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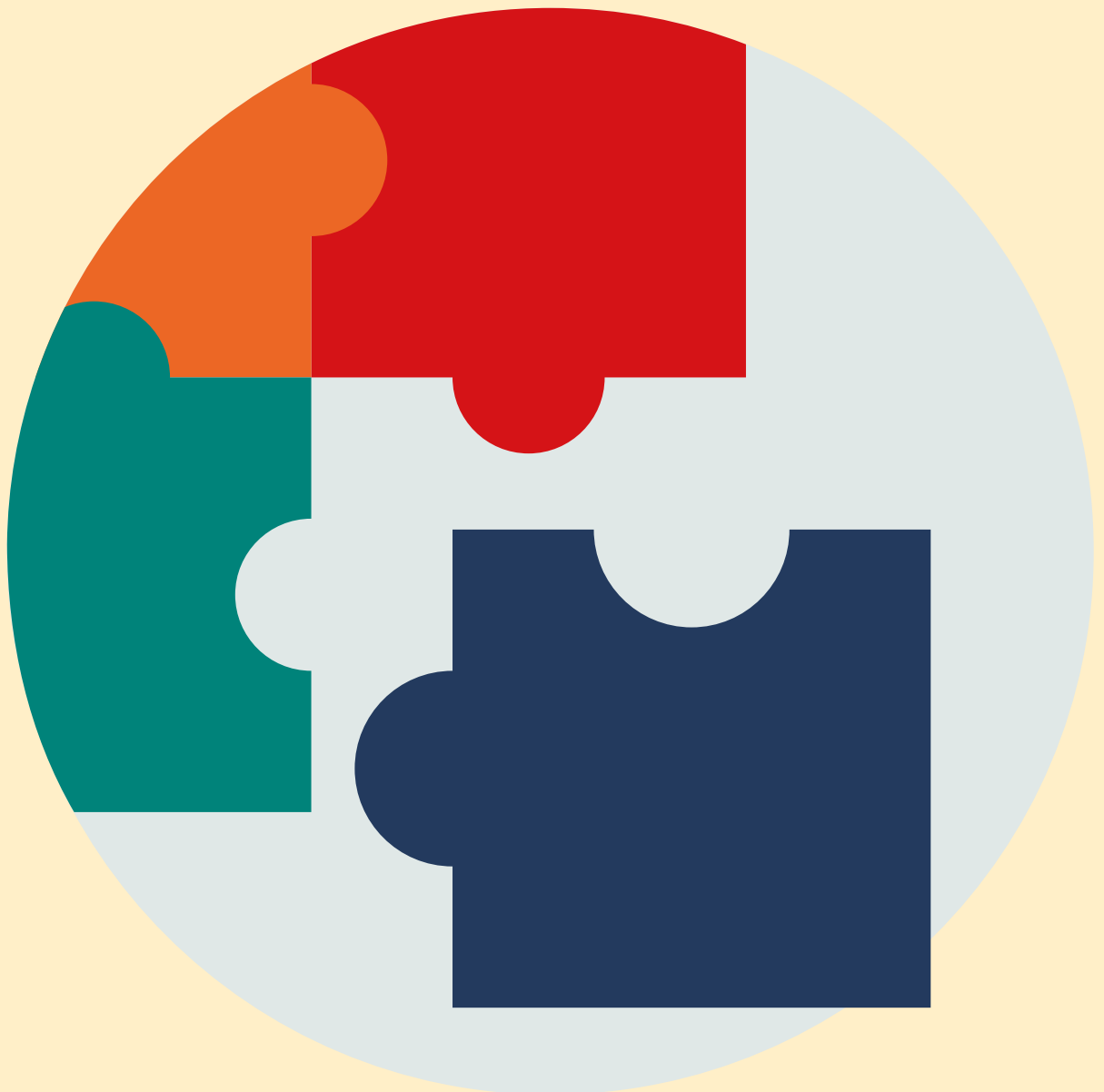
World Health
Organization



World Organisation
for Animal Health

Use and implementation of Codex, IPPC and WOAH standards

How do the three sisters
monitor the impact of their work?



International
Plant Protection
Convention

CODEX
ALIMENTARIUS
INTERNATIONAL FOOD STANDARDS

USE AND IMPLEMENTATION OF CODEX, IPPC AND WOA H STANDARDS: HOW DO THE THREE SISTERS MONITOR THE IMPACT OF THEIR WORK?

In today’s global economy, the trade of food, animals and animal products and plants and plant products is occurring at unprecedented levels. FAO’s *The State of Agricultural Commodity Markets 2020* (SOCO 2020) report estimates that “about one-third of trade in food and agriculture takes place within global value chains and crosses borders at least twice.” Trading nations must ensure the safety of the animals, plants and food products traded, to protect USD 4.3 trillion¹ in worldwide exports of food and agricultural products from the potential risks of unsafe or poor quality food, or the spread of pests and diseases. To safeguard these value chains, trading nations rely on the implementation of globally agreed standards set by three international entities: the Codex Alimentarius Commission (Codex), the International Plant Protection Convention (IPPC) and the World Organisation for Animal Health (WOAH). These bodies are known collectively as “the three sisters”.

The three sisters are referenced as the international standards-setting organizations for food safety (Codex), plant health (IPPC) and animal health and zoonoses (WOAH), under the World Trade Organization’s (WTO’s) Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), established

in 1995. Implementation of these standards at the national level ensures the safe trade of food, and best practices in pest and disease management and leads to harmonized trade. This collective, “One Health,” rationale protects people, animals, plants and the planet from pests and disease. One Health is an approach that recognizes the interconnection between human, animal, and environmental health, and emphasizes the need for collaborative efforts across sectors.

Here we examine how and why each of the three sisters monitors the use and impact of their standards and what challenges they face in doing so. It considers what are the outcomes and learning of the monitoring that can improve trade harmonization to the benefit of all, leaving no one behind.

We make a case for the engagement of memberships in setting and implementing standards, and in supporting the nascent monitoring activities that already promise to improve the impact of international standards.

WHAT ARE STANDARDS AND WHAT IMPACT CAN THEY HAVE?

International standards for the trade in food, animals and animal products and plants and plant products can describe best practice in an area of food safety or pest or disease control, or ways to detect, prevent and manage relevant problems, and they can set safe limits for use of chemicals and drugs.

¹<https://stats.wto.org/> (combined international trade statistics for agricultural products and food)



INTRODUCING THE THREE SISTERS

The standards elaborated by all three sisters are developed and adopted by their members to achieve the objectives of their respective mandates. Each sister is different in organizational governance and mission. It is important to note that while standards setting is a crucial part of their mandates, both IPPC and WOAH have broader responsibilities, including surveillance and capacity building.

WOAH

Est. 1924, 183 Members

WOAH is an international organization with the mission to improve animal health and welfare globally. Its work includes advocacy, monitoring of animal diseases worldwide and standards setting.

IPPC

Est. 1951,
185 Contracting Parties

The IPPC is an international treaty. Its Commission on Phytosanitary Measures (CPM) sets International Standards for Phytosanitary Measures (ISPMs) to facilitate the safe trade in plants and plant products.

Codex

Est. 1963, 189 Members

Codex is an intergovernmental body established by FAO and WHO. With a statutory purpose to protect consumer health and facilitate fair practices in the food trade, Codex sets standards, guidelines and codes of practice for food safety and quality.

In Brazil, for example, the application of the Codex *Code of Practice for the Prevention and Reduction of Mycotoxin Contamination in Cereals* (CXC 51-2003) has resulted in a reduction of fumonisin levels that has corresponded with an approximate four-fold increase in maize exports. A series of ISPMs offer Contracting Parties to the IPPC the guidance they need to eradicate, suppress or control plant pests and establish pest free areas. In Thailand, the suppression of oriental fruit fly (*Bactroceras dorsalis*) in mangoes through an area-wide integrated fruit fly management programme, has made possible the export of mangoes produced in these pest-free areas to some of the most stringent and lucrative markets, such as Japan. The United Kingdom of Great Britain and Northern Ireland used WOAH's standards on Bovine Spongiform Encephalopathy to support a definition of the disease and the implementation of appropriate national control measures. Use of these standards meant the national authorities had science-based benchmarks to help them contain what was a new disease, and give consumers and international partners confidence in their management of an outbreak.

The use of standards, then, has far reaching benefits globally.

WHY MONITOR?

A rules-based and harmonized global network of the safe trade of food, animals and animal products, and plants and plant products means there is mutual understanding across borders of what constitutes a safe commodity, and the methods by which that is determined and verified. This supports livelihoods, businesses and economies, reduces food loss and waste, provides greater consumer choice and leads to the solution to or reduction of trade disputes.

Monitoring helps the standards-setting bodies understand which standards are being implemented, by whom and where there may be gaps in, or barriers to, implementation. WOAH's Strategic Plan 2021–2025 states that monitoring is a factor in “responding to Members' needs,” one of their strategic objectives.

While monitoring is key to identifying which countries need what support in order for them to implement relevant standards, the three sisters also have a responsibility to their governing bodies. Monitoring allows assessments of institutional successes in applying mandates, reaching strategic goals and demonstrating maximum resource effectiveness, particularly in the context of the resource constraints in which the three sisters are operating. In addition, for WOAH in particular, the data-based monitoring activities are one of the pillars of the organization's digital transformation plan, which feeds into its strategic objective of improving the organization's data governance.

Monitoring, then, helps to define what standards are relevant, permits the identification of members that struggle to participate in standards-setting processes and those that struggle to implement relevant standards. Monitoring also assists in evaluating relevant issues and remedies, as well as offering data to support progress reporting.

CHALLENGES IN MONITORING

Gaps and barriers can arise first as part of the standards-setting processes. Effective standards-setting processes and effective participation in these processes by all members strengthens standards, making them more widely relevant and applicable. For some countries, resource or capacity restraints preclude participation in the processes and the decisions around the subject and substance of standards developed. Barriers may be related to funding, language, scientific expertise, understanding of procedures or capacities to provide data that make standards relevant to countries. Each of the three sisters works to identify and understand any barriers to participation in their standards-setting processes, where those barriers exist and how to help countries gain access to meetings and required capacities.

Even when countries can participate in the standards-setting processes, barriers to implementation of standards, or reasons for non-implementation, can be wide-ranging and are typically connected to inadequate capacities or weak surveillance, control and regulatory systems. Inadequate capacities that create barriers to implementation must be identified. Monitoring in-country capacities and priority weaknesses helps to develop a clear picture of what resources and capacities a country needs in order to make use of relevant standards.

Other monitoring challenges involve funding. In 2022, the IPPC Observatory transitioned from the Implementation Review and Support System (IRSS) – a project funded by the European Commission and Switzerland – to a more sustainable funding model. This transition aimed to establish baseline funding to cover the fixed costs of the IPPC Observatory, and additional

funding to cover studies and surveys was to be mobilized from other sources such as the IPPC Multi-Donor Trust Fund, projects, and in-kind contributions.

Codex monitoring is currently sustained thanks to a Republic of Korea-funded project, with a hope that the encouraging results from these initial monitoring stages will attract additional resources. WOAH’s Observatory is also entirely funded through extrabudgetary resources.

Funding remains a challenge for all three sisters, and they are collectively exploring joint funding opportunities that would support the efforts of all three.

THE THREE SISTERS’ APPROACH TO MONITORING

For over a decade the three sisters have elaborated different approaches to measuring who is implementing which standards and to what effect, with the aim of ensuring the relevance – and, ultimately, use - of their standards.

All three entities have developed tools to help countries assess their capacities. In the case of Codex, whose remit is limited to standards setting, the FAO/WHO Food Control System Assessment Tool was developed by the parent organizations to monitor and evaluate the performance of national food control systems as well as identify areas for improvement. Capacity development is also supported by FAO and WHO. The IPPC’s Phytosanitary Capacity Evaluation Tool (PCE) was launched in 2011, which helps countries “identify both strengths and gaps in [their] existing and planned phytosanitary systems,” and WOAH has developed the Performance of Veterinary Service (PVS) Pathway Tool, to help countries “establish their current level of performance, to identify gaps and weaknesses regarding their ability to comply with WOAH (founded as OIE) international standards.” Capacity assessment and support have been at the forefront of efforts to monitor impact and verify compliance, and the tools developed to achieve these play a role, or have fed into, the evolved programmes we have today.

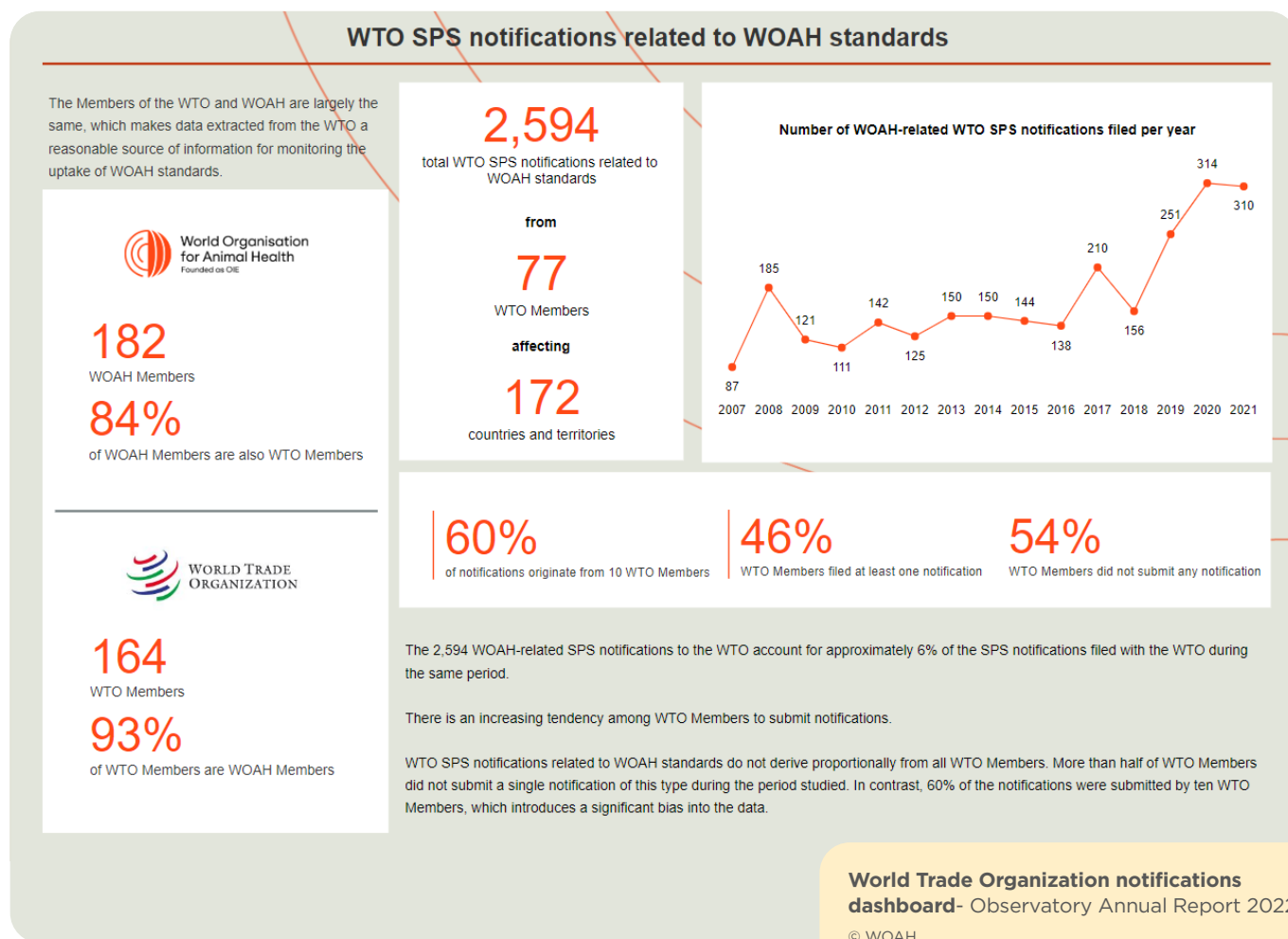
WOAH and IPPC have both established what they call “Observatories”, which provide tools for systematic data collection and analysis. Codex has adopted an approach based on several information-gathering methods, including an annual survey, case studies and collaboration with WTO. In this way, general information on implementation and barriers to implementation has emerged, and with that information, the three sisters or, in the case of Codex, the parent organizations, FAO and WHO, can develop technical assistance programmes and projects to help close capacity gaps.

These are not information-gathering exercises alone, but active drivers for improvement, a means to strengthen a consensus-driven, safe and horizontally and vertically harmonized framework for global trade. With the



Secretary of the SPS Committee, Christiane Wolff, presides over a Committee meeting. The standards set by all three “sisters” are the benchmark standards referenced in the SPS Agreement.

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cooperation of members and the continued support of donors, standards monitoring is already reaping rewards.

The IPPC Observatory

In 2021, the IPPC’s 10-year-old Implementation Review and Support System (IRSS) was restructured as the IPPC Observatory. This decade-long experience had identified and resolved gaps and challenges in implementation of standards and, as the Observatory, was now put on a more sustainable footing.

The monitoring work has included two general surveys, in 2012 and 2016, which provided disaggregated information on which standards are being adopted, an evaluation of the implementation of the IPPC, and information on contracting parties’ prioritization of all 36 ISPMs. From this it was possible to identify factors that were hindering implementation, such as insufficient human or financial resources and, even, poorly worded texts.

In addition, the Observatory conducts thematic studies that inform the development of CPM Recommendations with regard to plant pest and disease control. The IPPC Observatory also delves into the use and impact of individual ISPMs, which provide data on the strengths and weaknesses of the standard-setting work of the IPPC.

The WOH Observatory

The WOH Observatory was established in 2018 as a “systematic mechanism for gathering and analysing information about the global implementation of its standards.” It is embedded within the organization’s recently created Data Integration Department and produces three main data-driven deliverables: a quinquennial report that supports the development of WOH’s strategic plan; monitoring indicators published annually, aggregating information from various sources; and thematic studies based on in-depth analysis of a priority topic.

The monitoring report is divided into twelve sections, each covering a topic under which relevant standards are identified. To analyse the extent to which those standards are used, it utilizes “measurable, reliable and fit-for-purpose indicators” and draws on a range of data from internal and external sources, including WTO SPS notifications and reports, and gathers and cleans data as appropriate. While those indicators are published annually through dashboards on the WOH website, the report analyses them and provides recommendations to both WOH departments and Members to identify areas for further improvement.



Codex's Technical Officer, **Farid El Haffar** (R) and monitoring and evaluation expert, **Michael Ennis** (C), inspect freshly-picked maize in a field while taking part in the case study on fumonisins in maize, in Brazil.

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“While Observatory surveys provide insights, the aim of the monitoring indicators is to showcase facts. The digital transformation currently ongoing at WOAH will significantly improve the quality of Observatory indicators. This enhancement will foster greater trust and reliability in Observatory products, ultimately driving better decision-making for WOAH Members and facilitating more effective implementation of WOAH international standards” says the Observatory senior programme manager, Caroline Paquier.

In addition, WOAH makes use of success stories to illustrate the benefits of using standards and to provide incentives to countries. It has also conducted a survey on barriers to the implementation of WOAH standards for aquatic animal health “to improve our knowledge of the level of implementation of WOAH standards for aquatic animal health and to better understand the barriers that may hinder implementation.”

Codex's Monitoring

Goal 3 of the Codex Strategic Plan 2020–2025 demands not just monitoring, but an “increase [in] impact through the recognition and use of Codex standards”. This adds impetus to the notion of monitoring and evaluation of standards. Not only was Codex now asked by its Members to understand the use and implementation of standards but, beyond *improving* that implementation, there was now a requirement to increase its impact.

A first, pilot, survey, “Use and impacts of Codex texts” was carried out in 2022 and published in 2023,

with general questions on Codex texts, and targeted questions relating to reach, usefulness and use of four of the Codex texts. A second was carried out in 2023 which saw an increase in response rates from 52 percent (2022) to 69 percent (2023).

A pilot case study has been carried out and the Codex Secretariat will additionally start collaboration with WTO on the use of Codex texts in preventing and solving trade disputes.

Commonalities

For all three sisters, a quantitative approach that supplies data on implementation is complemented by a qualitative exploration of the barriers and success factors that members encounter. This vital information then informs targeted capacity building, technical cooperation and examinations into standards revisions and how concepts can be better communicated.

All three sisters have developed data and information gathering tools to inform their memberships on the extent, use and usefulness of their work. Pilots and proofs of concept have been developed and rolled out. With complementary objectives, through an informal working group, the three bodies exchange on ideas, tools and outcomes, and share on strategies such as regional coordinating mechanisms, how to elaborate and present data and how to advocate for monitoring work. WOAH's first report indicated benefits to “regular sharing of experience with Codex and IPPC, and with colleagues from the WTO SPS secretariat.” With common goals and corresponding mechanisms, the three sisters also share common challenges.

RESULTS, SUCCESSES AND CHALLENGES

Successes and lessons learned

IPPC has explicitly demonstrated how its monitoring has responded to the needs of its contracting parties. An IPPC comparative review of the implementation of their 2012 and 2016 surveys identified a number of areas where the survey design can be refined to obtain better results. As noted by Rokhila Madaminova, the IPPC Observatory Lead, “our key takeaway is to craft a more intentional questionnaire design, adopt a strategic approach to inquiry that aligns with daily National Plant Protection Organization (NPPO) practices, and streamline questions to eliminate overlap and make them easier to answer”.

In August 2024, the IPPC Observatory launched a study to assess how effectively the 185 IPPC Contracting Parties have adopted the CPM's Recommendation on *Internet Trade (e-commerce) in Plants and Other Regulated Products*. The study also aims to provide baseline data for monitoring IPPC's e-commerce programme and to identify successes and challenges NPPOs face in managing phytosanitary risks from e-commerce.

The IPPC Observatory implemented several measures to improve the design of the survey that accompanies the study, and to increase survey response rates and ensure accuracy of responses. The survey was structured thoughtfully, considering the necessity for specific sections, skip patterns, and other logical flows to ensure clarity and relevance of responses. A glossary document was also provided, offering definitions and examples of key terms used throughout the survey. The survey was pre-tested and the received feedback was integrated into the final version.

The findings of the 2024 IPPC Observatory E-commerce Study will be shared with the IPPC community in 2025 and the results will guide the IPPC Secretariat in developing a workplan to offer additional support to the NPPOs on this very important topic.

WOAH was able to report that its first, flagship, Observatory report “raises awareness of some of the existing gaps in the implementation of standards,” providing key guidance for follow-up actions. The report also provided information on external factors that are creating barriers to implementation and was able to recommend remedial actions both to WOAH itself and Members. In a similar vein, WOAH’s two thematic studies to date also offer insights into the organization and membership on the specific themes analysed.

A knock-on outcome of the Observatory work has seen WOAH’s data and analysis reported on in the media and its findings fed into the WOAH platform for the training of veterinary services, “to generate a virtuous learning cycle to encourage improved implementation of WOAH standards and guidelines.” The findings have also led to direct support from countries in terms of funding and secondment.

Codex has validated the “Theory of Change” model developed to guide the establishment of a monitoring framework and timely, credible and authoritative information has been developed on the reach and use of standards by national legislators, academia and traders. Like WOAH, Codex acknowledges that monitoring has helped the identification of implementation gaps. Codex learnt from its first survey that effective stakeholder communications support was an enabler in obtaining an improved response rate and the second survey was also adapted to Members’ needs. For example, the second survey, carried out in 2023, added a specific question on trade.

Challenges

For all three sisters, there are common challenges to obtaining results from countries that can inform a suitable strategic response in terms of ensuring all member countries are served by the standards-setting processes.

Both Codex and IPPC initially reported low response rates to surveys, which preclude the effective monitoring of standards use and impact. However, Codex, for example, has seen an improvement in participation from 50 percent for the first survey, to 70 percent for the second. Data gathered

through assessment tools is often sensitive and, according to IPPC, frequently “data is not divulged sufficiently enough to ensure a substantial sample size of data.” WOAH draws on a number of data sources, which can provide “insights, but not facts”. Misinterpretations – or varying interpretations – of survey questions limits the consistency of information obtained through surveys. Indeed, “biased responses cannot be ruled out,” according to WOAH.

“All of these challenges can be addressed through greater communication with Members, not only on the value of responding to surveys, but also improving Members’ understanding of the value of implementing standards, submitting national data and establishing food safety as a priority in the national agenda,” according to the Codex Secretariat’s Farid El Haffar.

The very novelty of these monitoring exercises in some respects works against the sisters. However, through the collaborative approach that has been established between them, and by constantly refining the survey and study approaches adopted, the quality of monitoring information should improve.

CONCLUSION AND PATH FORWARD

Monitoring where and why gaps exist in implementation is crucial to global trade. All three sisters have established evidence-based measures for determining how successfully their standards support the global trading framework, and where they can support countries to build capacity. These measures are in their infancy, but through dialogue – among themselves and with members - constant review and refinement, the successes can be built upon, to the benefit of all.

The success of these monitoring efforts hinges on two critical factors: 1) active participation from member countries, and 2) sustained funding to build capacity and drive impact.

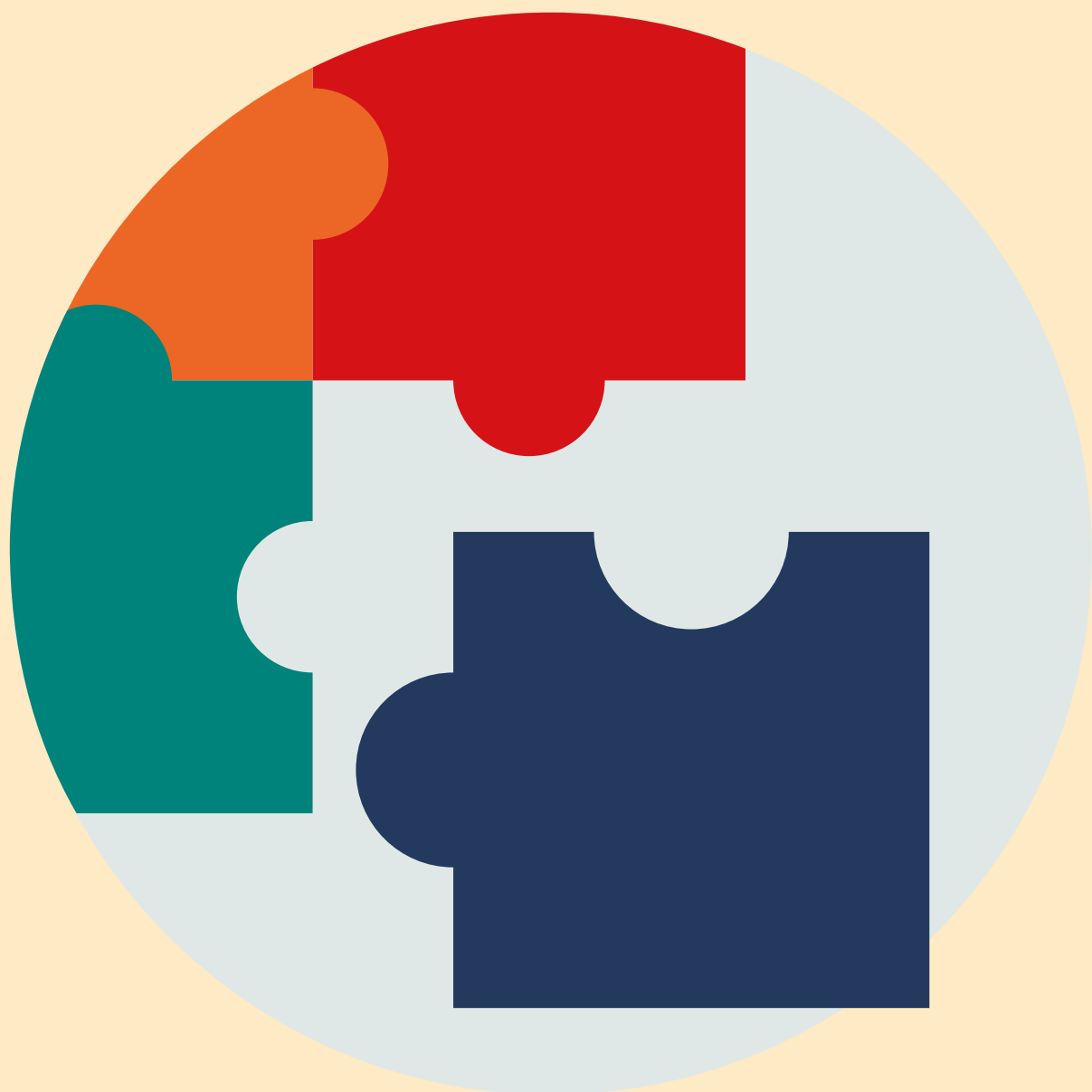
• Active Participation.

Memberships play a vital role in helping to improve monitoring results. It is important to increase awareness among members of the role and value of monitoring exercises and the benefits of communicating to the three sisters what may hinder participation.

• Sustained Funding.

Funding is the key factor that works against the three sisters in terms of building their own monitoring capacities and developing the knowledge and experience that will shape an improved evaluation of the use and impact of standards. The approaches outlined here are all funded through extrabudgetary resources, but have already demonstrated the value of these projects and the potential for them to increase the impact of standards globally to protect people, animals, plants and the planet.

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