



Establishing a diagnostic laboratory network

When countries trade plants, plant products and agricultural commodities, part of their responsibility is to ensure that these are pest-free or are at an acceptable level of protection. Access to diagnostic services and expertise is thus essential for importing countries to effectively detect pests in commodities that enter their borders.

This will prevent the entry and introduction of pests that could potentially harm agricultural production and the environment, or disrupt international trade. It is known that accurate and rapid pest diagnosis underpins phytosanitary certification, import inspections and the application of appropriate phytosanitary measures. Moreover, early detection and accurate diagnosis can minimize the risk and impact of a pest outbreak as it gives basis for successful pest outbreak containment or control strategies.



About the International Plant Protection Convention (IPPC)

The IPPC is a multilateral treaty established to protect the world's plants, agricultural products and natural resources from plant pests. Established in 1951, IPPC is ratified by 185 countries.

The IPPC Secretariat and community are focusing on eight **development agenda items (DAIs)** to achieve the objectives in the [IPPC Strategic Framework 2020-2030](#).

These agenda items, in various stages of implementation, are:

1. harmonization of electronic data exchange;
2. commodity- and pathway-specific International standard phytosanitary measures (ISPMs);
3. management of e-commerce and postal and courier pathways;
4. developing guidance on the use of third-party entities;
5. strengthening pest outbreak alert and response systems (POARS);
6. assessment and management of climate change impacts on plant health;
7. global phytosanitary research coordination; and
8. diagnostic laboratory networking.

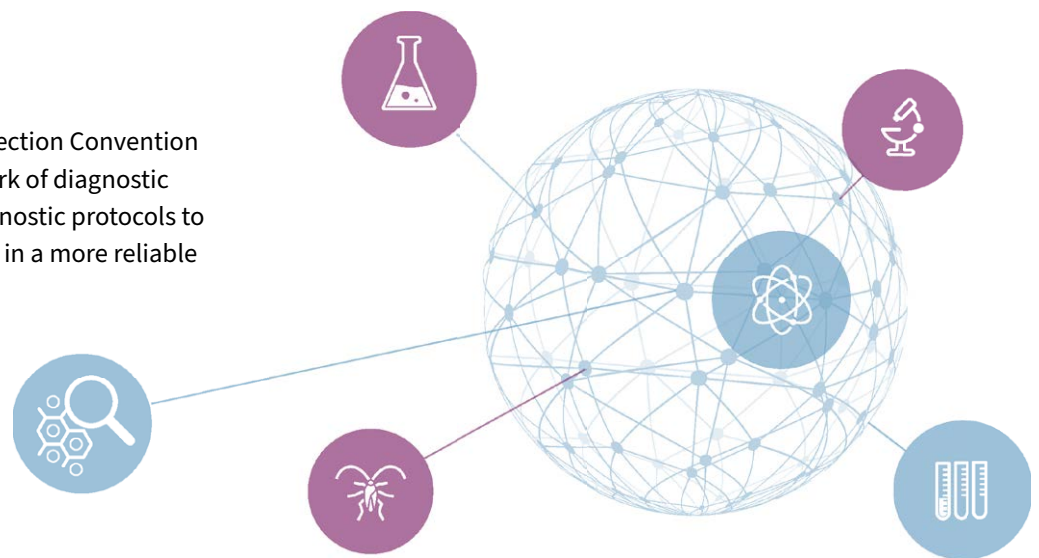
Challenges

- » Diagnostic services and expertise are severely restricted in many countries due to limited structural capacity and trained personnel.
- » Establishing world-class diagnostic laboratories and keeping up with advances in diagnostic technology is extremely costly.
- » For many countries, the only viable option to access high-end diagnostic services will be through international cooperation to access diagnostic capacity at an international, regional or subregional level.



Solution

The International Plant Protection Convention (IPPC) will establish a network of diagnostic laboratory services and diagnostic protocols to help countries identify pests in a more reliable and timely manner.



Current status and opportunity to invest

USD 1 478

total budget from 2023–2030



To date, a small amount of work has been commissioned to the CPM Focus Group to examine the current state of diagnostic capability in NPPOs and to establish a diagnostic laboratory network. No other scoping or planning has been done other than by this CPM Focus Group just established in 2023 to make an approximate budget provision, scope and an action plan.

This DAI has the potential to be a very large and complex programme, however it will tackle one of the most fundamental activities of a national plant protection organization services: pest diagnostics. The CPM recommended that the Scope and Plan phase should commence soon (2024) with the establishment of a

focus group to work with the IPPC Secretariat and Bureau. It is expected that discussions take place on approaches to maintain an IPPC laboratory diagnostic network including aspects on timely diagnosis of samples and communication of results.

Also, the practicalities needed for such a system should be considered including legal frameworks, confidentiality, and liability issues. It is forecasted to take two years before a viable proposal with details is presented to CPM for approval, as there is still a need to discuss and agree on the components necessary for an efficient and effective IPPC laboratory diagnostic network, considering the regional differences.



Why your investment matters

- » The capacity of NPPOs to detect and identify pests will be improved through the development of a laboratory network that provides reliable and timely diagnosis. It is expected that NPPOs will have almost instant access to reliable plant pest laboratories or plant health clinics, with a broad range of analytical capacities. This will allow NPPOs to establish technically justified phytosanitary measures, facilitate safe trade, and respond to pest out-breaks more quickly.
- » National laboratories with strong diagnostic functions will offer reliable services within regions or globally, through the lab network, reducing the need for all countries to develop duplicated capacity.
- » IPPC Regional laboratory networks can serve as surveillance sites to monitor “hot spots” for pest spread, which will support activities against emerging pests.



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Funding mechanism

Contact us on how you can contribute financially or in kind by sending an email to ippc-dai@fao.org.

For other inquiries, please email Adriana Moreira at adriana.moreira@fao.org.

Invest in plant pest diagnostics and the IPPC laboratory diagnostic network today and help ease market access and facilitate safe trade.

CONTACT US

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