# Annual Report 2018

# Directorate of Environmental Health, Occupational Health and Food Safety



Ministry of Health

# Annual Report

# 2018

Directorate of Environmental Health, Occupational Health and Food Safety

# Message from the Deputy Director General (Environmental Health, Occupational Health and Food safety)

Office of the Deputy Director General of Environmental Health, Occupational Health and Food Safety handles matters of far reaching and essential components of human existence.

Environmental issues have become concerns of everybody and health aspect of it is a complex inter woven matrix. Hence constant vigilance and prompt action to correct environmental issues is of paramount importance to safeguard health of people against adverse environmental factors. Therefore, Environmental Health unit had to intervene in many national issues like banning Asbestos and Glyphosate while looking after the areas of health care waste management, water and sanitation, climate change etc. We can be satisfied of the progress achieved during the year 2017 in these areas of our concern.

Occupational Health is an area which needs more resources and capacity building of staff to effectively address the current issues. With the limited resources at hand, we have tried our best to improve the present structure and function through capacity building of staff, developing workplace survey formats with H numbers and initiating district level reviews etc. This area has been of concern with lots of new industries and work sites coming in to the country. Hence a concerted effort is necessary to address some burning issues in this area.

Food Safety system in Sri Lanka needs further strengthening and improvements. This is a multifaceted area which involves many organizations working towards a common goal. We need to collaborate with many national and international agencies to achieve our objectives. Much work was initiated and completed in the areas of inter-sectoral collaboration, amendments to regulations, food surveys, and improvements to laboratories, implementation of NCD control measures and capacity building of staff. Although we can be satisfied with the progress we made, there is lot more to be done to improve the food safety system in Sri Lanka. We are planning to further strengthen the food safety in the years to come. This document highlights the important activities we carried out during the year 2018 at the Directorate of Environmental Health, Occupational Health and Food Safety.

I am thankful to the Minister of Health, Secretary of Health and Director General of Health Services for the fullest support and guidance they provided to achieve our organizational objectives. I also appreciate and thankful to all my staff for the commitment they made throughout the year as a team.

Dr. Lakshman Gamlath,

Deputy Director General (Environmental Health, Occupational Health and Food Safety) Ministry of Health

# **Contents**

# Page number

1.0	Message from the Deputy Director General	02
2.0	Introduction	05
3.0	Organizational chart	09
4.0	Environmental Health	10
5.0	Occupational Health	21
6.0	Food Safety	31
7.0	Way forward	67

# 2. Introduction

#### 2.1 Historical Background

Directorate of Environmental Health, Occupational Health and Food Safety has emanated a long way upto the present situation. Prior to 1990, there were only five Food and Drug Inspectors (F&DII) covering the entire country who were provided with one year training leading to RSH Diploma Certificates on Meat and other Foods in the United Kingdom (UK) while the Director Environmental and Occupational Health (D (E & OH)) was Dr. Mohan Rodrigo who was succeeded by Dr. H.M.S.S.D. Herath. In 1989, the first batch of 24 trainees of F& DII was selected and trained at National Institute of Health Sciences and deployed in 1990. Mr. S.M.B. Perera was the Chief Food & Drugs Inspector at that time who retired from service soon after and Mr. B.E.R. Rodrigo succeeded him. Mr. Rajakaruna oversaw the regulatory division of the Drugs Regulatory Authority.

Food Safety Activities were carried out in the main hall of the Ministry located in the 3<sup>rd</sup> floor of the Inland Revenue Department building where the other clerical staff also functioned and only a chair placed near the chief clerk's table on which Mr. Rodrigo had a makeshift seat on the days he came to collect his travelling claims or attend the Food Advisory Committee (FAC) meetings to Colombo and also to arrange for vehicles to go around the country on inspections. Mr. S. Nagiah joined as the second F&DI in this office. The third FDI to join the team in 1991 was Mr. Weerakkody (Late), and the setup took a resemblance of a Unit. Subsequently the Unit was shifted to the ground floor of the current Ministry building known as "Suwasiripaya", formerly known as the Tuberculosis Campaign Building.

There was only one regulation "Food (Miscellaneous) Regulations" published prior to 1990. The Food (Standards) Regulations was the second regulation to be published and the Gazette notification was duly published on 22.11.1990.

Dr. V. Jeganathan and Dr. Manil Fernando became the successive Directors of Environmental and Occupational Health followed by Dr. Dula De Silva then Dr. H.M.S.S.D Herath who was promoted to the post of Deputy Director General- Public Health Services (DDG (PHS)). It was during this period in 2001 that an Imported Food Inspection Unit (IFIU) was established in the Sea Port (and later in the Airport) in a part of the building of the Fumigation Unit with four senior F&DII.

Dr. C.K. Shanmugarajah was appointed as D (E & OH) in 2004 and brought a new impetus to the Unit. He completely reorganized the Unit into three rooms, one for his office, one for the Assistant Director (AD) and Inspectorate and another for the Codex Contact Point placing three MSc qualified graduates in Food Technology. During this period Dr. S. M. Arnold was appointed as the first Consultant Community Physician to the Directorate to look into the area of Occupational Health and Dr. N. Pallewatte Consultant Community Physician for Environment Health. Mrs. Sujeewa Fernando was attached to the Directorate from the Ministry of Environment.

Dr. Pathirana was appointed as D (E & OH) in 2008. Due to lack of space, the Food Control Administration Unit (FCAU) was shifted to the Anti-Malaria Campaign building in 2010 and later to the building earlier occupied by the Ministry of Economic affairs in 2015.

Dr. Ananda Jayalal was appointed as D (E & OH) in 2011 and Dr. L.T. Gamlath was appointed for the post in 2016. In 2015, all units were once again brought under one roof in Ministry of Health, Nutrition and Indigenous Medicine sub office at the former Ministry of Economic Development.

The Directorate was under the DDG PHS I in the initial stage. Dr. L.T. Gamlath was appointed as the first Deputy Director General Environment Health, Occupational Health and Food Safety on 27<sup>th</sup> of July 2017.

In 2018, the Directorate consisted of two consultants, three medical officers, two Assistant Directors, four FDIs, six Development Officers, one Management Assistant and nine support staff. Both the D (E & OH) and Deputy Director (DD (E & OH)) posts were vacant in 2018. The Import Food Inspection Unit is supported by 13 FDIs and they provide 24/7 services in the Rank Container Terminal 1 & 2, Seaport and Airport.

#### 2.2 Present Situation

Directorate of Environmental Health, Occupational Health and Food Safety is headed by Deputy Director General (Environmental health, occupational Health and food safety). There are three units namely Environmental Health Unit, Occupational Health Unit and Food control Administration Unit (FCAU) under his purview. Director (Environmental health, Occupational Health and Food Safety) functions under the DDG, is responsible for all the activities carried out by these three units.

Food control Administration Unit is responsible to protect consumer's health by ensuring that food imported, produced, marketed, distributed and consumed meets the highest standards of food safety and hygiene. Food Act No. 26 of 1980 and various regulations implemented under this is the legal basis for the food control activities in the country.

Food control activities are mainly categorized as import control, domestic control and issuance of Export (Health) certificates. Food import control procedure is implemented at the borders to ensure that the food arrives in Sri Lanka are safe for human consumption. Domestic food control system in Sri Lanka is based on the Food Act No.26 of 1980 which was amended in 1991and 2001. Registration of bottled water manufacturing facility is done in accordance with the Food (Bottled water Registration) to ensure that the bottled water is physically, microbiologically and chemically safe for human consumption. Export certificates for exporting food consignments are issued on request certifying that the exporting food item is fit for human consumption.

Foods that are imported, exported and those available in the market are tested for physical (adulterants, additives etc.), chemical (heavy metals, toxins etc.) and microbiological (bacteria, virus etc.) parameters by Food testing laboratories.

Environmental Health Unit is responsible to provide safe communities with healthier environments. This is achieved by implementing various policies and programs to minimize exposures in air, water, soil, food and other environmental media. National healthcare waste management programme and national water quality programme are managed by Environmental Health Unit. It also involves with solid waste management and protecting bio diversity.

Occupational Health Unit is responsible for implementing the National Occupational Health Programme of the Ministry of Health in Sri Lanka. This programme targets all workers in all occupations. The unit also handles health related issues regarding climate change and air pollution together with the occupational health unit due to significant overlap between environmental and occupational health fields.

The areas of Environment Health, Occupational Health and Food Safety involve inter-sectoral coordination with other agencies for effective functioning. These coordination mechanisms were started during 2018 and will be strengthened and continued in 2019. Long lasting issues of delay in regulation amendments were sorted out and Food Act and relevant regulations amendment process was expedited in the year 2018. The development of a new website was initiated and will be completed in 2019. Food safety weeks were conducted with the support of Health Promotion Bureau and all Provincial health authorities.

Directorate of Environmental Health, Occupational Health and Food Safety is determined to provide the best possible services to the nation with the limited resources at hand. Annual report 2018 of Directorate of Environmental and Occupational Health and Food Safety is published for the second successful year and includes comprehensive information on the area of Environmental Health, Occupational Health and Food Safety.



# 4. Environmental Health

Environmental Health encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments. There are so many areas of work under this. Air quality, water quality, waste management including the most important healthcare waste management and bio diversity is considered under Environmental Health. It is very important to identify the role of the health sector in working in these areas since it needs multi stake holder engagement to achieve the objectives. The Ministry of Health liaises closely with the Ministry of Environment, Central Environmental Authority and other relevant stakeholders in working in the area of Environmental Health.

The implementation of Environmental Health activities in the preventive health sector are conducted mainly through the Provincial and District level Health Services via the MOH unit system. The Medical Officers of Health (MOOH) and the Public Health Inspectors (PHII) carry out Environmental Health activities at the grassroots level. Environmental and Occupational Health units have been set up at district level to strengthen the coordination between the Directorate of Environmental Health and Occupational Health and District and Divisional level health staff.

Environmental Health and Occupational Health overlap significantly with each other therefore activities in relation to work environment have been done under Occupational Health.

#### 4.1 Vision of the Environmental Health unit

A healthy Sri Lanka free from environmental health risks

#### 4.2 Mission of the Environmental Health Unit

To improve the health status of all Sri Lankans by creating an environment free from environmental health risks through provision of environmental health services by

- Advocating, collaborating and partnering with stakeholders
- Promoting and supporting health staff
- Empowering people to be leaders in their communities

#### 4.3 Objectives

- 1. To formulate an institutional framework that enables efficient coordination and collaboration of the various sectors and stakeholders that have environmental health related responsibilities.
- 2. To ensure an effective institutional capacity for rendering environmental health services
- 3. To strengthen the capacity of health staff working in the area of environmental health to become efficient agents and catalysts for desired change.
- 4. To adopt a partnership approach with the purpose of facilitating holistic and integrated planning in environmental health.
- 5. To facilitate the development and maintenance of an effective Environmental Health Management Information System.
- 6. To promote community participation and development through empowerment in environmental health, to contribute to promotion of own health

#### 4.4 Performance in year 2018

#### 4.4.1 Capacity building for healthcare field staff on air pollution and its health implications

Single day program was organized by the Non Communicable Disease Unit (NCD unit) of the Regional Director of Health Service (RDHS) office, Monaragala and technical expertise from the unit was provided. SPHII, PHNS, PHII and PHMM participated at the program.

#### 4.4.2 Health Care Waste Management (HCWM)

Health Care Waste Management is a major programme under Environmental Health. World Bank funded Second Health Sector Development Project is in operation from 2014 – 2018, where Healthcare Waste Management has been identified as an important component in the project. Improvement of sewerage & waste water management becomes very important in obtaining licenses as well as for smooth functioning of healthcare facilities without polluting the environment. Five Line Ministry hospitals have been provided with financial support in 2018 for improvement of

sewerage and waste water management. Among all Base Hospital Type, A and above 27 (37%) obtained Environmental Protection License and 16 (20%) have obtained Scheduled Waste Licenses by year 2018. Out of 47 Line Ministry Hospitals 13 (27.6%) have obtained Environmental Protection License and 9 (19%) have obtained Scheduled Waste Licenses by year 2018. Five Incinerators and 20 Metamizers have been installed and functioning under the Australian project as follows.

	Metamizers sites	Incinerator Sites
1	BH Thellippalai	BH Thellippalai
2	MOH office Ormanthei	MOH Office Ormanthei
3	BH Trincomalee	BH Batticaloa
4	TH Batticaloa	PGH Badulla
5	PGH Ampara	DGH Pollonnaruwa
6	BH Akkareipattu	
7	BH Kalmunai North	
8	BH Kalmunai South	
9	PGH Badulla	
10	PGH Rathnapura	
11	DGH Kegalle	
12	TH Anuradhapura	
13	DGH Polonnaruwa	
14	TH Kurunegala	
15	BH Kuliyapitiya	
16	BH Karawanella	
17	BH Monaragala	
18	BH Chilaw	
19	BH Embilipitiya	
20	BH Marawila	

 Table 1 Incinerators and Metamizers installed under the Australian project

Cluster operations started in 2018 in Sabaragamuwa Province. Cluster operations have been planned to streamline healthcare waste management in government hospitals in a given province.

Tripartite agreement between the Ministry of Health, Sisili Hanaro Encare Pvt Ltd and CEA to manage the healthcare waste of the government health institutions in Western, Southern and Central Provinces was under review to better manage healthcare waste. It is expected to commission an improved centralized facility in Kerawalapitiya in year 2019.



Figure 1 - Waste storage at National Hospital of Sri Lanka



Figure 3 - Sewerage plant at Teaching Hospital Batticaloa



Figure 2 - Waste storage &bins at Lady Ridgway Hospital



Figure 4 - Sewerage plant at Teaching Hospital Jaffna

## 4.4.3 International Consultation to revise the National Health Care Waste Management Guideline

Revision of Healthcare Waste Management Guideline introduced in year 2007 by the SLMA was undertaken in 2018. Situational analysis was done at selected hospital settings and consultative meetings were conducted with local experts engaged in healthcare waste management. A WHO consultant facilitated this process and a draft report was prepared.



Figure 6: Stake holder consultations for the revision of the National Health Care Waste Management Guidelines

4.4.4 International Consultative meeting/workshop on implementation of Health-related articles of the Minnamata Convention

A consultative meeting and a two-day workshop was conducted by WHO international experts with relevant stakeholders in Sri Lanka on the implementation of Health related articles of the Minnamata convention. The workshop was attended by 20 participants representing different specialties and levels of healthcare institutions in the country. Group discussions were held to analyze the current status and implementation strategies. Information gathered would be used by WHO consultant to produce a report on this aspect.







Figure 7 & 8- International Consultative meeting/workshop on implementation of the Minnamata Convention

## 4.4.5 Development of IEC material

Figure 7

Development of IEC material is very important in terms of strengthening the Environmental Health Programme. Two posters on prevention of food wastage and polythene plastic burning were developed. These posters were distributed to RDHS offices to be used for environmental health promotional activities at MOH offices, hospitals and workplaces by the MOOH and PHII.



Figure- 10: Poster on polythene/plastic burning



Figure-11: Leaflet on polythene/plastic burning

#### 4.4.7 Inter-Agency Co-ordination

Technical guidance was provided to other ministries, relevant agencies and awareness was created among the general public in the area of Environmental Health. Inter-ministerial coordination activities were carried out in the areas of Climate Change, Bio Diversity, Cleaner Production, air quality and Solid & Hazardous Waste Management.

Technical expertise was provided for the development of the following policies initiated by the Ministry of Environment and Mahaweli Development.

• National Policy on Waste Management

The draft policy was prepared and awaiting public comments and final validation.

- National Policy on sound management of chemicals
- Development of strategic and action plan at Provincial and local level for municipal waste management initiated by the Waste Management Authority of the Western Province

Following steering committees of the Ministry of Environment and Mahaweli Development were represented and provided with necessary technical expertise.

• Minamata Steering Committee

Sri Lanka has ratified the Minamata Convention and hence need to phase out mercury containing thermometers and sphygmomanometers by 2020. Minamata Initial Assessment was carried out in Health Sector to identify gaps and recommendations for mercury management in the health sector.

- PCB (Polychlorinated Biphenyl) Management Steering Committee
- Steering Committee on Development of Indoor Air Quality Guidelines

Indoor air pollution is a major problem in Sri Lanka needing urgent attention. However, Sri Lanka does not have Indoor Air Quality Guidelines and the steering committee is in the process of developing the guidelines.

Technical guidance was extended to following areas also.

- Provision of technical expertise for Technical Meetings under Basel convention
- Technical Advisory Committee on Management of Industrial Chemicals (TACMIC)
   Decisions were taken to allow the usage of ethylene oxide only in carefully selected healthcare settings such as the National Hospital of Sri Lanka under strict monitoring
- National Advisory Committee Meeting on Basel Rotterdam Stockholm
- Greening the informal economy e waste collectors

#### 4.4.8 Representation at International conferences and meetings and the contribution made

# • WHO South-East Asia Regional Meeting on Air Quality and Health, Bangkok, Thailand

The objectives of the meeting were to promote using available data on the impact of air pollution on health and to facilitate the formulation of relevant interventions and national targets, action plans and strategies, including for relevant SDG indicators and identify regional priorities for improving air quality.

#### • First WHO Global Conference on Air Pollution and Health in Geneva, Switzerland

This conference was held in response to a resolution of the Sixty-eighth World Health Assembly (WHA68.8) in 2015, in which ministers of health asked for a major scaling-up of the response by health and other sectors to prevent air pollution diseases, exposure to air pollution and their costs to society.

# • Regional Consultation on Draft Global Strategy on Health, Environment and Climate Change, New Delhi, India

Contributed to the consultation by sharing experiences, challenges, and success stories with work on health, environment and climate change and identifying operational models for implementing the strategy when adopted by the WHA in 2019.

# 5. Occupational Health

Occupational Health Unit of the Directorate of Environmental and Occupational Health is responsible for implementing the National Occupational Health Programme of the Ministry of Health in Sri Lanka.

Occupational Health is about workers' health. A healthy workforce is considered an asset for any country and Sri Lanka is no exception. The National Occupational Health Programme targets all workers in all occupations. Occupational Health services are provided at the grass root level by Public Health Inspectors (PHII) together with the Medical Officers of Health (MOOH) through the District and Provincial Health systems.

#### 5.1 Vision of the Occupational Health unit

A healthy workforce contributing to sustainable development of Sri Lanka

#### 5.2 Mission of the Occupational Health unit

To contribute to the attainment of highest possible levels of health of all workers through provision of comprehensive, sustainable, equitable and quality Occupational Health services in a supportive and worker friendly setting leaving no worker behind.

#### 5.3 Objectives

- To promote and maintain the highest degree of health among workers in all occupations
- To prevent adverse effects on health among workers caused by working conditions
- To protect workers from occupational risks resulting from factors adverse to health
- To adapt work to workers and workers to work

#### 5.4 Our role

Provision of occupational health and safety to workers in Sri Lanka needs a concerted effort of multiple stakeholders. The Ministry of Health is considered a very important stakeholder in the provision of occupational health services. Curative, rehabilitative, preventive and promotive occupational health services are provided by the Ministry of Health, Nutrition and Indigenous Medicine.

The Occupational Health Unit is the focal point for Occupational Health in the Ministry of Health in Sri Lanka. The unit is responsible for planning, co-ordination, monitoring and evaluation of the National Occupational Health Programme. It is responsible for capacity building of Public health staff, curative health staff as well as other staff categories in the Ministry of Health on Occupational Health. Trainings are conducted for undergraduate and post graduate medical students. The unit involves in awareness creation and research and development in the area of occupational and related environmental health issues. Additionally, the unit liaises with other important stakeholders such as the Ministry of Labour and Trade Union Relations, Ministry of Environment and Central Environmental Authority in implementing the National Occupational Health Programme of the Ministry of Health.

All workers in Sri Lanka have access to free health services at the curative, rehabilitative as well as preventive health services. Treatment of occupational diseases and injuries and rehabilitation of occupational injuries are integrated into the existing curative health system. Occupational medical problems are taken care of by the medical units, occupational surgical problems by the surgical units and rehabilitation by the physiotherapy and rehabilitation units. Occupational accidents affecting significant number of workers and surrounding communities are considered as disasters and curative sector response is carried out immediately.

The implementation of occupational health activities in the preventive health sector are conducted mainly through the Provincial and District level Health Services via the MOH unit system. The Medical Officers of Health (MOOH) and the Public Health Inspectors (PHII) carry out occupational health activities at the grass root level. Environmental and occupational health units have been set up at district level to better facilitate the implementation of the National Occupational Health

Programme and to strengthen the coordination between the Directorate of Environmental and Occupational Health and the grass root level.

#### 5.5 Environmental & Occupational Health team at the Directorate

Dr Inoka Suraweera	Consultant Community Physician (Unit Head)
Dr Himan Galappaththi	Registrar in Community Medicine
Mr. S Jayatheeswaran	Development Officer
Ms. Shanika Rupasinghe	Development Officer
Mr. Dhammika Jayawardhana	Health Driver
Miss Samantha Wijekoon	Saukya Karya Sahayaka
Mr. Prasad Harshana	Saukya Karya Sahayaka

#### 5.6 <u>Performance in 2018</u>

#### 5.6.1 Advocacy

The Executive Board of the WHO decided to develop, in consultation with Member States and other stakeholders as appropriate, and in coordination with the regional offices, a draft comprehensive global strategy on health, environment and climate change to be considered by the Seventy-second World Health Assembly in May 2019, through the Executive Board at its 144th session in January 2019.Being a member of the Executive Board, the Sri Lankan delegation headed by the Hon Minister of Health, Nutrition and Indigenous Medicine, Dr Rajitha Senaratne proposed that work environments need to be given special emphasis and that the working environment should be considered as integral part of technical content of the global strategy on health, environment and climate change. Further they proposed that the relevant aspects of workers' health, occupational health, and the working environment need to be adequately covered in the global strategy on health, environment and climate change.

This was accepted and work environments have been adequately covered under the draft strategy.

The technical guidance for this proposal was provided by the Occupational Health Unit together with Dr Lakshman Gamlath (Deputy Director General, Environmental Health, Occupational Health and Food Safety)

### 5.6.2 Capacity building of National, Provincial and District level Health Staff

Occupational Health and safety is a specialized area and therefore building a critical mass of human resources on this area was identified as a priority in 2018. Public Health Staff need to be trained first, for them to carry out the activities of the National programme. It is intended to address occupational health issues of the informal sector as well as small scale industry workers through them. Three-day occupational health and safety training workshops for Supervising Public Health Inspectors (SPHII) and Public Health Inspectors (PHII) were conducted at district level. Three hundred SPHII & PHII from Galle, Kurunegala, Kegalle, Hambantota and Matale were trained on theoretical and practical aspects of occupational health.



Figure 13: Occupational Health Training SPHII/ PHII (Galle district)

Conducting the occupational health module for Trainee Public health Inspectors following basic training was carried out in Kadugannawa, Kurunegala, Galle and NIHS and around 200 PHI trainees were trained.

Workers need to be empowered to look after their own health. In service training becomes very important for different categories of health staff to look after their own health. A two-day capacity building workshop on occupational health & safety for Nursing Officers was designed and four such workshops were conducted in Sri Jayawardhanapura Hospital, Hambantota District General Hospital and De Soyza Maternity Hospital for Women. Around 150 Nursing Officers were trained.

Three single day workshops on occupational health and safety were conducted in Gampaha, Hambantota and Colombo for Health Drivers and 90 were trained.

	Name of the	No. of	Category trained	No.	Place of workshop
	workshop	workshops		trained	
1	3-day training on OHS	5	SPHII/PHII	300	Galle, Kurunegala, Kegalle, Hambantota and Matale
2	2-day training on OHS	4	Nursing Officers	150	SJH, DMH, DGH Hambantota
3	One day training on OHS	3	Health Drivers	90	Gampaha, Hambantota and Colombo

Table 2 Summary of Capacity building on occupational health and safety

# 5.6.4 Training of staff attached to Chemical, Biological, Radiological and Nuclear (CBRN) hazard management units

Officers attached to CBRN units of the Sri Lanka Army and Sri Lanka Air Force were trained on biological and chemical hazards.

## 5.6.5 Awareness rising on occupational health among different categories of workers

#### • Workers at BOI zones

Occupational health and safety awareness was done for workers and supervisors in Katunayake BOI zone and Biyagama BOI zone. Around 120 participants attended these sessions carried out on two days.

#### • Training on Occupational Health for officers in the Sri Lanka Army

Occupational health and safety awareness was done for army personnel in selected camps upon invitation of the Sri Lanka Army.

### 5.6.6 Chemical accident prevention, preparedness and mitigation

Awareness programs were conducted on chemical accident prevention at highly hazardous workplaces such as chlorine manufacturing and rubber manufacturing industries. Post-accident review meeting was conducted at the Madurawala MOH office following a chemical accident at a Rubber manufacturing industry in Horana. Awareness was given to the health staff on prevention, preparedness and mitigation. Additionally, technical expertise was provided in developing the action plan on chemical event management under International Health Regulations.

### 5.6.7 Development of Information, Education and Communication (IEC) material

Development of IEC material is very important in terms of strengthening the National Occupational Health Programme. One leaflet was prepared on controlling of noise induced hearing loss. The IEC material was distributed to BOI zones, MOH offices and hospitals to be used for health promotional activities.



Figure-15: Leaflet on Noise pollution

5.6.8 Procurement of Personal Protective Equipment to protect health workers from work environmental hazards

The MOOH, AMOOH, SPHII and PHII carryout workplace inspections in their respective areas. Therefore, they need to be provided with Personal Protective Equipment (PPE) to ensure their safety. In this context, 15750 Nos. of N 95 respirators were purchased and all MOH Offices were provided with these items.

#### 5.6.9 Annual Occupational Health Survey

PHII are expected to carry out a survey to identify workplaces in their respective ranges. To streamline this process, survey formats were developed with 'H' numbers. Following activities were carried out to institutionalize the survey formats.

#### • Training of trainers on conducting basic workplace survey

It is a team of trainers from each district was trained on conducting the workplace survey using the formats developed. A single day Training of Trainer (TOT) program was designed and two such programs were conducted. Five officers including a MO responsible for Occupational Health activities, MOH, SPHID, SPHI and a PHI from each district were trained. Workplace inspection survey formats (H 1268 a-e & 1269 a-b) and 'Guideline on conducting workplace survey' booklet was distributed among the district teams. They were asked to train their staff.

#### • Implementation of basic workplace survey at district level

All the range PHII were asked to conduct the basic workplace survey according to the guideline provided by the Directorate. All MOHs have been instructed to send the MOH summary formats within the stipulated time periods.

#### 5.6.10 Development of Workplace inspection format and summary report format

Three Consultative meetings were conducted with the participation of relevant resource persons representing national, district and divisional levels. Draft formats have been prepared and would be finalized in year 2019.

## 5.6.11 Incorporating occupational health component in to the Personal Medical Record (PMR)

Regular screening of workers for non-communicable disease risk factors and other occupational risk factors becomes essential in improving their health. Occupational Health related components were included to the newly developed PMR. It is intended to introduce these records at work places.

## 5.6.12 Development of Occupational Health & Safety & Wellbeing program for health workers

It has been decided to develop a national program on Occupational Health & Safety & Wellbeing for health workers in Sri Lanka. Initial discussions on this were carried out with resource personnel from WHO Head Quarters and the WHO country office Sri Lanka. Brief discussions were held with the higher administrative officials of the Ministry of Health to plan this. Field visits were conducted by the experts to assess the prevailing condition in terms of provision of occupational health & safety in healthcare settings. Development of the national program will be done in year 2019.

### 5.6.13 Monitoring & Evaluation

## 5.6.13.1 Conducting reviews on occupational health and safety at district level

Monitoring of progress is essential to further strengthen the National Occupational Health Program. Review formats were developed and District level reviews were conducted in 24 health administrative districts. District level reviews were conducted with the participation of officials from the Provincial Environmental Authority, Labor Department, Animal Production and local government. District level public health staff appreciated the initiation of district level reviews on occupational health and safety with the participation of other stakeholders.



Figure 19- Occupational health review at Kalmunai

### 5.6.14 Intersectoral Coordination

Strengthening inter-sectoral coordination is essential in the field of occupational health and environmental health. Technical guidance was carried out with the Ministry of Environment and Mahaweli Development, Ministry of Labour and Trade Union Relations, Central Environmental Authority and relevant stakeholders to strengthen Occupational & Environmental Health in other policies, action plans and projects.

# 6. Food Safety

Director General of Health Services (DGHS) acts as the Chief Food Authority (CFA) of Sri Lanka. Food Control Administration Unit which comes under Directorate of Environmental Health, Occupational Health and Food Safety is responsible for coordinating and monitoring of regulatory services, and providing technical guidance to local authorities in order to ensure the availability of safe and wholesome food for consumers.

The Deputy Director General of Environmental Health, Occupational Health and Food Safety (DDG (EOH & FS)) is the contact point for International Food Safety Authorities Network (INFOSAN) and is also the designated National Codex contact point for Sri Lanka.

#### 6.1 Vision of the Food Control Administration Unit

A healthier nation through provision of safe food for all.

#### 6.2 Mission of the Food Control Administration Unit

Protect consumer's health and build consumer trust by ensuring that food consumed, distributed, marketed or produced meets the highest standards of food safety and hygiene.

#### 6.3 Objectives

- To protect consumers from preventable health risks.
- To provide information to consumers to enable better consumer choices.
- To protect consumers through a fair and effective, science-based food regulations that support competitive markets.
- To coordinate national food surveillance, enforcement and food recalls.
- To support food safety at ports of entry.

#### 6.4 Our role

Modern food and food control management recognize that a systems approach is needed which is risk and evidence based, outcomes focused and recognizes the food chain framework that encompasses food from primary production, through processing and manufacture to final consumption.

Currently the food regulation system in Sri Lanka focuses on the end-product checks rather than on a preventive risk-based approach. The standards are largely focused on quality and compositional aspects and not much emphasis on food safety. The primary food law is the Food Act 1980. This generally addresses food control at the processing/ manufacturing and retail end and not the complete food chain.

The government roles and accountabilities of the ministries involved in food management along the food chain are defined by the laws in Sri Lanka and are well understood. The Acts provide adequate powers to the responsible managers. Coordination and management of the interfaces between different departmental responsibilities are through the Food Advisory Committee but there are no formal agreements or benchmarks for performance in food safety management along the food chain. Within each ministry, there are defined chains of command and powers and accountabilities of authorized officers.

Advocacy, formulation of regulations, inspection, enforcement, testing and coordination between different stakeholders at national and provincial level are all important areas in food safety that is required to be accomplished by FCAU of the Ministry of Health at national level while the Regional Directors of Health Services are designated to supervise and coordinate food safety at district level. The Medical Officer of Health is the Food Authority to ensure food safety at the Divisional level with the support of the Public Health Inspectors. To have an effective risk-based enforcement system, the monitoring framework needs to have regular planning from National level and reporting by sub national levels. Currently such a system is not in place, the result is that inspections are random with no clear picture of the situation. The adoption of modern approaches to food safety management requires a different skill set among inspectors where they need to be trained on the entire process and are able to identify hazards or risk factors in the production/ processing and see if

these are well addressed, rather than focusing on traditional inspection of drawing end product sample for testing or just checking if Good Hygienic Practices (GHP) are in place.

The Food Control Administration Unit has taken into consideration the recommendations of the two external assessment reports, "Review of the Food Safety Control Systems in Sri Lanka" by Food and Agriculture Organization (FAO) in March 2016 and the "Assessment of Food Safety Laboratories" by World Health Organization (WHO) in June 2016 and have been incorporating these recommendations to the national program in a stepwise approach.

The Food Control Administration Unit is also entrusted under the bottle water regulations to register natural mineral water and bottle/packaged drinking water and according to the iodization of salt regulation the registrations for salterns, iodization premises, salt transport and bulk storage.

Details of activities performed during the year 2018 are given below.

#### 6.5 Food safety team at the Directorate

#### **Office of FCAU**

Dr. Sapumal Dhanapala	Director (Acting) /Consultant Community Physician
Dr. B.D.A. Fernando	Medical Officer
Mr.J.K. Jayasinghe	Assistant Director (FCAU)
Mr. S.T. Abouthali	Assistant Director (FCAU)
Mr. R.S.L Udawaththa	Food and Drug Inspector
Mr. K.K.L. Jayalal	Food and Drug Inspector
Mr. P.D. Nihal Premarathne	Food and Drug Inspector
Mr. H.M. Dayaratna	Food and Drug Inspector
Mr. J.H.M.O.M. Jayaweera	Food and Drug Inspector
Mr.E.G.S. Kulasinghe	Food and Drug Inspector
Mr. I.G. Mangala	Food and Drug Inspector
Mrs. S.M. Rukshani Semasinghe	Development Officer
Mrs. Sureni A. Ileperuma	Development Officer
Mrs. Suntharavathany	Development Officer
Mr. Hiroshan Rathnasiri	Development Assistant

Mrs. H.D.N.T. Kumari Mr. H.D.S. Kariyawasam Mr.M.S.M. Zafeer Mr. K.P. Karunarathna Mr. G.T. Kumara Mr. W. A. Nishantha Fonseka Mr.S.M. Aberathna Banda Mr.D.D.I.T. Gunawardana Ms. Sanduni Nisansala

## **Rank Container Terminal**

Mr. R.D. Sumanarathna	Food and Drug Inspector
Mr. S.D. Wijeweera	Food and Drug Inspector
Mr. R.M.K. Rajapakse	Food and Drug Inspector
Mr. K.Q. Perera	Food and Drug Inspector
Mr. H.M.N. Hearath	Food and Drug Inspector
Mr. S. Kaludewa	Food and Drug Inspector

#### Sea Port

Mr. J Wijesooriya

Food and Drug Inspector

Public Management Assistant

Health Driver- DDG

Saukya Karya Sahayaka

Saukya Karya Sahayaka

Saukya Karya Sahayaka

Saukya Karya Sahayaka

Health Driver

Health Driver

Health Driver

#### **Bandaranayake International Air Port**

Mr.A.M.J.B. Wickramasinghe

Food and Drug Inspector

#### 6.6 Performance in 2018

Food Act No. 26 1980 and various regulations implemented under this is the legal basis for the food control activities in the country.

Food control activities are broadly categorized into following activities

Import control Issuance of Export (Health) certificates Domestic control

#### 6.6.1 Import control activities

Food import control procedure is implemented at the borders by FCAU of Ministry of Health to ensure that the food arrives in Sri Lanka are safe for human consumption. Import control activities are carried out by Food and Drug Inspectors in sea port, airport, and container terminals. Inspection of documents, foods and food sampling according to the sampling plan are done by the staff at the entry points. Imported food is categorized by food safety risk and compliance history (on the basis of high risk, medium risk and low risk).

Food Control Administration Unit regulates all food items imported to the country. But for the following categories of food, respective departments help the FCAU to excercise its control activities.

- 1. Live animals, raw meat and feed : Department of Animal Production and Health
- 2. Plant products : Plant Quarantine Office of the Department of Agriculture.

Any food item could be rejected at the border if it does not comply with the provisions of the Food Act No. 26 of 1980 or relevent regulations published under this Act. However consignees can appeal aginst any rejections.

All food items imported should comply with Food (labelling and advertising) Regulations 2005 and Food (shelf life for imported food items) Regulations 2012. The above two regulations apply in addition to the specific regulation(s) governing the product if any such regulation(s) exist for the product. For Eg. Common salt should comply with "Food (Iodization of salt) regulations in addition to the above two regulations.

Further, if a standard has been adopted under the "Food (Adoption of Standards) Regulations for a specific food product that product shall comply with the adopted Sri Lankan standards. There are 101 food products currently regulated by this regulation.

Food control system has joined with the custom single window system- ASyCuDa world system to handle e-document with the help of other regulatory authorities and to ensure an effective import control system.

	Activities	2015	2016	2017	2018
1	Number of consignments inspected	35,096	36,520	40,459	41,135
2	Number of consignments rejected	01	33	03	163
3	Total number of samples sent for analysis	8,349	6,809	6,494	10,314
4	Number of samples sent to Atomic Energy Authority	6,315	4,783	4,649	4,869
5	Number of samples sent to ITI	363	177	201	192
6	Number of samples sent to NIHS	1,091	1,673	1,644	2,859
7	Number of samples sent to other laboratories	580	176	-	2394
8	Total Number of samples unsatisfactory	04	76	60	311

## Table 3: Food Inspection activities at Rank Container Terminal (RCT)

Table 4: Food Inspection activities at seaport

	Activities	2015	2016	2017	2018
1	Number of consignments registered	1415	1188	1812	2559
2	Number of samples taken	60	19	20	18

#### Table 5: Food Inspection activities at Airport

	Activities	2016	2017	2018
1	Number of consignments received and inspected	3595	4201	3765
2	Number of consignments referred to FCAU	00	16	05
3	Number of samples sent for analysis	42	00	01
4	Number of consignments destroyed under supervision	-	-	01
5	Number of consignments rejected	-	-	03

During March 2018, imported canned fish had excess of dead parasites which was initially reported by Sri Lanka Standard Institute which looks into ensuring the standard under the import inspection scheme. The Ministry of Health Food laboratories assisted to test all imported canned fish consignments. A total of 454 canned fish samples were tested for parasites and 160 (35%) samples were detected as positive for parasites and all the positive consignments were either re- exported or destroyed. The vigilance of the SLSI laboratory staff and the support of the Food advisory Committee and the Hon. Minister made sure that only canned fish meeting the standard was released to the market. The vigilance of the import inspection unit despite the shortage of staff is commendable and needs to be more vigilant in 2019.

#### 6.6.2 Export Certification

When exporting food items, the importing country requests for a health certificate from the food authority of the exporting country, certifying that the product is suitable for human consumption. This is called "export certificate" or "health certificate". Export certificates for exporting food consignments are issued on request by FCAU certifying that the food is fit for human consumption. Exporting company must be registered at the FCAU as a prequalification for issuing a health certificate for it's products. Usual procedure for issuing a certificate is that, a sample is taken by the FCAU officials from the exporting food consignment and is tested at a laboratory, recognized by the FCAU before issuing the certificate. Different countries request different parameters to be included in the certificate.

ealth certificates are issued for following export food items by the FCAU.

Tea, Coconut and coconut products, Rice and rice based products, Cereals and cereal based products, Spices and condiments, Processed and semi processed foods, Dried fish, Food packaging materials - eg. cans, wrapping papers, tags, Porcelain products and any other food items requested by the exporter.

A team comprising of a medical officer and a FDI, inspect the facilities and necessary actions will be carried out before registering export food factories. Inspection of the export food factories, those who do not require health certificates, are also carried out. Necessary actions will be taken to revisit, to monitor and to improve the food exporting factories and those which were inspected by the Canadian Food Authority in 2017 were also revisited and monitored. It is important to have a proper system with the support of the Divisional and District level authorized officers to ensure food safety of these food factories.

	Activity	2016	2017	2018
1	Number of Health certificate issued	9868	11320	10848
2	Number of food factories newly registered	76	49	55
3	Total Number of factories registered as an export food factory at FCAU	748	797	853
4	Number of factories visited	35	17	31

#### Table 6 : Export control activities of the unit

#### **Domestic control**

#### 6.6.3.1 Routine Activities

There are 61 Food and Drug Inspectors at District level and about 2300 Public Health Inspectors ensuring food control activities throughout Sri Lanka. They are involved in obtaining food samples, prosecution and seizing when needed under Food Act and its regulations and conducting awareness programmes in the community.

Special circulars were issued on inspection and strengthening food safety measures of school canteens, canteens within hospitals and hotels/eateries surrounding of the hospitals and hotels used by long distance bus travelers.

#### 6.6.3.2 Bottled water registration Activities

All bottled or packaged natural mineral water and bottled or packaged drinking water have to be registered under the bottled or packaged water regulation 2005. Factory inspections were carried out by an expert team before issuing registration for products in 2018 and legal actions were taken against two companies, which did not meet the criteria.

Table 7: Data on registration of Bottled or Packaged Water Manufacturing facilities

	Activities	2015	2016	2017	2018
1	Total number of factories	120	133	153	166
2	Number of bottled drinking water facilities newly registered	03	13	13	14
3	Number of mineral water facilities newly registered	00	00	00	00
4	Number of bottled drinking water facilities registration renewed	39	50	50	31
5	Number of mineral water facilities registration renewed	00	02	02	00
6	Total number of factories visited	39	52	52	36
7	% of facilities visited for new and re registration	92.8%	82.5%	82.5%	80%

#### 6.6.3.3 Iodized salt regulation Activities

All premises used for iodization of edible common salt or transportation of non-iodized common salt are registered under the Iodization of Salt regulation 2005. Inspection of the facilities are done prior registration of the products. Renewal of edible salt license is done annually. All imported common salt samples were checked for meeting the standard. A surveillance study by Medical Research Institute (MRI) revealed that the iodization levels of some products in the market were inadequate. This issue needs to be addressed to ensure that the iodization program is made a success.

Table 8:	Issue of	permits fo	or common	salt

	Activities	2015	2016	2017	2018
1	Number of new permits issued	14	20	19	26
2	Number of factories registered at FCAU	14	20	19	26
3	Number of factories visited	14	20	19	26
4	Number of factories newly registered	0	06	00	06

#### 6.6.4 Electronic Information system e EOHFS

The Public Health Inspector's Monthly Report is the key tool that extracts ground level information and data. Since the data collection carried out by manual basis by PHIs, it has been difficult to make use these data for advance analysis and thereby unable to support for effective contribution in health policy decision process.

The data that is being collected through "PHI's Monthly Report" are very important to have a clear understanding about the performance of the public health programs in given MOH area and will help to develop policy frameworks. It provides wider range of information about the household level as raw data.

The level of inaccuracy is relatively high in paper based data collection systems. It was found that current paper-based data collection by PHIs has not been verified by any authenticated person. This will also lead weak quality data that is being gathered by PHIs in their monthly report. It is very difficult to comment on completeness of the data since there is no proper mechanism to identify and notify about the incomplete reports. Even though there is a deadline has been set to submit the report to the next level in the reporting structure, no monitoring system has been established to make sure the timeliness of the data.

Hence, it is very clear that current paper-based reporting structure / system is not suited to take the information generated and the hard work carried out by the Public Health Inspectors to the public health service to the District, Provincial, National and even Global level. The electronic system of data collection, transmitting and analyzing will fulfill most of inherent issues of paper-based system. Thus, the paper based Monthly return of public health inspectors form was converted to a digital system (eEOHFS) with the support of Dr. Prabhadini Godage MO Informatics, the Health Informatics society, Family Health Bureau and the Directorate of EOH & FS assisted to digitalize the paper-based system.

The field staff and PHIs will benefit as follows;

- Provide easy recording of data with data validation thus enhancing the quality of data they provide as the primary level of data collector.
- It will replace the manual data aggregation with automated data aggregation and transition of data to relevant levels for further summarization.
- The PHI will be able to visualize the data pertaining to their working domain.
- Applying an electronic system will allow easy search and data recovery capabilities
- The system will minimize data dismissal.
- Since data been store in centralized data base or data warehouse, the interpretation of data can be automated. That will enhance the level of decision-making process.
- It provides essential security over the collected data since some of data may carry personal information.
- Help research activities

Benefit for MOOH, District level, Provincial level, National level program managers

- Ability to view summarized data or atomic data as per requirement
- System can automate to provide interpretation and allow alerting on any incomplete data dissemination.
- Ability to increase level of the data visualization and decision-making process
- It allows to provide data for wider range of research activities
- Based on the international commitments data can be published in the web much easier than paper base system.

The e EOHFS was introduced in early 2018 through the training conducted at District level with the staff of the Family Health Bureau. The circular was sent on institutionalizing the e EOHFS. The data entry in 2018 has been extremely good in the Districts where the Provincial level and District level staff personally monitored and motivated the PHI and MOOH to include their data and show case their performance.

Name	Actual	Expected	Percent	Reports On	Percent On
	Reports	Reports		Time	Time
NuwaraEliya RDHS	492	504	97.6	123	24.4
Kandy RDHS	86	1020	8.4	3	0.3
Matale RDHS	12	492	2.4	0	0
Central PDHS	590	2016	29.3	126	6.3
Batticaloa RDHS	619	720	86	20	2.8
Trincomalee RDHS	375	504	74.4	0	0
Ampara RDHS	239	336	71.1	0	0
Kalmunai RDHS	108	576	18.8	0	0
Polonnaruwa RDHS	84	456	18.4	0	0
Anuradhapura RDHS	6	864	0.7	0	0
Kurunegala RDHS	4	1344	0.3	0	0
Puttalam RDHS	2	672	0.3	0	0
Kilinochchi RDHS	180	180	100	49	27.2
Jaffna RDHS	864	948	91.1	34	3.6
Mannar RDHS	151	216	69.9	6	2.8
Mullaitivu RDHS	144	240	60	4	1.7
Vavuniya RDHS	45	204	22.1	2	1
Ratnapura RDHS	276	1128	24.5	14	1.2
Kegalle RDHS	15	816	1.8	0	0
Galle RDHS	1137	1236	92	89	7.2
Hambantota RDHS	522	756	69	27	3.6
Matara RDHS	366	948	38.6	3	0.3
Moneragala RDHS	334	384	87	0	0
Badulla RDHS	233	732	31.8	15	2
Kalutara RDHS	294	708	41.5	6	0.8
Gampaha RDHS	37	1512	2.4	2	0.1
Colombo RDHS	0	1380	0	0	0
CMC RD	0	564	0	0	0
NIHS	0	276	0	0	0

# Table 9 : Summary of the reporting rate of PHI's Monthly Return (H 631) in 2018 Phi

Monitoring of the eEOHFS data entry and usage need to be strengthened at District and Provincial level if real time public health information is to be used for programming in 2019.

## 6.6.5 Regulatory Activities

Regulatory activities include,

- Regulation formulations
- Review and amendment of regulations
- Regulatory activities with regard to labelling and technical aspects

The relevant food legislation is the Food Act No.26 of 1980 with its regulations published in terms of section 32 of the Food Act. Food Advisory Committee (FAC) has been setup under the Food Act and has regular meetings every month.

Two new subcommittees were formulated during 2018. The following sub committees under the FAC facilitate the functions and activities of the FAC

- Regulation Formation Sub Committee
- Food Health Claims Subcommittee
- Food Technical Subcommittee
- Food Laboratory services Subcommittee
- Technical Advisory Subcommittee on Food Safety

The following regulations were reviewed in 2018.

- Food (Colour coding for Sugar, Salt and Fat) regulation
- Food (Registration of premises) regulation
- Food (Milk and Milk Products) regulation
- Food (Preservative) regulation
- Food (Additive General) regulation
- Food (Amendment of Labeling and Advertisement) regulation
- Food (Bottled or packaged water) regulation
- Food (Iodization of salt) regulation

Stake holder consultations were conducted for the following regulations

- Food (Colour coding for Sugar, Salt and Fat) regulation
- Food (Meat and Meat products)
- Cereals, pulses and Legumes
- Fish and fish products

The following regulations were drafted in the year 2018

- Food (Meat and Meat products),
- Food (Fish and Fish Products), Food (Fruits and Vegetables),
- Food (Registration of products)
- Food (Oils and Fats)
- Food (Food for special dietary use and special medical purposes)

It is expected that these regulations will be enacted in 2019 to improve food safety.

# Table 10: Number of Food Advisory committees and Food Advisory subcommittees conductedin 2017 and 2018

Name	2017	2018
Food Advisory Committee	11	12
Food Advisory Sub Committee (Technical)	13	12
Food Advisory Sub Committee (Health claims)	11	12
Food Advisory Sub Committee (Regulation Formation)	14	54
Food Laboratory Subcommittee	-	02
Technical Advisory Subcommittee on Food Safety Programme	-	02

## 6.6.6 Capacity Building of the staff

• Local training –

Authorized officers need to have a sound knowledge on food safety management through entire food chain. Therefore, it is important to conduct capacity building programmes for these officers.

#### Table 11 : Summary of local training activities

Name of the training	Number of programmes conducted	Number of officers trained
Three-day Training programme on GMP for PHI/SPHI	05	300
Training programme on Pesticide act for authorized officers	01	60
Training of trainer's series on internal food safety best practices (with collaboration of UNIDO	01	103

- International training -Twenty-two authorized officers and one Regional Epidemiologist were trained on "Food safety and Hygiene" at University of Mahidol, Thailand.
   Two Microbiologist and 15 laboratory staff members were trained on risk analysis and ISO/IEC 17025:2017 accreditation, Institute of Nutrition, University of Mahidol Thailand.
- National review meetings- Two, 2 day national reviews, one in Colombo and the other in Badulla were held with the participation of all Supervising Public Health Inspectors at District level (SPHID) and F&DI, in order to discuss the food safety issues at the peripheral levels, and necessary actions were taken to improve the food safety at the grassroots level. Two review meetings were held for national food surveillance on food contaminants with a total of more than 150 participants.

#### 6.6.7 National Food Surveillance activities

**Food Surveillance -** Food surveillance is defined as "the on-going systematic collection, collation, analysis and interpretation of accurate information about a defined food or feed with respect to food safety or food standards, closely integrated with timely dissemination of that information to those responsible for control and prevention measures."

The analysis and interpretation of data provide the intelligence which is needed to inform risk assessment, policy development and the targeting of enforcement activity, and therefore enable FCAU to deliver its public health and consumer protection obligations.

Food surveillance activities are categorized as import food surveillance and domestic food surveillance.

## 6.6.7.1 Import food surveillance

Import food surveillance is conducted randomly to ensure the safety of the particular food. During the past few years, the surveillance was conducted and in 2018 the surveillance was strengthened for chillies. Based on the aflatoxins levels of dried chilies being high, all importers were given an orientation on the harmful effects of aflatoxins and the levels to be adhered. The importers requested a two-month period to correct the situation.

Item	Tested	Laboratory	Number of samples	Number unsatisfactory	Percentage unsatisfactory
Potato	Pesticide residue	Bureau Veritas	150	Nil	0%
Potato	Heavy metal	Bureau Veritas	40	Nil	0%
Frozen fish	Formaldehyde	NIHS	796	20	2.5%
Dry Chillie	Sudan Dye	Bureau Veritas	167	Nil	0%
Dry chillie	Aflatoxin	SGS	288	07 (>30ppm)	2.43%
Dry chillie	Aflatoxins	Bureau Veritas	1389	39 (>30ppm)	2.81%

 Table 12: Summary of import food surveillance

Year	Laboratory	Number of samples	Detected (%)	10 – 30 µg/kg	>30 µg/kg
2018	SGS	288	13* (4.5)	06	07
2018	Bureau Veritas	1389	95* (6.8)	56	39

### Table 13 : Summary of aflatoxins levels in dried chilies

### 6.6.7.2 Domestic Food Surveillance

Based on the results of food surveillance in 2017, it was decided to carry out an island wide survey on pesticides, heavy metals and aflatoxins and other contaminants residuals in fruits and vegetables and other commonly consumed food items in 2018. There is a general belief that the food we eat are contaminated. The first food surveillance programme island wide was initiated in 2018 and this activity covered both imported and domestically produced food. Samples were collected by authorized officers in all 26 districts.

All of these samples were tested by reputed government laboratories such as,

- Food Laboratory at the Government Analyst's Department
- Food Laboratory at NIHS, Kalutara
- Food Laboratory Anuradhapura
- NARA Laboratory
- Sri Lanka Standard Institute

Selected vegetables, green leaves and fruits were tested for 21 pesticide types namely Fenthion, Fenobucarb, Propamocarb, Chlorothalonil, Chlorpyrifos, Novaluron, Diazinon, Metalaxyl, Fipronil, Profenofos, Flutolanil, Oxadixyl, Bifenthrin, Difenoconazole, Dimethomorph, Dimethoate, Thiamethoxam, Pyraclostr at the Government Analyst Department and Food Laboratory at NIHS, Kalutara. Of them, 9 pesticides namely Dimethoate, Fenthion, Chlorpyrifos, Metalaxyl, Oxadixyl, Bifenthrin, Difenoconazole, Phosalone and Malathion are not included in Control of Pesticide Act, Sri Lanka. The results of pesticide residues need to be interpreted with caution as it only reflects the pesticide residues of the above mentioned 21 pesticides.

Vegetable	Number of samples tested	Types of pesticides tested in each sample*	Total number of tests done	Number (%) of pesticides detected
Tomato	34	16	540	17(3.15%)
Brinjal	44	16	704	08(1.14%)
Leeks	23	19	385	02(0.52%)
Carrot	23	16	348	03(0.86%)
Beans	8	13	104	01(0.96%)
Long Beans	19	14	254	03(1.18%)
Ridged Gourd	11	16	159	02 (1.26%)
Snaked Gourd	23	16	359	05(1.39%)
Ladies finger	13	12	156	Nil

Table 14 : Summary of pesticides in Vegetables

\*Some samples were tested for lesser number of pesticides

Green Leave	Number of samples tested	Types of pesticides tested in each sample*	Total number of tests done	Number (%) of pesticides detected
Mukunuwenna	41	18	688	27 (3.92%)
Gotukola	41	18	642	23(3.58%)

\*Some samples were tested for lesser number of pesticides

Table 16:	Summary	of pesticides	in fruits
-----------	---------	---------------	-----------

Fruit	Number of samples tested	Types of pesticides tested in each sample*	Total number of tests done	Number (%) of pesticides detected
Papaya	65	14	786	02 (0.25%)
Banana	71	17	1163	01 (0.09%)
Water Melon	60	17	831	01(0.12%)
Pineapple	69	17	1054	11(1.04%)
Guava	61	17	747	39(5.22%)
Grapes	8	17	108	03(2.78%)
Mango	64	17	1005	06(0.6%)

\*Some samples were tested for lesser number of pesticides

Salt was tested for heavy metals at SLSI laboratory while rice and dhal were tested for heavy metals at the Food laboratory Anuradhapura. The results from the Anuradhapura laboratory was delayed due to method verification process.

# Table 17 : Summary of heavy metals in salt

Parameter	Maximum level	Number of samples tested	Number (%) satisfactory
Lead (Pb)	2mg/Kg	84	84 (100%) <1mg/Kg
Arsenic (As)	0.5mg/Kg	84	84 (100%) <0.1mg/Kg
Cadmium (Cd)	0.5mg/Kg	84	84 (100%) <0.2mg/Kg
Mercury (Hg)	0.1mg/Kg	84	84 (100%) <0.1mg/Kg

Heavy metals and Formaldehyde in Fish were tested at NARA laboratory.

Parameter	Number of samples tested	Number (%) not detected	Number (%) detected but within approved limits	Number (%) detected above approved limits
Mercury 5-10mg/Kg	71	40 (56.34%)	31 (43.66%)	00(0%)
Formaldehyde 5ppm	72	60 (83.33%)	10 (13.89%)	02(2.78%)

Table 18: Summary of heavy metals and formaldehyde in fish

Red raw rice and tea were tested for artificial colouring at the Food laboratory – National Institute of Health Sciences. The commonest colouring used was sunset yellow (E 110).

Table 19: Summary of artificial colouring in raw rice and tea

	Total number of samples	Number (%) detected
Red raw rice	82	16(19.51%)
Tea	81	Nil

Coconut oil, peanut and coconut oil were tested for aflatoxins at the Food laboratory – National Institute of Health Sciences.

Table 20: Summary of aflatoxins in food items

Food item	Total Number of samples	Number (%) with > 10 ppm	Number (%) with > 30 ppm
Coconut Oil	80	8 (10%)	1(1.25%)
Peanut	80	9 (11.25%)	4 (5%)
Chillie Powder	80	14 (17.5%)	9 (11.25%)

Microbiology in yoghurt was tested at the Medical Research Institute

Item	Parameter	Total number of samples	Number (%) Satisfactory	Number Unsatisfactory
Yoghurt	Bacterial contaminations	20	20 (100%)	0

Table 21:	Summary	of bacterial	contaminations	in yog	hurt
-----------	---------	--------------	----------------	--------	------

#### 6.6.8 Tax on Sugar Sweetened Beverages (SSBs)

Data on Sri Lankan adolescents, has reported that 82% of the sample (17-year-old adolescents) consumed sugar-sweetened soft drinks at least once per week, while 77% and 48% consumed sugar-sweetened carbonated drinks and sugar-sweetened fruit drinks respectively at least once per week (Reference 1). Data from the Global school-based health survey for Sri Lanka further supports these findings with 26.5 % of school children aged 13-17 years reporting that they consumed a carbonated soft drink at least once per day. The data used for consumption and sales of SSBs in Sri Lanka are based on a Euromonitor International report, 2014 (Reference 2). Sri Lanka's annual average per capita GPD growth between 2009 and 2013 was 6.5% while consumption of SSB grew at 8.3%.

WHO assisted the Ministry of Health, Nutrition and Indigenous Medicine in compiling a report on the Sri Lanka context. Fiscal policies are one of the key population based options proposed by WHO to influence consumer behaviours and reduce the dietary risk of NCDs, others include implementing recommendations on marketing of foods and non-alcoholic beverages to children, school and other settings based interventions to reduce intake of salt, sugar and fat, food labeling, specifically interpretative front of pack labeling on pre-packaged foods and promoting product reformulation, mass media campaigns to raise awareness and advocate for healthy dietary behaviours. As with tobacco and alcohol, taxation has been proposed as an effective tool to decrease SSBs consumption. Unlike tobacco and alcohol, that do not have healthy substitutes, fiscal tools to decrease SSBs consumption can include subsidies to healthy alternatives, such as subsidizing fruit or vegetables in schools, potable water and promoting improved eating behaviours. Sri Lanka is the first country in the region to include excise taxes on SSBs thanks to the efforts of the strong Health Ministry lobby with the Hon. Minister leading, with the support of SLMA, professional colleges with other agencies. The SSB tax was gazetted on government notification Excise special provisions Act No 13 of 1989 dated 9<sup>th</sup> Nov 2017. The tax included was 50 cents per each gram of sugar per 100 ml.

There was response from the industry to reformulate their products for healthy choices by reducing the sugar content but some companies have included sweeteners to keep the sweet taste. The position paper on use of sweeteners by World Health Organization is expected in 2019 which will pave the way to scientifically assess the health consequences, if any, of the use of sweeteners.

- 1. Ratnayake N, Ekanayake L. Soft drink consumption in Sri Lankan adolescents. Public Health Nutrition. 2012;15(8):1333-7.
- 2. Euromonitor International. Markets of the future in Sri Lanka. 2014

#### 6.6.9 Food Safety week

Two food safety weeks during festival seasons; in early April 2018 and in mid-December 2018 were conducted with the support of the authorized officers at Provincial, District and Divisional levels. The activities included inspecting the food establishments, grading of food establishments, destroying food not suitable for human consumption, conducting awareness programmes for general public and educating food handlers on the food safety theme.

At national level with the support of Health Promotion Bureau, FAO and UNIDO, 20,000 posters or wallcharts or both on food safety principles in Sinhala, English and Tamil Medium were printed and distributed across the island. The balance needs to be reprinted in 2019.

A media conference was held in collaboration with the Health Promotion Bureau to educate media on food safety weeks and an awareness campaign for food handlers was done in the Colombo Municipal Council area with the support of the Chief Medical Officer of Health, Colombo Municipal Council and his staff.



Figure 23- Media conference to educate media on food safety in collaboration with the Health Promotion Bureau

6.6.10 Health Education Materials





உணவைச் சுகாதாரமான முறையில் பரிமாறுவோம்

# සුරක්ෂිතව ආහාර පිළිගන්වමු

2

# Let's Serve Food Hygienically

Use gloves or appropriate tools to serve food

A Message from the Health Promotion Bureau



Figure 24- Health Education Materials developed with the support of Health Promotion Bureau, FAO and UNIDO

#### 6.6.11 Analytical Capacity

Foods that are imported, exported and those available in the market are tested for physical, chemical and microbiological parameters. There is a network of seven food laboratories which continued to support in testing food and water samples for surveillance and contamination. Four come under Ministry of Health, namely Food Microbiology Laboratory at the MRI, Food Laboratory at National Institute of Health Science (NIHS) Kalutara, Food Laboratory at Anuradhapura, Provincial Food Laboratory at Kurunegala, while Government Analyst, City Analyst Colombo and City Analyst at Kandy, too support the Ministry of Health in testing food and water samples during food surveillance.

Microbiological samples (both solids and water) are tested at Microbiology laboratories at MRI and NIHS. Outbreak investigations are done in Enteric reference laboratory (Feaces and vomitus) of the

MRI. Chemical food laboratory of the NIHS has the capacity of testing aflatoxin levels in food items and Food laboratory at Anuradhapura test heavy metals of the food samples.

	Number of samples							
Type of Sample	Govern ment Analyst Departm ent	Microbi ological laborat ory MRI	Chemical laborator y NIHS	Microbi ological laborat ory NIHS	City Analys Colomb o	Food laborato ry North Western Province	Food laborato ry Anuradh apura	City Analys t Kandy
Cereals and flour	1124		585		33		293	5
Pulses	474		320		23		212	
Fish, meat and poultry products	200		1519	816	14		133	
Bread and bakery products	347		119	317	18		35	
Sugar confectionaries	349				13		221	
Flour confectionaries	141				12		294	
Fruit based products	882		226	102	31		293	
Edible oil and fat	527		374		46		309	6
Milk and milk products	189		266	1178	40		79	
Spices and condiment	2448		1371		313		1096	24
Vinegar	135		38		3		24	
Iodized salt	1334		1177		37		643	6
Sugar and sugar Products	127		263	43	11		67	6
Beverages	159		230	9	35		101	
Potable water	1418		244	2885	310		2801	
Vegetable base products	618							1
Process food items					16			
Rice and curry				833	8			8
Ready to eat food				55	12			
Any other	1105		489	201	101		16	22
Egg and Egg products				50				
Total	11577	1750	7221	6489	1076	1219	6617	78

 Table 22: Summary sheet of performance of the Food Quality Control Laboratories -2018

Directorate in collaboration with UNIDO is in the process of strengthening and accreditation of food laboratories-ISO 17025:2017(2). Preliminary and Mid assessments were done for all food laboratories in 2018. Training of the laboratory staff in many aspects such as in ISO 17025: 2017, manual writing, calibration and measurement uncertainty and internal audit were done accordingly. Food laboratory at MRI is at the final stage in the process of accreditation.

It was noted that the most adulterated food items were rice, coconut oil, chilie and a letter was circulated to all authorized officers to be vigilant. It was also noted that most samples taken were normal and the importance of informing authorized officers to take food samples where a high suspicion of safety needs to reinforced.

The water samples sent for microbiology had a large percentage reported as normal and the mandatory taking of two samples per PHI area needs to be revisited. The Food laboratories provided these analytical reports with greatest difficulty due to lack of analysts and other staff. It is important that the cadres be filled early to ensure analytical services are further strengthened.

# 6.6.12 Nominating authorized officers for Institute proceedings and conducting prosecution under the Control of Pesticides Act No.33 of 1980

Office of the Registrar of Pesticides nominated and issued identity cards for 52 authorized officers for Institute proceedings and conducting prosecution under the Control of Pesticides Act No.33 of 1980.

#### 6.6.13 Activities of Codex /WTO-SPS contact point

Directorate of Environmental Health, Occupational Health and Food Safety is the National Codex contact point for Sri Lanka. It was strengthened with the appointment of two staff members. One officer was trained in modern technology used in Codex work in India. It was planned to strengthen the national codex committees by recruiting members from relevant institutions. A training on Codex for all persons working in Codex work has been arranged in 2019 and steps would be taken to appoint Codex committee chairs and members after the training.

Drafts food safety regulations (Bottled and Packaged Water and Iodization of Salt) were notified on WTO-SPS information management system to get comments from interested countries.

#### 6.6.14 INFOSAN (International Food Safety Authorities Network)

In 2012, the INFOSAN Secretariat launched the INFOSAN Community Website – an online, secure platform for INFOSAN members to connect and engage with one another. Since launching, the Community Website has been used to engage with members and as the primary tool for disseminating food safety information to members during emergency situations. The Community Website also provides a forum for members to discuss topical food safety issues with experts from around the globe and a chat-function to enable real-time communication with other members, including the INFOSAN Secretariat. In addition, the Community Website serves as a repository of food safety documents of global interest to food safety professionals involved in emergency preparedness and response activities. The Community Website now supports nearly 500 users from around the world and encourages each of them to connect with one another to build and exchange knowledge on global food safety matters. In addition to Emergency Contact Points and Focal Points from Member States, users include FAO and WHO staff, INFOSAN Advisory Group Members, regional food safety authority contact points, and WHO Collaborating Centre contact points.

Directorate of Environmental Health, Occupational Health and Food Safety is the National Emergency INFOSAN contact point for Sri Lanka. In 2018, 4 INFOSAN alerts were received and the measures taken are given below.

## Table 22 : INFOSAN Alerts

Date	Incident	International Action	Local action
2017.12.1 5	Outbreak of listeriosis in South Africa	To be on Alert No imports to Sri Lanka	Affected samples collected and destroyed
2018.02.2 3	Outbreak of Salmonella Agona in France with infant formulae Lactalis	All stocks recalled and Destroyed.	
2018.05.2 3	Outbreak of Salmonella tephoneurium in USA with Sliced coconut	Detailed corrective measures taken	Desiccated coconut collected from various processing plants and consumer repacking at plant. Instructed to have Stringent quality assurance of raw material and finished product
2018.07.1 0	listeriosis in Europe linked to frozen vegetables from Hungary	Product recalled and destroyed	All remaining stocks in the ware houses (400Kg) were destroyed. What had already distributed had been consumed but no reported food safety events
2018 07.31	Metal fragments in coconut powder manufactured in Sri Lanka	Detailed corrective measures taken	During routine maintenance a wire had been attracted to the magnet which has not been detected. SOP developed to prevent occurrence.

# 6.6.15 RASFF (Rapid Alert System for Food and Feed)

**RASFF Alerts** - The EU has one of the highest food safety standards in the world – largely thanks to the solid set of EU legislation in place, which ensures that food is safe for consumers. A key tool

to ensure the flow of information to enabling swift reaction when risks to public health are detected in the food chain is **RASFF** – **the Rapid Alert System for Food and Feed**. Created in 1979, RASFF enables information to be shared efficiently between its members and provides a round-theclock service to ensure that urgent notifications are sent, received and responded to collectively and efficiently.Vital information exchanged through RASFF can lead to products being recalled from the market. A robust system, which has matured over the years, RASFF continues to show its value to ensure food safety in the EU and beyond.

During 2018, 3 RASFF notifications were received. The importance of following up on the notifications to ensure food exported meets the necessary standards of the exporting country should be ensured. The need to have the health certificate from the FCAU or relevant authorized agency should be mandatory for compliance in future.

#### 6.6.16 Water Surveillance

#### 6.6.16.1 Routine Water Surveillance

Water surveillance continues to be done based on the circular but the quality of data and actual need for the surveillance need to be revisited. Currently due to poor monitoring of this program at national level and District level, no meaningful comparison or interpretation can be made. The summary of the returns sent by District is given in the table below.

Table 23:	<b>RDHS's Monthly</b>	Consolidated Return or	ı Water	Quality	Surveillance	Chlorine	Testing
<i>- 2018</i>							

	Jan - Apr			May - Aug			Sept - Dec			
	Total				Total			Total		
RDHS AREA	Numbe r of Sampl e Taken	Satisfa ctory	Unsatisf actory	Numbe r of Sample Taken	Satisfactor y	Unsatisfa ctory	Numb er of Sampl e Taken	Satisfact ory	Unsatisf actory	
Batticaloa	0	0	0	0	0	0	0	0	0	
Badulla	618	488	130	317	290	27	576	504	72	
Kurunegala	0	0	0	0	0	0	0	0	0	
Kalmunai	0	0	0	0	0	0	0	0	0	
Kegalle	2	2	0	8	8	0	78	60	18	
Kilinochchi	123	95	28	82	79	3	135	132	3	
Monaragala	465	318	147	610	410	200	487	319	168	
Ratnapura	0	0	0	0	0	0	8	8	0	
Anuradhapu ra	48	45	3	108	99	9	0	0	0	
Nuwara Eliya	208	34	174	62	6	56	41	18	23	
Hambantota	0	0	0	0	0	0	0	0	0	
Jaffna	2387	2357	30	2368	2366	2	0	0	0	
Kandy	0	0	0	0	0	0	0	0	0	
Galle	0	0	0	0	0	0	0	0	0	
Ampara	0	0	0	0	0	0	0	0	0	
Colombo	0	0	0	0	0	0	0	0	0	
Matara	0	0	0	0	0	0	0	0	0	
Puttalam	52	37	15	145	135	10	67	67	0	
Vavuniya	12	6	6	0	0	0	0	0	0	
Trincomalee	0	0	0	0	0	0	0	0	0	
Polonnaruw										
а	0	0	0	0	0	0	0	0	0	
Gampaha	0	0	0	0	0	0	0	0	0	
Kalutara	0	0	0	0	0	0	0	0	0	
Matale	47	43	4	0	0	0	0	0	0	
Total	3962	3425	537	3700	3393	307	1392	1108	284	

# Table 24: RDHS's Monthly Consolidated Return on Water Quality Surveillance BacteriologicalTesting - 2018

	Jan - Apr			May - Aug			Sept - Dec		
RDHS	Total				Total		Total		
AREA	Numbe r of Sample Taken	Satisfac tory	Unsatis factory	Number of Sample Taken	Satisfac tory	Unsatisf actory	Number of Sample Taken	Satisf actory	Unsatisf actory
Batticaloa	306	110	212	346	89	236	196	54	142
Badulla	496	345	515	201	66	108	366	94	173
Kurunegala	189	38	9	267	45	12	378	55	37
Kalmunai	211	113	78	240	100	140	78	43	35
Kegalle	28	9	15	54	7	17	156	48	86
Kilinochchi	113	39	65	135	36	164	114	40	80
Monaragal a	345	194	117	346	165	176	409	186	199
Ratnapura	281	50	184	269	46	149	277	49	212
Anuradhap ura	134	85	24	229	116	26	0	0	0
Nuwara Eliya	282	59	122	133	24	42	280	61	125
Hambantot a	288	158	130	266	137	129	146	68	78
Jaffna	593	173	106	627	104	103	0	0	0
Kandy	0	0	0	0	0	0	0	0	0
Galle	0	0	0	0	0	0	0	0	0
Ampara	163	70	28	171	87	85	153	100	66
Colombo	333	106	27	327	196	36	367	197	28
Matara	205	10	21	0	0	0	0	0	0
Puttalam	209	79	64	165	111	88	135	59	106
Vavuniya	240	84	61	204	47	61	31	6	10
Trincomale e	0	0	0	0	0	0	0	0	0
Pollonnaru									
wa	0	0	0	0	0	0	0	0	0
Gampaha	0	0	0	0	0	0	0	0	0
Kalutara	0	0	0	0	0	0	0	0	0
Matale	71	9	9	0	0	0	0	0	0
Total	4487	1731	1787	3980	1376	1572	3086	1060	1377

The reporting rates need to be interpreted with caution due to backlog of samples being accumulated in the Microbiology laboratories. Due to the workload of testing formal food samples, the water surveillance samples get delayed in creating a frustration among those who take samples while the laboratories get unnecessarily overburdened if samples are not taken for meaningful action.

#### 6.6.16.2 Surveillance of drinking water sources in all the schools in Sri Lanka

The special projects unit of the President's office, Ministry of Education, Ministry of Health, Nutrition and Indigenous Medicine with the Support of Government Analyst Department (GA), National water Supply and Drainage Board(NWSDB) and Industrial Technological Institute (ITI) embarked to assess the water quality in schools under the "Thirarsara school programme" which will include bacteriological and chemical (including heavy metals) testing. This effort was to augment the current water quality surveillance system which is already been implemented throughout the country.

According to school census data, out of the 10162 schools, there are 3627 schools using either NWDSB or community water scheme (CWS) sources, 4368 Well water (shallow/deep), 854 from water springs. There are 90 schools which trucks water and another 1223 without any supply of drinking water.

The proposed testing of all school water sources (including RO) for basic chemical parameters and heavy metals in schools was on phase basis due to laboratory testing capacity in 2018 and 2019. All schools where drinking water is supplied by NWDSB were excluded as NWDSB conducts routine testing of all the para meters.

The identified basic chemical tests were entrusted to be done by the regional water board laboratories, while the heavy metals based on capacity of the laboratories were identified with priority being given to CKDU areas.

The payment for testing was under taken by the Presidential Secretariat. The progress of the project needs to be monitored at National and Provincial level.

#### 6.6.17 WTO agreement on Trade facilitation

The WTO Trade Facilitation Agreement (TFA) entered into force on 22 February 2017. It is a result of the Doha Round of Trade Negotiations, which was launched in 2001. The text of the TFA was adopted by WTO Members at the 9<sup>th</sup> Ministerial Conference in Bali, 3-6 December 2013. The Agreement entered into force in accordance with the provisions of Article X:3 of the WTO Agreement and Members have to individually accept the amendment of the WTO Agreement by depositing an instrument of acceptance for the Protocol of Amendment, adopted on 27 November 2014. Sri Lanka is a signatory to this agreement in 2016 with members aim:

- To "expedite the movement, release and clearance of goods, including goods in transit;"
- To facilitate "effective cooperation among Members on trade facilitation and customs compliance issues;" and
- To enhance "assistance and support for capacity building" for developing and least developed country Members.

The National Trade Facilitation Committee (NTFC) in Sri Lanka was established as required by Article 23.2 of the (TFA) and is chaired by the Director General of Customs & Co-chaired by the Director General of Commerce. The NTFC coordinates interagency activities associated with implementation of the TFA and other trade facilitation initiatives in Sri Lanka through the participation of all cross-border trade public and private sector stakeholders. Currently it consists of Sixteen (16) Government Agencies and Seven (7) Private Sector Chambers. Furthermore, the NTFC is supported by a Secretariat, which ensures effective coordination & implementation of the TFA & other trade facilitation initiatives.

The FCAU is a member of the NTFC represented by the DDG (EOH & FS) or in his absence D(EOH). The procedures to be adopted under the import and export of food has been included in the trade portal of the Department of Commerce for the easy understanding of the procedures to be followed. The only area that the FCAU is unable to comply under A category commitment is the electronic payment similar to other service departments such as Animal quarantine and Plant quarantine.

# 8. Way forward

#### 8.1 The way forward for Occupational Health in 2019

It is expected to provide advocacy at regional and international level to integrate workers' health and work environments adequately in the forthcoming WHO Global Strategy on Health, Environment and Climate Change and to develop a regional action plan based on that. The highlight of 2019 would be the development of the National Occupational Health and Safety and Wellbeing Programme for Healthcare workers. Establishment of a National Steering Committee on Occupational Health and Environmental Health is intended in 2019 to further strengthen the National Occupational Health Programme. Streamlining the workplace survey by issuing necessary circular instructions, capacity development of health staff together with monitoring of the programme with district level reviews too will be carried out in the forthcoming year.

#### 8.2 Way forward for Environmental Health in 2019

It is expected to plan activities to manage air pollution and climate change at district level together with important stakeholders. Further strengthening of the National Healthcare Waste Management Programme and Waste water Management will be carried out. Circular instructions will be sent to phasing out of mercury containing health equipment in accordance with the Minamata convention.

#### 8.3 Way forward for Food Safety in 2019

It is expected to develop National Food Safety Policy with strategic areas, activities and indicators in the year 2019.