



SRI LANKA FOOD PROCESSORS ASSOCIATION (SLFPA)

# FOOD FOR THOUGHT

NEWSLETTER

Excellence and World Class

Issue - 25  
December Edition - 2020



MERRY  
*Christmas*

HAPPY NEW YEAR

2021





## PRESIDENT'S MESSAGE

It gives me immense pleasure and pride to add few words to the latest edition of our newsletter.

First & foremost I hope that you, your families and your employees are staying safe from the 2nd wave of COVID 19.

For the past few years, SLFPA with the help of its Membership had initiated & conducted workshops, seminars as well as educational programs to share and communicate valuable information to the stakeholders in the Food industry, associated industries as well as to the ordinary masses in Colombo, its suburbs and even in the rural areas.

A few new regulations are scheduled to come into effect - namely Sugar Tax on Beverages, Premises registration , Banning of the usage of single use polythene and plastics, I wish to point out that SLFPA will monitor these closely & inform the membership of the new developments & get involved on behalf of the membership to voice their concerns to the relevant authorities.

Annual Profoods/Propack exhibition which was scheduled to take place at BMICH in August 2020 was cancelled due to the current situation, we are in the process of looking at the possibility of hosting a virtual exhibition to run parallel to the physical event scheduled for next year. I strongly believe that this will be successful with the blessings of our valued members.

I would like to take this opportunity to express my profound gratitude to our EXCO and the general membership for their untiring efforts. I appeal to all of them to work unitedly as a team during the rest of year 2020 to make it another fruitful year for SLFPA amidst the challenges we all face during this Corona pandemic.

SRI LANKA FOOD PROCESSORS ASSOCIATION (SLFPA)

**FOOD FOR THOUGHT**  
**NEWSLETTER**

### Editorial Committee

Cyril Wickramaratne  
Rasika Seneviratne  
Aruna Senanayake  
Anil Fernando  
Sandya Fernando

# Content

NEW PLASTIC ECONOMY WITH REGULATIONS	05
WHY MODERN AGRICULTURAL TECHNOLOGIES FAIL ...	12
Bridging the Gap between the INDUSTRY AND ...	15
WHAT ARE THE OPPORTUNITIES AND NUTRITIONAL TRENDS...	18
SLFPA Annual General Meeting	21
SLFPA & ECCSL sign MOU...	22
Young Undergraduate creates 'Cream Milk Tea Butter' Product	24
Open Doors for Innovative Products...	25
FOOD FOR THOUGHT Rate Card	26
Sustainable Food Packaging & Biodegradability Testing	27
Webinar Series from IFSTSL	29



## HYGIENE STATION

- ▶ Product manufactured in Sri Lanka with International standards and design.
- ▶ Fully stainless steel construction with guaranteed durability.
- ▶ Complete Hygienic entrance designed as per the HACCP requirement.
- ▶ Can be used even after COVID-19 as a Hygienic facility entrance.
- ▶ Plug and play design, no compressed air requirement.



Contact

Jenith - 0770 134 947

Nadun - 0740 029 811

No 08, Rodrigo Mawatha, Nawala Road, Rajagiriya.

Tel : 0112 806 776-9

Fax : 0112 806 780

Email : colombo@cmc.slt.lk

Web : www.cmcenglk.com

**CMC Engineering Export GmbH**

## Cleaning & Sanitizing against COVID 19

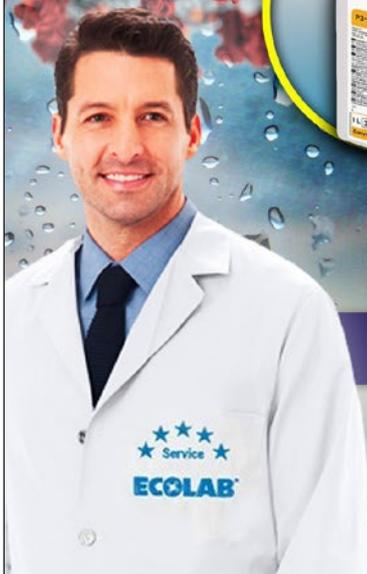
### P3 MANODES LI

- Recommended Hand Sanitizer for hotels, restaurants and food industry
- 75% Alcohol (minimum)



### MIKRO-QUAT

- Cleaner plus sanitizer for industries, hotels and restaurants



**CMC Engineering Export GmbH**

### Contact Us

Isuru ☎ 0769623249  
✉ isuru@cmcenglk.com

Jenith ☎ 0770134947  
✉ jenith@cmcenglk.com

📍 No:08, Rodrigo Mawatha, Nawala Road, Rajagiriya, 10107, Sri Lanka.

✉ www.cmcenglk.com



The Sri Lankan Government, budget proposals have suggested and approved by the parliament to band single use plastics from 2021. Up to now there is no proper list of products which has been given but it seems that government is working on below regulations and directions to implement the first round of plastic ban in the country.

- Prohibition of packaging of chemicals or pesticides in Polyethylene Terephthalate (PET) and Vinyl Chloride (PVC) containers and use packaging made of glass or other raw materials as an alternative.
- Prohibition of sachets made of polythene and plastic less than 20ml/20g, use packages of 100 ml/100g or more as an alternative (excluding food and medicine). Prohibition of various inflatable toys made of plastic (excluding balloons, balls and floating toys) and the use of toys made of eco-friendly and hygienic raw material as an alternative.
- Ban plastic cotton buds (excluding hygiene products) and use cotton buds made from biodegradable materials as an alternative.
- Mandating to indicate the 1-7 Codes Internationally recommended to promote the recycling of all plastic products.

In this journey as the next step there is a higher chance of considering the ban of following plastic products

- Plastic cutlery and straws which are made to use only one time
- Plastic advertising materials such as banners
- Shopping/ Grocery bags and carry bags
- PET bottles below 400 ml.

With the growing population and the rising demand for consumer goods, food and beverage manufacturers are constantly looking for ways to enhance their practices and create additional value. They are also required to ensure that the food product is well-preserved using appropriate packaging till the point of sale. While there are multiple alternatives and materials that can be used to package food, plastic food packaging has always been the most preferred option. Plastic has retained this popularity over the years due to its adaptability and durability. Take a look at some of the other benefits plastic food packaging offer:

1. Plastic packaging is a very flexible and adaptable form of packaging, which allows manufacturers to customize its shape, size and style as per their customers' requirements.
2. Plastic packaging is an extremely light-weight storage option that doesn't require a lot of storage space either. Since they don't take up much storage space, they are also extremely easy to transport, thus reducing the carbon footprint during transportation.



3. Plastic packaging can survive extreme environments and don't easily degrade in hot and cold temperatures, thus preserving the integrity of the food or beverage inside it. It also protects your products from moisture, oxygen, dust, light and odors.
4. Since plastic is extremely durable and resistant to external influences, you can ensure your product is well-preserved at all times. This in turn, helps you avoid losses due to wastage of inventory and also helps you bring about consistency in product delivery, thus increasing brand value.
5. The high versatility of plastic allows for ease of reuse and recycling. In fact, these days, companies are creating specialized plastic bag making machines that help you optimize on the recyclability of plastic.
6. The durability offered by plastic packaging also allows manufacturers to print eye-catching, high-quality custom designs, and thereby increase product visibility in a retail setting.
7. Plastic packaging is highly economical and can be used by all industries irrespective of their scale of operations. The cost-effectiveness of plastic food packaging is especially beneficial to small-scale product manufacturers as it allows access to standardized packaging options in spite of lower budgets.  
  
As mentioned above, most of the plastic packages are easily recyclable and require lesser energy to produce in comparison to the other packaging alternatives available. According to a study conducted by United States EPA, plastic bags use 40% less energy to produce and generate 80% less solid waste than paper. The study also revealed that a pound of plastic takes 91% less energy to recycle as compared to a pound of paper.
8. Plastics are convenient - if you go to the supermarket, you will likely use plastic bags to carry home the things you just bought since it is simply the most convenient way. , it will take you less effort and many people also forget to bring their own bags when they go shopping. When it comes to buying water, most people rely on plastic bottled water since it is lightweight compared to other materials like glass.
9. Variety of different uses - Plastics are prominent in all parts of our daily life. For instance, if you go shopping in the store, you will likely use plastic bags. Moreover, if you buy a shirt, chances are that it is made (at least partly) out of polyester, which is a synthetic material that can be regarded as plastic as well. If you buy a coffee-to-go, chances are that you will use a disposable plastic cup, which is usually also made out of plastics to a certain extent.
10. Other packaging materials would increase product prices - Since plastic is the most cost-efficient packaging material, it also assures that many of our daily life products can be offered at a rather low price. This would not be true if we switched to alternative packaging materials. For instance, refraining from plastic packaging would increase manufacturing costs and therefore would also translate into increasing product prices in the long run.
11. Odorless in most cases - Unlike other materials, plastics do not emit an unpleasant smell. For instance, packaging that is made out of organic materials may begin to smell after a while. This is especially true when it comes in contact with moisture.
12. Plastic products could be used multiple times - Even though we often only use our plastic bags and other things a single time, most plastic items are suitable for reuse. For instance, you could use your plastic bags multiple times and therefore easily improve your ecological footprint.
13. Plastics are not fragile - Another advantage of plastics is that they are not fragile at all. For instance, if you compare plastic and glass bottles, which one will be more vulnerable to break and cause unpleasant surprises in your trunk or at your home? Since plastics are less fragile, they will often be the safer option compared to other materials and plastics are quite popular due to this fact for most people.

14. Plastic has a long lifespan - Many of our plastic products also have quite long lifespans. For instance, we could use our plastic garden chair for many years. However, many people just buy and dump their things way too early due to fashion reasons.
- Thus, in many cases, it is people's preference to get rid of their plastic items quite soon, not the quality of the plastic product itself. Therefore, plastics should not be blamed for people's behavior since many plastic products would be suitable for quite a long time if people wanted to do so.
15. Many industries rely on plastics - Our industries are heavily dependent on plastics of several sorts. This is due to the fact that plastics have many convenient properties. Moreover, since plastics have been around for a quite long time, everyone got used to it and production and packaging processes without the use of plastics are unimaginable in many industries in our current age. Therefore, many companies are simply dependent on plastics in order to be able to manage their logistics.
16. Processes around plastics have been optimized - Moreover, since plastics have been around for so long, all processes regarding our production chains have been optimized over the past decades. Thus, since many companies rely on plastic packaging, it would be quite hard to introduce a new packaging material on a large scale and it would take plenty of time and effort for many companies to adjust their production behavior as well as their logistics. Therefore, we are kind of trapped in plastic use since all our processes have been optimized around it.
17. Potential eco-friendly plastics in the future - Even though plastics are quite harmful to our environmental system right now, there might be eco-friendly plastics in the future. Our technology continues to progress at a rapid rate and chances are that researchers might be able to find a sort of plastic that may be less harmful to our planet than the ones that are currently used in our production processes. Therefore, synthetic materials might even be able to protect our planet at one point in the future.
18. There are even worse materials out there - Plastics are always blamed to be quite harmful to our environmental system. Although this is true to a certain extent, there are materials out there that are even more harmful to our planet. For instance, the use of aluminum can be regarded to be less eco-friendly compared to the use of plastics in many aspects. Whether the use of plastics is truly bad for our environment depends on the alternatives we have, and, in some cases, plastics may be less damaging for our planet compared to the use of other materials.
19. No methane emissions from plastic - An additional upside of plastics is that they do not emit methane in the degradation process. For instance, when organic materials end up in landfills, they usually emit significant amounts of methane, which is a harmful greenhouse gas that contributes to global warming.
20. Can be reused for energy production purposes - Part of our plastics are burned, which can be quite harmful to our environment since large amounts of harmful gases are emitted into our atmosphere. However, there is also an upside to this process. By burning plastics, plenty of energy can be produced and plastic waste can therefore be reused in order to supply many households with electricity.
21. Employment opportunities for many people - Since many companies use plastics in their production processes, numerous people are employed in the plastics industry. Those people greatly rely on their jobs and if we switched to other packaging materials instead, many people might lose their jobs. However, to be fair, those people could also be educated in alternative packaging and may find another job pretty soon.
22. Plastics help a lot in food security and availability - Since plastic is a material that is able to conserve food for quite long, it may also contribute to less food waste. Thus, through the use of plastics, chances are that we will produce far less food waste.



23. Humanity is dependent on plastics to a certain extent - Let's be honest. In our current state of the world, we are heavily dependent on plastics all over the globe. Most of our companies in the production sector rely on plastics in many of their production stages. Therefore, without the use of plastics, we would no longer be able to produce goods in sufficient quantities for the mass market. Moreover, our goods would become much more expensive.

Therefore, even though a switch to more eco-friendly packaging alternatives would be possible, it would require plenty of sacrifices from all of us and we would also have to be willing to pay higher prices for our materials. Due to many advantages which I have described above, during last two decades production and use of plastics have tremendously increased causing many problems such as

#### 1. **Plastics hurt the environment**

The use of plastics also implies serious problems. One disadvantage of plastics is that they significantly hurt our environment in many different aspects.

#### 2. **Environmental dumping**

People just dump the used plastic in many ways creating various problems.

#### 3. **Non-renewable resource**

Another downside of plastics is that they are a non-renewable resource. Plastics are made out of oil and oil will not last forever.

#### 4. **Not sustainable in the long run**

Due to the non-renewable character of the raw materials in the plastic production process, the use of plastics can also be considered to be not sustainable in the long run.

#### 5. **Water pollution**

The use of plastics also leads to significant water pollution. Many of our seas, lakes and rivers are already significantly contaminated with plastics. Sri Lankan coastline, rivers, lakes have already become the dumping ground and polluted due to plastic material and micro plastics. Scientist have found fish and human body already have micro plastics which will have serious health impacts unidentified so far.

#### 6. **Air pollution**

Plastics also imply significant air pollution. Since a large part of our plastic waste has to be burned in order to get rid of it, this burning process also implies the emission of large amounts of harmful gases into our atmosphere. Burning plastics, especially PVC emits very toxic fumes including Dioxins and Furans which are responsible for many lung diseases and Cancer. There are no safe methods of burning plastics in Cement Kilns, Incineration or open air.

#### 7. **Acid rain**

Through the burning of plastic waste and the related air pollution, also the chances for the formation of acid rain increases significantly. Many people still think that acid rain is a rather minor environmental issue. However, acid rain may cause significant problems in the long run. For instance, yields may become much lower in agriculture since plants will suffer from an increase in acidity levels in the soil.

#### 8. **Land pollution**

Plastic waste is also a major factor when it comes to land pollution. If you go for a walk in a nearby forest, you will soon see that those forests are no longer a natural habitat but are rather transformed into some kind of garbage dump. This is especially true for forests nearby big cities. People seem not to care at all about our environment and just dispose of their plastic trash in the forest. Thus, the use of plastics can also lead to significant land pollution due to the irresponsibility of some people.

#### 9. **Littering**

Littering is another big environmental problem that can be caused by plastics. Many people just dispose of their plastic trash right where they stand. If you have a look at the sidewalk of main streets, you will see plenty of litter. Most of this litter will be made of some sort of plastics.

#### 10. **Resource depletion**

Since plastics are made out of oil, the use of plastics of all sorts also significantly contributes to the resource depletion problem. Our world population is growing and if we continue to



rely on fossil resources, chances are that we as humanity will experience serious trouble in the near future.

### 11. Visual pollution

The use of plastics also causes all sorts of visual pollution. For instance, if you walk around in big cities, chances are that you will walk over all kinds of plastic trash.

### 12. Global warming

Through the emission of harmful gases into our atmosphere related to the burning of plastic waste, the global warming issue is also exacerbated. This is due to the fact that large amounts of greenhouse gases are emitted into our atmosphere, which are known to speed up global warming.

### 13. Ocean pollution

Plenty of our plastic waste will also end up in our oceans which destroys ocean habitats.

### 14. Soil pollution

Since plenty of plastic waste is illegally dumped into our forests, lakes and rivers, this waste will also contaminate the soil once it starts to degrade. In the long run, this may lead to serious soil pollution and may eventually also pollute our groundwater since contaminants will be eventually washed through the soil.

### 15. Endangerment and extinction of species

The use of plastics may also contribute to the endangerment and extinction of species. Since our nature is often used as a kind of trash dump for plastic waste, many natural environments will be contaminated, and

the natural living conditions of animals and plants will be adversely altered.

### 16. Public health problems

The use of plastics also contributes to serious health problems on a global scale. For instance, it has been shown that we all carry around large amounts of micro plastics in our bodies. This is due to the fact that the fish we consume had been contaminated with micro plastics. By eating those fishes, humans become contaminated as well. Even though there is not a congruence regarding the true health effects of micro plastics among scientists yet, our common sense should tell us that it can't be healthy to consume micro plastics.

Moreover, we will also suffer from a decrease in air quality that is caused by the burning of plastics. Thus, overall, the use of plastics and the resulting plastic waste can cause many severe health problems in the long run.

### 17. High public costs

Since the use of plastics has several adverse health effects and also implies the contamination of the environment on a global scale, it also implies immense social costs in the long run. Sooner or later, humanity will experience significant problems due to the use of plastics and we all will be in serious trouble if we continue to use excessive amounts of plastics on a global scale. Plastics make enormous contribution for spreading Dengue in the country.



**18. Not biodegradable**

Another issue with plastics is that they are not biodegradable. Plastics have to be either burned or disposed of into landfills in order to get rid of them.

**19. Recycling of plastics may not be possible**

Even though some sorts of plastics can be recycled, this is not true for all plastics. Some plastic items are non-recyclable and will therefore have to be either burned or disposed into landfills. Both methods lead to either serious air or soil pollution and hurt our environment in the long run.

**20. Inefficient single use in many cases**

Many people are still not aware of how harmful plastic waste really is for our planet. Therefore, many people still use plastic bags just a single time and dispose of them in the trash bin after that. Thus, this lack of awareness leads to the production of excessive plastic waste and related environmental issues.

**21. Significant costs for retailers**

Also, retailers might significantly suffer from the excessive use of plastic bags. In many countries, those bags are still free, and it may cost retailers plenty of money to offer those bags to their customers in the long run.

**22. The poorest among us have to pay the piper**

One sad truth is that the poorest among us will have to suffer the most from the adverse consequences of the use of plastics. Moreover, since plastic waste also contributes to global warming, especially poor developing countries in the Southern hemisphere of our planet will suffer the most from water shortages, natural disasters and other issues while our rich Western world will not experience too many problems.

**23. Long-term consequences yet unclear**

Finally, it is still unclear how the long-term effects related to plastic waste will look like. The true extent of the problem will become obvious sooner or later and many people will be in serious trouble due to all those issues related to the production of plastic waste.

However, nobody could exactly forecast the true effects and therefore, it might be a good idea to

reduce plastic waste production significantly in order to avoid unpleasant consequences in the future.

Sri Lanka is considered as one of the countries who does not take much concern on the plastic waste and one of the countries that produces significant amount of waste per capita and just throw to the environment. Government and respective officials coming behind the industry from time to time propose ad-hoc regulatory recommendations mainly considering few main factors

1. Landscape - Land and the marine pollution
2. Health Problems - Cancer and respiratory diseases and even plastic contributes a lot for spreading dengue.
3. Global and Regional Policies
4. Perception of industry - such as industry does anything for profit
5. Considering the future of our younger generation
6. Frequency of political changes
7. Definition of understandings
8. New research and findings

Plastic waste management has to be a long journey which needs to drive through many ways with solid national policy with the involvement of related industries. It has to be a combined effort from Public, private and regulatory bodies. The below hierarchy has to be our main concern and the focus.

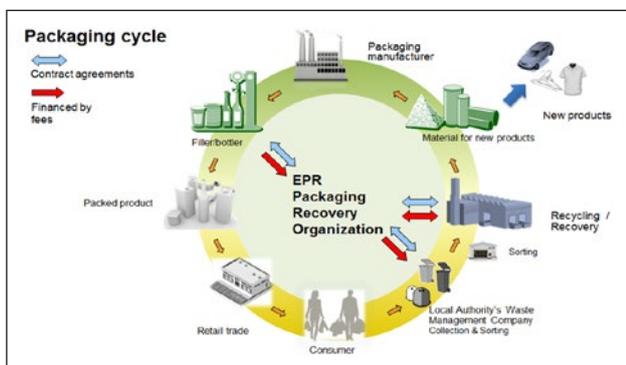


Based on the polluter pays principle the packaging industries should develop a mechanism to collect all their plastic material and recycle them in an environmentally sound socially responsible manner.

Extended Producer Responsibility is such a mechanism accepted worldwide. Such a process is widely in operation in other countries but the Transnational corporations operate in Sri Lanka and they should have equal treatment for Sri Lankan environment and people too.

Extended Producer Responsibility (EPR) strategy which places the responsibility of a product's post-consumer phase on the producers.

Plastics should be managed properly where even citizens who contribute to pollution are held responsible, and all the sectors from private, civil society, media, and government come together to collect and recycle



Extended Producer Responsibility can be achieved in many ways

1. Packaging Design - We can design packaging in a way that can be 100% recyclable, also can go for light weight designs which consumes less plastics.
2. Collections of Used plastics
  - a. We need to create awareness first
  - b. Then the Education from School level till the house holds
  - c. Segregation at the household level is very important
  - d. Then we have to do the collection
3. Partnerships – This is very important for the responsibility and partnerships has to come up with producer, collector, regulatory authority and the recycler.

This framework can be supported with

1. Preventing use of plastics as much as possible
2. Adopting a system for Fines
3. Give required time frame for the producers to put collection systems in place

4. Proper regulations have to be in place
5. Tax benefits have to come to the people who adapt these regulations and in line with the collection standards

There are emerging concepts as well as technologies for recycling plastics and one of them is bottle to bottle. That means a waste plastic bottle can be recycled to produce a new bottle which can be used for the same original purpose.

I think the way forward is very clear rather complete banning of plastics is not an option but need to look at very closely the life cycle of it and need to implement the stricter approach based on avoid, minimize , mitigate.

Up to now other alternate materials have not given many promising advantages when it comes to carbon footprint or the biodegradability.

The problem is not plastic, it is way we use it and dispose it.

*Mr. Nishan Perera*

*CEO - CMC Engineering Export GmbH*

**MD**

*Sri Lanka's No. 1 Choice*

**Exported to  
over 35 countries  
worldwide**

Winner of National Chamber of Exports Awards (Gold, Silver & Bronze)

**LANKA CANNERIES (PVT) LTD.**  
No. 45/75 Narahenpita Road, Colombo 5,  
Sri Lanka. Tel: +94-112-586622 Ext: 108  
Fax: +94-112-368480. Web: www.mdfood.lk.  
E-mail: exports@lankacanneries.com

HACCP & ISO 22000 CERTIFIED COMPANY



# WHY

## MODERN AGRICULTURAL TECHNOLOGIES FAIL IN SRI LANKA!



Scores of modern technologies are being introduced to the agriculture sector regularly to enhance agricultural productivity that is imperative to feed the ever-increasing population in the world as the available arable land area is a near constant leaving no room for expansion. Maintaining the balance between the forest cover and agriculture is ever more important with global warming threatening the sheer existence of life on the earth.

In such a scenario, it is of utmost importance for a country like Sri Lanka to embrace modern agricultural technologies to produce basic food requirements within the country at competitive prices and in sufficient volumes to mitigate the ever-increasing food import costs. The article intends to discuss the failures of adopting such modern agricultural technologies in Sri Lanka.

### Seed Sector –



In the past three decades, the seed sector has experienced corporate concentration trends. This means more and more acquisitions and mergers and the world seed sector will eventually be controlled by a handful of conglomerates. The positive side of this development is the introduction of highly advanced seeds and planting materials during the past few decades. As a result of this trend, several Sri Lankan companies engaged in seed import business introduced new hybrid varieties to the farming community. Though this trend could have increased the productivity of crops by several folds, the absence of other advanced inputs such as second and third generation fertilizers, modern growing techniques, judicious use of proper agrochemicals and a host of other impediments have dampened the real potential of those hybrid varieties.

Unnecessary restrictions placed upon introduction of new crop varieties have slowed down the potential progress of the seeds and planting materials sector in the country. Strange though, there have been instances where progenies of hybrid seeds given for testing were

used for selection of parent lines by local plant breeders.

### Fertilizer Sector –



Use of proper, effective and nutritionally efficient fertilizer to any crop is a fundamental requirement to enhance the productivity. Sri Lanka spend forty billion rupees annually to provide the fertilizer subsidy to the farming community.

The subsidy scheme is applicable to fertilizer recommendations advocated mainly by the Department of Agriculture while Department of Export Agriculture, Tea, Rubber and Coconut Research Institutes recommend fertilizers to their respective crops. Recommendations of these institutions are based on first generation fertilizers, mainly Urea, Ammonium Sulphate, Triple Super Phosphate and Muriate of Potash. Poor quality of fertilizers supplied under the subsidy scheme does not provide the desired results by enhancing the expected yields. This situation prompts farmers to use extra volumes of fertilizers doubling the environmental damage.

More than 85% of Phosphorous Pentoxide (P<sub>2</sub>O<sub>5</sub>) in Triple Super Phosphate will get fixed in the soil and therefore, unavailable to the crop. 50-60% of Nitrogen (N) in Urea is lost by either evaporation or leaching. Potassium Oxide (K<sub>2</sub>O) in Muriate of Potash is met with the same fate. One of the main pollution factors of surface water sources and groundwater is excessive, inaccurate and indiscriminate use of poor quality fertilizers.

The world fertilizer market is currently dominated by second and third generation fertilizers that have “slow release” and “controlled release” characteristics and “compound fertilizers”. As these types of advanced fertilizer formulae do not fall under the subsidy scheme, the market price of these high-quality fertilizers is quite high compared to subsidized poor-quality fertilizers. Therefore, the farming community cannot get the advantage of modern fertilizers available in the world market. Moreover, the importation of these quality assured fertilizers is hampered

by regulatory blockades based on unscientific reasons.

### Agrochemicals Sector –



Agrochemical imports are regulated by the Registrar of Pesticides in the Department of Agriculture and therefore, a great control of highly toxic products entering the country is in place. However, the usage of agrochemicals in the country is at extremely high levels mainly because of the poor extension and advisory services. The farmers’ advisor is the village level agrochemical trader who has none or very little technical knowledge of the products that he sells. Traders want more volumes sold while the farmers are of the view that using a mixture of two or more products (cocktails) to control a single pest or disease is a better option than using the recommended product.

Rather than clamoring for a ban, what should happen is to promote the judicious use of agrochemicals and improve the agricultural extension and advisory services to properly advice the farming community. Application of agrochemicals by unmanned aerial sprayers (drones) would be an ideal solution to prevent overuse.

### Micro Irrigation Systems –



Drip Irrigation Technology that was invented in Israel nearly six decades ago was commercially introduced to Sri Lanka in 1996 by Netafim of Israel. This technology can save up to 80% of water used by row crops. However, it is ironic that this technology is not getting acceptance by Sri Lankan farming community. Why?

Filtration System is the “heart” of the Drip Irrigation system. Therefore, introduction of



a proper filtration unit in the system after a thorough water analysis prior to designing the system is a fundamental requirement. Strangely though, none of the service providers do a proper water analysis prior to selection of the filtration system. They either use a simple screen filter or a disc filter for any type of water mainly to reduce the final price of the system to the end user and get the “business”. This is the best way to kill the “technology”! Use of media filters for highly contaminated water is never heard of in the industry. Instead, service providers have introduced an “openable dripper” that can be opened and cleaned by the end user. Imagine cleaning thousands of drippers even in a ¼ acre chili plot!

Another alarming situation is the promotion of “so called” drip irrigation systems of ¼ to ½ acre plot sizes by government sponsored projects. These systems mostly provided free of cost are of flawed specifications drawn up by some interested parties in the state mechanism who favor certain private companies. The so called “openable dripper” is the one used in the tender specifications of abovementioned projects. Such systems fail after a few months or even after a few weeks of use and thrown away by the farmers blaming the “drip irrigation technology” but not the unprofessional system design. Eventually, the “technology suffers and will die a natural death”!

### Greenhouse Agriculture -



A proper greenhouse for growing vegetables was introduced by the Israeli company Netafim in 1998 and this was exhibited at the exhibition organized to commemorate the 50th anniversary of independence at the BMICH premises in February 1998. For the first time, visitors to the exhibition saw tomato, bell pepper and green cucumbers grown in a greenhouse though Colombo was not the best place to grow these greenhouse crops.

Sri Lanka has geographic limitations for greenhouse production of vegetables and flowers. High humidity and high temperature are detrimental for greenhouse horticulture and therefore, establishment of the greenhouse project at a suitable geographic location is of paramount importance for the success of such a project. However, making another failure in adapting modern technologies, government sponsored projects, authorities in agriculture sector, private entrepreneurs and companies are promoting greenhouses in hot and humid locations in the country leading to disasters. Once again, those investors “blame the technology” but sadly not the wrong decisions made by them.

Establishing uneconomical small rain shelters even in the suitable geographical areas with the support of government agencies discourages entrepreneurs due to the high cost of production of crops caused by meagre yields that they get from such facilities. One again, the technology is blamed.

However, a mere handful of companies who have invested on proper greenhouse facilities are making tremendous progress and profits from their facilities. This shows that the use of proper technology in the right direction can generate profits in the short term.

### Conclusion -

It is essential that modern agricultural technologies are introduced to the country if Sri Lanka is to increase agricultural productivity, firstly to feed the increasing population and secondly to explore export avenues with a product that can compete in the international market. To achieve these objectives, it is imperative that technologies that are introduced not tampered with “cheaper solutions” to make short-term profits. Proper introduction of such technologies to the farming community is the responsibility of the private and state sectors of the country.

**Wicky Wickramatunga**  
*Managing Director*  
*Agriworld (Pte) Ltd.*

# Bridging the Gap between the INDUSTRY AND THE LOCAL UNIVERSITY Research System



As per the well-known proverb we cannot expect rise of a nation without innovations. It is obvious that new innovations will decide the future of the country. There is a hidden hunger in the industry for new innovations and product developments at the same time even many researches have been carried out in the university system, many have not been commercialized due to various reasons hence neither researchers nor the country get the benefits of those. Industry has a limited awareness on the research works carried out and university has the limited understanding on the industry requirements. By understanding this gap between the industry and the academic sector Ministry of higher education has introduced a system which we all should appreciate and support. Below article is intended to educate our readers on that effort made recently on such new products development related to food industry seeking support from industry to commercialize.

We would like to invite our SLFPA membership to share any suggestions and comment which is worthwhile to share such forum. Please write

your comment to SLFPA representative at UBL - **Rasika Seneviratne (roshan.seneviratne@gmail.com)**. Through the SLFPA Newsletter letter we will be sharing any updates important to food sector which will be of mutual benefit for the industry as well as universities.

Below is the first set of innovations we would like to present. If interested we can connect you with them. Commercial partners are also requested to contact following parties if they are interested in following food products. Commercialization will happen through respective UBLs established at universities.

**Connecting University Business Linkage (UBL) Cells under the Accelerating Higher Education Expansion and Development (AHEAD) operation with interested private sector organizations**

The Accelerating Higher Education Expansion and Development (AHEAD) is an operation funded by the World Bank where the



implementing agency is the Ministry of Education. One component of AHEAD (results area 3) is to strengthen the Research, Development, Innovation and Commercialization (RDIC) activities in the Universities and some Non-State Higher Education Institutions (NS HEIs).

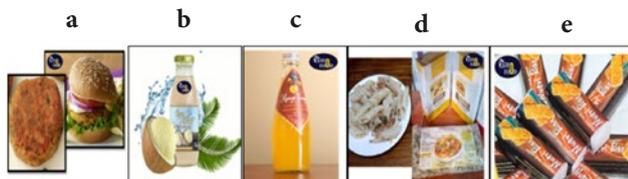
The University level units to liaise with the commercial partners are established in all 15 Universities and few NS HEIs which are referred to as University Business Linkage (UBL) and HEI-Society Linkage (HEI-SL) cells, respectively. These UBLs /HEI-SL cells will support the research teams to identify suitable commercial partners thereby transferring benefits of university research to the industry and society. A need of an online platform to connect the academics to industry is recognized. As such an App "CONNECT AHEAD" was developed to connect the two parties (<https://ahead.lk/connect/>).

The UGC/UBL standing committee gathers every other month to provide an opportunity for few selected UBL/HEI-SL directors to present ongoing research work at their universities. Industrial associations including SLFPA are invited to this meeting to widen the awareness of UBLs/ HEI-SL cells among the industry community.

Food science and technology is one of the major areas of research in many universities especially at Sabaragamuwa, Wayamba, Sri Jayewardenepura, Peradeniya and Ruhuna. We invite members of SLFPA to join hands with UBLs/ HEI-SL cells and support commercialization of research outcomes. Please visit AHEAD website (<https://ahead.lk/result-area-3/>) to find the links to the UBL/ HEI-SL cell websites.

### Agribusiness Centre,

**Faculty of Agriculture, University of Peradeniya**

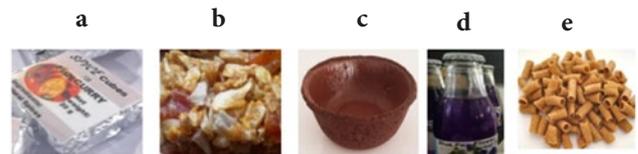


- Spice cubes for chicken and fish curries: 20g cubes convenient and ready to use.
- Nutrient-rich dehydrated tropical fruit bar: no artificial colors, flavor and preservatives.

- Edible dessert cup using banana blossom powder. A rich source of dietary fiber and other nutrients; a potential alternative to replace plastic cups.
- Blue pea (*Clitoria ternatea* L.) flower extract incorporated beverage having functional properties.
- Davulukurundu (*Neolitsea involucrate*) leaf extract incorporated instant rice-flour string hoppers.
- Composite flour mixtures for French bread: 30-40 % substitution for wheat flour with soya bean flour, brown rice flour and chickpea flour.

Contact: Mr. Palitha Arampath/[pcarampath@gmail.com](mailto:pcarampath@gmail.com)

### Department of Food Science and Technology, Wayamba University of Sri Lanka

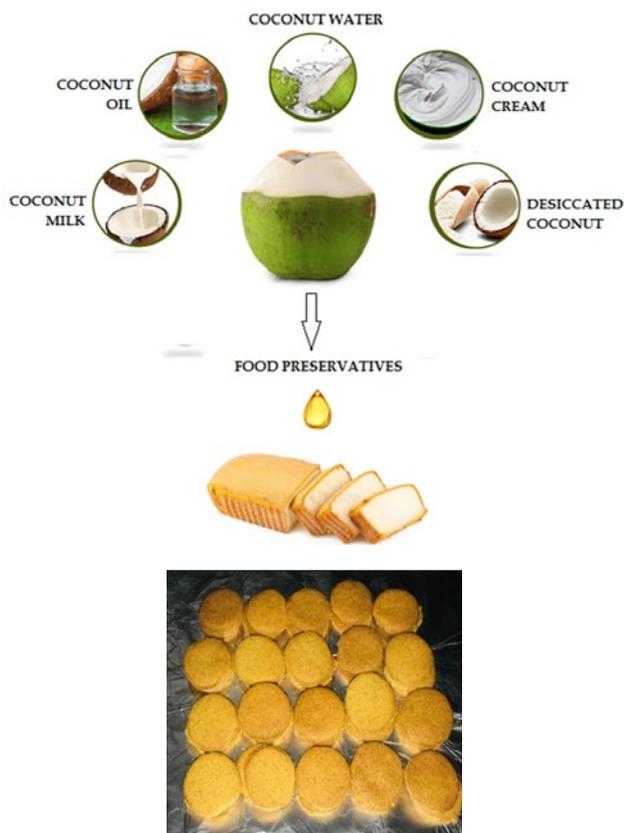


- Patty Polos: Low fat vegan product prepared from tender jack fruit which gives meat like texture.
- Coco Blast: Energy boosting beverage developed using coconut haustorium or coconut apple, No added artificial preservatives.
- Mango peel vinegar: 100% natural product made from the mango peel.
- Probasta: Pasta comes with the goodness of corn, wheat, wheat Semolina and pumpkin seed flour.
- Pumse Nutri bar: Ready to eat vegan product, No artificial colors, flavors or preservatives and gluten free.

Contact – Prof. Chamila Jayasinghe/ [cjayasinghe@wyb.ac.lk](mailto:cjayasinghe@wyb.ac.lk)

## Coconut-based food preservatives

Faculty of Science, University of Kelaniya



Various food products are prepared from coconut. In addition to these various coconut-based products, we have prepared thermally stable coconut-based food preservatives that are capable of extending the shelf-life of many foods. Due to hazardous health effects of synthetic food preservatives such as BHT, BHA, TBHQ etc., consumption of such synthetic food preservatives has been banned in many countries. Our studies have shown that the coconut-based food preservatives are even more effective and more thermally stable than synthetic food preservatives. These natural coconut-based food preservatives extend both chemical and microbial shelf-life of baked cakes by at least 100%. Studies done with trained panels indicate that the added coconut-based food preservatives do not affect the taste, aroma, texture, color, or overall acceptability of food. Our product provides an ideal alternative to synthetic food preservatives.

Contact - Prof. Kapila Seneviratne/ kapilas@kln.ac.lk

## Wine based on Gaviola (*Annona muricata*)

Faculty of Applied Sciences, University of Sabaragamuwa



A Gaviola (*Annona muricata*) based wine was developed by enriching it with antidiabetic herbs for the purpose of increasing the antidiabetic and antioxidant activities. The alcohol percentage is 10%.

Contact: Dr. Namal Perera / [namalperera@appsc.sab.ac.lk](mailto:namalperera@appsc.sab.ac.lk)

## Development of Nutritionally Enriched Maize Based Cookies with the Infusion of Omega 3 Fatty Acid

Faculty of Technology, South Eastern University of Sri Lanka

Nowadays, consumer demand for gluten free foods increases to minimize the risk of celiac disease which is a digestive disorder. Maize is an appropriate food for patients suffering from celiac disease. These cookies are rich in fibre, minerals like calcium, potassium & phosphorous, vitamins like vitamin A, D, E & K, carbohydrates, and Omega 3 fatty acids. The use of maize-legume based composite flour in the production of cookies would promote the value addition of maize and diversification of utilization of this crop in Sri Lanka and globally.

Contact - Dr. A.D.N.T. Kumara/ [adntkumara@seu.ac.lk](mailto:adntkumara@seu.ac.lk)





## WHAT ARE THE OPPORTUNITIES AND NUTRITIONAL TRENDS WITH THE “NEW” NORMAL WHERE FOOD INDUSTRY CAN CAPITALIZE?

The year 2020 would be recorded as a year which changed the world including food behaviors drastically. With the Covid-19 Pandemic world is adapting to the “New Normal”. As a society we have to face the challenge. Beside many negative impacts there are certain positive outcomes including new opportunities as well as nutrition trends where food industry itself can be made use of. With the thought of consumer is the king let’s look some key consumer concerns which is important for the food industry. While respecting the balance diet as well as availability of natural sources for the same like fruits and vegetables, this article intends to provide some possible avenues for food industry on their product development. First we would like to draw your attention on digitalization of the work and learning, where not only office people but also the children have to perform the duties and learning with a digitalized platform. This increased time we spend in front of screens (computers, laptops, mobile phones as well as televisions) across the generations have already created big stress on our eye health. Hence it is very important to take care of our eye health. Maintenance of the eye function,

lowering the risk of eye damage and relieving dry eyes are crucial. Proper nutrition play a key role here where we need to take a balanced diet along with nutrients important for the eye health such as vitamin A, Lutein, omega 3 DHA, etc... Fresh vegetable and fruits, fish oil are natural sources. At the same time there are new opportunities for the food industry to fortify their products with such nutrients as well as introduce nutritional supplement and nutraceuticals in various formats such as nutrition supplement powders, capsules and soft gels.

One such ingredient would be Lutein. Lutein is a carotenoid naturally found in avocados and green leafy vegetables. It is a strong antioxidant and filter of high energy visible and UV light. Hence Lutein helps protect the eyes, specifically the macula (“yellow spot”). Eyes are enriched with lutein in the macula (“yellow spot”), which is most vulnerable to light damage. Lutein supports good vision and may slow onset /progression of Age-related macular degeneration (AMD), a disease that impairs central vision.

Omega 3 DHA (docosahexaenoic acid) is another nutrient contributing for visual development and found in very high concentration in the cell membranes of the retina up to 65%. For the normal function of rhodopsin (pigment in the photoreceptor rod cells) and retinal cell membranes this DHA plays an important role. DHA deficiency is associated with poor night vision and other visual problems. At the same time Omega 3 DHA may be useful to prevent dry eyes also. Dry eye means the lack of tears or an imbalance in the composition of the tear film in the eyes.

Dry eyes will lead to blurring, a feeling of grittiness, burning, red and itchy eyes and eye fatigue. With the Covid Pandemic our usage of digital device increased as well as we tend to read more at the same time usage of certain chemicals resulting dry environment which may lead to dry eyes other than certain health conditions and poor diet. Emerging scientific evidence proves the benefits of Omega3 DHA supplements against the symptoms of dry eyes.

When we come to commercialization many food manufacturers enquire on ability to make claims around DHA. As such would like to provide below few claims already approved by European Food Safety authority (Commission Regulation (EU) No 440/2011) where you can submit to our local food authority for consideration after fulfilling other regulatory requirements.

- DHA intake contributes to the normal visual development of infants up to 12 months of age at 100 mg/day.
- DHA maternal intake contributes to the normal development of the eye of the fetus and breastfed infants at 200 mg/day.
- DHA contributes to the maintenance of normal vision at 250 mg/day in general population.

DHA can be incorporated into consumer diet not only with fish oil but also with different formats such as food fortifications as well as dietary supplements. Other than that, soft gels and gummies with DHA/omega 3 are very popular around the world. Manufacturers tend to use algal DHA and vegan DHA than fish oil based

DHA, due to some negative sensory parameters such as odor and fish flavor which negatively impact consumer acceptability against fish oil.

Second, we would like to draw your attention on mental health for which most of us pay less attention. Change of our routine lifestyle as well as uncertainty built around us have created mental stress. This pandemic has confined us to home or private rooms which results in big stress over humans as social animals. At the same time our general metabolic patterns in the body have drastically changed due to this behavioral change. We are less aware, that our diet also can help us to improve our mental health as well as physical health. For example vitamin B2 helps to provide energy to the brain, Vitamin B12 is also very useful in brain function and overall wellbeing and Vitamin B5 may help to reduce tiredness and fatigue as well as supportive on energy metabolism. This has been accepted by many regulatory authorities and as such following claims have been approved in other countries.

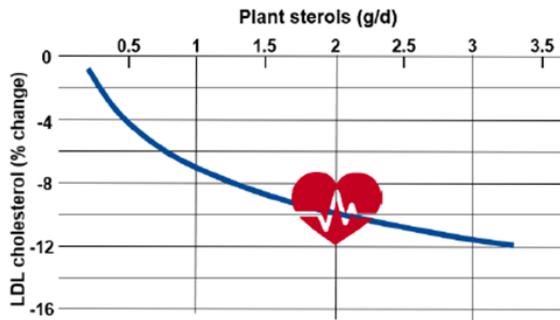
- USA- Vitamin B 5 contributes to the reduction of tiredness and fatigue
- Europe - Vitamin B 5 contributes to the normal energy yielding metabolism
- China - Vitamin B 5 is essential for energy metabolism and tissue formation

With the limited physical activities and mental stress, it is obvious that risk on cardiovascular health has increased. This pandemic itself has increased the number of deaths due to cardiovascular issues. That's why health officials say these non-communicable diseases such as cardiovascular diseases as well as diabetes and blood pressure should be carefully managed which will be very useful in combating against Covid Pandemic also. With the balanced diet there are many healthy diet options consumers can follow. At the same time there are many possible ingredients which the food industry can introduce to the consumers as nutritional supplements, nutraceuticals or food fortificants.

One such ingredient would be plant sterol. This option rhymes with the consumer trend on seeking for Natural food solutions. Plant sterols are natural fat components of plants. Since plant



sterols are structurally similar to cholesterol it compete with Cholesterol. But the body metabolizes them differently which results in



Plat et al, 2019; Lye et al, 2019

improved blood lipid profile for a better cardiovascular health. When considering the regulatory aspect European Food Safety Authority recommends daily intake of 1.5 to 3 g by approving the claim "Plant sterols have been shown to lower/reduce blood cholesterol. High cholesterol is a risk factor in the development of coronary heart disease." There are many documentary evidence as proven non drug options to lower cholesterol, and available in different formats such as spreads, dairy, beverages and soft gels where our local industry also can make use of.

On the other hand, with limited physical exercise there is a tendency of increased obesity as well as body lipids. For such cases conjugate linoleic acid (CLA) would be an attractive solution. CLA is a nutritional ingredient that helps to improve body composition by helping your body to burn fat while preventing fat cells from refilling and storing in your body. It can also help in blocking the enzymes that cells use to absorb unused fat, diverting it to your muscle cells to help promote growth. It is very popular in the western countries including USA. Many formats including soft gels, Sachets, oil, Powder forms as well as fortified foods are available. There were many clinical studies on this ingredient to prove its effectiveness in controlling obesity and body lipids.

At last the author would like to focus on the main consumer need or trend which we all agreed; that there is big demand from consumers for immunity boosting options. Around the world many herbals and Ayurvedic options have become popular where we can discuss in a separate article in future. Herewith let's discuss few traditional ingredients which our food manufacturers can

make use of as immunity boosting ingredients. These ingredients are useful in strengthening the body defense, building healthy gut and immune system and lowering the risk of infection which are very crucial against this Covid-19 pandemic. Vitamin C, Vitamin E, Zinc, Prebiotics, Probiotic and Carotenoids are the generally popular ingredients. Zinc is a vital mineral involved in the production of certain immune cells. Vitamin C and Vitamin E are powerful antioxidants which may be particularly helpful in boosting the immune systems of people under major stress as well as maintain the health immune system. However, from Vitamin family, Vitamin D has widely drawn attention of the healthcare experts with the Covid-19 Pandemic. Vitamin D plays a strong regulatory role in the immune system (both innate and adaptive). Immune cells have Vitamin D receptor and CYP27B1 enzyme (converts Vitamin D to active hormone). Vitamin D 3 has anti-viral effects helping to combat infections. Special attention is paid recently in its anti-viral function in combating Covid-19, e.g. it stimulates antimicrobial defense and inhibits pathogens entry into tissues. Several clinical studies are underway in healthy people at risk of COVID 19 and in patients. High dose Vitamin D upon hospitalization reduced the risk of ICU need from 50% down to 2%. Other than Immunity vitamin D plays a critical role in calcium absorption which will be useful in bone health. Even our body has the ability to synthesize vitamin D. Since we are confined to inside with limited exposure to sunlight there is a risk. Therefore, vitamin D deficiency has been identified as an emerging risk around the world which goes hand in hand with poor bone health.

Finally, we would like to emphasize the importance of nutritional value addition of foods. One good outcome established with pandemic is now consumers are well aware that when selecting a food item they should consider the nutritional and health benefits of food. In other words, they are aware that food plays a much wider role than fulfilling hunger and satisfying taste buds. There are many opportunities in the market to match those consumer needs.

*By Rasika Roshan Seneviratne*  
Account Manager Nutrition and Health  
BASF Lanka Pvt Ltd



# ANNUAL GENERAL MEETING



Sri Lanka Food Processors Association (SLFPA) held its 23rd Annual General Meeting on 30th September 2020 at the '80 Club' Independence Square, Colombo 07, amidst a large gathering of its members.

The main presentation was done on 'Issues facing the food industry, and the recommendations on how to improve and take it to the level of international standards'. These views were shared by Mr Dhammika Gunasekera - Past President SLFPA and Managing Director - Tropical Life Pvt. Ltd, Mr. Delano Dias - President Elect SLFPA and CEO of Millers Ltd, and Mr. Maliek De Alwis - Past President SLFPA and CEO of Ma's Tropical Foods Pvt. Ltd.

The President – Mr. Nishan Perera also spoke and recognized the Past Presidents of the Association who have contributed immensely to bring the Association to the current level.

The committee for the years 2020/2021 consists of President - Mr. Nishan Perera of CMC Engineering Exports GmbH, Hon. Secretary - Mr. Aruna Senanayake of C.W. Mackie PLC, Treasurer - Mr. Nadishan Guruge of Mead Lee Trading Pvt. Ltd., Immediate Past President - Mr. Sarath Alahakoon of Country Style Foods Pvt Ltd., President Elect - Mr. Delano Dias of Millers Ltd., 1st Vice president - Mr. Damitha Perera of Forbes & Walker

Commodity Brokers Pvt. Ltd., 2nd Vice President - Mr. Thusith Wijesinghe of Trans Continental Packaging Pvt. Ltd., 3rd Vice President - Mr. Vasantha Chandrapala of Ma's Tropical Foods Pvt. Ltd., Assistant Secretary - Mr. Lasantha Ratnayake of Kelani Valley Canneries Ltd., and Assistant Treasurer - Mr. Amila Weerasinghe of Nestle Lanka Ltd.

The rest of the committee comprises of - Mr. Sanjeeva De-Silva - Unilever Sri Lanka Ltd., Mr. Jayanga Perera - Ceylon Biscuits Ltd., Mr. Dilanga De Fonseka - C.D. DE Fonseka & Sons Pvt. Ltd, Mr. Hemantha Balasuriya - Coca Cola Beverages Sri Lanka Ltd, Mr. Ruwan Kumara - Ceylon Cold Stores PLC, Mr. Sameera Jayathilaka - Westman Engineering Co. Pvt Ltd., Mr. Roshan Ranawaka - Control Union Inspections Ltd., Mr. Dylan Gonawela - Virgin Oil International Pvt Ltd., Mr. Rasika Seneviratne - BASF Lanka Ltd, Mr. Kolitha Amarasinghe - SGS Lanka Pvt Ltd., and Mr. Nuwan Rodrigo - Rohan Rodrigo Refrigeration & Air Conditioning Pvt Ltd.

SGS Lanka Pvt Ltd. was the main sponsor for this event while Nestle Lanka Ltd. and Sunquick (C.W. Mackie PLC) were the co-sponsors.

The Hon. Secretary, Mr. Aruna Senanayake, delivered the Vote of Thanks, following which the event ended with cocktails and fellowship.



# SLFPA + ECCSL

## Sign MOU for benefits offered to SLFPA Members & Market Access Team



A MOU between Sri Lanka Food Processors Association (SLFPA) & European Chamber Of Commerce of Sri Lanka (ECCSL) was signed on the 3rd of September 2020 at the Colombo Club Meeting Room at Taj Samudra Hotel.

The MOU mainly outlined the benefits offered to the SLFPA membership & the Market Access Team (MAT) members of ECCSL by both parties. Under this MOU SLFPA agrees to share its membership details with ECCSL & ECCSL agreeing to offer its MAT membership to the SLFPA members at a nominal fee of Rs 2,500.

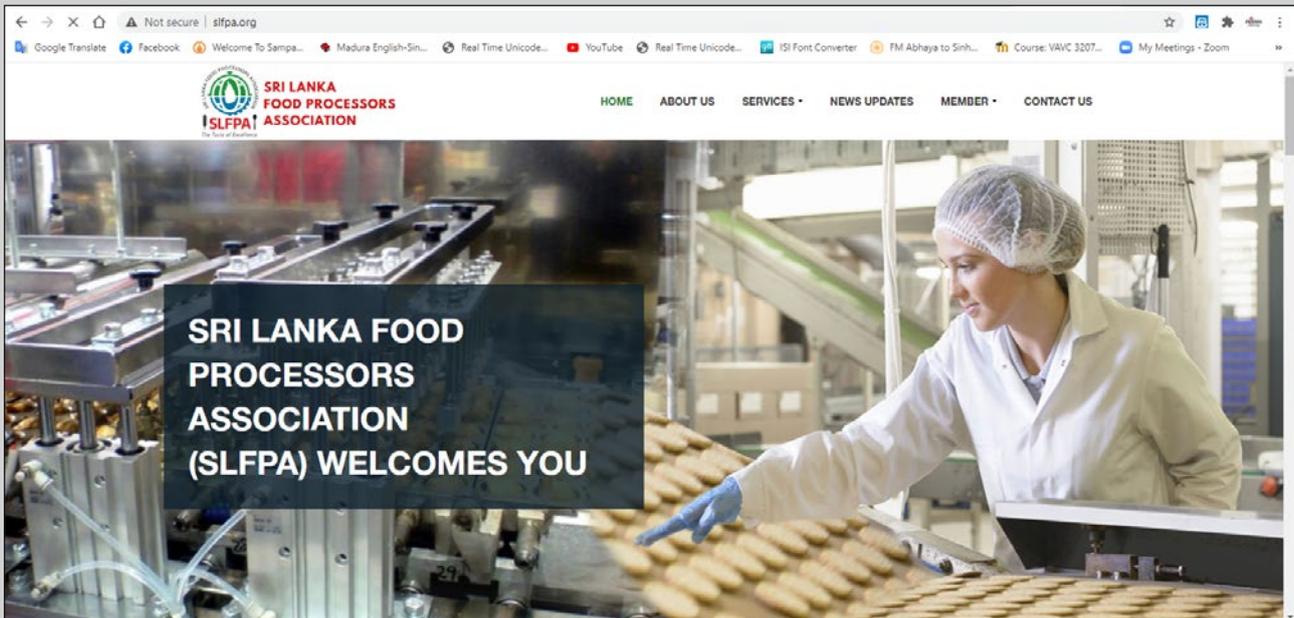
While this MOU is in force the SLFPA - MAT members will get opportunities to join outbound trade delegations to European countries organized by ECCSL. SLFPA - MAT members will also get opportunities to access inbound trade delegations that include companies in the Food & Agro sector.



Mr. Nishan Perera - President & Mr. Delano Dias - Vice President signed the MOU on behalf of SLFPA, while Mr. Arnold Perera - President & Mr. John Wilson - Director signed on behalf of ECCSL.

Other members present for the occasion were - Mr. Ranith Wijesinghe - Founder & Past President SLFPA, Mr. Aruna Senanayake - Honorary Secretary SLFPA, Mr. Dilipan Tyagarajah - Director ECCSL & Mr. Thomas Daetwyler - Director ECCSL.

# SLFPA Website Relaunch



SLFPA relaunches its Website on 11th of November 2020 with a new look after a lapse of sometime. The latest news including the details of the Webinar it conducted during 1st lockdown period, the AGM held in September, Latest

Seminars conducted & the signing of the MOU with ECCSL (European Chamber of Commerce) ... etc are uploaded in the site. The address of the website is [www.slfpa.org](http://www.slfpa.org)



**DeHy-V**

*Convenient and hygienic*

*Dehydrated  
Potato, Onion, Leek,  
Garlic, Carrot*



Marketed by  
**VISVAKA**  
Marketing (Pvt) Ltd.

*MAKES COOKING SO EASY*



Wide range of extracted oleoresins, dehydrated egg powders, modified starches and exclusive premixes for dedicated applications with the ensured best quality.

Visvaka Marketing (Pvt) Ltd., No. 456, Colombo Road, Jaliyagoda, Piliyandala, Sri Lanka  
Tel: +94 (0) 11 5375446 / +94 (0) 011 4368082 Mobile: 070 449 2002-3 E-mail: [marketing@visvaka.com](mailto:marketing@visvaka.com) Web: [www.visvaka.com](http://www.visvaka.com)  
Agencies - Colombo, Panadura, Makola, Negombo, Anuradapura, Kegalle, Kandy, Kurunegala, Galle, Akuressa, Beliatta, Ratnapura, Band rawela





## Young Undergraduate creates ‘Cream Milk Tea Butter’ Product

While there has been a far cry that the country’s universities are lackadaisical and fail to produce employable and creative graduates, in the yesteryear those coming out of universities were considered excellent.

Undergraduate Ms. K. Uduli Indumini, Peradeniya University, was the winner under ‘Most Innovative Process Category for the Process - Cream Milk Tea Butter’. At present there are some universities that understood the development and commercial strategies of the country and in fact gear their undergraduates to invent products and services that could reach international market.

This was apparent at the launch of the ‘Pro-Food, Pro-Pack and Ag-Biz 2020 (Sri Lanka’s largest food, packaging and agriculture Expo)’ and the presentation of awards for the stall holders and the large number of university undergraduates who invented various products, under Food-Science, Food-Technology and Food-Safety. The event took place at the Cinnamon Grand, Colombo last week. At this event there were a large number of undergraduates from some universities lined up to receive the prestigious accolades for their achievements.

Further, the National Science Foundation (NSF) under its Technological Grants Scheme has awarded financial assistance to various universities

to invent various exceptional products and services that would hit not only the local market, but also the world market. In fact some of them have reached the international market already as some of these products have been really unique. The Business Times has been serialising these university achievements which has been partly funded by the NSF.

During the event, the Business Times spoke to one of these award winners, undergraduate Ms. K. Uduli Indumini, Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya.

She became the winner under the ‘Most Innovative Process Category’ for the process she has invented – Cream Milk Tea Butter – a product introduced for tea lovers all around the world – a butter that gives sumptuous flavour of tea along with creamy taste of butter. The butter too was manufactured by the Faculty of Agriculture of the university.

The tea taste is imbibed into butter so that when bread is eaten with this butter one gets the taste of butter as well as tea. She said that she was mindful of ‘Ceylon Tea’ that is accepted as the best tea in the world and thought that with her ‘process’ there would be a certain boost for Ceylon Tea further. No sooner when the product goes to the market, it would hit the international market, she added.

# Open Doors for Innovative Products Inspired by the Pandemic



Since the outbreak, Doctors, Scientists and Designers have been working hard on ideas to facilitate the efforts to overcome and stop the virus spreading all over the globe creating huge opportunities for new product developments and enterprises in this challenging environment.

Apart from the medical needs, it seems that the Global consumption patterns too have changed significantly creating a huge void for natural product needs and convenience, more important factors than the price causing booming sales for some brands and products.

Because Online marketing has become a mainstream buying pattern, along with the new policies of the government, set to increase the involvement of the SME sector in the agro-based, high quality and value-added production as alternatives to similar imported products as well as avenues for reaching the Global market along with these newly created marketing gaps in the global markets.

Especially the startups and young professionals aiming at grabbing the opportunity should be part of their Universities with their existing research and product development facilities and resources to fill in the gaps of these new market needs, mainly to fulfill the need of the people, groceries, retailers and supermarkets which are being opened with new selling lines such as online selling as mobile presence has become a widely used tool at all level of the ages.

The trust developed in online buying prevents social gathering preferred by high up consumers accepted already and gradually accepted by middle-income level as well.

Admirable discoveries from individuals, Organizations and Universities are unleashed every day. Hence the enthusiastic entrepreneurs in the Food supply chain need to realize these opportunities to utilize all the resources within and outside their environment to develop new value added products utilizing the low-cost raw material, services, and resources available currently along with latest policies of the government in rural economic development.

As a showcase for others, we are closely working with the Sabaragamuwa University in our product development needs, sharing their academic knowledge and experience and resources towards identified needs created in this pandemic situation and our Research & Development facilitated by National Science Council enabled us to introduce nutritive 100% natural whey beverage product suitable for all the age levels at an affordable price to the market.

May be the interventions in developing new products would be the stepping stone to defeat the sinking socio-economic situations created as a result of Corona scare which could have a lasting impact for more years to come.

*Mr. Sunil Rodrigo*  
*Chairman Li Li Cheese (Pvt) Ltd.*





SRI LANKA FOOD PROCESSORS ASSOCIATION (SLFPA)

**FOOD FOR THOUGHT**

Excellence and World Class

# NEWSLETTER RATE CARD

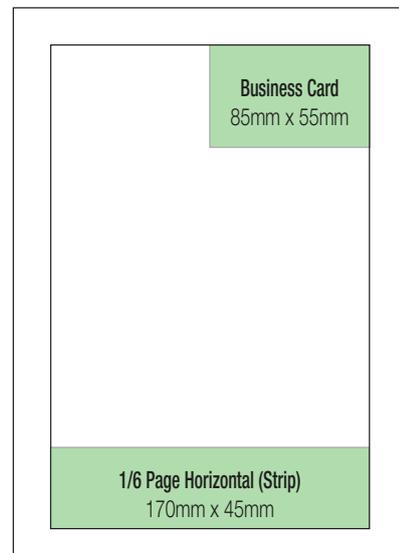
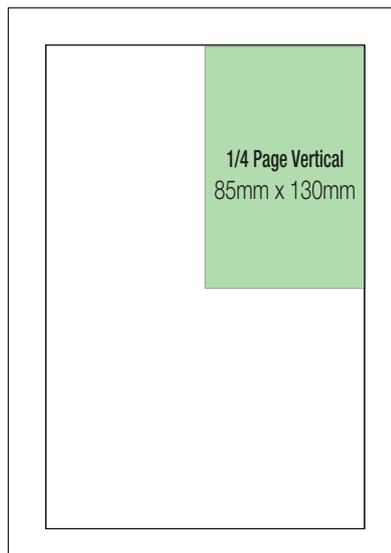
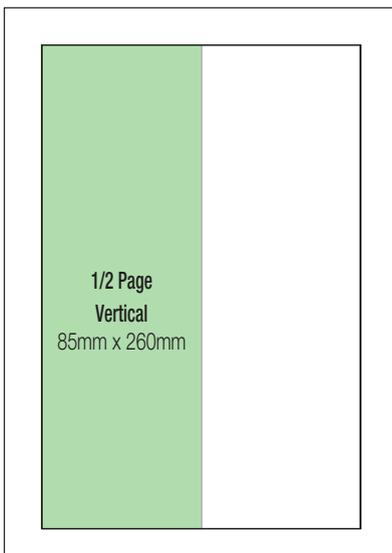
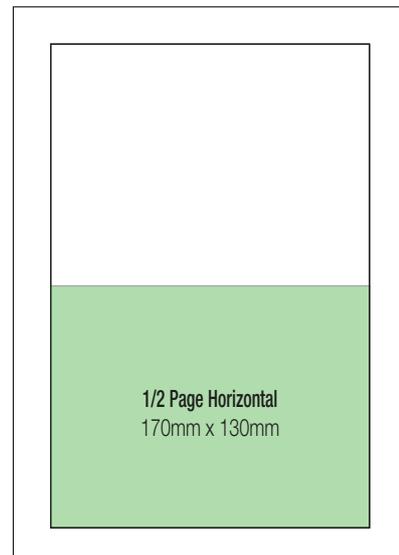
**SPECIFICATIONS:**

Artwork Format - AI, EPS, PDF, CDR

Artwork Colour - CMYK

Artwork Bleeds - No Bleeds

Ad Dimensions	Width x Height mm	Price Per Ad Rs. (Excluding VAT)
1/2 Page Horizontal - Inner Pages	170mm x 130mm	10,000.00
1/2 Page Vertical - Inner Pages	85mm x 260mm	10,000.00
1/4 Page Vertical - Inner Pages	85mm x 130mm	8,000.00
1/6 Page Horizontal - Inner Pages (Strip)	170mm x 45mm	5,000.00
1/6 Page Horizontal - Front Inner (Strip)	170mm x 45mm	8,000.00
1/6 Page Horizontal - Back Inner (Strip)	170mm x 45mm	7,000.00
Business Card - Inner Pages only	85mm x 55mm	2,000.00



**For Inquiries: Anil - +94 773 296 074 Sandya - +94 771 149 397**

## SRI LANKA FOOD PROCESSORS ASSOCIATION (SLFPA)

21 D, Polhengoda Gardens, Colombo 05, Sri Lanka

Phone : +94 11 7548770 / +94 11 4920206 Fax: +94 11 7 548771 E-mail : office@slfpa.org



# SUSTAINABLE FOOD PACKAGING & BIODEGRADABILITY TESTING

## Industrial change

The plastics industry began in the early 1900s when the first synthetic plastic was created by Leo Hendrik Baekeland in the U.S. Since the industry began, annual global plastic production has exploded from some 1.5 million metric tons in 1950 to 359 billion metric tons in 2018. The cumulative production of plastic has already surpassed eight billion metric tons worldwide, with further increases expected in the coming decades.

Over the years, plastics and other non-compostable materials have brought economic, environmental and social advantages. However, their popularity has also meant a rise in non-compostable waste, which brings its own economic, environmental and social issues. The redesign of plastic products, both at the scale of the individual polymer and in terms of the product's structure, could help alleviate some of the problems associated with plastic waste. With thoughtful development, redesign could have an impact at all levels of the hierarchy established by the European Waste Framework Directive:

prevention, re-use, recycle, recovery and disposal. This Future Brief explores current research into the redesign of plastics and developments in biodegradable materials. It considers the implications of redesign and increased use of biodegradable plastics, as well as policy options to maximize benefits and minimize risks.

## Concept

In principle, any organic compound is biodegradable. The meaning of this statement is that the organic carbon of any substance, after a series of degradation processes, more or less extreme and prolonged, can be oxidized into carbon dioxide through microbial respiration. In the absence of oxygen, methane and CO<sub>2</sub> are produced, as known. This conversion process from organic carbon to inorganic carbon is defined mineralization. The terms biodegradation and mineralization are frequently used as synonyms. In reality, not always a biodegradation process leads to a complete mineralization of the substrate. On the other hand, other environmental factors, besides biodegradation, such as temperature, water, irradiation etc., can have a part in the



mineralization process. But, whatever is the degradation pathway, the essential result of mineralization is the closing of the carbon bio-geo-chemical loop.

The meaning of two terms frequently used as synonyms (even by the experts) must be clarified: biodegradability and biodegradation. Biodegradability refers to a potentiality (i.e. the ability of a biological polymer to be degraded by a biological agent). It is the general knowledge that there is at least one enzyme in the biosphere able to break the chemical bonds of a given product chain. Biodegradation refers to a process, occurring under certain conditions, in a given time, with measurable results.

### **What is the difference between Aerobic and Anaerobic Biodegradation?**

In the most basic sense, biodegradability is the ability for a product to be consumed by microorganisms. Biodegradability for the purposes of making claims (as an inherent property of the material) requires a bit more detail.

Currently, unless the product is 100% naturally derived and not materially changed in the manufacturing process, testing must be performed to enable a supplier to make legitimate claims on a products biodegradability.

From a microbial perspective, there are two methods for biodegradation:

- Aerobic in which organisms use oxygen as part of the respiration for consumption of nutrients.
- Anaerobic in which organisms use other elements such as sulfur, in the process of respiration and consumption of nutrients.

In the real world, there is typically a continuum of these two processes, but in waste treatment facilities, the facility is managed in such a way that one or the other process is the predominant form of degradation. For most commercial markets, aerobic biodegradation is preferred.

### **Need of standardization**

With increasing global environmental awareness, the importance of producing biodegradable

plastics, papers, coatings, and other consumer materials is driving manufacturers to be ahead of the curve and gain market share for the future. However, the uncertainty in establishing trusted relationships with laboratories conducting biodegradability assessments plagues those not knowledgeable in this area of specialty testing.

Laboratory test methods are used by industry laboratories to determine biodegradability, an important parameter for the evaluation of the ecological behaviour of substances. Biodegradability has a key role due to the simple fact that a degradable substance will cause no long term risk in the environment. The great variety of biodegradation processes in the natural environment and in technical plants for treating waste water and solid wastes gave rise to a rather a number of test methods based on different test principles. To guarantee the acceptance of the test results by authorities and customers internationally standardized methods (ISO, OECD) and established quality criteria (GLP, EN 45000, ISO 9000) are used.

### **Bureau Veritas Services**

Bureau Veritas undertakes Biodegradable testing keeping up to the very purpose of sustainable development by ensuring the industries to comply to global sustainability policies.

We are proud to be the only service provider in Sri Lanka to extend below testing services facilitating the requirements of the Textile, Plastic, Leather and Chemical manufacturers in terms of their pathway to a sustainable environment by measuring the biodegradability /compostability in products.

The capability is established in Bureau Veritas CPS Lanka for SLS SLS 1557:2017 and SLS 1539 : 2016 for Sri Lanka domestic market and International test standards covering ASTM D6691, ASTM D 6400, ASTM D 5210 , ASTM D5576, ISO 14855 - PART1, ISO 14853, ASTM D5338, ASTM D5511, ISO 20136:2017 and OECD -302 B.

### ***Shenal Edirisnghe***

*Manager - Strategic Business Development  
Bureau Veritas Consumer Services Lanka (Pvt) Ltd.*



# Webinar Series from IFSTSL

(Institute of Food Science and Technology Sri Lanka)

Due to the public health guidelines set by the government against Covid-19 pandemic situation in the country, IFSTSL decided to conduct online webinars through zoom facility.

## Webinar 1

A webinar on “Covid-19 and sustainable food systems; innovations to face the “New Normal” was organized by IFSTSL on 13th June 2020. The speaker of the webinar was Professor Rangika Halwathura-Commissioner, Sri Lanka Inventors Commission. Prof.Halwathura highlighted research findings on gaps seen on sustainable food systems, and provided examples to participants based on his experience.

## Webinar 2

The IFSTSL selected a theme applicable for food industries, for the second webinar of IFSTSL, named “Chemical Hazard along the Food Chain (Farm to Fork)” held on 20th June 2020. Emeritus Prof. Upali Samarajeewa was the speaker of the webinar. Presentation was lined up to discuss various important aspects of chemical hazards in agriculture, food processing and their impact, and efforts to be taken by industries to minimize the impact on the environment. At the end of the webinar Prof. Upali Samarajeewa moderated a Q & A session where the participants clarified several important aspects regarding the presentation made.

## Webinar 3

A webinar on “Smart Foods for Preventive Healthcare during Covid phase” was organized by IFSTSL on 28th June 2020. The speaker of the webinar was Professor Pratima Khandelwal from Bangalore,India. Prof. Pratima highlighted the importance of consumption of “Life Force’-natural fruits, vegetables and spices.

## Webinar 4

A webinar on Food Color Coding (Sugar, Salt and Fat) Regulations was organized by IFSTSL on 11th

July 2020. The speaker of the webinar was Dr.Sujeewa Gunarathne- Senior Regulatory Advisor –Unilever Lipton Ceylon Ltd and also the Immediate Past President of IFSTSL. Dr. Sujeewa presented on color coding regulations, labelling requirements food regulations and their revisions and also she provided guidance to participants based on her experience. Dr.Sujeewa Gunarathne and Prof.Upali Samarajeewa moderated a Q & A session where the participants clarified several important aspects regarding the presentation made.

## Webinar 5

A webinar on “Minimally Processed or Fresh-cut Fruits and Vegetable Products Industry-Overview and Challenges” was organized by IFSTSL on 18th July 2020. The speaker of the webinar was Dr. (Ms) Ilmi Hewajulige Additional Director General –R & D at the Industrial Technology Institute. The webinar was attended by more than 100 participants and they successfully utilized the opportunity.

## Webinar 6

A webinar on “Plant Proteins - A multifaceted ingredient for food industry” was organized by IFSTSL on 18th July 2020. The speaker of the webinar was Dr. Janitha Wanasundara-Research Scientist at Saskatoon Research and Development Centre-Government of Canada. Dr. Janitha presented on types of proteins, uses, nutritional value evaluation for food industry and also she provided guidance to participants based on her experience.

## Webinar 7

A webinar on “Bioactive foods for a healthier life” was organized by IFSTSL on 7th November 2020. The speaker of the webinar was Prof. K.K.D.S Ranaweera - Senior Lecturer University of Sri Jayawardanepura. The webinar was attended by more than 150 participants.

SRI LANKA FOOD PROCESSORS ASSOCIATION (SLFPA)

21 D, Polhengoda Gardens, Colombo 05, Sri Lanka

Phone : 011 7548770 / 011 4920206 Office Mobile : 077 322 2743 Fax : 011 7 548771 E-mail : [office@slfpa.org](mailto:office@slfpa.org)

Design by : Friends Advertising

Registered in the Department of Posts of Sri Lanka under No. QD/114/News/2020

