



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

**CODEX COMMITTEE ON GENERAL PRINCIPLES**

**Thirty-second Session**

**Virtual meeting, 8-17 February 2021**

**INFORMATION ON ACTIVITIES OF FAO AND WHO RELEVANT TO THE WORK OF CCGP**

**MATTERS ARISING FROM FAO**

**FAO's study looks at the international harmonization  
of pesticide maximum residue limits in rice**

**1. Introduction**

1.1 Despite longstanding efforts towards international harmonization of allowable thresholds for pesticide residues in foods, differences in national implementation of maximum residue limits (MRLs) continue to exist, raising questions with regard to their impact on trade. To shed light on this complex issue, FAO conducted an analysis, using rice as a case study. Rice was selected because it is a key staple food commodity in many countries, and contributes critically to food security and livelihood for many poor farming households. Furthermore, while only around 9 percent of the global rice production is traded, rice plays a significant role in the exports of emerging economies and developing countries. It is noteworthy that among the top ten rice exporters, seven are upper- and lower-middle-income economies. Finally, in an initial analysis carried out by FAO, it was found that rice was one of the commodities in which stricter pesticide MRLs than those recommended by Codex tended to be applied.

1.2 The publication, [Understanding international harmonization of pesticide maximum residue limits with Codex standards](#), was jointly developed by the Food Systems and Food Safety Division (ESF) and the Markets and Trade Division (EST) and is organized in two main parts:

**2. Part A**

2.1 The first part looks at the international harmonization of pesticide MRLs and its effects on trade, reporting that many MRLs registered at national level do not have corresponding Codex MRLs. The analysis also revealed that the majority of Codex pesticides MRLs in rice are not adopted at national level. The level of harmonization with Codex pesticides MRLs in rice varies greatly across countries and regions. The economic analysis, conducted using a gravity model, found that MRLs can affect trade in two ways: strict food standards including MRLs do not necessarily translate into fewer imports, but can even be associated with higher imports. Without the use of food safety standards in international trade, trust in imported products could decline, which would likely imply reduced imports, in particular from countries with a real or perceived higher risk of pesticide contamination. However, the exact mechanisms and causality of this relationship are not yet well-researched and require further investigation. On the other hand, the divergence in standards between the importing and exporting country implies higher costs when producers and processors need to adapt production and monitoring practices to meet the more stringent standards and certification requirements of the importing country. That might impede trade and as pesticide MRLs in rice tend to be stricter in developed than in developing countries, this may put developing country exporters with a lower capacity to meet the standards at a particular disadvantage.

### **3. Part B**

3.1 The second part of the publication explores the reasons behind the various levels of harmonization, investigating the risk assessment procedures and risk management policies that may lead to divergent MRLs. Considerable variation has emerged in how countries are aligned with the FAO/WHO Joint Meeting on Pesticide Residues (JMPR)/Codex process for the development and establishment of pesticide MRLs. In general, many of the differences observed in risk assessments do not seem to have a significant impact on the overall outcome of the pesticide safety evaluation. Some of the major differences in MRLs and residue definitions are due to, for example, the consideration of different data for the various countries/region and to inconsistency among the commodity descriptions in different countries. Automatic harmonization with Codex MRLs is not the norm because such practice is not embedded in national legislations. For MRLs not established at national level, the default practice is, in general, to set a default value, usually at the limit of quantification, or not to establish any tolerance level or MRL.

### **4. Way forward**

4.1 The study showed that changes towards further international alignment of rice pesticide MRLs to facilitate trade will have to balance between high food safety requirements on the importing side and the higher market access costs incurred by exporting countries. Different steps could be taken by countries towards improving harmonization with Codex standards. For example, Codex MRLs could be taken into consideration in the absence of national MRLs. Furthermore, for the optimal functioning of the Codex MRL standard-setting process, it would be important that countries actively notify whenever they have reservations and are not in the position to adopt a newly established Codex MRL. Attention should be also given to developing country needs for better and more active participation in the Codex standard-setting process.

4.2 The study was recently presented by FAO during a side event at the margins of the WTO SPS Committee (the webinar can be watched here: [webinar](#)) and it is hoped that the findings of this analysis could further stimulate international dialogue to improve harmonisation.