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**Integrating the One Health approach into IPPC activities**

# Introduction

The One Health High Level Expert Panel (OHHLEP) defines One Health as an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent. The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.

As the global population grows, leading to changes in food production, land use and climatic conditions, the interaction between humans, animals, plants and the environment becomes ever more complex and intertwined. One Health therefore has an increasingly important role to play in mitigating against the risks arising from this interplay of different sectors.

# How plant health fits into the One Health concept

Discussions on One Health were held at the 16th Session of the Commission of Phytosanitary Measures and highlighted the incomplete understanding of how plant health fits into the One Health approach and how plant health could benefit from it. Below are two examples of where plant health has a pivotal role to play in the One Health approach.

**Antimicrobial resistance (AMR)** –

Resistance has been reported worldwide against drugs of bacteria, viruses and fungi over recent years. For the drug ciprofloxacin, for example, which is used to treat urinary tract infections, resistance of between 8.4 – 92.9% has been reported (WHO, 2021). In a scenario where antibiotics become ineffective, infections and deaths could rise by hundreds and tens of thousands, respectively (OECD, 2018). This is not just a human issue, the misuse and overuse of antibiotics in animal and plant systems is also a contributing factor to resistance. A One Health approach is therefore required to tackle this issue. In the area of plant health, this could involve raising awareness of the impact using antibiotics in crop production can cause and working with growers to reduce the use of antibiotics through more integrated pest management programmes.

**Food security** –

Another issue that could benefit from the One Health approach is that of food security. As the global population rises, there is an increasing pressure on food systems, with food production needing to increase by up to 50% of 2012 levels to meet demand by 2050 (Garcia *et al.*, 2020). Like with AMR, this issue requires solutions across human, animal and plant sectors. In the latter, minimising the introduction and spread of plant pests, and ensuring that crop production is carried out in a sustainable manner, will be significant.

By tackling these issues collectively with other sectors, including human and animal health, plant health can benefit from the expertise and resources of these sectors, as well as learn from best practice. It is also important to realise that One Health is gaining momentum across major organisations, such as the World Health Organisation (WHO), Food and Agriculture Organisation (FAO), United States Centre for Disease Control (CDC), the European Union, and the One Health European Joint Programme (OHEJP) (ECDC, 2022; Garcia *et al.*, 2020). It would be unfortunate if the plant health sector was not able to fully grasp the opportunity to be involved with other programmes and maximise benefits to plant health.

# One Health gap in IPPC activities

As evidenced by discussions at CPM-16, One Health is still a novel concept for many. It is not widely referenced in IPPC standards, recommendations or guidance materials. There is therefore a significant gap in awareness and implementation. Efforts are also needed to raise the profile of plant health in the wider international One Health debate.

# Recommendations

1. Send out an IPPC Call for case studies of how the One Health approach has been used and disseminate these to Contracting Parties and store them on the International Phytosanitary Portal;
2. Hold an IPPC webinar series of One Health topics, such as AMR and sustainable food systems;
3. Integrate the One Health approach into the overarching implementation plan for the IPPC Strategic Framework 2020-2030 development agenda items. Many, if not all, of the development agenda items could benefits from the approach, including the Pest Outbreak Alert and Response System, climate change, diagnostic networking, and global phytosanitary research coordination;
4. Raise awareness of the importance of plants in the One Health global debate, such as with the FAO, WHO, World Animal Health Organisation (WOAH), CODEX and other international fora;
5. Consider whether an IPPC recommendation is appropriate to raise awareness of the One Health concept;
6. Consider whether the One Health concept can be incorporated into other IPPC activities, including standard setting, implementation and capacity development, and communications

# References

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