



Preventing the next zoonotic pandemic Adopting a One Health approach to animal and plant pests and diseases and preventing future zoonotic pandemics

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The issue

Similar to over 60 percent of human infectious diseases, the Coronavirus pandemic (COVID-19) is thought to have originated from an animal source. Whereas zoonotic diseases represent a direct threat to human health, animal diseases have devastating impacts on animal health and production, trade and economic development of the region. In the Near East and North Africa (NENA) region, livestock contributes between 30 to 80 percent to agriculture GDP and it is the main source of income for vulnerable populations in rural areas. The region is exposed to several transboundary animal diseases (e.g., Foot-and-Mouth disease, Peste des Petits Ruminants, Lumpy skin disease) and zoonotic diseases (e.g., Rift Valley fever, highly pathogenic avian influenza, rabies, MERS-CoV, Crimean-Congo haemorrhagic fever, brucellosis, bovine tuberculosis). These diseases are increasing the vulnerability of farmers and smallholders even more, given the lack of access to veterinary services, extension services, clinical care and food safety inspections due to the COVID-19 restrictions, in addition to the disruption of value chains. It is therefore extremely important to enhance national, regional and international preparedness and emergency response by operationalizing the One Health approach.

Plant pests and diseases are major threat to food security, nutritional status, and food safety in the region. They are able to cause losses up to 40 percent in many staple crops, reduce nourishment value of plants by decreasing nutritional content caused by injuries, and increase food safety hazards, i.e., directly through mycotoxins, or indirectly by triggering pest control practices like the use of pesticide sprays. Countries in the NENA region are facing significant challenges in implementing the wide range of diversified measures to address plant pests and diseases. Insufficient national capacities and the lack of proper regional cooperation programmes are contributing to these challenges and limiting surveillance, border controls and inspections, risk assessments, proper laboratory diagnosis and effective timely response.

The transboundary nature of some animal and plant pests and diseases makes it impossible for a single country to adequately address them alone. Therefore, a regional cooperation strategy among NENA countries becomes vital to create synergy in order to analyze threats, exchange useful knowledge and information, and coordinate response actions with established harmonized standards.

NENA countries have underlined the importance of efforts to control transboundary animal diseases including zoonoses and plant pests and diseases jointly in a common approach in the 34th Session of FAO Regional Conference for the Near East in 2018.

The action

In order to mitigate the impact of animal and plant pests and diseases the following actions are proposed:

Budget

USD 20 million

Time frame

2021–2023

SDGs



Related FAO policy notes on COVID-19

- ▶ [Preventing the next Zoonotic Pandemic](#)
- ▶ [Mitigating the impacts of COVID-19 on the livestock sector](#)
- ▶ [COVID 19 and its impact on Food Security in Near East and North Africa: how to respond?](#)



- Assist countries in developing comprehensive national One Health Action Plans (in collaboration with the World Health Organization (WHO), the World Organization for Animal Health (OIE), the Arab Organization for Agricultural Development (AOAD), the Gulf Cooperation Council (GCC), the Arab Maghreb Union (UMA) and establish or operationalize One Health Platforms.
- Strengthen collaboration between NENA veterinary services for exchange of information, early warning, and harmonizing risk-based surveillance and control strategies.
- Support countries in the design and implementation of national Animal Health strategies and strengthen laboratory capacities, biosafety, biosecurity, quarantine systems, veterinary public health and animal health services to combat diseases and antimicrobial resistance.
- Support countries in the implementation of targeted capacity development programs including veterinary education and research on transboundary animal and zoonotic diseases, including COVID-19 and the role of animals.
- Support countries in promoting safe livestock and animal product value chains to overcome the impact of COVID-19 and ensure food security.
- Support Plant Health Services in the organization of regional training workshops, technical meetings and conferences to bring together researchers, NPPOs, phytosanitary inspectors and laboratory specialists from NENA countries to exchange technical opinions and expertise.
- Support the use of innovative tools for the early identification and detection of transboundary animal and zoonotic diseases, as well as plant pests and diseases and control antimicrobial resistance.
- Develop regional training on plant quarantine pest lists depending on national requirements and the principles of the International Standards for Phytosanitary Measures (ISPMs) for Pest Risk Analysis, and organize trainings on the diagnostic on plant pest identification protocols and methods.
- Foster innovative production practices that reduce food safety hazards and strengthen awareness of farmers on food safety and antimicrobial resistance.

Expected results

- 1 Comprehensive National One Health Action Plans developed in collaboration with national stakeholders (WHO, OIE, AOAD, GCC and UMA).
- 2 One Health platforms operationalized and control of emerging infectious diseases and antimicrobial resistance in place.
- 3 Animal Health and Plant Health Services' capacities strengthened for early detection and rapid response to emerging infectious diseases and antimicrobial

resistance, including improved biosafety and biosecurity in laboratories and key diagnostic services.

- 4 Veterinary education in surveillance and response to combat emerging infectious diseases and antimicrobial resistance enforced and research capacities on emerging zoonotic diseases, including COVID 19 strengthened.
- 5 Food safety strengthened and awareness on food safety risks and antimicrobial resistance increased.

Programme links

The programme is in line with the FAO One Health Strategic Action plan, FAO-OIE Global Framework for Transboundary Animal Diseases, FAO Emergency Prevention System for Animal and Plant Diseases and Pests, FAO-OIE-WHO Tripartite Agreement, FAO Emergency Centre for Transboundary Animal Diseases (ECTAD), FAO Regional Initiative on Building Resilience for Food Security and Nutrition (RI-FSN).

Partnerships

This programme will work with the Emergency Prevention System for Animal Health (EMPRES), the Global Early Warning System for Major Animal Diseases (GLEWS), the Animal Production and Health Division (NSAH), the Office of Emergencies and Resilience (OER) and the Emergency Centre for Transboundary Animal Diseases (ECTAD), WHO, OIE, AOAD, GCC, UMA, the African Union Inter-African Bureau for Animal Resources (AU-IBAR), the Near East Plant Protection Organization (NEPPO), the International Center for Agriculture Research in the Dry Areas (ICARDA), the International Center for Biosaline Agriculture (ICBA), Abu Dhabi Agriculture and Food Safety Authority (ADAFSA), the Arab Society for Plant Protection (ASPP), the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), the Mediterranean Animal Health Network (REMESA), the International Plant Protection Convention (IPPC), academia and research institutions and governments of the involved countries.

Country focus

Egypt, Iraq, Jordan, Lebanon, Mauritania, Morocco, Sudan, Syrian Arab Republic, Tunisia and Yemen

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