ri Lanka eco-friendly producers can support 80% of the country's fertilizer requirements for paddy, Dr Sarath Ranaweera, Executive Chairman Bio Foods said in an exclusive discussion held with Daily News Supplements.

He said there were over 300 producers and 49 National Fertilizer Authority (NFA) registered producers who can produce 80% of the national requirement. He therefore opined that there was no serious need to import fertilizer into Sri Lanka specially when the country did not have dollars even to buy medicine. He said the decision to ban chemical fertilizer was a good one, but the application was very bad. He cautioned that a country cannot be converted overnight and it would take about 3 years and one needs to educate policymakers and all stakeholders before such a herculean task is set upon. "We have tons of waste in Sri Lanka that can be converted most of the waste products such as animal droppings, urban waste and other compostable Agri waste into eco-friendly inputs. But you need to add the lost beneficial microbes into the soil only then that you can see efficacy otherwise you don't see big results from just applying compost into a dead soil."

Dr Ranaweea questioned how Lankan kings and forefathers exported rice to other countries and whether they did import urea or NPK. "We were the biggest exporter in Asia and called the Sahal Neliya. Did they import urea from America, Germany, India or China? No. We did it because we had all healthy soil, all the natural ingredients and all the microbes in our soil

He said the company's average export annual earning over the years was USD25 million expect the during the covid pandemic and with the demand increasing for organic food they expect to increase it to USD 100 million in the next 5 years.

food poisoning from an artificial drink incident changed the life of a young mathematician to what he is today, a food scientist and a top bio food producer and famed organic product exporter in the world. Dr Ranaweera went down memory lanes to that very incident that changed his life.

Excerpts from the discussion with Dr Ranaweera

"When I left the Tea Research Institute (TRI) in the latter part of 1991, I wanted to start a project that was connected to tea. But at the same time, I wanted to make sure that the product has not been contaminated with any artificial input. I was victimized somewhere around 1983 with some artificial drink and I was hospitalized for a week and unconscious for a couple of days. This created a huge eagerness in my mind to study how chemical inputs can influence human health. This changed my life. I really wanted to avoid all the artificial inputs, any food that has any colouring or artificial flavour. I wanted to explore more about food science. However my original background was in mathematics. I did physics, chemistry, mathematics, and at that point I didn't know biology or human nutrition."

Turning point

It was during his tenure at the Tea Research Institute (TRI) that Sarath Ranaweera got the opportunity to do his post graduate studies at the Postgraduate Institute of Agriculture, Peradeniya which was also a very fascinating tale.



they initially refused to allow me because I was from a mathematical background. However they gave me an exception and it was a turningpoint for me and the PGI as well. I managed to do my postgraduate studies in science and technology which was a master philosophy programme. Here Sarath Ranaweera mastered human nutrition, how food is absorbed in the human body and what kind of influence it has from the absorption of chemicals.

Bio Foods (Pvt) Ltd and green

It was with all the expertise, practical and academic knowledge that Dr Ranaweera set up the company Bio Foods (Pvt) Ltd in 1993. "The term organic was much unknown during that time, and I had lots of new ideas and I also had a patent right, a new innovation in tea. So I started with that innovation. So that was a pretty much new technology to produce green tea. That was our beginning.

Game changer

"I got an invitation to Germany in 1994 for a presentation of small farmer ecological tea project in Sri Lanka and for participating a three-week workshop related with organic and biodynamic agriculture. That was kind of a big game changer for me and my company. At that time the organic sector was very small and there were only three to four companies in the sector and even in Europe there were no regulations for organic products. After the beginning in 1993, we expanded towards not only tea, but also other products because we worked with the larger number of organic small farmers. And I introduced a new model for small farmers. During free time I did some lectures on invitation in the university and I interacted with the students. And they always said the problem was that they couldn't depend on Sri Lankan agriculture and their fathers suffered a lot, because there was no assurance. We missed this point in Sri Lanka as a developing country. Why people don't ioin agriculture is not the income level, but the assurance of income. If you join

the government sector or private sector, you know how much money you get at the end of the month, this amount is the assurance. So at least you will get it."

Fixed minimum target price

Sarath Ranaweera introduced the fixed minimum farm gate price that is calculated based on the cost of production plus 10% profit margin.

"When they have a 10% profit margin, they were very interested, and I termed it as the cost of sustainable production (COSP). So, that's how I started this small farmer project and farmers initially didn't believe it, because it was new and hardly companies followed this. And then later on, farmers understood that it continued and then they saw sustainable income flowing to their families. So, then we actually saw a huge number of farmers joining from different villages, who respected the biodiversity. Without biodiversity good organic practices cannot be followed. So, we defined organic in 1993. Organic has been defined as 1) environmentally friendly(no artificial chemical inputs can be used), 2) culturally sensitive, (we have many cultures in Sri Lanka, so we have respect for all the Agri-cultures practices otherwise it is not organic). 3) Social just/responsible (we hate discrimination exploitation, that's how the Fair-Trade concept came into organic philosophy). And then 4)organichas to be economically viable otherwise, it will become like a hobby farm.

Efficient management system

"And then on top, we had something like an efficient management system, where the farmers have to do their own homework, education, bookkeeping and everything whether they are small- or large-scale farmers. So, it's an efficient management system that support clear traceability from farmer to consumer. So, this was introduced in mid-nineties now it is the definition that is carried forward by even international bodies."

Bio Food world's first Fair Trade and organic company

Dr Ranaweera said when their tea became popular in Germany as a very first organic green tea entry in Germany. This small organic farmer project spread in Europe as a beautiful model established in Sri Lanka and people from Fair Trade International wanted to see this project. "They came to Sri Lanka to see this project. They understood that they had not to invent a sustainable model again. So, they identified and selected me as a resourceful person to set up the standards for different fairtrade products internationally, and immediately I was selected as a standard committee member under fair trade labeling. So, I'm the person who led setting standards for spices. As a result, Bio Foods became the World's first Fair Trade and organic company for spice production as well as coconut production

Icon in the world

A group of international team members came to Sri Lanka, and they conducteda seminar here and they had doubts about the presence of sustainable farmer model in any part of the world. And they really wanted to come and see this project. And after their visitation to farmers and seen the ground level reality



life is gone from the soil. Soil is dead in many parts of Sri Lanka because of the heavy use of chemicals, and now soil must be rejuvenated by adding lost beneficial microbes which we and few other companies produced.

We have facilities to manufacture large amount of organic bio liquid and solid plant and soil inputs. We not only support the Sri Lankan economy by exporting high value added products but also substituting chemical fertilizer by organic and ecological fertilizers reducing foreign currency outflow from our country

Organic

Dr Ranaweera mentioned that the term "organic" can be used for the product when it is certified by an accredited body that is registered under NOCU the National Organic Control Unit (NOCU) in Sri Lanka. "There is a gazette notification published in 2017 legalizing the term

period. Additionally, N₂O is the largest stratospheric ozone-depleting substance and is projected to remain so for the remainder of this century. Tanya Steele, WWF's chief executive said:

Vinimaya-Viruwo

Contact: 0112 429 339, 0777 270 076

with positive impacts, they made a collective statement about their findings and that message went all over the World among the fair-trade communities and we had become an icon in the world during that period. Then the Fair-Trade Foundation UK also made a beautiful article about our project. Bio Foods has become a kind of model to follow in the world on organic and fair-trade combination. "And so that's our beginning and we expanded our product portfolio towards not only tea but also spices, coconut products and IQF most demanding new product line where you make products preserved for years by freezing. So it's a special technique. We have many factories for tea, spices, coconut and IQF which is the latest modern factory that is certified BRC and the factories are all certified different many internationally recognized certifications. We are everywhere in the world, almost every European country,

MOPA

project called Marginalized Organic Producers Association we call it MOPA and it is our dedicated supply partner. There are about 3,000 farmer families

the US, Canada, Japan except for East

Asia, Middle East and Russia.

than the exports organic farmers are now supported with highly effective organic solid and liquid fertilizer. Bio Foods has a large organic fertilizer unit and we supply large amount of organic and ecological bio fertilizer to the Sri Lankan government.

Zero input

"If you have a zero net imports and do the export, you can really make a positive gap between export and import. Right now, Sri Lanka as a country has higher import volumes and low export volume and suffers as a result. So, we as a company and a model take net export revenues having better revenues by exporting higher value-added product. When you compare with conventional exports our prices are higher because it is organic and at least we get 50% more for the same product if you label it as organic.

Even for our agriculture we have our own sustainable fertilizer company. Bio fertilizer enriched with beneficial microbes gives higher yield. Organic concept and the production methods are And in addition, we look after our not properly understood yet and are farm project, we have a huge farm misinterpreted in Sri Lanka.Farmers apply compost and complain about poor yield of course, if you put compost on a dead soil, you will not get expected yield. When the beneficial microbes are gone,

organic in Sri Lanka. Hence if you want to label any product organic it has to be certified by an accredited body," he

Tanya Steele

"Whether you like it or not the whole world is moving towards sustainable food production. If you really look at the millennium development goals, they urge for sustainability, food security, transparency and traceability. So how do you achieve it? You have to introduce what is ideal for Sri Lanka and it's economy Global meta-analysis of the

nonlinear response of soil Nitrous Oxide (N₂O) emissions to fertilizer nitrogen published by IuriiShcherbak, Neville Millar, and G. Philip Robertson expressed that 130 Trillion USD (Approx.40% Global assert value) has been allocated for protection of the environment, minimize the emissions, GHG. Further the document emphasized Nitrous Oxide (N₂O) is a major Greenhouse gas (GHG) with a global warming potential ~300-fold that of CO₂ over a 100-y time







from four regions Uva, Wayamba Central and down South. Bio Foods has formed a few small farmer groups and later made them independent. We source raw material mainly from MOPA and we also work with many other supply chain partners. Bio Foods Ltd processes all the raw material in our organically certified facilities, or leased out certified facilities, and export to Europe mainly in different forms. In addition, we have a higher priority for research and development because without R&D no SME sector can survive. So we have a lot of research to invent new products, if you invent new products you can survive because the world competition is such that if you don't find a new one, somebody will bulldoze you and copy you and you are done. So, our major difference is that we have a complete value chain, farmer to consumer. Our products move from farmer to consumer with a nice story connecting farmer with the consumer

which is called Fair Trade link. Other

"We can't tackle climate change and keep global temperature rise to 1.5C without halting nature loss - and we can't save nature without changing what's on our supermarket shelves." Meanwhile, five of the UK's biggest supermarkets - Tesco, Sainsbury's, Waitrose, Co-op and M&S - pledged to halve the environmental impact of a weekly food shop by the end of the decade

They would achieve this by reducing carbon emissions, deforestation, food waste and packaging. The British retailers' efforts will be monitored by the WWF. Therefore, Dr Ranaweera said the country was going backwards, without properly understanding the world requirements. He said the world needs sustainably produced food and other items and questioned whether our country has plans to face it and achieve it.

> **BY FIZEL JABIR** PIX BY NISSANKA WIJERATHNE



