International Agri-Food Network

International Year of Plant Health
2020 Call to Action

Plant health, soil health and animal health underpin the health and safety of our food systems. Recognizing the role healthy crops can play in increasing productivity and better use of precious land, water and health resources, the IAFN proposes focusing on the following to mark the UN International Year of Plant health.

1) Research on Plant Health
Conduct research to better understand plant diseases and its impact, crops and plants, health and optimal nutrient uptake, the development of more pest and disease resilient varieties; assess the likely impacts of climate change on pest establishment; develop models of pest outbreak potential and impact to enable informed pest management decision-making.

2) Monitoring
Develop/implement early warning systems to support prevention and rapid response to new and existing pests to limit in-country and cross-border spread and intensification. This will enable rapid and targeted short-term responses and long-term adaptation planning. This can be done by deploying technologies such as remote sensing, drones, and satellite technologies, as well as artificial intelligence. Current pest management practices should be based on sound science.

3) Response Capacity
It is vital that FAO plays a role along with the wider global community in building a rapid response capacity among the varied stakeholders on the pressing plant health issues due that exist. Climate change is having a significant impact on global crop yields and food security; as well as directly and indirectly influencing the distribution and severity of crop pests, including invasive species, which is further effecting crop production.

4) E-phytos
Trade of crops ensures food security in a changing world and the phytosanitary system protects plant health when those crops move. “In the short term, by moving food from surplus to deficit areas, trade can provide an important mechanism to address production shortfalls due to extreme weather events. In the long term, international trade could contribute towards..."
adjusting agricultural production in an efficient manner across countries.” The FAO should assist developing countries and their national and regional institutions in reaping export opportunities in international markets through trade facilitation, e-application of sanitary and phytosanitary (SPS) measures and help global value chains function more efficiently. Supporting Codex and IPPC is essential.

5) Sharing of Best practices and innovative approaches for Plant Health

Science, technology and regulations all have a role to play to fight back against pests that are destroying food crops and other resources that are critical to long-term food security. Identified best practices include Integrated Pest Management (IPM) a holistic approach to sustainable agriculture that focuses on managing insects, weeds and diseases through a combination of cultural, physical, biological and chemical methods.

All farmers need access to knowledge on all tools available to promote health, including, adaptive practices that also help mitigate climate change, such as the 4R principles for plant nutrition - using the right nutrient source, at the right rate, at the right time and in the right place to optimize plant uptake, reduce nutrient losses and increase yields and carbon capture.

Crop protection is required for plant health. There is a need for innovative approaches and to have expedited reviews of technologies needed on urgent files, as well as improved seeds.

6) Plant Nutrition

Providing proper plant nutrition is vital for improving plant health, resilience to stress and resistance to disease. Scientific research has show that healthy plants are better able to fend off pathogens, while the occurrence of pests and diseases is higher when plants are stressed and malnourished. Ensuring that farmers have access to well adapted fertilization can increase plant vigor, resistance to droughts and frosts and reduce the severity of many diseases.