### CODEX ALIMENTARIUS COMMISSION





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Agenda Item 7

CX/CF 16/10/8-Add.1 March 2016

# JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON CONTAMINANTS IN FOODS

Tenth Session
Rotterdam, The Netherlands, 4 – 8 April 2016

## PROPOSED DRAFT CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF ARSENIC CONTAMINATION IN RICE

Comments at Step 3 submitted by Costa Rica, Ecuador, Egypt, Ghana, India, Indonesia, Kenya, Nicaragua, Peru, Republic of Korea and AU

#### **COSTA RICA**

Costa Rica appreciates the opportunity afforded for providing comments and expresses its support for the draft document submitted by the working group.

#### **ECUADOR**

#### (I) General Comments:

Ecuador thanks Japan and China for the prepared document; in this regard wishes to present the following comments:

Ecuador supports the postponement of the "Proposed draft Code of Practice for the Prevention and Reduction of Arsenic Contamination in Rice"; this in view that the information concerning the data requested by the chair and co-chair of this EWG is still being collected by some countries at international level, and will be available at least from 2017.

Then it would be considered that a COP that has all the information necessary to prevent and reduce arsenic contamination in rice would be an important tool for all actors involved in this agro-production chain, focusing in protecting consumer health and fair practices in food trade, to prevent and mitigate the risks of contamination from this heavy metal.

Finally, Ecuador considers important to mention that it is constantly working on the development of Guides for Good Agricultural Practices and Applicability Manuals, tools that are critical for the implementation of Good Agricultural Practices and are used as a mitigation measure, and once this COP is approved by the Codex Alimentarius Commission, Ecuador will adopt the recommended measures and will incorporate them into the current Ecuadorian legislation.

#### **EGYPT**

I would like to thank the Electronic Working Group and inform you that Egypt supports the recommendations of EWG.

#### **GHANA**

**Position 1:** We support the development of a Code of Practice (COP) for the prevention and reduction of arsenic contamination in rice. In addition we support the development of a short and simple COP which reflect current best practices for the prevention or reduction of arsenic in rice.

Rationale: Developing COP is in line with the Principles regarding contaminants in food and feed (GSTCFF). The COP will ensure that adequate action is taken by food control authorities, manufacturers and other relevant bodies to reduce contamination of rice with arsenic. Considering that arsenic may have significant public health implications, it is important that all known practically achievable risk management options are applied to prevent or reduce arsenic contamination in rice. Maximum levels for inorganic arsenic in polished rice has already be adopted. It is beneficial to complement the use of ML with COP which integrates source directed measures and GAP to further control arsenic contamination. We believe currently available information can be used for the development of the COP and the document updated when new information becomes available.

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#### **INDIA**

India supports the recommendation of EWG to postpone the discussion on the elaboration of a COP for prevention and reduction of contamination of arsenic in rice, at this stage till sufficient information is available to prepare COP.

#### **INDONESIA**

Indonesia welcomes and appreciates the work performed by the electronic Working Group under the lead of Japan and co-chaired of China on Proposed draft Code of practice for the prevention and reduction of arsenic contamination in rice (at Step 4). The followings are Indonesia comments:

Proposals	Indonesia Comments
3. <b>DEFINITIONS</b> [Aerobic condition of soil in a paddy field where rice is grown is a condition that a paddy field is more aerobic than flooded condition.] [Aerobic rice technology is a production system in which rice is grown in well-drained, non-puddled, and nonsaturated soils.]	Indonesia proposes to open the square bracket on first sentences and delete the square bracket on the second sentences. Indonesia considers that the term of aerobic rice technology is not mentioned anywhere in this document.
[Intermittent ponding means a variety of possible water management practices in which a paddy field is alternately in flooded and aerobic/nonflooded condition.]	Indonesia proposes to delete the term "nonflooded condition". Indonesia considers that this term is not appropriate.
4.1.2 National or relevant food control authorities should consider implementation of source directed measures in the Code of Practice concerning Source Directed Measures to Reduce Contamination of Food with Chemicals(CAC/RCP 49-2001). In particular, authorities can consider whether measures in the following areas are appropriate for their countries:	Indonesia prefers to use the term "reduction" rather than "elimination". Indonesia is of the opinion that it is almost impossible to eliminate arsenic in rice
<ul><li>Irrigation water;</li><li>Identification of irrigation water with high arsenic concentration</li></ul>	
<ul> <li>[Elimination][Reduction] of arsenic from irrigation water with high arsenic concentration [adjusting to permitted limits]</li> </ul>	
<ul> <li>Avoidance of [use of] irrigation water with high arsenic concentration for rice production</li> </ul>	
Soil;  • Identification of paddy fields in which arsenic concentration in soil is high and/or rice produced from that soil has high inorganic [or organic] arsenic concentrations	Indonesia proposes to delete the square bracket. Indonesia is of the opinion that arsenic contained in soil mostly in inorganic form
4.2.3National or relevant food control authoritiesmay identify rice cultivars that [contain][absorb] arsenic at low concentration [in husked and/or polished rice] and/or encourage public research institute and/or private nursery developer to develop rice cultivars that result in husked and/or polished rice with low arsenic concentration. Producers could select such rice cultivars, if available and suitable.	Indonesia prefers to use the word "absorb" rather than "contain" since rice it self does not contain with arsenic it is absorbed from soil with high arsenic level
6.1 National or relevant food control authorities should share information on risks and benefits of consuming polished and/or husked rice among stakeholders in the light of arsenic concentrations and nutrient components [, noting that there are health benefits associated with consumption of husked rice]	Indonesia proposes to delete the sentence in the square bracket.

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Proposals	Indonesia Comments
National or relevant food control authorities should share the following information with distributors and consumers and encourage them to implement the practices, which would reduce arsenic concentration during processing and cooking.	Indonesia proposes to open the square bracket
- It is known that during polishing process more arsenic is removed from husked rice that contains higher concentration of arsenic and that husked rice polished at the higher polishing rate results in polished rice with lower arsenic concentration. Polished rice contains less inorganic arsenic than husked rice, because polishing removes inorganic arsenic in the bran layer. [Thus, husked rice containing high concentration of arsenic can be distributed and safely consumed after it is appropriately processed into polished rice.] [However, there are also health benefits associated with consumption of husked rice.]	
7. Complementary information for further considration of measures	Indonesia would like to inform that Indonesia is developing research on bioremediation or biological remedy method to reduce/clean up soil contamination of arsenic (e.g. hyperaccumulator plants and/or microbes)

#### **KENYA**

#### **SPECIFIC COMMENT**

We propose not to postpone but to finalize a draft COP with currently available information and revisit to update the COP with additional information that will come available.

#### **JUSTIFICATION**

This is because the COP should contain measures that are proven to be effective for prevention and reduction of arsenic in rice.

#### **NICARAGUA**

#### (i) General Comments

Codex Nicaragua thanks Japan, China and all participants in the Electronic Working Group for preparing the document and offering us the opportunity to work in the process of submitting comments.

#### (ii) Specific comments

Considering the harmful effects for health of the consumption of rice contaminated by arsenic and the need for establishing immediate measures to counteract these effects, Nicaragua supports the position to continue with the discussion and finalize the Code of Practice using the information available; once the ongoing research reports are available, it will be appropriate to examine and propose the updating of the Code.

#### **PERU**

#### **GENERAL COMMENTS:**

Field studies to identify feasible and effective measures for local and regional conditions should be conducted; for example, where rice should not be sown. In addition, these studies should include the use of cultivars that accumulate less arsenic, the application rate to control irrigation water.

#### **SPECIFIC COMMENTS:**

#### **Country position:**

"Not accept the postponement of not having a Code of Practice until 2019 or 2020; the scientific information we have at the time and the information that can be derived from the work that countries are carrying out upon demonstration of its effectiveness in the prevention and reduction of arsenic in rice should be systematized so that during the XI meeting this proposed draft be examined by the CCCF (Committee on Contaminants in Foods)".

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#### REPUBLIC OF KOREA

Since the Republic of Korea is also currently conducting a study regarding soil amendments and water managements, we support the EWG's recommendation to postpone the discussions on the elaboration of the COP to allow time to collect additional data and information after the study is finalized. Also, according to a study on the reduction of arsenic contamination in rice conducted in 2015 in Korea, total arsenic content in polished rice can be significantly reduced by repeated washing (stirring and rinsing) and soaking in water for 8 hours before cooking. Therefore, this information could be included in "Risk Communication" section of the COP.

#### **AFRICAN UNION (AU)**

**Position 1: AU** supports the development of a Code of Practice for the prevention and reduction of arsenic contamination in rice.

**Issue & Rationale:** In our expert opinion of 2015, we urged Africa Countries to support the development of a Code of practice for the prevention and reduction of arsenic contamination in rice. Our opinion was based on the observation that the COP will provide national and relevant food control authorities, manufacturers and other relevant bodies with guidance to prevent or reduce arsenic contamination in rice.

The CCCF9 accepted the recommendation to develop the COP. It was agreed that field studies should be conducted to identify measures that are feasible and effective for local or regional conditions. The scope of these studies should be limited to source directed measures and agricultural measures to reduce and prevent arsenic contamination in rice and that guidance for consumers should be included under risk communication.

**Position 2: AU** supports the preparation of a short and simple COP using currently available information as a starting point to reduce or prevent arsenic in rice whilst awaiting the final Code of Practice.

**Issue and Rationale:** The EWG to further develop the COP was re-established at CCCF9. Requests by this EWG consisting of 22 members and two observers for additional information and data to be used in drafting the COP did not yield any results. Information on relevant on-going studies in various countries (Japan, The Philippines, United States and Uruguay) were however provided. In view of this, some options have been proposed by the EWG for discussion at CCCF10 as follows:

- Information currently available in the draft COP is insufficient for completion of the COP so
  postpone discussions pending results of on-going studies (likely to be March 2019). Work on
  COP should resume in 2019 or 2020.
- Compile the measures currently available in scientific literature for the prevention and reduction of arsenic contamination in rice.
- Compile available information and prepare a short simple COP on current best practices to reduce or prevent arsenic in rice in 2017. CCCF could then update this document when additional information becomes available.

The ML for inorganic arsenic in polished rice has been adopted and work on ML for husked rice is in progress. Preparation of an interim COP with information on current best practices we believe will help growers and manufacturers reduce to some extent or prevent arsenic concentrations in rice whilst awaiting the final Code of Practice.

Meanwhile African countries should endeavor to provide information on studies and data on measures that have been conducted and/or implemented in their respective countries for inclusion in the final document.

National or relevant food control authorities in rice growing African countries may consider work in the following areas:

- Identification of irrigation water with high arsenic concentration and ways of reducing/eliminating arsenic levels
- Identify paddy fields with high arsenic concentration in soil
- Identify agricultural and livestock materials such as pesticides, veterinary medicines, feed and fertilizers containing arsenic
- Identify waste such as timber treated with copper chrome containing arsenic
- Education of rice producers about practices to prevent and reduce arsenic concentration in rice
- Conduct research to identify rice cultivars that contain/absorb arsenic from contaminated soils.