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Seminar on Food Safety & Healthy Food:  
**A Look beyond State Regulatory Framework**



The Institute of Food Science & Technology Sri Lanka (IFSTSL) held a seminar on 'Food Safety & Healthy Food: A Look beyond State Regulatory Framework' on the 6<sup>th</sup> April 2018, at Hotel Global Towers, Colombo 6. The seminar focused on capacity development of stake holders in the food industry aiming a healthy food supply to the nation. The seminar was organized by the president of IFSTSL Dr Sujeewa Gunaratne, with the guidance of Coordinator of Training and Food Safety sub-committee of the IFSTSL, and Chairman of Board of Governors, Emeritus Prof. Upali Samarajeewa. Dr. Eresha Mendis, Editor of IFSTSL, and Senior Lecturer Department of Food Science and Technology, University of Peradeniya moderated the panel session at the end of presentations and Ms. Choshani Dalukdeniya, Joint Secretary and Ms. Sandhya Fernando, Administrative Assistant supported organizing the seminar.

The seminar was well attended by industry participants and invitees from government departments, institutes and authorities. Dr. Sujeewa Gunaratne welcomed the audience and spoke on the positive role the food regulations have played over a period, together with gaps in the system. Dr. Lakshman Gamlath, Deputy Director General (EOH & Food Safety) presented on the impactful role of food regulations in food safety and healthy food. Mr. Arun Mishra, Executive Vice President Regulatory Affairs of Indian Sub Continent, GSK Consumer Healthcare presented on Good Regulatory Review Practices and Food Safety, highlighting the need food industry should play in implementing a regulatory review practice. Dr. S. Dhanapala, Director (EOH & Food Safety) spoke on Recent Progresses in Food Regulations and discussed the gaps in regulations and implementation processes. Dr. Bhanuja Wijayatilaka, Consultant Community Specialist of Nutrition Division, Ministry of Health presented on Nutritional Challenges on achieving national goals on non communicable diseases. Dr. Renuka Jayatissa delivered an insightful presentation on Food vs Borderline products: classification, claims and communication limitations. A question and answer session was moderated by Dr. Eresha Mendis covering all presentations discussed. GSK Consumer Healthcare Sri Lanka, a leading organization driving food safety agenda in Sri Lanka, sponsored the seminar. Members from GSK Consumer Healthcare India and Bangladesh team also participated.



## IFSTSL Represented at International Conference on Food Safety & Regulatory Measures

Dr. Sujeewa Gunaratne, President IFSTSL co-chaired a session at the International Conference on Food Safety and Regulatory Measures held at Tryp Aeropuerto Hotel, Barcelona, Spain from 11<sup>th</sup> to 13<sup>th</sup> June 2018. She also presented on 'Challenges in consumer behaviour change based on colour coding system for beverages as a NCD control mechanism in Sri Lanka'. The IFSTSL newsletter was distributed among participants as a means of publicity, and an introduction of IFSTSL was given at the session presentation.



## 'Industry Expectations and Career Aspirations for Food Science Graduates'

On behalf of the IFSTSL, Dr. Sujeewa Gunaratne organized a seminar on 'Industry Expectations and Career Aspirations for Food Science Graduates' during the Profood/Propack-AgBiz Exhibition on 3<sup>rd</sup> August, at BMICH. The objective of the seminar was to share some understanding of food industry expectations as an employer of food science graduates, and prepare them to join the food industry. Dr. Sujeewa Gunaratne welcomed the participants and introduced the objectives of the seminar. Mr. Lasantha Rathnayaka, General Manager of JanRich Foods Ltd presented on 'Knowledge and Competency Expectations from Fresh Graduates to Industry: A Recent Survey Findings'. Mr. Dhammika Gunasekara, Managing Director of Tropical Life Pvt Ltd spoke on 'The role of Food Science Graduates in Innovation' and clarified undergraduates concerns through questions and answers. Dr. Sujeewa Gunaratne spoke on 'Industry Expectations of Food Science Graduates: MNC point of view'. Ms. Oshadhi Perera, an undergraduate of the University of Peradeniya summarized their learnings from the seminar and appreciated knowledge shared by the speakers. The seminar was attended by undergraduates of Peradeniya, Wayamba, Sri Jayewardenpura and Sabaragmuwa Universities and participants highly appreciated the effort taken by IFSTSL to help them by explaining industry expectations of the graduates. Dr. Eresha Mendis and Ms. Choshani Dalukdeniya of IFSTSL supported in organizing activities.



**Food Regulatory System in Sri Lanka: Implications for Local and Export Food Trade**



The Institute of Food Science and Technology Sri Lanka (IFSTSL) in collaboration with Sri Lanka Food Processors Association (SLFPA) successfully organized a seminar on "Food Regulatory System in Sri Lanka: implications for local and export food trade " on 03<sup>rd</sup> August at Ruby Hall Restaurant in the BMICH complex in parallel with "Profood-Propack-Ag Biz 2018" annual exhibition. Speakers representing the government institutions covered the positive and negative aspects of the national food regulatory system while emphasizing the importance of having effective national food control system to protect the health of consumers and to promote export food trade. Sri Lankan standards and standard setting procedure were taken into discussion in identifying the expected role played by SLSI in promoting food trade locally and internationally. The mechanisms available in regulating imports and exports of plant produce and plant products were covered by a representative from National Plant Quarantine Agency of the Department of Agriculture and further explained about the improvements required in the system to ensure a smooth functioning. Challenges faced by Sri Lanka exporters in reaching compliance were also discussed by a speaker representing the food industry and emphasized the possible measures to improve the system to support export trade. A speaker from India representing Indian food control system elaborated on the importance of the compliance with global requirements for food trade which places considerable responsibility for countries to strengthen their food control systems and to implement and enforce risk-based food control strategies. In this aspect, Indian system was discussed and improvements took place in Indian food control system in the recent past to promote exports from India were explained in detail. The main objective of this awareness seminar was to develop a dialogue with the concerned parties on national regulatory system in Sri Lanka with a view to understand its implications on local and export food trade. In line with the objective of the seminar, final presentation delivered representing IFSTSL summarized the areas that the national food control system has inadequacies that require improvements in promoting export food trade in Sri Lanka. Following the speeches, Dr. Eresha Mendis served as the moderator of the panel discussion to lead discussions with the audience. The program was organized and coordinated by Dr. Eresha Mendis and co-coordinated by Dr. Sujeewa Gunaratne and Ms. Choshani Dalukdeniya.



**Sri Lankan Food Product Standards & Standard Setting Procedure: Implications on Food Trade**

*Ms. Thilini Kalugala  
Assistant Director,  
Scientific Standardization Division,  
Sri Lanka Standards Institution*



**Plant Quarantine Measures & Procedures Required for Exporting Agricultural Products**

*Dr. Jayantha Senanayake  
Former Director,  
National Plant Quarantine Service,  
Department of Agriculture*



**The Role of Indian Food Regulations & Standards in Promoting Local & Export Food Trade:**

**Indian Food Authority Perspectives**  
*Mr. Sanjay Dave  
Advisor, Food Safety & Standards Authority  
of India*



**Challenges Faced by the Sri Lankan Food Exporters in Achieving Compliance with Emerging International Food Standards & Regulations**

*Dr. Sujeewa Gunaratne  
President, IFSTSL*



**Sri Lankan Food Regulatory System: Recent Developments to Support Local & Export Food Trade**

*Dr. Sapumal Dhanapala  
Director (EOH and Food Safety),  
Ministry of Health*



**Proposed Improvements in the Food Regulatory System in Sri Lanka to Promote Local and Export Food Trade**

*Dr. Eresha Mendis  
Senior Lecturer,  
Department of Food Science & Technology,  
University of Peradeniya & Editor, IFSTSL*



Feature Article

## The Urgent Need of Strengthening Compliance with the Codex Requirements in Promoting Export Food Trade in Sri Lanka

**Dr. Eresha Mendis**

*Consultant for food safety and Editor of the Institute of Food Science and Technology Sri Lanka*

Food industry is becoming the ever growing industry in the world. Food production as well as trade is a complex business requiring regulation to protect the health of consumers and ensure fair practices in the food trade. In assuring health of consumers, the stakeholder groups of food sector need to concentrate on food safety, which supports the supply of food free from high risk hazards. At the same time, regulations imposed by different countries/regions should not demand to meet unjustifiable safety and quality requirements from smaller producers in developing and emerging economies that become challenging for them to involve in trade. Instead these regulations need to adequately focus on ensuring the public health supported by science.

### What is Codex Alimentarius (the harmonized food code)?

Considering the different capacities of countries and parties engaged in this sector of business, harmonization of food safety and quality requirements are considered of paramount importance which contributes to trade facilitation while ensuring food safety. By reducing the need for producers to comply with different standards in different markets, harmonization becomes a powerful tool to make trade less costly and more inclusive. The use of international food standards worldwide not only contributes to public health, but also helps reduce trade costs by making trade more transparent and efficient, allowing food to move more smoothly between markets. The Codex Alimentarius Commission was established by Food and Agriculture Organization (FAO) and World Health Organization (WHO) to develop a harmonization mechanism in international food trade based on science. The Codex Alimentarius Commission as an internationally recognized body holds the responsibility for all matters regarding the implementation of the Joint FAO/WHO Food Standards Programme. As a result Codex Alimentarius, or "Food Code", was published. Codex Alimentarius is a collection of harmonized international food standards, guidelines and codes of practices. The publication of the Codex Alimentarius was intended to guide and promote the elaboration and establishment of definitions and requirements for foods to assist in their harmonization and in doing so to facilitate international trade. This food code has become the global reference point for consumers, food producers and processors, national food control agencies and the international food trade. Currently the Codex Alimentarius Commission has 189 Codex members made up of 188 member countries and 1 member organization, the European Union.

These international standards are voluntary in nature that governments may opt to use to ensure food safety, quality and fair practices in the trade aiming at international food trade facilitation. When the standards are followed, consumers get a guarantee about the safety and quality of the products they buy and importers can trust that the food they ordered will meet their specifications. The Codex Alimentarius includes standards for all the principal foods, whether processed, semi-processed or raw, for distribution to the consumer. Codex standards, guidelines and codes of practice, applied together, ensure food is safe. Codex commodity standards define the physical and chemical characteristics of nearly 200 traded products. Codex guidelines, for example, on food labelling provide evidence based information and advice together with recommended procedures to ensure that food supplied to the consumer is safe, of good quality and can be traded. A code of practice, for example, food hygiene, describes the controls necessary along the food chain from primary production through to final consumption. Considering in that line farm to fork approach is used to define responsibilities of different stakeholder groups, Ex. food handlers in ensuring food is safe and suitable for human consumption. The Codex general standard for contaminants lists the maximum levels and associated sampling plans of contaminants and natural toxicants in food and feed that are safe for commodities subject to international trade. The numerical Codex standards for food additives, veterinary drugs maximum residue levels and pesticide maximum residue levels, can also be accessed via databases.

### Significance of Codex in international food trade and in settling international trade disputes

The World Trade Organization (WTO) provides a set of rules for multilateral trade, and is a forum to resolve disputes by assuring that the international trade does not create unnecessary trade barriers or arbitrarily or unjustifiably discriminate members. Application of Sanitary and Phytosanitary (SPS) Measures and Technical Barriers to Trade (TBT) are the two food related agreements of WTO that work towards trade facilitation through harmonization. The SPS Agreement lays down the rules for food safety, animal and plant health protection measures in trade, to ensure that such measures do not act as unnecessary barriers to trade. The TBT Agreement applies to other food regulations including quality and labelling requirements. The WTO also provides a set of tools to facilitate international dialogue on food related measures, and to resolve trade concerns when they arise. Since standards are essential for smooth trade, the WTO Agreements strongly encourage governments to harmonize their requirements on the basis of international standards and they promote Codex standards as the benchmark for harmonization. Together the Codex Alimentarius and the WTO form a system of rules to ensure that food is safe, of expected quality, and that it can be traded fairly.

### Effective participation in Codex activities and associated benefits

The participation of both low and high income countries from various regions allows Codex to develop globally relevant standards. While participation of member countries had grown over the years, still the most participating countries include industrialized countries and developing countries are few. Better participation of member countries in this work is essential to ensure that standards take into account the realities and address the needs of different countries along with the different needs. It is

important, therefore, for all countries to participate effectively in the work of Codex to ensure that their interests and concerns are adequately taken into consideration in the elaboration of these Standards. Most importantly, all the countries engage in Codex are required to keep international food standards up to date and relevant, and to resolve trade issues. When countries engage in the development of Codex standards and then use those standards as the basis for national standards, a country becomes legally enforceable. This can help governments that may struggle to find the necessary resources to invest in developing their own food safety requirements to be included in standards, as they can rely on the best available scientific knowledge as embodied in international standards. Understanding the importance, some countries have taken initiatives to get maximum benefits through effective participation. Some countries including India have shifted from only attending Codex meetings to co-hosting a session of a committee and even permanently hosting a commodity or general subject committee of particular interest or relevance to the country.

### **Is Sri Lanka being a member country of Codex adequately participating in Codex functions?**

Sri Lanka is a member country of Codex Alimentarius Commission since 1972. The National Codex Committee (NCC) in Sri Lanka was established in 2005. The Director of the Department of Environmental, Occupational Health and Food Safety of the Ministry of Health is the designated National Codex Contact Point (NCCP) as for SPS of WTO. NCCP is expected to lead all relevant Codex activities within the country through the coordination of all the stakeholder groups of the food sector. NCCP receives invitations to Codex sessions and responsible for informing of the names of the participants from the country. It's the responsibility of the NCCP to circulate all Codex final texts and working documents of Codex sessions within the country and send comments on Codex documents or proposals. NCCP works in close coordination with the national Codex committee and act as a liaison point with the food industry, consumers, traders and other parties concerned. It is expected that NCCP acts as a channel for the exchange of information and coordination of activities with other Codex members and promote Codex activities throughout the country. In line with Codex member and commodity committees, National Codex Subcommittees are functioning targeting requirements in specific areas and forward suggestions and proposals to the NCCP through the National Codex Committee. The success of a country's Codex activities depends on the effective functioning of the Codex contact point, which serves as the link with the Codex secretariat and member states. Lack of funds and manpower, as well as inadequate institutional capacity, are the major constraints hampering Codex activity in Sri Lanka and the identified functions of NCCP are not adequately covered affected by those. For several years, most of the National Codex Subcommittees have not been actively participated in Codex functions or forwarded their comments on relevant issues losing the chance of receiving trade benefits for the exporters. Instead, traders face issues of compliance to international standards resulting in consignment rejections. A good example can be brought in to notice with regard to compliance of food safety requirements of cinnamon exports. Since 2005, Sri Lanka encountered problems with export consignments of Ceylon cinnamon to the European Communities, due to presence of sulfur dioxide which was not listed in EU regulations as a permitted preservative in cinnamon. The issue was related to traditional practice of fumigating cinnamon with sulfur dioxide as a way of protecting cinnamon from possible fungal contaminations and maintaining color. The Department of Commerce in consultation with Spices Traders' Association, Department of Agriculture and the Trade Representation highlighted that there was no international standard for sulfur levels in cinnamon at that time, and was in a state to initiate negotiations with EU member countries. Thereafter, an international standard for sulfur in cinnamon was adopted in July 2006 by Codex. It has approved maximum level of use of 150 mg/kg for sulfites (including sulfur dioxide) in food category, Herbs and Spices. As a result, the EU decided to base its requirements on the Codex standard and, by the end of 2006, Sri Lanka reported to the SPS Committee that this issue had been satisfactorily resolved. If Sri Lanka as a member country of Codex had taken proactive approaches in developing standard for cinnamon with required specifications, exporters would not have experienced negative trade restrictions on cinnamon for years losing the national income.

In developing of national regulations and food standards, an effort is taken in Sri Lanka to formulate them on the basis of Codex. However, it is proposed that more attention on Codex requirements is needed to embed food safety requirements specified by Codex into national regulations to promote trade without restrictions. In food commodity standards of Sri Lanka, Maximum Residue Limits (MRLs) are not given adequate priority which directly affects food exports resulting in lack of compliance to international food safety requirements. However, chemicals in food are a worldwide health concern and leading cause of trade obstacles. The expert advice of FAO and WHO provide to Codex ensures that exposure levels are set in Codex standards to protect consumer health and ensure fair practices in the food trade. Due to risk based standard development procedures are not taken place nationally, also the capacity exists for such practices are not adequate in the national food control system in Sri Lanka, by adopting Codex standards into national food control system can provide much needed benefits. The relevant authorities are expected to work towards these improvements in promoting Sri Lankan export food trade.

Countries acquire the highest benefit from Codex, when they prepare at the national level. It is essential for Sri Lanka as a codex member country to invest in a system that allows identifying and prioritizing food safety and trade concerns. Coordination between all relevant agencies within government as well as with stakeholders from the entire food supply chain is essential in this effort. Especially the food industry together with food exporters need to emphasize the need of strengthening Codex functions nationally and collaborate closely with the national contact point in setting a national agenda and national priorities. Coordination should begin with the effective functioning of the Codex Contact Point. National Codex Committee can be used as an option in Sri Lanka, to provide support to the work of the NCCP and ensure that all other ministries bearing direct or indirect responsibility, relevant governmental and non-organizations, consumers and industry have the opportunity to present their views on Codex matters, including aspects related to effective national food control functions. The primary responsibility of the national committee is to advise the government on the implications of any issues relating to food standards and food control that may arise in trading food in the

international market. Such an approach can provide important benefits by assisting the government in ensuring a safe supply of food for consumers while also maximizing opportunities for industrial development and the expansion of international trade. When the Codex contact point and the National Codex Committee are empowered to coordinate all the relevant stakeholders across government and the private sector, and when needs and priorities in terms of food safety and trade are given high visibility and economic support, then the powerful mechanisms of Codex become fully available to the country. With that support, participation in Codex sessions need to be improved at the first place. Further, notifications need to be handled in a proactive manner to disseminate the message to the relevant party/ies in the export sector avoiding the possible trade disputes. A country with a coordinated, consolidated position supported across sectors and backed up by data justifying a particular concern, is in a strong position in handling exports. Effective and proactive engagement with Codex is of prime importance and initially need to contribute to the development of standards proposed by the other member states. Once a country has gained experience with the mechanisms of standard development proposed by Codex, it can begin to consider its own needs more closely. As an example, being a leader in spice exports, specifically cinnamon, it is indeed a necessity for Sri Lanka to effectively participate in the development of relevant Codex standards, guideline and code of practices to obtain competitive trade benefits. If not the case, other countries would dominate in deciding the safety and quality requirements related to produce and products resulting in issues to Sri Lankan spice exports.

In receiving support from the Codex Alimentarius Commission in national needs, the interest of the country towards Codex functioning needs to be visible to the parties concerned. As a member country, SL needs to be vigilant on the opportunities available for improvements. Codex Trust Fund (CTF) was an initiative of FAO/WHO aimed at developing national capacity of specially developing and transition economy countries to participate effectively in Codex. CTF proceeded from 2004-2015 focused on catalyzing the exposure to Codex through participation in Codex meetings and to provide them a chance to understand its importance. This first phase supported nearly 140 countries. The second round of CTF was launched in 2016 and, currently round three of the call for applications is kept open. It plans to support over 100 eligible countries to build strong, solid and sustainable national capacity to engage in the international food standard-setting work of Codex. However, in both the occasions Sri Lanka has not been identified in the list of eligible countries to receive support which highlights a situation requires attention of relevant authorities.

In parallel to improvements in Codex involvements, engagement in the food safety requirements spelled out by SPS also need to strengthen to ensure that guidance and best practices for implementing the agreements remains up-to-date, and that trade frictions are effectively resolved. It is though the effective coordination and processes at the national level for both Codex and the WTO that give a country genuine access to the system. What required is the effective preparation, which, when combined with strategic participation in the international meetings of the two institutions, gives a country the ability to influence the creation of standards in the areas it needs, and to make sure that the standards developed reflect domestic needs to promote export food trade.



## TRAINING SEMINAR ON LABORATORY QUALITY ASSURANCE

A seminar to introduce the new concepts in the revised International Standard 17025:2017 and discuss the changes expected in the laboratory quality management systems was conducted on 17<sup>th</sup> May 2018 at the Global Towers Hotel, Colombo 6. The program was organized by the Institute of Food Science and Technology Sri Lanka (IFSTSL) as a part of the activities to strengthen the food sector in Sri Lanka, to meet global challenges. The seminar highlighted the improvements necessary in the laboratory quality management systems, specially in relation to performance of the analysts, their responsibilities and ways & means to improve the systems continuously. Of the seven titles discussed during the program, most participants requested more information on “Towards self-improvements in Hands-on Practices”. This demand indicates the desire of the analysts and paucity of information for improve their practices continuously.

Thirty persons including technical officers in the private sector, universities, public sector laboratories and students reading for food science degrees participated in the seminar. The full day program was conducted by Emeritus Professor Upali Samarajeewa providing an opportunity for the participants to gain professionally, from the long experience he has gathered by working internationally on development of testing laboratories towards accreditation.



**FoodTechno 2018:**  
*"Innovation to Application"*  
**04<sup>th</sup> Annual Research Session**

FoodTechno 2018: "Innovation to Application", the annual research session of the IFSTSL was held for the fourth consecutive time on 04<sup>th</sup> August 2018 at Mihilaka Medura, BMICH Colombo, during the ProFood/ProPack-AgBiz Exhibition. The keynote speech of the event was delivered by Mr. Ravi Jayawardena, the group CEO of Maliban Biscuit Manufactories (Pvt) Ltd. Thirteen research work related to different disciplines of food science & technology were presented at three sessions during the day. The special cash award for the best research and the presentation was awarded to Ms. S.A.C.T. Senarath for the paper on Evaluation and comparison of refreshing ready to serve (RTS) beverage of coconut haustorium without chemical preservative. The research was carried out at the Department of Food Science & Technology, Faculty of Livestock, Fisheries & Nutrition, Wayamba University of Sri Lanka with the co-authorship of Dr. O.D.A.N. Perera. Dr. R.A.U.J. Marapana, Emeritus Professor T.S.G. Fonseka and Dr. Niranjan Rajapakse chaired the sessions. Dr. Sujeewa Gunaratne, Mr. Sumith Liyanage and Mrs. Neranji Jayasinghe served as the judges. Dr. Eresha Mendis of IFSTSL coordinated the event.



The special cash award for the best research and the presentation was awarded to Ms. S.A.C.T. Senarath



## Second Inter University Food Science Quiz Competition 2018

The IFSTSL organized and conducted the second Inter University Food Science Quiz Competition 2018 on 5<sup>th</sup> August at Mihilaka Medura, BMICH, Colombo. Dr. Sujeewa Gunaratne organized the competition with guidance and coordination of Emeritus Professor Upali Samarajeewa. Teams from Universities of Sri Jayewardenepura, Peradeniya, Wayamba, Sabaragamuwa and Rajarata participated at the Quiz. The quiz was conducted in two divisions, the written quiz competition and the oral competition. All teams attended the written competition, and the teams from Universities of Sri Jayewardenepura and Wayamba emerged as teams with highest marks. The final oral quiz competition was held between these two teams. Dr. Gunaratne acted as Quiz Master, and Mr. Cyril Wickramaratna and Mrs. M. Rafeek attended as Judges. After a competitive competition, the team of University of Sri Jayewardenepura emerged as winners of the IFSTSL Quiz Challenge Trophy in 2018. The IFSTSL appreciates all universities for participating and congratulates the winning team. Ms. Dalukdeniya and Mr. Seneviratne, the Joint secretaries, and Ms. Fernando administrative assistant supported in organizing the activities.

