**IPPC STRATEGIC FRAMEWORK 2020-2030 DEVELOPMENT PROGRAMME: DIAGNOSTIC LABORATORY NETWORKING**

*(Prepared by IPPC Secretariat)*

1. **INTRODUCTION**
2. The current COVID-19 pandemic is demonstrating to the world that we need to be ready to tackle such emergencies. Plant pests are no different to viruses, nor pests or diseases carry passports when moving from one country to another. We also need to be conscious of increase in trade and travel as plant pests move across borders with consignments and travelers and spread unintentionally at alarming rates.
3. It is known that early detection and accurate diagnosis can minimize the likelihood of a pest outbreak. Accurate and rapid pest diagnosis underpins phytosanitary certification, import inspections, surveillance activities and the application of appropriate phytosanitary measures. The IPPC Strategic Framework 2020-2030[[1]](#footnote-1), with its eight key development agenda items, identifies new priority work areas that are aligned to the IPPC’s vision, mission and strategic objectives. One of the identified development agenda is to establish a network of diagnostic laboratory services and diagnostic protocols to help countries identify pests in a more reliable and timely manner. It is expected that by 2030 an international network of diagnostic laboratory services is functioning, and that national laboratories have strong diagnostic functions are officially recognized as capable of offering reliable services within regions or globally, reducing the need for all countries to develop duplicated capacity.
4. The [IPPC Standard Setting Unit (SSU)](https://www.ippc.int/en/publications/2463/) was assigned to coordinate the activities related to this development agenda item. The plan is to include activities that would go across the different IPPC committees and to the entire IPPC Secretariat, building on the expertise of all its units and committees. It is to note that there is no secured resources to achieve this development agenda, and the work has not yet commenced, but initial discussions were held with the [IPPC Technical Panel on Diagnostic Protocols (TPDP)](https://www.ippc.int/core-activities/standards-setting/expert-drafting-groups/technical-panels/technical-panel-diagnostic-protocols/) and the [Standards Committee (SC)](https://www.ippc.int/en/core-activities/standards-setting/standards-committee/). The SC is scheduled to have further discussions in its November 2020 meeting. Therefore, this document outlines the discussions carried out in 2020 and some possible future activities.
5. It is important to highlight that, although a prioritization exercise should be made to the progress the development agendas in the IPPC Strategic Framework, some activities related to diagnostic laboratory networking should commence soon in order to achieve the desirable goal, in which it may take up to some years to consolidate an international network.
6. **WHAT HAPPENED SO FAR?**
7. The SC in May 2019 had agreed to discuss the impact of the IPPC Strategic Framework 2020-2030 on standard setting at its meeting in November 2019. In preparation for this, the SC had invited the technical panels to comment on the potential impact of the IPPC Strategic Framework 2020-2030 on their work. The TPDP in their August 2019 meeting[[2]](#footnote-2) focused some discussions on three development agenda items in which diagnostic protocols (DPs) are mainly concerned with and these are: a) commodity- and pathway-specific ISPMs, b) diagnostic laboratory networking, and c) strengthening pest outbreak alert and response systems. Noting that global phytosanitary research coordination may also influence the TPDP work and that they could provide contributions in the future.
8. Regarding Diagnostic laboratory networking, the TPDP noted the strong linkage with the work of the panel and acknowledged the need for many contracting parties to be supported in their diagnostic capacity, particularly in the face of occurrence of emerging pests, and that this could be achieved through a network of diagnostic laboratories.
9. **TPDP 2019-08 meeting.** Below, extracts from the [TPDP 2019-08 meeting report](https://www.ippc.int/static/media/files/publication/en/2020/04/Report_TPDP_2019_Aug_2020-04-09.pdf):
10. The TPDP noted that a network of diagnostic laboratories exists in the field of animal health, which is managed by the World Organization for Animal Health (OIE); however, this network deals with approximately 15 pests, while in the plant health field the number of pests to be taken into consideration is far greater. Despite this difficulty, there are networks in the plant health field, but they only certain regions of the world (e.g. the network of official reference laboratories within the European Union), or they function on an informal basis which, besides the lack of sustainability, can lead to difficulties when the matter is for official NPPO purposes. The TPDP noted that this means that a laboratory network would have to comply with some rules. One participant noted that EPPO established a database of diagnostic laboratories in which the laboratories of its region can declare themselves on a voluntary basis.
11. The TPDP acknowledged that, in the framework of a diagnostic laboratory network, sending samples for laboratory testing from one country to another could present legal and procedural difficulties. The TPDP noted it was necessary to draw the attention of NPPOs and RPPOs to the need to facilitate the movement of plant material and specimens for diagnosis. A document should be drafted for this purpose and discussed during the next TPDP meeting in order to make a proposal to the SC for a CPM recommendation.
12. The TPDP underlined that the objective is both to facilitate diagnosis of regulated pests and new emerging pests which could be non-regulated.

The TPDP then considered a series of questions in relation to diagnostic laboratory networking.

1. *Question 1:*

How could the TPDP collaborate in achieving the desired outcome with the development of DPs or other documents (e.g. CPM recommendations, cross-cutting DPs such as for the setting up of laboratories, or other type of documents such as guides or manuals)?

1. The TPDP considered that it could gather different types of information from different regions (e.g. manuals, guides, videos), and after assessment should be able to review the IPPC diagnostic manual ([Guide to Delivering Phytosanitary Diagnostic Services](https://www.ippc.int/en/publications/86076/)), if and when needed. In this regard, Specification TP 1[[3]](#footnote-3) should be adjusted in order to allow the TPDP to address such issues in collaboration with the SC and the Implementation and Capacity Development Committee (IC).
2. *Question 2:*

Could the TPDP consider supporting diagnostic laboratory networking beyond providing DPs (or other documents, such as CPM recommendations)?

1. The TPDP noted that the IPPC Secretariat could collect information on existing networks of laboratories.
2. The TPDP suggested that it could lead a workshop for diagnosticians. This would be very useful not only for sharing scientific information but also because, provided all regions of the world are represented, a face-to-face meeting (e.g. scientific workshop) among specialists would facilitate the building of a network. In that respect, people from outside the TPDP should be invited, for instance through SC and IC members and representatives of OIE or international scientific bodies such the Centre for Agricultural and Bioscience International (CABI). This workshop should take place in 2021.
3. *Question 3:*

If yes, would it be possible for the TPDP to consider advising or participating in capacity building in the field of diagnostic laboratories; for example, this could be training, advising on quality processes, or proficiency tests?

1. The TPDP declared that it could encourage participation in the proficiency tests by preparing a guideline or cross-cutting DP aiming to describe how to organize such tests, and how to participate, particularly in relation to how to perform a good sampling.
2. Noting that the TPDP is under the SC’s remit and following the tasks described in the Specification TP 1, the TPDP proposed some recommendations to the SC, to commence some work on diagnostic laboratory networking, as follows:

* that the TPDP gather different sources of information (manuals, guides, videos) from different regions, in order to identify gaps in the existing DPs;
* in collaboration with the SC and IC, the TPDP develops or revises manuals and guidelines when needed (e.g. the existing IPPC guide to diagnostic services, or guidelines on proficiency tests);
* amending Specification TP 1 in order to allow the TPDP to participate in the activities described above;
* that the TPDP recommended that a CPM recommendation on “Facilitating shipment and transport of reference material and specimens, to support diagnostic activities for regulated pests” be developed, and asked some TPDP members to draft a justification for that purpose to be discussed at the next TPDP meeting;
* that the TPDP is willing to take the lead in organizing the *first international workshop on diagnostic laboratories* in 2021 and asked some TPDP members to draft a detailed proposal (justification, programme, resource mobilization) to be discussed at the next TPDP meeting.

1. **SC 2020.** The SC discussed the recommendations from the TPDP 2019-08 meeting via e-forum. Although the majority of the SC members agreed in principle with the TPDP recommendations, one SC member pointed out the need to have a broader debate on this topic, not only at the SC level but also at the IC and even the Bureau or CPM levels. It was mentioned that the issue goes beyond standard setting work and means that the TPDP would be directly involved in implementation issues. Even though it was agreed conceptually, it was thought that the topic required further discussion.
2. The SC in its September 2020 meeting did not have sufficient time to engage in such discussions, thus it was deferred to the November meeting.
3. **WHAT’S NEXT?**
4. With the COVID-19 pandemic, some of the SC’s discussions and decisions related to its technical panels got delayed, and consequently some activities in relation to Diagnostic laboratory networking. Moreover, some discussions were supposed to happen at the International Plant Health Conference in Helsinki, which is now postponed for 2021.
5. The TPDP just had their first virtual meeting in 2020 and they are awaiting recommendations and directions from the SC to continue the discussions about this development agenda. Moreover, it is important to highlight that there is yet not a establish plan, and that the IPPC Secretariat is also awaiting further discussions at different meeting and that proper resources are allocated.
6. **FINANCES: IPPC INVESTMENT PLAN 2020-2024.**
7. The following budget is proposed in the IPPC Investment plan which was noted by CPM-14 (2019). It is to note that the investment plan discusses only the first 5 year of the 10-year lifespan of the Strategic Framework and should be re-visited once a detailed set of activities are agreed.

| **Action** | **Funding**  **Source** | **Estimated budget (USD)** | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **2020** | **2021** | **2022** | **2023** | **2024** |
| 1. Coordinate and publish a list of diagnostic laboratories including operational expertise | 1. ExtP | 30K |  | 10K |  |  |
| 1. Develop a model for networked or shared diagnostic laboratories | 1. ExtP |  | 100K | 60K |  |  |
| 1. Draft standards and protocols | 1. ExtP |  |  | 60K | 15K | 15K |
| 1. Coordinate a pilot laboratory network | 1. ExtP |  |  | 15K | 30K |  |
| **Total** | 1. ExtP | **30 K** | **100 K** | **145 K** | **45 K** | **15 K** |
| FTE (estimate) | 1. ExtP | 0.25 | 0.5 | 1.25 | 0.5 | 0.1 |

Recommendation

1. The SPG is invited to:
2. *note* the document;
3. *discuss* possible next steps on the development of an international diagnostic laboratory networking;
4. *discuss*, *and if possible, provide advice* on the finances and possible ways to mobilize resources.

1. Link to the IPPC Strategic Framework 2020-2030, as to be presented to CPM-15 (CPM 2020/08): <https://www.ippc.int/en/publications/88125/> [↑](#footnote-ref-1)
2. 2019-08 TPDP Meeting Report (Melbourne, Australia): <https://www.ippc.int/en/publications/88295/> [↑](#footnote-ref-2)
3. Specification TP 1 - Technical Panel on Diagnostic Protocols: <https://www.ippc.int/en/publications/1297/> [↑](#footnote-ref-3)