

Coalition for Codex MRL Reform

Supporting Codex Alimentarius to support food security

Introduction

Trade is critical to food security and the ability to trade in food is central to the livelihoods of many of the world's rural poor. As the most important international standard setting body in the area of food safety, the Codex Alimentarius plays a crucial role in enabling trade in agricultural products that benefits both producers and consumers. One of its most important responsibilities is its setting of international pesticide maximum residue limits (MRLs).

Given the importance of global trade and the significance of MRLs in facilitating trade, the Codex Committee on Pesticide Residues plays a critical role in determining economic outcomes of all stakeholders that depend on trade flows. Enabling Codex to perform its role effectively by addressing current capacity challenges and ensuring adequate resources are available is essential to supporting global food security. Delays in the establishment of MRLs and the resulting lack of harmonisation have important consequences for market access, productivity and farmer livelihoods, contributing to a poorer and hungrier world.

Background

Since 1963, the global consumer demand for a safe, plentiful, affordable food supply has substantially increased along with the world trade of food commodities. This global increase in consumer demand for safe food and trade has heightened the importance of Codex and specifically of JMPR as the most important body in enabling decision-making on MRLs.

The Codex Alimentarius comprises standards, guidelines and codes of practice. It works through more than 20 committees and working groups, exercising the core codex risk-management function. Codex committees are supported by independent expert scientific panels that are jointly administered by WHO and FAO. These panels also provide technical and scientific expertise to member states.

One of the most important function of the Codex Alimentarius in terms of trade in agricultural goods in its role as a standard setter in terms of MRLs. The Codex Committee on Pesticide Residues (CCPR) is the committee in which MRL issues are discussed. Its role is to advance MRLs through the elaboration process for adoption by the Codex Alimentarius Commission (CAC), but its work is supported through other key bodies:

- The Joint Meeting Pesticide Residues (JMPR) is an expert scientific panel administered jointly by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). JMPR evaluates the toxicology of pesticides and recommends Acceptable Daily Intake levels (ADIs) and Maximum Residue Levels (MRLs).
- The JMPR/WHO Core Assessment Group is responsible for reviewing pesticide toxicology data and recommending ADIs.
- The JMPR/FAO Panel of Experts on Pesticide Residues in Food and the Environment is responsible for reviewing pesticide residue data and recommending MRLs in food and feed.

The grower perspective

Crop protection products – such as herbicides, fungicides and insecticides – have contributed to improving agricultural productivity by protecting crops from disease, weed and insect pressures. However, MRLs are needed to make registered products useful to farmers who wish to trade, or must trade. Capacity limitations within Codex means it can take years to establish tolerances for residue levels in pulse crops. This is further complicated as importing countries can apply zero or near-zero default tolerances for residues of products if there is no Codex MRL in place. In the view of pulse growers, this is not a science based approach.

In 2011, the global pulse industry experienced a high-profile glyphosate MRL noncompliance on lentils. The issue was that many farmers were using a crop protection product, glyphosate (or Roundup), for which an MRL had been set in Canada and some other jurisdictions with exports that were easily compliant with those MRLs. However, two key import jurisdictions – Codex and the EU – had never gone through the process of establishing an MRL, and consequently the importing country applied a tolerance of 0.1 ppm that caused rejections, as well as the threat of product recalls off retail shelves.

All of this happened solely as a result of a lack of regulatory harmonization. When food safety issues are encountered they must be dealt with swiftly; however, this was not a safety issue. Underscoring that there was no food safety risk is that the following year Codex established a glyphosate/lentil MRL of 5 ppm, 50 times the 0.1 ppm tolerance that was applied. The same year, the EU established a glyphosate/lentil MRL of 10 ppm.

It must be emphasized that regulatory gaps alone caused shipments of safe, nutritious lentils to be treated as a food safety breach, and rejected – randomly and unpredictably, harming farmers and consumers. While the lentils in question were of North American origin, the concern is as relevant to pulse farmers in Uganda or Ethiopia as it is to Canadian farmers.

The value of global pulse trade vulnerable to missing Codex MRLs is approximately 2.2 billion Euros annually. A great deal of this trade is destined for food-insecure countries who cannot afford disruptions in terms of both physical and price volatility.

The issue

Recognition of the importance of Codex's role in establishing MRLs has led to recent efforts by its members to improve its functioning. Since 2007, reforms have occurred in the CCPR decision-making process, reducing the time of the MRL elaboration process from over 10 years to approximately 2 years. Also changes in the scheduling process have allowed new active ingredients to be placed on the JMPR review schedule years in advance of their initial approval in member countries. Yet, JMPR capacity challenges continue to create significant delays.

Efforts must be taken to build on these successes and adopt changes to increase the JMPR review capacity to meet the ever increasing demand for Codex MRLs for new active ingredients, shortly after their introduction into the marketplace, and new uses, particularly for minor/specialty crops.

Currently, the schedule for the review of new active ingredients is full for several years into the future and the number of new uses reviewed each year by JMPR is limited. Ideally Codex MRLs should be established soon after a new active ingredient or new use is approved by a national authority and in use on crops entering international commerce.

As a result of the capacity issues affecting JMPR, and ultimately Codex's decision-making ability, delays in the establishment of Codex MRLs, or the failure to develop MRLs, subjects the global food trade to the unpredictability of zero, near-zero, or undefined default tolerances that could be applied in cases where MRLs have not yet been established. Steady advances in the sensitivity of testing add to the urgency of addressing these challenges.

Increasing the capacity of JMPR

Growers need more Codex MRLs generally, and Codex MRLs that are issued in conjunction with product registrations, or shortly thereafter – however that is accomplished. While it is recognized that there is no easy solution to increasing the capacity of the JMPR, a fundamental requirement is high-level commitment to increase the capacity of the JMPR from the leadership of FAO, WHO and the Codex Alimentarius Commission. Assurances must be obtained that resources for JMPR meetings are in the budgets of both FAO and WHO, as well as support for continual improvement of the review process.

Potential solutions appear to include several initiatives that together could result in an increase of the JMPR's ability to meet the current demand for Codex MRLs. The following key steps should be considered (*see full text of recommendations on next page*):

1. Increase the number of experts on panels, with the support of member countries
2. Ensure budget is available to cover secretariat staff, experts and the costs of the JMPR annual meeting
3. Leverage the availability of electronic tools to enable discussions to take place online before the JMPR meeting to free up time on the JMPR agenda for priority issues
4. Use national reviews and MRLs already established by national authorities to avoid duplication and use resources efficiently
5. Maximise the use of crop groupings and representative commodities to maximize the number of MRLs established for minor/specialty crops and minimize the level of expert review effort
6. Avoid re-work and delay through clear guidance on residue trial requirements, the use of all available data, and modification of the policy that requires an approved label before a MRL can be recommended
7. Ensure the consistency of application and adherence to the policies adopted by JMPR, CCPR

Recommendations:

1. **Increase the availability of experts:** While the demand for panel reviews has increased over the years, the number of experts on each panel has not increased substantially. Several potential reforms might be considered, such as hiring new staff to support the WHO and FAO panels to screen dossiers, summarize issues, and review work already done on the pesticide by national authorities; such assistance could relieve the burden currently placed on experts who much currently conduct the primary reviews of the dossier and writing lengthy monographs. Ideally, experts should focus and render opinions on specific questions identified in the dossier relevant to assessing the safety of the pesticide use. Perhaps government- or professional association-sponsored fellowships could be offered to graduate school students, or sabbaticals to academics familiar with JMPR; such scientific experts could provide valuable time-saving assistance to the WHO/FAO panel members.
2. **Secure a budget for secretariat staff and experts:** Each year it is uncertain if adequate funds will be available to hold the JMPR meeting. Funding to cover the total cost of the JMPR meeting must be a regular item in the FAO and WHO budgets. Obtaining a multi-year grant from a foundation or food organization without a conflict of interest to supplement budget allocations could be explored.
3. **Maximize the use of electronic tools:** Full utilization of the electronic tools available would allow for issue discussion to occur before the actual face-to-face JMPR meeting. The JMPR meeting agendas could focus the time on complex scientific issues, increasing the number of active ingredients or additional uses reviewed at each annual meeting. Teleconferences or videoconferences should be considered as means to assist early reviews among experts as soon as the dossier has been submitted.
4. **Use national reviews and MRLs established by national authorities:** JMPR should consider maximizing the use of national reviews, focusing on areas where they disagree. This would streamline the JMPR review process and allow for more chemicals to be reviewed each year. Consideration of MRLs established by national authorities prior to the JMPR review should be factored into JMPR's MRL recommendation to avoid creating unnecessary trade impediments that have no impact on food safety. Alternatively JMPR could review the dossier of a new active ingredient concurrent with the national authorities and consult with them prior to finalizing a MRL recommendation.
5. **Maximize the use of crop grouping and representative commodities:** JMPR should consider establishing MRLs for crop groups and subgroups based on a review of representative commodity data. MRLs could be established on multiple commodities based on the extrapolation of residue field trial data on the representative commodity to other members of the crop group/subgroup allowing for the assessment of pesticide exposure of a chemical on multiple commodities without reviewing data for each individual commodity. This approach would maximize the number of MRLs that could be established for minor/specialty crops and minimizes the level of expert review effort.
6. **Avoid rework and delay:** The use of all available data developed on the same Good Agricultural Practice (GAP) (use pattern) or substantially similar GAP should be routine (global data sets). Additionally, revision is needed of the current JMPR policy to require that a new active

ingredient or a new use appears on an approved label, with the use(s) at the GAP used in the residue trials, before a MRL is recommended. Since the recommended MRL is based on the GAP used in the residue field trials, having the use on a pesticide product label is irrelevant and causes unnecessary time delays waiting for a label to be approved in a member country. Once a Codex MRL is established, the GAP (use pattern) on a label can change at any time. This change in policy would allow pesticide manufacturers to submit residue field trials immediately upon study completion rather than wait for a label to go through a member state's approval process.

7. **Ensure the consistency of application and adherence to the policies adopted by JMPR, CCPR:** Experts should not be acting independently of the policies adopted by the CCPR. FAO and WHO Secretariats need to ensure that adopted policies are followed consistently. An expert's objection serious enough to delay a recommendation of a MRL should be communicated to the whole panel well in advance of the meeting.

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For more information

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Members of the Coalition for Codex MRL Reform



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