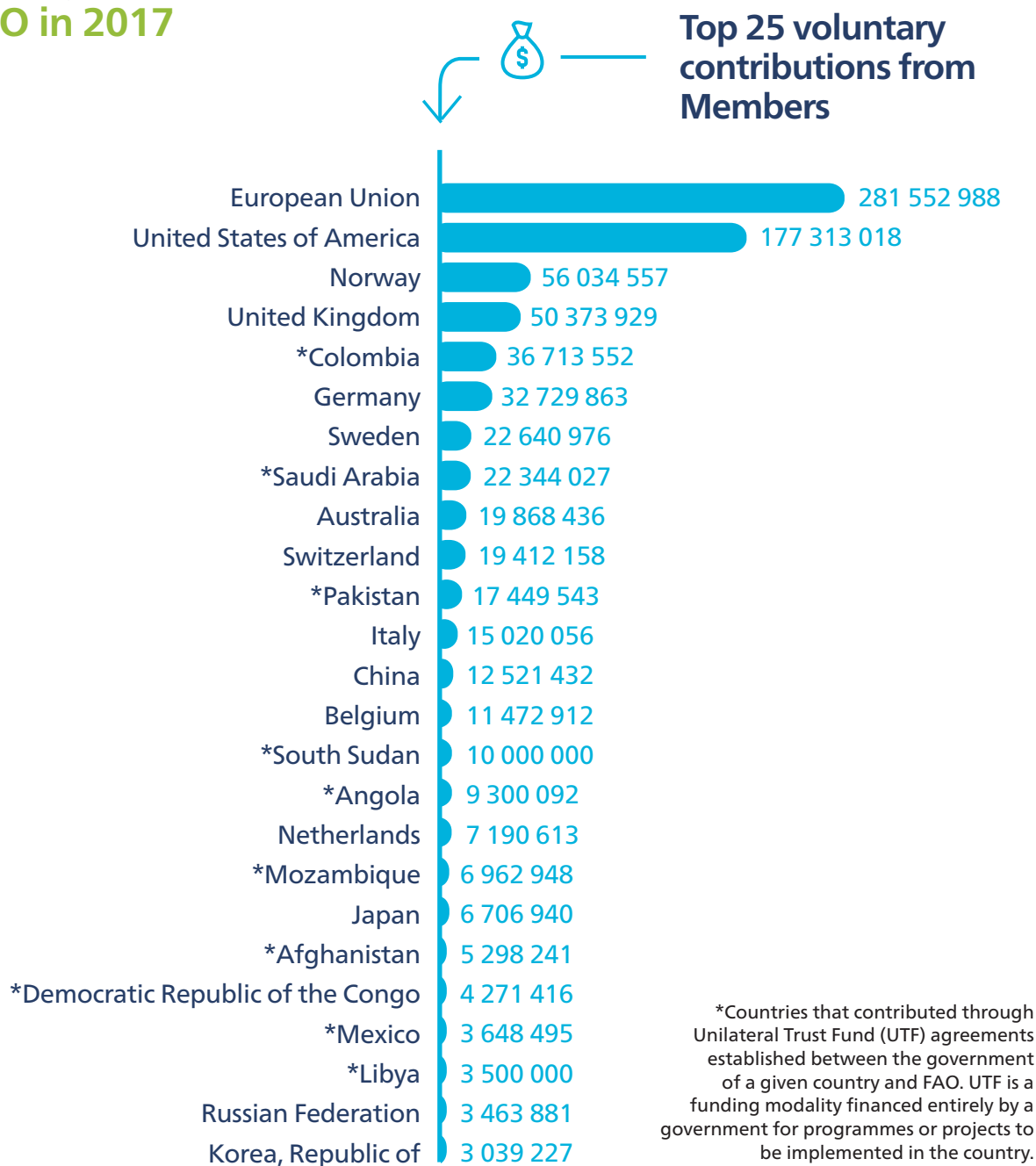
Strategic Objective 5

Increase the resilience of livelihoods to threats and crises

Objective 6

Ensures quality and integrity of FAO's core technical, normative and standard setting work, including statistics, and the cross-cutting themes on gender, governance and nutrition.

Voluntary contributions to FAO in 2017



Other voluntary contributing members

Austria
Azerbaijan
Bhutan*

Brazil
Cabo Verde*
Cambodia*

Canada
Chad*
Congo
Croatia
Czech Republic
Denmark

Finland
France
Hungary
Ireland
Kuwait
Lebanon*
Liberia*

Mali*
Morocco
Nigeria*
Philippines*
Rwanda*
Sierra Leone*
Singapore

South Africa
Spain
Tunisia*

Top 15 voluntary contributions from institutional resource partners



Other voluntary contributing institutional resource partners

Bill and Melinda Gates Foundation

Common Humanitarian Fund for Somalia (CHS)

Global Alliance for Improved Nutrition (GAIN)

International Fund for Agricultural Development (IFAD)

International Union for the Conservation of Nature and Natural Resources (IUCN)

Skoll Global Threats Fund (SGTF)

Standards and Trade Development Facility in SPS Measures

United Nations Administered Trust Fund

United Nations Conference for Trade and Development (UNCTAD)

United Nations Darfur Facility

United Nations Development Programme (UNDP)

United Nations Mission in Liberia (UNMIL)

United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA)

United Nations Office for Project Services (UNOPS)

United Nations Population Fund (UNFPA)

United Nations Water Multidonor Trust Fund (UNW)

United States International Poultry Development Programme (UIPDP)

University of Greifswald

Main funding modalities

Delivering results with FAO

Bilateral Trust Fund (TF)

With bilateral trust funds, resource partners channel financial voluntary contributions through FAO for specific development projects or programmes in an individual country, a region, or globally. Usually, agreements are made in project documents on how to use FAO's technical and backstopping expertise, and FAO reports regularly to all stakeholders concerned on progress made in the implementation of the programme. In other cases, resource partners provide in kind contributions to FAO through knowledge and expertise, for example through the Associate Professional Officer (APO) modality. APOs are often deployed as key experts to decentralized offices to support the technical formulation and/or implementation of programmes.

2017 Approval of TF Projects by Strategic Objective

Total USD 940 851 505



2017 Approval of TF Projects by Region

Total USD 940 851 505

Africa Asia Europe Interregional Latin America Near East



2017 Delivery of TF Projects by Strategic Objective

Total USD 626 091 577



2017 Delivery of TF Projects by Region

Total USD 626 091 577

Africa Asia Europe Interregional Latin America Near East



Unilateral Trust Fund (UTF)

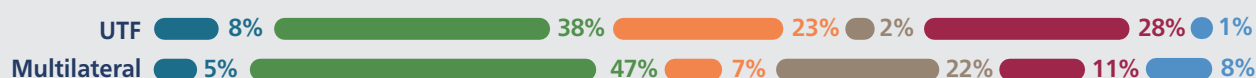
UTF is a government financed funding modality for programmes or projects implemented in a given country. Unilateral resource partners fund technical assistance projects through their own countries' national resources or from loans, credits and grants made by international financing institutions. FAO provides technical expertise and supports ownership by the beneficiary country.

Multilateral Trust Fund (MUL)

MUL projects or programmes are funded by more than one resource partner. Resource partners contributing to a MUL pool their funds to achieve the agreed results/products. MUL distinguish themselves from single resource partner projects /programmes by the fact that there is one project document; with one set of results, products and activities, one budget and one end date.

2017 Approval of UTF/MUL Projects by Strategic Objective

Total UTF USD 132 793 710
Total Multilateral USD 79 375 337



2017 Approval of UTF/MUL Projects by Region

Total UTF USD 132 793 710
Total Multilateral USD 79 375 337

Africa Asia Europe Interregional Latin America Near East



2017 Delivery of UTF/MUL Projects by Strategic Objective

Total UTF USD 46 560 440
Total Multilateral USD 72 419 047



2017 Delivery of UTF/MUL Projects by Region

Total UTF USD 46 560 440
Total Multilateral USD 72 419 047

Africa Asia Europe Interregional Latin America Near East



Multi-Partner Programme Support Mechanism (FMM)

FMM funds are voluntary contributions not tied to a specific project but directly support FAO operations. The flexibility of pooled and unearmarked FMM funding makes it possible for FAO to allocate funds where they are most needed, anywhere in the world, and to any thematic area. As a result of FMM, new strategic partnerships have emerged, and projects have stimulated cross-sectoral work, fostering synergies and new thinking, both within and outside FAO.

Belgium, the Netherlands, and Sweden were the first FAO resource partners to provide funds to the FMM. In 2017 Switzerland joined as a new resource partner for the FMM. With the original contributors renewing their commitment with generous contributions for 2016–2017, FAO was able to implement 17 new projects.

2017 Approval* of FMM Projects by Strategic Objective

Total USD 3 689 334



2017 Approval of FMM Projects by Region

Total USD 3 689 334



2017 Delivery of FMM Projects by Strategic Objective

Total USD 22 667 284



2017 Delivery of FMM Projects by Region

Total USD 22 667 284



* According to FAO official methodology determined by the Governing Bodies, voluntary contributions (approvals) are counted at the moment the programme/project is declared operationally active.

Africa Solidarity Trust Fund (ASTF)

ASTF is an innovative Africa-led fund for mobilizing resources from one African country for the benefit of another, promoting intra-Africa collaboration.

It aims to strengthen food security across the continent by assisting countries and their regional organizations to eradicate hunger and malnutrition, eliminate rural poverty, and manage natural resources sustainably.

Last year the ASTF successfully showcased African solidarity and demonstrated positive effects on the continent's development.

Angola and Equatorial Guinea have been the major financial contributors to the ASTF, with funding of approximately USD 40 million.

In October 2017, the ASTF Steering Committee endorsed a project to enhance countries' capacity to reduce the risk of Tilapia Lake Virus (TiLV) to emerging African tilapia aquaculture. TiLV is a highly contagious disease that is spreading among farmed and wild tilapia, one of the world's most important fish for human consumption, especially in Africa where many countries are affected by it.

The proposed regional TiLV project activities will cover Angola, Egypt, Ghana, Kenya, Nigeria, and Uganda, and will last 18 months for a total amount of USD 779 450.

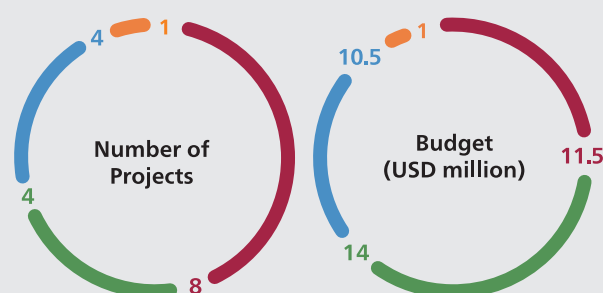
Also last year the ASTF Steering Committee made field visits to three countries to discuss projects in specific areas: Cameroon (agricultural extension, climate change and climate resilience), Uganda (nutrition, fisheries and aquaculture) and Malawi (horticulture). As of the first half of January 2018, these projects were being successfully implemented in all three countries.

Throughout 2017, the Resource Mobilization Forum was high on the agenda of the ASTF Steering Committee Forum—an important event for the fund's sustainability and replenishment. The Forum is being organized in close collaboration with FAO'S Resource Mobilization Division and its Partnership and South-South and Triangular Cooperation Divisions.



Distribution of ASTF funding by thematic area

As of 2017, the ASTF allocated USD 37 million to 17 regional programmes and national projects, being implemented in 40 countries.



Resilience and livelihood supports
 Employment and value chain
 Food safety, security and nutrition
 Gender and women's empowerment

Reducing Emissions from Deforestation and Forest Degradation (REDD+)

Partnering with FAO to mitigate climate change

Reducing Emissions from Deforestation and Forest Degradation (REDD+) is part of global efforts to mitigate climate change. FAO supports countries in their REDD+ processes and in turning political commitments into action.

This support extends to countries' efforts to reduce emissions from deforestation and forest degradation, foster conservation and the sustainable management of forests, and enhance forest carbon stocks.

FAO has established a National Forest Monitoring NFM/ REDD+ cluster in its Forestry Department, which is supporting a total portfolio to Foodollio of USD 145 million, either directly as budget holder or as lead technical unit.

Within the work of the cluster, the bulk of the funding is represented by the UN-REDD Programme, which consists of both national programmes and a global programme.

The UN-REDD Programme is the United Nations Collaborative Initiative on Reducing Emissions from Deforestation and Forest Degradation (REDD+) in developing countries. It is supported by a FAO Multi-Partner Trust Fund. The Programme was launched in 2008 and builds on the convening role and technical expertise of FAO, UNDP and UNEP. The UN-REDD Programme supports nationally led REDD+ processes and promotes the informed and meaningful involvement of all stakeholders, including indigenous peoples and other forest-dependent communities, in national and international REDD+ implementation.

In 2017 the UN-REDD Programme approvals amounted to USD 8 million, while delivery was USD 25 million.

Special Fund for Emergency and Rehabilitation Activities (SFERA)

Reducing the time between a funding decision and action on the ground

In the Democratic Republic of the Congo, through the contribution of Belgium, FAO supports the agricultural production capacity of 84 000 internally displaced persons and returnees by providing them with agricultural inputs and livestock assistance.

The Special Fund for Emergency and Rehabilitation Activities (SFERA) enables FAO to take rapid and effective action in response to food and agricultural threats and emergencies.

SFERA contributions for 2017: USD 12.8 million

In 2017, the Swedish International Development Cooperation Agency (Sida) provided unearmarked contributions to SFERA for the first time. These resources were intended to support the Agricultural Inputs Response Capacity (AIRC) window and the capacity of FAO country teams to respond quickly to large scale crises and ensure coordinated and technically sound action.

Fully allocated in 2017, these flexible funds enable FAO to address urgent gaps in response to crises. Under the AIRC window, time-critical agricultural inputs were delivered in Ethiopia, the Syrian Arab Republic and Yemen. Under the capacity component, funds were used to increase staff capacities in several large humanitarian crises including in the Central African Republic, the Democratic Republic of the Congo, Haiti, and Nigeria by supporting FAO's Country Offices and also the food security cluster coordination.

In 2017, Belgium has continued to support FAO early action and emergency activities through the allocation of over USD 9 million to the Organization. Support to SFERA amounted to USD 3 412 969 and contributions to emergency projects and programmes reached USD 5 848 047. Also last year, Belgium became the first resource partner to invest in interventions aimed at anticipating crises through early warnings and early actions (SFERA-EWEA). Such grants have provided FAO with the financial means and flexibility to provide assistance to rural populations affected by natural disasters, conflicts, protracted crises and food chain threats.

Special Fund for Relief Operations (OSRO)

FAO's emergency aid operates through a trust fund for special relief operations (OSRO), which organizes short-term emergency relief and rehabilitation operations. It responds to requests for emergency assistance arising from natural and human-made calamities, and helps developing countries formulate plans to prepare for emergencies and to respond to them. Most OSRO projects last for less than a year (the interval between two main harvests). Typical projects supply crop seed, fertilizers, livestock vaccines, animal feed, hand tools and farm machinery, and emergency storage for crops. The OSRO office also provides emergency forms of transport for the distribution of inputs and food.

2017 Approval* of OSRO Projects by Region

Total USD 507 200 000

Africa Asia Europe Interregional Latin America Near East



2017 Delivery of OSRO Projects by Region

Total USD 416 400 000

Africa Asia Europe Interregional Latin America Near East



* According to FAO official methodology determined by the Governing Bodies, voluntary contributions (approvals) are counted at the moment the programme/project is declared operationally active.

Global Environment Facility (GEF) in numbers

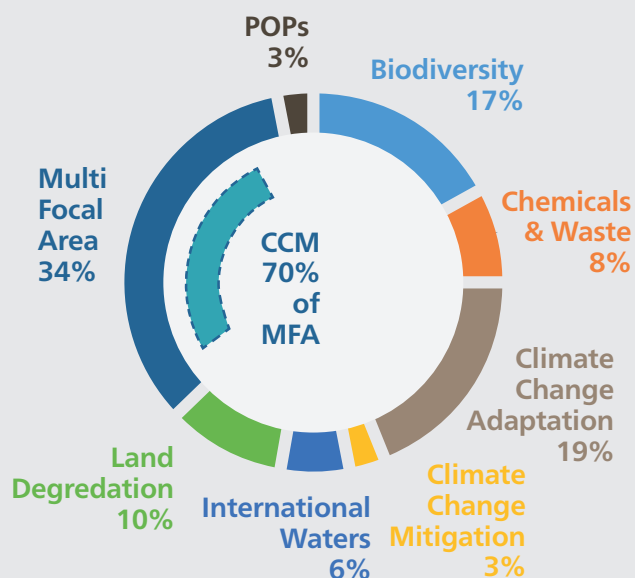
Together, investing in the planet

The Global Environment Facility (GEF), a partnership of 18 agencies and 183 countries, is working towards addressing the world's most challenging environmental issues.

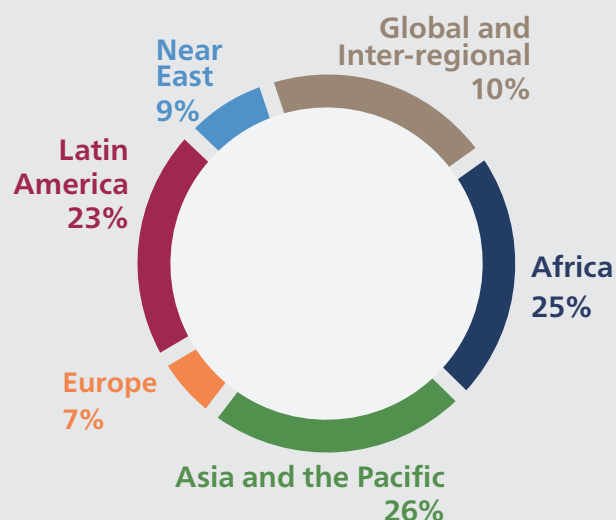
The FAO-GEF partnership represents a unique opportunity to improve food security and, at the same time, achieve global environmental benefits.

In 2017, this partnership continued to yield significant investments for its member countries' critical priorities related to addressing (i) climate change, (ii) conserving biological diversity, (iii) improving land management, (iv) reducing the use of hazardous chemicals and (v) enabling transboundary water management while supporting sustainable agriculture, forestry and fisheries worldwide.

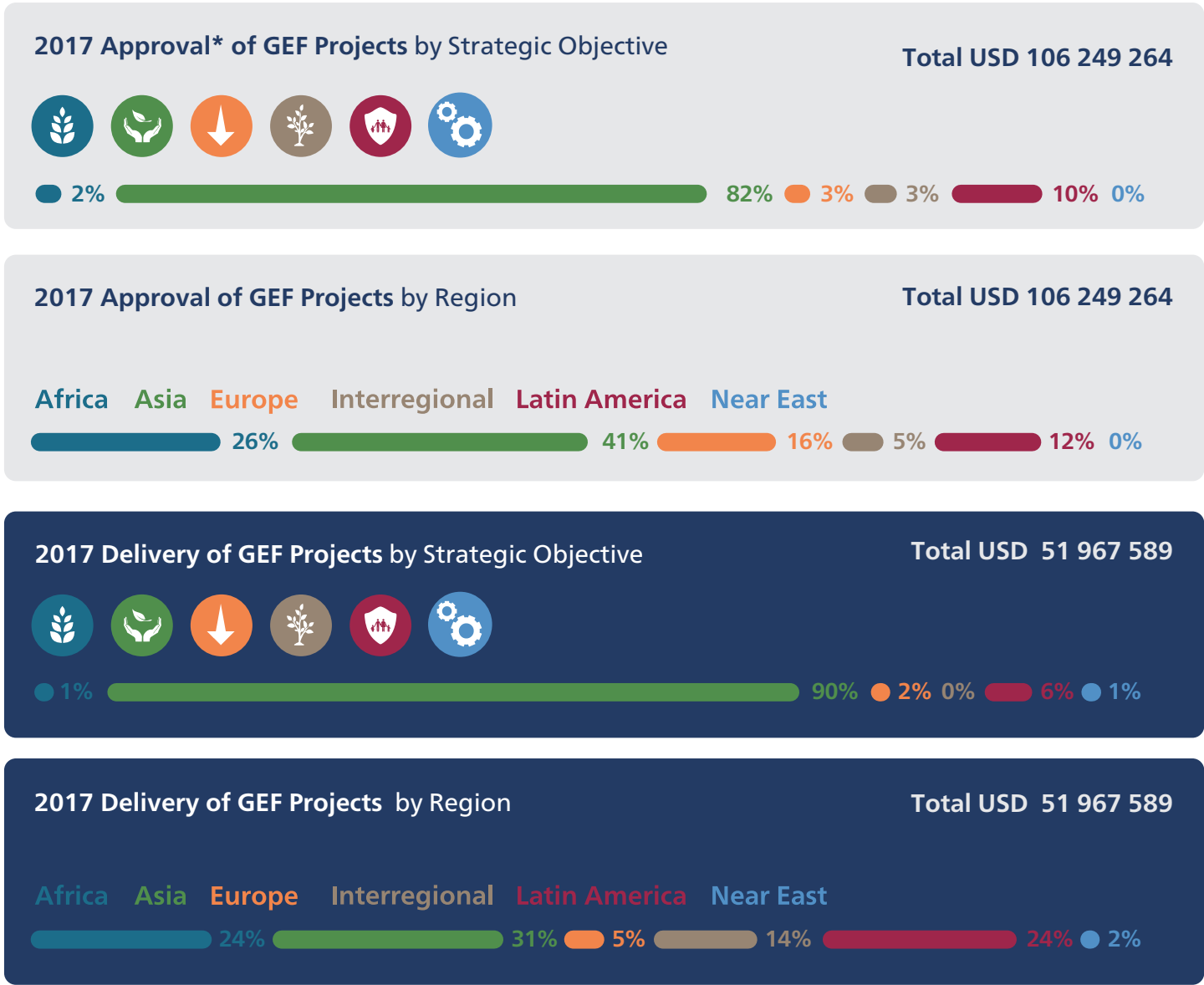
FAO's GEF portfolio covers all of GEF's five focal areas, plus climate change adaptation projects. Almost 35% of the portfolio addresses multiple focal areas, an indication of how integrated the FAO-GEF work is becoming. 70% of these multi-focal area projects address Climate Change Mitigation (CCM) in conjunction with Biodiversity and/or Land Degradation.



In December 2017, the FAO-GEF portfolio had a total value of approximately USD 726 million. As of today, over 60% of the projects are under implementation or about to start activities. With more than 180 projects, the FAO-GEF portfolio has grown exponentially in the last decade. Though well-spread across regions and focal areas, Asia and the Pacific has the largest share of the FAO-GEF portfolio at 26%, followed by Africa at 25%.



2017 FAO-GEF Projects



FAO's role in fostering agricultural investment

Bringing FAO knowledge to investment policies and programmes

Investing in agriculture and rural development is critical for achieving Zero Hunger by 2030. Throughout 2017, FAO's Investment Centre contributed to FAO's strategic objectives and helped countries develop a conducive environment for public and private investment—from providing technical assistance to investment programmes to facilitating policy dialogue and strengthening national investment capacities.



Why does FAO support investment in food and agriculture?

Member Nations increasingly request technical advisory services to prepare, implement and evaluate national agriculture strategies and programmes, to develop enabling policies that will attract investors and to facilitate linkages between the public and private sectors. Countries also require specific support to design investment projects based on sound knowledge and development practice.

In response to this demand, FAO supports Member Nations to increase their capacities to design and implement investment programmes and to strengthen linkages between policy and investment, improve service delivery, and scale-up good practices.

In this respect, FAO works actively with Members and International Financing Institutions (IFIs)—such as the World Bank, The International Fund for Agricultural Development (IFAD) and the European Bank for Reconstruction and Development (EBRD)—to design and support large-scale investment projects.

To support investment, FAO also draws on partnerships, such as the one with the Global Environment Facility (GEF), to address environmental concerns and make investments more sustainable.

Through its Investment Centre, FAO provides support in the areas of policy support, investment programme support, knowledge sharing and learning, and advocacy and facilitation.

In 2017, FAO assisted
in the design of

47 

investment projects financed by
IFIs and governments, for a total
investment value of over USD

5 **BILLION**

As of 2017, total investment
support is valued at more
than USD

120 **BILLION**

FAO's first cooperative agreement
for investment support was
signed with the World Bank
in 1964. This long-lasting
partnership is still an essential
part of our work, with around

1/3 

of World Bank agricultural and
rural development projects
having received FAO support

FAO has agreements with

30 

IFIs and others that invest in
agriculture

A photograph of a smallholder farmer in the Democratic Republic of the Congo, wearing a dark cap and shirt, kneeling in a field of tilled brown soil with small green seedlings. In the background, a hazy mountain range is visible under a cloudy sky. The text 'Partnerships in action' is overlaid in large white font on the left side of the image.

Partnerships in action

Joining forces for
global food security

After fleeing violence, a smallholder farmer in the Democratic Republic of the Congo plants seeds with a FAO officer.

Photo: ©FAO/Anton Glaeser



Reinforcing United Nations partnerships



The 2030 Agenda is a transformative set of goals, requiring that United Nations agencies work more closely together than ever before, to pool expertise, and to advance integrated approaches to capacity building worldwide.

For FAO this means continuing to partner, and exploring new partnerships, with other agencies in the United Nations family. That is, delivering results to those most in need, doing more with what FAO already has, encouraging innovation, and strengthening accountability on all fronts.

United Nations Rome Based Agencies collaboration Delivering results together for a Zero Hunger world

In 2017 the United Nations Rome Based Agencies (RBAs) - FAO, the International Fund for Agricultural Development (IFAD) and the World Food Programme (WFP) - continued to collaborate to respond to the global hunger crisis by assisting those in need, and also worked together to achieve longer term goals outlined in the 2030 Agenda.

In September, the RBA Principals visited Ethiopia on a joint mission to emphasize the importance of their agencies' collaboration in support of the Ethiopian government's development efforts and committed themselves to expanding joint in-depth analysis of ongoing collaboration in the country.

Also last year, in the Dominican Republic, joint exercises planned by RBA coordination teams help identify common areas of consideration within the country strategic plans of each agency.

In the Lake Chad basin countries Cameroon, Chad, Niger and Nigeria, RBAs are developing an operational framework to address humanitarian and development needs to assist conflict-affected populations to meet basic food and nutrition requirements.

FAO and WFP are forming an Operational Plan in line with ten of the 12 Priority Actions of the Strategy for Development and Security, Resilience and Human Development to better support G5 Sahel countries both at the political and programmatic levels. IFAD will join the planning and implementation processes.



**Food and Agriculture
Organization of the
United Nations**



**World Food
Programme**

FAO, IFAD and WFP

An investment in resilience in conflict prone areas in Africa

In 2017, a USD 38 million (CAD 50 million) five-year programme funded by the Government of Canada, was rolled out in the Democratic Republic of the Congo, Niger and Somalia by FAO, IFAD and WFP in the area of resilience. The joint programme aims to sustainably increase food security and strengthen the resilience of vulnerable families with a specific focus on women and children, through actions led by national governments and local communities.

FAO and WFP

Assisting in conflict-affected Yemen

The Enhancing Rural Resilience in Yemen (ERRY) programme was created through a joint effort by FAO, ILO, UNDP and WFP, and helped to strengthen the resilience of conflict-affected rural communities in Yemen. FAO and WFP were later asked to assist in the re-establishment of the food safety laboratories in Aden and Al Hudaydah.

FAO and IFAD

Reducing poverty worldwide

Twelve projects were formulated, as of 2017, to promote poverty reduction, food security and rural development with FAO's assistance and the IFAD Board's approval for a total value of over:

USD 600 Million

Beneficiary countries

Argentina
Côte d'Ivoire
India
Kyrgyzstan
Laos
Mauritania
Montenegro
Niger
Rwanda
Tonga
Viet Nam
Zimbabwe

Major design support ongoing in

Belize
Benin
Burkina Faso
Central African Republic
Gabon
Guinea
Madagascar
Mali
Uzbekistan



Photo: ©FAO/IFAD/WFP/Petterik Wiggers

2 September 2017, Hayelom, Tigray, Ethiopia

The FAO, WFP and IFAD delegation visits an exhibition featuring the products and results of the work of FAO, Governments and local farmers.

Pooling United Nations expertise to build capacity

+ WHO and FAO Harnessing action for healthier diets

In 2017 the Nutrition Decade Work Programme was finalized through discussions with Members complemented by open online consultations held by The United Nations System Standing Committee on Nutrition. The Nutrition Decade is a global collective effort to increase nutrition investments and implement policies and programmes to improve food security and nutrition, driven by United Nations Members and co-convened by FAO and WHO, in collaboration with IFAD, UNICEF and WFP. In particular, the Committee on World Food Security (CFS) provides a vital multi-stakeholder platform to discuss progress, exchange experiences and agree on coherent and consistent food security and nutrition policies.

+ IAEA and FAO Researching and transferring technologies for food security

The United Nations' FAO/IAEA Agriculture and Biotechnology Laboratories in Seibersdorf, Austria perform a broad range of R&D activities in the areas of animal production and health, food and environmental protection, insect pest control, plant breeding and genetics, and land and water management. In 2017, four coordinated research projects were launched to: utilize transboundary animal disease pathogens as vaccines and immune inducers; develop hand-held field-deployable analytical methods to assess the authenticity, quality and safety of foods; integrate biocontrol methods to control insect pests in greenhouses; and improve the resilience of rice and sorghum to drought through mutation breeding.

+ UNHCR and FAO Collaborating on sustainable energy for refugees

Together, FAO and UNHCR are working to support the energy needs of large refugee communities to reduce negative impacts on forest resources and alleviate pressure on host populations. Projects in 13 refugee settlements across Bangladesh, Chad, Djibouti, Ethiopia, Uganda and the United Republic of Tanzania continue to address adverse environmental impacts on forests associated with woodfuel consumption. In 2017, in response to increased pressure on the environment due to tree felling for settlement establishment and the need to meet ongoing household demand for woodfuel, FAO and UNHCR initiated a joint rapid woodfuel assessment at the Bidibidi settlement in Uganda.

+ UN-HABITAT and FAO Strengthening urban-rural food supply linkages

In the absence of effective urban planning, the consequences of today's rapid urbanization will be dramatic. UN-Habitat's mission is to promote socially and environmentally sustainable human settlements development and to achieve of adequate shelter for all. Building resilient food systems by integrating rural and urban areas and strengthening their linkages—with the involvement of all stakeholders—benefits both smallholder farmers and the urban poor. In 2017, together with UN-Habitat, several other agencies and Member Nations, FAO developed guiding principles for strengthening urban-rural linkages and collaborated with UN-Habitat and the Kuehne Foundation to improve rural-urban food supply chains in Kenya.

+ UNITAR and FAO Transforming knowledge into e-Learning products and services

In 2017 FAO and UNITAR signed an agreement to develop and deliver a series of online courses with special focus on trade and food security for trade and agriculture officials. These joint courses form part of the partnership between UNITAR and FAO and build upon the strengths of both institutions by transforming the knowledge expertise provided by FAO into high-quality learning products and services. The partnership takes full advantage of modern information and communications technologies for greater outreach and cost-effectiveness. These instructor-led e-learning courses are prepared by FAO and delivered by UNITAR.

**WTO and FAO****Enhancing global potential for agricultural and fisheries trade**

In 2017 the report *Trade and Food Standards*, co-published by the World Trade Organization (WTO) and FAO, showcased the long and fruitful collaboration between the two organizations on issues related to agricultural and fisheries trade. While the WTO is the only global international organization that deals with multilateral trade negotiations, part of FAO's work focuses on support to developing countries in implementing the WTO agreements in agriculture. WTO staff routinely participate in FAO's high level and/or experts meetings. In 2017, WTO staff contributed to analyses that feed into FAO flagship publications, in particular the *State of Commodity Markets (SOCO)*.

**EIF and FAO****Supporting countries to develop trade strategies for food security**

FAO and the Enhanced Integrated Framework (EIF) collaborate in mainstreaming trade into agriculture policies and programmes. In 2017 FAO signed a Letter of Intent with the EIF to join efforts to strengthen country capacities to develop trade strategies, policies and agreements that support agricultural development and food security. With the support of an FAO FMM project, the two institutions piloted their collaboration in Africa, where policy and institutional arrangements for both trade and agriculture exist under the EIF and the Comprehensive Africa Agriculture Development Programme (CAADP) respectively.

**UNIDO and FAO****Promoting inclusive and sustainable agriculture and agribusiness value chains**

Accelerated Agriculture and Agro-industry Development Initiative PLUS (3ADI+) is a development initiative, jointly led by FAO and UNIDO, that aims to promote highly inclusive and sustainable agriculture and agribusiness value chains and market systems in developing countries. 3ADI+ was introduced in 2017 and builds on FAO and UNIDO know-how to facilitate public and private investment and unlock the full potential of large-scale funding from development partners, such as IFAD, the African Development Bank (AfDB) and other development finance institutions. Last year, technical teams were put in place at FAO and UNIDO, with the collaboration of ILO and ITC staff.

**ITC and FAO****Connecting food value chains from farmer to consumer**

In 2017 FAO signed an MoU with the International Trade Centre (ITC) to support improvement of the incomes, livelihoods, sustainability, resilience and nutritional status of small and medium rural farmers, fishers, foresters and livestock keepers, including indigenous peoples, with a special emphasis on issues facing women agricultural producers or workers. FAO and ITC also signed an agreement to develop and deliver a series of online courses with special focus on effective multi-stakeholder partnerships benefitting MSMEs, SMEs, and agricultural producers and their partners.

**UNCTAD and FAO****Linking agricultural and fisheries trade to the SDGs**

FAO has a longstanding collaboration with the United Nations Conference on Trade and Development (UNCTAD) in the areas of agricultural trade, fisheries trade, as well as non-tariff measures (NTMs), sustainability standards, Responsible Agricultural Investment (RAI), and commodities. In 2017, FAO played an active role in inter-agency mechanisms hosted at UNCTAD, including the CEB Inter-agency Cluster on Trade and Productive Capacity where FAO is leading the thematic area on trade and value chains; the United Nations Forum on Sustainability Standards; and the Multi-agency Support Team on NTMs. FAO and UNCTAD jointly produced the *Annual Commodities and Development Report 2017*.

Expanding strategic partnerships globally

FAO is convinced that to achieve Zero Hunger, political commitment and major alliances with key stakeholders are crucial. Only through effective collaboration with governments, civil society, the private sector, academia, research centers and cooperatives, and making use of each other's comparative advantages, can food insecurity be defeated.

In 2016-17 strategic partnerships focused on deepening and broadening the scope of existing collaborations through knowledge exchange and capacity building; advocacy and communication; and the mobilization of resources.

Producer
Organizations
and NGOs



Private Sector





Parliamentary Alliances for Food Security and Nutrition



30

parliamentary alliances
for ending hunger
and malnutrition

20+

laws relating to food security
and nutrition enacted

European Union Fight against Hunger
Parliamentary Alliance

Pan African Parliamentary Alliance for
Food Security and Nutrition

Parliamentary Front against Hunger in
Latin America and the Caribbean

European Parliament Alliance

The European Parliament Alliance, established in 2016, aims to contribute to the commitment in fighting hunger and malnutrition at the European level by raising awareness on issues related to hunger, food insecurity, malnutrition and world food systems sustainability; promoting legislative advances; and developing relationships with other global/regional parliamentary Alliances. In 2017 the Alliance organized a WFD event "Change the future of migration: invest in food security and rural development".

Pan African Parliamentary Alliance for Food Security and Nutrition

FAO supported the establishment of the Pan-African Parliamentary Alliance for Food Security and Nutrition which was created to position the issue of food security and nutrition at the highest level of countries' political and legislative agendas. It acts as a regional platform for African Members of Parliament to discuss critical issues related to food security and nutrition. In 2017 FAO signed a technical cooperation programme with the Alliance on 'Strengthening capacities of Parliamentarians in Africa for an enabling environment for Food Security' and started activities at national and regional levels in the selected countries of Cameroon, Madagascar, Sierra Leone and Uganda. The formation of national alliances in Benin, Congo Republic and Madagascar have also been promoted.

Parliamentary Front against Hunger in Latin America and the Caribbean

Parliamentarians are key stakeholders for implementing political commitments in the area of food security and nutrition when it comes to drafting laws and approving public budgets. During 2017, FAO continued its partnership with this sector at regional and national levels. In Latin America, the Parliamentary Front against Hunger (FPH-ALC) continued its active work promoting and giving technical support to 23 regional/sub-regional/national parliamentarians' alliances, most recently in Haiti and Chile. In parallel, the regional parliament (PARLATINO) developed a model law on family farming in Latin America and the Caribbean, which will serve as a reference document for future national laws in the countries concerned.

Supporting National Parliamentary Alliances

An Italian Parliamentary Alliance for Food Security was also set up last year. Outreach efforts in Asian countries led to the setting up of the FAO Parliamentary Friendship League in Japan in May 2017. The Japanese League aims to offer an inclusive and diverse platform to discuss and take action on food and nutrition issues. Similar prospects are ongoing in the Philippines. In recent years, FAO has facilitated the establishment of 30 parliamentary alliances for ending hunger and malnutrition in Africa, Asia, Europe, and Latin America and the Caribbean.

Interregional collaboration

In April 2017 FAO facilitated the participation of African and Latin American parliamentarians in a side event held during the meeting of the OECD Food Crisis Prevention Network in Paris, France to promote interregional collaboration and to increase visibility of the legislature's role in eradicating hunger. In June 2017 an exchange between parliamentarians from the Latin American and the Caribbean, and Spanish Senators and Members of Congress was held in Madrid, Spain. During CFS44, a side event on the role of parliaments in achieving Zero Hunger took place with the participation of parliamentarians from Latin America, Africa as well as Spain. As a result, the Spanish Senate has committed to host a global parliamentary summit against hunger this year.

Private Sector



30+
partnerships established and
implemented in 2017 with the
private sector in 27 countries

AgriCord

AGRIDEA / acting on behalf of the
Global Forum for Rural Advisory
Services (GFRAS)

Asia - Pacific Network for
Sustainable Forest Management and
Rehabilitation (APFNet)

Asociación Española de Mayoristas,
Importadores, Transformadores y
Exportadores de Productos de la Pesca
y Acuicultura (CONXEMAR)

Auralight

Autogrill

Bill & Melinda Gates Foundation

Boulder Institute of Microfinance

CEMA

Compañía Española de Financiación Del
Desarrollo, COFIDES S.A.

Google

Grameen Foundation USA

Grupo TRAGSA

IKEA of Sweden AB

International Federation of
Agriculture Journalists

Kuehne Foundation

Magazine "A Lavoura" of the Sociedad
Nacional de Agricultura de Brasil

Mars, Incorporated

Mastercard

Messe Düsseldorf GmbH

National Geographic Society

Rabobank Foundation

RedR Australia Limited

Spanish Exporters and Investors Club

The Rockefeller Foundation

Unilever

Google**New technology for rural sustainable development****SDGs:** 1 2 5 10 13

In 2017 the collaboration between Google and FAO made significant progress with the FAO Collect Earth application, which works with Google Earth, and uses high-resolution spatial and temporal satellite imagery to analyze forest areas in conjunction with the Google Earth Engine and Open Foris Collect. FAO and its partners have used this technology to conduct the first detailed assessment of trees and forest cover in global dryland biomes. According to the data from this analysis, previously undeclared forest areas in drylands have increased global forest cover estimates by at least 9 percent.

Boulder Institute of Microfinance**Rural and agriculture finance****SDGs:** 1 2

Together with the CABFIN Partnership in Rural Finance (FAO, IFAD, WFP, GIZ and the World Bank), the Boulder Institute of Microfinance inaugurated the first edition of the Rural and Agricultural Finance Programme, a highly specialized diploma programme on rural and agricultural finance, held every summer at the International Labour Organization (ILO) International Training Center in Turin. In 2017, at the third edition of the Rural and Agricultural Finance Programme, FAO delivered 20 partial and full scholarships to key strategic partner institutions, aimed at increasing their capacity on rural finance.

Rabobank**Supporting small-holder farmers and the rural poor****SDG:** 2

FAO and the Rabobank Foundation signed their first partnership agreement in September 2013, with the overall objective of supporting smallholders in developing countries. Rabobank foundation provides unique private information on markets as well as adequate financing instruments so that smallholders can pursue investment opportunities. In July 2017, Rabobank received the FAO international Jacques Diouf Award in recognition of its efforts to provide financial strength and support to small farming communities in developing countries.

Mars, Incorporated**Food safety and reducing food waste****SDGs:** 2 3 12 13

The primary objective of the agreement between FAO and Mars is to share information and data on mycotoxin contamination. The agreement contributes to FAO food safety programmes and enables access to technical data as well as providing experts in key areas such as food traceability. In 2017, the partnership focused on mycotoxin prevention and control. Mars produced data with the aim of expanding the functionalities of the FAO sampling tool, including combinations of mycotoxins/basic products not currently covered by the Organization. Information provided by Mars has been useful to FAO work on food safety risk assessment.

Messe-Düsseldorf GmbH**Save Food initiative****SDGs:** 12 13

The objective of this partnership is to address the complex issue of food loss and waste through the Global Save Food Initiative which raises the awareness of food loss and waste, finds solutions to problems, while developing strategies adjusted to the specific needs of regions and countries. In 2017 the Agreement with Messe-Düsseldorf GmbH was renewed with a focus to expand the collaboration to the preparation of case studies assessing better packaging solutions for selected value chains in Thailand and the development of advocacy activities to support the reduction of food loss in China.

Rockefeller Foundation**Reducing Food Losses in sub-Saharan Africa****SDGs:** 2 12

This partnership, launched in September 2016, has allowed FAO and the Rockefeller Foundation to support the global initiative on food loss and waste reduction in the African region in accordance with the goals on the reduction of post-harvest losses by 2015 set by the Malabo Declaration of 2014. The partnership has supported institutional capacity building by training national government officials and private sector actors to design investment policies, strategies and programmes aimed at reducing food losses. These initiatives have made it possible to define the key indicators to monitor and report on post-harvest losses.

COFIDES**Agribusiness and value chain development****SDGs:** 2 8

The partnership between FAO and COFIDES was entered into in 2016 with the objective of promoting investment in favor of stakeholders operating in the private agribusiness sector. FAO is coordinating, in consultation with the Government of Colombia, the support of COFIDES for the financing of small producers and SMEs in value chain development. The collaboration between COFIDES and FAO has a significant potential as it aims to leverage financial resources for the development of critical aspects of agricultural value chains.

Academia and Research

40

major partnerships with
universities and research
institutions across Europe, Asia,
Africa and the Americas



African Rice Center (AfricaRice)

Agrinatura

Aleksandras Stulginskis University

Animal Population Health Institute (APHI), Colorado State University

Ankara University Turkey

Australian Animal Health Laboratory (AAHL)

Bartın University (Turkey)

Centre Régional AGRHYMET (Niger)

Chinese Academy of Agricultural Sciences (CAAS)

College of Agriculture and Natural Resources of the University of Tehran (UTCAN)

El Instituto Argentino de Investigaciones de Zonas Áridas (IADIZA, Argentina)

French Agricultural Research Centre for International Development (CIRAD)

Global African Swine Fever Research Alliance (ASF)

Institut Polytechnique Lasalle Beauvais

International Center for Agricultural Research in the Dry Areas (ICARDA)

International Center for Biosaline Agriculture (ICBA)

International Centre for Integrated Mountain Development (ICIMOD)

International Centre of Insect Physiology and Ecology (icipe)

International Food Policy Research Institute (IFPRI)

Instituto Nacional do Semiárido – INSA (Brazil)

Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale" (IZSAM)

Italian Research Institutions: Consiglio Nazionale delle Ricerche; Consiglio per la ricerca in agricoltura e l'analisi dell'economia agraria; Agenzia Nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile

International Rice Research Institute (the Philippines)

Japan International Centre for Agricultural Sciences - JIRCAS

Kazan State Agrarian University

Kyoto University

La Sapienza

M.V. Lomonosov Moscow State University (MSU)

Michigan State University

Mississippi State University

Moscow Timiryazev Agricultural Academy

Nagoya University

Norwegian Institute of Marine Research (IMR)

Research Institute of Agricultural Economics (Hungary)

Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)

Royal Veterinary College (RVC)

Sam Moyo African Institute for Agrarian Studies

Southeast Poultry Research Laboratory (SEPR)

Texas A&M University (TAMU)

Tokyo University of Agriculture and Technology (TUAT)

Tropical Agricultural Research and Higher Education Center (CATIE)

Tufts University

Unión de Universidades de América Latina y el Caribe (UDUAL)

Universidad Austral de Chile

Universidad Politécnica de Madrid (Spain)

Universidade Aberta of Portugal

Université Catholique de Louvain

Università degli Studi Roma Tre

Université Laval (Canada)

University of Adelaide

University of Illinois at Urbana-Champaign United States of America

University of Leeds (United Kingdom)

University of Liege (Belgium)

University of Tsukuba

Wageningen UR (University and Research Centre)

AGRINATURA**SDGs:** 2

AGRINATURA, a consortium of 28 European universities and research institutes in 18 countries, partners with FAO to strengthen capacities for agricultural innovation in developing countries. FAO and AGRINATURA are jointly implementing the Capacity Development for Agricultural Innovation Systems (CDAIS) project funded by the EU with the overall objective to make agricultural innovation systems more efficient and sustainable in meeting the demands of farmers, agribusiness and consumers to improve food security. In 2017, the work under the CDAIS project focused on the finalization of the National Innovation Facilitators' Training Package.

French Agricultural Research Centre for International Development (CIRAD)**SDGs:** 8 10

The FAO-Cirad partnership provides FAO with access to vast research sources in some 50 countries in Africa, Latin America, Asia and the Pacific through the 'platforms in partnership for research and training' bringing together a group of partners with the desire to work together, share outlooks and objectives, and provide long-term commitment of human, material and financial resources on shared research themes. In 2017, a key result of this partnership was the development of the first-ever atlas on complex rural migration patterns: Rural Africa in Motion-Dynamics and Drivers of Migration South of the Sahara.

International Center for Agricultural Research in the Dry Areas**SDGs:** 2 5 6

ICARDA, a key partner of FAO in the Near East and North Africa (NENA) region, contributes greatly to the Regional Initiative on Water Scarcity. The FAO-ICARDA partnership promotes sustainable agricultural development and the management of water and land resources to enhance food security and improve livelihoods. In 2017, the joint work continued on the scaling-up of mechanized raised-bed production packages in small scale farming systems and the provision of support for decision makers to better manage scarce natural resources; the development and promotion of best practices for integrated drought management and increasing the resilience of agriculture in the NENA region.

Kyoto University**SDGs:** 12 13

A valued partner, Kyoto University has collaborated closely with FAO in areas of climate change and food loss and waste. Kyoto University worked with the City of Kyoto, a signatory of the Milan Urban Food Policy Pact, to hold a Climate Change Symposium in June 2017 with key interventions by FAO and international experts. A food loss and waste event was held on Kyoto University campus to raise awareness and engage youth. Areas for future collaboration include crop climate modelling at global scale, urban food systems and water scarcity.

Moscow Timiryazev Agricultural Academy**SDGs:** 2 6

Based on a long history of cooperation, FAO and the Timiryazev Agricultural Academy renewed their commitment to collaborate on critical themes relevant to Russia and the Eurasian region. In May 2017 in Moscow a roundtable-webinar was organized by the FAO office in Russia with the Russian State Agrarian University-Moscow Timiryazev Agricultural Academy-on the effective use of water resources in agriculture and agroecology, part of a series of webinars that formed part of the framework of the Year of the Environment in Russia.

Norwegian Institute of Marine Research (IMR)**SDGs:** 2 13 14

On 24 March 2017, the new EAF-Nansen Programme Agreement, "Supporting the application of the ecosystem approach to fisheries management, considering climate and pollution impacts", was signed by the Norwegian Agency for Development Cooperation (Norad), the Institute of Marine Research (IMR) of Bergen, Norway and FAO. It is currently FAO's major initiative focusing on improving the knowledge base for and supporting the implementation of the Ecosystem Approach to Fisheries (EAF).

Sam Moyo African Institute for Agrarian Studies**SDGs:** 1 17

FAO and the Sam Moyo African Institute for Agrarian Studies (SMAIAS) have organized Agrarian Summer Schools and workshops to generate knowledge resources, build capacities of academia and civil society representatives from Africa, Asia and Latin America, and strengthen multi-stakeholder dialogue on themes linked to the implementation of agrarian reforms, such as Voluntary Guidelines on the Responsible Governance of Land (VGGTs), family farming, gender, rural labor, climate change and migration. In 2017 SMAIAS and FAO organized a summer school and a policy dialogue workshop.

Texas A&M University**SDGs:** 1 2

Partners since 2014, FAO and Texas A&M University (TAMU) continue to collaborate to strengthen agricultural production innovations to improve food security. The FAO-TAMU partnership has facilitated development of the Predictive Livestock Early Warning System (PLEWS) which uses satellite images to provide accurate monthly forage condition estimates for livestock in East Africa. This timely spatial information on trends of livestock well-being allows pastoralists and policymakers to learn about more rational crisis mitigation and reduced land degradation risk.

FAO-University Webinar Series**SDGs:** 2 6 15

In 2017, FAO's Division of Partnerships and South-South and Triangular Cooperation rolled out the FAO-University Webinar Series, to strengthen its relationships with its academic partners and raise the profile of the 2030 Agenda among the student and academic community at FAO partner institutions. Participating universities included Centro Agronómico Tropical de Investigación y Enseñanza, Institut Polytechnique LaSalle Beauvais, Tokyo University of Agriculture and Technology, Aleksandras Stulginskis University and Texas A&M University.

Producer Organizations and NGOs



1 150

family farmers from 67
countries directly benefitted
from South-South and
Triangular Cooperation

500 Million

small producers
reached worldwide

Action Aid - AA

Asian Farmer's Association for
Sustainable Rural Development Inc.
(AFA)

Asociación Panamericana de Ciencias
Veterinarias (PANVET)

Caritas Internationalis

Consumers International (CI)

Cornell University

Deutsche Welthungerhilfe e. V.

Dharwad University of Agricultural
Sciences

Indian Council of
Agricultural Research (ICAR)

International Cooperative Alliance (ICA)

International Federation of Red Cross

and Red Crescent Societies (IFRC)

International Planning Committee
for Food Sovereignty - IPC

International Union of Notaries (UINL)

International Centre for
Advanced Mediterranean
Agronomic Studies (CIHEAM)

Interpeace

La Via Campesina

Network of Marine Protected Area
Managers in the Mediterranean
(MedPAN)

Plan International

Self Employed Women's
Association (SEWA)

Slow Food

Union des Producteurs Agricoles
(Québec) – Développement
International - UPA/DI

Urgenci

WeEffect

World Wildlife Fund - WWF

International Forestry
Students' Association (IFSA)

Latin American Parliament

Pan African Parliament

Thomson Reuters Foundation

Union Nationale des
Femmes du Maroc (UNFM)

World Union of Wholesale
Markets (WUWM)

World Vision International WVI

International Planning Committee for Food Sovereignty (IPC)

SDGs: **2 12**

FAO has expanded its partnerships under the umbrella of IPC, convening more than 6 000 organizations and 300 million small-scale food producers, rural workers, and grassroots organizations to fight food insecurity. The FAO-IPC partnership focuses on enhancing collaboration with civil society organizations and small-scale food producers to implement the VGGT. It aims to promote a wider application and implementation of the VGGT at all levels through awareness-raising and training to achieve a critical mass of agents of change required for successful implementation.

Self Employed Women Association (SEWA)

SDGs: **1 5 8**

Longstanding partners in building the capacities of the rural poor, with particular emphasis on ensuring the inclusion and empowerment of women and youth, in 2017 FAO and SEWA facilitated a series of South-South and Triangular Cooperation knowledge-sharing and capacity-building activities in Ethiopia, India, and Nepal focusing on inclusive sustainable agriculture and food systems, and rural women's access to services, employment and market opportunities. Analysis was also conducted on SEWA's rural financial services (particularly the community microcredit scheme), to which FAO's Rural Finance Team is providing technical advice to improve their performance.

Union des producteurs agricoles de Québec-Développement International (UPA-DI)

SDGs: **1 2 8**

With many years of fruitful collaboration focused on strengthening producer organizations in developing countries, UPA-DI contributed to the implementation of an FAO TCP in Egypt to support the reform of agricultural cooperatives in Egypt to ensure that they are more efficient, fair and inclusive enterprises for the benefit of small farmers. UPA-DI fostered a participatory process and dialogue within the Egyptian cooperative movement and relevant government institutions to support an analysis and an internal reform process. In 2017, a series of workshops were organized with more than 200 representatives.

Consumers International

SDGs: **1 2 5 8**

In 2017, FAO and Consumers International (CI) signed an agreement aimed at improving CI's access to the FAO knowledge and information network. As part of this, CI and FAO are developing a training framework to increase and reinforce FAO technical staff's knowledge of consumer perspectives and their proactive efforts to bring about healthy and environmentally sustainable changes in food systems. In Latin America and the Caribbean, CI has supported the development of public policies to improve access to healthy food and optimize nutritional information.

Réseau International URGENCI

SDGs: **2 8**

The recently formalized strategic partnership with Urgenci aims to strengthen territorial food systems as an efficient tool to make agriculture and food production more inclusive and sustainable. Urgenci, the international membership driven network of small scale food producers and consumers with approximately 2 million members in almost 35 countries, promotes a locally-based economic model of agriculture and food distribution and facilitates solidarity partnerships between small-scale food producers and consumers. In 2017, Urgenci implemented awareness raising and capacity development activities for consumers and for small and medium scale food producers in Turkey and in Lebanon.

International Cooperative Alliance (ICA)

SDGs: **1 2 17**

FAO's partnership with ICA focuses on three main areas: promoting knowledge exchange and good practices of cooperatives as sustainable and inclusive enterprises in the food and agriculture sector; supporting the advancement of the cooperative model including smallholder farmers for food and nutrition security and sustainable agricultural development; and supporting inclusive cooperatives to participate in regional and global policy consultation processes and awareness-raising events, highlighting the important contributions of cooperatives to achieve food security and the 2030 Agenda. In 2017, FAO and ICA collaborated at many levels and on a wide range of topics.

South-South Cooperation with Family Farmers

In 2017, FAO partnered with several national and local producer organizations to share and to reflect upon their successful experiences and practices through peer learning activities with other family farmers. Twenty-seven South-South farmer-to-farmer exchanges were conducted through farmer networks, directly supporting about 1 150 family farmers from 67 countries, covering family farming policy processes, agroecology, land tenure, rural finance, forestry, peacebuilding, value chains, women entrepreneurship, seeds, integrated agriculture, aquaculture, pastoralism and more.

South-South and Triangular Cooperation (SSTC)



South-South and Triangular Cooperation (SSTC) is the mutual sharing and exchange of development solutions—knowledge, experiences and good practices, policies, technology and resources—between and among countries in the global South. SSTC has enormous potential for agriculture and rural development in developing countries. It can unlock diverse experiences and provide solutions to pressing development challenges.

USD 371
million in financial
commitments

200
agreements signed
with partners

+2 000
SSTC cooperants

China Partnership for Food Security

The China Programme is a FAO SSTC flagship programme in which China donated USD 80 million worth of trust funds to FAO in two phases to support SSTC in agriculture to improve food security. By May 2017, China sent more than 1 000 experts and technicians to 28 countries in Africa, Asia including the South Pacific, and Latin America and the Caribbean accounting for about 60 percent of all expatriates under the programme. So far, 12 national projects and five global/inter-regional projects have been implemented and ten more will be operational under the programme, directly benefitting over 3 million people.

FAO-Korea SSTC project on rice sector development

The Korean SSTC project is working to effectively share Asian knowledge and skills with target countries in Africa. Cooperation with the International Rice Research Institute (IRRI) began in 2017 with participants from Côte d'Ivoire and Nigeria joining an IRRI training workshop in June. The project also collaborated with the Africa Rice Center (ARC) to launch a training program in Senegal in December. In order to expand training opportunities in more African countries, SSTC projects will jointly support training, together with Asian experts and participants from 12 African countries.

Interregional SSTC between Kenya, Malaysia and Indonesia, and Ecuador and Peru within the FIRST programme

Kenya's Ministry of Agriculture, Livestock and Fisheries along with 47 county governments requested that FAO support their understanding of how a devolved, decentralized governance system can support their agriculture sector growth and transformation strategies, currently under preparation. In response, FAO facilitated an SSTC study tour to Malaysia, Indonesia, Peru and Ecuador, who operate through decentralized governance and have lessons to share. Eight civil servants from Kenya traveled to Peru and Ecuador to learn lessons from both governments regarding the decentralized management of food security and productive development programs.

City to City Cooperation for local economic development and food security

FAO's City to City Cooperation promotes SSTC at the local level and accelerates the transformation of food systems. The City of Milan launched the Milan Urban Food Policy Pact (MUFPP), with the aim of championing sustainable food systems and promoting healthy diets in cities and connected rural areas. In response, FAO developed the 'City to City Initiative' (CtCi) to empower local governments to make their cities and interconnected regions more food secure, on the premise that one Southern city context more readily relates to another, and that cities can support one other in the transition towards more sustainable food systems.

African rice development: Japan, ASEAN and SSTC

FAO's project 'Strengthening Agricultural Statistics and Food Security Information in CARD (Coalition for African Rice Development) countries', funded by Japan, aims to implement and further develop countries' National Rice Development Strategies by improving agricultural statistics, particularly, data on rice production. Drawing on statistical methods and experiences from the Association of Southeast Asian Nations (ASEAN), the project aims to improve the capacity of CARD members to collect and provide reliable statistics on area planted to rice and/or yields. As of 2017 the project has conducted training workshops and pilot surveys in five target countries and organized two regional workshops.

Brazil and LAO PDR: improving contract farming

An SSTC study tour to Brazil on contract farming (CF) was organized for Laotian representatives nominated by their Ministry of Agriculture and Forestry. Participants learned about different CF models, implementation challenges, management strategies, different types of contracts and their provisions, the long-term dynamics of CF relations, and the key role of contracts in boosting chain competitiveness in the country. Following the study tour, capacity building materials were developed in cooperation with the University of Vicosa in Brazil, and a training workshop on CF was organized for 28 extension workers in Lao PDR.

FAO reference centers in China

In recent years FAO accredited five agricultural research and training centers in China, thereby raising the profile of institutional capacity in the global South. These centers have worked in partnership with FAO, through the SSTC framework, for at least a decade and have contributed significantly to the selection and fielding of SSTC experts on the development of various agriculture technology transfers. In addition to organizing capacity development activities, together with FAO these centers have actively participated in the identification, formulation and implementation of other SSTC initiatives.



FAO selected results and success stories 2017

The following stories, images, and testimonials showcase tangible results from FAO work in the field in 2017. They illustrate diverse, replicable and scalable initiatives and highlight what FAO, its partners, and project/programme beneficiaries can achieve by working together.



Food and Agriculture
Organization of the
United Nations

September 2017, Samburu East, Kenya - A member of the Samburu pastoral community during the Animal feed distribution-Hay programme FAO and Red Cross Kenya are developing in Samburu County.

Photo: ©FAO/Luis Tato



Food and Agriculture
Organization of the
United Nations



Food and Agriculture
Organization of the
United Nations



Food and Agriculture
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United Nations



Food and Agriculture
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United Nations



Contribute to the eradication of hunger, food insecurity and malnutrition

There is more than enough food produced in the world to feed everyone, yet 815 million people still go hungry

In spite of progress made over the past two decades, 815 million people are still chronically undernourished. Among children, it is estimated that 155 million under five years of age are chronically malnourished and over 52 million are acutely malnourished.

FAO is committed to ending hunger and achieving food security and improved nutrition, by raising the profile of these issues in the public arena through engagement with governments and development partners around the world.

FAO facilitates dialogue and measures to transform political will into concrete action.

The aim is for people everywhere to be able to make healthy eating choices on a daily basis. This is achieved primarily by supporting countries in the development and implementation of policies, programmes and legal frameworks that promote food security and nutrition.

Part of this success occurs at country level, where FAO promotes healthy diets, land tenure, small-scale fisheries, the right to food, and social protection in the context of national food security.

FAO leverages its work at global and regional levels to raise political commitment and build capacity at country-level to ensure sectoral and cross-sectoral policies, programmes, legal frameworks, and investment plans that promote food security and nutrition objectives through inclusive and evidence-based policy dialogue.

Between 2016 and 2017, through the joint FAO-EU FIRST Policy Assistance Facility, 34 senior policy officers were deployed to high-level positions in government ministries, strengthening implementation at country-level.

Through its presence at country-level in ongoing policy processes, FAO has strengthened capacities at country-level

to adapt and apply the following guidelines for tangible results towards Zero Hunger:

FAO/EU FIRST Policy Guidance Series – STRENGTHENING SECTOR POLICIES FOR BETTER FOOD SECURITY AND NUTRITION RESULTS

VGGT – THE VOLUNTARY GUIDELINES ON THE RESPONSIBLE GOVERNANCE OF TENURE OF LAND, FISHERIES AND FORESTS (VGGT) IN THE CONTEXT OF NATIONAL FOOD SECURITY

VGRtF – VOLUNTARY GUIDELINES ON THE RIGHT TO ADEQUATE FOOD IN THE CONTEXT OF NATIONAL FOOD SECURITY

VGSSF – THE VOLUNTARY GUIDELINES FOR SECURING SUSTAINABLE SMALL-SCALE FISHERIES (VGSSF) IN THE CONTEXT OF FOOD SECURITY

Engaging with parliamentarians on the implementation of voluntary guidelines has proven a highly effective way of moving from norms to policy, and from policy to action; however, there is still scope for further intensifying such efforts at regional, sub-regional and country levels.

United Nations initiatives such as the Decade of Action on Nutrition 2016-2025 provide further impetus for enhancing programmes that improve food security and nutrition, as well as those that enable new partnerships across governments and regional bodies, accelerating the reach and impact of policy environments at the country-level.

FAO is tireless in its efforts to ensure that people have access to food, and in this way contributes to the achievement of SDG 2, Zero Hunger, but also to SDGs 1, 3, 14 and 15.



A girl carries a sack of fertilizer, distributed by FAO, on her head in Yin Yane Village - Monywa, Myanmar

Photo: ©FAO/Hkun Lat



Contribute to the eradication of hunger, food insecurity and malnutrition



54 / SCHOOL FEEDING PROGRAMMES FOR THE ZERO HUNGER INITIATIVE IN LATIN AMERICA AND THE CARIBBEAN 2025

FAO programme 'Strengthening School Feeding Programs in the Framework of the Zero Hunger Initiative in Latin America and the Caribbean 2025' fights hunger in 13 countries. It has already helped implement sustainable school meal programmes and strengthen the institutionalization of school feeding policies. By sourcing food from community farmers, the programme helps stimulate food production in the long term, reduce poverty, and strengthen the nexus between agriculture, food systems and food security and nutrition.



56 / MOTHER CARE GROUPS IN MOZAMBIQUE

FAO and partner organizations support the Government of Mozambique in implementing food and nutrition education and behavioural strategies for improved diets and better nutrition. FAO's 'Nutrition Education and Communication for behaviour change integrated with Home Gardens' project sets up Mother Care Groups to share knowledge and practices. These women have, in turn, taught nutrition and home garden skills to 28 000 beneficiary mothers, who can now better provide their children with nutritious food.



58 / FOOD AND NUTRITION SECURITY IMPACT, RESILIENCE, SUSTAINABILITY AND TRANSFORMATION (FIRST)

The 'Food and Nutrition Security, Impact, Resilience, Sustainability and Transformation' (FIRST) Programme is a strategic FAO - European Union (EU) partnership to provide policy and implementation support. It has posted policy officers and technical experts to governments and regional bodies at their request. FIRST helps develop coherent sectoral and cross-sectoral policy and programme frameworks in 32 countries, one territory, and one sub-regional organization. In addition, FIRST helps strengthen human and organization capacities and support policy dialogue and coordination.



60 / MEETING THE UNDERNUTRITION CHALLENGE (MUCH)

'Meeting the Undernutrition Challenge' (MUCH) works to strengthen national capacities to formulate, implement and monitor sectoral and cross-sectoral policies, strategies and investment plans in order to build a strengthened enabling environment for eradicating food insecurity and malnutrition in Bangladesh. MUCH targets malnourished and vulnerable people of all ages by mainstreaming nutrition-sensitive approaches into national programmes and strategic actions with particular attention to the first 1 000 days of life as well as dietary diversification to enhance nutrition outcomes.



62 / MESOAMÉRICA HUNGER FREE INITIATIVE

The Mesoamérica Hunger Free Initiative works to improve food security and eradicate malnutrition for families across Latin America by strengthening local, national and regional institutional frameworks. The project supports sustainable food production mechanisms and community capacities like family farms that supply school food programmes. Through technical and financial assistance, the initiative increases food production, access to resources, and sustainable food security.



64 / STRENGTHENING FOOD SECURITY AND NUTRITION IN SELECTED COUNTRIES OF THE CAUCASUS AND CENTRAL ASIA

The 'Developing Capacity for Strengthening Food Security and Nutrition in Selected Countries of the Caucasus and Central Asia' project is part of a larger global and regional Zero Hunger initiative in Armenia, Kyrgyzstan and Tajikistan. This project works to promote stakeholder participation in policy dialogue; to integrate nutrition education and nutritional health in food security strategies; and to create social protection programmes like school meals.

66 / THE VOLUNTARY GUIDELINES FOR SECURING SUSTAINABLE SMALL-SCALE FISHERIES (VGSSF) IN THE CONTEXT OF FOOD SECURITY

The VGSSF promote the uptake of fisheries and aquaculture instruments, products and services by Member Nations and other key partners to facilitate the inclusion of food security and nutrition objectives and gender considerations in sectoral policies, investment plans, programmes, policies and legal-regulatory frameworks.

66 / VOLUNTARY GUIDELINES ON THE RIGHT TO ADEQUATE FOOD (VGRtF) IN THE CONTEXT OF NATIONAL FOOD SECURITY

The VGRtF supports countries in strengthening their food security policies, programmes, strategies, and legislation so they may adopt the right to adequate food and apply human rights principles that empower rights-holders and make duty-bearers more accountable.

67 / THE VOLUNTARY GUIDELINES ON THE RESPONSIBLE GOVERNANCE OF TENURE OF LAND, FISHERIES AND FORESTS (VGGT) IN THE CONTEXT OF NATIONAL FOOD SECURITY

Achieving Zero Hunger depends largely on how people gain access to land, fisheries and forests. Often tenure problems arise because of weak governance, and the quality of governance, in turn, affects attempts to address problems.

As of 2017, much work has been done in providing technical assistance to Member Nations to promote policies that improve tenure governance and, as a result, food security.



School feeding programmes for the Zero Hunger Initiative in Latin America and the Caribbean 2025

Prioritizing food and nutrition education across the region

Resource Partner: Brazil

SDGs:



Regional Initiative:

RIL1: Support to the Hunger-Free Latin America and Caribbean Initiative

"School meals contribute to greater school retention rates—if food is guaranteed in the schools, parents let children carry on with their studies rather than begin work."

Minister of Education, Paraguay

Young student washes her hands before lunch as part of a school feeding programme in Santa Lucía.

Photo: ©FAO/Patricia Andrade



In programme countries, food for school meals is sourced from smallholder farmers in the community, providing local farmers and businesses with a predictable outlet for their products.



food for school meals



With FAO support, Brazil's Zero Hunger Initiative was launched 15 years ago with two parallel strategies to fight hunger both in the short and long term. These comprised an emergency response to provide food for the hungry, and a longer-term strategy to improve professional training, reduce poverty and stimulate food production.

Today, the FAO programme 'Strengthening School Feeding Programmes in the Framework of the Zero Hunger Initiative in Latin America and the Caribbean 2025' supports, and often implements, sustainable school meals programmes throughout the region.

As of 2017 activities were underway in 13 countries: Belize, Costa Rica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Honduras, Jamaica, Paraguay, Peru, Saint Lucia, and Saint Vincent and the Grenadines to strengthen the institutionalization of school meals programmes regionally and nationally.

FAO developed a specialized strategy based on the successes of the Brazil experience. Covering 5 570 municipalities and 27 states, and assisting 43 million students per day for 200 school days, Brazil's school meals programme is a point of reference in Latin America and the Caribbean.

The main goals of the FAO strategy for its regional school meals programme are to share knowledge to boost human resources and to help create sustainable institutions and policies.

"Progress is due to the programme's style that allows countries to compare experiences and define their own path according to their own strengths and weaknesses," says Paraguay's Deputy Minister of Education, "Other technical cooperation programmes don't achieve that level of empowerment."

In the programme, food for school meals is sourced from smallholder farmers in the community, providing local farmers and businesses a predictable outlet for their products. The result is a snowball effect. Not only do public school children benefit, but so does anyone with a connection to these students. Moreover, children begin to educate their families, which in turn, educates communities.

The programme has made gains on both the policy and human fronts. Established with the human right to food in mind, the programme has now become an integral part of social and governmental policies.

Food and nutrition education are now part of the curricula across the region, and school gardens are an educational tool. The public is encouraged to voice its concerns and to participate in local school communities where experiences are shared.

Other notable results in 2017 were the opening of a public market for the purchase of food produced by local smallholder farms and the participation of other sectors of society such as civil society (through NGOs), associations, cooperatives and parliament.

In simple terms the sustainable value of a school meals programme is the transfer of knowledge and building of capacity that enable children to have access to healthy diets, which is the root of an active and healthy adult life.





Mother Care Groups in Mozambique

Home gardens connect agriculture to
nutrition, producing a ripple effect

Resource Partner:
European Union (EUDF)

SDGs:

1 2 3 5 6 17

Regional Initiative:
RIL1: Africa's commitment to End
Hunger by 2025

"I used to make porridge for
my children only with flour and
sugar, but now I know we can
make enriched porridge with
added vegetables and other high
nutritive value foods, the same
food that we produce in the home
gardens because nutrition comes
from there."

Rosita Francisco Mocole, Mother
Care Group volunteer in Namite,
Alto Molocue, Zambezia Province,
Mozambique

A group of women in the Zambezia
province of Mozambique during a
monitoring field visit for learning
nutrition and home garden practices
as part of the Mother Care Groups.

Photo: ©FAO/Telcínia dos Santos

+

2 800

mothers – *mães beneficiárias*
– received seeds, seedlings,
training and technical support to
set up their own home gardens





Rosita Francisco Mocole is part of a Mother Care Group in Alto Molocue in the Zambezia Province of Mozambique.

She is one of 12 women volunteers in her community who meet twice weekly to share knowledge and practices learned through the FAO project 'Nutrition Education and Communication for behaviour change integrated with Home Gardens.'

By 2017 the project had made a significant impact on the lives of women throughout Mozambique who were pregnant, lactating, or caring for children under five.

2 800 trained care group mothers, *mães cuidadoras*, passed knowledge gained to 28 000 beneficiary mothers, *mães beneficiárias*, through education sessions including cooking demonstrations.

For the home garden component, Rosita's group started growing cabbage, butter beans, tomatoes, sweet potatoes, onion and garlic. She also learned how to make organic manure for the gardens.

"We produce food for our children and we learn how to feed pregnant and lactating women. We now know that pregnant women and children, especially, need at least three different meals per day from the four food groups," says Rosita.

Nutrition in Mozambique remains precarious, with nearly half the children under five chronically undernourished.

Last year the Mother Care Group project achieved important results in terms of capacity building for local community based organizations (CBOs) and government staff, in changing behaviours related to eating and child feeding.

For instance, eight varieties of vegetable seeds selected on the basis of a high nutrition value were distributed and planted in demonstration gardens and in the home gardens of the beneficiaries. These seeds provide high micronutrient value food and promote dietary diversity.

The Care Group Model is a behaviour change strategy for nutrition that increases community participation and extends coverage of project activities to targeted women within a short period of time. The resulting life-saving changes in behaviour and community norms and practices are sustainable, continuing even after the project ends.

One day, Julieta, another volunteer from Alto Molocue, met a woman named Fina with her weak and stunted three-year-old daughter. Julieta advised the mother to visit a pediatrician and taught her proper child feeding practices like preparing enriched porridge—which she learned from training in the project.

A year later, Fina's child is growing healthy. "The community members now respect me," says Julieta, "and come to me for advice on nutrition and on their children's health."



Food and Nutrition Security Impact, Resilience, Sustainability and Transformation (FIRST)

Over 30 governments, the EU and other stakeholders partner with FAO

Resource Partner:
European Union (DG DEVCO)

SDGs:

1 2

FIRST is catalyzing a new level of partnership between the EU and FAO—gradually aligning and reinforcing their efforts around shared priorities.

Butyaba, Buliisa District, Uganda - Fishers seen setting up their fishing nets at Butyaba landing site.

Photo: ©FAO/Isaac Kasamani

Support policy formulation



As of 2017, ECOWAS is developing its Regional Fisheries and Aquaculture policy based on reviews of national-level policies in the West African regional economic union of 15 countries.





The 'Food and Nutrition Security Impact, Resilience, Sustainability and Transformation' (FIRST) Programme aims to enhance the environment for food and nutrition security and sustainable agriculture in 32 countries, one territory, and the sub-regional organization ECOWAS.

FIRST is a joint initiative between the EU and FAO that provides policy support to governments and regional bodies at their request to sharpen the focus of sector-specific policies on food security and nutrition, towards the realization of SDG 2. Additionally, the partnership aims to strengthen capacity for human resources and organizational development and to support stakeholder outreach and coordination to turn policies into action.

The programme's ambitions are long-term in nature, and represent the work of a tripartite agreement between the government, FAO and the EU.

At country-level policy officers foster dialogue among a range of partners and stakeholders, including government ministries and organizations, farmer's organizations, CSOs, private sector organizations, as well as development agencies and regional organizations.

Substantive progress was made in 2017 towards FIRST's goals, ranging from capacity building activities in Honduras, and Timor-Leste, to the inclusion of food security and nutrition in national strategies in Cambodia, Honduras, Myanmar, and Niger; from identifying priority investments in Burkina Faso, Chad, and Côte d'Ivoire to rural equity plans in Guatemala, and the setting up of a Regional Committee for Fisheries and Aquaculture Policy for The Economic Community of West African States (ECOWAS).

With FIRST's support, the draft statutes of the National Council for Food Security, Sovereignty and Nutrition in Timor-Leste (KONSSANTIL) have been finalized. In Honduras, capacity building through national and sub-national food and nutrition committees is ongoing.

In Myanmar the Agriculture Development Strategy implements elements from the country's new land policy in its food security and nutrition objectives. The Strategy document and roadmap are now available and two pilot interventions are underway.

FAO's support to the development of National Agriculture Investment Plans

In 2017, FAO worked intensively under the leadership of the ECOWAS commission to support the economic union's 15 West African countries with the development of their National Agriculture Investment Plans (NAIPs).

NAIPs are the tools used throughout Africa to implement the Comprehensive Africa Agriculture Development Programme (CAADP) through identifying, coordinating and prioritizing investments to enable the countries to mobilize the necessary financial resources (from their own budgets and from other sources) and use them as efficiently as possible. A particular focus this year has been the incorporation of food security and nutrition features (objectives, indicators, activities) into the NAIPs as a powerful way to address the persisting issue of malnutrition in the region where 32 percent of children under five are stunted.

The multiplier effect of this technical assistance is key in terms of the level of investment in agriculture, food security and nutrition and the potential for this investment to reduce hunger and malnutrition and, hence, achieve SDG 2.

Moving forward

Further strengthening the partnership between FAO and the EU, the programme will require closer collaboration between EU and FAO technical units in order to integrate new shared global priorities related to youth and migration, climate change, and peace and security issues.

FIRST will also deepen its support to develop national capacities for implementing policies for food and nutrition security.

In addition, FIRST envisages organizing high-level regional policy dialogues around food security and nutrition, to contribute to new global priorities and to maintain food security and nutrition high on the development agenda.



Meeting the Undernutrition Challenge (MUCH)

Strengthening the enabling environment for eradicating food insecurity and malnutrition

Resource Partners:

United States of America (USAID),
European Union (DG DEVCO)

SDGs:



Regional Initiative:

RIP1 - Asia and the Pacific's Zero Hunger Challenge

'Nutrition-sensitive agriculture provides a new mechanism for us to develop food-based interventions that are beneficial to the people of Bangladesh. We already have some evidence on integrated homestead gardening, nutrition education and cooking demonstrations, integrated rice and fish cultivation, and nutrition-sensitive fish culture.'

Minister for Agriculture of
Bangladesh


Infant at the Mobarakpur Community Clinic in Kulaura Upazila in northeastern Bangladesh during former United Nations Secretary-General Ban Ki-moon's visit to spotlight the importance of women's and children's access to health care in rural areas.

Photo: ©UN/Mark Garten



In 2017, together with Bangladesh's Ministry of Food (MoFood), UNICEF, WFP, IFPRI, and Save the Children, MUCH organized a technical symposium on nutrition-sensitive social protection in Dhaka.





In 2017, FAO celebrated the 40th anniversary of its work in Bangladesh. As one of the first international agencies to extend assistance to Bangladesh after its independence, FAO's commitment to the country continues undiminished.

'Meeting the Undernutrition Challenge' (MUCH) is an ongoing FAO policy advisory project that works with the Government of Bangladesh to strengthen the enabling environment for eradicating food insecurity and malnutrition.

MUCH is paving the way for better sectoral and cross-sectoral work on food security and nutrition, and is stimulating increased investment in this area.

Together with Bangladesh's Ministry of Food (MoFood) and other government departments, the project targets people of all age groups who are malnourished and vulnerable, with particular attention to children in their first 1 000 days of life, and to pregnant and lactating women.

MUCH has already produced results that are informing national food security and nutrition policy processes, such as the implementation of the government's 7th Five Year Plan, and the technical support given to the development of annual Monitoring Reports—a flagship government report assessing policy impacts and resource mobilization—produced together with MoFood and 16 other partner ministries and departments.

The project supported the formulation of the Second National Plan of Action for Nutrition (NPAN2) with the Ministry of Health and Family Welfare, the development of the Second Country Investment Plan (CIP2) for Nutrition-Sensitive Food Systems, and the development of a Food Price Monitoring and Analysis (FPMA) Tool with the FAO Global Information and Early Warning System (GIEWS).

Other results include chronic and acute food and nutrition security assessments and targeting; support to youth and adolescents through the Nutrition Olympiad 2017; support for the preparation of Quarterly Bangladesh Food Situation Reports and Fortnightly Foodgrain Reports by the Food Planning and Monitoring Unit (FPMU), MoFood; and promotion of the Right to Food.

Social protection is a globally recognized strategy to tackle hunger and malnutrition. At the end of 2017, MUCH, in collaboration with MoFood, UNICEF, WFP, IFPRI and Save the Children, organized a technical symposium on nutrition-sensitive social protection.

This symposium is among the first of its kind in Bangladesh that integrates and mainstreams nutrition-sensitive approaches into social protection and safety net programmes. It is also the second in the series of technical symposiums focusing on nutrition-sensitive approaches to achieving food and nutrition security.

Attended by 143 representatives from the government, the United Nations, CSOs, academia, and the private sector, the meeting took stock of the best practices and lessons learned from social protection programmes to address food insecurity and malnutrition.

The MUCH project is one more example of how innovative partnerships can lead to progress towards the 2030 Agenda. It works and creates synergies with SUCHANA, a consortium of civil society organizations (CSOs), in order to translate national level policies and strategies into grassroots-level actions.

Working together with the Institute of Nutrition and Food Science (INFS) at the University of Dhaka, MUCH is also conducting a food consumption survey to provide estimates for selected measurable dietary indicators to inform and refine future nutrition programming interventions.

The dietary indicators include the Women's Dietary Diversity Score (WDDS) to assess women's dietary diversity and the Food Insecurity Experience Scale (FIES) to assess food security, both of which will provide input for the Zero Hunger goal.



Mesoamérica Hunger Free Initiative

South-South and Triangular
Cooperation for food security

Resource Partner:
Mexico (AMEXCID)

SDGs:

1 2

Regional Initiative:
RIL1: Support to the Hunger-Free
Latin America and Caribbean
Initiative

“We can eradicate hunger in Latin America and the Caribbean through joint parliamentary efforts; collaboration between parliaments and their executives; parliaments and academia; parliaments and civil society; and parliaments and the private sector. It’s possible. It’s viable.”

María Augusta Calle, Regional
Coordinator, Parliamentary
Fronts against Hunger 2015-2016

Indigenous Guna Yala Region, Tigre
Island, Panama — Photograph taken
during a media tour with a network
of journalists for Mesoamérica
without Hunger.

Photo: ©FAO/Mesoamérica Sin Hambre

+
21 rural municipalities
more than matched a USD
436 940 investment by
AMEXCID by allocating USD
500 957 annually from their
own budgets.





As a cultural area, Mesoamérica presents a diverse mosaic of cultural traits shared by its indigenous peoples. Beginning as early as 7 000 BC the domestication of maize, cacao, beans, tomato, squash and chilli led to a transition from hunter-gatherer groups to the organization of sedentary agricultural villages.

The flourishing of pre-Columbian societies in the 15th and 16th centuries witnessed major civilizations, including the Aztec, Maya, Olmec, Teotihuacan, and Toltec.

Today the Mesoamérica Hunger Free Initiative seeks to strengthen local, national and regional institutional frameworks to obtain food security and nutrition results for family farming in the countries of Central America, Colombia and the Dominican Republic.

The initiative is funded by the Government of Mexico and is the result of a collaboration agreement between FAO and Mexico's Agency for International Development Cooperation (AMEXCID). The initiative is a model for South-South and Triangular Cooperation (SSTC), with the Mexican Ministry of Foreign Affairs recognizing it as one of the most successful initiatives to date.

Activities were launched in Belize with the objective of eradicating malnutrition, and, as of 2017, have extended to eight additional countries where the rural populations are affected by poverty: Colombia, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

The project emphasizes reinforcing community capacities to increase access to resources and to achieve sustainable food security.

Participating countries are supported with technical and financial assistance to build national sustainable school meal programmes with healthy local ingredients, educational school gardens, and better kitchens and dining areas.

Schools in the programme buy the ingredients for meals from local family farms, a practice which can ultimately reduce a nation's food import bill and create jobs. The involvement of family farming contributes to enhancing livelihoods in addition to boosting environmental sustainability.

Latin America and the Caribbean, as a whole, has made the greatest advances worldwide in fighting the problems of hunger and malnutrition with some 34 million people having overcome hunger across the region since 1992.

Despite this, significant challenges lie ahead. Today over 30 million people suffer from hunger in the region, while some 22 percent of people across the Americas are deemed to be overweight or obese. The path forward depends on building sustainable production mechanisms and healthy consumption habits as well as preserving regional food products and diets.

Through the USD 436 940 invested as part of the Mesoamérica Hunger Free Initiative, 21 rural municipalities more than matched the USD 436 940 invested by AMEXCID, by allocating USD 500 957 annually from their own budgets.

In other words, for each dollar invested through the initiative, the local authorities decided to invest USD 1.15 each year.

While the amount of money matched may not seem substantial, it is significant that it comes from local public budgets of municipalities facing different levels of poverty and nutritional deficiencies.



Strengthening Food Security and Nutrition in selected countries of the Caucasus and Central Asia

Addressing child nutrition and migration in Tajikistan

Resource Partner:
Russian Federation

SDGs:



Regional Initiative:

RIE1: Empowering small holders and family farms in Europe and Central Asia

"The implementation of the pilot on Matching Grants for Migrants is very suitable and timely for the economic and agricultural development of the country. This experience will assist in the creation of new permanent jobs and the development of agribusiness; increase capacity and knowledge of migrant workers; and overall this approach will contribute to food security and nutrition in Tajikistan."

Tolibjon Sharipov

Deputy Head of Migration Service of the Ministry of Labour, Migration and Employment, Tajikistan

A boy and his sheep at a livestock market in Kulyab, Tajikistan.

Photo: ©FAO/Vasily Maximov



For each dollar invested by migrant workers, an additional dollar will be made available for the project.





The project 'Developing Capacity for Strengthening Food Security and Nutrition in Selected Countries of the Caucasus and Central Asia,' implemented by FAO, has a global and a regional programme, active in Armenia, Kyrgyzstan and Tajikistan, to support these countries in achieving SGD 2.

It integrates food security and nutrition governance, nutrition-sensitive social protection and nutrition education into a comprehensive food and nutrition security approach.

At the global level, the project promotes the participation of stakeholders from the Caucasus and Central Asia in international policy dialogues, including those of the Committee on World Food Security (CFS). The project also contributes to the development of normative content for FAO's global programme 'Strengthening Food Systems for Nutrition Sensitive Social Protection' and facilitates inter-regional exchanges of experiences and lessons learned.

At the regional level, the project brings together good practices and instruments for capacity development, policy dialogue and learning about food security and nutrition strategies, including nutrition-sensitive social protection and school meals programmes.

At the national level, the project aims to operationalize the linkages between social protection, nutrition and agricultural interventions across food systems through pilot projects.

In Tajikistan, for example, a pilot project known as the 'School Food and Nutrition Programme linked to the Agricultural Sector,' addresses the missing linkages between the National School Feeding Programme and local agricultural activities, adopting a comprehensive and holistic approach to food insecurity and malnutrition and benefitting schools and farmers in the Vakhsh and Dusti districts. More specifically, the project is establishing greenhouses with drip irrigation equipment in 15 schools and five community gardens. The aim of these school and community gardens is to increase food supplies and meet the nutritional needs of schoolchildren and their local communities.

A second pilot in the country, 'Promoting Inclusive Economic Growth through Matching Grants for Families of Migrants,' leverages the remittances of migrant workers to invest them into the development of family agriculture. Migrants or returnees, female-headed households receiving remittances from a first-degree relative, or forced-returnees with proven ineligibility to migrate abroad can invest 50 percent of the funds into an agricultural activity of their choice and benefit from a matching amount from the project in addition to FAO knowledge, and technical assistance on agribusiness.

These models will provide an evidence base on the impact of integrated approaches on food security, nutrition and social protection outcomes and inform key national policy processes. Results of the pilots will be used to improve policies, legislation and programmes at country, regional and global levels. In Tajikistan, for example, the FAO project is working on including the results of the Matching Grants pilot the 'National Strategy for Migrant Labour 2016-2020' and the 'National Sustainable School Feeding Strategy.'

With their promotion of multi-sectoral governance and national action to achieve the SDGs, the pilots intend to strengthen the capacities of the Food Security and Nutrition Council of Tajikistan.

Overall, the projects help to align national efforts to strengthen food security and nutrition with the 2030 Agenda, and promote enhanced political commitment and inter-ministerial support for food security and nutrition.



Small-Scale Fisheries

The Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries (VGSSF) in the Context of Food Security

The VGSSF promote the uptake of fisheries and aquaculture instruments, products and services by Member Nations and other key partners to facilitate the inclusion of food security and nutrition objectives and gender considerations in sectoral policies, investment plans, programmes, policies and legal-regulatory frameworks.

The Right to Adequate Food for All

Voluntary Guidelines on the Right to Adequate Food (VGRtF) in the Context of National Food Security

The VGRtF supports countries in strengthening their food security policies, programmes, strategies, and legislation so they may adopt the right to adequate food and apply human rights principles that empower rights-holders and make duty-bearers more accountable.

In 2017, FAO

Supported countries in the development and implementation of normative and standard-setting instruments, such as international agreements, codes of conduct, and technical standards.

For example, in Costa Rica a draft law on small-scale fisheries was developed which highlights the livelihood function of the sector, supporting Costa Rica's effort to improve the sustainability of its small-scale fisheries.



Facilitated policy dialogue at global, regional and country levels including:



A training course for indigenous people and related stakeholders on the SSF guidelines for countries of Central America in September 2017, and the third Latin American Forum on the inclusion of fish in government school meal programmes in Buenos Aires, Argentina in November 2017.

Promoted partnerships between governments, development partners, civil society and the private sector for food security and nutrition.

Last year, through the "Too Big To Ignore" research partnership, a book on the implementation of the SSF guidelines was published and launched during the Centre for Maritime Research (MARE) conference in Amsterdam, the Netherlands.

In 2017, FAO

Expanded further its collaboration with parliamentarians to other regions, taking into account regional and national specificities, based on its experience with interregional exchanges. For 2017 results related to VGRtF and the work with Parliamentarians, see p. 50-53.



Responsible Governance of Tenure of Land, Fisheries and Forests

The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries And Forests (VGGT) in the Context of National Food Security

Achieving Zero Hunger depends largely on how people gain access to land, fisheries and forests. Often tenure problems arise because of weak governance, and the quality of governance, in turn, affects attempts to address problems.

As of 2017, much work has been done in providing technical assistance to Member Nations to promote policies that improve tenure governance and, as a result, food security.

In 2017

In Africa

The VGGT and the Framework and Guidelines on Land Policy (F&G) became leading normative frameworks in the Senegal River Basin region for the development of new land policies and laws, but also for innovative approaches to local governance.

State actors, lawyers, the private sector, scientists and civil society utilized the VGGT to support tenure reform processes in Mali, Mauritania and Senegal.

Training on tenure governance brought together more than 40 key “change agents” from Liberia and Sierra Leone to assess the situation in their countries with regard to the VGGT and to identify solutions to improve tenure governance.

Open-source software and land tenure

Open Tenure/SOLA are open-source software programmes to help protect tenure rights and support the implementation of the VGGT.



FAO and the World Bank worked together to integrate geospatial data collected with drones with Open Tenure/SOLA and with Google Earth technology to provide a complete low cost solution for securing the tenure rights of indigenous peoples.

In Angola, FAO provided training courses and facilitated the customization of the SOLA/Open Tenure system to develop a computerized GIS solution (Angola Land System).

Together with international financial institutions

The VGGT is being successfully mainstreamed in long-term partnerships with IFIs, particularly under the IFI-funded land administration investment projects that cover most regions globally and are jointly designed and supervised by the World Bank and FAO.



Make agriculture, forestry and fisheries more productive and sustainable

Sustainable development is a dynamic process of innovation

The world's population is projected to grow to nearly 10 billion by 2050. The highest rates of population growth are predicted to occur in places where people depend directly on crops, livestock, forestry and fisheries for their livelihoods—and have low rates of food security.

Sustainable growth in the agriculture sector is one of the most effective means of achieving food security and FAO works to ensure that these productivity gains do not only benefit the few.

The use of sustainable production practices and technologies implies a more holistic view of agriculture sector production and its link with natural resources. Such practices include, for example, agroforestry systems, crop–livestock integration and crop–aquaculture production, with connections among them to promote the conservation and use of ecosystem services.

Climate change threatens our ability to achieve global food security. It affects agricultural productivity through changing rainfall patterns, drought, flooding, and the geographical redistribution of pests and diseases.

Consequently, climate-resilient development that boosts livelihoods, especially through climate-smart agriculture, is a priority for FAO to achieve the goal of Zero Hunger by 2030.

Another FAO priority area, agroecology plays an important role in building resilience and adapting to climate change. Agroecology builds synergies that can support food production and food security and nutrition while restoring the ecosystem services and biodiversity that are essential for sustainable agriculture.

The FAO stories and examples of normative work that follow show tangible results achieved by rural and urban communities who are securing equitable access to resources in order to actively participate in, and benefit from, economic development.

FAO's work on land and water impacts the governance and management of food production systems, the provision of essential ecosystem services, food security, human health, biodiversity conservation, and the mitigation of, and adaptation to, climate change.

Over the years, the Organization has produced guidelines and manuals on all aspects of soils, including the Voluntary Guidelines for Sustainable Soil Management (VGSSM), and assisted Member Nations with technical and policy advice to boost soil health.

FAO helps sustain biodiversity through the work of the International Treaty on Plant Genetic Resources for Food and Agriculture and the Commission on Genetic Resources for Food and Agriculture in addition to key conventions that protect our world's resources.

FAO is the only United Nations agency mandated with the promotion of sustainable food and agriculture, contributing to the achievement of the SDGs 2, 6, 13, 14, and 15 through its work to make agriculture, fishery and forestry efficient, productive and resilient worldwide.



A fisher in the river Tista -
Panjarbhang, Bangladesh.

©FAO/Mohammad Rakibul Hasan



Make agriculture, forestry and fisheries more productive and sustainable



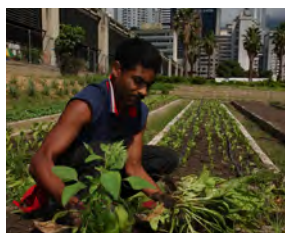
72 / CONSERVATION AGRICULTURE SCALING UP PROJECT IN ZAMBIA - CASU

FAO and Zambia's Ministry of Agriculture collaborated on the Conservation Agriculture Scaling Up Project (CASU) to reduce hunger, improve food security, nutrition, and income while promoting the sustainable use of natural resources through a farmer-to-farmer training approach. CASU supports some 20 000 lead farmers, who, in turn teach over 200 000 follower farmers. The project developed an e-voucher system to facilitate farmers' access to inputs and services.



74 / AGRIBUSINESS DEVELOPMENT IN BALOCHISTAN, PAKISTAN

The Australia Balochistan Agribusiness (AusABBA) Programme works to reduce poverty and economic inequalities for people in Balochistan. Droughts have taken a heavy toll on livestock—a valuable asset in Pakistan which represents an important genetic resource and contributes to biodiversity and a sizable portion of Pakistan's GDP. The FAO - Australia partnership has contributed to food and nutrition security, increased income for 30 600 households in 340 communities, enhanced yields and livestock productivity, and strengthened market linkages.



76 / FAO SUPPORT TO URBAN AND PERI-URBAN FORESTRY IN CABO VERDE

After the valley of São Francisco Ribeira in Praia underwent desertification, losing most of its indigenous flora, FAO launched the 'Urban and Peri-urban Forestry in Cabo Verde,' campaign. The project helped reforest Praia by planting climate-adapted trees, designing urban and peri-urban forest management plans, employing rural women, and strengthening the city government's capacity for intervention in the afforestation of public spaces.



78 / SUSTAINABLE AQUACULTURE AND FISHERIES IN KYRGYZSTAN

The FAO project 'Towards Sustainable Aquaculture and Fisheries Development in Kyrgyzstan' built capacity for sustainable fishing in a village where jobs are scarce and illegal fishing is rampant in the face of rural poverty. This project successfully enhanced livelihoods and employment opportunities by establishing four mini-hatcheries and three feed mills, producing 730 000 fry fish, and other animal feeds.



80 / SUSTAINABLE DAIRY FARMER DEVELOPMENT

The project 'Promoting Nutrition and Food Security through Smallholder Dairy Development and Fostering linkages with Local Rural School Milk Programmes' sustainably increased dairy productivity in Bangladesh, Myanmar and Thailand. Milk quality improved, The Asian Dairy Network was established, the school milk programme in Myanmar grew from 5 000 to 109 000 students, and 20 percent of beneficiaries became commercial smallholder milk producers.



82 / CLIMATE CHANGE AND ADAPTATION SOLUTIONS FOR GREEN SECTORS IN THE NENA REGION

The Near East and North Africa (NENA) region faces intensifying water scarcity which harms agriculture. FAO implemented the 'Climate Change and Adaptation Solutions for the Green Sectors of Selected Zones in the NENA Region' project which assessed changes in crop yields through change projections and AquaCrop, helping policymakers respond. Farmers, scientists and research institutions benefited by better management of resources and the design of appropriate strategies.



84 / MANAGING BIODIVERSITY IN CHIMBORAZO'S PÁRAMOS IN ECUADOR

The Chimborazo Natural Resources Management Project is a joint effort by the Chimborazo Provincial Council (CHPC), other national partners, FAO, and the GEF to support the conservation and sustainable management of the páramo ecosystem and its natural resources and the improvement of the livelihood situation of the local population. The project is promoted by the Provincial Government of Chimborazo as part of its climate change adaptation and mitigation plan.



86 / GLOBAL ACTION FOR SUSTAINABLE TUNA FISHERIES AND BIODIVERSITY CONSERVATION IN ABNJ

The FAO-GEF Common Oceans ABNJ Tuna Project is working to promote sustainable tuna fisheries resources and biodiversity conservation in marine areas that do not fall under any national jurisdictions. The project has contributed to improvements in governance, combatting illegal, unreported and unregulated fishing and in reducing ecosystem impacts, enabling public and private sectors to collaborate.



92 / FAO PORT STATE MEASURES AGREEMENT (PSMA)

FAO's Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA) Agreement is the first legally binding international instrument to combat illegal, unreported and unregulated fishing in order to safeguard the ocean environment. By the end of 2017, 52 Parties were involved. Technical Cooperation Programmes (TCPs) supported activities in 33 developing countries and in SIDS.



94 / AGRO-BIODIVERSITY CONSERVATION MEETS LOCAL ECONOMIC DEVELOPMENT

The Globally Important Agricultural Heritage Systems (GIAHS) was created in 2002 as a way to safeguard traditional agricultural systems and promote the idea that these systems are a sustainable way to preserve natural resources based on the harmonious relationship between human needs and nature conservation. The GEF project 'Conservation and Adaptive Management of Globally Important Agricultural Heritage Systems (GIAHS)' has worked to transform GIAHS from a mere concept into a set of concrete action-oriented activities.



100 / INTERNATIONAL PLANT PROTECTION CONVENTION

The International Plant Protection Convention (IPPC) works to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control. Its implementation involves collaboration by National Plant Protection Organizations, which can act as coordinating bodies at a regional level to achieve the objectives of the IPPC.



102 / DEFENDING CROP DIVERSITY IN THE MIDST OF CLIMATE CHANGE

As climate-change threatens agriculture, FAO is working to sustain biodiversity and ensure its role in meeting basic human food and nutritional needs. Initiatives include the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), the Commission on Genetic Resources for Food and Agriculture (CGRFA), the Strategy for the Implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources, and the Domestic Animal Diversity Information System.



Conservation Agriculture Scaling Up in Zambia (CASU)

Farmer-to-farmer training with digital e-voucher solutions

Resource Partner:
European Union (DG DEVCO)

SDGs:

1 2 5 10 13

Regional Initiative:
RIF2 - Sustainable Production Intensification and Value Chain Development in Africa

"We need an integrated approach to transform agricultural systems so that they effectively ensure food security in a changing climate."

A CASU Lead Farmer

CASU Lead Farmer after receiving the CASU e-voucher card.

Photo: ©FAO/Precious Chitembwe



12%

of smallholder farmers in Zambia practiced conservation agriculture

+
FAO, through CASU, supported 20 000 lead farmers, who in turn reached over 247 000 follower farmers who are now practicing Conservation Agriculture—around 12 percent of the total smallholder farmers in Zambia.

Conservation Agriculture (CA) is a practice that involves the three interrelated principles of minimal soil disturbance, permanent soil cover and crop rotation.

CA improves soil health, water conservation and ecosystem services. This in turn leads to increased and sustained soil productivity and can also contribute to improved adaptation and resilience, cushioning the effects of climatic shocks and variability.

Investments in CA in Africa are on the rise, including in Zambia where unpredictable changes in climatic conditions, especially prolonged droughts, are becoming a recurrent problem affecting small holder farmer productivity.

Since 2013 FAO—in close collaboration with Zambia's Ministry of Agriculture and with financial support from the EU—worked to implement the Conservation Agriculture Scaling Up (CASU) Project to help reduce hunger, improve food security, nutrition and income while promoting sustainable use of natural resources through a farmer-to-farmer training approach.

In addition to teaching CA techniques, the project employed ICT solutions to modernize extension service delivery, undertake routine market, food security and nutrition monitoring, linking farmers to input and output markets. The project also developed an e-voucher system, The Farmer Input Management Voucher System (FIVMS), to facilitate access to quality inputs and services by farmers.

The system monitors farmer activities and allows the redeeming of inputs in real time, facilitating reconciliations and payments to agro-dealers and suppliers, and providing extension services. The results speak for themselves.

By 2017 CA capacities in Zambia had improved significantly with more than 268 000 small-scale farmers registered to be practicing CA and the area under CA having increased from 1.47 percent to 1.84 percent.

Five-hundred and forty-six Ministry of Agriculture extension staff and 146 472 lead and follower farmers have been trained on various CA related topics, including CA practices and technologies, planting and care of Agro-forestry species and handling of herbicides, among others.

By 2017, the area under legume cultivation increased by more than 40 percent per farmer, contributing to the rise of the dietary diversity score among project beneficiaries from 7.3 to 8.4.

Private sector involvement in providing farmers linkages with 90 legume aggregators was increased through a partnership with the WFP.

Women represented more than 40 percent of registered CASU farmers. The project addressed barriers to rural women's socio-economic empowerment, such as their lack of access to labor-saving technologies and productive resources including credit. The project also increased knowledge of gender and CA through studies that measure CA adoption effects on men's and women's time use.

The success of FIVMS and the CASU e-voucher model led the Government of Zambia to adopt the system as the backbone for the implementation of the national agricultural subsidy programme, the Farmer Input Support Programme (FISP).

The Zambia Integrated Agricultural Management Information System (ZIAMIS) was rolled out in 2017 and registered over 90 suppliers, 1 500 agro-dealers, and 1 523 639 farmers. In addition, eight banks and mobile payment companies use ZIAMIS for real time management of payments, monitoring and reconciliation of transactions, thus improving transparency and accountability.

The ZIAMIS has further enhanced the use of ICT within Zambia's Ministry of Agriculture. Through a range of Android and Windows applications, the system collects and manages databases such as the National Farmer Register; the national catalogue of agricultural inputs; the e-extension platform enabling mass SMS communication to farmers and other stakeholders; and routine market, food security and nutrition monitoring data across the country.



Agribusiness development in Balochistan, Pakistan

FAO and the Australian government continue efforts to improve productivity and strengthen market access

Resource Partner:
Australia (DFAT)

SDGs:

2 5 8

Regional Initiative:
RIE1: Asia and the Pacific's Zero Hunger Challenge

"I've opened a bank account for the first time in my life using the money earned from backyard chicken farming. I now tell other women I meet to look at how this activity has changed my life."

Murad Bibi, poultry farmer and mother of 12 children, Balochistan



Preparation of a family meal underway - Pakistan.

Photo: ©FAO/Farooq Naeem

900
women
trained in
poultry
management

708
farmers
trained in
vaccination

70
seasonal
farmer field
schools
opened



In 2017, FAO renewed its partnership with Australian assistance to agricultural development in Balochistan border areas through the Australia Balochistan Argibusiness (AusABBA) Programme. The initiative aims to reduce poverty and economic inequalities for some 175 000 impoverished rural people from six western border districts in Balochistan, Pakistan through sustainable agriculture development.

Livestock is a valuable asset in rural communities, especially in this province, where animal agriculture is centuries old and most of the territory consists of rangeland. Livestock also represents an important genetic resource and contributes to biodiversity and accounts for some 14 percent of Pakistan's GDP.

In recent decades droughts have taken a heavy toll on the mostly rural province of Balochistan that borders Iran and Afghanistan—an area where low crop and livestock productivity, underdeveloped markets, food and nutrition insecurity, result in arbitrary fluctuations in income and livelihoods.

AusABBA (Phase I), which ended in June 2017, saw a significant improvement in food security and nutrition and a meaningful increase in income for 30 600 poor households in 340 rural communities in Balochistan.

The programme enhanced yields and livestock productivity, increasing the gross value of agricultural produce in the six districts by almost USD 9.24 million over its duration, introducing improved technologies and management, and community-based water management.

Murad Bibi is a livestock farmer in Balochistan, and mother of 12 children, whose family was among the rural communities participating in the AusABBA. "In two years' time, not only did poultry provide my family with nutritious food, but it also helped me generate an income of PKR 39 500 (about USD 900) per year by selling eggs and chickens," says Murad Bibi.

Through the programme, market linkages were successfully strengthened to increase sales of surplus and encourage the establishment of small local agribusinesses.

In addition, AusABBA helped people from several adjacent community organizations form farmer's marketing collectives. A recent study has shown that the farmer's marketing collectives approach can increase farmer profits by up to 47 percent.

Phase II of AusABBA began in July 2017 and will run until 2020. Building on the success of Phase I, the programme will focus on training female and male farmers to help strengthen supply chains and eventually connect them with markets for Balochistan-specific commodities like onions, fruit trees, goat and sheep meat, seed, wood and dates.

Among its solid results, community development stands out as perhaps the most important achievement and is a foundation for sustainable transformation in Balochistan. "Now, we are able to provide education for our children. Even our daughters are going to school as we can afford to hire labour," explains Bibi Zubada from Zhob District.

Major components of AusABBA II will target women's economic empowerment. At least 25 percent of the direct and indirect project beneficiaries will be female with the aim of improving the nutritional status of the family.



FAO support to urban and peri-urban forestry in Cabo Verde

Creating green spaces in cities and surrounding areas.

Resource Partner:
FAO TCP

SDG:

15

Regional Initiative:
RIF2 - Sustainable Production Intensification and Value Chain Development in Africa

"Well managed forests and trees in and around cities provide habitats, food and protection for many plants and animals, helping to maintain and increase biodiversity."

FAO Director-General
José Graziano da Silva

Urban and peri-urban agriculture can improve the nutrition and livelihoods of poor families.

Photo: ©FAO/Giuseppe Bizzarri



Climate-adapted trees were planted, substituting introduced species with local varieties with agroforestry added value.





The island country of Cabo Verde spans an archipelago of ten volcanic islands and various islets in the Atlantic Ocean. Most of Cabo Verde's population is concentrated in 24 cities.

Very often these urban and peri-urban areas lack landscape quality, green spaces and leisure spaces and are excessively vulnerable to extreme weather events.

The valley of São Francisco Ribeira in the periphery of Praia, Cabo Verde's capital, suffered an intense process of desertification losing most of its indigenous flora, leaving only a few invasive plants behind to populate the dunes.

As part of the reforestation campaign of the FAO project 'Urban and Peri-urban Forestry in Cabo Verde', climate-adapted trees were planted, substituting introduced species with local varieties that possess agroforestry added value, such as date palms. The women's association of São Francisco was in charge of the climate-adapted trees campaign, and employed rural women.

And not only in Praia. By 2017 the project had also developed urban and peri-urban forest management plans and green spaces in the three cities of Mindelo (São Vicente), Porto Novo (Sant Antão) and Espargos (Sal).

The plans create the conditions for the sustainable management of these spaces taking into account the ecological characteristics of plant species to be used, of the environmental parameters, and of the socio-economic conditions of the green areas to be created and managed.

They also aid in optimizing green spaces and forest areas by making them more attractive, thereby enhancing the quality of life of local populations and increasing environmental quality.

In addition, by 2017 three public green spaces were created and managed in Rutina (Mindelo, São Vicente), in Costa de Domingos Ramos (Praia, Santiago), and Espargos.

These results strengthen the capacity of city governments and other stakeholders to intervene in the afforestation of their own public spaces. In order to transform results into sustainable impact, an urgent priority is the promotion of greater awareness among people in urban and peri-urban areas about how to make their environments sustainable.

During the project's implementation, FAO collaborated with Cabo Verde government entities including the Ministries of Education; Forestry and Environment and Agriculture; Health; the Environment; Housing and Spatial Planning; as well as the Municipalities, especially in the preparation of the forest management plans with the local communities. The approach adopted was transversal and interdisciplinary across all sectors involved in the initiative.



Sustainable aquaculture and fisheries in Kyrgyzstan

From poacher to rural elected official

Resource Partner:
Finland

SDGs:

2 8 14

Regional Initiative:
RIE1: Empowering small holders and family farms in Europe and Central Asia

"There's always a right path for development. You just need to stop and think, and work very hard."

Artur, a fisher and rural council member from Toktogul, a city in the Jalal-Abad Region of Kyrgyzstan

Artisanal fisher harvests fish from net - Kyrgyzstan.

Photo: ©FAO/Sergey Kozmin



The project strengthened the right to food and enhanced livelihoods and employment opportunities among the rural poor in Kyrgyzstan.



Enhanced livelihoods and employment



Artur comes from Toktogul, a city in the Jalal-Abad Region of Kyrgyzstan located on the northern shore of the Toktogul reservoir. After high school, Artur, like many of his village friends, began to fish for a living.

In this remote area with few jobs, it was relatively easy to catch and sell fish from the reservoir close to his home.

There was one constraint, however. Fishing in the Toktogul reservoir was illegal—which made Artur a poacher.

Following the fall of the Soviet Union, aquaculture production across Central Asia has declined dramatically and many operational fish farms have been abandoned.

Existing pond farms and new production facilities in Kyrgyzstan are promising, yet lack of technical expertise and support from industries limit the potential growth of the sector. Fish farmers rely on costly imported or poor quality feeds and, as a result, suffer from low production rates and economic returns.

Concluded at the end of 2017, the FAO project 'Towards Sustainable Aquaculture and Fisheries Development in Kyrgyzstan' aimed to build institutional and local capacity towards sustainable aquaculture.

The project strengthened the right to food and enhanced livelihoods and employment opportunities among the rural poor in Kyrgyzstan.

Artur is among the rural poor and needed the income from fishing to provide for his family. He fully understood that poaching is wrong and when the FAO project came along he welcomed the idea of fish farming, and was among the first to establish fish ponds.

One goal of the project was to set up four mini-hatcheries and three feed mills in identified project areas. As of 2017 all of them are operational, with the mini-hatcheries producing 730 000 fry fish, and the feed mills producing 4 tonnes of carp feeds, 1.45 tonnes of trout feed, and 3 tonnes of materials for terrestrial animal

feeds per year. The feeds were produced using available local ingredients.

The project also trained fish farmer associations in feed formulation and manufacturing. Artur proactively participated in the project, bringing other fishermen together to form a fish farmer association. Last year his fellow villagers nominated and elected him a member of the rural council.

Together with other council members he promotes aquaculture development in Toktogul district, provides hands-on training to people interested in fish farming, and offers advice from his personal experiences.

Artur has come a long way since he was a poacher and is now a role model in the community.



Sustainable dairy farmer development

Linking dairy farmer livelihoods to schoolchildren's milk

Resource Partners: Animal Production and Health Commission for Asia and the Pacific (APHCA), CFC, OPEC Fund for International Development (OFID), Bangladesh, Myanmar, Thailand

SDGs:

2 3 8 12

Regional Initiative:
RIE1: Asia and the Pacific's Zero Hunger Challenge

"With the extra income from my dairy business I was not only able to buy a motorcycle trailer and handheld tractor to expand my business, but I could also afford to enroll my eldest daughter in university this year."

Ko Khin Zaw, dairy farmer in Mingaladon township, Yangon, Myanmar



+
1 000
subsistence smallholders graduated to become commercial smallholder milk producers in Myanmar.



A dairy farmer in Myanmar.

Photo Credit: ©Miklos Gaspar /IAEA

The FAO project 'Promoting Nutrition and Food Security through Smallholder Dairy Development and Fostering linkages with Local Rural School Milk Programmes' in Bangladesh, Myanmar and Thailand, supported governments to promote smallholder dairy development by linking producers to local markets and by setting up school milk programmes.

At the start of the project Ko Khin Zaw's income just barely covered his family's food expenses. A dairy farmer living in Mingaladon township in Yangon, Myanmar, he had only 0.75 acres of land for vegetable production and 12 cattle for dairy husbandry.

With the help of the project, Ko Khin Zaw began selling raw milk to a major dairy processing company and shortly after obtained an interest free loan of 2 million kyats (around USD 1 550) from the company to buy more dairy cows.

The loan repayment was deducted from the income of the sale of milk and once he paid his debt, Ko Khin Zaw borrowed another 2 million kyats to expand his activity.

Ko Khin Zaw participated in training courses on hygienic milk handling and milking. He gradually enlarged his dairy farm, which now counts 30 cows. Thanks to his high quality and on-time delivery, his price per liter of milk increased under the quality-based incentive price scheme introduced by the project. Now his dairy enterprise not only covers household expenses, but also provides extra income. One objective of the project was to sustainably increase dairy productivity by using locally available resources.

Along with overall improved quality, milk productivity improved by 20 percent. In addition, 1 000 subsistence smallholders—or 20 percent of beneficiaries—graduated to become commercial smallholder milk producers.

A second project goal was to expand market access for smallholder milk producers by improving value chain management through the promotion of high quality milk, healthy eating, and product safety and quality. Among the top results were improved market access for 5 000 smallholder milk producers and six school milk nutrition schemes piloted for 6 000 primary school children.

A third objective aimed to set up a capacity building and information dissemination network to improve the bargaining power of smallholder dairy farmers in the region. As a result, the Asian Dairy Network was established.

Sustainability, key to the long-term success, was achieved on many fronts. The school milk programme in Myanmar grew from 5 000 students to over 109 000 students.

The project also helped build robust relationships and promote South-South exchange.

For example, the Chiangmai Regional Dairy Training Centre established by the project has been welcoming many farmers from Myanmar in recent years as well as some groups from Bhutan and Afghanistan.

Sustainability is often achieved through ownership. The project's prioritization of awareness raising among communities and coaching and mentoring of the three country teams contributed to a strong sense of ownership along the entire dairy value chain.





Climate change and adaptation solutions for green sectors in the NENA Region

Crop yield changes under different climate scenarios

Resource Partner: Germany (GIZ)

SDG:

13

Regional Initiative:
RIE1: Near East and North Africa's
Water Scarcity Initiative

Livestock searching for water in the drought-affected Al-Mafraq in Jordan.

Photo: ©FAO/Maria Losacco



The project resulted in a contribution to the Arab Climate Change Assessment Report, within the framework of the Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region.



climate change assessment



The Near East and North Africa (NENA) region has the lowest per-capita fresh water resource availability among all regions of the world and in the coming decades, it faces a severe intensification of water scarcity as well as more frequent, intense and long droughts.

The agriculture sector will be particularly affected, as wheat yields, olive tree yields, and numbers of livestock are projected to decline under all climate change scenarios.

Given that agriculture consumes 85 percent of fresh water, the agricultural industry will need to enhance its water efficiency and productivity. At the government level, policy reform could be effectively oriented to encourage the adoption of farm practices that increase adaptation to climate change and enhance resilience.

To address these issues, FAO implemented the 'Climate Change and Adaptation Solutions for the Green Sectors of Selected Zones in the NENA Region' project with special focus on Egypt, Jordan and Lebanon.

The project used state-of-the art climate change projections, and AquaCrop, FAO's model for crop yield response to water and climate change, to assess changes in yield of key crops in selected NENA countries under various climate scenarios.

The aim was to provide evidence for a regional dialogue and strategic thinking about adaptation responses necessary for coping with the challenges of climate change, water scarcity and food security.

In 2017 the project resulted in a contribution to the Arab Climate Change Assessment Report, within the framework of the Regional Initiative for the Assessment of Climate Change Impacts on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR).

RICCAR is implemented through a collaborative partnership involving FAO and 10 other implementing partner organizations.

Additionally a regionally focused and forward looking technical report Climate Change and Adaptation Solutions for the Green Sectors in the Arab Region—currently under preparation—will be issued under this project.

While farmers are the direct beneficiaries of the project, scientists and research institutions also benefit from the ability to design their research strategies and programmes taking into consideration impacts of climate change.

Evidence from the project can also be used by policymakers in the agriculture and water sectors to better plan and manage limited land and water resources available. While the project itself was focused on a selection of crops and countries, the methodology is easily scalable.

The project nurtured strong cooperation and coordination with other international and regional organizations, such as the United Nations Economic and Social Commission for Western Asia (ESCWA) and the Arab Center for the Studies of Arid Zones and Dry Lands (ACSAD), creating a positive impact on the quality of the reports produced, and also on FAO relations with its partners in the region.



Managing biodiversity in Chimborazo's páramos in Ecuador

Resource Partners:
Global Environment Facility (GEF)
and other co-financing partners

SDGs:

15 13

"The project contributes to the economic and social development of communities, through the responsible use of natural raw materials."

Tarsicio Granizo, Minister of the Environment, Government of Ecuador

+
Blue grass, white clover, plantain and rye grass pastures saw both an increase in milk production and a reduction of around

40% in gas emissions in 2017

Women walking in Ecuador, one of the world's most biologically diverse countries.

Photo: ©FAO/GEF PROMAREN



The Chimborazo Natural Resources Management Project is a joint effort by the Chimborazo Provincial Council (CHPC), other national partners, FAO, and the GEF to support the conservation and sustainable management of the páramo ecosystem and its natural resources and the improvement of the livelihood situation of the local population.

Ecuador is one of the world's most biologically diverse countries, due to the extraordinary variety of ecosystems and species that co-exist in a relatively small territory.

While there are serious environmental problems in the country that contribute to the deterioration of natural ecosystems, the sustainable management of biodiversity and natural resources continues to be a strategic priority of Ecuador whose Constitution grants inalienable rights to nature.

The Chimborazo project's global environment objective is to conserve and manage the Chimborazo's páramos and the biodiversity of the mountain ecosystems and to improve local livelihoods through improved sustainable natural resource management.

The project's development objective is to re-establish and sustainably use the agrobiodiversity and the páramos ecosystems and to improve food sovereignty of the local indigenous population, who are dependent on Chimborazo's mountain ecosystems, by applying modern watershed management approaches.

For instance, blue grass, white clover, plantain and ray grass pastures saw both an increase in milk production and a reduction of around 40 percent in gas emissions in 2017.

The project is promoted by the Provincial Government of Chimborazo, and has worked with local communities to construct five watershed management plans, based on the communities' knowledge and needs. These plans have a local committee that follow up project activities. At the same time, the project contributes to strengthening the policy and regulatory framework for the integration and promotion of biodiversity in the goods and services markets.

The project is part of the Provincial Government's plan to adapt to and mitigate climate change. The plan came after a thorough environmental study that was conducted in the 10 cantons of the province between 2012 and 2015.

According to the study, the increase in temperature is also linked to the increase of droughts, concentrated and off-season rainfall, sudden frosts and other changes in the environment that influence agriculture.



Global action for sustainable tuna fisheries and biodiversity conservation in ABNJs

Resource Partners:

Global Environment Facility (GEF)
and other co-financing partners

SDGs:

1 2 6

Regional Initiative:

RIF2 - Sustainable Production
Intensification and Value Chain
Development in Africa

"We are pleased with project results—the development and testing of biodegradable fishing gear, the installation and use of electronic monitoring systems, and workshops on harvest strategies—and look forward to further collaboration."

Susan Jackson, President,
International Seafood
Sustainability Foundation (ISSF)


Commercial tuna fishers.

Photo: ©Sunji Fijuwara



The world's tuna fleet, made up of thousands of vessels from over 85 countries landing catches valued at almost 17 billion USD annually, is a critical food source





The Areas Beyond National Jurisdiction (ABNJ)—known as Common Oceans — are the marine areas that do not fall under the responsibility of any one country, and home to many of the world's most valuable fisheries and marine ecosystems.

Few resources are as closely associated to these areas as tuna fish, a highly migratory species accounting for almost 20 percent of all marine capture fisheries. The world's tuna fleet, made up of thousands of vessels from over 85 countries landing catches valued at almost 17 billion USD annually, is a critical food source.

With the high demand for tuna, some stocks are overfished and today 33 percent of catches from major commercial tuna originate from sources stocks which are subject to overfishing. This poses a challenge to the tuna Regional Fisheries Management Organizations (RFMOs) ensuring sustainable fisheries management and biodiversity conservation.

Illegal, unreported and unregulated (IUU) fishing is another serious threat to sustainable fisheries, marine ecosystems and the livelihoods of legitimate fishers. In addition to tuna, ABNJ also provide habitat for other ecologically and economically important species including sharks, seabirds, sea turtles and marine mammals – some of which are severely threatened by human activities, including fishing.

Together with its partners, the FAO-implemented Common Oceans ABNJ Tuna Project strives to achieve responsible, efficient and sustainable management of fisheries resources and biodiversity conservation in the ABNJ.

Being the largest of four projects in the Common Oceans ABNJ Program, it unites a large and diverse array of partners at global, national, and regional levels including the five tuna-RFMOs, NGOs, international organizations, as well as representatives from governments and the private sector.

Results of 2017 show progress, particularly in terms of strengthening governance and collaborative work among the tuna-RFMOs.

As of today, harvest control rules have been developed and agreed for six tuna stocks and the current tuna-RFMO efforts will continue until all major stocks are covered. Moreover, tuna-RFMOs have exchanged experiences and are seeking to formulate innovative and harmonized ways of operationalizing the ecosystem approach.

To improve the ability of tuna-RFMO countries to combat IUU fishing, the Project has contributed to capacity building and networking, as well as developing and testing innovative monitoring, control and surveillance tools. In addition, the Project has proven that electronic monitoring systems can be an effective tool for compliance for developing countries, following the deployment of equipment aboard the whole fleet of purse seiners in Ghana, and currently on 35 longliners in Fiji.

The project has also succeeded in addressing information gaps that had impeded the effective management of threats to ecosystems and biodiversity. The international bycatch analyses coordinated by the project have established new partnerships and modes of data sharing, and steps toward reduction in impacts due to entanglement or hooking of threatened species by fishing gear have been demonstrated in multiple fisheries around the world.

As a result, the project effectively contributes to ensure food and livelihoods security by strengthening the long-term management and sustainability of ABNJ fisheries and the ecosystems on which they depend, and thereby addresses to the sustainable development aspirations reflected in the 2030 Agenda.

Forging climate change solutions

FAO believes that hunger, poverty and climate change can be tackled together by strengthening the links between rural poverty reduction, sustainable agriculture and strategies that boost resource-use efficiency, conserve and restore biodiversity and natural resources, and combat the impacts of climate change.

Recognizing that the world cannot achieve Zero Hunger without addressing climate change, FAO is further integrating climate action into all of its work. In 2017 FAO released a dynamic climate change strategy that aims to deliver the climate solutions the agricultural sectors offer.

Around 90 percent of countries' climate commitments, known as Nationally Determined Contributions (NDCs), include the agricultural sectors - clearly demonstrating the fundamental contribution the sectors can bring. During the last United Nations Climate Change Conference countries took a landmark decision to do more to address the impacts of climate change on agriculture and food security. FAO is already supporting many countries to better integrate agriculture, forestry and fisheries in their climate actions. The best example has been through the recently approved Green Climate Fund project in Paraguay.

Rising temperatures, increased frequency of dry spells and drought, rising sea levels, changing precipitation patterns, increasing intensity of extreme weather events, and temperature variability, all have negative impacts on the productivity of crops, livestock, fisheries and forestry.

Climate change affects agriculture, and agriculture contributes to climate change. Taken together, agriculture, forestry and land-use change account for at least 1/5 of total greenhouse gas emissions, mainly from the conversion of forests to farmland and from livestock and crop production.

The greatest vulnerabilities to climate change impacts are in sub-Saharan Africa and South and South-east Asia.

Productivity declines would have serious implications for food security.

Millions of low-income people that are already highly food insecure, including smallholder producers, would be affected.



Significant improvements can be achieved with the introduction of sustainable agricultural practices driven by access to the right technologies to implement them.



26%

of all climate-related disaster damage and loss in developing countries, between 2005 and 2015, was in agriculture



30%

potential for reduction in baseline methane emissions from livestock production estimated by FAO



10%

of global GHG emissions are caused by deforestation and forest degradation

1/3

of all food produced is lost or wasted. This costs up to USD 2.6 trillion per year including USD 700 billion in environmental costs and USD 900 million in social costs

Laxmi Sunar wants to provide her daughter with the best possible education so that she can have a bright future. This is Laxmi's dream; it is the dream that all mothers have for their children. Today though, Laxmi's main concern is that her family has enough food to eat.

"In the past five years, climate change has affected us. Rain is uncertain. Crops have been damaged by fog and hail stones," says Laxmi. "The yields from our crops are a lot less and we don't have enough food."

With changing weather patterns and extreme events, Nepal has been hit hard by climate change. With little access to new farming methods or technologies, rural farmers feel these effects the most. Many of them cope with decreased yields by skipping meals, borrowing money at high interest rates or migrating.

"My husband has a big family. To support everyone he had to go abroad to find work. He thought going overseas to earn money would make me happy," Laxmi says.

Hoping that migrating to find work would make their lives better, Laxmi's husband took out a loan to go overseas. Now, most of the money he sends goes towards paying that debt.

Despite this effort, four years later their lives have not improved. Laxmi is taking care of their farm, livestock and young daughter. "My daily life is very hard, but I need to do all this to survive," she says.

FAO has rolled out a project in Nepal to help farmers adapt their farming to the realities of climate change.



Laxmi Sunar, a woman farmer and beneficiary of FAO's Climate Change Adaptation in Agriculture project in Nepal.
Photo: ©Chris Steele-Perkins/Magnum Photos for FAO

Laxmi is one of about 3 000 farmers who are learning new ways of cultivating crops and caring for livestock that can offset some of the impacts of climate change. Through the project, farmers are now testing different varieties of crops and using new methods to determine the best varieties to grow on their land. They are also learning when and how to feed their animals.

"If we grow our own vegetables, we don't have to buy them," she says. "The savings can then be used to pay for our daughter's education."

Through this project, FAO and GEF are helping hundreds of women farmers to improve their yields and incomes through climate-smart and sustainable agriculture. By investing in people's livelihoods, FAO is helping to make migration a choice.



The Global Framework on Water Scarcity in Agriculture under a changing climate (WASAG)

"We must produce more food with less water. The WASAG Global Framework will bring together key players from across the globe to design and implement integrated strategies to do just that and prevent water scarcity from setting back our ambitious vision of a future of peace and plenty for all."

Eduardo Mansur, Director, Land and Water Division, FAO

Young boy fetching water in a water-scarce region.

Photo: ©FAO



At least two-thirds of the global population, over 4 billion people, live with severe water scarcity for at least one month each year.





At least two-thirds of the global population, over 4 billion people, live with severe water scarcity for at least one month each year. And the situation is set to worsen as populations grow, economies develop, and the climate changes.

FAO Director-General José Graziano da Silva launched the Global Framework on Water Scarcity in Agriculture under a changing climate (WASAG) during COP22 in November 2016, in Marrakech, Morocco.

WASAG held its first stakeholders meeting in April 2017 in Rome with more than 100 institutions who discussed the importance of the agricultural sectors in coping with water scarcity for food security and climate change adaptation and mitigation.

The stakeholders have forged a WASAG Partnership—hosted by FAO—that brings together key players across the globe to tackle the challenge of using water better in agriculture to achieve the food security and water-related targets of the 2030 Agenda.



FAO Port State Measures Agreement (PSMA)

Sweden, the European Union, Norway, and the United States of America committed funding of over USD 10 million towards FAO's global capacity development programme to assist 31 developing countries and SIDS.

FAO deployed fish magnets to help Somali coastal communities find fish more easily.

Photo: ©FAO



2017 also marked the release of the first operational version of the FAO Global Record of Fishing Vessels, Refrigerated Transports Vessels and Supply Vessels





The FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSMA) was adopted by the FAO Conference in 2009 to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing through the implementation of robust port state measures.

The PSMA is the international community's tool to tackle IUU fishing, a challenge critical to safeguarding the ocean environment.

Having reached the 25 parties needed, the FAO Agreement is the first legally binding international instrument designed to combat IUU fishing. As of 31 December 2017, there were 52 Parties to the Agreement, including the EU.

As of December 2017, 47 States or regional economic integration organizations are Parties to the PSMA, including Pacific Island Forum Fisheries Agency (FFA) member countries Australia, New Zealand, Palau and Vanuatu.

The first meeting of the Parties to the PSMA and the first meeting of the Ad Hoc Working Group was held in Oslo, Norway, in 2017.

2017 also marked the release of the first operational version of the FAO Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record). The Global Record, currently being developed under the guidance of FAO's Committee on Fisheries and the Global Record Informal-Open Ended Technical and Advisory Working Group, is aimed at providing a single access point for information on vessels used for fishing and fishing-related activities with the primary objective of combating IUU fishing. The development of the Global Record is supported by the EU, Iceland, Spain, the United States of America, and Sweden.

In 2017, technical cooperation programmes (TCPs) in support of activities either specifically concerning the adoption and implementation of the PSMA or related to the broader context of combatting IUU fishing were being implemented in 33 developing countries and SIDS.

Also last year, Sweden, the EU, Norway, and the United States of America committed funds of more than USD 10 million towards FAO's global capacity development programme to assist 31 developing countries and SIDS in improving national policy and legislative frameworks; monitoring, control and surveillance enforcement institutions and systems; improving State performance; enhancing capacities to perform inspections in ports and take more effective action against persons and entities engaged in IUU fishing; and the implementation of market access measures, such as catch documentation and traceability schemes. Earmarked funding is also being provided to support the further development of the Global Record, a PSMA Capacity Development Portal to be hosted by FAO, and FAO's database on port state measures (PortLex).

Through these various instruments, tools and funding, FAO is playing a leading role in pursuing a core target of SDG 14, which calls for ending IUU fishing by 2020.



Agro-biodiversity conservation meets local economic development

Resource Partners:
Global Environment Facility (GEF) and other co-financing partners

“Even with a great plan for protecting and improving landscapes, we cannot do so without farmers. As their livelihoods are at stake, farmers themselves should speak up and send out this message. Their voices must be heard.”

Eri Otsu, Director, Kyushu Biomass Forum is a key player in the designation of GIAHS on Kyushu Island, Japan

The forest, village, terrace and river compose the typical ecological landscape of the Hani Rice Terraces. The Hani People, their indigenous agricultural technologies, and their traditional customs for environment protection and conservation all show a harmonious relationship between human and nature.

Photo: ©FAO/Min Qingwen



Globally Important Agricultural Heritage Systems (GIAHS) was created in 2002 as a Global Partnership Initiative, hosted at FAO headquarters in Rome. Its main goal is to identify and safeguard remarkable traditional agricultural systems, rich in agro-biodiversity of global value.

These systems were maintained and transmitted from one generation to the next, thanks to the interaction between agriculture, culture, and sustainable management of natural resources and through a holistic approach based on a harmonious relationship between human needs and nature conservation.

With the arrival of the Global GEF project 'Conservation and Adaptive Management of Globally Important Agricultural Heritage Systems (GIAHS)', FAO initiated concrete activities through the establishment of a better performing mechanism, bringing an enormous impact for GIAHS in moving from a mere concept to concrete action-oriented activities.

Globally Important Agricultural Heritage Systems

Sites designated in 2017

China

Diebu Zhagana Agriculture-Forestry-Animal Husbandry Composite System

Zhejiang Huzhou Mulberry-dyke and Fish-pond System

Japan

Nishi-Awa Steep Slope Land Agriculture System

Osaki Kodo's Traditional Water Management System for Sustainable Paddy Agriculture

Mexico

Chinampas Agricultural System in Mexico City

Republic of Korea

Traditional Hadong Tea Agrosystem in Hwagae-myeon

Spain

Malaga Raisin Production System in Axarquia

Salt production system of Añana

Sri Lanka

The Cascaded Tank-Village System in the Dry Zone of Sri Lanka



Soil Management

The Voluntary Guidelines for Sustainable Soil Management (VGSSM)

The VGSSM are a normative tool that will help boost soil health at national, regional and global levels.

Woman of the Batwa community in Burundi planting potatoes while others are tilling the soil in preparation.

Photo: ©Giulio Napolitano



The VGSSM constitute a substantial support for guiding national governments on policy development related to soil governance and provide technical and policy recommendations on how sustainable soil management can be achieved.

In 2017, FAO

Disseminated

the VGSSM at the national, regional and international levels including training courses and workshops and events on soil issues including at the CFS44, EU2017, COP13 and EC info point.

Advocated

through the ITPS the inclusion of the VGSSM in the work plans of other panels such as the SPI of the UNCCD, IPCC, IPBES and UNFCCC.



Organized

the Global Symposium on Soil Organic Carbon (GSOC17), the first of a series of meetings organized by the Global Soil Partnership to tackle threats identified in the Status of the World's Soil Resources.

Land Resource Planning (LRP) toolbox for sustainable land management

Growing challenges of population growth, demands on limited resources, land degradation, biodiversity loss, and climate change all call for a rational use of resources to enhance productivity and maintain resilient ecosystems.

Updated land resource planning (LRP) tools that integrate all sectors, make better use of technology, introduce SLM practices and follow a people-centered multiscale approach, are urgently needed to tackle these challenges.

FAO's LRP Toolbox is a freely accessible online source for stakeholders involved in land use planning.

The goal of the Toolbox is to inform potential users about existing tools, facilitate access to the tools, and assist with the selection of appropriate tools for interventions at different levels, in different regions, and in different sectors.

The LRP tools can help decision-makers and land users put sustainable land management into practice to augment land restoration, transforming development from unsustainable to sustainable in support of the SDGs.

The GSOCmap - unlocking soil's potential to mitigate and adapt to climate change

Poor soil management practices cause soils to lose organic carbon and release greenhouse gases. Maintaining and increasing soil carbon stocks, as a norm, would allow us to unlock the soil's potential to mitigate and adapt to changing climate.

The Global Soil Organic Carbon Map (GSOCmap) was launched on World Soil Day 2017. It represents the first ever global soil organic carbon assessment produced through a country-driven approach in which countries developed their own maps under agreed specifications.

GSP Secretariat trained 150 experts from 110 countries in digital soil organic carbon mapping. The trainings were supported with the Soil Organic Carbon Mapping Cookbook, a step-by-step guide for digital soil mapping.

The GSOCmap and the process also support the SDG Indicator 15.3.1 and directly contribute to the implementation of the VGSSM.

FAO and EU, AU Commission and ACP

Partnering for action against desertification for Africa's Great Green Wall

Africa's Great Green Wall (GGW) is a game changer for Africa, given its potential to address climate change adaptation and mitigation, eradicate poverty, end hunger and boost food security and nutrition.

Desertification and land degradation are serious challenges that lead to hunger and poverty and are the root of many conflicts. Recent successes, however, show that these problems are not insurmountable.

In partnership with the EU, the African Union Commission and the Secretariat of the African, Caribbean and Pacific Group of States (ACP), FAO has supported the implementation of the GGW in six countries—Burkina Faso, Ethiopia, Gambia, Niger, Nigeria and Senegal—under a project known as Action Against Desertification (AAD).

As a result, FAO has developed a comprehensive approach for large-scale dryland restoration in support of the GGW in which natural regeneration is favored and assisted where possible. Alternatively, high quality seeds and nursery produced seedlings of well-adapted, diverse native woody and fodder species are collected and planted.

As of 2017, a total of 12 000 ha of degraded lands have been planted across ten regions in the AAD target GGW countries to improve land productivity for small scale farming. FAO is sustaining the impact of these interventions by helping local communities to be fully independent in carrying out all technical activities. This approach is fast becoming a model as evidenced by its adoption and implementation by several hundreds of village communities around the world, and its focus on involving women and youth.

EU, ACP, CIFOR, CIRAD and WCS

Partnering with FAO for sustainable wildlife management

A 2017 initiative launched by the ACP and funded by the EDF, the 'Sustainable Wildlife Management Project' aims to reduce the hunting of wildlife to sustainable levels, protect endangered wildlife species, conserve biodiversity, maintain the essential ecological roles of wildlife within forested and savanna ecosystems, and secure stocks and flows of food essential to some of the poorest and most marginalized people on earth.

Recipient countries are Chad, Democratic Republic of the Congo, Gabon, Guyana, Madagascar, Mali, Senegal, Sudan, Papua New Guinea, Zimbabwe, and Zambia.

The project aspires to set up policies and regulations to enable sustainable use of species resilient to hunting and fishing, and the conservation of protected and threatened species; to manage wildlife and fish populations sustainably; to increase livestock production and consumption to meet the nutritional needs of urban and rural people; to reduce wild meat demand and consumption to sustainable levels; to disseminate training and capitalization products; and to share knowledge about the development of public policies that reconcile conservation and food security issues.



On the way from Djibo to Dori in Burkina Faso, young farmers plough soft ground after the rain.

Photo: ©FAO/Giulio Napolitano

International Plant Protection Convention



**Food and Agriculture
Organization of the
United Nations**

The International Plant Protection Convention (IPPC) is an international treaty which works to prevent the spread and introduction of pests of plants and plant products, and to promote appropriate measures for their control.

2017 has been a milestone for the IPPC as the 65th Anniversary of the Convention and the first time the IPPC implemented, as its annual theme, "Plant Health and Trade Facilitation."

The IPPC extends beyond the protection of cultivated plants to the protection of natural flora and plant products. It takes into consideration both direct and indirect damage by pests, so it includes weeds. It also covers vehicles, aircraft and vessels, containers, storage places, soil and other objects or material that can harbor or spread pests.

As of 2017 the Convention had 183 parties, which included 180 United Nations Member Nations, the Cook Islands, Niue, and the EU. The Convention is recognized by the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (the SPS Agreement) as the only international standard setting body for plant health.

All EU Member States have signed the International Plant Protection Convention, an international treaty.



**International Plant
Protection Convention**

The Convention provides a framework and a forum for international cooperation, harmonization and technical exchange between contracting parties.

Its implementation involves collaboration by National Plant Protection Organizations, which are official services established by governments to discharge the functions specified by the IPPC, and Regional Plant Protection Organizations, which can act as coordinating bodies at a regional level to achieve the objectives of the IPPC.

2017 was a successful year for the IPPC National Reporting Obligations Programme (NRO). It was the third stable year in a row during which countries supplied over 240 new NRO reports through the International Phytosanitary Portal.

Also in 2017 significant progress was made on the ePhyto (Electronic Phytosanitary Certification) project, including the finalization of the requirements for the development of the hub and generic ePhyto national system (GeNS) and the launch of the ePhyto Hub Pilot.

22 International Standards for Phytosanitary Measures (ISPMs) were adopted in 2017—the highest number of standards ever adopted in a year.



Agricultural practices applied throughout the production process and packaging of pineapple under the supervision of the State Phytosanitary Service in Costa Rica.

Photo: ©FAO/Ezequiel Becerra

Rehabilitation of seed systems in 2017

FAO supports the use of seed system security assessment methodologies in countries that are affected by, or prone to, natural disasters, conflict or both.

In 2017, FAO carried out seed security assessments in collaboration with partners in the Democratic Republic of the Congo, Lesotho, Nigeria and South Sudan. These assessments guide immediate responses and set out seed sector development strategies which reflect national contexts.

FAO also supported the response to emergencies arising from natural hazards such as drought, and from complex crises such as war or refugee displacement—emergencies which severely affected the food security and nutrition of millions of smallholders.

Finally, FAO promotes input trade fairs (ITFs) to improve access to seeds and planting materials in emergencies, an approach that strengthens local markets, as well as farmers' agency in choosing what to purchase to help their recovery. In 2017, ITFs took place in five countries, helping 140 000 households of smallholders access seeds worth USD 4 million.

Defending crop diversity in the face of climate change

FAO's role in genetic resources and biodiversity

In the last century, vast numbers of food crop diversity disappeared forever. This has resulted in fewer available resources for growing crops. In addition, changing global weather patterns mean that farmers cannot rely on the same crops they used to.

Climate change poses what is arguably one of the most serious threats to agriculture, resulting in less predictable harvests and the emergence of new pests and diseases, undermining rural development and placing greater pressures on the most vulnerable farming communities.

The diversity of genetic resources for food and agriculture plays a crucial role in meeting human food and nutritional needs.

FAO contributes to sustaining biodiversity through the work of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the Commission on Genetic Resources for Food and Agriculture (CGRFA).



+ Last year, FAO procured crop seed and planting materials worth USD 30 million to distribute to farmers in 82 countries.



A school near Lushoto, Tanzania, where children learn reforestation techniques.

Photo: ©Georgina-Smith

The International Treaty on Plant Genetic Resources for Food and Agriculture



In 2017, thanks to major donors like Australia, Italy, Norway, Sweden and Switzerland, the fourth project cycle of the Treaty's Benefit-sharing Fund was launched with a renewed focus on partnership and gender equality.

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) is an international instrument that farmers and plant breeders rely on to access the raw genetic material needed to develop new crop varieties, including those resilient to climate change.

The Treaty's objectives focus on the conservation and sustainable use of all plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use.

2017 marked an important milestone for ITPGRFA with several new Contracting Parties, such as the United States of America, joining. The more countries that support efforts for the global collection of plant genetic resources, the better for all farmers around the world.

Significant results were also achieved at the farmer level, with the support of Contracting Parties to the Treaty's Benefit-sharing Fund. By the end of 2017, almost a million people around the world, mostly smallholder farmers, had benefited from projects since the Fund began in 2009.

Farmers and scientists, including young scientists, continue to be trained on how to conserve, manage and use plant genetic diversity. New technologies are constantly being developed and made available to help discover and breed crop traits. Farmers have been able to adapt their crops to the effects of climate change, pests and diseases which has had immediate benefits for their livelihoods, and longer-term benefits for world food security.

ITPGRFA is the first legally binding international agreement to recognize Farmers' Rights. Its implementation supports the 2030 Agenda and works to guarantee food security through the conservation, exchange, and sustainable use of plant genetic resources.

As part of the Treaty, a Multilateral System allows farmers and breeders access to a wide range of seeds to adapt agriculture to our changing needs. By the end of 2017, more than 4 million samples of genetic diversity had been exchanged since the system began. Samples were exchanged particularly from the 64 crops and forages which make up 80 percent of the world's calorific intake.

Community seed banks to ensure food security and combat climate change

A FAO Plant Treaty Benefit-sharing Fund project, supported by the EC, is expected to benefit at least 10 000 resource poor farmers through the establishment of four community conservation systems as a means to increase access to crop diversity and respond to farmers' needs.

The Kiziba community seedbank was established in 2008 in Rwanda and currently stores 70 varieties of beans serving over 1 000 farmers. It is now being used as a model learning platform for the creation of four community seedbanks in Kenya, Uganda and Tanzania as part of a FAO Treaty Benefit-sharing Fund project.

Through the project, farmers' seed fairs and knowledge exchange forums have been organized as learning platforms for farmers, aiming to target women farmers in particular.

During an exchange visit, the Kiziba farmers shared their knowledge with their guests from the Hoima district in Uganda including lessons learned and best practices on their local seed varieties, good practices for seed production, postharvest handling and storage, community seedbank management and community seed banking.

The farmers from Hoima applauded the community seedbank and plan to replicate the model in their own districts.

**+
“Sharing the seeds freely among the group promotes unity at the community level.”**

Eve Kugonza, farmer group leader, Hoima district in Uganda



In the Mbozi district of Tanzania, husband and wife farmers explain the benefits reaped from cultivating beans.

Photo: ©Georgina Smith/(CIAT)

Commission on Genetic Resources for Food and Agriculture

Biodiversity for food security and nutrition

Maintaining biodiversity for food and agriculture is a global responsibility and international cooperative efforts are needed to halt genetic erosion

Biodiversity, and in particular genetic diversity, is being lost at an alarming rate.

Biodiversity for food and agriculture is indispensable, from the insects that pollinate plants to the microscopic bacteria used to make cheese, from the diverse livestock breeds raised in harsh environments to the thousands of varieties of crops and the fish in the seas that sustain food security worldwide. Biodiversity is essential for achieving nutritional diversity in diets – a diverse food basket – which is critical for human health and development.

Threats to genetic diversity include the development and use of only a few commercial crop varieties and breeds of livestock, thereby neglecting locally adapted varieties and breeds and their important characteristics; the effects of increasing human population pressure and changing consumption habits; the loss of natural habitats and environmental degradation, including deforestation, desertification and river-basin modification; and ecosystem impacts from non-native species and climate change.

With climate change, the conservation and sustainable use of genetic diversity has become more critical than ever. Plants and animals that are genetically tolerant to high temperatures or droughts, or resistant to pests and diseases, are of great importance in climate change adaptation.

Maintaining and using a wide range of diversity – both diversity among species and genetic diversity within species – means maintaining capacity to respond to future challenges.

The Commission on Genetic Resources for Food and Agriculture (CGRFA) is the only international forum that specifically deals with all components of biodiversity for food and agriculture such as plants, animals, aquatic species, trees and other woody species, micro-organisms and invertebrates.

The CGRFA promotes a world without hunger by fostering the use and development of the whole portfolio of biodiversity important to food security and rural poverty alleviation.

The challenge of conserving and sustainably using genetic resources extends across all continents and ecosystems and demands a broad-based response.

Of the over 80 000 tree species, fewer than 1% have been studied for potential use.

Waters, forests, herds, crops, micro-organisms and insects

Biodiversity for food and agriculture

In 2017 FAO, under the guidance of the CGRFA, prepared a draft report on the State of the World's Biodiversity for Food and Agriculture, the first comprehensive and cross-sectoral analysis of the biodiversity in and around production systems that provide ecosystem services for food and agriculture.

Aquatic genetic resources

In 2018 FAO, under the guidance of the CGRFA, prepared a draft report on the State of the World's Aquatic Genetic Resources for Food and Agriculture, the first comprehensive analysis of farmed species and their wild relatives in areas within national jurisdiction. The Report elucidates the rich diversity of aquatic species farmed around the globe and the importance for the people who depend on them, and provides important additional detail to the aquaculture statistics recorded by FAO. The report will further facilitate the implementation of articles of the FAO Code of Conduct for Responsible Fisheries, and other policy measures, as appropriate, thereby supporting the sustainable use and responsible management of aquatic genetic resources for food and agriculture.

Forest genetic resources

FAO continued to support countries in the implementation of The Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources. In this regard, FAO also continued its collaboration with regional networks on forest genetic resources and relevant international organizations. Furthermore, in 2017, the CGRFA adopted targets, indicators and verifiers for forest genetic resources that are being used as assessment tools for monitoring the implementation of the Global Plan of Action.

Animal genetic resources

FAO continued to support the implementation of the Global Plan of Action for Animal Genetic Resources —a framework for the effective management of the world's livestock biodiversity —by facilitating global, regional and country collaboration, supporting the convening of intergovernmental meetings, and further developing the Domestic Animal Diversity Information System, the global database of livestock breeds that serves for SDG Target 2.5 reporting.

Plant genetic resources

FAO, through the continued implementation of field activities and the convening of its member countries and partners to negotiate and agree on policies, guidelines and instruments, supported the implementation of the Second Global Plan of Action for Plant Genetic Resources for Food and Agriculture (Second GPA). In particular, it published the Voluntary guidelines for national level conservation of crop wild relatives and wild food plants that were endorsed by the CGRFA. Also, it developed further the World Information and Early Warning System (WIEWS), the Reporting System for monitoring the implementations of the Second GPA and the SDG 2.5.



Photo: ©Roy Kaltschmidt

Vendor selling aquatic organisms harvested from rice fields and the Mekong river in Lao PDR.



Reduce rural poverty

Most of the world's poor live in rural areas

In 2017, FAO continued its track record of success by promoting and implementing solutions to help rural poor everywhere gain access to productive resources, decent employment and social protection.

In recent decades, large segments of the rural poor have been lifted out of poverty. In 1993, 1.86 billion people (33.5 percent of the population) lived below the USD 1.90 poverty line. By 2013, this number had dropped to 767 million people (or 10.7 percent of the population).

Still, rural poverty remains widespread—especially in South Asia and Africa. FAO continues to prioritize improvements in living conditions for small scale producers, collective action, innovations in both on- and off-farm employment opportunities, social protection coverage and ways for rural communities to cope with risks.

Gender equality is a precondition for prosperity. Rural women are a driving force against hunger, malnutrition and poverty.

Women's engagement is necessary to achieve all the SDGs. FAO's policy interventions therefore strive to empower rural women and help close the gender gap in agriculture and rural labor markets.

FAO supports countries to achieve the SDGs, in particular SDGs 1, 2, 5, 8, 10 and 14, in line with its mandate to eradicate poverty and hunger and conserve natural resources.

To do this, FAO advances evidence-based policies and investments that help countries and their institutions set up national development programmes that create lasting benefits for rural people, their families and communities.



FAO Bolivia supports family farmers in the Bolivian Altiplano to strengthen their food security.

Photo: ©FAO/Bolivia



Reduce rural poverty



112 / BREAKING THE POVERTY CYCLE IN ZAMBIA WITH SOCIAL CASH TRANSFERS

Zambia's Social Cash Transfer (SCT) Programme works to reduce extreme poverty. The national social protection programme, funded by the Government of Zambia, has improved food security, child wellbeing, and agricultural productivity. By the end of last year, it reached 590 000 households, led to a 36 percent increase in worked land, and a reduction of poverty by 5.4 percent.



114 / INNOVATIVE APPROACHES TO RURAL YOUTH MIGRATION

FAO's Rural Youth Migration project (RYM) aims to enhance the positive impacts of migration, while mitigating negative effects and root causes. In 2017, 50 micro projects benefited 550 youth through job creation in Tunisia. In Ethiopia, the Regional Bureaus of Agriculture trained 350 youth in horticulture, livestock production, fishing, and beekeeping.



116 / DIMITRA CLUBS - FAO FLAGSHIP APPROACH FOR GENDER-RESPONSIVE SUSTAINABLE RESULTS

In 2017, around 1.6 million rural women and men were impacted positively by FAO Dimitra Clubs in Burundi, Central African Republic, Democratic Republic of the Congo, Ghana, Mali, Niger and Senegal. As a community mobilization and empowerment tool, the Clubs have improved rural livelihoods, enhanced rural people's participation in community life, transformed gender relations, and strengthened farmer-based organizations and women's leadership. Through dialogue and collective action, and the use of ICTs and youth networks, new partnerships have formed, together with numerous requests to implement the approach.



118 / INTEGRATED COUNTRY APPROACH TO DECENT RURAL EMPLOYMENT

The FAO Integrated Country Approach (ICA) works to create decent rural employment (DRE) for youth. It helps ensure rural-friendly labour services, gender equality, information and communication technologies, and social entrepreneurship by promoting country-level policies. Pilot models have helped over 700 youth expand skills, and gain access employment services, land and finance. ICA has recently been implemented in Guatemala, Senegal, and Uganda and previously in Malawi and the United Republic of Tanzania.



120 / SCALING UP SOCIAL PROTECTION IN LESOTHO IN THE WAKE OF EL NIÑO

In the wake of the El Niño-induced drought in 2015, FAO supported the expansion of the emergency response, by complementing the Child Grant Programme (CGP) as well as humanitarian aid with a food and nutrition pack.



122 / WORKING TOGETHER TO ACCELERATE RESULTS FOR RURAL WOMEN

The Joint Programme of FAO, IFAD, WFP and UN Women on 'Accelerating Progress towards the Economic Empowerment of Rural Women' (JP RWEE) reduces rural poverty by improving women's livelihoods and rights through sustainable development. JP RWEE has already helped 41 000 women and 261 000 household members receive access to both financial services and to improved agricultural technology and training in Ethiopia, Guatemala, Kyrgyzstan, Liberia, Nepal, Niger and Rwanda.



124 / FOREST FARM FACILITY IN VIET NAM, GUATEMALA, BOLIVIA AND GAMBIA

The Forest Farm Facility (FFF) funds partnership agreements and small grants to build capacity at local, national, regional and international levels. Through FFF, Indigenous Peoples' Forest-and-farm producer organizations gain technical, business, and advocacy skills to improve food security, provide alternatives to economic migration, adapt to and mitigate the effects of climate change, and reduce rural poverty. FFF covers over 40 million members in 10 partner countries.



126 / AGRIBUSINESS SOLUTIONS TO DISTRESS YOUTH MIGRATION

Migration is often considered an attractive alternative to rural poverty, particularly by youth. The FAO project 'Creating Agribusiness Employment Opportunities for Youth through Sustainable Aquaculture Systems and Cassava Value Chains in West Africa' builds on local opportunities to improve food security, increase jobs and reduce migration rates. As of 2017 FAO reached youth in Burkina Faso, Côte d'Ivoire, Ghana, Guinea-Bissau, Nigeria and Senegal.



Breaking the poverty cycle in Zambia with Social Cash Transfers

Beneficiaries Investing In their own livelihoods

Resource Partner: Zambia

SDGs:

1 2

"With the money I receive every month, I moved into a new house with both children, bought them school uniforms and can pay for their school fees."

Ruth Simutombo, Ng'andu Village, Kazungula, Zambia

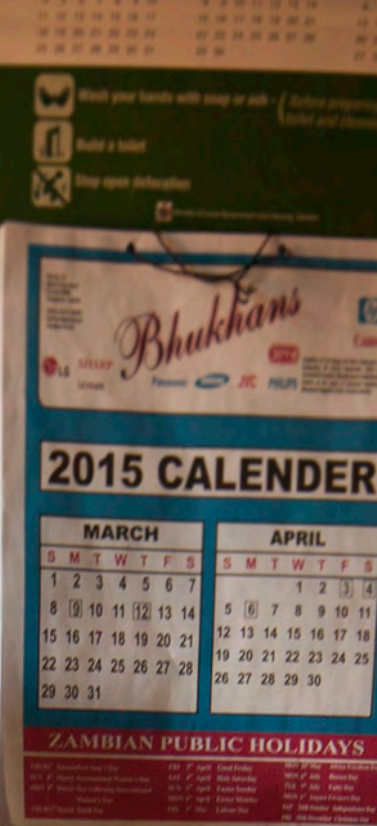
Ruth Simutombo, beneficiary of the Social Cash Transfer Programme in Ng'andu, Zambia sits with her son and nephew at their school.

Photo: ©FAO/Ivan Grifi

25%

The Social Cash Transfer produced an income multiplier at the household level—the increase in per capita consumption induced by the programme was 25 percent greater than the transfer itself.





What started as a resource partner-driven pilot for 1 200 households is now a domestically financed programme implemented nationwide. By end of 2017, Zambia's Social Cash Transfer (SCT) Programme had reached 590 000 households across Zambia with plans to reach over 700 000 families this year.

Implemented by the Ministry of Community Development, Mother and Child Health, the main objective of the SCT is to reduce extreme poverty and prevent its transmission across generations.

Ruth Simutombo is a twenty-eight-year-old beneficiary of SCT programme. She lives with her son Patrick and her sister's son, Sichimwa, in Ng'andu Village in the Southern Province of Kazungula where the programme began 15 years ago.

To be eligible, a household must meet specific criteria related to residence location, proportion of household fit to work, and overall welfare levels.

Ruth's story is an example of the life-changing impacts of cash transfers in Zambia where the Government, through the SCT, targets labor-constrained and extremely poor households.

Ruth is also part of a training programme that teaches families how to save and invest. Thanks to her new skills, she has opened a small shop in the local market that sells fruit, soft drinks and vegetables.

Results from impact evaluations carried out by FAO, UNICEF and American Institutes for Research, show that the SCT programme had positive impacts on food security, child wellbeing, living conditions, and productivity and ownership of productive assets.

In 2017 the SCT programme led to a 36 percent increase in the area of worked land as well as an increase in the use of agricultural inputs, including seeds, fertilizers and hired labor which led to a similar increase in the value of overall production—products that were primarily sold in markets rather than consumed on farm.

Evidence also points to a 21 percent increase in the share of households owning livestock such as goats, cows and chickens last year.

By highlighting the impact of social cash transfers on human capital and productivity, these findings challenge perceptions that cash transfers create dependency, and show the reverse.

Beneficiaries are not just passive recipients of aid but rather use the money received to invest and improve their livelihoods.

As a result, cash transfer programmes are increasingly being recognized by governments as one of the most flexible and effective instruments for addressing the needs of poor rural populations and their coverage is being expanded.

"I used to live in dire conditions. Now, with the money I receive every month, I moved into a new house with both children, bought them school uniforms and can pay for their school fees," says Ruth.

"My son Patrick wants to become a lawyer and my nephew Sichimwa, a teacher. Now I can help make those dreams into reality."



Innovative approaches to rural youth migration

FAO supports agripreneurs in Tunisia and Ethiopia

Resource Partner:
Italy (AICS)

SDGs:

1 2 5 8

Regional Initiative:
RIN2 - Small-scale agriculture for inclusive development in the Near East and North Africa

"I decided to stay in my country and on my land."

Said Touati, university graduate and sheep farm business owner, Tunisia

Said Touati, a beneficiary of the RYM project with his mother in El Kef-Tejerouine, Tunisia.

Photo: ©Nikos Economopoulos



In Tunisia, 50 micro projects benefited some 550 youth, over half of whom are young women, through direct and indirect job creation.

550 Youth





In 2017 FAO's Rural Youth Migration project (RYM) provided technical assistance to agripreneurs, boosting their financial literacy and teaching them agricultural skills.

Participants are youth from rural areas in Tunisia and Ethiopia, two countries experiencing high levels of emigration and acute distress economic mobility.

RYM aims to enhance the positive impact of rural youth out-migration on food security and agricultural development in countries of origin, while mitigating the negative effects and the root causes of migration.

Despite holding a university degree in mathematics, Said Touati was unemployed in Tunisia, and lacked the resources to start a business. At one point, he considered migrating.

Through the RYM project, he learned how to run an organic sheep farm and received a small herd of sheep. "I decided to stay in my country and my land. I'd rather not leave my mother alone."

Rural youth in Tunisia and Ethiopia not only face the specter of high levels of unemployment, but also barriers to launching a new business, including limited access to credit, land, and technical training. Too often out-migration seems to be the only viable option.

Yimam Ali, a twenty-eight year old from Ethiopia, had migrated to Saudi Arabia in search of work, but later returned to Ethiopia where, together with 15 other youth, he joined an RYM horticulture initiative.

Yimam's group received training on gardening and other agricultural techniques along with seeds and tools. "I'm happy to work in my own country. I'm working to change my life," says Yimam.

The results, as of 2017, speak for themselves.

There was an 80 percent reduction in propensity of project beneficiaries to migrate, based on self-assessments, and an 85 percent retention rate in employment for project beneficiaries by the end of the project.

In Tunisia, 50 projects benefited some 550 youth—over half young women—with 143 jobs created directly; a further 200 jobs created indirectly.

In Ethiopia, over 350 youth in the Amhara and Oromia regions organized across 31 youth groups were trained by the Regional Bureaus of Agriculture and received in-kind contributions in the form of agricultural inputs.

The RYM approach can be replicated in other countries, while allowing for flexibility to adapt to diverse needs and complex priorities of migration.

In a first for FAO, the Tunisian project piloted solutions to engage the Tunisian diaspora to invest in agricultural projects with their families and communities of origin.

As of 2017 more than 50 percent of Tunisian RYM projects have a formalized agreement for financial or in-kind support by a member of the country's diaspora.

RYM is indeed innovative because it brings together the issues of migration, employment and agriculture at policy levels and is also a concrete example of capacity development at the country level.

Implemented under the auspices of the Regional Initiative on Small-Scale Family Farming, RYM benefited from learning exchanges between countries. It has given rise to new United Nations agency partnerships, including policy collaboration between IOM, UNDP and ILO in Tunisia, an example of successful inter-agency collaboration towards the attainment of SDGs 2 and 8.



Dimitra Clubs FAO flagship approach for gender-responsive sustainable results

Transforming gender roles for
food security and nutrition

Resource Partners: Belgium, Netherlands, Sweden, Switzerland through FMM and several other partners including Canada, European Union, Norway through broader emergency and development projects

SDGs:

1 2 3 5 6 10 13 15 16

Regional Initiative:

RIF1-Africa's Commitment to End Hunger by 2025
RIF3-Building resilience in Africa's drylands

"Thanks to the club we've increased our incomes and acquired new skills."

Rebecca Bombali, Dimitra Club member, Democratic Republic of the Congo

Dimitra Club members in the Democratic Republic of the Congo.

Photo: ©FAO/Christiane Monsieur



In 2017 over 2 000 Dimitra Clubs were active, with some 60 000 members of which two-thirds were women. An estimated 1.6 million rural people benefit from the clubs' achievements in Burundi, the Democratic Republic of the Congo, Ghana, Mali, Niger, Senegal, and soon in the Central African Republic.





FAO Dimitra Clubs are groups of women and men who gather and discuss how to trigger social and economic transformations in their communities. This approach improves access to information in rural and high-poverty areas with a focus on people's community mobilization, and gender equality.

From boosting rural people's participation in community life and decision-making to strengthening rural organizations, and women's and youth's leadership, the Dimitra Clubs induce a wide spectrum of impacts and results in several areas of FAO work, such as agriculture, food security and nutrition, climate adaptation, and resilience.

An example in the Democratic Republic of the Congo (DRC)

Tshopo Province in the northeastern DRC is covered by rainforest and watered by the Congo River and its tributaries. Across this vast territory, fishing is a key economic activity, traditionally controlled by men.

"For the first time men-women equality and the division of responsibility were discussed," says Henri, club member in the village of Isangi, "and we've realized women can also play a proactive role in fishing."

Thanks to women's and men's participation within the Dimitra Clubs, behaviours do gradually change, and today women carry out tasks that were previously attributed to men, like fishing.

A redefinition of women's roles has increased fish catches improving people's livelihoods. "Thanks to the club we've increased our incomes and acquired new skills," says Rebecca Bombali, a fisher and club member in Isangi.

Through community radio, the clubs discover what other clubs do, talk about it, and build on these experiences, ultimately redefining their daily lives and shaping their futures. In the DRC last year, 11 community radio stations received training on gender in radio production to share Dimitra Clubs' experiences over the airwaves.

The success of Dimitra Clubs, also made possible by the support of traditional chiefs and local authorities, has led to a multiplication of partnerships and requests to implement or scale-up the approach, including in the framework of United Nations joint programmes, such as the RWEE in Niger.

During 2017, the catalytic quality of the project led 11 new FAO initiatives to request technical support to use FAO Dimitra Clubs. This will translate in 2018 into some 1 200 new Dimitra Clubs (an estimated 60 in Central African Republic; 250 in Senegal; 400 in Niger; and 500 in DRC), improving the livelihoods of almost one million rural women and men.

Other projects in the pipeline include a Dimitra Club component in GEF-funded programmes in the forestry sector, to be implemented in DRC and Central African Republic, and resilience programmes in Mali and Niger.

This is only the beginning.

Dimitra Clubs are widely recognized as a powerful approach to achieve gender-responsive sustainable results in all areas of rural development. A female farmer and Dimitra Club leader from Niger says, "Today, the Dimitra Club belongs to us. It's ours and it benefits the entire community!"



Integrated country approach to decent rural employment

Cultivating business opportunities for youth in Guatemala

Resource Partners: Belgium, Netherlands, Sweden, Switzerland through FMM

SDGs:

1 2 8

Regional Initiative:

RAF –R1, R2: Africa's Commitment to End Hunger by 2025, Sustainable Production Intensification and Value Chain Development in Africa, RI1-RLC: Support to the Hunger-Free Latin America and Caribbean Initiative

"The ICA programme is generating a change in my life and in the life of my community."

María Chum Pastor, a young farmer from Climentoro, Aguacatán, Guatemala

María Chum Pastor with another ICA beneficiary - Climentoro, in the municipality of Aguacatán, Guatemala.

Photo: ©FAO/Luis Sánchez Díaz



700 youth connected



As of 2017, ICA has helped over 700 rural youth to expand their skills, access employment services, connect to networks, and access land and finance.





In Guatemala, most youth hold precarious jobs in the informal rural economy earning half the national minimum wage. Often this leaves them no choice but to migrate, to urban areas or abroad, in an attempt to earn a living wage.

"Everyone migrates: young boys and girls, young women and even entire families," explains María Chum Pastor, a 26-year-old farmer from Climentoro, in the municipality of Aguacatán.

FAO's challenge is to ensure that rural development creates decent and productive employment opportunities for people aged 15 to 35 who are unemployed, underemployed or under precarious employment.

The Integrated Country Approach (ICA) for decent rural employment (DRE) is a FAO flagship programme for country-level policy support to address these difficulties.

As of 2017 the ICA has been implemented in two different phases in five countries in Sub-Saharan Africa and Latin America. It aims to develop rural-friendly labor services, promote the use of ICTs, and foster social entrepreneurship.

The latest phase of the ICA implemented in Guatemala, Senegal, and Uganda was built on the lessons learned from the previous phase in Malawi and the United Republic of Tanzania, and was completed in December 2017.

By the project's close, more than 2 000 people had participated in ICA-promoted high visibility dialogues and market fairs.

One of the ICA initiatives implemented in Guatemala was La Factoria de trabajo, a business laboratory helping youth from migration-prone areas start up community-centered businesses.

By the end of 2017, 36 out of the 60 youth trained had established solid processes in their communities; 20 had obtained municipal and other support for accessing land; 10 had accessed some financial resources, and another, 20 had obtained technical support.

Thanks to La Factoria, María, together with her community, designed a multi-sectorial business project on cattle rearing, and the production and commercialization of cheese, potatoes and green vegetables, and organic fertilizers.

This enabled her to boost her family's subsistence farming, create a cooperative, and help set up 10 to 15 microenterprises in her community.

FAO is collaborating with the Ministry of Agriculture in Guatemala in the development of an internet platform linked to a mobile app to raise the visibility of initiatives like María's. This will enable new networks of young entrepreneurs to access technical support and financial resources, including through crowd funding, remittances from Guatemalans abroad, and microcredits.

La Factoría, as a training approach, can be replicated easily. FAO is currently working with public and private stakeholders to identify innovative solutions for the next, most difficult steps: leveraging investment capital and formalizing the businesses.

In the countries where ICA has been implemented, its pilot models have helped over 700 rural youth to expand their skills, access employment services, connect to networks, and access land and finance, with gender balance guaranteed across training opportunities and in the pilots.



Scaling up social protection in Lesotho in the wake of El Niño

From protection to investment

Resource Partner:
European Commission (DG ECHO)

SDGs:

1 2

Regional Initiative:
RIF3 - Building resilience in Africa's drylands

"My keyhole garden helps me to grow my vegetable seedlings faster."

Matabello Fokotsane,
home gardener and
grandmother from Lesotho



2017 marked a 37 percent increase in birth registration in Lesotho, an anticipated effect of the programme, which requires beneficiary children to possess a birth certificate within six months of enrollment.



37%

Beneficiaries of the CGP programme.

Photo: ©FAO/Cristiano Civitillow



The Child Grant Programme (CGP) provides cash transfers to poor rural households in Lesotho for childcare needs.

Supporting just over 1 000 households a decade ago, in 2017 it had delivered a predictable quarterly cash transfer to over 26 000 households across the country, reaching some 80 000 children below the age of 18.

The CGP has grown from a small resource partner-supported pilot, into a national and government run intervention, an example of close collaboration between government structures and FAO technical and operational support.

The primary objective of the CGP is to improve the living standards of orphans and other vulnerable children (OVC) to reduce malnutrition, improve health, and boost school enrollment among OVCs.

High levels of poverty and HIV AIDS combined with climate change and unsustainable land management practices are among the structural challenges faced by Lesotho, where 33 percent of children under five were stunted and over 50 percent suffered from anemia in 2017.

HIV AIDS poses a direct threat to household food security as it tends to affect the most productive family members. In 2017, more than 350 000 children were classified as orphans in Lesotho—almost 20 percent of the population—many of whom were cared for by older siblings or grandparents.

Sixty-four-year old grandmother Matabello Fokotsane heads her household. “My keyhole garden helps me to grow my vegetable seedlings faster, and then I transfer them to other parts of my garden,” she says.

As a result of cash transfers and training under the CGP and her own efforts, Matabello has been able to use home gardening techniques such as a keyhole garden, defined as a round, raised garden supported by stones, filled with compost and soil, with an efficient irrigation system to optimize scarce water resources.

Techniques like these helped enrich the quality of the soil thus resulting in improved production despite recent severe climate change impacts.

Agriculture is fundamental to CGP beneficiary households in Lesotho: 78 percent produce crops, over 60 percent have livestock, and almost 90 percent have vegetable gardens.

The El Niño weather phenomenon recorded in 2015 impacted CGP beneficiaries particularly severely, causing an unprecedented drought in Lesotho which left 680 000 people in need of livelihood support.

In response to this crisis, the Government of Lesotho declared a state of emergency, and provided additional cash transfers, linked to the CGP, which brought further relief to 23 000 households such as Matabello's.

Benefits of the CGP extend beyond direct programme beneficiaries, reaching the wider community and generating impacts in the local economy.

Another result of the CGP was a 26 percent increase in the share of pupils with uniforms and shoes and an increase in school enrollments and children staying in school.

Moreover, the programme increased the share of households using and purchasing crop inputs, like pesticides and seeds.

FAO continues to work with governments and other partners to incorporate social protection into national rural development policies and—as the CGP shows—to help the poor invest in their own future.



Working together to accelerate results for rural women

An FAO, IFAD, WFP, and UN Women joint programme

Resource Partners: Norway, Sweden, Internal resources of FAO, IFAD, UN Women and WFP

SDGs:

1 2 8

Regional Initiative:
RIF2 - Sustainable Production Intensification and Value Chain Development in Africa

"After expanding the milk business and saving enough, my plan is to purchase another milking cow to increase the supply."

Safaya Kabato, 45-year-old mother of nine children, from Oromia in Ethiopia

Beneficiary of JP RWEE Programme in Ethiopia tends her livestock.

Photo: ©FAO/Filippo Brasesco

20 000

women accessed financial services



As of 2017 the United Nations Joint Programme for Accelerating Rural Women's Economic Empowerment has changed the lives of approximately 40 000 women, and 261 000 members of their households, around the world.





The UN Joint Programme for Accelerating Rural Women's Economic Empowerment (JP RWEE) is a global initiative to improve rural women's livelihoods and rights in the context of sustainable development. The JP RWEE has been implemented in Ethiopia, Guatemala, Kyrgyzstan, Liberia, Nepal, Niger and Rwanda. Safaya Kabato is a 45-year-old farmer from the Oromia region of Ethiopia.

Raised in a community in which milk and milk products were produced for home consumption, it never occurred to Safaya that she could support her family with milk until, through JP RWEE, she took part in a training course on business skills and received a loan.

It was a turning point. "Before, I never saved the income from the sale of milk. Now, I have opened a bankbook and saved 1 100 Birr (around USD 55), which I will use to expand the milk business," says Safaya.

JP RWEE's approach creates synergies and multiplier effects that go beyond the individual beneficiary, extending to her household and community. As a result of more households buying Safaya's milk she earned over 2 500 Birr (around USD 125). Some she has saved, and some she has used to buy clothes for her nine children.

A unique joint FAO - IFAD - WFP - UN Women programme, the JP RWEE capitalizes on each United Nations agency's mandate and institutional strength to generate lasting and wider scale improvements in the livelihoods and rights of rural women.

Each agency brings a distinct comparative advantage: FAO's specialist technical knowledge and policy assistance on agriculture and food security, IFAD's co-financing of rural investment programmes and innovative tools to promote more equitable intra-household relationships, WFP's food assistance innovations like "Food for Assets" and "Purchase for Progress," and UN Women's strong linkage with the women's movement and leadership for gender equality and women's empowerment within the United Nations.

The collaboration aims to respond to the diversity of issues constraining rural women's economic empowerment, which go beyond the mandate of any individual United Nations entity to tackle alone.

JP RWEE focuses on two main groups of women. First, the most vulnerable, poorest and illiterate women, who are often bypassed by conventional economic empowerment programmes; and second, women entrepreneurs already organized in producer organizations or cooperatives, who have potential to grow their businesses.

From the Dimitra Clubs in Niger, to the self-help groups in Kyrgyzstan, to the women-led cooperatives in Rwanda, these groups constitute the building blocks of the JP RWEE and the reason for its accomplishments.

By creating institutional alliances that bring together their know-how, resources, experiences and constituencies, the four United Nations agencies together make the JP RWEE more relevant, efficient, effective and sustainable, widening its impact and accelerating its results.



The Forest Farm Facility (FFF)

Building capacity to reduce global poverty

Resource Partners: Agricorn, EC through the FAO-EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan, Belgium, Netherlands, Sweden, Switzerland through FMM, Finland, Germany, United States of America (DTO)

SDGs:



"When FFF members work together in cooperatives they can sell a larger volume of products to the market at a better price."

Pham Tai Thang,
FFF beneficiary from Viet Nam

Team heads toward the field demonstration site at a forest following a workshop - Hanoi, Viet Nam.

Photo: ©FAO/Hoang Dinh Nam



Governments and organizations supported by FFF serve over 40 million members in the 10 partner countries of Bolivia, Gambia, Guatemala, Kenya, Liberia, Myanmar, Nepal, Nicaragua, Viet Nam and Zambia.



40 million members





The Forest Farm Facility (FFF) funds partnership agreements and small grants with smallholder, women, community and indigenous peoples' producer organizations and governments to build capacity at local, national, regional and international levels.

Through FFF, indigenous peoples' forest-and-farm producer organizations (FFPOs) gain technical, business, and advocacy skills in order to improve food security, provide practical alternatives to economic migration, adapt to and mitigate the effects of climate change, and reduce rural poverty.

FFF also engages with governments to develop cross-sectoral mechanisms, policy processes, and investments that meet the needs of local people, and enhances farmer-to-farmer learning and South-South collaboration through exchanges within and between countries.

Governments and FFPOs supported by FFF serve over 40 million members in 10 partner countries: Bolivia, Gambia, Guatemala, Kenya, Liberia, Myanmar, Nepal, Nicaragua, Viet Nam and Zambia.

Farmers in Viet Nam, for instance, face several challenges. They have small areas of land to grow dozens of different products, like livestock, trees for timber, fruit trees, rice, cassava, and fish.

But most of them produce and market individually and don't benefit from economies of scale. Rarely do they share knowledge on products or prices. Planted trees are cut prematurely and sold to the pulp industry. Traders are the main partners in selling their products to the market.

When FFF first came to Viet Nam two years ago, members began meeting with farmers and other groups, training them, supporting them to aggregate into FFPOs, and arranging meetings to discuss policies and converse with the local government.

By aggregating, farmer groups can add value to products, access new markets, negotiate better prices, provide services to members, and attract government as well as external support.

By 2017, implementation of FFF enabled FFPOs in Viet Nam to register as corporations, take out government loans and form larger enterprises. This led to investments in better technology and farming equipment. As a result, timber production capacity increased by up to 20 percent per month, allowing the FFPOs to fulfil large orders from furniture makers, at 15 percent better prices, which helped reduce poverty.

Globally, FFF's proven cost-effective, demand-driven delivery mechanism reached more than 400 FFPOs in its 10 partner countries and 30 additional organizations over the last four years.

Governments are acknowledging the role of FFF in supporting policy changes, making significant impacts on poverty reduction and direct gains in forest landscape restoration and climate change mitigation and adaptation.



Agribusiness solutions to reduce distress youth migration

Aquaculture systems and cassava value chains in West Africa

Resource Partner:
African Solidarity Trust Fund (ASTF)

SDGs:

2 8 16

Regional Initiative:
RIF2 - Sustainable Production Intensification and Value Chain Development in Africa


"Our youth, who were at first tempted by illegal migration as a way to survive, have benefited a lot from this project."

Abass Embalo, farmer and project staff member from Pitche, Guinea Bissau

Youth show off their freshly harvested fish, which are now being farmed in floating cages instead of imported - Guinea-Bissau.

Photo: ©FAO/Mamadou Sene



+
45 
tonnes
of fish farmed
annually as a result
of the project



In Guinea-Bissau 80 percent of the population relies on agriculture for its livelihood and most producers, whether they are farmers, livestock owners or fishers, struggle to produce enough food to feed their families. Irregular rainfalls and volatile food prices contribute to food insecurity.

In this context, migrating to larger towns, to neighboring countries or to Europe is an attractive option for young people. And while migrating might appear to be an attractive alternative to rural poverty for youth, opportunities also exist locally.

Pitche village is located in the northeast of Guinea-Bissau, only a few kilometers from the Corubal River, yet villagers lacked the skills or means to try aquaculture.

Last year in Pitche things started to change. Groups of unemployed youth learned how to farm fish in floating cages, while others learned to make a living by growing and selling cassava.

With support from FAO, they set up three sites filled with 45 floating cages, ready to farm fish. "Young people like me now have technical knowledge and are ready to take full ownership of the project," says Bacar Camara, a young man from Pitche employed in aquaculture.

The project is called 'Creating Agribusiness Employment Opportunities for Youth through Sustainable Aquaculture Systems and Cassava Value Chains in West Africa.' Implemented by FAO with the support of the African Solidarity Trust Fund for Food Security, it aims to create job opportunities for rural youth in agricultural sectors and related value chains in the beneficiary countries.

This, in turn, will lead to increased income among targeted youth, and help to stem the tide of youth migration.

As of 2017, FAO trained 150 youth in farming fish in Burkina Faso, Côte d'Ivoire, Ghana, Guinea-Bissau, Nigeria and Senegal.

The fish and cassava initiatives changed peoples' perspective. Those who have dreamed about "escaping" their villages, now begin to see the advantages of staying. "I gave up the idea of migrating when the project started. Some of our friends who had unsuccessfully attempted to migrate to Europe through Libya have now returned and joined the project," said Abbas Embalo who is part of the cassava growing initiative.

The project is innovative in several ways. For one, it is showing youth how gratifying and rewarding it can be to feed one's own community. In addition, national governments are providing local experts, at considerable savings on expert consultancies and trainings, thereby allowing the project to support more youth.

During each cycle, youth involved in the project farm about 90 000 fish or about 22.5 tons of fish. Per year, this amounts to about 45 tonnes of fish.

Bacar is expecting these results to continue and be long lasting. "We've had four fish harvests so far. With this money we've established a fund to sustain our activities once the project is done."

FAO generating knowledge on Decent Rural Employment & Migration

Over three quarters of the world's poor live in rural areas. Many of them depend on agriculture to earn a living and hold precarious and poorly remunerated jobs in the informal economy. Youth in particular face additional disadvantages in accessing productive and gainful jobs, due to their limited access to productive resources, as markets and organizations. This situation can trap them in a vicious cycle of hunger and poverty, fuelling migration.

Revitalizing rural economies and promoting decent work and entrepreneurship in rural areas is crucial to improve food security, reduce poverty and provide rural people with a sustainable alternative to migration.

FAO supports countries in the development of policies and programmes to generate more decent farm and non-farm employment opportunities, targeting disadvantaged groups such as youth, women and migrant workers in rural areas.

In particular, FAO provides countries with training courses and technical advice, encouraging dialogue between agriculture and labor stakeholders, and promotes innovative pathways for decent youth employment in rural areas hard-hit by migration.

Finally, the Organization supports knowledge generation on employment and migration issues in rural settings, shedding light on the linkages among decent work, agricultural development and human mobility.

Migration



Facts and Figures

Globally, in 2017, there were 258 million international migrants and 763 million internal migrants

33% of international migrants were aged 15 to 34

40% of international remittances were sent to rural areas



Ethiopia

A framework has been created to make rural areas more attractive to youth and 454 youth in rural areas hard-hit by migration have already received technical training courses and in-kind contributions to start different agri-business activities aimed at generating employment opportunities.



Tunisia

50 projects benefited 550 youth in migration-prone areas through direct and indirect job creation



Youth Employment and Child Labor

Caribbean

Small grants scheme established for young agri-entrepreneurs



Guatemala

Rural-friendly labour intermediation and information services developed in Tejutla, San Marcos.

Training on entrepreneurial skills and local development provided to 60 young men and women to help them start up multi-sectorial productive initiatives (mini-clusters) in their communities.

By the end of 2017, 36 out of the 60 youth trained had established solid processes in their communities; 20 had obtained municipal and other support for accessing land; 10 had accessed some financial resources, and another 20 technical support.

Online digital platform ChispaRural.gt developed to aggregate up-to-date information on opportunities and resources for rural youth, as well as practical tools, training materials, best practices.

Kenya

Youth agribusiness strategy developed and piloted in 2 selected districts.

Lebanon

Technical support provided to the National Action Plan to Combat Child Labour in Lebanon in partnership with ILO, UNICEF and MoL.

Economic and Financial Education curriculum developed to increase financial literacy of youth engaged in agricultural vocational training courses.

Some 290 farmers, child protection workers and ministry of agriculture staff in five governorates trained on child labor and occupational safety and health in agriculture.

Mali

318 young farmers provided with a starter kit and trained using the Junior Farmer Field and Life School methodology.

An awareness campaign on child labour implemented in the circle of Bandiagara involving 30 Dimitra Clubs in 6 communes.

Nigeria

6 618 young agri-entrepreneurs trained using the Junior Farmer Field and Life School methodology.

Senegal

National Rural Youth Employment policy developed to create from 100 000 to 150 000 jobs per year.

Online National Observatory of Rural Employment (ONER) launched to help rural youth and producers monitor the national labour market and get information on the agricultural sector.

Youth entrepreneurship boosted in rural areas through the implementation of the Youth in agribusiness model (MIJA).

Somalia

Creation of short-term employment opportunities for 3 490 vulnerable youth in Kismayo,

Cabudwag, Beledweyne and Bosasso through the rehabilitation of 13 irrigation canals and more than 20 water catchments.

The infrastructure projects have increased water storage capacity and help over 1 500 farmers to channel water.

Additional 1 600 short-term jobs were created for youth working on road rehabilitations in Berbera and Baidoa.

Uganda

National Strategy for Youth Employment in Agriculture developed.

Rural radio programmes on protecting children and young workers from pesticides broadcasted in the Arua district.





Enable inclusive and efficient agrifood systems

Better food, better jobs, and a fairer future for all

Globalization poses unique challenges for agricultural producers and small scale enterprises, particularly in poorer countries. Economically viable smallholders and small and medium-sized enterprises are often excluded from value chains because they cannot compete in a globalized marketplace. Vulnerable consumers are challenged in accessing affordable healthy and nutritious diets. Another issue of increasing global concern is food loss and waste (FLW) which generates 8 percent of total annual GHG emissions – for which FAO is leading efforts to reuse.

To counter these tendencies, FAO supports the development of more efficient, inclusive and resilient food systems through coordinated action at the international, national and local level.

At the international level, FAO's technical excellence allows it to be a neutral international forum for standard-setting and voluntary guidelines, as well as a provider of market information, data and knowledge-based advice. Joint FAO-WHO scientific work underlies the Codex Alimentarius standards, which provide food guidelines and codes of practice, and facilitate international trade. FAO's partnering with other agencies includes work on new technologies, including biotechnologies and nuclear technologies, which promise to expand food security and intensify the benefits of nutrition.

At the national level, FAO assists in developing strategies and investment programmes to facilitate collaborations with local governments, and to adopt multi sectoral approaches in formulating evidence-based policies. For instance, the Committee on World Food Security (CFS) Principles for Responsible Investment in Agriculture and Food Systems improve the quality of investment so that it benefits those who need it most, addressing all stakeholders and applying to all stages of the value chain. In addition, FAO works to make agrifood systems resilient to environmental and economic shocks, such as the threat of antimicrobial resistance (AMR).

At the local level, FAO strengthens managerial and technical capacities of value chain actors and service providers, whether rural, urban or peri-urban by leveraging international and local partnerships, and forging new ones.

All of this contributes to a positive impact for food value chain actors, including disadvantaged producers and consumers.

Increasing the participation of people everywhere in agriculture and food systems is critical to achieving FAO's goal of a world without hunger.

Through its mandate to support sustainable food value chains, reduce food loss and waste, and increase the participation of people in agriculture and food systems, FAO makes a particularly important contribution towards the achievement of the SDGs 2, 6, 8, 9, 12, 14, 16 and 17.



Fruit and vegetable vendors at a city market in Cairo, Egypt.

Photo:©FAO/Ami Vitale



Enable inclusive and efficient agrifood systems



134 / SOCIAL GASTRONOMY TRANSFORMING FOOD LOSS AND WASTE INTO OPPORTUNITY

Global food loss and waste (FLW) amounts to USD 2.6 trillion per year and generates 8 percent of total annual greenhouse gas emissions. The 'Global Initiative on Food Loss and Waste Reduction' programme promotes social entrepreneurship initiatives to address food reuse. One partnership under the FLW initiative, Gastromotiva, promotes social change and feeds vulnerable people, thereby creating job opportunities.



136 / GLOBAL ACTION FOR FOOD SECURITY AND NUTRITION IN SIDS

The Global Action Programme (GAP) supports sustainable development in Small Island Developing States (SIDS), 39 nations particularly vulnerable to rising ocean levels and extreme weather events caused by climate change. In 2017, FAO implemented projects to accelerate action on food security and nutrition through improved food system sustainability, agricultural resilience in the context of climate change, and community empowerment.



138 / CAPACITY BUILDING FOR TRADE IN EASTERN EUROPE AND CENTRAL ASIA

The key achievement of FAO's project 'Trade Related Capacity Development in Eastern Europe and Central Asia' is the increased ability of beneficiary countries to access new markets and participate in global agricultural trade. The project helps to strengthen capacities of ministries and other stakeholders on WTO rules for agriculture; better inform export strategies; and improve government systems to monitor and analyze trade and price data, with notable results in 2017.



140 / THE NADHALI PROJECT

FAO's NADHALI project supports the city governments of Nairobi (Kenya), Dhaka (Bangladesh) and Lima (Peru) on sustainable food systems planning. FAO recognizes city governments as key players whose capacity development is critical to achieve food security and nutrition in urban areas. NADHALI has already proven to be a driver for creating synergies and partnerships with other FAO initiatives, United Nations agencies, the private sector and academic institutions.



142 / ACTION ON ANTIMICROBIAL RESISTANCE (AMR) IN LATIN AMERICA AND THE CARIBBEAN

The FAO project, 'Support to the development of National Action Plans on Antimicrobial Resistance (AMR) in Latin America and the Caribbean' incorporates an awareness and advocacy component into its technical design. With its strategy aimed at expanding human resource capacities and formulating communication tools, the ongoing project has already strengthened institutions in the area of risk communication on AMR.



144 / ERADICATING HORTICULTURAL PEST THROUGH TECHNOLOGY TRANSFER IN THE DOMINICAN REPUBLIC

After the Mediterranean fruit fly was detected in March 2015 in the Dominican Republic, FAO, IAEA and USDA, with the Government's Ministry of Agriculture, established the Moscamed Programme as an emergency response to save jobs and restore food products and the export market. In 2017, the Dominican Republic eradicated the fruit fly thanks to a strengthened surveillance system and emergency response capacity.



146 / BIOTECHNOLOGY

Biotechnology encompasses a wide range of technologies, from traditional to cutting-edge, and can help meet the world's food and nutritional needs. The Regional Meeting on Agricultural Biotechnologies in Sustainable Food Systems and Nutrition in Asia-Pacific allowed experts in public sector biotechnology, the private sector, and civil society to discuss and gain clarity on the needs and concerns of biotechnologies. There was an overwhelming conclusion that a multi sectoral approach must be maintained.



FAO Save Food Initiative

Social gastronomy transforming food loss and waste into opportunity

Resource Partners: Belgium, Netherlands, Sweden, Switzerland through FMM

SDGs:

1 2 12

Regional Initiative:

RIL1: Latin America and the Caribbean without Hunger

RIL2: Family farming and inclusive food systems for sustainable rural development

"At Gastromotiva, without wasting any ingredients, we prepare 'meals with dignity', feeding between 90 and 100 socially vulnerable people every night."

Agnes Alencar, International Social Impact Coordinator, Gastromotiva

As part of a Seminar on Social Innovation, participants visited Mercadom and Food Bank facilities in the Dominican Republic.

Photo: ©FAO/República Dominicana Flickr



Gastromotiva uses the power of education, food, and gastronomy as social change agents to transform the lives of people experiencing vulnerability and social exclusion.

Gastronomy as social change agent



"Fighting hunger is a priority for my institution, my country, and the world. That's why I'm fully on board with FAO and the 'Global Initiative on Food Loss and Waste Reduction' project," says Mercodom Manager José Amado Vencos, surrounded by colorful stalls in the bustling Santo Domingo Food Wholesale Market.

Today, one-third of all food produced in the world is lost or wasted at a cost of up to USD 2.6 trillion per year. Global food loss and waste (FLW) generates about 8 percent of total annual greenhouse gas emissions.

FAO's Save Food initiative is a global player in raising awareness about FLW, and in finding solutions for more inclusive and efficient agribusinesses and agrifood chains in the public and private sectors.

Under this umbrella programme, the 'Global Initiative on Food Loss and Waste Reduction' project implemented by FAO has been successful in gathering data on the levels and causes of FLW in key value chains.

These in turn were used in 2017 to develop guidelines, strategies and policies to address FLW in Cameroon, Colombia, Dominican Republic, Egypt, Jamaica, Lao People's Democratic Republic, Morocco, Myanmar, Zambia and Zimbabwe.

In the Dominican Republic, recent data estimates that 24 026 pounds per week of fruit and vegetables are wasted in the marketing phase.

To tackle this problem, the project is working on the design and development of a socio-productive entrepreneurship initiative for the reuse of food waste in the area near Mercodom.

Transforming surpluses into new products offers an opportunity to connect diverse groups, create job opportunities, and innovate while drawing from local traditions.

One project stakeholder, Gastromotiva, embodies social innovation to fight FLW.

Founded in Brazil, but active globally, Gastromotiva uses the power of education, food reuse, and gastronomy as social change agents to transform the lives of people experiencing vulnerability and social exclusion.

In the Dominican Republic, social gastronomy has proven to be a win-win situation. While Mercodom manages marketing surpluses, the local government identifies employment opportunities for its citizens, and communities move towards a more responsible consumption.

At a 2017 workshop on sustainable consumption and production in Colombia, organized in collaboration with Gastromotiva, about 210 participants benefited from capacity building including students, food entrepreneurs, farmers, public actors, private actors, and civil society.

In addition, the FAO project supported the integration of FLW in the formulation of legal and regulatory frameworks in the Latin America and Caribbean region.

Drawing on the experience of the Dominican Republic, a National Network for Prevention and Reduction of Food Losses and Waste has been established in Ecuador with the support of the FMM, opening doors to further South-South and Triangular cooperation.





Global Action for Food Security and Nutrition in Small Island Developing States

FAO and United Nations partners address urgent challenges facing islands

Resource Partners: Belgium, Netherlands, Sweden, Switzerland through FMM

SDGs:

2 13 14

Regional Initiative:

RIP4, RIF1: Africa's Commitment to End Hunger by 2025, RIL1: Latin America and the Caribbean without Hunger, RIF2: Sustainable Production Intensification and Value Chain Development in Africa, RIL2: Family farming and inclusive food systems for sustainable rural development

"The impacts of climate change are particularly worrisome. They affect everything that we plan to do in the SIDS countries."

FAO Director-General
José Graziano da Silva

Numerous species of reef fish, contribute to the vibrant colored water around islands.

Photo: ©UN/Martine Perret




In Jamaica, FAO installed automated weather stations in all major agriculture production areas across the country to help mitigate risks related to climate change.



weather stations installed





Launched at the 40th FAO Conference, the Global Action Programme (GAP) was jointly developed by FAO, the United Nations Department of Economic and Social Affairs (UNDESA) and the Office of the High Representative for Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (OHRLLS).

The GAP covers the Small Island Developing States (SIDS), 39 countries in the Caribbean, the Pacific, Atlantic, and Indian Oceans, and the Mediterranean and South China Seas.

SIDS share unique challenges and needs. Vulnerable to rising ocean levels and the increase in extreme weather events such as tsunamis, storms, floods and droughts, these island states are profoundly affected by climate change.

The fish resources and marine biodiversity of their fragile aquatic ecosystems are increasingly at risk.

Last year, during the Ocean Conference at the United Nations headquarters in New York, FAO presented a commitment to increase economic benefits to SIDS countries through the Blue Growth Initiative that advocates ways to balance economic growth, social development, food security, and the sustainable use of aquatic living resources.

Often geographically remote, far from global markets and with limited arable land and economic sectors, many islands depend on food imports, making food security and nutrition priority concerns.

Though hunger has declined in overall terms in the SIDS, prevalence rates of obesity and non-communicable diseases (NCDs)—like cancer, cardiovascular disease, chronic respiratory diseases, and diabetes associated with poor quality diets—are among the world's highest.

NCDs are now the main cause of morbidity and mortality in most SIDS, accounting for 75 percent of adult deaths in the Pacific.

In 2017 11 Caribbean SIDS had obesity rates greater than 30 percent among adult women. Several SIDS registered high numbers of overweight children including Tuvalu at 6.3 percent; Maldives at 6.5 percent, Jamaica at 7.8 percent; Papua New Guinea at 13.8 percent, and Tonga at 17.3 percent.

The costs of managing and treating obesity and associated NCDs were a significant drain on the resources of most SIDS in 2017.

To overcome the interconnected challenges faced by the SIDS, the GAP recommends actions at local, national, regional, and global levels. FAO has scaled up its work with the SIDS in improving natural resources use, integrated rural development, and resilience to extreme weather events.

GAP is working to improve the environments for food security and nutrition and nutrition-sensitive food systems, and to empowering people who will ultimately achieve the goals of the 39 island countries sustainably.

Implementation of the GAP was initiated in the second half of 2017 with USD 4 million of seed funding. The GAP stems from the SIDS Accelerated Modalities Of Action (S.A.M.O.A.) Pathway, the outcome of the Third International Conference on SIDS held in Apia, Samoa in 2014, where FAO was invited to develop a global framework for action.



Capacity building for trade in Eastern Europe and Central Asia

Penetrating new markets for global agricultural trade

Resource Partners: Belgium, Netherlands, Sweden, Switzerland through FMM

Regional Initiative:
RIE2: - Agrifood trade and regional integration in Europe and Central Asia

SDGs:

8 9

"Taking part in the Apimondia Expo completely changed my idea of what the modern consumer wants."

Sergiy Gryn,
Owner of the Ukrainian Honey Group (UHG)

Beekeeping in Central Europe.

Photo: ©Pixabay



In 2017 the Ukrainian Association of Honey Exporters and Processors participated in the Apimondia Expo with its own booth, benefiting 18 member companies like Sergiy's.



Agricultural systems in Eastern Europe and Central Asia are still adjusting to the political and economic transition effects of globalization and to deepening regional and global trade integration.

The region plays an increasingly important role as a supplier of agricultural commodities to international markets, but a great potential remains to optimize its participation in global agricultural trade.

Sergiy Gryn, owner of Ukrainian Honey Group (UHG), has been in the honey market for over a decade, and his company works with more than 200 beekeepers and owns 400 hives that produce about 20 tons of honey per year.

Before participating in FAO capacity development activities, Sergiy focused primarily on the sale of sunflower honey in bulk to Poland, France, and Germany.

The key achievement of FAO's project 'Trade Related Capacity Development in Eastern Europe and Central Asia' is the increased ability of beneficiary countries to access new markets and participate in global agricultural trade.

Specifically, the project helps strengthen capacities of ministries and other stakeholders on WTO rules for agriculture; provide better information for the development of export strategies; and improve government systems to monitor and analyze trade and price data.

The project achieved notable results in 2017. In terms of capacity development, it supported the establishment of agribusiness guidelines using WTO instruments, the production of a series of publications on agricultural trade policy, and region-wide workshops and online training courses on agricultural trade issues and the WTO.

Workshops on export promotion and trainings courses were conducted for flour producers and exporters, leading to a wheat flour market review and export strategy.

The FAO Food Price Monitoring and Analysis (FPMA) Tool was launched in the Kyrgyz Republic and Tajikistan last year, with a launch in Georgia scheduled for 2018.

Through the project, a partnership has been established with the United Nations Institute for Training and Research (UNITAR) for the delivery of e-learning courses. New partnerships have been established with private sector organizations such as The National Union of Food Exporters of Russia, The Ukrainian Association of Honey Exporters and Processors of Honey (UAHEP), and the Union of Millers of Ukraine.

Another key result of the project, facilitated by FAO, was the participation of UAHEP in the Exhibition of the International Apicultural Congress—Apimondia.

After participating in the Apimondia Expo in 2017, Sergiy decided to gradually move away from the export of barrels of honey, to the development of packaging and design for a new product line: 200 and 400 gram containers of honey, under his own brand in Ukraine.

Thanks to new contacts he made at the Expo, Sergiy is now negotiating the supply of products under private labels to Lebanon, the United Kingdom and the United States of America.





The NADHALI Project

Sustainable food systems for urban areas - Nairobi, Dhaka and Lima

Resource Partners: Belgium, Netherlands, Sweden, Switzerland through FMM

SDGs:

2 8 9 12

Regional Initiative:

RIF1: Africa's Commitment to End Hunger by 2025
RIP1: Asia and the Pacific's Zero Hunger Challenge
RIL1: Latin America and the Caribbean without Hunger

"I haven't missed one multi-stakeholder platform meeting, even if it meant I had to travel for hours."

Bertha Cruz Saraza, member of the NADHALI Project Multi-Stakeholders Platform in Lima, Peru

FAO project beneficiaries near Lima, Peru.

Photo: ©FAO



In 2017 in Lima, women represented 50% of NADHALI's food systems multi-stakeholders platform.





By 2050, two-thirds of the world population is projected to live in cities, increasing the challenges in terms of access to sufficient nutritious, safe and sustainable food for all.

Innovative and holistic approaches are needed to produce sustainable and environmentally sound solutions to address the growing food needs in cities.

FAO's NADHALI project supports the city governments of Nairobi (Kenya), Dhaka (Bangladesh) and Lima (Peru) on sustainable food systems planning.

The project's Food Systems Multi-Stakeholders Platform (FSMP) is an authentic opportunity to bring urban stakeholders together to create an innovative multi-sector food planning process.

FAO recognizes city governments as key players whose capacity development is critical to achieve food security and nutrition in urban areas.

Bertha Cruz Saraza lives in Carabayllo, a district northeast of Lima, in the Valley of the Chillón River.

She works for the City of Carabayllo on productive activities projects for low-income households. Determined and strong, Bertha has connected with farmers in the area, who are now her co-workers, and together they have achieved remarkable results, including the first meeting on the production, financing, commercialization and certification of the nutritious quinoa plant.

Bertha is a member of the NADHALI platform and has carried out her work in Carabayllo with such great enthusiasm that she attracted the attention of the Lima Municipality that began supporting her with technical assistance on the use of pesticides and other chemicals.

As of 2017, thanks to the work of urban dwellers like Bertha and with NADHALI's support, the district of Carabayllo has become known as "Lima's pantry," with its rich production of vegetables such as celery, parsley, broccoli, lettuce and cabbage.

A number of other activities have been undertaken in 2017 under NADHALI.

The Rapid Urban Food Systems Appraisal Tool (RUFSAT), supported with qualitative information from FSMP, was developed and tested in the three pilot cities, along with awareness raising workshops.

Spatial analysis of data with visualization on Geographic Information Systems (GIS) maps was launched in Lima and Nairobi, resulting in initiatives like "Sustainable Lima" with its "Saving the Chillón Valley" programme.

The FSMP is carrying out a project that establishes a composting center to manage solid waste from the urban retail market.

The Food Charter in Lima has been developed and signed by the FSMP members. And this is only the start of the project.

NADHALI has already proven to be a driver for creating synergies with other FAO initiatives, United Nations agencies, private sector and academic institutions.

New partnerships were created at the local level in 2017 as a result of the FSMP.

In Nairobi a partnership was born between the Nairobi County, FAO, UN-HABITAT and Mazingira Institute (a local NGO), while Lima saw the creation of a partnership between Lima Municipality, the Urban Agriculture Platform, the Local Gastronomy Association and the Lima Healthy Food Platform.

These partnerships create the basis for future engagement of city governments on food systems and on mainstreaming food in their agendas.



Action on Antimicrobial Resistance (AMR) in Latin America and the Caribbean

Communications for regional risk management

Resource Partners:

Belgium, Netherlands, Sweden, Switzerland through FMM

SDGs:

2 3

Regional Initiative:

RIL2: Family farming and inclusive food systems for sustainable rural development

"The FAO project for AMR allows countries to develop appropriate National Action Plans on AMR. We acquire technical skills, and in turn, share with other countries and institutions in the face of this common issue."

Stephany Beltrán, Certification Analyst, Ministry of Agriculture, Ecuador

Scientist works on rice genetic variations in lab.

Photo: ©Georgina Smith



In 2017, Latin America and the Caribbean's 8 main aquaculture producers met at a regional meeting of experts on the use of antimicrobials in aquaculture.





Antimicrobial resistance (AMR)—when micro-organisms evolve resistance to substances like antibiotics—is a major global threat of increasing concern to human and animal health. It also has implications for both food safety and food security and the economic wellbeing of millions of farming households.

The health consequences and economic costs of AMR are respectively estimated at 10 million human fatalities a year and a two to 3.5 percent decrease in global GDP, amounting to USD 100 trillion by 2050.

AMR micro-organisms can develop in our food chains and move between animals and humans by direct exposure, consumption, or the environment. Awareness about AMR risks is critical to fighting it.

In Latin America and the Caribbean (LAC), many official health entities are ill equipped to carry out risk communication processes in a systematic, reflective and strategic manner. Even more so with technically complex topics like AMR.

To address these issues the FAO project, 'Support to the development of National Action Plans on Antimicrobial Resistance in Latin America and the Caribbean' incorporates an awareness and advocacy component into its technical design.

With its strategy aimed at expanding human resource capacities and formulating communication tools, the ongoing project has already strengthened institutions in the area of risk communication on AMR.

A pioneer in the region, the project is successfully convening actors from the biomedical sciences together with those from the sciences of communication.

"We've had the opportunity to exchange experiences among countries and to acquire new knowledge about AMR as an emerging problem in our region," says Ana Galán, Chief of Communications of the Ministry of Agriculture, Cuba.

Regional results as of 2017 include effective awareness raising about AMR with the creation of guidelines for visibility design; governance of AMR and antimicrobial use through a multi sectoral analysis; and the strengthening of institutional capacities through a regional workshop that launched the project.

In Ecuador, the FAO project counterpart and the official authority on Agricultural Health and Food Safety (AGROCALIDAD) recognized the need for a multi sectoral approach to tackle the threat.

"The FAO project has allowed us to connect the technical aspects related to AMR, with the area of communications, allowing for the development of joint initiatives to raise the levels of awareness of AMR," says Julia Fabara, Director of Communications of the Ministry of Agriculture, Ecuador.

At the request of the Ministry of Agriculture of Ecuador, the FAO technical team initiated a series of actions to support AGROCALIDAD, paving the way for the establishment of a Committee.

The Committee's constitution was born in a national meeting held in November in Quito, Ecuador, with the participation of FAO, and where the One Health approach was set forth as a guiding principle in the fight against the AMR threat.

The recognition of communications as part of AMR risk management led to the creation of a Network of Communicators on AMR. The Network is strengthening the relationship between governments and national mass media, thus contributing to the insertion of AMR into national public agendas for solutions through the development of appropriate public policies.



Eradicating horticultural pests through technology transfer in the Dominican Republic

Re-joining the export market

Resource Partners:

FAO, IAEA, USDA, OIRSA, IICA, Guatemala-México-USA Moscamed Programme and Government of Dominican Republic

SDGs:



Regional Initiative:

RI3: Sustainable use of natural resources, adaptation to climate change and disaster risk management

"The ban affected us a lot. Not being able to export, we were forced to throw away all our production or sell it in the local market, which was saturated. We lost a lot of money in agriculture, and we had to let go of more than 50 percent of our workforce."

Miguel Soto, farmer, Dominican Republic

Punta Cana, Dominican Republic. The MOSCAMED-RD Team take the "sleepy" flies out from their holding boxes and place them into special aerial release boxes.

Photo: ©Danfung Dennis



The eradication of the Mediterranean Fruit Fly enabled the reopening of export markets two years after the detection of the fly – which had caused losses of USD 40 million alone in 2015, and put 30 000 jobs in the country at risk.



The presence of the Mediterranean fruit fly (*Ceratitis capitata*), was officially reported in March 2015 in the Dominican Republic.

The major horticultural pest had already spread to more than 2 000 km² in the eastern part of the country, constituting a major outbreak.

International trading partners established an immediate ban on imports of most fruits and vegetables from the Dominican Republic, causing a loss of USD 40 million in the remaining nine months of 2015, and putting 30 000 jobs at risk.

The outbreak was located in the Punta Cana region, a top tourist destination, suggesting that the pest was introduced by tourists carrying infested fruits.

As an emergency response, the government, through its Ministry of Agriculture, established the Moscamed Programme, providing the required financial and operational support to perform all required surveillance and eradication activities.

FAO, IAEA and the United States Department of Agriculture (USDA) joined together to guide and assist the country in establishing a national monitoring network to delimit the distribution of the outbreak and to initiate an eradication campaign also with input from regional organizations such as OIRSA and IICA. The Guatemala-Mexico-United States of America Moscamed Programme played a major role in assisting through technology transfer.

An external Technical Advisory Committee (TAC) that consisted of a group of international experts was organized and chaired by the Joint FAO/IAEA Division, which reviewed activities and progress achieved during the initial months of the programme.

Even though the pest had already spread to a large area, the TAC confirmed that eradication was still feasible and recommended that an area-wide integrated pest management programme should be established, integrating the sterile insect technique (also known as the SIT) with other control methods.

The SIT is an environmentally-friendly and effective method to suppress or eradicate selected insect populations, and is particularly effective in areas that are difficult to reach with other pest-control methods, such as mass-trapping and the application of insecticide. It involves mass-rearing male flies and sterilizing them with ionizing radiation.

In just two years, involving an intense eradication campaign with the participation of up to 300 experts, the Dominican Republic eradicated this major agricultural pest. The last wild fly was detected in January 2017 and successful eradication was officially declared by the government on 7 July 2017.

The Dominican Republic is now on the official list of countries that have successfully eradicated the Mediterranean fruit fly and the programme has substantially strengthened its fruit fly surveillance system and emergency response capacity.



Biotechnology

**Biotechnology is much more than
GMOs**

In 2017 FAO and IAEA agriculture and biotechnology laboratories continued to respond to requests by Member Nations for cutting edge nuclear techniques and related biotechnologies in the areas of: animal production and health, food and environmental protection, insect pest control, plant breeding and genetics, and soil and water management.

FAO extension workers examine insects in a field as part of integrated pest management training.

Photo: ©Danfung Dennis





Biotechnology is much more than genetically modified organisms (GMOs). It encompasses a wide range of traditional and cutting-edge technologies. Meeting the nutritional needs of a growing world population, and doing so through improved, efficient and sustainable food systems, is a major task.

While recent breakthroughs in biotechnologies in the food and agriculture sectors have been impressive, applying them at ground level has been more challenging. Part of the reason is affordability—the vast majority of our food is produced by smallholder farmers, fishers and pastoralists—many of whom are poor and often themselves food insecure.

To help alleviate this challenge, FAO operates, in close cooperation with the International Atomic Energy Agency (IAEA), its own FAO/IAEA Agriculture & Biotechnology Laboratories in Seibersdorf, Austria. These laboratories specialise in developing, adapting and transferring appropriate and affordable nuclear techniques and related biotechnologies of importance to agriculture – technologies that are designed to meet specific local needs and environmental conditions. In doing so, it works with some 400 research institutions and experimental stations worldwide.

In 2017, among others, the sterile insect technique was used to successfully eliminate an invasive insect pest, the Mediterranean fruit fly, from the Dominican Republic; scientist in the Democratic Republic of the Congo detected a new outbreak of avian influenza using polymerase chain reaction technology to identify the genome of the virus; Cambodia commenced the introduction of artificial insemination using semen of superior bulls to improve cow size and meat quality; and many member countries used modern biotechnologies to screen and select mutants induced by nuclear techniques, with at least 10 further varieties being officially licensed.

The FAO/IAEA Agriculture & Biotechnology Laboratories continued to respond to request by member countries for cutting-edge nuclear techniques and related biotechnologies in the areas of animal production and health, food and environmental protection, insect pest control, plant breeding and genetics, and soil and water management and crop nutrition. They also provided support services and technical training for scientists in member countries, including guidance on the application of these technologies, the underpinning science and their hands-on use.

In 2017, FAO convened a Regional Meeting on Agricultural Biotechnologies in Sustainable Food Systems and Nutrition in Asia-Pacific in Kuala Lumpur, Malaysia, hosted and co-organized by the Government of Malaysia. It was a follow-up to an International Symposium on the same topic, held at the FAO headquarters the previous year.

These meetings create the space for greater clarity on the needs and concerns regarding biotechnologies at the regional level, underlining the needs for maintaining a multi sectoral approach, covering the crop, livestock, forestry and fishery sectors.

The wide spectrum of available biotechnologies, including microbial food fermentation, tissue culture in plants, reproductive technologies in livestock, use of molecular markers, genetic modification and other methods were examined at last year's meeting in Kuala Lumpur.

Participants included experts in public sector biotechnology work from countries across the Asia and Pacific region, as well as experts from the private sector and civil society.

CFS Principles for Responsible Investment in Agriculture and Food Systems (RAI)

In 2017 FAO was active in the application of the CFS Principles for Responsible Investment in Agriculture and Food Systems—known as RAI—under the Umbrella Programme ‘Supporting Responsible Investments in Agriculture and Food Systems.’

The RAI are a set of ten principles that apply to all types and sizes of agricultural investment including fisheries, forests and livestock.

The RAI hold that recognition and respect for human rights is the starting point for defining how responsible investments in agriculture and food systems can contribute to food security and nutrition.

In Uganda last year, through the RAI, a rapid capacity assessment tool on youth and responsible investment was developed and pilot-tested. FAO obtained funding from the Swiss Federal Office for Agriculture to further test this tool in 2018 in a series of youth events with published guiding materials.

Also in 2017, FAO conducted a multi-stakeholder learning needs assessment related to responsible investment, and has initiated work to develop content for a learning programme on the enabling environment for responsible investment in agriculture and food systems.

A commitment for funding from France was secured to support pilot-testing of the learning programme with policy makers from four Sahel countries in the second part of 2018.

European Neighborhood Programme for Agriculture and Rural Development (ENPARD)

Implemented by FAO, a 2017 ENPARD project aimed to improve the capacity of Georgia’s Ministry of Environment Protection and Agriculture (MEPA) and to provide support for the development of the country’s Strategy for Agriculture Development 2015-2020, streamlining the alignment of Georgia to EU institutions.

Among the key deliverables achieved, FAO work was central to the preparation of the country’s Strategy for Agricultural Development and related action plan by the Ministry of Agriculture; the Rural Development Strategy 2017-2020; the preparation of a new Seed Law as well as a Seed Certification Scheme; and policy support in the preparation of Strategies for Cooperatives and Extension.

Another key element of the project was on-demand advice and analytical support to the Ministry in order to improve the quality and speed of the decision-making process and ensure the effectiveness of policy decisions taken.

The EU is supporting rural development in Georgia through its ENPARD Programme with a first phase focused on developing national agriculture potential, and the second and the third phases focused on creating economic opportunities for the rural population that go beyond agricultural activities.



Farmer inspects trees for FAO project in Georgia.

Photo:©Vashlis-Shetsamvla-Qarelshi

Codex Alimentarius

Harmonizing food standards, ensuring food safety

The Codex Alimentarius, or "Food Code" is a collection of international standards, guidelines and codes of practice adopted by the Codex Alimentarius Commission (CAC) to ensure safe, good food for everyone. CAC is at the center of the Joint FAO - WHO Food Standards Programme, and was established by the two United Nations agencies to protect consumer health and promote fair practices in food trade.

Increasing trade in agricultural, fishery and forestry products is an essential component of most countries' development strategies. Trade is difficult to imagine without food standards, which give confidence to consumers about the safety, quality and authenticity of what they eat.

Through the joint FAO - WHO scientific work underlying the Codex standards, members agree on a common approach to addressing risks, such as those related to food contamination or nutritional content.

The harmonization of food standards contributes to the protection of consumer health and to the fullest possible facilitation of international trade.

World trade in agricultural, fisheries and forestry products amounts to over USD 550 billion annually.

Numbers of Codex standards, guidelines and codes of practice by subject matter as of 2017

78
Guidelines



221
Commodity Standards



53

Codes of Practice



106

Maximum Levels (MLs) for contaminants in food covering 18 contaminants

5 231

Maximum Residue Limits (MRLs) for pesticide residues covering 303 pesticides

Over

4 130 MLs

covering 244 food additives or groups of food additives

623 MRLs

for residues of veterinary drugs in foods and 12 Risk Management Recommendations (RMRs) covering 63 veterinary drugs or groups of veterinary drugs





Increase the resilience of livelihoods to threats and crises

FAO is uniquely positioned to achieve results across the humanitarian-development-peace nexus by investing in more resilient livelihoods

Between 60 and 80 percent of crisis-affected people rely on agriculture for their livelihoods and are hardest hit by disasters.

FAO in 2017 continued to assist crisis-hit populations in over 50 countries, boosting their resilience to prevent and cope with threats and disasters more effectively.

While the greater share of FAO humanitarian resources was directed to averting and containing famine in northeastern Nigeria, Somalia, South Sudan and Yemen, the Organization continued to respond to protracted crises in Afghanistan, the Central African Republic, the Democratic Republic of the Congo and the Syrian Arab Republic.

FAO saves lives by saving livelihoods. In areas affected by protracted conflicts, it does so by helping farmers stay on their land and produce food, when it is safe to do so—a critical factor in preventing or mitigating forced displacement.

Between 2003 and 2013, natural disasters caused USD 1.5 trillion in damages worldwide and affected over 2 billion people in developing countries alone.

Recognizing that acting early is critical, FAO's early warning–early action system translates alerts into anticipatory actions to reduce the impact of disaster events.

FAO responds to food chain crises in a number of ways. In 2017 in many countries in Asia and Africa, the FAO Progressive Control Pathway (PCP) framework was used to control foot and mouth disease and other transboundary animal diseases and build awareness.

Building on lessons learned from the global response to Highly Pathogenic Avian Influenza (HPAI), FAO, in close collaboration with global partners and stakeholders, has been active in developing the One Health approach, connecting the health of people, animals, and the environment to address potential health threats including AMR.

To monitor the spread of dangerous pests like the Fall Armyworm (FAW), FAO IT-Solutions developed new field tools such as a mobile phone app, databases and a web-based early warning platform. Other technologies were explored to monitor FAW and damage using drones, remote sensing and the Google Earth Engine.

Inter-agency cooperation among United Nations agencies, such as WFP, IFAD, IOM, UNHCR and UNICEF, increases the effectiveness of all FAO programmes in disaster prone areas, whether climate related or conflict related.

FAO contributes to the achievement of the SDGs 1, 2, 11, 13, 15 and 16 through its programmes and its emergency support on the ground.

Sustaining Peace

The SDGs call for a transformative approach to improve collaboration on conflict prevention, mitigation, resolution and recovery, thus linking sustainable development and peace.

Sustaining peace encompasses activities aimed at preventing the outbreak, escalation, continuation and recurrence of conflict, including addressing root causes through interventions that support food and nutrition security and agricultural livelihoods.

As part of a system-wide commitment to promote peace and prevent conflict, FAO developed a corporate Framework to Support Sustainable Peace in the context of Agenda 2030.



Livelihood kits being delivered to
hard-to-reach areas in South Sudan.

Photo: ©FAO/South Sudan



Increase the resilience of livelihoods to threats and crises



156 / FAO'S COMMITMENT TO PEACE AND RESILIENCE IN COLOMBIA

Colombia's agricultural sector has been severely affected by internal armed conflict as well as from climatic variability. Since conflict ended in 2016, agriculture has become a strategic sector for achieving peace and equity. FAO is working to improve the technical capacities of institutions in order to strengthen resilience especially for vulnerable family farms.



158 / FAO INFORMATION SYSTEMS FOR FOOD SECURITY

Conflict and food security in Yemen has escalated in recent years. FAO's 'Food Security Information Systems in Yemen (FSIS)' project has helped the Government of Yemen to create a conducive institutional environment for food security decision-making and data collection on drivers food insecurity, supported by a National Food Security Information System.



160 / DISASTER RESILIENCE IN PAKISTAN

The 'Technical Support to Stakeholder Capacity Development for Effective Implementation of Pakistan's National Disaster Risk Reduction Policy' project helps disaster-affected communities in rural areas of Pakistan to better anticipate, manage and recover from shocks and stresses. It is working towards capacity development in government departments and local NGOs and implementing a disaster risk management (DRM) system.



162 / ENHANCING RESILIENCE FOR SYRIAN REFUGEES AND HOST COMMUNITIES IN TURKEY

Partnering with the Turkish private sector to match labor demand and supply, the FAO project 'Enhanced Resilience through Increased Economic Opportunities for Syrian Refugees and Host Communities' worked to provide agricultural and technical training and formal job opportunities to Syrian refugee populations in southern Turkey. In partnership with UNHCR the project had the added value of registering project participants and linking vulnerable individuals to services.



164 / CONTROLLING FOOT-AND-MOUTH DISEASE AND OTHER TRANSBOUNDARY ANIMAL DISEASES

'Building resilience and self-reliance of livestock keepers by improving control of Foot-and-Mouth Disease (FMD) and other Trans boundary Animal Diseases (TADs)' works to strengthen food security in Afghanistan by controlling livestock diseases through an on-farm livestock healthcare system. It uses a six-step framework that includes the implementation and evaluation of interventions followed by the diagnosis and prevention of livestock diseases.



166 / CLIMATE RESILIENCE AND DISASTER MANAGEMENT FOR FOOD SECURITY IN HAITI

Continued displacement due to the 2010 earthquake, followed by a series of recent hurricanes and droughts, has left an estimated 2.1 million people in Haiti in urgent need of humanitarian assistance. The FAO-GEF project, 'Strengthening climate resilience and reducing disaster risk in agriculture to improve food security in post-earthquake Haiti,' aims to implement climate-resilient agriculture and disaster risk management practices and technologies.



FAO's commitment to peace and resilience in Colombia

A socially and environmentally sustainable new Colombian countryside

Resource Partner:
Sweden (SIDA)

SDGs:

1 2 8 13

Regional Initiative:
RIL3 - Sustainable use of natural resources, adaptation to climate change and disasters risk management

"Our animals were dying because of the drought. We didn't have anything to feed them, or to feed our children."

Juan Páez, Waiamouchon community member in the municipality of Uribia

Family looks out their window in Morroa Municipality, Cambimba Village, Colombia.

Photo: ©Magnum Photos/Patrick Zachman



FAO provided fodder, crop, feed and animal health support to affected communities in response to recent droughts in Colombia, rapidly increasing people's food security and resilience to future shocks.



Agriculture has been one of the most affected sectors during the 50 years of internal armed conflict in Colombia, which saw over 8 million people officially registered as victims and some 7 million people internally displaced. With the end of the conflict in 2016, agriculture has become one of the most strategic sectors for maintaining and recovering the social fabric throughout the country, achieving equity, and constructing peace.

Climatic variability has also severely impacted national agricultural production in Colombia. With remarkable frequency and intensity, events related to the El Niño and La Niña phenomena — landslides, floods, storms and drought — have caused the loss of crops, livestock, infrastructure and associated public assets.

As a result, in 2017, there were 4.9 million people in need of humanitarian assistance in Colombia, of whom 2.3 million required food assistance.

Against this backdrop, FAO designed a work strategy for Colombia that aligns with the country's momentous peace agreement and its implementation. This new strategy defined concrete objectives to implement what had been established in FAO's 2015-2019 Country Programming Framework (CPF).

At FAO, the CPF establishes the strategic link between a country's development goals and FAO's Strategic Framework and Medium-Term Plan (MTP).

In this case, the result—The FAO Resilience Programme in Colombia—underlines resilience building as critical to post-conflict scenarios, especially in areas where natural disasters are recurrent.

Launched in 2017 the three-year programme aims to strengthen the technical capacities of institutions and communities in order to protect livelihoods; address the management of agroclimate and social crises; support vulnerable rural communities; generate strategies for the inclusion of small-scale vulnerable farmers in family agriculture markets; support historical memory by fostering traditional methods of production and consumption; and ensure the human right to food.

In addition the programme aspires to strengthen social cohesion by using training methods based on active participation by communities, as well as to create a space for humanitarian action in areas where illegal armed groups are still present.

Direct beneficiaries include four government institutions, five departmental governments, 13 municipal councils, as well as 2 600 families participating in implementation of interventions on the ground.

The peace agreement also calls for a 'comprehensive rural reform' agenda which entails three immediate challenging tasks to which FAO can make valuable contributions.

First, farmers' livelihoods can be improved through value chains that link food production and consumption, ensuring that they have access to functioning local markets.

Second, agricultural production in the country can be sustainable through effective management of the deforestation linked to generating new arable land. FAO can contribute to this process through its VGGT (Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security).

And finally, transboundary plant and animal health issues are key, since their spread is affected both by climate change and by the end of armed conflict.



FAO information systems for food security

Responding with resilience in conflict- ridden Yemen

Resource Partner:
European Union (DG DEVCO)

SDG:

2

Regional Initiative:
RIN3 - Building resilience for food security and nutrition for the Near East and North Africa

"Rest assured that FAO will continue to work in Yemen. We will continue to save lives by saving livelihoods."

FAO Director-General
José Graziano da Silva

Farmer attends to his hot pepper irrigated field in Yemen.

Photo: ©REUTERS/Ahmed Jadallah

A photograph of a man with a mustache, wearing a red and white striped polo shirt, sitting on the ground. He is holding a pair of black-handled scissors in his left hand and a small, dark, round pepper in his right hand. He is looking down at the pepper. In front of him is a small green plant with several red peppers growing on it. The background is a blurred, light-colored wall.

+ 17.8 million
people in Yemen
are food insecure

Of this, approximately 8.4 million
people are severely food insecure
and at risk of starvation —
a worrying increase of 24% since
April 2017

Yemen faces one of the worst humanitarian crises in the world today. The country is increasingly unstable since the conflict escalated dramatically in 2015. The economy has been severely disrupted, including the agriculture sector.

A dramatic increase in displaced people, the closure of ports, reduction of food production, rising food prices, loss of income sources, and depreciation of the currency have all contributed to a worsening food security landscape. Consequently, population movement and humanitarian access are more and more restricted, including in some of the worst affected areas.

The Emergency Food Security and Nutrition Assessment (EFSNA) was conducted under the umbrella of the Food Security and Agriculture Cluster with full and active participation of the FAO-FSIS Programme. The last year's findings revealed that an estimated 17 million people, which is equivalent to 60 percent of the total Yemeni population, are food insecure and require urgent humanitarian assistance to save lives and protect livelihoods.

At the national level, the population under Crisis and Emergency levels of food insecurity—that is, Integrated Food Security Phase Classification (IPC) Phases 3 and 4—has increased by 20 percent compared to the previous year's analysis. The most recent Famine Risk Monitoring result revealed that 17.8 million people in Yemen are food insecure. Out of this, approximately 8.4 million people are severely food insecure and at risk of starvation—a worrying increase of 24 percent since April 2017.

The FAO 'Food Security Information Systems in Yemen' (FSIS) project was designed to assist the Government of Yemen in the creation of a conducive institutional environment for food security decision-making, supported by a relevant, effective, and sustainable National Food Security Information System. This, in turn, would improve food security and nutrition in the long run.

Results from the FSIS are comprehensive and far reaching.

The project established, equipped, supported and strengthened cross-sectoral national and governorate food security structures, including the spearheading of food security information systems in the country.

The project also produced a system that supported timely decision-making and response planning. Six food security updates and 23 monthly market-monitoring bulletins were generated between August 2015 and June 2017.

Additionally, FSIS produced enhanced and better-coordinated data collection from Governorate levels to improve analysis and understanding of key food insecurity drivers.

Finally, in terms of results, the FSIS programme played a leading role in the implementation of the IPC programme in Yemen, including providing the capacity building trainings, facilitating analysis and communication to end users.

The IPC analyses periodic food security updates and monitors monthly market prices which were instrumental in supporting informed decision-making for humanitarian organizations, resource partners, and government institutions during the 2017/2018 Humanitarian Needs Overview (HNO) and Humanitarian Response Plan (HRP) processes—the main tools for coordinating life-saving responses, supporting informed decision-making, and mobilizing resources at country level.

FAO Director-General José Graziano da Silva has stressed that FAO intends to continue its work to improve food security in Yemen, despite the difficulties ahead.

FAO's FSIS project responded to a growing demand for in-depth analysis of underlying and emerging factors affecting vulnerable livelihood systems in a country facing acute hunger and malnutrition.

FSIS products, data and analysis are among the main reference for development and humanitarian interventions on food security and nutrition and are extensively used by the multi-agency coordination mechanisms on the ground.

Based on the results of the FSIS, and covering an additional seven governorates, a new EU project, 'Enhancing Yemen Food Security Information Systems and Rural Livelihoods Programme (EFRP)', has been launched. It aims to restore the livelihoods of poor households to enhance their resilience amid degraded living conditions.

In addition to the EU, FAO is working closely with the World Bank, WFP, UNICEF and all stakeholders in the fight against hunger and malnutrition in Yemen.



Disaster resilience in Pakistan

Technical support to Pakistan's national disaster risk reduction policy

Resource Partner:
United Kingdom (DFID)

SDGs:

1 13

Regional Initiative:
RIN3 - Building resilience for food security and nutrition for the Near East and North Africa

"Aid efforts remain inadequate without proactive risk management, early action and investment to enhance resilience."

Minà Dowlatchahi, FAO Representative in Pakistan

Empowering women in agriculture in Pakistan.

Photo: ©FAO/Virginia Morgan

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Technical support offered to

300 villages 





Pakistan is vulnerable to severe and frequent floods and droughts, hitting resource-poor smallholder farmers, pastoralists and fishing communities the hardest. With more than 190 million people, Pakistan is the sixth most populous country and most of its population is rural.

In the past decade, over 80 percent of the country was hit by natural disasters, impacting 33 million people. Flooding causes an estimated annual economic impact of between 3 and 4 percent of the federal budget.

The FAO two-year project 'Technical Support to Stakeholder Capacity Development for Effective Implementation of Pakistan's National Disaster Risk Reduction Policy' aims to help disaster-affected populations in Pakistan to better anticipate, manage and recover from shocks and stresses.

The project is part of a grant to the Government of Pakistan for 'Building Disaster Resilience in Pakistan (BDRP)' implemented in Muzaffargarh and Rajanpur districts of Punjab Province and Kashmore and Ghotki Districts of Sindh province.

It supports capacity development of government departments and local NGO partners in the implementation of community based disaster risk reduction (DRR) and disaster risk management (DRM) strategies.

Beneficiaries of technical support in 2017 included 300 villages in 27 Union Councils, 2 500 households that had benefitted from Farmer Field Schools and Women Open Schools, and 90 government officials.

Through the project, 12 DRR/DRM plans and strategies were developed by target stakeholders, 3 260 people were trained with new DRR/DRM skills, and 5 940 people from education, health services and DRM sectors trained in disaster preparedness and response planning.

Supporting the provincial government of Punjab to review and update agro-ecological zones was another key achievement last year. Defining agro-ecological zones is critical for land degradation assessment, livestock productivity modeling, population support capacity assessment, and land-use optimization modeling. It facilitates informed decision-making and boosts socioeconomic development in the agriculture sector.

Due to the proactive work by the United Nations consortium agencies led by FAO, and the INGO consortium led by Concern Worldwide during the inception phase, the project achieved its intended targets and received a top ranking in a 2017 annual review, which provide a solid foundation for the remaining 18 months of the pilot phase.

Discussion is underway for the second phase involving both consortia to expand the programme to another 20 hazard prone districts of Punjab and Sindh.

The project's innovative method of working across sectors and jointly between United Nations Agencies, government counterparts and CSOs ensures support to vulnerable communities in line with their livelihood needs. These synergies reinforce the project's impact.

As part of the initiative, agriculture resilience building was also adopted and replicated by target communities in Pakistan. As a result, demonstration sites for climate smart agriculture (CSA) practices were set up and communities are starting to understand the benefits of adopting CSA practices, leading to behavioral change as CSA is replicated and adopted in the context of disaster-affected rural populations.



Enhancing resilience for Syrian refugees and host communities in Turkey

A sustainable livelihood-oriented approach

Resource Partner:
UNHCR

SDGs:

2 8 10

Regional Initiative:
RIN2 - Small-scale agriculture for inclusive development in the Near East and North Africa

"We selected training topics like greenhouse, olive, pistachio, irrigation and cotton production, keeping in mind employment possibilities. Half of all cotton production takes place in our province and it is in this sector where we most need workers."

Adnan Yetkin, a project coordinator

Learning new cultivation techniques in Turkey.

Photo: ©FAO



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FAO and UNHCR provide opportunities for Syrian refugees and Turkish host communities by building skills and creating a partnership with the private sector to match labor demand and supply.



Refugee populations have limited livelihood potential with no access to formal job opportunities, a situation that can lead to instability and social tension between host and refugee communities.

One consequence of the seven-year Syrian crisis is over 4.8 million refugees have fled to Turkey, Lebanon, Jordan, Iraq, and Egypt posing a significant burden on host communities.

In this context, in 2017 FAO implemented the 'Enhanced Resilience through Increased Economic Opportunities for Syrian Refugees and Host Communities' project in five provinces of southern Turkey.

"I escaped to Turkey from Aleppo with my family. I am now a harvest operator in agriculture," says Muhammed Haciahmed, a project beneficiary.

The FAO project targeted and successfully provided training for Syrian refugees together with local Turkish community members.

By partnering with UNHCR the project had the added value of registering project participants and linking vulnerable individuals—often including women and youth—to services.

Given that the agriculture sector engages more women than any other, the project promoted the involvement of women, who were 45 percent of total project beneficiaries.

"Thanks to this project, we learned how to better harvest grapes and pepper," says Sabri Aslan, from Islahiye in Gaziantep, a female participant, "We also learned olive cultivation, irrigation, and fertilization techniques. We want it to continue so everyone can learn and do agriculture right."

Prior to the start of the FAO-UNHCR project, labor constraints were negatively affecting growth in the sector which was unable to produce at full capacity due to the lack of skilled workers.

FAO worked with implementing partners to enhance capacities in the delivery of technical training courses as well as in matching labor demand and supply by partnering with the Turkish private sector.

"We selected training topics like greenhouse, olive, pistachio, irrigation and cotton production, keeping in mind employment possibilities. Half of all cotton production takes place in our province and it is in this sector where we most need workers," says Adnan Yetkin, a project coordinator.

Initially, some farms and companies were reluctant to take Syrian refugees on-board as workers and there was some tension between refugees and host community members.

But the project has been changing approaches and attitudes.

During FAO's monitoring missions, several farm owners or representatives of food processing companies reported their satisfaction with the project trainees and said they would be willing to hire the refugee workers in the future.

Given the protracted Syrian Crisis, it is foreseen that Syrians refugees in Turkey will remain in the country for at least the next few years, requiring a stronger emphasis on the transition from humanitarian response to a sustainable livelihood-oriented approach.

FAO plays a key role in advocating for this approach and for the inclusion of livelihood strategies, particularly in the agriculture sector, that provides substantial potential to accommodate the new labor force.

"I knew only one type of apple back in Syria, but I learned other types during the training courses," says Muhammed, "Our level of knowledge increased here. We are not thinking of going back to Syria now. We want to stay here."



Controlling Foot-and-Mouth Disease and other transboundary animal diseases

FAO builds resilience among livestock keepers in Afghanistan

Resource Partner:
Japan

SDGs:

1 2

Regional Initiative:
RIP1 - Asia and the Pacific's Zero
Hunger Challenge

"Our only and major source of
income is our livestock."


Abdul Rahma, livestock keeper
and father of six children

A woman milks one of her family's
cows - Afghanistan.

Photo: ©FAO/Danfong Dennis

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As of 2017
387 000
cattle vaccinated
against FMD

Afghanistan's Central Veterinary
Diagnostic and Research Laboratories
now has a vaccine bank that can store
10 million doses of the vaccine.



Abdul Rahman is from Parwan Province in the Bagram district of Afghanistan, where he lives with his wife and six children and owns two cows and two calves. Abdul was a beneficiary of vaccinations for his cows that had contracted Foot-and-Mouth Disease (FMD).

"When my cow was unable to produce the usual amount of milk, had strange lesions around the mouth, and trouble moving, I had no idea what to do," says Abdul. Later he noticed the symptoms in his calf and brought the animals to the veterinarian.

"Both animals recovered but I was worried the disease would come back," says Abdul.

An FAO initiative in Afghanistan is finding solutions for livestock keepers like Abdul. The programme 'Building resilience and self-reliance of livestock keepers by improving control of FMD and other transboundary animal diseases (TADs)' helps strengthen food security in the country and control FMD through an on-farm livestock healthcare system.

Soon to be implemented throughout the country, the programme aims to strengthen disease prevention and control, and support Afghanistan's progression to the second stage of the Progressive Control Pathway (PCP) for FMD.

FAO, like WHO and the World Organisation for Animal Health (OIE), relies on frameworks to reduce and eliminate a range of human and animal diseases, including FMD, peste des petits ruminants (PPR), brucellosis and rabies.

The PCP is an approach developed by an FAO-led team that included OIE and the European Commission for the Control of Foot-and-Mouth Disease (EuFMD). It is a framework that plans, implements and evaluates interventions against animal diseases.

The FAO programme in Afghanistan uses this framework to control FMD and PPR in six structured stages. It achieves its goals and objectives through assessment, control of the outbreak, the development of a Risk Based Strategic Plan (RBSP), prevention, and eventual eradication.

To render PCP effective, FAO worked to build awareness around TADs in Kuchi pastoral communities by promoting early warning, prevention, and emergency vaccinations. FAO also helped Afghanistan establish collaborations with neighboring countries Iran, Pakistan and Tajikistan to control TADs.

These efforts have resulted in fewer losses from the disease, improved livestock productivity, and strengthened disease surveillance, prevention, and control, with 387 000 cattle vaccinated against FMD as of 2017. In addition, under the programme 524 000 small ruminants were vaccinated against PPR.

The project also upgraded the capacity of the Central Veterinary Diagnostic and Research Laboratories, and set up a vaccine bank with the capacity to store 10 million doses of vaccine. Information points have been created in five live animal markets to spread awareness on FMD.

Abdul is enthusiastic to tell others about FMD and the vaccination campaign. "Our only and major source of income is our livestock," he says.



Climate resilience and disaster management for food security in Haiti

FAO builds resilience to rebuild livelihoods

Resource Partner:
GEF

SDGs:

1 2 11 13 15


Regional Initiative:
RIP3 - Sustainable use of natural resources, adaptation to climate change and disasters risk management

"Agroforestry allows me to cultivate many types of trees around the edges of my crops, creating protective barriers. Hurricanes tend to hit my part of the island hard."

Valentin Junior,
Lead farmer, Grand-Goâve, West Department, Haiti

Scene from Les Cayes, Haiti, in the aftermath of Hurricane Matthew, the category 4 storm which made landfall in the country on 4 October 2016.

Photo: ©UN Photo/Logan Abassi

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256 tonnes

of climate-resilient crop varieties and 1.7 million sweet potato and cassava cuttings distributed to Haitian families





Sixty-two thousand and six hundred people are still displaced from the 2010 earthquake in Haiti. While efforts to rebuild are still ongoing, Hurricane Sandy in 2012, the 2015 drought and Hurricane Matthew in 2016 compounded the problem, leaving an estimated 2.1 million people in need of urgent humanitarian assistance.

The latest hurricane caused considerable damage to the agriculture, livestock and fisheries sector, on which two-thirds of the population are dependent for their livelihoods.

It is in this context that the FAO-GEF project, 'Strengthening climate resilience and reducing disaster risk in agriculture to improve food security in post earthquake Haiti,' helps farmers to produce food, earn money, and become more resilient in the face of disaster.

According to Valentin Junior, a lead farmer from Grand-Goâve, "Since the project started, we've improved the productivity of our plots and now have many more ideas, means and practical tools."

Sustainable and climate-resilient practices such as drought-tolerant seed varieties, conservation farming, agroforestry schemes, tree planting, contour and slope farming were introduced and validated by farmers using FAO's Farmer Field School (FFS) approach paired with innovative communication techniques.

"Through exchanges with other lead farmers, I learned how to improve my own techniques and practices", says Valentin, "I am able to make better decisions thanks to the project training courses."

As of 2017, the project reached 5 000 households and led to the adoption of conservation agriculture and of Beseba, a drought-tolerant local lima bean variety; 150 lead farmers became engaged as extension agents; 12 artisanal seed producer groups were created and equipped; 256 tonnes of climate-resilient crop varieties and 1.7 million sweet potato and cassava cuttings were distributed; and 346 000 seedlings of fruit and forest trees were planted.

"Agroforestry allows me to cultivate many types of trees around the edges of my crops, creating protective barriers. Hurricanes tend to hit my part of the island hard," says Valentin.

The project also resulted in the setting up of 130 model agricultural systems focusing on climate-smart agricultural production and 20 farmer field schools on innovative adaptive agricultural systems.

At the policy level, a technical compendium on adaptation and disaster risk management practices was created; Haiti's National Action Plan for Adaptation to Climate Change (NAPA) was updated; technical assistance was provided for the creation of the Climate Change Directorate; and ten Community Disaster Risk Management Plans were developed and validated by recipient farmers.

The project equipped farmers with knowledge to improve the production of market gardening crops and other climate-resilient crops.

"I grow banana, lemon, cherry, orange, and grapefruit trees" says Valentin, "I also grow melons, cassava, papaya pepper, and pigeon pea. With this new system my food and agricultural products are regular and stable."

The comprehensive approach taken by the FAO project team has helped improve food security, increase the resilience of household livelihoods, and safeguard the environment for future generations in Haiti.

FAO in emergencies

Building resilience

Resilience is the ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner.

This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, nutrition, food security and food safety.

FAO works every day to increase the resilience of people and their livelihoods to natural hazards, man-made crises, and protracted crises.

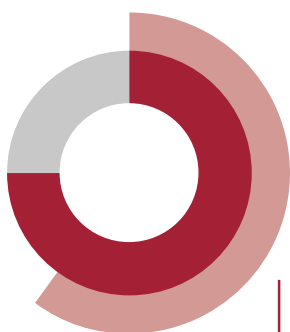
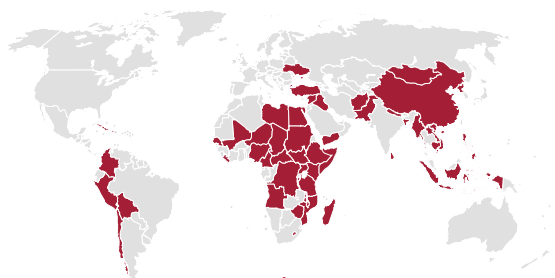


FAO representative Alexis Bonte walks with FAO colleagues and displaced people in Kalemie, Democratic Republic of the Congo where FAO provides seeds and tools to displaced families.



USD 535 million
received

Resource partners invested in
55 countries



75% went to
10 countries

- 1 Somalia
- 2 South Sudan
- 3 Yemen
- 4 Pakistan
- 5 Nigeria
- 6 Syrian Arab Republic
- 7 Democratic Republic of the Congo
- 8 Ethiopia
- 9 Burundi
- 10 Mali

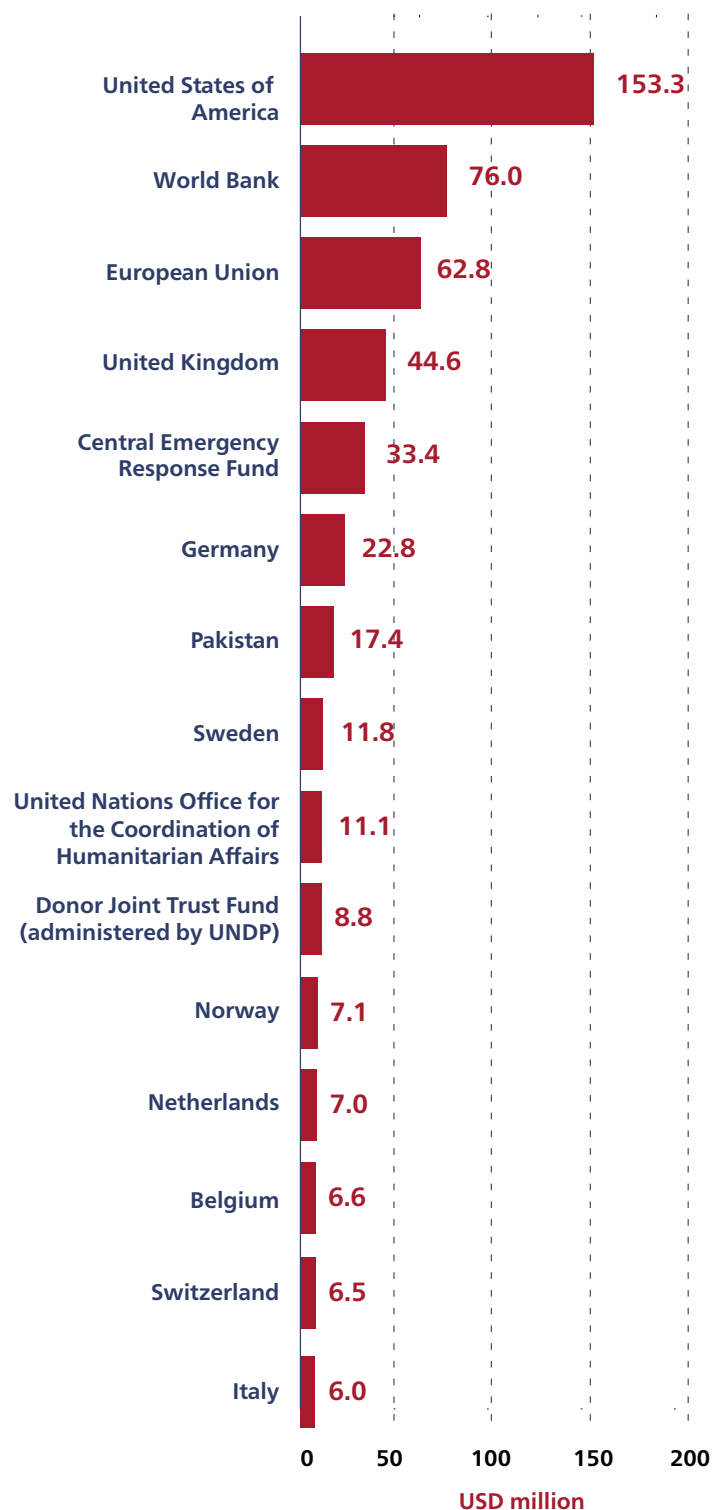
59%
went to
countries
fighting
famine

Nigeria
Somalia
South Sudan
Yemen



Top 15

Resource partners in 2017



Fighting famine in 2017

At the start of 2017, more than 100 million people worldwide were experiencing severe hunger, a third of whom were in four countries.

Northeastern Nigeria

 **USD 22.3 million**
received



5.2 million
people were severely
food insecure



>80%
depended on
agriculture

FAO's response



In 2017

Supported over 1.8 million people through the provision of seeds, fertilizers and livestock and cash-based assistance in northeastern Nigeria's three most affected States – Adamawa, Borno and Yobe. Of these, almost 1 million received support for the main planting season.



Livestock support

Vaccinated 105 850 animals and supported animal restocking for almost 5 000 women- and youth-headed households.

Somalia

 **USD 156 million**
received



3.3 million
people were severely
food insecure



>90%
of people in Integrated
Phase Classification
(IPC) 4 were in rural areas

FAO's response



Cash transfer and livelihood support

USD 35.8 million injected in the country's economy through cash payments to 936 678 people.

2 629 tonnes of cereal, legume and vegetable seeds distributed for Gu planting.

149 agricultural infrastructure facilities rehabilitated.



Emergency livestock support

38.3 million livestock treated during March-April 2017

53.5 million litres of water delivered to sites across Somalia.

45 575 households reached with supplementary feed for livestock.

South Sudan

 **USD 36.8 million**
received



5.5 million
people were severely
food insecure



>80%
depended on
agriculture

Yemen

 **USD 41.3 million**
received



17 million
were people severely
food insecure



85%
of people in IPC Phase 4
were in rural areas

FAO's response



Emergency livelihood support

5.2 million people benefited from FAO's dry season livelihood assistance since November 2016.

Distributed over 1 400 tonnes of crop seed and seed fairs provided a further 623 tonnes of crop seeds.



Livestock support

7.6 million livestock treated through a wide-reaching livestock and vaccination campaign.



Famine-hit area

246 858 people received livelihood support in Unity State.

FAO's response



Emergency livelihood support

Almost 600 000 people received emergency agriculture assistance (crop and vegetable kits, animal health and feed).



Emergency protection of livestock

Almost 40 000 households received livestock vaccination and treatment. In addition, veterinarians in Al Hudaydah and Hajjah Governorates received training courses.



Improve and diversify income and livelihoods

500 women have received dairy equipment and training courses.

Responding to global health emergencies

It is estimated that 75 percent of the new infectious diseases that have emerged in humans over recent decades are of animal origin, including the Ebola virus disease, highly pathogenic avian influenza (HPAI) and severe acute respiratory syndrome (SARS).

These diseases have either spread rapidly in a region or spread widely in many countries around the world leading to massive losses of life and livelihoods, and have had a significant economic impact. The control of such zoonotic diseases and emerging threats at the human-animal-ecosystems interface requires an integrated and multidisciplinary One Health approach.

In 2015, The United States Agency for International Development (USAID) extended its collaboration under the Emerging Pandemic Threat phase 2 (EPT-2) and the Global Health Security Agenda (GHSA) programme to combat animal disease threats—including zoonoses—in over 30 countries in Africa, Asia and the Near East.

Under these programmes FAO is helping countries to improve their capacity to prevent, detect and respond to disease threats of animal origin that could threaten human health and livelihoods.

The FAO GHSA programme contributes to the Global Health Security Agenda—a growing partnership of over 60 countries, NGOs and international organizations, aiming to create a world safe from infectious disease threats and to strengthen global health security.

The FAO EPT2 programme is actively combating avian influenza to reduce virus spread in poultry and human exposure and identify the emergence and spread of new virus subtypes.

8 March 2017 - FAO Officer vaccinates goats against parasites and treats them for other diseases, near the village of Bandar Beyla, Puntland, Somalia.

Photo: ©Scott Nelson/WPN for FAO



Transboundary animal and plant pests and diseases



In 2017 FAO held a Resource partners consultative meeting on three fast-spreading animal and plant pests and diseases calling for the intensification of synergies to combat:

- Fall Armyworm (FAW)
- Peste des petits ruminants (PPR – also known as sheep and goat plague)
- Banana fusarium wilt (FW) disease

Concerted action on these and other global threats is necessary to stop them from ravaging the food chain. FAO work demonstrates that prevention, early warning, and preparedness can save lives and livelihoods from a myriad of animal and plant pests and diseases including:

- Desert Locust Swarms
- Avian Influenza A virus

Fall Armyworm

FAW is a transboundary pest with high potential to spread. It feeds on 80 different crops, but most strongly affects smallholder maize farmers. The pest can cause significant yield losses if not managed by farmers through integrated pest management.

FAO response to FAW



SSTC

In 2017 FAO organized an SSTC FAW Technical Experts' Meeting in Accra, Ghana bringing together experts from the Americas, Africa and others to share and update the state of knowledge on sustainable FAW management for smallholder family farmers.

11 technical working groups coordinated by FAO covered biological control, bio-pesticides, synthetic chemical pesticides, monitoring and early warning, communication, awareness, and knowledge of FAW.

FAW early warning system development

FAO IT-Solutions has developed a mobile phone app (FAMEWS) to be used by farmers, community focal persons and extension agents to collect data when scouting fields and checking pheromone traps.



Integrated Pest Management

FAO has facilitated the preparation of an FFS field guide on Integrated Pest Management for FAW.



As of January, a total of 28 FAO FAW TCP projects were approved totaling

Over USD 6 Million

Peste des petits ruminants (PPR)

also known as sheep and goat plague, is a quick-spreading viral disease that affects and kills small ruminants.



As of 2017 it was present in more than 70 countries throughout Africa, Asia, Europe and the Middle East. It could spread further due to animal movements. PPR causes annual global losses estimated at USD 1.4 to 2.1 billion.

PPR, however is readily diagnosed, and a reliable, inexpensive and high quality vaccine is available that confers lifelong immunity to vaccinated animals.

FAO response to PPR

In 2017, FAO, in collaboration with OIE, developed an initial programme and an advisory committee to respond to PPR.

Last year assistance was provided to PPR-infected countries in the preparation of their National Strategic Plans (NSPs).

Draft NSPs have also been developed in Afghanistan, Bhutan, Georgia, Mongolia, Nepal and Pakistan. Support to FAO and/or OIE PPR control projects has been provided in Djibouti, Kenya, Mongolia, Pakistan, Somalia and in the Sahel countries of Burkina Faso, Chad, Mali, Mauritania, Niger, and Senegal.



In Africa, in collaboration with AU-IBAR and RECs, 25 countries have been supported in developing their NSPs, of which ten have already been formally validated.

Banana fusarium wilt (FW) disease



is one of the most destructive diseases of bananas worldwide, and its new strain, Tropical Race 4 (TR4), is extremely aggressive. It has caused serious losses in Southeast Asia, recently spread to the Middle East, Africa and South Asia, and is likely to continue.

Recent estimates indicate that the disease might spread to up to 1.6 million hectares globally by 2040, making up 17 percent of all banana production areas, the fruit of which is worth USD 10 billion.

Banana, together with plantain, is the most exported fruit in the world and the most produced food crop in least-developed countries. There is no real chemical control option for the disease, containment is difficult, and no resistant varieties exist at the moment.

Prevention is therefore the best and most cost-effective solution.

FAO response to FW

In 2017 the multidisciplinary partnership consisting of FAO, Bioversity International, the World Banana Forum (WBF), and the International Institute of Tropical Agriculture (IITA) gathered at FAO headquarters in Rome to agree on a programme of:

- prevention
- integrated management and biodiversity
- enhanced synergies, capacities, policy environments and coordination



Desert Locust Swarms

The desert locust is the world's most dangerous migratory pest with a voracious appetite unmatched in the insect world.

The insects can rapidly reproduce, concentrate and then form swarms able to move up to 150 kilometres per day in search of food. These swarms can even cross continents and oceans.

Desert locust swarms pose a constant threat to food supplies in some of the world's poorest and driest countries—they are a serious menace to agricultural production in Africa, the Near East and Southwest Asia.

The Desert Locust Control Committee (DLCC) is the primary forum that brings together locust-affected countries, resource partners, and other agencies to discuss the pest's management under the FAO umbrella.

FAO response to Desert Locusts

In 2017 the DLCC continued to define global desert locust prevention strategies and common management approaches for implementation at the regional and national levels. FAO's Desert Locust Information Service monitors the locust situation and provides early warning to countries and donors on an on-going basis. Through the FAO Emergency Prevention System and the three regional locust commissions, national capacities in early warning, early reaction and contingency planning are constantly being strengthened to facilitate better management of locust emergencies and a reduction in the frequency and duration of desert locust plagues.

The system can be adapted to other transboundary plant pests and diseases.

Avian Influenza A Virus (H7N9)

Swiftly locating and identifying viruses at source is the first step for a quick and smart response to a disease outbreak. While the number of animal and human cases of influenza A virus (H7N9) declined in China since the vaccination program started in September 2017, it is still critical for Viet Nam to quickly monitor and detect any unusual virus emergence to prevent the intrusion of this virus and minimize its impacts.



FAO response to H7N9

In 2017 a novel technology called Pen-side PCR became available allowing animal health experts to detect and identify H7N9 within two hours after sampling, rather than 2.5 days.

In Viet Nam, with financial support from USAID and in collaboration with the country's Department of Animal Health (DAH), Ministry of Agriculture and Rural Development (MARD), the FAO Emergency Centre for Transboundary Animal Diseases (ECTAD) rolled out training courses on the use of Pen-side PCR in five northern provinces.

The aim was to introduce this new method and effectively safeguard Viet Nam from the potential intrusion of H7N9.

In addition, the FAO response included surveillance of the virus at the border, training for surveillance, simulation exercises, and awareness raising among farmers, veterinarians, and live bird market workers.

Abbreviations

AMR	Antimicrobial resistance
ASTF	Africa Solidarity Trust Fund
CERF	Central Emergency Response Fund
CFS	Committee on World Food Security
CGRFA	Commission on Genetic Resources for Food and Agriculture
COAG	Committee on Agriculture
COFI	Committee on Fisheries
COFO	Committee on Forestry
CSA	Climate-smart agriculture
FAO	Food and Agriculture Organization
FAW	Fall Armyworm
FLW	Food loss and waste
FMD	Foot and Mouth Disease
FMM	Multipartner Programme Support Mechanism
FW	Banana fusarium wilt disease
GEF	Global Environment Facility
GHG	Greenhouse gas
IFAD	International Fund for Agricultural Development
IFI	International financing institution
IPPC	International Plant Protection Convention
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
MUL	Multilateral Trust Fund
NDCs	Nationally Determined Contributions
NGO	Non-governmental organization
OIE	World Organisation for Animal Health
OSRO	Special Fund for Relief Operations
PCP	Progressive Control Pathway framework
PPR	Peste des petits ruminants
PSMA	Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
RAI	Principles for Responsible Investment in Agriculture and Food Systems
RBA	United Nations Rome Based Agency
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SDG	Sustainable Development Goal
SFERA	Special Fund for Emergency and Rehabilitation Activities
SO	Strategic Objective
SSTC	South-South and Triangular Cooperation
TCP	Technical Cooperation Programme
TF	Bilateral Trust Fund
UN	United Nations
UTF	Unilateral Trust Fund
VGGT	Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the context of national food security
VGRtF	Voluntary Guidelines on the Right to Adequate Food in the context of national food security
VGSSF	Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the context of food security
VGSSM	Voluntary Guidelines for Sustainable Soil Management
WFP	World Food Programme

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