# codex alimentarius commission



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS WORLD HEALTH ORGANIZATION



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Agenda Item 5

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# JOINT FAO/WHO FOOD STANDARDS PROGRAMME

# **CODEX COMMITTEE ON FOOD HYGIENE**

Forty-first Session Loews Coronado Bay Hotel, San Diego, California, United States of America

COMMENTS ON THE PROPOSED DRAFT ANNEX ON FRESH LEAFY VEGETABLES (Annex to the Code of Hygienic Practice for Fresh Fruits and Vegetables) (At Step 3)

# LATE

# **COMMENTS SUBMITTED BY:**

# COSTA RICA, EUROPEAN COMMUNITY, INDIA, KENYA, INTERNATIONAL ASSOCIATION OF CONSUMER FOOD ORGANIZATIONS (IACFO)

## COSTA RICA

1- Line 9, second paragraph of the Introduction [Spanish version] - Costa Rica proposes replacing the term *"enmiendas"* with the term *"mejoras"*.

Also, on line 12 of the same paragraph, Costa Rica proposes replacing the phrase "in diverse ways" with the phrase "in diverse places".

2- For item 1. Objective of the Annex - Costa Rica suggests amending the wording as follows:

"The objective of this annex is to provide specific guidance to reduce the microbial food safety risks associated with fresh leafy vegetables, including fresh leafy herbs, that are intended to be consumed without cooking during their production, harvesting, packing, storage, distribution, and marketing. These include fresh leafy vegetables that are sold and marketed as fresh".

3- For item 2.1 Scope - Costa Rica suggests amending the wording as follows:

"This annex covers specific guidance related to the production, harvesting, packing, storage, distribution, and marketing of fresh leafy vegetables that could be consumed fresh. Fresh leafy vegetables for purposes of this Annex include all vegetables of a leafy nature where the leaf is intended for consumption. Thus, all

varieties of lettuce, spinach, cabbage, chicory, endive and radicchio and fresh herbs such as coriander/cilantro, basil, and parsley are included, among others."

4- Item 2.3 DEFINITIONS - Costa Rica proposes amending the wording as follows:

"Hydroponic: a general method for the production of plants in a water medium, without soil; plants are grown using mineral nutrient solutions instead of soil. Plants may be grown with their roots in the mineral nutrient solution only, or in inert media such as perlite, gravel, mineral wool or coconut husk fiber".

5- Item 3.1.1. Location of the Production Site, first paragraph - Costa Rica proposes amending the wording as follows:

"Production sites (indoor and outdoor) should be located in a way to minimize the risks of microbiological contamination from the nearby sites. Consideration of....."

Also, on the fifth line of the third paragraph, modify the text as follows "...natural such as trees or constructed artificial)..."

6- Costa Rica proposes replacing throughout the document the word "*microbial*" with the word "*microbiological*".

7- Item 3.1.2 - Costa Rica proposes amending the title [in the Spanish version] as follows: Utilización anterior y actual del lugar

Likewise, [in the Spanish version] Costa Rica thinks that the terms "**pasada y presente**" that appear in the paragraph should be replaced with the terms "**anterior y actual**".

8- Third bullet of item 3.1.3 - Costa Rica proposes amending the wording as follows:

*"Existing practices should be reviewed to assess the importance and likelihood of deposits of animal faeces coming into contact with... ".* 

Also, in the last line of the last paragraph [in the Spanish version], replace the term "cultivarse" with the term "cosecharse".

9- Item 3.2.1.1 - Costa Rica proposes amending the first paragraph as follows:

"In general, production water that meets the microbiological standards established for drinking water is the best way to reduce the hazards of microbiological contamination. The source of..."

Additionally, in the second bullet, Costa Rica thinks that it is necessary to clarify the concept of "head maintenance" within the context, and replace the term "casing" with the term "*isolation*".

10- Item 3.2.1.1.1 - Costa Rica does not agree with numerals 5 and 6 on surface waters and treated waste water. Costa Rica believes that the water used for irrigation of this type of products must be treated so that it won't contaminate food.

Also, Costa Rica proposes the following wording for the paragraph that appears right after numerals 1 through 6:

"Other options should be considered to reduce the microbiological load of surface waters, such as....".

11- In regards to the first bullet under Irrigation Method, Costa Rica proposes the following wording:

*"Evaluate the water distribution system to determine if a contamination source exists and can be eliminated. If it cannot be eliminated, establish no-harvest zones".* 

12- Costa Rica proposes the following wording for bullets 1 and 2 of item 3.2.2.4.

- Those responsible for the growing areas should monitor workers and visitors to ensure they comply with hygienic measures before entering these areas.
- .....around the structure or nearby to avoid attracting or harboring pests.

12- For the first bullet of item 3.2.3, we propose the following wording:

The company should have Standard Operating Procedures (SOPs) that relate to health, hygiene and sanitary facilities, which should address worker training, facilities maintenance, company policies relating to worker hygiene, illness reporting, and the supplies to practice proper hygiene.

Also, Costa Rica thinks that the next 4 bullets must be dealt with in the applicable SOP.

13- Costa Rica thinks that the document should address personnel footwear, which can become a contamination source.

14- Regarding item 3.2.3.1, Costa Rica believes that the requirements applied to sanitary facilities should be the same regardless of whether the facilities are permanent or portable.

15- With respect to the first bullet of item 3.2.3.2, Costa Rica proposes the following wording:

"Personnel should be trained to report to headquarters any symptoms of diarrheal or food transmissible communicable diseases".

16- For the second bullet of item 3.2.3.4, Costa Rica suggests modifying the wording as follows:

"Workers should have lockers to store their personal items (e.g., purses, backpacks, clothes, etc.) away from production areas".

17- With regards to the first bullet of item 3.4.2, Costa Rica proposes the following wording:

• "Cleaning and disinfection methods should not be carried out in a place where the rinse water might contaminate fresh leafy vegetables".

18- With respect to the first bullet of item 5.2.2.4, Costa Rica believes that the water used in the cooling of fresh leafy vegetables must be potable.

19- Regarding the first bullet of item 5.2.2.6, Costa Rica proposes the following wording:

• "Maintain sharpness and good hygienic condition of knives and cutting edges to maintain product quality and safety".

20- Costa Rica supports the inclusion of the paragraph in square brackets under item 5.7.

21- Costa Rica thinks that only the following paragraph must be retained under item 9.3.

"Label information needs to be clear and easy to read with specific directions for product storage and use".

22- Costa Rica proposes to delete the phrase "Products labeled washed and ready-to-eat should not be rewashed", under item 9.4. Costa Rica also thinks that the last bullet of this same item should be deleted.

23- Regarding the third bullet of item 10.2, Costa Rica proposes amending the wording as follows:

"Disposal of waste (defecation and urine) produced by children/infants who may accompany parents while the latter work in the field".

#### **EUROPEAN COMMUNITY**

#### **General comments**

The European Community and its Member States (ECMS) wish to commend the United States for the progress made by the electronic working group.

The ECMS believe that, more specific recommendations could be made in order to better address the particular risks linked to this type of products, as some specific problems that may occur during the production of leafy green vegetables have not yet been considered (e.g. internalisation of pathogens).

For a better understanding, the particularities of these products and the need to define Good Agricultural Practice (GAP), good practice on the storage, Good Manufacture Practice (GMP) and Hygiene, could be explained in the Introduction.

Taking into account the objectives of the Code of Hygiene for Fresh Fruit and Vegetables (CAC/RCP 53-2003), which addresses GAP and GMP helping to control microbial, chemical and physical hazards, we are of the opinion that the objectives of this Annex should cover chemical and physical risks as well, even though the main emphasis is on microbiological hazards. The ECMS propose replacing the term "microbiological contamination" with "contamination" throughout the text.

Some provisions might be over prescriptive, unfeasible or too detailed (training, personal hygiene, written procedures, records and documentation, temperature), in particular at primary production level and for small-scale farms/companies, which is not the case in the other two annexes. The rationale and the risk or epidemiological basis should be explained.

The link between this Annex for leafy green vegetables, the main code and its other annex is not evident.

There could be more coherence, clarity and/or explanation as regards the approach to define the different sources and level of water quality that can be used at the different steps, in particular at farm level. For example, in the paragraphs before 3.2.1.1.3 clean water is needed if water is in contact with edible parts. In this part no clarification on the type of water is given.

Throughout the text there are numerous references to specific training. The ECMS suggest drawing these together in Section 10 of the draft Annex. This would help to shorten section 3.2.

The ECMS believe that the storage temperature should be set depending on the products concerned and that a maximum temperature of 5 °C is a bit too low. The ECMS suggest that the temperature should be within the range of temperatures from 1 °C to 7 °C taking into account that for some products a temperature of 1 °C may lead to irreversible damages. Moreover, the temperature range is only mentioned for section 3.3.2 (storage and transport from the field to the packing facility), but nothing is specified regarding the temperature for storage, distribution, marketing and consumer use.

Finally, the ECMS believe that the data collected by the "JEMRA call for additional data on Fresh Produce" with a deadline of 31<sup>st</sup> of July 2009, should also be taken into account.

Furthermore, the ECMS are pleased to inform Codex members of a specific European research project named VEG-i-TRADE, starting in 2010, which will evaluate different production systems of vegetables including leafy green vegetables in relation to occurrence and survival of pathogens. The project will also perform risk assessments and risk profiling. The ECMS will share outcomes of this project at forthcoming CCFH sessions when available.

#### Specific comments

#### 1) 3.1.1 Location of the production site

Since it is over prescriptive, the ECMS propose deletion of the second paragraph, in order to shorten the text.

## 2) 3.1.3 Wildlife, livestock, and human activity

Since it is over prescriptive, the ECMS propose to keep only the first paragraph and to delete the rest of the section, in order to shorten the text.

## 3) 3.2.1.1. Water for primary production

First line, replace "drinking water" by "potable water".

Since it is over prescriptive, the ECMS propose to keep only the first paragraph and to delete the rest of the section, in order to shorten the text.

#### 4) 3.2.1.1.1 Water for irrigation:

New wording proposal:

The quality of water varies widely by type of source. The risk of contamination with pathogens generally increases according to the following ranking:

The quality of water may vary; the water for irrigation should be:

- Potable, or
- Clean water
  - Rain water provided the integrity of the water distribution system is maintained
  - Water in deep wells, provided they are maintained, monitored and capped
  - Water in shallow wells provided they are maintained, monitored and capped

*The following types of water could be used if they are adequately treated* to improve microbial quality *using treatments* of surface waters, such as sand filtration or storage in catchments or reservoirs to achieve partial biological treatment. (The efficacy of these treatments should be evaluated and monitored):

- Adequately treated reclaimed or wastewater
- Surface waters.

Before using reclaimed or wastewater for crop irrigation, an assessment to check the suitability of the water source should be made. Reclaimed wastewater subjected to different levels of treatment should be in compliance with WHO guidelines for safe use of wastewater, excreta and grey water, wastewater use in agriculture, in agricultural production specifically on irrigating vegetables marketed to consumers as fresh, pre-cut or ready-to-eat.

Since it is over prescriptive, the ECMS propose to delete the text from "Irrigation method" to the end of the section, in order to shorten the text.

5) Section 3.2.1.1.3. Hydroponic water: has a higher risk of microbiological contamination and this aspect should be considered and better explained in this section.

## Section 3.2 as whole:

6) Further consideration should be given to the difficulty in removing bacteria from plant tissues by washing. It has been experimentally demonstrated that bacterial pathogens such as *Salmonella* spp. can be taken up by or gain access to plant tissues (e.g. via roots, stomata) and there is potential for this to happen during irrigation. In addition, recent research has demonstrated that bacterial pathogens can be very strongly attached to the surface of leaves and it should be emphasised that once bacteria have reached the leaf surface it is very hard to remove them during processing. The ECMS would recommend considering these aspects in the elaboration of this Annex on hygienic practice for fresh leafy vegetables in order to explore the possible practical consequences.

- 7) Pathogens, e.g. *Salmonella*, can enter plant tissues via their roots (internalisation of pathogens). It has indeed been experimentally demonstrated that bacterial pathogens like *Salmonella* spp. could be taken up by plants and thus can be present in the plant tissue. The bacteria may either enter plants via roots or could intrude into leafs through the stomata.
- 8) Usually these events happen during irrigation. These bacteria could not be washed-off. Moreover, recent research has demonstrated that bacterial pathogens can be very strongly attached to the surface of leaves. It should be pointed out that once bacteria have reached the leaf surface it is very hard to remove them during processing. The ECMS would recommend considering these aspects in the elaboration of this Annex on hygienic practice for fresh leafy vegetables in order to explore the possible practical consequences.

#### 9) Section 3.3.2. Storage and transport from the filed to the packing facility:

A reference to the exclusivity of receptacles transporting foodstuffs should be made at the end of the third paragraph as follows: "Receptacles in vehicles and/or containers are not to be used for transporting anything other than foodstuffs where this may result in contamination. Where conveyances and/or containers are used for transporting anything in addition to foodstuffs or for transporting different foodstuffs at the same time, there is, where necessary, to be effective separation of products".

10) Section 5.2.2.3 Chemical treatments: The ECMS suggest adding at the end of the first sentence the following words: "noting however that post harvest treatments (paraffin, fungicides) should not be used for fresh leafy green vegetables."

#### **Editorial Comments**

11) 2.1.2 & 9.3 The number of the reference document is included after the title of the document; this is not the case with other references.

#### 12) 3.2.1.1.1 Water for irrigation:

Paragraph under last bullet, last sentence: "Therefore, only the clean water should be used for this type of irrigation."

- **13**) Section 3.2.2: the word 'protected' is used at various places. This term should be replaced by the term 'protective'.
- 14) Section 3.2.2.2: The title of 3.2.1.1.1 is not "soil irrigation" but "water for irrigation".
- **15**) Sections 3.2.3.3 & 3.2.3.4: Inconsistency in the references to the code of hygienic practices for fresh fruits and vegetables (There is a reference in 3.2.3, extra references in 3.2.3.1 and 3.2.3.2, but not in 3.2.3.3 and 3.2.3.4).
- 16) Section 4.1.2: Floors and walls are not 'Equipment' this belongs to 4.1.1.
- 17) Numeration in point 4. to be revised.

#### INDIA

# SECTION 2 SCOPE, USE AND DEFINITIONS

#### **Sub-Section 2.1 Scope**

The proposed Annex is intended to cover specific guidance related to the production, harvesting, packing, processing, storage, distribution, marketing and consumer use of fresh leafy vegetables that could be consumed raw (without cooking), pre-cut or ready to eat. There is no need of the word "fresh" since the mother document CAC/RCP 53 is for Fresh Fruits and Vegetables. It is suggested to add the word "raw" instead of the word "fresh" after the words "that could be consumed......".

#### **Sub-section 2.3 Definitions**

As only one term has been defined in the Section, the text in the opening paragraph should be editorially corrected as follows:

"Definitions ... ... ... ... code, the following definitions apply applies:"

## SECTION 3 PRIMARY PRODUCTION OF FRESH LEAFY VEGETABLES

#### Sub-section 3.1 Environmental Hygiene

#### Sub-sub-section 3.1.3 Wildlife, livestock, and human activity

In the last bullet point, last sentence, cultural methods (e.g. crop rotation) has been included as one of the possible measures to protect leafy vegetables growing areas from the animals. It is, however, not clear how these could be helpful in protecting leafy vegetable growing areas from animals. Therefore, the last sentence should be amended as follows:

"When appropriate, this may require the use of physical barriers (e.g. fences), <u>and</u> active deterrents (e.g. noise makers, scarecrows, images of owl, foil strips) and/or cultural methods (e.g. crop rotation)."

#### Sub-section 3.2 Hygienic Primary Production of Fresh Leafy Vegetables

#### Sub-sub-section 3.2.1.1 Water for primary production

The first sentence might lead a reader to interpret that only potable water should be used for all the operations in primary production of leafy vegetables. This is not appropriate as clean water would suffice for several operations like cleaning of equipment and intermediate rinsing of vegetables etc. Therefore, it is proposed to replace the first sentence with the following:

"An appropriate and adequate supply of water of a suitable quality for use in different operations in the primary production of fresh leafy vegetables should be available."

The last sentence should be amended as follows for clarity:

"Growers should seek appropriate guidance from national authorities, relevant institutions etc. on ... ... "

#### Sub-section 3.2.1.1.1 Water for irrigation

The categorization of water for irrigation based on risk of contamination should also include the ground water as it is a low risk source & widely used during the irrigation process. It is suggested to amend the second & third bullets of Point No. 2 as follows:

- <u>"Ground</u> water in deep wells, provided they are maintained, monitored and capped"
- "<u>Ground</u> water in shallow wells provided they are maintained, monitored and capped"

#### Sub-sub-section 3.2.1.2 Manure, biosolids and natural fertilizers

In the third paragraph, first sentence, the examples of treatment include 'heat' along with 'chemical' and 'biological' treatments. We are not sure about the practicality of heat treatment to manures. It would be appropriate to replace the word 'heat' with 'physical'.

#### Sub-Section 3.2.3 Personnel health, hygiene and sanitary facilities

The subsection provides details for the operator, worker and visitors. It is suggested that it should have different sub-paras, one each for workers, operators and visitors to bring clarity to the document. It is further suggested that the first bullet of the subsection 3.2.2.4 should be included in this section as it provides instructions for the workers and visitors.

#### Sub-Section 3.2.3.1 Personnel Hygiene and Sanitary Facilities

It is proposed to include the following as mentioned in the clause 3.2.3.4 as these are related to the facilities provided by the grower to the employees:

• <u>Growers should provide areas away from the field and packing lines for workers to take breakes and</u> eat. For worker convenience, these areas should contain toilet and hand washing facilities so workers can practice proper hygiene.

• <u>Personal items (e.g. purses, backpacks, Clothes, etc.) should be stored away from production areas.</u> Sub-Section 3.2.3.2 Health status

It is proposed to add a new bullet point as follows :

• <u>Medical examination of food handler should be carried out if clinically or epidemiologically</u> <u>indicated.</u>

#### Sub-Section 3.2.3.4 Personal Behaviour

Since this is in line with the Code of Hygienic Practices for Fruits and Vegetables, it is proposed to add a foot-note giving the reference of this code.

# SECTION 4 PACKING ESTABLISHMENT: DESIGN AND FACILITIES

#### **Sub-section 4.1.2 Equipment**

The text provided under this Sub-section pertains to the desired features in buildings and not in equipment. The text should be appropriately relocated at the Sub-section 4.1.1 Establishments.

#### SECTION 5 CONTROL OF OPERATION

#### **Sub-section 5.7 Documentation and Records**

In the third paragraph, first bullet point, it would be appropriate to indicate that the microbiological testing result and trend analysis should be retained for the final product as follows:

#### 'Microbiological testing results and trend analyses in respect of final products'

The text mentioned in the parenthesis shows that comprehensive written food safety plan should be as descriptive and elaborative as the HACCP plan. It is felt that there is no need of such a descriptive and elaborative plan for a commodity to be grown in the fields. It will be extremely difficult to implement it in developing countries, particularly, where the land holdings are very small. The requirements in parenthesis may, therefore, be deleted.

#### SECTION 8 TRANSPORTATION

The section provides the reference of General Principles of Food Hygiene and Code of Hygienic Practice for Transport of Food in Bulk and Semi-packed Food. It is suggested that reference may also be given of Recommended International Code of Practice for Packaging and Transport of Fresh Fruit and Vegetables – CAC/RCP-44.

#### SECTION 10 TRAINING

#### **Sub-section 10.1 Awareness and Responsibilities**

The text in the bullet point should be amended as follows for clarity:

"Making Placing appropriate priority on the education and training a priority for all of personnel."

#### **Sub-section 10.2 Training Programmes**

In the second paragraph, the first sentence should be amended as follows for the required flexibility:

In the third paragraph, the first sentence should be amended as follows for the required flexibility:

"To accommodate ... ... ... should be addressed, as appropriate:"

#### KENYA

#### **INTRODUCTION**

#### <u>comment</u>

1.We propose to strike <u>Fresh leafy vegetables are marketed as diverse products including whole,</u> unprocessed heads, loose leaves, mixed cut leaves and fresh herbs, and pre-cut packaged products. for it is repeated in the body of the introduction several times.

2. We also strike the word" sophisticated processing plants (the word 'sophisticated' is very subjective).

Fresh leafy vegetables are grown, processed and consumed in multiple ways and in diverse conditions throughout the world. They are grown on farms that vary from very large to very small. Fresh leafy vegetables are marketed both locally and globally to provide year round availability to consumers and are sold as fresh, fresh-cut, pre-cut or ready-to-eat products such as pre-packaged salads.

International and national concerns have grown in response to recent outbreaks and reported illnesses linked to fresh leafy vegetables. A broad array of microbial pathogens have been associated with fresh leafy vegetables as reported in international outbreak data, including Enterohemorrhagic Escherichia coli, Salmonella enterica, Campylobacter spp, Shigella spp, Hepatitis A virus, Norovirus, Cyclospora cayetanensis, Cryptosporidium parvum, Yersinia pseudotuberculosis and Listeria monocytogenes. Epidemiological evidence, outbreak investigations and risk assessments have identified areas of risk for pathogen contamination of leafy vegetables including key risks from water, animals, workers and manure based soil amendments. Fresh leafy vegetables are grown and harvested in large volume, often for export and increasingly in places that are new to harvesting and distributing fresh leafy vegetables, therefore the potential for human pathogens to spread has also grown. Fresh leafy vegetables are marketed as diverse products including whole, unprocessed heads, loose leaves, mixed cut leaves and fresh herbs, and pre-cut packaged products. (repeated several time) Fresh leafy vegetables are packed in diverse ways including field packed direct for market, in packing houses and processed for pre-cut products in sophisticated processing plants (the word 'sophisticated' is very subjective). As fresh, fresh-cut, pre-cut or ready to eat leafy vegetables move through the supply chain, there is also the potential for the introduction and growth of pathogens. There is no further processing treatment that would eliminate or inactivate the target microorganisms.

#### 3.3.2 Storage and transport from the field to the packing facility

#### **Comment**

We propose to strike off the word "previously" since we do not recommend the vehicles carrying fresh produce that might be eaten fresh or that can pick undesirable odor from these bioslids to again carry animal manure and biosolids, we therefore propose the statement to read "Fresh produce should not be

#### transported in vehicles used previously to carry animal manure or biosolids"

Refer to the Code of Hygienic Practice for Fresh Fruits and Vegetables and the Code of Hygienic Practice for the Transport of Food in Bulk and Semi-Packed Food. In addition, the following should be considered: Fresh leafy vegetables may be transported to the packing, cooling and cold storage facility by numerous modes of transportation. Transportation should be managed to reduce or control the risk of contamination. Each company should have its own standard operating procedure (SOP) for shipping containers/trailers to verify that they are clean, sanitary, and in good structural condition. *Fresh produce should not be transported in vehicles used previously to carry animal manure or biosolids* 

# 5.7 DOCUMENTATION AND RECORDS

#### **Comment on documentation and records**

<u>We would like to support the clause mentioned below the way it is and recommend the opening and closing square bracket to be opened. It is very important to document everything done in the farms for the purpose of traceability and facilitate the auditing.</u>

. [A comprehensive written food safety plan that includes a written description of each of the hazards identified in assessing environmental hygiene and the steps that will be implemented to address each hazard should be prepared. The description should include, but is not limited to: an evaluation of the production site, water and distribution system, manure use and composting procedures, personnel illness reporting policy, sanitation procedures, and training programs.] –

## IACFO

The International Association of Consumer Food Organizations (IACFO) is an association of a dozen national non-governmental organizations from all over the world that represent consumer interests in the areas of nutrition, food safety, and related food policy matters. IACFO members work on food policy concerns unique to diverse populations and regions, such as India, Uganda, Malaysia, Japan, and others. We respectfully submit the following comments for consideration at the Forty first Session of the Codex Committee on Food Hygiene.

IACFO would like to commend the working group for the progress that has been made on the draft annex on fresh leafy vegetables, and would like to support various interventions that underline the importance of documentation, traceability, and recall as tools to ensure consumer safety.

#### SECTION 3: PRIMARY PRODUCTION OF FRESH LEAFY VEGETABLES

The inclusion of Standard Operating Procedures (SOPs) at various points in section 3 on the production of fresh leafy vegetables creates a standardized model for maintaining a leafy vegetable supply virtually free from pathogens. Written SOPs ensure personnel hygiene and health as well as safe handling, storage and transport (3.2.3, 3.3.1, 3.3.2, and 3.2.4). IACFO believes that the benefits of implementing SOPs will be shared by a wide array of stakeholders, including industry, the public sector, as well as consumers.

SOPs are important in reducing the prevalence of foodborne illness; therefore, IACFO believes that the annex should be edited to include them in the written food safety plan.

#### 3.2.3: Personal health, hygiene, and sanitation

At the end of the first bulleted section add the following:

"The SOPs should be documented in the comprehensive food safety plan."

3.2.4: Equipment associated with growing and harvesting At the end of the first bullet, add the following: "The SOPs should be documented in the comprehensive food safety plan."

#### 3.3.1: Prevention of cross-contamination

After the second bullet, prevention of cross-contamination, add the following: "The SOPs should be documented in the comprehensive food safety plan."

#### 3.3.2: Storage and transport from the field to the packing facility

At the end of the second paragraph add the following:

"The SOPs should be documented in the comprehensive food safety plan."

The recognition of the importance of the SOPs in the written food safety plan throughout the annex will result in a more effective accounting for hazards along the line of production.

#### SECTION 5.7 DOCUMENTATION AND RECORDS

IACFO supports the implementation of a comprehensive written plan that captures the analysis of potential hazards and describes the steps that will be taken to reduce microbial food safety risks that may result from those hazards.

We support the removal of brackets from this section that describes how written plans assist in the documentation of hazards. Written plans aid the grower in identifying hazards and planning appropriate interventions. They also provide the competent authority with the documentation that may be audited to confirm the grower is applying appropriate methods to mitigate potential hazards.

## SECTION 5.8: TRACEABILITY AND RECALL PROCEDURES

IACFO supports the addition of this section. Food attribution is a crucial component of a successful recall; therefore, effective methods of documentation are necessary in order to ensure than in the case of an outbreak, the impact on public health can be minimized.

#### **SECTION 9.3: LABELING**

IACFO supports the adoption of the clause under consideration in section. Including clear and easy to read labels on packaged leafy vegetables increases consumer awareness of the risks of consumption, without reducing their confidence in the food supply.

# **SECTION 10.2: TRAINING PROGRAMS**

IACFO would also like to draw attention to the need for labeling provisions under this section. Labels are crucial in educating consumers, but retailers must also be exposed to labels that explain safe handling instructions. In the United States, nearly half of food-related outbreaks can be traced to food prepared outside the home, underscoring the importance of safe handling practices by restaurant employees among others.