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I am pleased to share with you the 2020 Annual Report of the Plant Production and Protection Division (NSP).

2020 was marked by extraordinary challenges. COVID-19 shook the world, causing loss of life, compromising livelihoods and disrupting our normal ways of living. But for many people, this pandemic was just one more hardship – in addition to poverty, hunger, endemic diseases, conflict, drought, extreme weather events and many other life-threatening difficulties.

For the fourth year in a row, the number of hungry people around the globe increased, as reported by FAO in The State of Food Security and Nutrition in the World. Plant production was again threatened by biotic and abiotic constraints, including diminishing areas of arable land, water scarcity, decreasing biodiversity, pests, diseases and extreme weather events.

2020 also brought important change for the Plant Production and Protection Division. Taking a new name, NSP, it was repositioned under the Partnerships and Outreach Stream as part of the FAO organizational renewal. NSP has put in place a five-year communication strategy (2021–2025), as well as a series of transformative measures to enhance internal management and strategic development. The Division is acting on key issues, such as the promotion of technology transfer for seed security, agroecology, plant nutrition, sustainable mechanization, urban and peri-urban agriculture, monitoring and control of desert locust and fall armyworm, and pesticide risk management.

“Building back better” to a more sustainable and equitable post-pandemic world is at the heart of FAO’s new Strategic Framework 2022–2031, with the aim of “leaving no one behind through MORE efficient, inclusive, resilient and sustainable agri-food systems for better production, better nutrition, a better environment, and a better life”.

Under the new Strategic Framework, FAO will make a more distinct connection between its work and the achievement of the Sustainable Development Goals (SDGs), particularly those most relevant to the Organization’s mandate. By aligning itself more closely to the 2030 Agenda and the United Nations system,
FAO acknowledges that only through holistic, system-wide approaches will it be able to deliver on its mission of ensuring food security and nutrition for all, both today and in the future.

The United Nations Food Systems Summit (UNFSS) 2021 will give us a tangible opportunity to put these approaches into action. Other major global fora, such as the Twenty-sixth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC COP26) and the Fifteenth meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP15), will also provide such occasion.

Plant production and protection is at the core of FAO’s mission. Plants make up 80 percent of the food we eat and are responsible for 98 percent of the oxygen we breathe – without plants, life as we know it would not exist. NSP and its wider global community will play a fundamental role in implementing the new FAO Strategic Framework, particularly in promoting “better production”, and in contributing to its mission of “enabling the transition to more efficient, inclusive, resilient and sustainable crop production and protection through optimization and minimization”.

2021 is already proving to be another important year for NSP. Under its annual theme, “Ensuring food security and nutrition (SDG 2)”, NSP is leading key initiatives related to the International Year of Fruits and Vegetables, and the celebrations of World Pulses Day and World Bee Day. In addition, the Division will organize the Global Conference on the Green Development of the Seed Industry, as well as launch and contribute to the Global Action on Green Development of Special Agro-Products, the Global Programme on Sustainable Dryland Agriculture, and the Global Action on Highly Hazardous Pesticides with the World Health Organization (WHO) and the United Nations Environment Programme (UNEP).

I am delighted by NSP’s achievements and excited by the direction it is taking. I truly look forward to working with the Division over the coming year and beyond to build back better and support sustainable development, together.

Beth Bechdol,
Deputy Director-General,
Food and Agriculture Organization of the United Nations (FAO)
It is my distinct honour to introduce the 2020 Annual Report of the Plant Production and Protection Division (NSP) — the first ever Annual Report for the division.

The year 2020 was extraordinary, with unprecedented challenges brought on by the COVID-19 pandemic. It was also a milestone year for NSP as the Division’s acronym changed from AGP to NSP as a part of the transformation of FAO.

Several noteworthy activities took place in 2020 to help mitigate the impact of COVID-19 on NSP’s work programme. Policy briefs on Sustainable crop production and COVID-19 and COVID-19 and the role of local food production in building more resilient local food systems were published to provide technical advice to stakeholders on actions to mitigate the disruptive effects of COVID-19. Meanwhile, over 700 virtual activities and events were organized at global, regional and nation levels, to promote a wide range of professional, coordination, communication and management activities.

The most significant milestone for the Division in 2020 was its transformation. The emphasis for internal management is to move towards a “One Dynamic NSP” by increasing internal solidarity and external visibility. The Division’s new strategic development aims are to build NSP as the centre of excellence for technology promotion and transformation to support MORE efficient, inclusive, resilient and sustainable plant production and protection through optimization and minimization.

A new NSP communication strategy (2021–2025) was developed by establishing one annual theme for each year, linked to the Sustainable Development Goals (SDGs).

Important progress in 2020 was made in transferring production technology: (i) 44 Member Nations received support to develop strategies, capacities and tools for plant conservation, breeding and seed systems; (ii) agroecology practices were disseminated in 16 countries and 4 regions through capacity building for sustainable agriculture and land management assessment; and (iii) 47 countries and 43 projects received technical assistance in implementing protected cultivation systems.
The Division’s new strategic development aims are to build NSP as the centre of excellence for technology promotion and transformation to support MORE efficient, inclusive, resilient and sustainable plant production and protection through optimization and minimization.

Important results in 2020 were also achieved in transferring protection technology: (i) support to FAO’s efforts to monitor and control desert locust in over 30 affected countries received USD 211 million in support, protected 4 million metric tonnes of cereal and secured food for 34 million people; (ii) a new strategy was launched to implement the FAO Global Action on Fall Armyworm Control by identifying 8 demonstration projects and 53 pilot countries in Africa, Asia and the Pacific, and the Near East regions; and (iii) capacity building was strengthened in 89 countries covering important aspects of the pesticide lifecycle, and work was carried out in 15 African, Caribbean and Pacific (ACP) countries on minimizing pesticide risks and mainstreaming biodiversity.

Even under the constraints of the pandemic, NSP was at the forefront of communication and advocacy activities for major events, including the International Year of Plant Health 2020, World Pulses Day, World Bee Day and World Food Day. The Division also contributed to the successful launch of the International Year of Fruits and Vegetables (IYFV) in 2021 and started publication of two bimonthly newsletters: Plant Production and Protection and Fall Armyworm Control in Action. Several major videos were also produced on subjects including seeds, protected cultivation, sustainable mechanization, conservation agriculture and farmer field schools.

Despite the impact of COVID-19, the Division’s partnerships and network were strengthened in 2020. The Division actively collaborated with over 180 partners at global, regional and national levels, covering areas of policy, regulation, research and academia, education, NGOs and the private sector. The Division also formally launched its networking mechanism for the NSP Community.

The major achievements of 2020 can in large part be attributed to the strong support and positive contributions of NSP and the entire NSP Community across all regions, as well as to the close cooperation of all NSP partners. Taking this opportunity, I would like to express sincere gratitude to all of you.

The year 2021 will be another remarkable one for NSP and the NSP Community, as it will be the first year of implementing NSP’s five-year communication strategy (2021–2025), with a specific focus in 2021 on “Ensuring food security and nutrition (SDG 2)”.

I look forward to your continued support and dedication to the NSP vision of “developing sustainable crop production systems for a world free from hunger”.

Jingyuan Xia,  
Director,  
Plant Production and Protection Division (NSP)
The FAO Plant Production and Protection Division (NSP) would like to acknowledge all partners for their participation in, and positive contribution to, the NSP work programme, including technical, knowledge and technological partners, project partners, research and academia, global and regional organizations, governments, farmers and farmers’ organizations, media, the NSP Community and FAO Decentralized Officers.

**Project implementation in 2020**

The support from resource partners enabled to successfully implement the following projects in 2020. In addition, technical support related to Plant Production and Protection was provided to over 150 projects from various sources.
<table>
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<tr>
<th>DONOR</th>
<th>PROJECT TITLE</th>
<th>PERIOD</th>
<th>DELIVERY 2020 (USD)</th>
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<tr>
<td>Canada</td>
<td>Supporting the joint FAO/WHO scientific advice programme: JMPR, JEMRA, JEMNU</td>
<td>27 Mar 2017 – 30 Jun 2021</td>
<td>27 146</td>
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<td>CropLife International</td>
<td>Voluntary contribution to Disposal of Obsolete Pesticide Stocks Projects</td>
<td>1 Sep 2012 – 31 Aug 2021</td>
<td>555 122</td>
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<td></td>
<td>IOMC Toolbox for decision making in chemicals management – Phase III: From design to action</td>
<td>1 Jan 2018 – 31 Dec 2020</td>
<td>56 452</td>
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<td>GEF</td>
<td>AAVAICLM: Agroecology, ensuring food security and sustainable livelihoods while mitigating climate change and restoring land in dryland regions</td>
<td>1 Oct 2019 – 31 Mar 2023</td>
<td>478 182</td>
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<td></td>
<td>Disposal of POPs waste and Obsolete Pesticides in Mozambique (FSP)</td>
<td>1 Jul 2011 – 31 Dec 2021</td>
<td>2 096</td>
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<td></td>
<td>Implementing Sustainable Low and Non-Chemical Development in SIDS (ISLANDS)/FAO Component (PPG)</td>
<td>23 Oct 2019 – 31 Dec 2020</td>
<td>67 065</td>
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<td></td>
<td>Participatory assessment of land degradation and sustainable land management in grassland and pastoral systems (FSP)</td>
<td>1 Feb 2017 – 19 Nov 2021</td>
<td>229 858</td>
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<td>Germany</td>
<td>Building the basis for implementing the Save and Grow approach: Regional strategies on sustainable and climate-resilient intensification of cropping systems</td>
<td>1 May 2016 – 30 Jun 2021</td>
<td>319 784</td>
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<td>Building climate resilience in city region food systems through adapted production systems</td>
<td>1 Dec 2018 – 30 Nov 2021</td>
<td>586 324</td>
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<td></td>
<td>Climate-Smart Crop and Mechanization Systems Scaling-Up (CSCS)</td>
<td>1 Jun 2019 – 31 Dec 2021</td>
<td>540 643</td>
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<td>Global Pulse Confederation</td>
<td>Celebration of World Pulses Day</td>
<td>7 Feb 2020 – 7 Feb 2021</td>
<td>27 805</td>
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<td>Japan</td>
<td>Project for Improvement of Locust Management (Phase 2)</td>
<td>28 Jul 2020 – 30 Jun 2025</td>
<td>427 131</td>
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<td>McKnight Foundation</td>
<td>Strengthening Multi-stakeholder Cooperation on Agroecological Approaches for Sustainable Agriculture</td>
<td>1 Dec 2015 – 31 May 2023</td>
<td>189 109</td>
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<td>Multidonor</td>
<td>FAO Commission for Controlling the Desert Locust in the Central Region (CRC)</td>
<td>15 Jun 2018 – 31 Dec 2021</td>
<td>1 831 129</td>
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<td></td>
<td>FAO Commission for Controlling the Desert Locust in South-West Asia (SWAC)</td>
<td>15 Jun 2018 – 31 Dec 2021</td>
<td>5 979</td>
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<td></td>
<td>FAO Commission for Controlling the Desert Locust in the Western Region (CLCPRO)</td>
<td>15 Jun 2018 – 31 Dec 2021</td>
<td>693 990</td>
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<td>FAO Desert Locust Control Committee (DLCC)</td>
<td>15 Jun 2018 – 31 Dec 2021</td>
<td>145 636</td>
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<td>Sustainable Management of the Fall Armyworm (FAW), FAO Programme for Action in Africa, North Africa and the Middle East</td>
<td>8 Nov 2018 – 31 Oct 2022</td>
<td>1 015 819</td>
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<td></td>
<td>Support for Horticulture Programme Development</td>
<td>14 Apr 2006 – 31 Jul 2021</td>
<td>207 305</td>
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<td>UNEP</td>
<td>FAO/UNEP Secretariat to the Rotterdam Convention 2020–2021</td>
<td>1 Jan 2020 – 31 Dec 2021</td>
<td>1 219 567</td>
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<td>United States of America</td>
<td>Locust disaster risk reduction in Caucasus and Central Asia (CCA)</td>
<td>28 Sep 2018 – 30 Sep 2021</td>
<td>113 146</td>
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<td><strong>Total</strong></td>
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<td><strong>9 361 388</strong></td>
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Key collaborators

We are particularly grateful for the support received from a number of strategic and technical partners to carry out global work in promoting sustainable plant production and protection.

51 Degrees Limited. NSP partnered with Vulcan to adopt its EarthRanger tracking tool to improve the management of up to 28 aircraft involved in desert locust survey and control operations in East Africa in 2020–2021. Real-time field data collected by eLocust3 digital tools flow into EarthRanger to help prioritize treatments, and results are integrated into national geographic information systems used in affected countries to manage the control campaign.

CGIAR Research Centers, CABI, icipe, Pennsylvania State University, Oregon State University, Lancaster University. These partners participated in online discussions and contributed to the development of the IPM guidelines on FAW and the Guidelines on Prevention and Preparedness for FAW Migration. They continue to provide technical guidance to the Global Action for Fall Armyworm Control via the Technical Working Groups and the Technical Committee.

French Development Agency (AFD). AFD funded a CLCPRO project in support of the preventive control strategy and to develop operational research on the desert locust in the Western Region, which includes the adaptation of prevention tools for climate change, better preservation of the environment by developing more respectful control methods and the development of technological innovations. The project also supports the Central Region Commission in strengthening its institutional, financial and operational mechanisms.

French National Institute for Agriculture, Food and the Environment (INRAE). FAO and INRAE partner to support transitions to sustainable food systems. Together, the two organizations produced the book Enabling Sustainable Food Systems: Innovators’ Handbook; organized events during the One Planet Network Sustainable Food Systems Global Conference and with FAO RLC and partners from Latin America; advised farmer field school programmes; and are producing 15 policy briefs on innovations for sustainable food systems.

Global Crop Diversity Trust. NSP collaborates with the Global Crop Diversity Trust on the conservation of plant genetic resources for food and agriculture. Recent outputs include the co-organization of the First International Multi-Stakeholder Symposium on Plant Genetic Resources for Food and Agriculture and the development of four crop conservation strategies.

Global Partnership on Sustainable Urban Agriculture and Food Systems (RUAF). Building on close collaboration over the last decade, RUAF supported NSP City Region Food Systems to develop assessments for resilience to climate change and pandemics and, with PSU and ESS, an indicator framework and training package for the Milan Urban Food Policy Pact. These tools link local agricultural production to efficient value chains through improved urban planning to achieve the SDGs.

Global Pulse Confederation (GPC). Since 2015, GPC and FAO have worked together towards generating knowledge and creating greater awareness of pulses to enhance food security, health and nutrition, while improving environmental sustainability; the collaboration contributes to NSP’s success and to FAO’s core mandate to eliminate hunger, food insecurity and malnutrition.
In 2020, the Desert Locust Information Service (DLIS) collaborated with NOAA to refine their HYSPLIT model and develop a web application to estimate desert locust swarm migrations up to 15 days forward or backwards in time. Trajectories produced by the model are integrated into DLIS analysis and early warning measures.

The five-year project (Phase II) for the improvement of locust management in Central Asia funded by JICA, commenced operations in November 2020. It is expected to provide substantial support for improving locust management through regional cooperation and for strengthening technical capacities on a wide range of topics, including in view of the operational use of the locust GIS entitled “Caucasus and Central Asia Locust Management System” (CCALM).

Since 2015, the McKnight Foundation has supported FAO work in agroecology, including support to the Second International Symposium on Agroecology (2018), during which the Scaling Up Agroecology Initiative was launched. The Foundation supports the Agroecology Knowledge Hub, the development of the Tool for Agroecology Performance Evaluation (TAPE) and the Global Soil Organic Matter Database to support carbon recycling and soil health.

In 2020, the Desert Locust Information Service (DLIS) collaborated with NOAA to refine their HYSPLIT model and develop a web application to estimate desert locust swarm migrations up to 15 days forward or backwards in time. Trajectories produced by the model are integrated into DLIS analysis and early warning measures.

In 2017, NSP partnered with PSU to develop the Fall Armyworm Monitoring and Early Warning System (FAMEWS), which was followed by the SusaHamra mobile app for red palm weevil. In early 2020 and because of these collaborations, PSU was able to rapidly develop eLocust3m, a mobile app for crowd-sourcing data and improving desert locust monitoring and response in countries affected by the 2020–2021 upsurge.

Since 2015, the McKnight Foundation has supported FAO work in agroecology, including support to the Second International Symposium on Agroecology (2018), during which the Scaling Up Agroecology Initiative was launched. The Foundation supports the Agroecology Knowledge Hub, the development of the Tool for Agroecology Performance Evaluation (TAPE) and the Global Soil Organic Matter Database to support carbon recycling and soil health.

The School of Agriculture Foundation, University of Buenos Aires. The Foundation has been an excellent service provider and partner, ensuring the timely delivery of products and showing robust technical competencies in providing high-quality reports, including risk assessments of Carbaryl pesticide, guides for pesticide risk evaluation, and human health and environmental impact studies.

KEMI is a key partner in implementing the International Code of Conduct on Pesticide Management. It provides financial resources and technical expertise for strengthening institution and stakeholder capacities to address key challenges in the management of pesticides.

In addition to the partners mentioned here, a total of 31 FAO partners generously contributed USD 211 million to support FAO’s Desert Locust Up surge: Global Response Plan in 2020. The Response Plan has been technically coordinated by NSP to curb the desert locust upsurge, safeguard livelihoods and promote early recovery, regional and national coordination, and preparedness.

Norad. Since 2018, NORAD has been providing financial support for FAO’s work on FAW management. Their contributions enabled the set up and implementation of the Global Action for Fall Armyworm Control.
A brief history

FAO’s Plant Production and Protection Division is almost as old as FAO itself! First established on 22 June 1947 as the Plant Industry Branch, by 1959 it was a full division focusing on crop production, improvement and protection. During the 1960s–1980s, the Division was broadly structured on crop and grasslands production services, plant protection service, and crop ecology and genetic resources. In 1980s–2000s there was an increased emphasis on fruits and vegetables. And, in 2020, the Division acronym changed from AGP to NSP, with a renewed focused transformation to MORE efficient, inclusive, resilient and sustainable plant production and protection through optimization and minimization.
**Vision**
Developing sustainable plant production systems for a world free from hunger.

**Mission**
Enabling the transition to MORE efficient, inclusive, resilient and sustainable plant production and protection through optimization and minimization.

**Core activities**
- plant genetic resources utilization and seed management;
- plant production system development and management;
- plant pest monitoring and management;
- pesticide risk reduction and management; and
- technology innovation and transformation.

**Strategic objectives**
- ensuring food security and nutrition;
- enhancing food quality and safety;
- protecting the environment and biodiversity; and
- facilitating safe trade and economic growth.
A global community

As of 31 December 2020, 171 FAO staff were working on plant production and protection, 148 of whom at FAO headquarters, and 24 in decentralized offices. This includes six teams specialized in various areas of plant production (NSPGD, NSPED and NSPLD) and protection (NSPMD, NSPCD and NSPRD), as well as the secretariats of the International Plant Protection Convention (IPPC), the Committee on Agriculture (COAG), and Fall Armyworm.

In addition, there are three desert locust commissions managed by the NSPMD team. Plant Production and Protection Officers are present across five regions and 11 sub-regions, demonstrating the importance of plant production and protection for the work of FAO.
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<tr>
<th>Acronym</th>
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<td>ACP</td>
<td>African, Caribbean and Pacific</td>
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<tr>
<td>ACT</td>
<td>African Conservation Tillage</td>
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<td>AFD</td>
<td>Agence Française de Développement</td>
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<td>CAAS</td>
<td>Chinese Academy of Agricultural Science</td>
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<td>CBD</td>
<td>Convention on Biological Diversity</td>
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<td>CCA</td>
<td>Caucasus and Central Asia / climate change adaptation</td>
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<td>CLCPRO</td>
<td>Commission for controlling the Desert Locust in the Western Region</td>
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<td>CLI</td>
<td>CropLife International</td>
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<td>COAG</td>
<td>FAO Committee on Agriculture</td>
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<td>COP</td>
<td>Conference of the Parties</td>
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<td>CRC</td>
<td>Chemical Review Committee</td>
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<td>CRFS</td>
<td>City Region Food Systems</td>
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<td>CYMMIT</td>
<td>International Maize and Wheat Improvement Center</td>
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<td>EAC</td>
<td>East Africa Community</td>
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<td>ETF</td>
<td>Enhanced Transparency Framework</td>
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<td>EU</td>
<td>European Union</td>
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<td>FAMEWS</td>
<td>FAW Monitoring and Early Warning System</td>
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<td>FAW</td>
<td>Fall armyworm</td>
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<td>FFS</td>
<td>Farmer field school</td>
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<td>F-SAMA</td>
<td>Framework for Sustainable Agricultural Mechanization in Africa</td>
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<td>GCI</td>
<td>Green Cities Initiative</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<td>HHPs</td>
<td>Highly hazardous pesticides</td>
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<td>HRSRS</td>
<td>Harmonized Seed Regulatory System</td>
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<td>ICBA</td>
<td>International Center for Biosaline Agriculture</td>
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<td>icipe</td>
<td>International Centre of Insect Physiology and Ecology</td>
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<td>IFA</td>
<td>International Fertilizer Association</td>
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<td>IFAD</td>
<td>International Fund for Agricultural Development</td>
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<td>INRAE</td>
<td>French National Research Institute for Agriculture, Food and Environment</td>
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<td>IPPC</td>
<td>International Plant Protection Convention</td>
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<td>ISF</td>
<td>International Seed Federation</td>
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<td>IVFV</td>
<td>International Year of Fruits and Vegetables</td>
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<td>IYPH</td>
<td>International Year of Plant Health</td>
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The year 2020 was an eventful one for NSP. The COVID-19 pandemic meant the Division had to abruptly adapt to new ways of working. Despite the disruption, NSP had the pleasure of welcoming its new Director, Dr Jingyuan Xia, who brought new dynamism and direction to the Division. In addition, the Division was placed under a new reporting line to the Deputy Director General for Partnerships and Outreach, Ms Beth Bechdel, as part of an overall restructuring within FAO in the lead up to a proposed new Strategic Framework for the Organization (2022–2031). This framework will more closely align the work of FAO and NSP with the goals of the 2030 Agenda for Sustainable Development.

NSP continued to be FAO’s reference point for all matters on plant production and protection, through activities related to seeds, ecosystems-based approaches to agriculture, sustainable crop production intensification, urban and peri-urban agriculture, sustainable mechanization, protection against transboundary pests such as desert locust and fall armyworm, and reduction of risks related to pesticides, fertilizers and other chemicals.

While many major events had to be cancelled or held virtually, strong support from a broad range of stakeholders, and the hard work and commitment of NSP employees and the NSP Community around the globe, meant the Division still managed to deliver in the highest professional manner and serve its partners globally, regionally and nationally. It also made significant progress in many areas of work.
Outstanding FAO achievements in 2020

**Mitigation of COVID-19**
FAO published major policy briefs on Sustainable Crop Production and COVID-19 and COVID-19 and the role of local food production in building more resilient local food systems, as well providing advice on ongoing activities related to many areas of work including seed systems, fall armyworm and desert locust. Over 700 virtual activities and events were organized at global, regional and national levels.

**Normative work**
Preparation work was finalized for 59 countries for the Third Report on the State of the World’s Plant Genetic Resources for Food and Agriculture, using the World Information and Early Warning System (WIEWS) reporting tool. Capacity development of sound pesticide management was enhanced in 89 countries, with 456 new international standards and technical guidelines developed. Preparations took place for the Tenth Conferences of the Parties (COP10) of the Basel, Rotterdam and Stockholm conventions, scheduled for 2021.

**Production technology**
FAO was at the forefront of promoting agroecology through capacity building for sustainable agriculture and land management assessment in 16 countries and 4 regions using TAPE and PRAGA training. FAO led the formulation divisions, NSP led the formulation of the new Global Programme on Sustainable Dryland Agriculture, endorsed at the Twenty-seventh Session of Committee on Agriculture (COAG), and brought forward its work with the African Union on the Framework for Sustainable Agricultural Mechanization in Africa (F-SAMA).

**Protection technology**
NSP was the lead technical division on FAO’s efforts to control desert locust in affected countries (with 2.5 million hectares treated) and migratory locust in 10 Caucasus and Central Asian (CCA) countries. A new strategy was adopted for the Global Action for Fall Armyworm (FAW) Control (GA) with over 60 countries in Africa, the Near East and North Africa involved, 8 of which as demonstration countries for the Global Action. In African, Caribbean and Pacific (ACP) countries, NSP supported initiatives for pesticide risk reduction and mainstreaming biodiversity, while two regional guidelines for harmonization of pesticide management were developed and endorsed for implementation.

**Seed technology**
FAO provided technical and policy support to 44 Member Nations for developing strategies, capacities and tools for plant conservation, breeding and seed systems. FAO also supported 48 countries to restart crop production after natural disasters and crises through the provision of quality seeds worth over USD 30 million.
Communications and advocacy

FAO promoted various plant production and protection-related initiatives including the International Year of Plant Health (IYPH), World Pulses Day, World Bee Day and World Food Day. The Division contributed to the successful launch of the International Year of Fruits and Vegetables (IYFV). Two new bimonthly newsletters were launched on plant production and protection and FAW. Six new FAW guidance notes covering 8 demonstration and 53 pilot countries (with 8 translations) were published. Videos were produced on agroecology, seeds, protected cultivation, sustainable mechanization, farmer field schools and conservation agriculture. The Task Force on Communications and Advocacy (TFCA) was formed.

Strategic planning

FAO developed a new five-year plant production and protection strategy (2021–2025) based on a different annual theme each year linked to the Sustainable Development Goals (SDGs).

- **2021:** Promote food security and nutrition (SDG 2)
- **2022:** Minimize crop loss and residual risk (SDGs 3 and 12)
- **2023:** Enhance environmental protection (SDGs 13 and 15)
- **2024:** Facilitate safe trade (SDGs 8 and 17)
- **2025:** Support poverty reduction (SDG 1)

Optimization of internal management

Standardization was strengthened through the adoption of standard operating procedures for meeting arrangements (12 items), the streamlining of official communications in 3 areas, quality control related to 10 items, and 18 new divisional and FAW communications templates. Teamwork and team building were strengthened through the establishment of the TFCA, the Task Force on Planning and Finance (TFPD), the Task Force on Strategic Development (TFSD); assistant Team Leaders were nominated to strengthen the technical teams; two workshops on team building were organized; and outstanding employees were recognized by the NSP Director.

Partnerships and network

NSP strengthened its networks on locust control, FAW control, pesticide management, agroecology and sustainable mechanization. It led cross-FAO activities related to the Technical Network on Sustainable Crop Production and Agroecology. It also enhanced existing and built new relationships with 180 partners. The global NSP Community was reinforced through stronger links between FAO headquarters and plant production and protection officers in the regions and subregions.

Transformation of FAO Plant Production and Protection

The FAO Plant Production and Protection Division went through a major transformation in the second half of 2020 focused primarily on two areas: internal management and professional development. With regard to internal management, emphasis was placed on the need for a “One Dynamic NSP”, which will be more innovative and build approaches that are people-first, demand-driven, result-oriented and performance-based. In terms of professional development, a new focus was put on innovation and technology and the two mainstreams of optimization and minimization.
Mitigation of COVID-19

COVID-19 policy brief

COVID-19 has fundamentally changed the context in which Agenda 2030 is being pursued, with the risk that gains made in recent years may be reversed. The poorest and most vulnerable groups – including subsistence farmers and smallholder farmers’ enterprises – will experience the most negative effects of the pandemic. In April 2020, a policy brief for decision makers in developing Member Nations where food security and nutrition issues have affected smallholder farmers. The policy brief highlighted a policy brief was developed for decision makers FAO’s commitment to work with Member Nations, organizations and partners to stabilize food production and distribution during the COVID-19 crisis. https://doi.org/10.4060/ca8807en
Farmer field schools: sharing information & new practices

The global farmer field school platform responded to the COVID-19 pandemic by providing ongoing technical support to countries and projects. A global communication and training campaign was launched to incorporate awareness-raising on COVID-19 into farmer field school programmes, and to adapt training and extension in the light of the pandemic. A handbook on Running Farmer Field Schools in times of COVID-19 and multiple posters and national communication campaigns were released in 10 languages in partnership with FAO field offices and external partners.

More information:


City region food systems and COVID-19

COVID-19 disrupted city region food systems (CRFS) worldwide, posing challenges for cities and local governments obliged to deal with rapid changes in food availability, affordability and the food security and nutrition situation of urban populations. Consequently, a pandemic component was added to the CRFS programme, with 17 articles and case studies published on the impact of COVID-19. Based on the information collected, the CRFS assessment methodology is being modified to include pandemic-related indicators. CRFS indicators are also contributing to the Green Cities Initiative (GCI) indicator framework.


COVID-19: FAW Secretariat continued support

A Guidance Note was issued on addressing the impact of COVID-19 on Global Action for Fall Armyworm Control; particularly, how FAW control work would continue despite the pandemic. http://www.fao.org/documents/card/en/c/ca8652en/

The Global Action for Fall Armyworm Control continued to support countries in managing FAW throughout the COVID-19 pandemic by conducting webinars and virtual training sessions on FAW monitoring and management, and by implementing activities where possible. This included a capacity-building workshop conducted in Gabon in December 2020.
Seed technology

Crop varietal development

FAO strengthened capacities to develop crop varieties suited to local agroecologies and farming systems. In 2020, the Republic of Moldova was supported in strengthening its value chain for berries, which included breeding improved varieties and enhancing smallholder capacities and access to markets. Similarly, in Mongolia, farmers were provided assistance to access quality planting materials for 36 improved new fruit varieties. In Africa, the adoption of improved crop varieties was facilitated in 15 countries: Angola, Benin, Cameroon, Côte d’Ivoire, Eswatini, Guinea, Kenya, Mali, Namibia, Nigeria, Senegal, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.
Seed sector development

FAO continues to support countries in developing national seed policies, legislations and/or regulatory frameworks. In 2020, 11 countries were supported in this regard. Seed value chains were strengthened in 30 countries. In five southern African countries, the production of Crop Specific Field Inspection Manuals was supported along with the promotion of sustainable seed production practices. In Latin America and the Caribbean, production capacity for quality legume seeds was strengthened in one country, while three others were supported with the dissemination of three new cassava varieties per country.

Conservation of genebanks

In 2020, FAO supported national genebanks to collect, conserve, regenerate, multiply, characterize and evaluate crop germplasm. These interventions resulted in sustained targeted germplasm collection and the expanded conservation of more crops and their wild relatives in four SADC countries. NSP worked with its partners to support informed decision-making processes in large germplasm collections and to develop national genebanks in Organization of Islamic Cooperation Member States. With the support from GEF, technical assistance was provided in Bolivia (Plurinational State of), Chile, China, Cuba, India, Indonesia, Mauritania, Mexico, Philippines and Tajikistan on in situ conservation of PGRFA and managing on-farm diversity.

Seed security

Natural disasters, transboundary pests, conflict and COVID-19 have increased the vulnerability of millions of small-scale farmers. Providing access to quality seeds and productive, nutritious and resilient farmer-preferred crop varieties is a core part of FAO’s assistance to farmers in post-crisis situations. In 2020, FAO supported emergency seed relief activities totalling USD 30 million in 48 countries through 144 projects.
FAO provided support to Santa Fe Province, Argentina, to implement a productive reconversion programme aimed at strengthening local added value through agroecology in combination with short circuit markets and sustainable land use planning. In 2020, the programme supported 93 farmers on 1 300 ha, trained 80 technicians in 50 training sessions, published the Basic Guide for Agroecological Planning and Management of Crops, and established a number of schemes to support agroecology and productive reconversion in the province.
Extension officers, farmers trained on protected cultivation

FAO has been promoting protected cultivation systems as a way to increase food security and grow crops more productively. Technical support was provided to Member Nations through the development of an online training course. It was delivered to 4 countries with a total of 120 participants, targeting private-sector stakeholders, extensionists and farmers. A total of 47 countries and 43 projects received technical support to develop projects and obtain approvals for protected cultivation items.

Capacity development supporting conservation tillage in Africa

The Framework for Sustainable Mechanization in Africa (F-SAMA) was launched, in collaboration with the African Union Commission, providing guidance, providing guidance on how to aid the development of sustainable mechanization in agri-food systems. Together with NSP partners, capacity building included: developing a training guide for mechanization hire service providers; conducting training in seven countries; conducting high-level sessions for investors in agricultural mechanization; and conducting a webinar series on F-SAMA, with 641 participants from 71 countries.

Mainstreaming biodiversity in Africa, Caribbean and Pacific

FAO is working to mainstream biodiversity into agriculture with funding from the EU and in collaboration with OACPS and UNEP. The joint programme will build capacities to overcome the socio-economic and political barriers preventing countries and farmers from adopting ecosystem-based agricultural practices and approaches to biodiversity and chemical management. In 2020, despite restrictions associated with the COVID-19 pandemic, the programme managed to validate 6 focus and 19 scale-out countries.

Improving farming, food and feeding in Mozambique

Through a six-year, EU-funded initiative, the Government of Mozambique, FAO, WFP and IFAD worked together to enhance agricultural production, improve access to food and improve dietary intake and feeding practices in Mozambique. Project demonstration plots evaluated the adaptability and performance of maize, rice and bean varieties in terms of yield, pest and disease resistance, and climate adaptation. In addition, 72 groups of seed producers were trained in seed production and seed enterprise development.

Agroforestry: improving livelihoods and climate change resilience

In Ghana, FAO supported the training of 40 extension staff and 3,000 farmers on a cocoa-based agroforestry system, in collaboration with the Ghana Cocoa Board, local NGOs and the Tokyo University of Agriculture and Technology. The system – developed by Japanese-Brazilian farmers – was adapted to the Ghanaian context through a South–South and triangular cooperation mechanism between Japan, Brazil and Ghana.
A new strategy was adopted for the Global Action for Fall Armyworm (FAW) Control, (GA) with over 60 countries in three regions involved, 8 of which were designated as demonstration countries and 54 designated as pilot countries for the GA. Regional integrated pest management strategies (IPM) are being developed by these countries, with lessons learned in the demonstration countries shared with the pilot countries. The GA continues to support countries in managing FAW by conducting webinars and virtual training sessions on FAW monitoring and management, and by implementing activities where possible. The guidelines distilled several hundred primary resources to assess the efficacy, safety, sustainability and scalability of IPM interventions.


Demonstration and pilot countries

North-East Asia: China, Democratic People’s Republic of Korea, Japan, Republic of Korea
South-East Asia: Cambodia, Indonesia, Lao People’s Democratic Republic, Malaysia, Myanmar, Philippines, Thailand, Timor-Leste, Viet Nam
South Asia: Bangladesh, India, Nepal, Pakistan, Sri Lanka
Western Africa: Benin, Burkina Faso, Cabo Verde, Côte d’Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo

Eastern Africa: Burundi, Ethiopia, Kenya, Rwanda, South Sudan, Uganda
Southern Africa: Angola, Botswana, Eswatini, Lesotho, Madagascar, Malawi, Mozambique, Namibia, South Africa, United Republic of Tanzania, Zambia, Zimbabwe
Central Africa: Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Gabon, Sao Tome and Principe
Near East and Northern Africa: Egypt, Mauritania, Sudan, Yemen
FAW coordination

The Steering Committee (SC) for the Global Action for FAW Control was established in 2020, chaired by FAO DG with over 20 members from resource, research and development partners across the globe. The SC is supported by a Technical Committee (TC) chaired by the chief scientist of USAID with over 30 members from international and national research institutes. During 2020, three SC meetings and three TC meetings were organized.

Innovations and tools to fight fall armyworm

FAMEWS, a mobile app and global platform to collect and summarize data on FAW field scouting and pheromone trapping was updated, while FAMEWS data (showing infestation and prevalence) were integrated into the Tanzania Agrometeorology (TMA) Database. Further, a digital monitoring and an early warning system was developed for crop diseases and insect pests in China, as well as a quick-identification tool.

FAO promotes sound pesticide management

FAO continued to facilitate pesticide risk reduction throughout all steps of pesticide lifecycle management, including support to national policies and laws on pesticide management in five countries, environmental management plans in six countries and environmental risk assessment reports for six countries, pilot schemes for empty pesticides containers management in four countries, plus four international tenders for environmentally sound disposal of more than 900 tonnes of obsolete pesticides. FAO also provided over 100 pesticide clearance requests from various FAO Country Offices.

Promoting alternatives to hazardous pesticides

In 2020, teams in four sub-Saharan countries were trained on promoting safer alternatives to severely hazardous pesticide formulations (SHPFs) using the FFS methodology. In Rwanda, FFS/IPM training plots demonstrated the effectiveness of botanical pesticides in controlling plant pests and built strong community awareness on the negative effects of SHPFs. In Burkina Faso, Mali and Senegal, alternatives to synthetic chemical pesticides were tested, with a market study carried out to assess the accessibility and profitability of alternative plant protection methods. The most promising alternatives were proposed to farmers through established FFSs.

FAO responds to desert locust upsurge

In 2020, the worst desert locust upsurge in 25 years affected 13 countries in East Africa, the Near East and Southwest Asia. In total, 2 825 000 ha were treated in 22 countries, of which 1 958 000 with direct FAO support across the ten most affected countries. With USD 194 million mobilized, FAO supported the affected countries with materials, equipment and innovative technologies for aerial and ground survey and control operations. FAO-supported operations averted the loss of an estimated 3 130 000 tonnes of cereal in East Africa and Yemen alone – enough grain to feed 21 million people for an entire year.

Innovations in monitoring, control of desert locust

The 2020 desert locust upsurge necessitated the development and implementation of innovative monitoring and early warning tools, and control systems. The eLocust3 system was expanded to include mobile phone (eLocust3m) and GPS (eLocust3g) versions. EarthRanger, a geospatial tracking system, was modified to manage aerial survey and control operations in three countries, with all field data made publicly available on the FAO/ESRI Locust Hub. New remote sensing products were developed to detect soil moisture and guide survey teams to potential breeding areas. And drones were deployed so survey teams could monitor larger areas for breeding conditions and locust infestations.
Mechanization

Through an FAO partnership, African Conversation Tillage (ACT) carried out scoping studies in 2020 to address knowledge gaps and training needs of stakeholders with regard to sustainable agricultural mechanization (SAM). Studies took place in Kenya, Uganda, United Republic of Tanzania and Zambia, with outputs including knowledge and information products, online workshops and training.
Holistic assessment of climate resilience of farmers and pastoralists

The self-evaluation and holistic assessment of climate resilience of farmers and pastoralists (SHARP) tool was customized to serve as a reporting tool under the Paris Agreement’s Enhanced Transparency Framework (ETF) in collaboration with FAO’s Office of Climate Change, Biodiversity and Environment (OCB). New material was developed and training on SHARP undertaken in multiple countries in Africa and Asia. Use of the tools is being mainstreamed in the Global Environment Facility (GEF) portfolio.

Scaling-up farmer field schools

Scaling-up of farmer field schools (FFS) was supported with the engagement of rural communities, governments and partners in 40 countries. Membership in the Global FFS Platform reached 131 countries. Ten new guides and reference documents were published to support FFS field work, including a report on Integrating ICTs in FFS, a book on Farmer field schools, gender equality, social inclusion and community empowerment, and FFS modules on agroecology, soil and watershed functions.

Evaluating agroecological performance

TAPE was developed in a collaboration between FAO and more than 70 experts to produce evidence on the performance of agroecological systems. TAPE uses and is closely linked to the 10 Elements of Agroecology framework, and both of these in turn support the Scaling Up Agroecology Initiative along agroecological transitions to sustainable agri-food systems.
Preparing the Third Report on the State of the World’s PGRFA

Over 250 National Focal Points for PGRFA from approximately 60 countries attended training sessions for country reporting and the use of the online WIEWS Reporting Tool. The country reports form the basis for The Third Report on the State of the World’s Plant Genetic Resources for Food and Agriculture, which is expected to be submitted for endorsement to FAO’s Commission on Genetic Resources for Food and Agriculture in 2023.
10 elements of agroecology

The 10 elements of agroecology analytical framework was approved by FAO Member States to guide FAO’s vision on agroecology and facilitate improved decision-making by policymakers, practitioners and other stakeholders. A review paper was published describing the rationale and development process of the analytical framework; it brought together different streams of scientific evidence to support social-ecological transitions structured around the 10 Elements of Agroecology framework. Link here: https://www.tandfonline.com/doi/full/10.1080/26395916.2020.1808705

Heading to Rotterdam Convention COP10

A vigorous push was given to preparations for the Tenth Conference of the Parties of the Rotterdam Convention (COP10), with all relevant documents for the first round of distribution submitted ahead of time. The Bureau and President meetings, which were held online, reached important decisions to ensure the success of this important event on pesticide and chemical management. COP10 was agreed to be held in two segments: online in July 2021 and in-person over two weeks in 2022.

Joint meetings on pesticides

The 13th FAO/WHO Joint Meeting on Pesticide Management (JMPM) meeting took place on 20–21 October 2020. The meeting approved one new guidance on pesticide licensing and one revised guidance on pesticide labelling. The 19th FAO/WHO Joint Meeting on Pesticide Specifications (JMPS) was conducted virtually in two sessions in June and October 2020, with 56 new specifications and equivalences evaluated. The 2020 plenary session of the FAO/WHO Joint Meeting on Pesticide Residues (JMPR) was rescheduled to 2021 due to COVID-19. Group meetings were conducted virtually, with 35 compounds evaluated and more than 300 maximum residue limits (MRLs) estimated.
Communication and advocacy

World Pulses Day

FAO highlights pulses to fight hunger
The theme of World Pulses Day 2020 was “Plant proteins for a sustainable future”, aiming to highlight pulses as an important plant protein source and to point to their valuable contribution to the 2030 Agenda. During a special ceremony held on 7 February 2020 at FAO headquarters, the Organization reiterated its commitment to continue working with all partners to improve the production and consumption of pulses as a means of contributing to healthy nutrition and sustainable agricultural and food systems.

World Bee Day

World Bee Day 2020: safeguard declining food heroes
Protecting bees and beekeepers is crucial to supporting livelihoods in the light of COVID-19. This was the key takeaway from virtual celebrations of World Bee Day 2020, organized on 20 May by FAO in partnership with the Government of Slovenia, the Chinese Academy of Agricultural Sciences (CAAS) and Apimondia. The “Bee Engaged” theme focused on apiculture and good practices adopted by beekeepers to support their livelihoods, deliver quality products and ecosystem services.
International Year of Plant Health

The International Year of Plant Health (IYPH) 2020 promoted and recorded 700 events on plant health globally, which raised awareness of the importance of plant health among the public and policy makers. The IYPH was launched at a successful face-to-face event on 2 December 2019 in the presence of FAO Director-General Qu Dongyu. The IYPH portal and communication toolkit were also introduced, and are available at: http://www.fao.org/iyph.

The IYPH increased stakeholder engagement all over the world. Examples include IYPH airport and tram campaigns in Milan, Italy, IYPH flags flying on public buildings in the Republic of Korea, and the green lighting of landmarks, monuments and buildings in Canada, Mexico and the United States of America. EPPO launched the “Beastie the Bug” campaign and rebranded its “Don’t Risk It” campaign to highlight the importance of preventing plant pest introduction when travelling. Belgium minted 600 000 two-euro coins as regular-issue currency, while Italy and Mexico minted commemorative coins. 29 countries from all regions issued IYPH commemorative stamps. FAO Governing Bodies endorsed the establishment of an International Day of Plant Health, proposed by Zambia. Lastly, the IYPH saw the launch of the Scientific Review of the Impact of Climate Change on Plant Pests and the Youth Declaration on Plant Health, sparking further public interest on the topic.

Newsletters

Two new bimonthly newsletters are published: Plant Production and Protection, on raising awareness of sustainable crop production and protection, and Fall Armyworm Control in Action, on measures being taken to address the threat of FAW. The FAO Agroecology Newsletter is published every month in English, French and Spanish on agroecology initiatives around the world, as well as its bulletins for desert locust.
Partnerships and network

NSP cooperates with over 130 different external partners, including over 30 key organizations to create synergies and achieve common goals. We are grateful to all our partners for the invaluable support they provide. The following is a list of our leading partners by category.

11 United Nations Organizations
- Codex Alimentarius
- Convention on Biological Diversity (CBD)
- International Fund for Agricultural Development (IFAD)
- International Treaty on Plant Genetic Resources for Food and Agriculture
- United Nations Centre for Sustainable Agricultural Mechanization (UN-CSAM)
- United Nations Development Programme (UNDP)
- United Nations Environment Programme (UNEP)
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA)
- United Nations Resident Coordinator Office (UNRCO)
- World Health Organization (WHO)
- World Meteorological Organization (WMO)

17 International/Regional Organizations
- African Union (AU)
- Caribbean Community (CARICOM) Secretariat
- East African Community (EAC)
- European Commission Directorate-General for International Partnerships (INTPA)
- Global Crop Diversity Trust
- Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)
- International Coconut Community (ICC)
- International Seed Testing Association (ISTA)
- International Union for Conservation of Nature (IUCN)
- Islamic Organization for Food Security
- North American Pollinator Protection Campaign (NAPPC)
- Organisation for Economic Co-operation and Development (OECD)
- Organization of African, Caribbean and Pacific States (OACFS)
- Plant Genetic Resources Centre, Southern African Development Community
- Secretariat for the Pacific Community, Fiji (SPC)
- Secretariat of the Pacific Regional Environment Programme (SPREP)
- Southern African Development Community (SADC)

72 Academic and Research Organizations
- Aerospace Information Research Institute, Chinese Academy of Sciences, China (CAAS)
- Africa Rice Center
- African Forum for Agricultural Advisory Services
- Arizona State University, United States of America
- Bioversity International
- Brazilian Agricultural Research Corporation (EMBRAPA)
- Caribbean Agriculture Research and Development Institute (CARDI)
- Centre for Agriculture and BioScience International (CABI)
- Tropical Agricultural Research and Higher Education Center (CATIE)
- China Agricultural University, Beijing, China
- Climate Prediction and Applications Centre (ICAPC/IGAD)
- Columbia University International Research Institute for Climate and Society, United States of America
- Conservation Tillage Research Center (CTRC)
- Cornell University, United States of America
- EC Joint Research Centre (JRC)
- ETH Zurich
- European Centre for Medium-Range Weather Forecasts (ECMWF)
- European Confederation of Soil Science Societies
- Federal University of Rio Grande do Sul (UFRGS), Brazil
- French Agricultural Research Centre for International Development (CIRAD)
- French National Research Institute for Agriculture, Food and Environment (INRAE)
- Global Soil Biodiversity Initiative
- Institute for Agriculture and Food Industry, Rhone-Alpes (ISARA)
- Institute of Biometeorology of the National Research Council (IBIMET)
- Institute of Plant Protection, Chinese Academy of Agricultural Sciences (CAAS)
Institute of Space Technique and Technology (ISTT), Kazakhstan
Instituto de Investigaciones en Ecosistemas y Sustentabilidad, Universidad Nacional Autónoma de México (UNAM)
International Center for Agricultural research in the Dry Areas (ICARDA)
International Center for Biosaline Agriculture (ICBA)
International Centre for Research in Agroforestry (ICRAF)
International Center for Tropical Agriculture (CIAT)
International Centre of Insect Physiology and Ecology (icipe)
International Crop Research Institute for the Semi-Arid Tropics (ICRISAT)
International Institute of Tropical Agriculture (IITA)
International Livestock Research Institute (ILRI)
International Maize and Wheat Improvement Center (CIMMYT)
International Potato Center (CIP)
International Rice Research Institute (IRRI)
International Water Management Institute (IWMI)
Joint Research Centre – European Commission (JRC-EC)
Latin American Scientific Society of Agroecology (SOCLA)
Leeds University, United Kingdom of Great Britain and Northern Ireland
Lund University, Sweden
Michigan State University, United States of America
National Agricultural Technology Institute (INTA), Argentina
Nordic Genetic Resource Center
Pennsylvania State University, United States of America
School of Agriculture Foundation, University of Buenos Aires, Argentina
School of Life Sciences, Chongqing University, China
SERVIR, NASA
Sorbonne University, France
Sudan University of Science and Technology, Sudan
TMG Research GmbH
Tokyo University of Agriculture and Technology, Japan
Transformative Partnership Platform (TPP)
Trinity College Dublin, Ireland
Tropical Agricultural Research and Higher Education Center (CATIE)
Universidad de Guadalajara, Mexico
Universidad de la República – Facultad de Agronomía, Uruguay
Université Catholique de Louvain, Belgium
University of Cambridge, United Kingdom of Great Britain and Northern Ireland
University of Cape Town, South Africa
University of Hamburg, Germany
University of Konstanz, Germany
University of Technology, Jamaica
University of Zambia
Vietnam Academy of Agricultural Sciences (VAAS)
Wageningen University, Netherlands
Warwick University, United Kingdom of Great Britain and Northern Ireland
Wilfred Laurier University, Canada
World Agroforestry Centre (ICRAF)/Center for International Forestry Research (CIFOR)
World Vegetable Center
Zambia Agriculture

39 Industry and NGO Partners
51 Degrees
Access Agriculture
African Conservation Tillage Network (ACT)
AGRHYMET Regional Center
Agriterra
AgroCare
Agronomes et Veterinaires Sans Frontières
Associação para a Cooperação e o Desenvolvimento (ACTUAR)
Basel Convention Regional Centre for Training and Technology Transfer for the Caribbean (BCRC-Caribbean)
Bioprotection global Biovision
CARE International
Coalition of the Willing on Pollinators (Promote Pollinators)
Cooperativas Agrarias Federadas
CropLife International
CSA Alliance (China)
Dan Church Aid (DCA)
Digital Green
Eastern Africa Field Schools Hub
Eclosio
Esri
European Agricultural Machinery (CEMA)
European Conservation Agriculture Federation (ECAF)
Foundation PLAGBOL (Plaguicidas Bolivia)
Garmin
Global Food Security Cluster
Global Pulse Confederation (GPC)
Google
GRUPO GEA (Peru)
HEMAV Foundation
Indian Meteorological Department
Institute for Research and Promotion of Alternatives in Development (IRPAD)
International Biocontrol Manufacturers Association (IBMA)
International Federation of Organic Agriculture Movements (IFOAM)
International Fertilizer Association (IFA)
International Seed Federation (ISF)
Lobelia/isardSAT
Louvain Cooperation
Mercy Corps
Transformation of FAO
Plant Production and Protection

Internal management and professional development

With the appointment of Jingyuan Xia as the new Director for NSP, the Division embarked on a process of internal restructuring based on clearly defined standardization principles. Director Xia stressed the need to foster a “One Dynamic NSP”, built on strategies to increase internal solidarity and external visibility, and to promote mindset, management and cultural innovations. It was agreed that approaches should be people-first, demand-driven, result-oriented and performance-based, all designed to bring positive transformation to NSP. By December 2020, two new sets of standard operating procedures had been adopted to facilitate workflow and clearance procedures (3 SOPs) and to improve quality control (10 SOPs). A new emphasis was placed on professional development in NSP. Specifically, plans were put in place to encourage technology promotion and transfer, while focusing on strengthening the two mainstreams of optimization (of yields, input efficiency, etc.) and minimization (of crop losses, pesticide residual risks, environmental contamination, etc.). To achieve the two mainstreams, four key technologies were identified: seed technology, cropping technology, protection technology and high technology.
Desert Locust control team – a success story

The Desert Locust control team has worked tirelessly to rapidly roll out a multi-country desert locust response to tackle the worst upsurge of a generation. The team’s response has produced significant successes, protecting millions of people’s livelihoods and food security across the affected regions thanks to cross-cutting strategies and collaborations. The achievements did not go unnoticed by FAO Director-General Qu Dongyu, who assigned one of the ten team awards to the Desert Locust control team for the excellent work done during 2020. The team was proud to receive such recognition and has continued to work hard to improve upon the achieved successes.

Teamwork

NSP underwent important restructuring geared towards bolstering teamwork and improving working mechanisms across the Division. The process involved the creation of three brand-new task forces – Task Force for Communications and Advocacy (TFCA), Task Force on Professional Development (TFPD) and Task Force of Planning and Finance (TFPF) – and a dedicated Women’s Group and Youth Group. The initiatives were welcomed as a positive step towards further connecting NSP employees from across different teams and encouraging a sense of working together for one common goal under difficult circumstances relating to COVID-19.

Culture building

NSP efforts to support team building in 2020 also extended to hosting an exciting end-of-year party, organized by the NSP Youth Group. Games were played, songs were sung – sometimes badly! – stories were told, and Director Xia took time to explain to NSP employees the great significance of the Chinese Year of the Ox, being celebrated in 2021.
Way forward

Dear Reader,

As you can see, we have achieved a lot in 2020, despite the challenging circumstances brought about by COVID-19. And in 2021 there will be no let-up!

With a new global focus on “building back better”, FAO’s Plant Production and Protection Division (NSP) plans to use this unique opportunity to reaffirm the importance that plant life on Earth plays in providing food security and nutrition, ecosystems services, livelihoods and a host of other benefits.

NSP will focus its activities for 2021 around the annual theme of “Enabling Food Security and Nutrition”, in line with Sustainable Development Goal (SDG) 2. NSP will also align its work plans with FAO’s proposed new Strategic Framework 2022–2031, which aims to achieve “MORE efficient, inclusive, resilient and sustainable agri-food systems for better production, better nutrition, a better environment, and a better life, leaving no one behind”.

NSP will play a key role in FAO’s contribution to the United Nations Food Systems Summit – with a pre-Summit in Rome in late July – which aims to increase understanding of the choices that affect the future of agri-food systems and to accelerate progress toward the SDGs. NSP will lead on FAO’s new Global Action on Green Development of Special Agro-Products: One Country–One Commodity (OCOC), a five-year initiative that will integrate the economic, social and environmental dimensions of sustainable development targeted in the United Nations 2030 Agenda. The Division will also launch the Global Programme on Sustainable Dryland Agriculture, with the support of other FAO divisions and Decentralized Offices.

NSP will co-lead with other FAO divisions the International Year of Fruits and Vegetables 2021 (IYFV) and, with the IPPC, coordinate activities for the extended International Year of Plant Health 2020 (IYPH), including the IYPH closing ceremony on 1 July. NSP will lead celebrations for World Pulses Day 2021, the theme of which is “Love pulses – for a healthy diet and a healthy planet”, and World Bee Day 2021, the theme of which is “Bee engaged – Build back better for bees”, as well as being a key partner for World Food Day 2021. NSP will also organize a two-day “Global Conference on Green Development of Seed Industries” at FAO headquarters on 4–5 November 2021.
After USD 194 million were mobilized by FAO in 2020 to combat desert locust, NSP will continue to provide technical support and lead on capacity development in affected countries and develop innovative solutions to the desert locust crisis, including drones for surveillance. Meanwhile, work will continue on implementing regional integrated pest management (IPM) packages in all eight FAW Global Action demonstration countries (Burkina Faso, Cameroon, China, Egypt, India, Kenya, Malawi and the Philippines) and developing capacities for prevention and preparedness in countries where FAW has not been detected.

FAO, along with the United Nations Environment Programme (UNEP) and the World Health Organization (WHO), will launch the Action Plan on Highly Hazardous Pesticides (HHPs). The Action Plan will seek to eliminate harm associated with HHPs, and increase knowledge so that countries can make informed decisions on phasing out problematic pesticides, disseminate knowledge and good practices, and encourage adoption of non-toxic alternatives to HHPs.

And the Rotterdam Convention Secretariat will continue to reach out with all possible electronic tools to its 164 Parties and ensure the continuous successful delivery of technical assistance for the sound management of certain hazardous chemicals and pesticides.

As ever, we will rely on the support of all partners to achieve the best results over the coming year.

"NSP will focus its activities for 2021 around the annual theme of ‘Enabling Food Security and Nutrition’, in line with SDG 2"
Further reading

Ecosystem approach to crop production intensification


Global Action for Fall Armyworm Control


Locusts and transboundary plant pests and diseases


Pest and pesticide management


Plant genetic resources and seeds


Rotterdam Convention


Rural and Urban Crop and Mechanization Systems
