Facilitating Food Standards Harmonization in ASEAN -
*ILSI Southeast Asia Region’s Scientific Initiatives*

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*ILSI Southeast Asia Region*
Presentation Outline

• A closer look at ASEAN, AEC and its food standards framework
• ILSI SEA Region’s initiatives and activities in supporting harmonization of food standards
  – Workshop Series on
    • Nutrition labeling and claims
    • Food safety standards
      – Database
    • Exposure assessment
• Challenges for harmonization
ASEAN Region - An Unique Region

- The Association of Southeast Asian Nations is a political and economic organisation of ten countries located in Southeast Asia, with the aims to
  - Accelerate economic growth, social progress, sociocultural evolution among its members
  - Protect regional peace and stability, and provide opportunities for member countries to discuss differences peacefully
Brief History: From AFTA to AEC...

- In 1992, ASEAN Member States signed the **ASEAN Free Trade Area Agreement (AFTA)**, initiating first serious effort towards regional economic integration (primarily through tariff reductions).

- The 1997 financial crisis provided the catalyst for further regional integration, where ASEAN Leaders set out the **ASEAN Vision 2020**, which provided the policy foundation for a regional community.

- In 2003, ASEAN Leader made the **Declaration of ASEAN Concord II** to establish an **ASEAN Community** by 2020 at the 9th ASEAN Summit.

- In 2007, ASEAN Leaders agreed to bring forward the establishment of the **ASEAN Community to 2015** and also adopted the **ASEAN Charter** to formalize ASEAN as a regional entity under international law.
ASEAN Community 2015

- Overall objective of the ASEAN Community is to ensure “durable peace, stability and shared prosperity in the region”

- The ASEAN Community will comprise three key pillars:
ASEAN Economic Community

• Goals of the AEC is to transform ASEAN into:

  i) a single market and production base;
  ii) a highly competitive economic region;
  iii) a region of equitable economic development;
  iv) a region fully integrated into the global economy

• The main instrument to implement the single market and production base for the AEC is the ASEAN Trade In Goods Agreement (ATIGA) signed in 2009
Harmonization of ASEAN Food Safety Standards

• ASEAN Leaders identified agro-based sector (includes food) as one of the eleven priority sectors for integration within the ASEAN Framework Agreement for the Integration of Priority Sectors signed in 2004

• Harmonization of various food safety standards are also included as priority actions within the ASEAN Economic Community Blueprint and ASEAN Socio-Cultural Community Blueprint in 2007

• Harmonization of standards are implemented by a number of ASEAN Working Groups that have been established over the years
The Prepared Foodstuff Product Working Group (PFPWG) was established in 2003 under ASEAN Consultative Committee on Standards & Quality (ACCSQ) with key responsibilities to:

i) Exchange information on food regulations and standards
ii) Identify and develop sectoral mutual recognition arrangements (MRAs)
iii) Identify areas for possible harmonization
iv) Identify food safety capacity building and technical infrastructure needs

Established a subsidiary Task Force on Harmonization of Prepared Foodstuff Standards in 2008, which addresses harmonization of standards for food additives, contaminants, food contact materials, etc.
ASEAN Expert Group on Food Safety

• Established with the broad objective to improve food safety across ASEAN under the purview of ASEAN Health Minister

• Implement capacity building projects to improve AMS and ASEAN food safety and technical infrastructure

• Also help to promote harmonization of food safety standards and technical regulations with international standards

• Work is guided by the ASEAN Food Safety Improvement Plan (AFSIP)-Phase II (2011-2014)
ILSI SE Asia Region.....Est. 1993

ASEAN + Australasia

Unique Regional Set up

• 13 countries
• 1 Regional Office
  Singapore
• 5 Country Committees
  Australia, Indonesia, Malaysia, Thailand and Philippines
• Widely Diverse Region
ILSI SEA Region’s Initiatives and Activities in Supporting Food Standards Harmonization in ASEAN

Recognizing the need for greater harmonization in scientific understanding, regulations and decision making in ASEAN region

- ILSI SEA Region identified several key issues and areas relevant to region
  - Nutrition labeling and claims
  - Food Safety Standards
  - Food Consumption and exposure assessment
ILSI SEA Region’s Initiatives and Activities in Supporting Food Standards Harmonization in ASEAN

1) Nutrition Labeling and Claims Harmonization Workshop Series

- Organized 8 workshop series with regional regulatory authorities and experts from SEA since 2001:
  - Shared regulatory updates and experiences in evaluating scientific data submitted for substantiation of claims
  - Provide avenues to explore possibilities in the harmonization of relevant regulations in SEA Region

- The key outcomes/outputs:
  - Asian position of Functional Foods
  - Regulatory Framework for Nutrition Labeling and Claims for Food - Harmonization in SEA Region
  - Guidelines for the Scientific Substantiation of Nutrition and Health Claims for Foods/Functional Foods
  - Guidelines for Evaluation of Safety / Nutritional Safety of Functional Foods
ILSI SEA Region’s Role & Activities in Supporting Food Standards Harmonization in ASEAN

2) ASEAN Food Safety Standards Harmonization Workshop Series

• Organized workshop series with food safety authorities from ASEAN since 2001:
  – Initially started with FAO & WHO to determine whether possible for ASEAN to harmonize food safety standards with Codex Standards
  – Serves as a platform for different stakeholders (government, academia & industry) to discuss and share scientific issues and identify capacity gaps that are relevant to food safety standards harmonization

• One of the key outputs:
  – ASEAN Food Safety Standards Database
ASEAN Food Safety Standards Database

• **ASEAN Food Safety Standards Database** - an online database developed by ILSI Southeast Asia Region in 2003 (pilot), revised and upgraded in 2011

• Currently focuses only on compiling **food additive standards** of ASEAN compared with Codex General Standard for Food Additives (GFSA)

• Received by the **PFPWG** in 2012 as a technical infrastructure for food safety in ASEAN for harmonization prioritization and reference
About the ASEAN Food Safety Standards Database

The ASEAN Food Safety Standards Database is an initiative of the Working Group on ASEAN Food Safety Standards Harmonization.

The Working Group on ASEAN Food Safety Standards Harmonization consists of government authorities from Southeast Asian countries that make up the Association of Southeast Asian Nations (ASEAN), as well as regional and academic stakeholders. The main objective of the Working Group is to identify ways to harmonize food safety standards among ASEAN countries so that they are aligned with international standards whenever possible, such as Codex Alimentarius. Members of the Working Group meet annually to discuss harmonization efforts at the ASEAN Food Safety Standards Harmonization Workshop, which is facilitated by the International Life Sciences Institute (ILSI) Southeast Asia Region.

Currently, the ASEAN Food Safety Standards Database contains information on food additive standards in the ten ASEAN countries.
### Additives

<table>
<thead>
<tr>
<th>Additive Code</th>
<th>Additive Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid, glacial</td>
<td>Ammonium citrate</td>
</tr>
<tr>
<td>Ammonium carbonate</td>
<td>Ammonium dichlorophosphate</td>
</tr>
<tr>
<td>Ammonium dihydrogen phosphate</td>
<td>Ammonium hydroxide</td>
</tr>
<tr>
<td>Ammonium hydrogen carbonate</td>
<td>Ammonium lactate</td>
</tr>
<tr>
<td>Ascorbic acid, L-</td>
<td>Calcium acetate</td>
</tr>
<tr>
<td>Calcium carbonate</td>
<td>Calcium dihydrogen phosphate</td>
</tr>
<tr>
<td>Calcium gluconate</td>
<td>Calcium hydrogen phosphate</td>
</tr>
<tr>
<td>Calcium hydroxide</td>
<td>Calcium lactate</td>
</tr>
<tr>
<td>Calcium malate, DL</td>
<td>Calcium oxide</td>
</tr>
<tr>
<td>Calcium oxide</td>
<td>Calcium polyphosphate</td>
</tr>
<tr>
<td>Carnosine</td>
<td>Citric acid</td>
</tr>
<tr>
<td>Diammonium hydrogen phosphate</td>
<td>Diphosphoric acid</td>
</tr>
<tr>
<td>Dipotassium dihydrogen phosphate</td>
<td>Dipotassium lactate</td>
</tr>
<tr>
<td>Disodium dihydrogen phosphate</td>
<td>Disodium phosphate</td>
</tr>
<tr>
<td>Disodium phosphate</td>
<td>Fumaric acid</td>
</tr>
<tr>
<td>Glycerol diacetate</td>
<td>Glucose dehydrolase</td>
</tr>
<tr>
<td>Hydroxymethylfurfural</td>
<td>L(+)-tartaric acid</td>
</tr>
<tr>
<td>Lactic acid, L-</td>
<td>Lactic acid, L-</td>
</tr>
</tbody>
</table>

### Food Categories

- 01.0.0.0 - Dairy products and analogues, excluding
  - 01.1.0.0 - Milk and dairy-based drinks
    - 01.1.1.0 - Milk (plain)
    - 01.1.1.2 - Buttermilk (plain)
    - 01.1.2.0 - Dairy-based drinks, flavoured and/or fortified
    - 01.2.0.0.1 - Fermented and renneted milk products (plain) excluding...
    - 01.2.1.0 - Fermented milk (plain), heat-treated after fermentation
    - 01.2.2.0 - Rennet milk (plain)
    - 01.3.0.0 - Condensed milk and analogues (plain)
    - 01.3.1.0 - Condensed milk (plain)
    - 01.3.2.0 - Beverage whiteners
    - 01.4.0.0 - Cream (plain) and the like
    - 01.4.1.0 - Pasteurized cream (plain)
    - 04.4.1.0 - Sterilized and heat-processed cream (plain)

### Countries

- Brunei
- Cambodia
- Indonesia
- Laos
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Vietnam

**Organized according to functional classes**

**Select food additive**

**Select country**

**Select food category**

**Search**

[PLACEHOLDER TEXT]: Describe the search function here
### ASEAN Food Safety Standards Database

#### Members Search

**Search Criteria**

<table>
<thead>
<tr>
<th>Food Categories</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additive/Substance</td>
<td>Preservative/Benzoates</td>
</tr>
<tr>
<td>Countries</td>
<td>ALL</td>
</tr>
</tbody>
</table>

**Legend**

- **Red** indicates all countries not harmonized with GSFA
- **Blue** indicates some (not all) countries harmonized with GSFA
- **Green** indicates all countries harmonized with GSFA

**Results**

<table>
<thead>
<tr>
<th>Food No</th>
<th>Description</th>
<th>GSFA Value</th>
<th>Brunei</th>
<th>Cambodia</th>
<th>Indonesia</th>
<th>Laos</th>
<th>Malaysia</th>
<th>Myanmar</th>
<th>Philippines</th>
<th>Singapore</th>
<th>Thailand</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.00.0</td>
<td>DAIRY PRODUCTS AND ANALOGUES, EXCLUDING PRODUCTS OF FOOD CATEGORY 02.0</td>
<td>100 ppm</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>01.10.0</td>
<td>Milk and dairy-based drinks</td>
<td>50 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
<td>80 ppm</td>
</tr>
<tr>
<td>01.11.0</td>
<td>MILK AND BUTTERMILK (PLAIN)</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>01.11.1</td>
<td>Milk (plain)</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>01.12.0</td>
<td>Buttermilk (plain)</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
</tr>
<tr>
<td>01.12.1</td>
<td>DAIRY-BASED DRINKS, FLAVOURED AND/OR FERMENTED (e.g.,</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
<td>NP</td>
</tr>
</tbody>
</table>
Management of the Database

- **Administrator (ILSI Southeast Asia Region):**
  - Update values for GSFA additives when changes occur at CCFA
  - Update GSFA food categories when changes occur at CCFA
  - Update database to include new food additives (if any)
  - Maintenance and further upgrading of the database software
  - Administer user access to the database (report to ACCSQ PFPWG on list of users, see who has accessed it and from where)

- **Moderators (ASEAN Focal Points):**
  - Modify national data for own country
  - Able to add country-specific custom categories
  - Not able to modify another country’s data
3) ASEAN Food Consumption Data and Exposure Assessment Workshops

- Background:
  - Recognition among food safety authorities in ASEAN of need to have reliable food consumption data to perform accurate exposure assessments.
  - However, existing food consumption data in ASEAN mostly collected for nutrition purposes and not available to risk assessors to do exposure assessments.
  - ASEAN Expert Group on Food Safety (AEGFS) Project on ‘Strengthening ASEAN Risk Assessment Capacities: Food Consumption Data’ was proposed in 2010.
  - Technical assistance requested to FAO and ILSI.
  - WHO and local Malaysian consultants provided technical assistance for Phase 1 of the project (2010-2011).
Project Phase 1

- ILSI Southeast Asia Region, FAO and Food Safety & Quality Division, Ministry of Health, Malaysia (Project lead country) jointly organized 1st Workshop on ‘ASEAN Food Consumption Data and Exposure Assessment’ October 10-13, 2011, Kuala Lumpur, Malaysia

- Objectives:
  - Discuss availability of food consumption data in ASEAN
  - Discuss food consumption survey methods
  - Identify steps to enable existing food consumption data to be used for dietary exposure assessment purposes among ASEAN countries
1st Workshop Outcomes

Work completed and agreements gained at the 1st Workshop:

- ASEAN countries agreed to
  - share food consumption data to be used for dietary exposure assessment purposes
  - compile existing food consumption data into a common ASEAN Food Consumption Database
- A draft list of harmonized food categories was developed as the basis for a common template to compile the national food consumption data
- List of food categories to be further discussed via electronic working group (led by Malaysia)
- ASEAN countries would consider future work to harmonize food consumption data collection and reporting within their countries
Project Phase 2

• A 2\textsuperscript{nd} workshop was needed to finalize the list of common food categories and other aspects (e.g. age groups, reported percentiles, etc.) for ASEAN food consumption database

• Also needed to discuss challenges involved in transferring national consumption data into a harmonized template
  – 2\textsuperscript{nd} Workshop on ‘ASEAN Food Consumption Data and Exposure Assessment’ November 19-21, 2013, Kuala Lumpur, Malaysia
  – Jointly organized by ILSI SEA Region, FAO and Food Safety & Quality Division, Ministry of Health, Malaysia
Potential Uses & Benefits of the ASEAN FCD

- Could be used to conduct dietary exposure assessment at both the national level and regional level.

- Countries that do not have specific data (e.g. no FCD for children or no data for certain foods) can use data of other countries to calculate exposure estimates (using appropriate assumptions).

- Countries that do not have any national FCD could use data of other countries in the ASEAN FCD to calculate exposure estimates (‘surrogate data’ especially if dietary patterns considered similar, i.e. Lao & Thai).

- Could also be used to calculate what are ‘ASEAN exposure estimates’ to a particular hazard.
Next Steps for the Project

• ASEAN countries begin to enter their national FCD into the common template

• Electronic working group will continue the discussion of potential challenges and issues in transferring the national data into the common template

• Once the work is completed, the ASEAN Food Consumption Database will be developed and maintained by the ASEAN Risk Assessment Centre (ARAC) of the AEGFS
  – ARAC is the regional body set up to coordinate food safety risk assessment activities to support other ASEAN WGS in implementing science-based harmonization of food safety standards
Harmonization of ASEAN Food Safety Standards-Not Without Challenges

• As harmonization of food safety standards is mainly based on science, there is a need for scientific data to be made available to support risk assessment activities

  – However, not all countries possess the necessary data to contribute to regional risk assessments (e.g. lack of nationally representative food consumption data)

• Apart from science, there are also other factors that may influence decisions to harmonize national standards within the region (e.g. for contaminants), such as different societal risk tolerances or views on what is deemed the ‘appropriate level of protection’
Harmonization of Food Safety Standards in ASEAN-Moving Forward

- Common elements in relation to work on harmonization of food safety standards across ASEAN WGs:
  - Adopt international standards such as those established by the Codex Alimentarius as the starting point for harmonization
  - Scientific risk assessment agreed to be the basis to decide on harmonization, especially in cases where international standards are not available or not suitable for the ASEAN situation
  - Harmonized ASEAN standards and guidelines that are developed by ASEAN WGs need to be adopted by AMS into their respective national legislation
Harmonization of ASEAN Food Safety Standards

ASEAN harmonization – may be a slow process but with solid foundation!
Thank you

Questions?

Website: www.ilsi.org/SEA_Region