



SIXTH NATIONAL ASSEMBLY

PARLIAMENTARY

DEBATES

(HANSARD)

FIRST SESSION

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MAURITIUS

Sixth National Assembly

FIRST SESSION

Debate No. 20 of 2018

Sitting of Friday 29 June 2018

The Assembly met in the Assembly House, Port Louis at 3.00 p.m.

The National Anthem was played

(Madam Speaker in the Chair)

The Prime Minister: Madam Speaker, the Papers have been laid on the Table -

A. **Office of the President**

The 44th Annual Report of the Ombudsman for the year 2017. (In Original)

B. **Prime Minister's Office**

Digest of Demographic Statistics 2016.

C. **Ministry of Local Government and Outer Islands**

The Municipal Council of Quatre Bornes (Fair) (Amendment of Schedule) Regulations 2018. (Government Notice No. 79 of 2018)

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ORAL ANSWER TO QUESTION

MARINE FISH FARMS – IN-LAGOON & OPEN SEA

The Leader of the Opposition (Mr X. L. Duval) (*by Private Notice*) asked the Minister of Ocean Economy, Marine Resources, Fisheries and Shipping whether, in regard to the in-lagoon and open sea marine fish farms, he will –

- (a) state if he has been made aware of an increased presence of sharks and of other predators in the vicinity thereof;
- (b) state the measures taken by his Ministry to closely monitor the effects thereof on the environment and on the marine ecosystem, and
- (c) give details of the large scale projects thereof approved as at to date.

The Minister of Ocean Economy, Marine Resources, Fisheries and Shipping (Mr P. Koonjoo): Madam Speaker, in line with the Government's Vision 2030, one of the key activities relating to the development of the Ocean Economy concerns the expansion of the aquaculture sector.

Development of aquaculture activities is a *sine qua non* for food security and availability of animal protein to ensure livelihood. According to reports from international organisations such as the Food and Agriculture Organisation, catches from the capture fisheries is stagnating worldwide. The FAO report on "The State of World Fisheries and Aquaculture", published in 2016, reveals that world per capita fish supply reached a high record in 2014, thanks to the vigorous growth in aquaculture which now provides half of all fish for human consumption.

As regards Mauritius, our local production from lagoon has been declining over the past years from about 900 tonnes in 2011 to 560 tonnes in 2017. Our local demand for fish is around 26,000 tonnes.

To meet the market demand, we have to resort to import of fish products. However, this measure is temporary until such time that local production is able to satisfy the market demand.

In this context, aquaculture is a privileged vehicle towards attaining the level of self-subsistence. In fact, my Ministry is promoting the development of aquaculture to increase fish production and create employment.

In accordance with the Fisheries and Marine Resources Act 2007 (Amendment of Schedule Regulations 2015), 20 sites have been prescribed for the development of large scale aquaculture activities. In addition, 10 sites have been identified for small scale aquaculture projects at –

- (i) Grand Gaube;
- (ii) Poudre d’Or;
- (iii) Quatre Soeurs;
- (iv) Bambous Virieux, and
- (v) Grande Rivière Sud Est,

where floating cage structures have been installed by my Ministry at a cost of around Rs11 m. and allocated to ten Fishermen Cooperative Societies since last year.

Moreover, the Ministry of Housing and Lands has vested six *barachois* in my Ministry as from 2014 onwards in the following regions –

- (i) Petit Barachois at Poudre d’Or ;
- (ii) Grand Barachois at Poudre d’Or;
- (iii) Barachois Trou Cango at Poudre d’Or ;
- (iv) Barachois Butte à l’Herbe at Calodyne ;
- (v) Barachois Mahebourg at Cité La Chaux, and
- (vi) Barachois Fountain Bay at Pointe des Lascars.

These *barachois* have been allocated for aquaculture projects to six companies.

Mr X. L. Duval: On a Point of order. Madam Speaker, I drafted the question specifically relating to in-lagoon and open sea marine fish farms. It has nothing to do with *barachois*.

Madam Speaker: Hon. Minister, the *barachois* that you are mentioning and the in-lagoon and open sea marine fish farms are the same?

Mr Koonjoo: Yes.

Madam Speaker: Hon. Leader of the Opposition, he is saying it is the same thing.

(Interruptions)

Hon. Minister, please proceed and explain how it is the same thing.

Mr Koonjoo: The first large scale aquaculture project in the lagoon started in 2002 by the Ferme Marine de Mahebourg which is a local company. This company has been

allocated eight sites and its production which was initially around 300 tonnes, has now reached 1,200 tonnes and it is targeting fish production of 5,000 tonnes annually in the future.

Madam Speaker, with regard to part (a) of the question, I wish to inform the House that lately, there has been an outcry in the Press and from certain sea users, including AHRIM, regarding the alleged presence of sharks in the vicinity of the fish farms. In response to the public outcry, surveys and monitoring exercises have been carried out at the different sites by a technical team of my Ministry. These did not reveal the presence of sharks in the vicinity of the floating cages installed for aquaculture activities.

In the course of their survey, officers of my Ministry also gathered information from La Ferme Marine de Mahebourg, which has confirmed that so far no shark attack has been reported on their floating cages situated at Vieux Grand Port Channel. In fact, on 29 May 2018, this year, my Ministry received a report from the company informing us that on 25 May, the net of one of the floating cages located at Pointe aux Feuilles had been cut at three distinct places, leading to escape of fish. Each cut was of one metre in length and was a straight one with no sign of tugging, which is a clear indication of human intervention rather than damage or attack by marine predators. The case has been reported by the company to the Police.

Madam Speaker, notwithstanding the absence of the evidence of presence of sharks and other predators, the then Board of Investment commissioned a study, the focus of which was the review of existing information on the effects of aquaculture activities on the occurrence, residency, behaviour and abundance of sharks in the lagoon and in the region. The study also encompassed the potential impact that the development of aquaculture may have on changing status of sharks in Mauritius. The study, which was undertaken by Dr. Jeremy Kiszka, a researcher from Florida International University, whose expertise is in the field of ecology and behaviour of large marine vertebrates, has, *inter alia*, concluded that –

- (i) there is no empirical evidence worldwide, that fish farming activities have led to an increased occurrence of shark bites on human beings, and
- (ii) aquaculture does not impact on the proliferation of sharks and as such future development within this sector should not be deferred.

Madam Speaker, regarding part (b) of the question, my Ministry carries out regular monitoring exercises and ecological surveys around the ten floating cages in the lagoon, as well as at the sites allocated to Ferme Marine de Mahebourg. The results of the analyses of the physico chemical and microbiological parameters are within the limits of the Coastal

Water Quality Guidelines for Class Aquaculture. The results are communicated to the Environmental Monitoring Committee of the Ministry of Environment. Furthermore, as one of the conditions of its EIA licence, Ferme Marine de Mahebourg has an obligation to carry out quarterly water quality analyses and submit results to my Ministry. So far, no abnormality has been observed.

However, I should inform the House that in the course of their monitoring exercises especially in the regions of Roches Noires, Pointe des Lascars, Poudre d'Or and Grand Gaube, my officers noted that gears and baits had been installed in the lagoon. This practice might have been resorted to by fishermen with a view to attracting sharks.

(Interruptions)

Madam Speaker: Please, proceed!

Mr Koonjoo: In order to address the issue, my Ministry is coming up with sensitisation activities on the dangers of placing gears and baits to attract sharks.

In addition, a research study carried out by the University of Mauritius in collaboration with my Ministry has revealed that the floating feed used by farms is eaten away by marine organisms. Moreover, the studies have also shown that fish farming does not affect our corals and, in fact, helps the growth of corals near the cages and sometimes on the cages. It has also been noted that coral regeneration has been observed in the region.

Madam Speaker, as for part (c) of the question, four large-scale projects have been approved as follows –

- (i) Ferme Marine de Mahebourg allocated eight sites in the lagoon at Pointe aux Feuilles for the culture of Red Drum and Bar fish since 2002;
- (ii) Grow Fish International allocated two sites off lagoon at distance of 1.2 km from the shore at Bambous at a depth of about 400 metres, in 2015, for the culture of Cobia fish. This company has not started its activities in view of an appeal lodged by AHRIM and Sea Users Associations against the grant of an EIA licence for this project. The case is *sub judice*;
- (iii) Mascareignas Oysters Co. Ltd allocated one site in the lagoon at Bois des Amourettes in 2017 for oyster culture, and
- (iv) Abagold Mauritius Ltd allocated four sites in the lagoon at Bois des Amourettes for the culture of Red Drum Fish in January 2018. The company is awaiting the EIA and other clearances to start its activities.

Madam Speaker, I take this opportunity to reassure the House that the conservation and the protection of the marine ecosystem and biodiversity stand high on the agenda of my

Ministry. In our endeavour to increase fish production, we are guided by best practices and recommendations made by international organisations which mitigate for the sustainable development of our marine resources.

I, therefore, wish to reiterate that the policies adopted in the ocean economy sector have as prime objective sustainable development which is centrally supported by responsible exploitation of the ocean for the benefit of the present and future generations. Any valid proposal would certainly be welcomed.

I should also mention that the development of ocean economy will never be to the detriment of other economic pillars. Government will act in such a way so as to ensure food security and the livelihood of the fishermen community.

Thank you, Madam Speaker.

Mr X. L. Duval: Madam Speaker, if I can ask the hon. Minister firstly, now that he is proceeding with the authorisation of a massive fish farm on the West Coast and also substantial expansion of the Ferme Marine de Mahebourg, whether he has read two reports that have been produced by Government, one called – ‘Accelerating the Development of Sustainable Aqua-Culture’, and the other one ‘Mauritius National Exports Strategy’. Has the Minister read these reports and taken note of what it says?

Mr Koonjoo: Madam Speaker, I have not read them as such, but I have got feedback from my officers what they do contain.

Mr X. L. Duval: Madam Speaker, the hon. Minister proceeds to give vast numbers of permits and has not bothered to read the report that tells him that Mauritius – I have read the report, has the Minister read the report? I will tell him what the report says. The report talks, Madam Speaker, and I will table it, he can read it, about the inadequacy of the present laws and regulations. It talks about lack of expertise in the veterinary field. It talks about need to expertise in detecting animal diseases and certified laboratory. All this, Madam Speaker, is in the report and, therefore, we can only be surprised. I would like to have the answer of the Minister. How can he proceed with such a huge expansion of our culture for fish farms without having put it to effect, let alone read, what the report says because none of these, Madam Speaker, has been done? These reports date 2015 and last year 2017.

Mr Koonjoo: Madam Speaker, Rome was not built in one day. The hon. Leader of the Opposition wants me to do in two years what they have started back in so many years. I said in my answer more than 15 years, they were with the project and nothing has been done. When we came, it was the first time in the history of ...

(Interruptions)

Madam Speaker: Please!

Mr Koonjoo:... the Ferme Marine de Mahebourg, that they received the concession from this Government. We signed it. The Rt. hon. Minister Mentor at the time was the Prime Minister; we signed it. And they are giving result now. I just said that they are expecting more than 5,000 tons of fish in the years to come.

Mr X. L. Duval: I take it as a very, very serious issue, that reports have been ordered by this present Government, asking for major reform to be done to our laws and certified by the Ministry and have not been even read by the hon. Minister, let alone taking into account, before granting permission for a fish farm, of 100,000 tonnes of fish annually. 100,000 tonnes of fish annually whereas the Ferme Marine does only 1,000 tonnes! This is hundred times bigger than Ferme Marine. None of these things have been done before granting permission and that, Madam Speaker, is a scandal.

Mr Koonjoo: Madam Speaker, let me tell the hon. Leader of the Opposition that the report he is talking about is meant for the export of fish, not to sell fish in Mauritius.

(Interruptions)

A new Fisheries Bill is being finalised and we will have a new Fisheries Bill soon in the Parliament.

Mr X. L. Duval: Madam Speaker, three years ago, in 2015, in response to a PQ, the hon. Minister responded that the Fisheries Bill is being finalised and will be presented to Parliament shortly. He is now saying three years afterwards the same thing! When is the Fisheries Bill coming?

Mr Koonjoo: I just told, Madam Speaker, that it is coming very soon.

(Interruptions)

Very soon!

(Interruptions)

Madam Speaker: Order!

Mr X. L. Duval: Same thing that the hon. Minister said three years ago! Madam Speaker, is he telling us that the Ferme Marine de Mahebourg which is producing for the local market and the 100,000 tonnes that are being produced in the West coast are going to be for the local market, this is why he has done nothing that has been put in the report?

Mr Koonjoo: I just replied, Madam Speaker, that the Ferme Marine de Mahebourg is exporting to other countries, and they are creating jobs for the people in Mauritius.

Mr X. L. Duval: The hon. Minister is not understanding or responding to the question that I am asking, Madam Speaker. Now, let me deal with the presence of sharks.

Everybody knows that a large stock of fish in the lagoon will attract sharks. It is not particularly a difficult science to understand that.

Now, I have taken the trouble of speaking to people in Grand Gaube where I live and they have produced pictures of sharks. These are is a tiger shark, a bull shark. The tiger sharks are particularly aggressive sharks, Madam Speaker. And I take it from the people of Grand Gaube whom I believe - in fact, I believe them more than I believe in something that is said in this Parliament - that they were caught in the lagoon and the same thing happens in Mahebourg. I spoke to the fishermen. They are catching now a large number of sharks in these lagoons, Madam Speaker. The hon. Minister said that he has a report by one Mr Jeremy Kiszka, will he table that report?

Mr Koonjoo: I will table the report, Madam Speaker.

Mr X. L. Duval: Can I ask the hon. Minister whether this Mr Kiszka spent the whole of two days in Mauritius to do his report? Is he is the same person?

Mr Koonjoo: The name I mentioned, Mr Kiszka is an authority in America and well-known everywhere in the world. I won't put any doubt in his capacity, Madam Speaker.

Mr X. L. Duval: I asked whether he spent the whole of two days. I did not ask whether he was an authority anywhere. I asked how long he spent, whether he spent two days in Mauritius to do that report?

Mr Koonjoo: I don't know - I search how many days he has spent in Mauritius or with him!

(Interruptions)

Madam Speaker: Order! Order, please! Yes?

Mr X. L. Duval: The hon. Minister will table the report, is that correct?

Mr Koonjoo: I did not hear. Can the hon. Leader of the Opposition repeat, please?

Mr X. L. Duval: Yes, of course. Will the hon. Minister table the report? Does he confirm that?

Mr Koonjoo: Yes, no problem.

Mr X. L. Duval: Madam Speaker, I understand that the person only spent two days in Mauritius and this is completely, therefore, unrealistic to expect any sort of intelligent report to come from him, whatever expert he may be. I would like to ask the hon. Minister about the frequent reports of massive escapes of red drum and sea bass in the lagoon of Mahebourg and whether his experts, so-called experts that he has, have informed him of that, and also looked at the consequence of having these predatory fish, carnivorous fish, thousands of them released in the lagoons and what is the effect on the ecosystem there?

Mr Koonjoo: Madam Speaker, in my reply, I stated that the case is before the Court.

(Interruptions)

Madam Speaker: Please, hon. Rutnah!

Mr Koonjoo: Madam Speaker, I should tell the House that these fish which the hon. Leader of the Opposition is talking about, do not spawn in our tropical waters.

Mr X. L. Duval: It is even worse, they don't even reproduce. So, they are eating our local fish. This is the issue. Thousands of them have escaped whether by sharks attacks or whether they have escaped by some problems in security there. They have escaped by the thousands. The hon. Minister just has to go to Mahebourg and ask them and he will find that there are thousands of them loose in the lagoons.

Mr Koonjoo: Madam Speaker, in my speech I said that it is the job of persons who have cut the net. It is not by itself. The case is before the Court and I think the Ferme Marine de Mahebourg is suing the people...

Mr X. L. Duval: Madam Speaker, does not the Ferme Marine de Mahebourg has a duty to protect its installations with security during the day and at night so that even if it was vandals or whatever, that is also the fault of the Ferme Marine de Mahebourg? It is also the hon. Minister's fault for not ensuring that there is appropriate security at the site.

Mr Koonjoo: I want to repeat again that the case is in front of the Court and those who have done the mess, are going to be sued in the Court.

Mr X. L. Duval: I am sorry, which Court is it in front of? Which Court?

Mr Koonjoo: It is the Court of Justice.

Mr X. L. Duval: This is ridiculous!

(Interruptions)

Madam Speaker: Order, please!

Mr X. L. Duval: I think for a moment I thought he meant the food court because nobody has been caught. This is absolutely incorrect, Madam Speaker! I would like the hon. Minister to correct what he said. There is no case in Court relating to any vandalism with respect to Mahebourg because nobody has been caught. Fish has been caught, but nobody has been caught!

(Interruptions)

What Court is the Minister taking about? He is the hon. Minister, he should respond; what Court is he talking about? What Court? Is he making jokes here? What Court is he talking about?

Mr Koonjoo: I told the hon. Leader of the Opposition it is the Court of Justice.

Mr X. L. Duval: This is rubbish, Madam Speaker! The culprits have not been caught.

Mr Koonjoo: Madam Speaker, I said to the House that the nets were cut. It was not innocently...

(Interruptions)

The investigation is still on.

(Interruptions)

Mr X. L. Duval: What a difference between...

(Interruptions)

Madam Speaker: Order!

(Interruptions)

Order!

Mr X. L. Duval: I was going to say a word, but I would not use the same word for the hon. Minister.

Madam Speaker, concerning the project on the West coast, can I confirm with the hon. Minister that it is a huge project, dealing with 100 times bigger than La Ferme Marine de Mahebourg - 100 times bigger - and that if you put it end to end, the cages will go five kilometres? Is my understanding correct about this project?

Mr Koonjoo: I did not hear. What project is the hon. Leader of the Opposition talking about? Is it the western project ...

Mr X. L. Duval: Growfish.

Mr Koonjoo: Growfish...

(Interruptions)

It is on the site of Bambous, and they are working upon that. There was a meeting in my Ministry about Growfish. The promoters and my officers found that there was a problem about the place they were looking for. They could not use that place because there were some people on that site...

(Interruptions)

Quelle dimension?

Madam Speaker: No, please! Hon. Leader of the Opposition!

Mr Koonjoo: And they arrived at a conclusion that Growfish will...

(Interruptions)

Yes, I was saying the same thing. The project of Growfish will be cancelled out of lagoon, 1.2 kilometres away, depth 400...

(Interruptions)

I just said that; 400 metres in the sea.

Mr X. L. Duval: I do not know which question the hon. Minister is answering.

(Interruptions)

He is not answering my question.

(Interruptions)

Madam Speaker: Ask your question!

Mr X. L. Duval: My question is that it is a huge project. It has been shown that he has done nothing for the last three years to change the laws and the laboratory, etc., as was my first question.

It is clear that this massive project of 100,000 tonsne is going to attract to Mauritius, predators, sharks around the coast of Mauritius, and I would like the hon. Minister to think very carefully of the mitigating measures that he is going to take because, to my mind, this single project, which is a huge project, is going to put in danger not only the tourism industry in Mauritius, but also the right of every Mauritian to have a dip in the sea and to enjoy the lagoons of Mauritius.

Mr Koonjoo: Madam Speaker, I said in my answer that this project which the hon. Leader of Opposition is talking about will take place about 1.4 kilometres outside the lagoon. I do not think that any person or all the tourists will go out that distance to have fun at sea. I do not believe that.

It will be a big project, and this is the problem with the hon. Leader of the Opposition. The big project will bring jobs in Mauritius, and it will definitely be a huge project for the future.

I also said in my reply that mitigating measures would be taken to see to it that, according to the EIA licence that will naturally be given, nothing is done to distort the ecosystem of the ocean.

Madam Speaker: Hon. Leader of the Opposition, your last question!

Mr X. L. Duval: Madam Speaker, last question. I rephrase, I think it is not mitigating that is required. We need to cancel this project, Madam Speaker. It is on the West coast of Mauritius, the nearest point to Reunion Island.

Now, does the hon. Minister know that in Reunion Island, since 2011, a few years ago, there have been 21 attacks of sharks on people, of which nine have been fatal, and these nasty sharks, hungry sharks, could very well be attracted to Mauritius on the West coast and

destroy this goose with the golden egg, which is the tourism industry. My request is for this project to be cancelled altogether.

Madam Speaker: Yes, reply!

Mr Koonjoo: Madam Speaker, I just said in my reply that the case of Growfish is in Court. I should make the House understand one thing. He is talking about Reunion. In Reunion, they have got a different story there. I do not have any problem with Reunion, but there, often sharks attack people. They attack people, but in Mauritius...

(Interruptions)

Madam Speaker: Order, please! Finish your reply, because time is nearly finished.

Mr Koonjoo: Yes, Madam Speaker.

In Mauritius, since the last 70 years, I have never seen anybody complaining that he has been attacked by any shark in Mauritius.

Madam Speaker: Time is over!

SUSPENSION OF S.O. 10(2)

The Prime Minister: Madam Speaker, I beg to move that all the business on today's Order Paper be exempted from the provisions of paragraph (2) of Standing Order 10.

Mr Roopun rose and seconded.

Question put and agreed to.

PUBLIC BILLS

Third Reading

On motion made and seconded, the Appropriation (2018-2019) Bill 2018 (No. VII of 2018) was read a third time and passed.

Second Reading

THE USE OF PESTICIDES BILL

(No. VI of 2018)

Order for Second Reading read.

(3.35 p.m.)

The Minister of Agro-Industry and Food Security (Mr M. Seeruttun): Madam Speaker, I move that the Use of Pesticides Bill (No. VI of 2018) be read a second time.

Madam Speaker, the Bill that we have before the House today is meant to regulate the use of pesticides with regard to fresh agricultural products in our country. As the House is no doubt aware, agriculture has always been a strategic sector well before independence.

Qui dit agriculture, dit aussi pesticides.

As a matter of fact, the use of pesticides has increasingly been resorted to in our agricultural practices. Although it is common knowledge that pesticides are harmful to our health and the environment, our commitment towards food security and food safety has always been high on the agenda of this Government.

The excessive use of pesticides constitutes a major threat to our food safety so much so that this matter has become a growing source of concern by consumers.

Two studies carried out respectively by the UNDP and the Ministry of Health and Quality of Life jointly in 2013 and the Mauritius Chamber of Agriculture in 2017, have highlighted the harmful effects of the excessive use of pesticides, *inter alia*, on our health, soil, flora and fauna, ecosystem and the environment.

This Bill is being introduced against this backdrop and also taking into account that we are a valued tourist destination with more than one million tourists annually. Whilst on one hand, we import over 30,000 tonnes of fresh agricultural produce, on the other hand, we export around 300 tonnes every year. The trend across the world now is to reduce and make judicious use of pesticides.

The introduction of this Bill is a landmark in the agricultural sector as it is for the first time that we are coming up with a legislation to control the use of pesticides in our agricultural practices. It will complement the Dangerous Chemicals Control Act, which was introduced in 2004, and which regulates the purchase, import and sale of dangerous chemicals only and does not cater for the use of pesticides in agriculture.

Madam Speaker, there is a perception among some farmers that the more pesticides are applied in crops, the better the yield and harvest would be. As a result, some farmers are tempted to make abusive use of pesticides, unaware of the fact that, at the end of the spectrum, that they, themselves, are the ones at risk first, followed by the consumers.

We also import a lot of agricultural produce. As at date, importation is allowed subject to phytosanitary conditions being complied with by the exporting countries.

However, phytosanitary requirements do not include the level of pesticides contained in those produce. Through this law, we are curing a lacuna as the importer will have to ensure that his consignment in addition to the phytosanitary certificate has to be accompanied by a certificate of pesticides residue analysis.

Contrary to some uninformed comments made right, left and centre, this legislation will be applicable to both local and imported fresh agricultural produce only. It excludes frozen, dried and processed agricultural produce, e.g. spices, pulses and rice, as they are already being catered for under the Food Act 1998. Our sugar is equally excluded from the provisions of the Bill since it is tested and analysed for a number of contaminants prior to shipment and has to comply with the requirements of the EU. As everybody in the House is aware, we have been exporting our sugar for years now without any problem to the European market, which is very stringent in terms of quality.

The main objective of this Bill is to ensure that the population consumes fruits and vegetables, whether locally produced or imported, that are not detrimental to their health in the long run. In addition, we must ensure that senior citizens, hospital inmates, pregnant women and kids, etc. are not exposed to fruits and vegetables containing pesticides residues above permissible level.

Furthermore, more than a million tourists visit this country annually. If we want to uphold our tourism industry, we are duty bound to ensure that the tourists also are consuming safe, fresh local vegetables and fruits, which are mainly sourced from the local market.

It is also common knowledge that pesticides constitute a threat to our flora and fauna. The excessive use of pesticides, amongst others, has resulted in the quasi disappearance of our fresh water fish and shrimps. The population of earthworm which is an indicator of good soil fertility has decreased considerably over the years. The House may be aware that the excessive use of pesticides has so far impacted negatively on the honey bee population and other pollinators like butterflies. It is to be noted that our local honey production has dropped from 30 tonnes in 2013 to 25 tonnes in 2017. It is claimed that if honey bees disappear, humanity is also going to disappear shortly after.

Our natural biodiversity as well is at risk, as natural biological control agents, such as lady birds, parasitoids are disappearing.

Madam Speaker, it is an established fact that since this Government came to power, we left no stone unturned in our effort to develop new cultural practices for crop production with a view to reversing the trend in the excessive dependence on pesticides. In this respect, we initiated a series of actions with a view to encouraging our farmers to adopt safe and efficient agricultural practices with minimum or no use of pesticides at all. These include talks, seminars, large scale sensitisation campaign as well as training of farmers on the safe and judicious use of pesticides.

Our extension service has also been improved so as to provide effective assistance to farmers to enable them to gradually adopt integrated pest management. Rigorous surveillance and control are, in addition, effected at entry points to ensure that new pests and diseases do not sneak in our country. The MAURIGAP levels 1 and II standards have been introduced to encourage good agricultural practices by making judicious use of chemicals. The zero budget natural farming has also been promoted. The bio farming scheme, and a whole gamut of incentives such as subsidies on compost, treated seeds, bio pesticides, materials for construction of protected structures and greenhouses that reduce exposure of crops to pests and diseases were made available to farmers with a view to inducing them to adopt new agricultural practices.

An organic research station was also set up at Pamplémousses to showcase the practice of organic agriculture and demonstrate to planters the techniques of fruits and vegetables production with no chemicals. Last year, a dedicated Bio farming zone, over an extent of 66 Arpents was set up at Britannia. Financial assistance is being provided to organic producers for the certification of their produce with recognised international certification bodies.

The Food Technology Laboratory of my Ministry has also been equipped with a new and sophisticated equipment costing over Rs25 m. which can easily detect 182 molecules of pesticides in samples of fresh fruits and vegetables, which is well above the 60 pesticides recommended for use in our local crops. As such, pesticides which have not been recommended for use, prohibited and banned, but are being used will also be detected.

Livid to the fact that fruit fly remains the main pest that affects our fruits and crops, a fruit fly rearing facility capable of producing 15 million sterile flies per week is presently under construction at Réduit. The facility will be operational by August 2018. With the release of sterile flies integrated with other control techniques, it is expected that the fruit fly

population will be reduced drastically in the medium-term. Hence, in the near future, little or no pesticide at all will be required by farmers for fruit fly control. Thus, curbing down their cost of production without compromising on the quality of their products.

Madam Speaker, the overriding aim of this Bill is to ensure that the level of pesticide residues in any fresh agricultural produce, whether grown locally or imported, is safe and complies with the FAO Codex Alimentarius Pesticides Database and does not exceed the Maximum Residue Level (MRL) as set out in the First Schedule of the Bill.

In this respect, the Bill provides at Section 5 for a Pesticides Regulatory Office to be set up and to keep relevant information on all pesticides being used, regulate, control and monitor the use of pesticides in and on agricultural produce; develop strategies for the sound use and management of pesticides and for risk reduction associated with the use of and disposal of empty pesticides containers.

As per Section 11, growers and pest control operators, including sprayermen will be required to undergo a training programme, approved by my Ministry, on the safe handling of pesticides and their judicious use. It is worth noting that presently pesticides are applied in crops by anybody, at any time, in any manner, very often without paying heed to the instructions on the labels with regard to the pest to be treated, the dose to be applied and the pre-harvest intervals, and above all, without any protective equipment.

Some planters even have recourse to pesticides mixtures, commonly known as cocktails. As a result, many of our farm workers and sprayermen, having been exposed to pesticides over the years, suffer from eyes and skin problems. If this continues unchecked, more and more of this category of workers will be put at risk. The House may wish to note also that, as at date, my Ministry together with FAREI, has already trained 5,800 farmers in the safe use and handling of pesticides. This training exercise is ongoing.

Madam Speaker, section 9 of the Bill will empower Authorised Officers to take samples of locally harvested agricultural produce from farm gate, in store or in the market for analysis so as to ensure compliance with the prescribed MRL and to determine the fitness of the produce for human consumption.

These samples will be sent for analysis of pesticide residue level in a designated laboratory. In case where after analysis any agricultural produce is found to contain pesticides residues exceeding the MRL and is thus unfit for human consumption, an

Improvement Notice will be issued to the grower or occupier, as at the Third Schedule, advising him to take remedial action in a period of not less than 14 days.

The House may wish to note that such growers will benefit from all necessary technical assistance and guidance from the extension service of FAREI to remedy the situation during that period.

It is important to highlight that the Improvement Notice has as objective to educate our planters on the need to make proper use of pesticides in the first instance and not to sanction them outright.

Mention has been made in one Press article regarding the possibility of pesticides drifting from one field to neighbouring ones. I would like to point out that there is very remote possibility for such thing to happen. Nevertheless, planters have been trained by FAREI on the proper selection of sprayer nozzles so as to ensure that drifts of pesticides do not occur in any circumstance.

At the end of the 14 days given to the planter, a second sample will be collected and if no improvement is observed, the planter will then be liable to prosecution under the provisions of the Bill.

As mentioned earlier, Madam Speaker, all imported fresh agricultural produce will, as per section 10 of the Bill, have to be accompanied by a certificate of pesticides residue analysis from a competent authority from the country of origin. Where an importer fails to submit the certificate, he will, in a first instance, be given an extension of time to submit same. If the certificate is still not submitted, the produce shall not be authorised for custom clearance and will be destroyed.

It is to be highlighted that random samples of imported produce will be subject to pesticides residue analysis in our local laboratories with a view to ascertaining the veracity of the accompanying certificate of pesticides residue analysis and hence, ensure that the produce is really safe for consumption. Adequate notice will be given to importers so that they have ample time to make necessary arrangements to comply with this new requirement.

Madam Speaker the House will also note that defaulters under the provisions of the Bill shall be sanctioned at different stages as detailed at section 13 –

- (i) a fine not exceeding Rs10,000 on first conviction;

- (ii) between Rs10,000 and Rs25,000 for a second conviction, and
- (iii) not less than Rs25,000 and not more than Rs50,000 and imprisonment for a term not exceeding one year, for subsequent convictions.

Extensive consultations have been held with all stakeholders concerned, including planters' associations for the finalisation of this Bill and pertinent proposals made by them have been considered, contrary to what has been reported in the Press.

Madam Speaker, throughout the world, many countries have already taken drastic measures with regard to the use of pesticides. Mauritius cannot afford to lag behind. As a matter of fact, Madam Speaker, countries are continually being urged at high level international forums to exercise rigorous control on the import and use of pesticides.

Indeed, Madam Speaker, the harmful effects of pesticides were discussed at the meeting of the ACP/EU Joint Parliamentary Assembly held from 18 to 20 June 2018 in Brussels attended by hon. Fowdar.

I note from the resolution adopted at that Assembly that there was general consensus that the uncontrolled use of pesticides has a damaging impact on the environment, human health and the economy.

The Assembly, among others, recommended that countries should take concrete action to control externalities caused by improper use of pesticides; ban pesticides that are harmful to bees and pollinators; ensure that awareness raising and training of farmers are conducted so that they are fully conscious of pesticides hazards; promote and reinforce legislation with regard to the quality and quantity of pesticides being used in agriculture.

As you may observe, Madam Speaker, we are in line with what is being recommended internationally on pesticides. The coming into force of the Use of Pesticides Bill will put Mauritius in the league of countries, whose fresh agricultural produce is recognised to be compliant with required norms and standards and is free from pesticides residues. This will no doubt enhance our reputation of a trustworthy producer and exporter of safe fresh agricultural produce and also reinforce our image at international level.

Madam Speaker, "We are what we eat." This phrase explains the reason why our population is increasingly becoming conscious of its health and is becoming very demanding

on the quality of food it consumes even if it happens to be sometimes more expensive. Safe food means having healthy people. And healthy people implies a healthy population and workforce and by extrapolation a wealthy nation as well. As such, we have no reason to deprive our population from the right of having access to safe food.

The Use of Pesticides Bill is the best option to enable Government to curb down excessive pesticides residue in agricultural produce and fulfil the aspirations of the population of having access to safe food. Madam Speaker, We have taken this bold step towards having safe agricultural produce. I have absolutely no doubt that it will bring the expected results and in a very near future, pesticides residues in our fresh fruits and vegetables will belong to the past. Our population will enjoy the comfort of having only safe food in their plates.

With these words, Madam Speaker, I now commend the Bill to the House.

The Vice-Prime Minister, Minister of Local Government and Outer Islands (Mrs F. Jeewa-Daureeawoo) rose and seconded.

Madam Speaker: Hon. Ms Sewocksingh!

(3.57 p.m.)

Ms M. Sewocksingh (Third Member for Curepipe & Midlands): Thank you, Madam Speaker. Madam Speaker, on the very outset, allow me to say that we are not against any nuisance which may affect the health of a person - *et je pèse bien mes mots, Madame* - we are not against any nuisance which may affect the health of a person or which may ruin the environment.

Today, Madam Speaker, we have this Bill, the Use of Pesticides Bill. The objective of this Bill is to regulate, control and monitor the importation and use of pesticides in or on certain fresh fruits, plants, seeds or vegetables with a view to, *inter alia*, minimising risks to human health and the environment. Procedures are important, Madam Speaker, as they reduce the risks of being biased, ensure fairness and maintain appropriate process.

Madam Speaker, as stated by the hon. Prime Minister during the Budget Speech, 77% of our foodstuffs are imported annually. Madam Speaker, coming directly to the Bill, I sincerely wonder how '*les petits planteurs*', will comply with all the specific terms and dosages specified in this Bill.

The Use of Pesticides Bill seems to point only to a list of pesticides with maximum residual level of pesticides for different types of crops. This makes me question as to whether there has been enough consultation with the community of planters or whether there has been adequate consultation over a reasonable period of time to take care of their apprehensions and empower them to adapt to the new situation that may arise as a result of legislation on the use of pesticides. Are we not putting the cart before the ox, Madam Speaker? Has there been any policy impact assessment carried out on planters?

A letter dated 22 November 2017, where I have a copy of the mail, which was sent to the PS of the Ministry of Agro-Industry and Food Security where it is mentioned that no representatives of farming community were invited in the stakeholders' meeting for their views and they also were not taken on board in the drafting process. They even gave a list of points which they wanted to add in the Bill which is quite long, so I am not going into details in it.

Clearly, Madam Speaker, *les droits fondamentaux des planters* have been overlooked and it violates the basic principles. Madam Speaker, in the Bill, page 7, clause 11 - and the hon. Minister of Agro-Industry and Food Security has spoken about the training - subclause 1(a) and (b), I would like to quote -

- “ (1) (a) Any person who cultivates any agricultural produce for the purpose of sale and who wishes to use or engage in the use of any pesticide shall follow such training programme as the Ministry may approve.
- (b) Any person who has followed a training programme pursuant to paragraph (a) shall be issued with a certificate by the Office.”

Madam Speaker, we heard the hon. Minister of Agro-Industry and Food Security saying that there have been some 5,000 planters who have been trained. My apprehensions are as follows, Madam Speaker - what about the wholesalers, suppliers, retailers dealing with pesticides? Will they have a training programme? What will happen to those who do not know how to read and write? Madam Speaker, many farmers, labourers are above the age of 50, and they will have to follow such kind of training. What about the content of the training programme? Will the training be a certified one? And will there be an assessment at the end of the training; the eligibility criteria to assess the training; the number of trainers needed and

are readily available for this training; the number of trainees who will be trained, Madam Speaker; the number of training centres; the duration of a complete training programme; the institution that will be in charge of the training; the time that it will take to train all the trainees?

Madam Speaker, it is a compulsory training so as farmers and other related stakeholders can perform and operate their activities. How will they do this at the same time while working in the field and following the programme? Will there be incentives? Will there be stipend for them? What will happen to those performing backyard gardening, Madam Speaker? Will they be eligible to purchase pesticides? What are the control measures, mechanism to verify those fraudulent acts? Can the Pesticide Regulatory Office issue a training certificate? Will it be MQA approved? All these questions, Madam Speaker, speak for themselves. It is also important that the Pesticide Regulatory Office should not be viewed only as a repressive organism. It is essential that training be an essential part in the application of this Act. Are we not prematurely and aggressively pushing a new piece of legislation down the throat of these planters?

Madam Speaker, I would like to point out the chemical products listed in the Bill, if there has been a survey done where these products are available and in what quantities they are valuable? Madam Speaker, for the first time in Mauritius, the planters' community is being specifically criminalised under this Bill through by penal clauses. Planters who work from sunrise to sunset, Madam Speaker, will see an additional burden hanging over their necks. Instead of concentrating on boosting outputs, they will carry the additional worry of falling short of the Use of Pesticides Act.

With such additional pressure, Madam Speaker, it is just my sincere wish that we do not see more planters and farmers abandoning their lands. Madam Speaker, the least that we could expect is a law which is implementable. I have serious doubt about it. I have serious doubt in the way the legislation has been formulated and where the same will not give rise to serious implementation challenges and will not just be a dangerous cosmetic one.

We cannot copy models that have been put in place in other countries, Madam Speaker. This, in no way means we should not learn from what other countries are doing in their field. There are countries which have put in place a Pesticide Control Board whereby representatives of the planters' community and farmers are represented. We should not forget that there is the international code of conduct on the distribution of the use of pesticides. We

have a copy which says everything, which provides guidance on pest and pesticide management policy development.

Madam Speaker, in the proposed Bill, all what we can see is that a unit will be created in the Ministry of Agro-Industry and Food Security under the control of an officer-in-charge who will be appointed by the Supervising Officer of the Ministry. Strangely enough, Madam Speaker, the staff of the Department will be under the control, not of the officer-in-charge, but under the Supervising Officer. I fail to understand the logic except that this unit may not be used as a political weapon. We hope that this will not be the place of close ones, Madam Speaker.

Besides, Madam Speaker, who will represent and defend small planters? The current Bill falls significantly short in protecting the interests of common citizens, consumers and the environment, Madam Speaker. Have the Ministry of Health and Quality of Life and Ministry of Environment been contacted while drafting the Bill? And we should not forget that the main purpose of the Bill is - it is said clearly on top - to protect consumers' health and environment. There is nothing in the Bill which speaks about education of the consumer and their health. Whether this Bill is passed or not, Madam Speaker, what measures are in favour for consumers to know the threats looming on them and how can they be on their guard? I do not find it!

The question of consumer protection becomes of all the most important, as the Use of Pesticides Bill demarcates between crops grown locally and dissociates from frozen, dry, processed fruits and vegetables, as mentioned by the hon. Minister. What is worse, Madam Speaker, is that the Bill is clearly discriminatory against our poor planters' community whose produce will be subject to the acts of this Bill under consideration. Why important products are not covered under this piece of legislation?

Madam Speaker, page 7, paragraph 12 of the Bill with reference 'Protection from liability', and I would like to quote this piece of the Bill –

“No liability, civil or criminal, shall be incurred by the Office or any officer in respect of any act done or omitted in good faith in the discharge of his functions or exercise of his powers under this Act.”

Madam Speaker, it also appears to be a draconian law as I have read. It will be naive to believe that there will be no abuse whatsoever law which is criminalising the planters'

community. What will happen if someday, somebody feels persecuted, yet no liability, civil or criminal will, be incurred by the office or any officer of the Ministry?

Madam Speaker, at page 5 of the Bill, clause 9 - Analysis of samples -

“(1) (a) An authorised officer who collects an agricultural produce and removes a sample from it for the purpose of analysis shall, as far as practicable, forthwith store the sample at the Office in such manner as to ensure that it does not perish.”

Madam Speaker, provision should have been made to protect the producers and give them the opportunity to counterpart any result found out of this analysis.

Madam Speaker, here, another issue that comes to my mind is the third party liability, which I would like to explain. Who will be liable if the offence is committed by a contracted or employed registered pesticides operatives on the premises of planters? What will happen if there is a problem of concentration or other impurities in the formulation or active ingredients of pesticides made by the pesticides manufacturer? Will there be facilities of testing formulations, active ingredients of pesticides in Mauritius, Madam Speaker? How will the Ministry do these tests in case of disagreement or also monitor the quality of all imported pesticides?

Madam Speaker, will tests be done in labs to check if the recommended levels are clearly indicated on the label of the container and whether the rates are accurate? All the above force me to believe that this Bill is being brought to Parliament *à la va-vite*, Madam Speaker. Should we not have more campaigns to sensitise especially consumers? Other than just training, for which the farmers would receive a certificate, Madam Speaker, don't we need to do more to know their concern, and should we not give them a better *encadrement* to be within the sphere of the law? What about the pest control companies, what about the IPM Programme, Integrated Pest Management? Will a list of research works and development programmes be provided? What about auction markets? What about risk of contamination in auction markets?

Regarding the proposed inspection at the point of sale, it must be noted that samples taken from vegetable sellers at market will not be of any use. Very often, products are purchased from the auction markets. In the present system of the vegetable auction market,

there is no traceability system in place to determine who has supplied the vegetables to the auction.

With no proper record keeping in place, it will be of no use if vegetable samples are taken and the supplier of the produce is not known. What about the problems of pesticides drifts in agglomeration zones, where there are no physical barriers, Madam Speaker? I am sure you do understand, as you have been a former PS in the Ministry of Agriculture. I can see you are listening passionately.

Madam Speaker, the law also tells to conduct what we call end-of-pipe control; this is a form of post-mortem approach. For instance, Madam Speaker, in the US, there are mechanisms for registration. I would like to elaborate a little bit on that as I found it quite interesting, and I would to share with all of you in this House and with the public in general. So, there it is said -

“Registration - Through registration, EPA evaluates pesticides to ensure that they can be used effectively without posing unreasonable risks to human health and the environment.

Reregistration - Under reregistration and tolerance reassessment, EPA reviewed older pesticides (those registered before November 1984) to ensure that they meet current scientific and regulatory standards.

Registration Review - Through registration review, EPA plans to review all registered pesticides approximately every 15 years to ensure that they meet current scientific and regulatory standards.

Emergency Exemptions and Special Local Needs - In cases where unexpected public health issues arise, EPA works to make pesticides available to states or federal agencies for emergency and special local need uses.

Although pesticides with public health uses follow the same regulatory process.”

Madam Speaker, pesticides that are currently used in Mauritius are from two sources, branded ones and generic ones.

Generic products are commonly used by farmers due to their low price. They may not usually be uniform in their concentration of active ingredients and also they may have

contaminants in their contents. Farmers using non-conforming products are going to be more at risk and their residue levels in vegetables may exceed despite conforming to that dosage.

It is thus essential that these pesticides are regularly tested in Mauritius so as to ensure the genuineness of the product and not just put the blame on farmers, in case of non-conformity.

Madam Speaker, if we go strictly by the MRL- Maximum Residue Level - in the use of pesticides - the hon. Minister spoke about it -, what will be the way out for planters in case the MRL has to be exceeded? Will a planter need a trading licence so as to trade legally and demarcate him from non-commercial produces? In case of an appeal, how will the planter proceed, Madam Speaker?

Madam Speaker, on another note, in the objectives of this Bill, most of active ingredients of herbicides have not been included and we have not heard about it. We have heard the hon. Minister talking about sugar. So, we do understand that it does not fall under this Bill.

Madam Speaker, with this Bill in its present form, we can foresee that implementation hurdles will poise for a long *problème de dentition*, which I sincerely hope will not demoralise the planters' community, as they already are.

Madam Speaker, the Bill itself stipulates different dates may be fixed for coming into operation of different sections of this Act. It is clearly apparent that there are no such cadre and equipped labs in Mauritius to conduct these types of tests required.

Madam Speaker, as per my understanding, passing a law in Mauritius in the 21st century, tests will have to be conducted elsewhere, outside the country, if am right. I wonder how it will be done. This Bill, Madam Speaker, clearly creates a situation of *deux poids deux mesures*.

Thank you.

Madam Speaker: Hon. Bholah!

(4.17 p.m.)

The Minister of Business, Enterprise and Cooperatives (Mr S. Bholah): Madam Speaker, thank you for allowing me to intervene and to bring my views to this very important Bill.

Madam Speaker, three to four years ago, I have had the bad luck, the misfortune of losing two of my dear ones, one of whom happened to be my own younger brother. In fact, it is back in 2014, in the early months, he was suffering with prolonged fatigue, with sweating for nothing and heavy coughing, and after a few visits to different doctors, finally in April, he landed in a private hospital, where he was diagnosed with lung cancer. I still remember, when I had a one to one meeting with this doctor, and we were planning his treatment, and the doctor bluntly told me that there is no way out for him. Obviously - anyone in my place - I also asked him how long is left, and the doctor told me only seven months.

In November 2014, a few days before the General Election, last election, he left his body, exactly seven months after. Time being a healer, we have settled the situation. But what I retained is this one: everybody who came to see him in hospital or at home, be it a close relative, a neighbour, a colleague or a member of the public who have known him, unanimously said that the very cause of cancer is what we eat. Today, I am very happy that my colleague, Minister Seeruttun, is coming up with this Bill after three and a half years.

The Use of Pesticides Bill in front of this House today has the objective to address the complex issue of the irrational and hazardous use of pesticides on local or imported fresh fruits, plants, vegetables and seeds being consumed locally. In its Explanatory Memorandum, we read that the main object of the Bill is to minimise risks to human health and the environment, which are, no doubt, critical to the wellbeing of the country as a whole.

When we talk of environment, it is very vast, Madam Speaker. But let me take the case of rivers, which are no longer safe with polluted water and many other pesticides carried into running or stagnant water. The Minister has just mentioned the case of shrimps and fish *qui ne manquaient pas autrefois et qui nourrissaient des anguilles et camarons*, which are no longer there now.

Indeed, the intensification of agricultural production and international trade due to concerns related to food security, together with the effects of climate change, have increased the pressure to contain and check pests and diseases on crops. It is reported that global annual crop losses caused by insects, rodents, weeds and diseases are today estimated between 20-40%, similar to those of 50 years ago. This is also relevant to Mauritius.

Pesticides are thus used for pest management, with benefits, including increased food production, increased profits for planters and the prevention of crop diseases. Although pests

consume or harm a large portion of agricultural crops, without the use of pesticides, it is likely that they would consume a higher percentage. However, while the widespread use of pesticides has had several benefits, it is also known to cause many problems, including human death.

Over the past half-century, the amount of pesticides used worldwide has increased fourfold. Today, over 50,000 pesticides and 1.8 million kilograms of these chemicals are used each year around the world. It is increasingly recognised that current levels of pesticide used are not sustainable and have considerable environmental and health costs.

There is an interesting case in India, in the State of Punjab. Interesting yes, but very sad though. Madam Speaker, the State of Punjab is known to be the granary, *le grenier de l'Inde*, the food basket of India as it produces 10% of India's cotton, 20% of wheat, 12% of India's rice with just 1.5% of India's land. In the 1970's, the farmers have moved from traditional farming to, what they call, the Green Revolution, with chemicals, high yield seeds and irrigation. The result has been that there has been a surge above normal rate in India of cancer patient in this State. And it is stated that farmers in that region have to move around 325 km to the Acharya Tulsi Regional Cancer Hospital and Research Centre. They have to board the train at 09.25 and the train covers a distance of 325 km with 26 halts to reach Bikaner, where the centre is. And two-third of the patients on the train are cancer patients. So much so, that this train has been tagged as a cancer train. Just imagine the tragedy over there, Madam Speaker.

Besides the large quantities used, hazardous pesticides-use practices have been observed, especially in the small vegetable growers' community, such as frequent, excessive pesticides dosages, inappropriate cocktails, untimely sprayings, no respect of safety intervals, and poor observance of protective measures.

In the present state of affairs in Mauritius, the following factors increase the risk of human exposure to pesticides –

- (a) lack of local quality control of products on sale;
- (b) easy access to highly toxic pesticides through the sale by numerous retailers and on markets;

- (c) weak awareness of pesticides uses and hazards all the way down the substances distribution chain, in the small planters community as well as in the general public;
- (d) limited implementation of safety measures and standards, lack of comprehensive monitoring systems of the pesticides levels;
- (e) limited pesticides management education, and
- (f) poor medical surveillance among workers, especially among small planters.

It is in fact quite alarming to note that Mauritius was ranked second only after Japan with regard to intensity of pesticides usage at the beginning of the nineties.

Madam Speaker, presently, The Dangerous Chemicals Control Act 2004 is in force. This legislation provides for the prevention of damage to health and to the environment caused by dangerous chemicals and for better protection of the workers, members of the public and the environment against dangerous chemicals. At the time this Act was proclaimed, the awareness of the hazards of pesticides was still limited, while the use of pesticides, including highly toxic products, has been on the surge.

The twofold nature of pesticides sums up the challenge, that is –

- (a) on the one hand, food production and control of infectious diseases in crops is heavily dependent on the proper use of pesticides, and
- (b) on the other hand, the dangers of pesticides to humans and the environment are widely recognized.

This reflects the complexity of the whole issue being dealt with through the introduction of this Bill. There needs to be a right balance between the two.

Ironically, the irrational use of pesticides has shown to disrupt the natural balance of an ecosystem and to destroy beneficial insects. This is what has led the European Union, in April this year, to vote in favour of a ban of three neonicotinoids after scientific evidence showed their risk to bees and wild pollinators, which are so crucial to biodiversity, food production and the environment.

In addition to causing harm to wildlife, pesticide poisoning is a global public health problem. The WHO acknowledges that pesticides are potentially toxic to humans and can have both acute and chronic health effects if their use are not properly controlled. They are

associated with neurodegenerative diseases such as Parkinson's and Alzheimer's, diseases of the new-born and different forms of cancer.

Madam Speaker, human exposure to pesticides has led to deaths of between 20,000 and 40,000 worldwide each year. These are official figures only.

What is the situation in Mauritius, Madam Speaker? Well, we do have figures concerning the status of cancer. It is in, fact, the third leading cause of mortality in our country. According to the latest figures of the National Cancer Registry of Mauritius, 2,607 new cases of cancer have been registered in 2016, which represents an increase of 4.7% compared to 2015. Statistics also indicate that 1,342 deaths occurred due to cancer in 2016. That is too much.

But what about the quantity of pesticides used per hectare? And even more important, what is the correlation between this figure and the national cancer statistics? As at date, due to the absence of any specific framework for the control and monitoring of pesticides use, we cannot come forward with either precise information, or evidence-based prevention strategies. But what we know is that pesticide-related poisonings and deaths are more frequent and serious in developing countries despite the fact that pesticides are sold in greater quantities in developed countries. One reason for this is the lack of rigorous pesticide control laws and lack of adapted training programmes for pesticide inspectors and users in the developing world.

Madame la présidente, pouvons-nous continuer à nous appuyer sur une agriculture aveuglement dopée à coup d'engrais et de pesticides? Certainement pas. A travers ce projet de loi, Maurice est en train de courageusement poser la première pierre dans cette lutte contre la dangerosité d'une utilisation déraisonnée des pesticides. Les consommateurs mauriciens s'attendent à ce que nous légiférions afin d'assurer la qualité de leur santé et de l'environnement dans lequel ils vivent.

Une telle démarche a aussi une portée sur la scène internationale, notamment en matière de commerce. En effet, à ce jour, ce n'est qu'en adoptant une législation qui, comme le '*Use of Pesticides Bill*', aligne les teneurs maximales en résidus dans les fruits, légumes et denrées alimentaires avec les normes en vigueur sur le plan mondial, que Maurice pourra préserver son statut d'exportateur fiable. Madam Speaker, I believe it is important that the Use of Pesticides Bill is in line with the International Code of Conduct on Pesticide

Management, developed by the Food and Agriculture Organization (FAO) and WHO which today is the only international instrument addressing the main elements of pesticide management throughout the pesticide life cycle. I consider it to be a very valid ground for us to be assured for the soundness of the technical provisions of the proposed Bill for its proper implementation. Madam Speaker, since the promulgation of the Dangerous Chemicals Control Act 2004, significant progress has been made.

Clause 3 of the Use of Pesticides Bill proposes to add up to the Dangerous Chemicals Control Act 2004, which caters for the control of dangerous chemical in general. On the other hand, the Use of Pesticides Bill has a strong focus on agro-chemicals and the agricultural field of activity.

Clause 5 makes provision for the setting up of a Pesticides Regulatory Office. The efficiency of this office will be crucial as it will serve as the front line of enforcement of the pesticide legislation and I can expect the list of its functions, as presented in clause 6, to become more sizable and adaptable with time. This is my suggestion, Madam Speaker.

The Pesticides Regulatory Office will have no choice but to act as a national focal point. This will enable the organisation to effectively monitor the implementation of international instruments being used, like the International Code of Conduct or the definition and/or measurement of MRLs as determined in the third column of the First Schedule. I am allowing myself to make another suggestion, which, I believe, is of strategic importance for the Office to be adequately empowered in this respect.

Clause 6 (c) caters for the collection of relevant information on pesticides as one of the functions of the Office. Through such a mechanism, we are establishing the foundations for a reliable, informed pesticide management system in our country.

Bearing in mind the ambition of the proposed legislation, we can, for instance, expect the information collection component of the Office to –

- determine the usage limit of specific pesticides;
- build an effective public information campaign;
- help in decision making of particular packaging or labelling, and
- provide guidance to agricultural strategies.

This information gathering function can even be taken a little bit further. This office may be granted the power to require manufacturers, importers, distributors and sellers of pesticide products to keep records for a specified time period and to make their data available for inspection at all reasonable times. They can also be asked to report any incidents of health problems or environmental contamination resulting from pesticide use.

Madam Speaker, we nevertheless have to bear in mind that a modern pesticide law and a comprehensive legislative framework for pesticides like the one presented today, although essential, cannot alone meet the goals of adequate pest and vector management and pesticide risk reduction. Implementation of programmes at all levels is required. I am confident that Government will, as a complement, establish and implement programmes aimed at risk reduction to promote sustainable agriculture. It is indeed only through such measures, underpinned by a solid national legislative framework, that we will be able to achieve a sound management of pesticides.

At the level of my Ministry, Madam Speaker, we are constantly encouraging agricultural cooperative societies to embrace this essential mission to gradually shift from conventional farming practices, which rely largely on chemical inputs, to sustainable agriculture. Presently, there are some 229 agricultural and mixed farming cooperatives, and 140 cooperative societies with around 9,000 active planters who make use of pesticides. In order to encourage them to adopt new sustainable agriculture practices, numerous measures have been and are being implemented

One of them is Zero Budget Natural Farming - My Ministry launched the Zero Budget Natural Farming in 2015 whereby more than 300 participants in Mauritius and 242 people in Rodrigues were trained. Unfortunately, the programme had to be stalled due to the outbreak of the Foot and Mouth disease and we hope to resume same in the near future, particularly that there will now be a conducive legislative framework. And here I have to commend the work undertaken by our Commissioner in Delhi, his Excellency Mr Jagdishwar Goburdhun.

Put simply, organic farming works in harmony with nature rather than against it by involving the use of techniques to achieve good crop yields without harming the environment or the people who live and work in it. Further to the collaboration between my Ministry and the Ministry of Agriculture and Farmers Welfare of India, 15 participants followed a

Certificate Course on Organic Farming at the National Centre of Organic Farming in India last year.

I can say that most participants have already initiated organic cultivation projects in Mauritius, thus substantiating the rationale of the legislation being proposed. I can mention and congratulate the Falcon Bio-organic Farming Cooperative Society Ltd situated at Terre Rouge which I had the opportunity to visit recently. Through the successful adoption of organic techniques, the society is able to cultivate fruits and vegetables that have more beneficial nutrients without any trade-off on its yield. I will invite members of this House to visit this farm.

The Strategic Action Plan 2018-2020 for the Cooperatives sector launched by my Ministry in March this year, has also been aligned with the objectives of achieving sustainable food production. “Adoption of Sustainable Agricultural Practices” and “Formation of cooperatives in non-traditional, emerging sectors and green business development”, which are in line with the UN SDG 2 ‘Zero Hunger’, are among the 12 programs identified in this plan.

For the cooperatives cane sector, Madam Speaker, the Mauritius Cooperative Agricultural Federation Ltd (MCAF) is a key player to curb the trend of excessive use of pesticides. The main activities of the Federation consist of sales and distribution of agro-inputs, such as fertilizers, pesticides, herbicides, insecticides, sprayers, seeds etc. It operates a network of 13 retail outlets around the island.

The Federation has initiated several measures to promote sustainable agriculture. Since January 2009, the Federation is importing and distributing 8 bio-products from Gujarat Life Sciences (India) in Mauritius. It has also launched a bio-fertilizer plant at Fort George, Port-Louis in 2015 in collaboration with the Mauritius Chemical & Fertilizer Industry (MCFI) and the Indian Farmers Fertilizer Cooperative Limited (IFFCO). The MCFI is now commercialising the bio fertilizer to the planters.

Fair Trade, also known as ‘*commerce équitable*’, is an alternative model for trade that guarantees a minimum price which covers the cost of sustainable production and a Fair Trade premium to be used for economic, environmental and social development.

The Fair Trade initiative is in place in the Sugarcane Sector in Mauritius since 2009 and as at date, 33 Cooperative Societies regrouping some 5,000 planters are Fair Trade Certified.

The Fair Trade concept is in line with the spirit of the present Bill as it lays much emphasis on the protection of environment. Regular audits of sugarcane fields of Fair Trade certified cooperative societies are being carried out by FLOCERT, the Fair Trade certifying body, to ensure that cane cultivation is being carried out as per Fair Trade norms and standards. Workshops are, moreover, organised on a regular basis by the Mauritius Fair Trade Cooperative Federation Ltd to update affiliates on norms and standards, especially with regard to the use of pesticides and the disposal of pesticide containers, amongst others.

Madam Speaker, SMEs are also called upon to underpin the philosophy of the Use of Pesticides Bill. Biofarming, for instance, has been high on the Government's agenda since the beginning of its mandate. That is why, over and above the existing facilities and incentives provided to small farmers and breeders, the SME Development Scheme includes biofarming as a priority sector, thus enabling SMEs in this field to benefit from a tax holiday as well as easy access to finance.

Madame la présidente, ce projet de loi se doit d'être considéré comme une première étape dans la transition de l'Ile Maurice vers la pratique d'une agriculture durable.

La courbe d'apprentissage, associée à un tel projet de loi qui modifierait tout un système de production et de consommation, est définitivement longue. Ainsi, je suis d'avis que le ministre de l'Agro-Industrie sera en mesure de venir de l'avant avec d'autres provisions pour compléter ce projet de loi en temps et lieu, en fonction des éléments qui surgiront au cours de son implémentation.

A titre d'exemple, je pense que la clause 8, qui formule des provisions pour la mise en application effective de cette loi à travers l'inspection, ne devrait pas se limiter uniquement aux produits agricoles qui sont mis en vente, mais s'étendre à d'autres circonstances où l'agriculture est pratiquée d'une manière ou d'une autre.

Je parle ici, par exemple, des jardins et espaces verts appartenant aux collectivités locales, aux établissements publics, aux ONG, et même des jardins ou potagers privés. N'oublions pas qu'à Maurice, de nombreux petits planteurs mettent leur récolte en vente à leur propre domicile et leurs produits sont ainsi susceptibles d'échapper au contrôle que ce projet de loi compte instaurer.

Nous avons beaucoup à gagner à nous inspirer de la France dans cette perspective, Madame la présidente, où les particuliers ne seront plus autorisés, dès le 1^{er} janvier 2019, à déverser des pesticides dans leur jardin. A partir de cette même date, ces produits phytosanitaires de synthèse seront interdits de vente aux particuliers. Il s'agit, en effet, de santé publique et nous ne devons, donc, en aucun cas hésiter à voir grand.

La clause 11 est consacrée à la formation, qui est essentielle. Cela dit, pour aller un peu plus loin, je dirais que bien plus que de la simple formation, c'est d'un accompagnement renforcé dont les agriculteurs bénéficieront.

Je propose que cette formation soit étendue également aux particuliers qui sont impliqués dans des activités agricoles qui ne sont pas destinées à la vente, mais qui d'une manière ou d'une autre font partie de la chaîne de consommation.

Une collaboration étroite avec l'Organisation des Nations Unies pour l'alimentation et l'agriculture (FAO) devrait être bénéfique dans cette optique, vu que la FAO s'engage beaucoup auprès des gouvernements du monde entier en faveur de la vulgarisation et de l'implémentation du Code de conduite pour la gestion des pesticides.

La question de l'élimination des déchets de pesticides, qui est brièvement mentionnée dans la clause 6(b), doit aussi être traitée de manière rigoureuse car elle implique des méthodes très spécifiques, telles que l'incinération à très haute température, le traitement chimique, des décharges spécialement aménagées ou encore un entreposage prolongé, contrôlé.

Cet aspect est primordial et nécessitera une attention particulière afin d'éviter tous risques de contamination du sol, des cours d'eau, ou des nappes phréatiques, et d'empoisonnement. Le Code de conduite international ainsi que quelques documents de terrain de la FAO devraient être d'une aide précieuse concernant l'élaboration d'un dispositif efficace et fiable de traitement et d'élimination des déchets de pesticides.

Madame la présidente, l'île Maurice a une longue et forte tradition agricole comme l'a souligné l'honorable ministre. L'introduction de ce projet de loi doit pouvoir rallier chaque membre de la Chambre vers un objectif commun, c'est-à-dire -

- celui d'augmenter l'efficacité des pratiques agricoles pour résolument inscrire notre agriculture dans les piliers du développement durable, et
- développer une agriculture productive, source d'emplois et de richesses, mais aussi de services écologiques pour l'ensemble de la société, le tout dans un

contexte d'utilisation optimale des ressources de maintien de la compétitivité de notre agriculture.

En effet, la vocation première de l'agriculture est et doit rester notre approvisionnement alimentaire en quantité et en qualité. Mais elle peut également participer activement à la lutte contre le réchauffement climatique et la préservation de notre environnement, notamment par l'utilisation de variétés ou d'espèces qui sont naturellement plus résistantes ou par la mise au point d'itinéraires techniques de culture qui limitent le recours aux intrants de synthèse.

Le *Use of Pesticides Bill* est un signal fort de notre engagement en faveur d'une agriculture moins dépendante des pesticides et meilleure pour la santé et l'environnement. Je pense qu'il convient de féliciter l'honorable ministre de l'Agro-Industrie pour cette initiative de poser les jalons d'une production agricole responsable alors qu'il y avait, jusqu'à lors, un vide juridique à ce sujet.

Ce projet de loi marquera un tournant décisif dans notre culture agricole car au vu de nombreuses crises sanitaires et alimentaires qui défraient la chronique un peu partout dans le monde, la réassurance du consommateur passe aujourd'hui nécessairement par une évolution des pratiques agricoles.

Le type d'agriculture proposé par ce projet de loi peut certes paraître contraignant dans un premier temps car il exige, par exemple, plus de main-d'œuvre, de travail et de soin.

Cela dit, Madame la présidente, les agriculteurs et consommateurs mauriciens seront les principaux bénéficiaires d'un usage plus modéré des pesticides, avec un rendement maintenu voir supérieur dans bien des cas, une qualité et une sécurité accrues des produits agricoles, la sécurité de l'approvisionnement, et une qualité de vie supérieure dans un environnement sain.

Je vous remercie, Madame la présidente, de votre attention.

(4.46 p.m.)

Mr R. Bhagwan (First Member for Beau Bassin & Petite Rivière): Madam Speaker, I believe that there is unanimity regarding the urgent need for the use of pesticides to be regulated, controlled and monitored. I think there is unanimity in the country as well.

We are all very much aware of the abuse being made of the use of pesticides and the consequences thereof on our environment particularly and the suspected ill effects of such

abuse on the health of our population, particularly in relation to the rise in new cases of cancer in Mauritius.

Madame la présidente, on ne parle que de cela depuis quelques années. Il faut manger cinq fruits et légumes chaque jour pour jouir d'une bonne santé. A la télévision, à la radio, dans la presse et dans les brochures, c'est cette même recommandation qui revient à chaque fois. Et savez-vous quelle est la première réaction des mauriciens en général lorsqu'ils entendent ce conseil rempli de sens ? Les fruits et les légumes sont remplis de pesticides qui sont responsables de nombreuses maladies. Invariablement, Madame la présidente, c'est la réponse qui est au bout des lèvres de tout le monde. C'est vrai, l'Internet est, donc, que beaucoup de gens, l'ensemble de la population, deviennent maintenant *health conscious*, il y a une prise de conscience, essaient de manger plus sainement.

D'autant plus de nombreuses recherches ont démontré qu'il ne faut pas se fier aux emballages séduisants de l'alimentation transformée et des *fast-foods*. Ce n'est que l'objet du débat d'aujourd'hui et je souhaite qu'on ait l'occasion d'en discuter ici et ailleurs.

J'estime, donc, Madame la présidente, que la présentation de ce projet de loi dont l'objectif déclaré est, je cite: "*minimising risks to human health and the environment*" est devenu nécessaire afin d'apaiser les craintes de la population, mais surtout de protéger la santé de la population.

Plus de 1,000 pesticides sont utilisés à travers le monde, peut-être plus, pour empêcher que nos aliments ne soient endommagés ou détruits par des nuisibles. Chacun de ces pesticides possède des propriétés et des effets toxicologiques différents. Mais les pesticides sont potentiellement toxiques pour l'être humain. Ils peuvent avoir des effets indésirables, comme je l'ai dit plus tôt, sur la santé parmi lesquels des cancers, sur la procréation et sur le système immunitaire et nerveux. C'est énorme pour la santé.

Madame la présidente, en même temps que nous discutons de l'utilisation des pesticides - il est important que le ministre, et je suis sûr qu'il est *tuned* là-dessus - il faut une liste intégrée contre les ravageurs. *It is important to have an integrated pest management*. L'intérêt croissant pour la gestion intégrée s'explique en grande partie par le fait qu'il est reconnu que l'utilisation des pesticides, avec les risques qu'elle représente, peut être réduite de manière significative sans avoir d'impact négatif sur la production, ni sur la rentabilité. Il convient, donc, en premier lieu, de s'interroger sur la véritable nécessité d'utiliser des pesticides dans une situation donnée où une gestion des ravageurs s'impose. La gestion

moderne des ravageurs utilise l'approche écosystémique. Celle-ci prend en compte le cycle de vie et l'écologie des ravageurs et de leurs ennemis naturels, de même que les interactions entre les organismes nuisibles et les autres. Les pesticides ne sont utilisés que dans les cas où il n'existe pas d'autres options efficaces ou économiquement viables. Il est à présent reconnu que l'utilisation excessive ou impropre des pesticides peut aggraver le problème des ravageurs, par exemple la destruction de leurs ennemis naturels, une résistance plus forte aux produits chimiques, et conduire à multiplier inutilement le recours aux pesticides.

La gestion intégrée, Madame la présidente, est une approche souple qui est mise en pratique dans une grande variété de cultures et dans toutes les régions du monde. Elle contribue à réduire la dépendance à l'égard des pesticides. Il est important que nous parlions sur cet *integrated approach*. Elle se fonde sur les principes suivants -

- des cultures saines ;
- la tension est axée sur des pratiques culturales visant à maintenir la santé des cultures ;
- il est important de sélectionner des espèces résistantes ou tolérantes aux organismes nuisibles ;
- le choix du lieu et du type de cultures ;
- l'hygiène des semis et des sols, et
- la gestion des éléments nutritifs et de l'eau

sont autant de facteurs qui contribuent à la croissance saine des cultures.

Une gestion de l'écosystème, Madame la présidente, système agricole, pour empêcher les ravageurs de se développer. Les techniques agronomiques sont employées pour rendre les terres et les cultures inhospitalières pour les insectes nuisibles, mais attractives pour leurs ennemis naturels et pour éviter les conditions favorables à l'apparition des mauvaises herbes et de maladies. Les décisions concernant l'application d'intrants externes pour renforcer la lutte sont prises localement et se fondent sur la surveillance de l'incidence du ravageur et le site concerné.

Les intrants externes, Madame la présidente, comprennent, entre autres les organismes bénéfiques comme les prédateurs, des ravageurs, des parasites ou les microbes pathogènes des ravageurs. L'élimination manuelle des ravageurs, Madame la présidente, les barrières physiques, des dispositions mécaniques, les appâts pour ravageurs, des phéromones,

des pièges contre les ravageurs et les pesticides biologiques ou chimiques, le choix varie en fonction de la situation.

On peut également choisir l'utilisation des pesticides parce que les techniques non chimiques de lutte intégrée contre les ravageurs économiquement viables ne sont pas disponibles et qu'elles ne sont pas parvenues à limiter l'organisme nuisible. Généralement, les pesticides ne s'appliquent que lorsque le suivi aux champs démontre que la population des ravageurs a atteint un niveau tel qu'elle pourrait causer des dommages économiques, significatifs, et que l'on constate que leur utilisation est rentable dans le sens où elle permettra d'avoir un effet positif sur les bénéfices nets du producteur. Il y a aussi l'impact sur l'environnement - sur lequel je ne vais pas venir-, sur le sol, les cours d'eau, lagons, récifs, faune et flore marine.

The most effective long-term way to manage pests is by using a combination of methods that work better together than separately. Approaches for pest management are often grouped in the following categories -

- biological control;
- cultural control;
- mechanical and physical controls, and
- chemical control.

Madame la présidente, j'ai voulu insister auprès du ministre sur ces aspects d'*integrated pest management control* qui est un élément important. Ce n'est pas seulement venir avec un projet de loi pour contrôler les pesticides, mais aussi une approche d'*integrated pest management control*.

Madam Speaker, however, as we are all aware, we may have an arsenal of legislations, but if we do not have a robust, fair and transparent enforcement mechanism, we may fail altogether to achieve our aim, and we may also end up in doing more harm than good. Madam Speaker, according to clause 3(2) - "This Act shall apply to every person who, for the purposes of sale, cultivates or imports an agricultural produce." I would have thought that for the purpose of this Act, it would have been primordial in the first instance to define this. One of the primary functions of the Pesticides Regulatory Office should have been to keep a comprehensive register of such persons. We all know, Madam Speaker, how inspections in relation to law enforcement are generally carried out in Mauritius. By

experience, we all know. We have legislation, but implementation and control is something different.

Unfortunately, Madam Speaker, there is never a transparent mechanism by which we decide on who to inspect. Unfortunately, we often inspect those who are vulnerable. Sometimes also, unfortunately, we inspect for the purpose of destroying competition - this is a fact - or for victimisation. This is Mauritius, we all know. Sometimes, certain persons use political contact, personal contact, I would say, through civil servants and then trying to destroy competition. We should address this issue by keeping, as I said, a register, and using a computerised randomisation programme to select a list of persons to be inspected at any one time. This would, thus, ensure fairness and transparency. If the hon. Minister wants to succeed, he must send the proper message with regard to fairness and transparency with regard to inspection.

Madam Speaker, I will also raise concern that there is no provision within this legislation for regular inspections of pesticide application, equipment and thus ensuring proper maintenance. I consider this to be a major shortcoming in the legislation. The hon. Minister can explain later on if there is provision for that. We all know how deficient equipment being used in the application of pesticides leads to pollution of the environment and endangers the health of animals and human beings present in the vicinity where pesticides are being sprayed. In the constituency where we are, in Rose Hill and Beau Bassin, we have this in La Chaumière area, where we have a cooperative movement, and then we have all the planters of La Chaumière. So, we see the types of equipment which are being used, sometimes *avec des méthodes archaïques*. This is where we have cause for concern.

Madam Speaker, we should gradually move from a culture of policing and enforcement to one of education; awareness building needing to a transition towards more natural pest control methods. Unfortunately, I do not find this legislation conducive to such a transition. I believe that the legislation should have made provision for a mechanism for grants and incentives to be provided to all persons involved in the cultivation for sale of agricultural produce to support development and adoption of best management practices designed to encourage reduction in pesticides used in favour of more natural pest controls.

Madam Speaker, a few points before I conclude. Regulating, controlling and monitoring of pesticides are good, but it would have been better to regulate and control the

types of pesticides which are being imported and sold to planters. The same active ingredient, for example, copper hydroxide is being imported under different brand names from different countries. Some come from well-reputed European laboratories and others from unknown laboratories. Many products are imported from China and India. There is no certification of quality control by the relevant institutions prior to selling these products to the planters. So, how can you control the use of pesticide when you are not controlling the types of pesticides which are being used? Maybe, the hon. Minister will give us some replies.

Madam Speaker, the Bill does not take into consideration the different areas where the products are being produced and also the season. Different areas have different specificities. Producing a cabbage in La Marie may give one unit of residual level, while producing a cabbage in the north of the country may give another residual level. I want to ask the hon. Minister: has consideration been given and experiences carried out in different areas of the country, prior to coming up with a list of maximum residual level?

Madam Speaker, this Bill addresses the important issue of food safety arising from consumption of agricultural produce grown locally or imported. However, the issue of pesticide management should have been viewed in a holistic way. Instead of concentrating quite rightly on the issue of food security, this Bill should have included a number of partners of development, and I hope the Minister is working with different partners, be it the Ministry of Health, the Ministry of Environment, the Ministry of Labour, and obviously his Ministry, the Ministry of Agro-Industry.

The Minister must inform us how the Ministry of Health has been involved. Similarly, the Ministry of Environment should have an overview of the question of pesticides, its use, its import and management on agro-chemicals. Why I say the Ministry of Health should have been involved? It is because of the great concern arising from overuse of pesticides, as I have said before, to cancer issues. This point has been raised by many authorities and even the authority in Singapore, which believes that the rise in the number of cancer patients could be due to high residue of pesticides in the food chain.

Similarly, Madam Speaker, the Ministry of Environment should have had an overall view on the question of pesticide. The Ministry of Labour also should have been a partner because of the health and safety issue of those involved in spraying the pesticides. This is a major weak point in this Bill. Of course, Madam Speaker, local newspapers have made extensive coverage on the abuse of a wide variety of pesticides in the country. Some of these

pesticides that are used locally are prohibited elsewhere. Surveys have revealed a policy of *laissez-faire* which has impacted on the health of our citizens and our agriculture, and its administration should be dealt with caution so as not to affect our health and also to make available all the vegetable requirements of the country.

Madam Speaker, I would like to take this opportunity to congratulate the vegetable growers, as I have just said, not only in our constituency, we have a sort of '*grenier*' in La Chaumiere, Rose Hill and Beau Bassin. The vegetable growers of the country operate in very difficult conditions these days. International companies such as Mosanto, Dow are lobbying strongly in their favour with authorities of many countries to sell their products. These international companies send their agents just to sell their products. *En passant*, there are other toxic herbicides which have now been banned officially, such as Gramoxone, but it still finds its way somehow on the market. I hope the hon. Minister will do the necessary to eliminate all loopholes in the importation of Gramoxone.

Pesticide, Madam Speaker, unfortunately is a necessary evil. The question of pesticide in this Bill seems to be only the concern of vegetable growers. Madam Speaker, the sugar industry has been using herbicides over the years in an uncontrolled manner and even the sugar industry has been having aerial spraying. The issue of the toxic nature of our well-known herbicide, which is known as Rounder, is a case in point.

The herbicide, Madam Speaker, is used extensively by sugar cane planters and vegetable growers. The World Health Organisation (WHO) has raised concern on its use and the European Commission has decided to ban its use in two years' time. Madam Speaker, we are all at the mercy of major international players. As mentioned before, our country has experienced drought, cyclone and recently the heavy rainfall. Our planting community has suffered a lot. At times, they suffer from over production which brings down their sale below the cost of production, as is the case for sugarcane. I think, the Ministry should launch a campaign involving all vegetable growers to inform them - which I am sure the Minister will do - of the dose they should apply, the methodology and the practice. Government must not make life more difficult for them, but, at the same time, Government, the Minister must see to it that the care and the health of the population is taken into consideration.

Madam Speaker, in summary, I believe that this legislation is one step in the right direction, but there is considerable room for improvement in the legislation. I am sure, following the passing of this Bill, the Minister will have, again, wide consultations, wide PR

exercise and bring everybody on board and also use the MBC/TV, which is used sometimes for other purposes, for propagating news, and this is where the Government, the Minister must see to it that the MBC/TV be made use in the interest of the health of the population. I again say, Madam Speaker, on this side of the House, we have no big quarrel with this Bill and we wish that the Minister puts a *plan de travail* and reports to the House, to the nation, to the planting community the progress in the months to come.

Thank you.

Madam Speaker: Hon. Ganoo!

(5.08.p.m)

Mr A. Ganoo (First Member for Savanne & Black River): Madame la présidente, ce projet de loi est une avancée dans le domaine du contrôle des pesticides. Je salue cette initiative du ministre qui est *long overdue*, étant donné le nombre impressionnants de questions parlementaires qui ont été posées sur ce sujet, ici même, à cette Chambre, car il s'agit d'un sujet qui affecte la santé publique comme nous le savons tous. Il y avait dans le pays une grande attente pour que *sooner or later* l'Assemblée nationale vienne régulariser d'une façon plus sévère l'utilisation des pesticides dans le pays.

Mais ceci dit, Madame la présidente, pour moi, je pense qu'il y a un *fundamental flaw* dans ce projet de loi *in terms of its conception and strategy*. Je m'explique. Le projet de loi, comme nous le voyons dans l'*Explanatory Memorandum*, Madame la présidente, parle que le *main object of this Bill is to regulate, control and monitor* l'importation et l'utilisation des pesticides *with a view to, inter alia, minimising risks to human health and the environment*.

On parle donc que l'objectif de ce projet de loi est de minimiser les risques à la santé et à l'environnement. Moi, je dirais, Madame la présidente, que ce concept de *risk reduction, risk minimisation is different to pesticide use reduction and this is what I meant by the wrong concept. So, this concept of pesticide use reduction has been consistently overlooked within agricultural policies*.

Focus should have been all the way on risk reduction, as now there has been a widespread misconception, Madam Speaker, that pesticides and agricultural chemicals are harmless. And its use goes on unchecked into human and animal stomach and this is as a result of this misconception between minimising risk and the other concept of reduction of

the use of pesticides. And this misconception has, in many ways, led to intensive chemicals used unchecked leading to more widespread contamination of food and water resources, inclusive of seafood.

This is why bio-diversity is on rapid decline and the human health has also not been spared as evidenced by all these new style diseases which are in the world today, Madam Speaker. Pesticide use reduction, I repeat, pesticide use reduction targets have been adopted in many countries with success, Madam Speaker, and I think we should also use the same concept here with the result that our Government officials, the media and agro-chemical dealers must show more concern and raise greater public awareness of the problems associated with the extensive pesticides use and their role in producing sustainable and healthy food pushing producers towards zero pesticides in food.

Studies have demonstrated in other countries, Madam Speaker, that pesticide use reduction is not only possible, but it is also economically desirable and feasible.

Ayant dit ceci, Madame la présidente, je voudrais remercier un quotidien, 'l'Express', qui, en janvier 2018 - ça n'a rien à faire avec la politique, vous allez comprendre dans quelques secondes...

(Interruptions)

Madam Speaker: Hon. Rutnah, I have told you several times to mind your language.

Mr Ganoo: Une enquête de 'l'Express' datée de janvier 2018, Madame la présidente, a démontré qu'un échantillon sur cinq des produits agricoles qui étaient en vente à travers l'île, affichait des taux de pesticides qui étaient au-delà des limites maximales de résidus d'après les normes de la Communauté Économique de l'Union Européenne.

D'après l'enquête, Madame la présidente, on a retrouvé que sur certains produits, des pesticides ont été retrouvés à plus de quatre fois le taux permis, par exemple, dans les carottes, et dans l'ananas, le durillon a été trouvé à 4.5 le taux permis, *idem* pour les lalos, dans la pipangaille, du cypermethrin a été retrouvé six fois en qualité supérieure au taux permis. Dans les haricots rouges c'était 15 fois le taux voulu, Madame la présidente. Et la cerise sur le gâteau, dans le cas des petits piments qui se trouvent dans l'assiette de tous les mauriciens, c'était le comble. Formule tannate qui est le pesticide utilisé, avait atteint 92 fois la dose prescrite.

(Interruptions)

L'objectif de ma part n'était pas de créer quelque panique, Madame la présidente, mais je réitère ce que j'ai lu et je conseillerai à mes amis qui avaient fait des commentaires quand j'avais cité 'l'Express' d'aller lire cette enquête. Cela n'a rien à faire avec la politique. C'est la santé publique qui est en jeu et je crois que c'était une enquête qui avait conscientisé beaucoup de mauriciens qui avaient pris connaissance de cette enquête.

Madame la présidente, entendons-nous bien comme quelqu'un l'a dit avant moi, ce n'est pas seulement à Maurice que la situation est aussi grave comme je viens de le mentionner. De par le monde, cette menace et ce problème complexe inquiètent et troublent les populations et les autorités. En Angleterre, le combat des associations des consommateurs est permanent, ils sont sur le qui-vive, le travail de conscientisation porte ses fruits et les consommateurs veillent à grain sur la présence des résidus, le pesticide.

Au niveau des pays de la CEE, les échantillons sont analysés pour déterminer si ces échantillons dépassent la limite maximale de résidus régulièrement. En Asie du Sud, Madame la présidente, des études démontrent des résultats inquiétants, des produits analysés démontrent des centaines de résidus de pesticides et établissent le taux de LMR à 14%. En Inde, Madame la présidente, récemment j'ai fait une petite recherche, il y avait devant la Cour Suprême de l'Inde, *a petition was lodged, at least 99 pesticides should be banned and in this on-going petition that sought Supreme Court's direction for the concrete action on harmful pesticides and their phasing-out in India.*

Madame la présidente, et voilà ce que je lis –

“It is a very sad state of regulatory affairs in the country in India, when it comes to pesticide. This petition was filed soon after the acute pesticide poisoning incidents that emerged in the Darba region of Maharashtra in novembre 2017. The petition contended that there was a parliamentary committee and the mandate was narrowed by the Government to 66 pesticides, banable pesticides as the Lok Sabha refers now to them when there are at least 99 pesticides being used in India which have been banned or restricted elsewhere in the world.”

This petition prayed for all these pesticides to be banned after citing numerous studies on the health impact of these pesticides, namely on the farmers themselves and the

agricultural workers. This petition argued that this is a violation to the right of life of these citizens.

As per the Supreme Court directions to the petitioners, a representation was submitted before Krishi Bhawan on 08 April of this year and in their petition, the petitioner submitted that no concrete action has been seen for nearly five years now, even as a negative impact of pesticides were being borne by farmers and farm workers. In the representations to the committee, the petitioners repeated their prayers to the Supreme Court. Firstly, as a first step, banned all these 99 pesticides that have been banned or restricted in other countries; banned the advertising and unacceptable practices of marketing and promoting of pesticides which, after all, are poisons; put into place a system by which the precautionary principle is to be followed before registering any pesticides for use or manufacture; make it mandatory to perform a need and alternative assessment before registering any pesticides; appoint an expert committee comprising of individuals of unimpeachable integrity, mainly from the field of organic agriculture, agro-ecology to examine the issue of making a roadmap for phasing out all chemicals, pesticides in a time-bound manner preferably within five years, and so on, Madam Speaker.

So, le danger est à l'échelle mondiale, Madame la présidente. Et à Maurice, nous l'admettons tous, toute cette dérive était dû à un manque de contrôle et de cadre légal approprié, parce que même s'il est vrai que nous avons dans notre arsenal juridique le *Food Act*, le *Chemical Control Act* ou même le *Pesticide Pesticide Control Act*, avec l'évolution rapide et les découvertes de nouveaux pesticides, il fallait mettre à jour nos lois et les dispositions institutionnelles afin de poursuivre le contrôle et de *monitor* l'utilisation des pesticides sur le marché mauricien.

Donc, nous avons dans notre système un contrôle basique, superficiel. J'ai devant moi, dans mes mains, Madame la présidente, une réponse du ministre que l'honorable député Ramful avait interpellé il y a quelques mois de cela. Et l'honorable ministre avait répondu –

“The Food and Agricultural Research and Extension Institute (FAREI) which operates under the aegis of my Ministry regularly collects samples of fruits and vegetables at farm gate level which are then analysed by the Agricultural Chemistry Division of the Food Technology Laboratory to detect the presence and level of pesticides residues.

Whenever pesticide residues in samples collected are found to be above the maximum residue level allowable by the Codex Alimentarius Commission, the planters concerned are sensitised on Good Agricultural Practices and on the quantity of pesticides to be used in their fields (...).”

Donc, il y avait un semblant de contrôle, Madame la présidente. Et ce projet de loi, aujourd’hui, devant l’Assemblée, vient combler une lacune, un vide juridique parce que ce projet de loi a pour but de remplir ce vide légal quant au contrôle de l’utilisation des pesticides. Donc, il propose la mise sur pied du régulateur, les sanctions. Il n’y avait pas dans notre loi pour le non-respect des normes sur l’utilisation des pesticides. Il définit clairement la classification et le dosage précis des pesticides et le taux maximal de l’utilisation permise.

Ayant dit ceci, Madame la présidente, malgré les propositions positives du projet de loi, je crois qu’il y a quand même des manquements et des questions qui se posent. La première étant, est-ce que le *Food Technical Laboratory* est suffisamment adéquat, sophistiqué? *Can the hon. Minister confirm that his Food Technical Laboratory is an accredited laboratory to carry out analyse and does it have the necessary equipment to analyse all the pesticides listed in this Bill?*

Dans le projet de loi, *in the definition section*, Madame la présidente, “*laboratory*” means a laboratory designated by the Ministry. Qu’en est-il du *Food Technical Laboratory* ou est-ce qu’il y a des laboratoires privés *which will be designated by the hon. Minister?*

Deuxièmement, Madame la présidente, dans le projet de loi, il est mentionné qu’une agence de formation sera *set up* par le ministère. Quel sera le rôle de cette agence de formation, Madame la présidente? Et d’une façon plus importante, rien n’est dit - ça c’est un autre point - sur la traçabilité des produits; *traceability of these agricultural produce*. Qu’advient-il des échantillons qui seront prélevés aux marchés, aux encans, aux autres lieux de ventes comme les supermarchés dont le taux de résidus est supérieur à la norme?

I am talking, therefore, de la traçabilité. Quel dispositif sera utilisé par le ministère pour retracer celui ou ceux afin de rendre les contrôles plus précis, plus exacts, plus justes et plus cohérents? La question de la traçabilité! Le projet de loi ne fait aucune mention sur une période de carence qui consiste, selon les normes européennes, de ne pas utiliser des pesticides un mois avant la récolte. Le silence, sur cet aspect des choses dans le nouveau projet de loi, nous interpelle, c’est-à-dire, la période de carence.

Cinquièmement, Madame la présidente, les associations de protection des consommateurs, je pense que le projet de loi aurait dû donner une certaine considération à ces associations, leur donner les moyens pour régulièrement surveiller et passer en revue si les nombres établis par ce projet de loi sont respectés, comme c'est la pratique dans les autres pays. Et peut-être, le ministère aurait dû apporter son soutien financier pour permettre aux associations de protection des consommateurs d'avoir la compétence et la possibilité de faire des tests régulièrement.

Finalement, Madame la présidente, le problème concernant les planteurs, même la relation entre les planteurs et les techniciens du ministère. En effet, quand on se penche sur le problème des pesticides, il faut aussi se rappeler de la situation des petits planteurs que leur situation est directement, étroitement liée avec la question du contrôle des pesticides. Pour cette communauté, Madame la présidente, le recours aux herbicides, aux pesticides est peut-être une condition *sine qua non* pour leur survie. Le manque de main-d'œuvre pour les travaux est une contrainte, comme nous le savons tous, un problème récurrent.

La main-d'œuvre se fait rare et faute d'encadrement technique, les planteurs ne maîtrisent toujours pas les propriétés des insecticides ou pesticides qui peuvent éliminer les nuisances et qui menacent les plantations. Les planteurs procèdent *by trial and error*, à tâtons et essaient de respecter les instructions fournies sur les emballages des produits.

Ce projet de loi, Madame la présidente, pourra-t-il offrir des solutions aux problèmes et aux contradictions du système actuel, c'est-à-dire, maintenir une activité agricole viable et saine, en prenant en considération la nécessité de la conscientisation d'une part, et la protection de l'environnement et la santé publique d'autre part ?

Dans ce sens, Madame la présidente, aucun nouveau projet de loi ne nous permettra d'offrir une solution durable sans offrir les possibilités d'un dialogue, d'une concertation, d'un *working relationship* entre les planteurs et les techniciens du ministère.

Indeed, if there is no prior preparation of the planters' mind-set, this present Bill can be a hard blow to them, Madam Speaker. Yes, they must imperatively be educated and trained on environmental issues, and this will help them understand the issues to enable them to stay on the market and continue producing almost pesticide residue-free food.

Donc, aujourd'hui, avec ce projet de loi, Madame la présidente, je considère que nous avons fait un grand pas, mais il y a encore des pas à faire dans l'avenir. Il y a encore plusieurs

obstacles à considérer. Le contrôle des pesticides est un processus qui est dynamique et qui s'inscrit dans le temps, Madame la présidente. On doit sans cesse veiller à faire évoluer notre législation pour se préparer à de nouvelles situations, à de nouveaux défis. J'ai en tête une nouvelle situation qui a été mise en avant par le scandale Monsanto, qui a démontré le danger pour la santé publique du glyphosate et des insecticides de la famille du néonicotinoïdes qui sont des tueurs d'abeilles. Ce scandale avait démontré ce qui constitue un danger pour la pollinisation des arbres fruitiers et par un pesticide qui était hautement toxique pour les abeilles.

Donc, je vais conclure, Madame la présidente, pour vous dire que ce projet de loi est un bon pas dans la bonne direction. Il va permettre à la nation de se responsabiliser. Il va aider à la conscientisation du problème que posent les pesticides pour la santé publique. *It is a welcome move in the prime interest of the consumers as well as of the planters in terms of the economy and for the nation as a whole.*

Il est de la responsabilité de nous tous, Madame la présidente, de tout un chacun, les autorités publiques, les petits planteurs, l'Association pour la protection des consommateurs, pour que ce système de contrôle de production locale et les importations fonctionnent bien, dans le souci de préserver un environnement sain pour les futures générations.

Je vous remercie.

Madam Speaker: I suspend the sitting for half an hour.

At 5.33 p.m., the sitting was suspended.

On resuming at 6.08 p.m. with Madam Speaker in the Chair.

Madam Speaker: Hon. Mrs Monty!

Mrs M. C. Monty (Third Member for Port Louis North & Montagne Longue): Merci, Madame la présidente, de m'accorder la parole. Je voudrais d'abord féliciter et remercier l'honorable ministre de tutelle d'être venu avec ce projet de loi.

Madame la présidente, ce projet de loi vient répondre non seulement à une attente, un manque longtemps décrié, mais à un besoin dans un monde où le consommateur devient de plus en plus avisé et où la notion du bio habite de plus en plus la conscience populaire. L'utilisation des pesticides à tort et à travers et selon le bon vouloir des cultivateurs affecte

dans une grande mesure non seulement la santé, mais aussi l'environnement. C'est un fait indéniable que le taux de pesticides présent dans les fruits et légumes dépasse largement le taux résiduel acceptable, mettant ainsi en danger la santé de la population.

Madame la présidente, il est bon de rappeler que jusqu'ici les mesures de sensibilisation, les nombreuses campagnes de sensibilisation n'ont pas suffi pour diminuer l'emploi abusif des pesticides. Et, Madame la présidente, la réponse des autorités gouvernementales arrive à point nommé. Ce n'est un secret pour personne que les abus sont légion et que le but du cultivateur n'est pas seulement de protéger à n'importe quel prix, même au prix du surdosage de sa culture, mais aussi et surtout son profit, voire même son gagne-pain.

Madame la présidente, les cocktails sont d'office, et le mélange des produits se fait de façon outrancière pour tuer insectes ou toute autre nuisance pouvant affecter les plantes. Faute de guide, d'information ou de formation, les ajouts ou autres mélanges des pesticides se font au gré des échanges conversationnels entre voisins ou agriculteurs, autour des pratiques coutumières des uns et des autres ; arrive donc avec ce projet de loi une mesure sécuritaire qui se veut réglementaire et régimentaire. N'empêche qu'il demeure certaines interrogations par rapport à son implication et la mesure dans laquelle l'agriculteur devrait pouvoir bénéficier de la formation ou de l'information y relative.

Madame la présidente, suivant les retombées des dernières recherches faites et publiées, il se trouverait qu'il y ait un taux bien trop élevé des résidus provenant des concoctions de pesticides dans certains légumes, comme la carotte, la laitue. Faut-il que les laitues soient larges, grosses et très feuillues pour qu'on soit tenté de les acheter ? C'est ce qui semble attirer le consommateur. Le danger, Madame la présidente, est bel et bien présent, et les occasions et opportunités d'achat à portée de main. Mon interrogation, comment et à quel point pourra-t-on contrôler les petits vendeurs d'occasion sortant leurs légumes de leurs potagers et les vendant à tout venant et aux acheteurs non-avisés ? Qui ne voit pas ces vendeurs d'occasion présentant des planchettes sur des tonneaux en plastique bleu superposées en guise d'étals d'occasion !

Madame la présidente, c'est un fait indéniable que l'agriculteur type de notre île est d'âge mûr. Une vie longue de contact avec la terre, la culture et tout ce qui est nécessaire à ses yeux pour protéger sa culture, vendre ses produits, se nourrir lui et sa famille, nourrir les autres, gagner sa vie, bref, une longue vie d'expérience, de savoir-faire pour sauver la vie de

ses plantes. Ce cultivateur, Madame la présidente, non-technocrate avec peu d'éducation formelle, et dont les mains calleuses sont les seules réponses à nos interrogations, où se situe-t-il dans la formation préconisée par notre nouvelle loi ? Il y a là, à mon avis, le duel expérience-expertise. Mais si les bonnes vieilles méthodes ne cadrent plus avec les exigences d'une économie moderne et les risques accrus en matière de santé, il n'en demeure pas moins que la question de pédagogie appropriée soit de mise. Serait-ce une pédagogie du dosage, une formation savamment dosée pour être digérée lentement et sans résidu ? Comme le dit le docteur Scheider –

« La santé ça se mange et nous sommes ce que nous mangeons. »

Si tel est le cas, notre Assemblée d'élus est bien menacée, Madame la présidente ! Le vocabulaire propre à l'agriculteur type qui nous a nourrit à sa façon tout ce temps, et dont nous respectons le dur labeur, est loin, Madame la présidente, d'être scientifique. Sa compréhension très éloignée des noms ou autres compositions chimiques ou alors les limites résiduelles acceptables selon les normes internationales en ce qui concerne l'application des pesticides, vous conviendrez, Madame la présidente. Ce qu'ils appellent 'Médecine' se réfèrent aux pesticides, et 'Vitamines' se réfèrent aux fertilisants. Donc, il y a tout un chemin, rude sûrement, une montagne certes, bien escarpé, pour atteindre une boîte crânienne, où l'efficacité des produits compte beaucoup plus et où la science passe au second plan.

Heureuse d'entendre que le ministre ait annoncé que la formation a déjà commencé ! Mais n'oublions pas que l'habitude est une seconde nature et le contrôle devrait être très strict, continue, suivi et très répandu. N'empêche, Madame la présidente, qu'il demeure certains aspects liés à ce projet de loi qu'il conviendrait de toucher, notamment la vulgarisation de ce projet de loi, la dissémination de l'information, la formation des *Verification Officers*, *Quality Control Officers*, le nombre adéquat de ces contrôleurs pour sillonner toute l'île, le contrôle de l'application des dosages, les analyses et la recherche. Et là, une fois encore, l'annonce du ministre concernant le laboratoire nouvellement équipé vient rassurer.

Une autre interrogation demeure, Madame la présidente, par rapport à l'industrie cannière, la plus grosse utilisatrice des pesticides. Donc, le plus gros pollueur de notre environnement ! Mais, le ministre de tutelle, de concert avec son collègue le ministre de l'Environnement, viendront sûrement avec une mesure adéquate.

Madame la présidente, l'agriculture pollue à grands coups de nitrate, de phosphates et de pesticides, et les consommateurs paient non seulement la nourriture, les aides aux agriculteurs mais aussi la facture de pollution et de dépollution. Il convient aussi, ici, de saluer les mesures préconisées par ce projet de loi, Madame la présidente. Il ne s'agit pas, ici, de brandir le couperet et de mettre des bâtons dans les roues aux cultivateurs et à son entreprise, mais de lui permettre d'évoluer dans un cadre informé et légal, où la santé humaine demeure primordiale. Il s'agit, ici, de venir sauver l'âme d'une agriculture devenue trop menaçante, un tueur silencieux qui atteint riches et pauvres, femmes et enfants, jeunes et vieux. Encore faut-il que d'autres mesures parallèles viennent consolider la nouvelle direction en matière de protection des plantes, protection de l'environnement et celle de la santé.

Madame la présidente, l'éducation à tous les niveaux demeure importante ; la recherche, l'infrastructure, le capital humain, de nouvelles stratégies de contrôle et d'investissement, d'attraction de nos jeunes vers la culture vivrière, les encourager, les motiver à être des agri-preneurs.

Madame la présidente, si 'la gastronomie est l'art d'utiliser la nourriture pour créer le bonheur', eh bien, on est mal parti et on est bien menacé ! J'ai cité Theodore Zeldin. On ne peut continuer à utiliser la nourriture pour provoquer la maladie, la créer, la perpétuer sans rien faire. D'où l'action gouvernementale qui arrive en ce jour et qu'on devrait saluer. Ce sont là, Madame la présidente, quelques notes de réflexion sur lesquelles je terminerai en félicitant le ministre. Je voudrais souhaiter bon vent à ce nouveau projet de loi et, sur ce, Madame la présidente, je vous remercie.

Madam Speaker: Hon. Dayal !

(6.17.p.m.)

Mr R. Dayal (First Member for Flacq & Bon Accueil): Madam Speaker, the Use of Pesticides Bill (No. VI of 2018) has to be viewed. First, the object of this Bill is reassuring because it is to regulate, control and monitor the importation and use of pesticides in, or on certain fresh fruits, plants, seeds of vegetables with a view to, *inter alia*, on the one hand, to produce quality fruits and vegetables, and on the other, minimising risks to human health and the environment.

The Bill must be read within the broad ambit of the Dangerous Chemical Control Act (No. XVI of 2004), particularly the establishment of an Advisory Chemical Council and its

functions, as well as the Dangerous Chemical Control Board and its functions, where the Ministry of Environment is dully represented together with other important stakeholders. This Bill answers to the growing concern of the majority of Mauritians as the trend in healthy living dictate to have insight into what you eat and how it is produced commercially. This Government is doing a lot in the field of bio culture. Nevertheless, traditional mode of cultivating food crops in the agricultural sector must be supported to motivate all stakeholders to produce more in an environmentally sustainable manner to sustain livelihood properly of those who are dedicated for generations in the production of vegetables and fruits. Today, it is a modern reality that bio-pesticide and insecticide are being fostered as an alternative to chemical pesticides and insecticides by this Government.

Nevertheless, when seeking compliance, we have to make sure that proper motivation is done for voluntary certification and I say, again, for voluntary certification with appropriate sensitisation schemes initiated by the Ministry of Agro-Industry and Food Security. It is not a secret to anyone that there is fierce competition in the community of vegetable and fruit growers to showcase nice-looking fruits and vegetables to attract consumers based on the demand.

In order to achieve their objective of producing good quality vegetables, heavy use of pesticides and fertilizers in an unbelievable manner is utilised with the result that there is no respect of the dosage utilised and their frequency for the application of pesticides. This has got various negative implications on our environment and the food chain. It is happening because the dosage indicated in the containers of pesticides and insecticides coming from overseas apart from being very costly, does not give effective results in the fields based on Mauritian realities.

An outgrowth of the agricultural products encountered great difficulty to control damage caused by insects and pests, and I, again, sustain what I am saying because I won the trophy of the Best Young Farmer for three consecutive years in my young days. Just by way of an example, today one container of coragen costing about Rs800 is used for some 80 litres instead of 200 litres, thus at national level, urgent action had to be triggered and this Bill is most welcome for the proper and safe use of pesticides.

Madam Speaker, imposing specified pesticides and the dosage in terms of maximum residual level for corresponding adjacent produce is a must. The creation of a Pesticides Regulatory Office is commendable indeed. However, the thorny issue of importation of

pesticides has not been dealt with to scheduled effective product and appropriate dosage although elements of control are there. At paragraph 6(b) under Functions and powers of office, the provision to –

“Develop strategies for the sound use and management of pesticides and for risk reduction associated with the use and disposal of empty pesticide containers.”

This is very important for the environment and I suggest that an incentive in the form of a financial token be provided for every container returned and it be financed under the Environment Fund.

The provision at paragraph 9 in respect of Analysis is rationally pragmatic as a deterrent and a sign post to vegetable growers that any agricultural produce can be secured and subjected to analysis in respect of standards and norms.

However, this Bill does not address the fundamental issue of the whys and wherefores of the level of MRL in our agricultural produce. In that, non-mechanism is tailored to control, outsource and I say again, outsource because it is not produced in Mauritius, it is produced overseas. The quality and efficiency of pesticides based on the needs of vegetable and fruit growers. Thus, all importations of pesticides must be controlled by the Pesticide Regulatory Office in terms of standard and dosage as well as price and *rémanence*, i.e., period of application of pesticides in the fields.

Madam Speaker, to achieve proper control on the price efficiency and quality of insecticides and pesticides in the interest of the community of planters and in the interest of all stakeholders, notwithstanding national interest, insecticides and pesticides should be imported by an appropriate Governmental agency like the State Trading Corporation, and I humbly appeal to the hon. Minister to see how it can be done proactively. The rationale being that consumer friendly insecticides and pesticides of proper standards are imported at a reasonable control price to ensure environmentally, friendly use of insecticides and pesticides. In this context, I propose an amendment in the Bill that will answer to some very pertinent issues related to the abusive sale and use of insecticides and pesticides.

In the object of the Bill, it is clearly spelt out that this Bill is to regulate, control and monitor the importation and use of pesticides and it is to be noted that no provision in this Bill is made for the control and monitoring of the importation of pesticides in terms of efficiency of the dosage, I say again, efficiency of the dosage and cost-effectiveness, value

for money and those who produce fruits and vegetables have a great burden to bear in terms of price.

At paragraph 4 – Control of pesticides, the provision of importation of pesticides is not spelt out. This Bill should also encourage voluntary compliance of all stakeholders involved in the cultivation of any agricultural produce for the purpose of sale. A paradigm shift is a necessity today to pave the way for a new mindset and culture of compliance. A training establishment, *École de Planteurs* should be created for all planters in the Agro-Industry and all regions of the Republic for a new generation of planters that will be compliant-friendly to the vision of this Government for meaningful change.

At paragraph 6(a) should be inserted the word ‘import’ in order to allow the Pesticides Regulatory Office to have the proper authority and mandate together with the Dangerous Chemical Pesticide Control Board operating under its aegis to have a more targeted approach and inform decision-making based on real timing inputs noted in the agricultural fields. The actual growers’ community, which is a highly vulnerable group as a result of climate change and high-cost of production burdened by circumstances beyond their control, must not be unduly penalised by this Bill more precisely in the context of food security.

Therefore, before having recourse to enforcement which entails heavy penalty as a responsible Government, a nationwide education programme should be implemented in the first place to ensure sustainable development in the field of food security. More so, as the cost of enforcement outweighs the cost of capacity building and training when handling a highly vulnerable sector dedicated to provide food security to Mauritians and tourists alike. And also to include in this Bill the Sugarcane Industry as they use between 1,700 tonnes of dangerous chemicals yearly and the residual value is really high.

Thank you very much for bringing this Bill hon. Minister. We are very grateful to you.

Madam Speaker: Hon. Osman Mahomed!

(6.28 p.m.)

Mr Osman Mahomed (Third Member for Port Louis South & Port Louis Central): Thank you, Madam Speaker, for giving me the opportunity to speak on the Use of

Pesticides Bill, which I consider to be a good initiative and is a first step to address a longstanding problem of public health and also of the physical environment.

At the outset, I would kindly request hon. Dayal if he could kindly circulate to us the amendment that he would want to bring forward to this Bill so that we can take cognizance before it is ...

(Interruptions)

Madam Speaker: I don't know whether he is circulating any amendments. He proposed certain amendments, but he didn't say that he is circulating.

Mr Osman Mahomed: Anyway, Madam Speaker, in the days when I was the Executive Chairman of the '*Maurice Ile Durable Commission*,' I came across an interesting article written by Mr Jean-Pierre Lenoir in '*Le Mauricien*' of Friday 30 November 2012, title '*Pesticide qui contrôle quoi qui agira*'. The article covered the story of one person who fell sick in Singapore and who was admitted to the hospital. The hospital staff, when they got his blood results, rushed back to him and asked him whether he was from Mauritius, simply because the amount of chemical they found in his blood sample. So, that gave them an idea that already he was from Mauritius. This can be verified. I am going to table later the link to the article.

After reading this article, I acted. From the Prime Minister's Office, I wrote to the Permanent Secretaries of the Ministry of Agro-Industry and Food security, the Ministry of Environment and the Ministry of Health and Quality of Life, with copies to their respective Ministers: hon. Faugoo, hon. Veerasawmy and hon. Bundhoo. Hon. Dr. A. Boolell was then Minister of Foreign Affairs. Previously, he was Minister of Agriculture. In my email, I said the following to Mr Nowbuth, who was then the Permanent Secretary -

"Mr Nowbuth, this email is written and intended to solicit yours and your colleagues of others Ministries' support to address this serious public health issue and please, rest assured that, we, at the *Maurice Ile Durable Commission*, would like to assure you of our contribution to your Ministry in whatever way is necessary".

The email is dated 04 December 2012 with a link to the article. I am going to table it later on. I must say, we kept on the pressure and subsequently, we got the Government to take a very important Cabinet decision on 22 May 2013, which reads as follows –

“Cabinet has taken note of the preparation of an Ecological Agriculture Action Plan in line with the concept of an ‘*Ile Maurice Durable*’. The project aims at gradually reducing the use of conventional pesticides on food crop plantations and replacing them by bio-pesticides which are less toxic with a view to making Mauritius an agro-ecology country. In this context, a Committee has been set up to –

- (a) prepare a list of pesticides, chemical fertilizers, fungicides, insecticides and herbicides which can be withdrawn from the market either immediately or in a phased manner, and
- (b) prepare an Action Plan to promote ecological agriculture with emphasis on reduction of chemical pesticides and promotion of alternative methods of pest control, including an integrated pest management approach which are more sustainable.”

Madam Speaker, we did not stop there. In May 2013, the Cabinet of Ministers approved the *Maurice Ile Durable* Policy Strategy in Action Plan, and this Action Plan together with several important policies on clean agriculture and also projects on green agriculture certification. And also, who does not remember the vast programme of *Maurice Ile Durable* Fund on the distribution of household compost bins with accompanying training to several thousands of Mauritian families.

Freshly elected in 2015, I remain a bit on the subject of clean agriculture and on 07 April 2015 in my Parliamentary Question B/280, the House will recall that I had asked hon. Seeruttun where matter stood as regards the decision of the Cabinet decision, I mentioned earlier. Well, in his reply, hon. Seeruttun told the House that in effect –

“(...) High-Level Steering Committee was set up in August 2013 at the level of the Ministry to work out a list of pesticides which could be withdrawn from the market, either immediately or in a phased manner, and to prepare an Ecological Agriculture Action Plan for both Mauritius and Rodrigues.”

Now, the important point is here -

“A list of 20 pesticides was consequently identified for withdrawal and safer pesticides/bio-pesticides were proposed as alternatives.”

The hon. Minister went on further to say -

“Upon the recommendation of the High-Level Steering Committee, the Dangerous Chemicals Control Board, which operates under the aegis of the Ministry of Health

and Quality of Life, decided to stop issuing permits for the importation of three pesticides in January 2014 and six pesticides later on.”

Now, Madam Speaker, at this stage, I would like to ask a first question to the hon. Minister and it is whether in connection with Clause 4 (a) of the present Bill which states that: “No person shall use a pesticide other than the pesticide specified in the corresponding second column of the Schedule”. First, can the hon. Minister confirm whether the pesticides he referred to in the question as being those to be withdrawn, have actually been withdrawn?

Secondly, the number of 20 was mentioned at the material time, but we just heard from hon. Ganoo that even India has banned 99. So, is this number 20 still relevant or must it be increased or do they not form part - I believe they do not form part - in the First Schedule that we are being requested to analyse today? Can the hon. Minister confirm that the list of toxic pesticides, he had referred to in his reply, whether those toxic pesticides do not also form part in the list to be found in the First Schedule which was supposed to be already banned?

Now, on a further point, Madam Speaker, it must be said that the very first Bill of this kind that was passed in our Parliament was the Pesticide Control Act of 1970, the days when Sir Seewoosagur Ramgoolam was Prime Minister. It is an ongoing battle with the giant agro-pharmaceutical industry, Big Pharma. But, we seem to be getting better at protecting our people and our ecology from their worst toxic effects. It is commonly said that much of the problems is not with Big Pharma, but with our own planters. There is a general belief, the hon. Minister explained that earlier on, aiming them, no doubt, spared by the suppliers that the more agrochemical they use, the more beautiful and bigger will be the vegetables that will be produced, and faster.

Now, the problem has always been with the proper quantification of agrochemicals used and once such problem lies with this Bill, more specifically as contained in section 4(b) of the Bill that tells us:

‘No person shall, in respect of an agricultural produce exceed the maximum residue level specified in the corresponding third column of that Schedule’.

Well, I have looked at the first, the second and the third column of the 29 pages all the way from pages 10 to 38, and in none of these pages have I seen the units in which these maximum residue levels are quoted.

(Interruptions)

Circulated! Which units are they measured? Well, I can only guess it can be milligrams per kilogram or parts per million.

Madam Speaker: It has been circulated already! An amendment has been circulated.

Mr Osman Mahomed: Okay, I believe this was one request of mine because the first Bill does not contain the units. I went to meet some experts, but it was not there.

Now, the next point I would like to raise on this Bill, Madam Speaker, has to do with Clause 4(a), counting the number of pesticides in the table has not been an easy task because they are listed by names of vegetables or fruits. Well, here, I must pay credit to '*L'Express*' - Mr Philippe Forget who wrote in '*L'Express*' - of 11 June 2018, title "The Use of Pesticides Bill: *Certainement mieux que rien! Mais encore...?*"

The hon. Minister has listed the number of pesticides in the Bill to be 60 as well. Now, the Food Tech Lab of the Ministry of Agro-industry and Food Security has invested Rs25 m. in a very sophisticated machine called 'Liquid chromatography-mass spectrometry' that can, at the moment, cover 186 molecules and it is planning to increase that figure to 200 going forward in the near future.

With this, I have the following questions. First, why is the Bill then limited to only 60 molecules when the Government Laboratory, itself, can test and treat more than that number? The second question is: what happens if the laboratory spots a molecule of pesticide that is not in the list? Will the batch be accepted simply because the molecule is not covered under the law? This is my second question.

Now, my next point, Madam Speaker, is about an equally important group of pesticides, which experts whom I have consulted call organic volatile pesticides. These are different types of pesticides which, for the purpose of analysis, must be extracted by organic solvents prior to analysis, and this is done in a different piece of equipment called a gas chromatography-mass spectrometry. This is a different apparatus. So, my question here is: does the food lab have this equipment and, if they do not, what will happen in the case of organic volatile pesticides, which are used mostly in non-water based legumes?

The point here, Madam Speaker, is that for the whole spectrum of pesticides to be analysed, laboratories must be equipped with two types of equipment: the liquid chromatography and the gas chromatography-mass spectrometry, which have the ability to detect, identify, confirm and quantify the amount of pesticide residues in vegetables and

fruits and the non-water based vegetables. This logically brings me, Madam Speaker, to a further point, which has to do with laboratory, and there, I have to refer the House to clause 2(b) of the Bill, which defines laboratory as meaning 'a laboratory designated by the Ministry'. This definition is very vague. Which laboratory is being referred to here? Is it the Food Tech Lab or some other lab? Also, there is in my opinion one word that is not to be found, and that is the word 'accredited'. All labs of repute, for the purpose of this Bill, should, in my opinion, be accredited specifically for their analysis of pesticide residues. The lab must be trustworthy and reliable, and its staff must be up-to-date through continual training and, of course, all equipment must be well calibrated at all times for the sake of good analytics and forensic results.

Madam Speaker, I would now like to touch on a further problem that has turned growers in many countries, so to speak, bananas, and that has to do with the problem of banana that is rampant around the world today. They are being attacked by a fungus called Fusarium wilt, for which a single heap of contaminated dirt is enough to spread like wildfire.

I was reading an article from the former Attorney General, Mr Rama Valayden, in the Papers before yesterday, and he asked the following question, which I am going to transmit to the House because I think it is a pertinent question. Are our authorities aware or are they blind to what is happening to our banana plants? So, I seize this opportunity to request the hon. Minister to give us an update on the situation. Are our bananas safe for consumption? Notwithstanding the virus that is rampant, we still see very clean bananas on the market. So, they must have been the subject of a lot of agrochemicals and a lot of pesticides. Even myself, I am telling my children - because they are so beautiful, so clean - not to consume. So, will the hon. Minister update us on the banana situation, please?

(Interruptions)

Before we go bananas!

Madam Speaker, I shall now raise a few more questions, which I hope the hon. Minister will consider. First, it concerns the impact of pesticides, more specifically insecticides, which is the greatest challenge to pollinators. What steps is the Government taking to ensure that the principles of dose-response relationship are included in professional, technical and public education, even using the MBC, maybe, to educate people on the

protection of the natural environment, and why not in school syllabus and teacher training and local government level? So, this is first a first suggestion, in fact.

The second concerns herbicide spraying in towns, which not only threatens the wide array of pollinators, where scarce open ground in Port Louis, for example, in their last remaining habitat, where the dead dry grass left after spraying many times catches fire and has to be attended by the Fire Services. If these plots of land - many times State land - could be put to local planters wanting to make green spaces, I believe we will make hay while the sun shines, making good use of these plots of land rather than having pollinators being destroyed and fire time and again in these places. We will all be better off.

Third, this has to do with the marine environment. I see that one academic from the University of Mauritius, Professor Bhagooli, has just been awarded the World Reef Award 2018 by the International Society of Coral Reef Studies. He has found that human activity is a key factor together with climate change in degrading coral reefs. Good seawater quality is vital. So, runoff from dosing of pesticides by untrained operatives is a potent factor in reducing the opportunities offered by the full potential of our marine environment. I look forward to hearing from the hon. Minister on this.

I come to my fourth point. The Minister has spoken about consultation with planters. This is very good. I hope that this Bill is the result of consultation between Ministries and other stakeholders as well, for the clue to environmental protection and human health is by joined-up Government and a fully aware community. Can the hon. Minister assure us of that?

Madam Speaker, I began my intervention with the story of a Mauritian patient in Singapore, who was found with high levels of chemical products in his blood. I commend this Bill for its objectives in regulating the content of the level of pesticides in our agricultural produce. That is a necessary first step, but it is not nearly sufficient if this Government is to be committed to the pursuit of sustainable development. The Bill merely controls the inputs. It does little about the process of applying pesticides, where the dose-response relationship is a key factor of use and abuse, nor does this Bill consider monitoring the outcomes in terms of chemical products in human blood samples, the impact on the wider ecology, including our vital pollinators, nor on the marine environment and the critical state of the corals or reefs, so important habitats for the nurturing of fish and other sea products. It is a persistent dilemma of Government that the existing problems that it tries to tackle have often emerged from the

persistent failure of existing institutional framework for effectively dealing with them. That is why we need joined-up Government. That is why *Maurice Ile Durable* was invented for covering this complex field.

Madam Speaker, may I call on the hon. Minister to ensure that he now actively consults other relevant Ministries - I lay a lot of emphasis on Ministries - which have a role in dealing with the process of use of chemicals, with education and training of operatives and the community at large, and that he engages the support of those concerned with human, animal and other species, health and the quality of environment, to check that the objectives of this Bill are fulfilling the desire of the measurement of the outcomes on health and ecology in this country.

Finally, may I ask the hon. Minister about the identification and safe disposal of the existing supply of products he is about to eradicate, stemming from the Parliamentary Question I asked him in 2015. What are the current stocks of these dangerous substances and who is responsible for their safe disposal when this will be completed?

I hope we shall not discover, as we did with the persistent polluted DDT, that the remained sizeable stocks are inadequately stored and no plans for their safe disposal. Can we have an assurance from the hon. Minister that these plans include the identification of these stocks, their safe disposal within a defined period of time and by accredited methods?

I thank you for your attention.

Madam Speaker: Hon. Benydin!

(6.49 p.m.)

Mr T. Benydin (First Member for La Caverne & Phoenix): Thank you, Madam Speaker. In the first instance, I would like to congratulate the hon. Minister of Agro-industry and Food Security for the introduction of such an important Bill geared to regulate, control and monitor the importation and use of pesticides in or on certain fresh fruits, plants, seeds or vegetables to minimise risks to human health and environment.

This Bill meets also the objectives of promoting organic agriculture, namely the shift from the use of chemical inputs to organics ones, in order to promote sustainable agriculture as well as measures contributing to healthy and nutritious aspects of food. Madam Speaker, I would like to refer to a study conducted by the National Economic and Social Council

(NESC) in July 2013, on food security, The Challenges for Mauritius, and its reference to the use of pesticides. The NESC Report made mention of the fact that, I quote –

“There is a need to gradually move to bio-pesticides for food security reasons as well as to help reduce the risks of cancer and Alzheimer.”

It thus recommended that continuous efforts should be made in this direction as this aspect of food security is one of the most important components of food security also. No segment of the population is completely protected against the exposure to pesticides and the potentially serious health effects. The worldwide deaths and chronic diseases due to the pesticide poisoning is about one million per year.

Madam Speaker, the high-risk groups exposed to pesticides include production workers, formulators, sprayers, mixers, loaders and agricultural farm workers. During manufacture and formulation, the possibility of hazards may be higher because the processes involved are not risk-free. In industrial setting, workers are at increased risk since they handle various toxic chemicals, including pesticides, raw materials, toxic solvents and inert carriers. Organochlorine compounds could pollute the tissues of virtually every life on earth, in the air, the lakes and the oceans, the fishes that live in them and the birds that feed on the fishes. Bioaccumulation and biomagnification occurred in the body of the animals and humans whereby the concentration increases along the food chain, as the insoluble pesticides get accumulated in fats and as we go up the trophic level, at each stage, the concentration of the pesticide becomes stronger.

Madam Speaker, humans are found mostly at the level in food chain being mostly secondary, tertiary consumers. Not regulating the level that may be sprayed can result in pesticide becoming a major and direct threat to our health and life. Madam Speaker, the promotion of hydroponic culture and smart agriculture should be encouraged, and we note with satisfaction that already the Ministry of Agro-industry, in collaboration with FAREI, has embarked on a laudable project to encourage young people, namely young graduates to reshape the agriculture sector and bring innovation in agriculture *via* the promotion of sheltered farming and hydroponics.

This project, as we all know, was launched by the hon. Prime Minister and the Minister of Agro-industry in Plaine Magnien in April last. Madam Speaker, to overcome health problem issues, awareness campaigns should be oriented towards consumption of

fresh fruits and vegetables. Therefore, there is a need to produce adequate crops and fruits in order to yield good harvest farmers are using chemicals and other substances, such as pesticide to control plant diseases. It has very strong impacts on humans through food commodities. Among the fresh vegetables, lettuce, which we, Mauritian families, consume almost on a daily basis, is the crop where researchers have found residues mostly above the normal MRL, and eaten raw, impacted on our health directly. MRLs were exceeded in crops like beans, mandarins, pears, bananas, potatoes, spinach, peaches, carrots, *pâtisson*, squash and even melons and cauliflowers were determined as potential threats.

Madam Speaker, pesticides impact on the environment is enormous. It can contaminate soil, water and other vegetation. In addition to killing insects or weeds, pesticides can be toxic to a host of other organisms, including birds, fish, beneficial insects like bees and non-target plants. Pesticides can reach surface water through run-off from treated plants and soil. Groundwater pollution due to pesticide is a worldwide problem. During a survey in India, 58% of drinking water samples drawn from various hand pumps and wells were contaminated with organochlorine pesticides above the Environment Protection Act (EPA) standards.

It is important to note that once groundwater is polluted with toxic chemicals, it may take years for the contamination to dissipate or to be cleaned up and this cleaning can be very costly, complex, if not, impossible. In an article published by Inter-Press Service (IPS) News Agency, on 26 April 2016, entitled 'Mauritius Farmers Go Smart', it was mentioned that, according to official statistics, Mauritius imported 54,000 tonnes of chemical fertilisers and 2,250 tonnes of pesticides in year 2015. Out of 307 samples collected for testing, 72% had no pesticide residue, on 24% the presence of pesticide residue was below the codex maximum residue level and 4% exceeded this level. Madam Speaker, what we may tend to forget is that pesticide is a big hindrance to plant growth. Heavy treatment of soil with pesticides can cause population of beneficial soil, microorganism to decline. Based on the soil scientist, Dr. Ingham, whose studies I would like to quote -

“If we lose both, bacteria and fungi, then the soil degrades.”

Overuse of chemicals, fertilisers and pesticides have effects on soil organisms that are similar to human overuse of antibiotics. The Use of Pesticides Bill, therefore, comes at an opportune time for a better control. Before proceeding ahead, I would like to place on record that this Government, in a short span of time, has come forward with two very important

Bills. The two Bills deal with health issues, namely, The Human Tissue (Removal, Preservation and Transplant) Bill and now we are coming with this present one, The Use of Pesticides Bill. Madam Speaker, these initiatives clearly show how caring our Government is to work for the betterment of the nation. Coming back to the introduction of this Bill, I would like to stress on the importance of using pesticides and their benefits on the one hand, to ensure good harvest and safe from bacteria, but to as well their harmful impact on vegetation. While considering the use and abuse of pesticides, it must be borne in mind that the excessive use of pesticides can also contaminate the soil and nearly water courses, if not, boreholes with their toxicity and other living organisms like birds, bees and aqua organisms when farmers unconsciously wash their sprayers in the nearby rivers.

Madam Speaker, we know too well that without bees, the world would be endangered as they are the most important vectors of pollination; excess of pesticides is contributing to their extinction. In short, if I continue, I can enumerate even more what pesticides can cause to the environment and, more importantly, to our children, our future generation towards whom we have a very deep responsibility. But I will now want to assure our fellow stakeholders who are directly and indirectly connected with this Bill and, here, I am talking to my constituent brothers and sisters who are planters, sprayers, agricultural workers and farmers that this Bill is for every one of us. As agro workers, it takes into consideration our health and safety. As planters, it ensures our business longevity. As consumers, it takes full consideration of our health and as decision-makers it ensures that our future generations have a full-fledge and healthy life.

Madam Speaker, exposure to pesticides through handling them and breathing can put people at risk of acute and chronic poisoning. The more so when it comes to those who are directly involved like planters and farmers, pregnant women when consuming these crops, infants and vulnerable sick people and the elderly. Therefore, Madam Speaker, this Bill is a wake-up call to –

- (1) regulate and measure the application of pesticides in fruits and crops by enforcing law;
- (2) provide for a mandatory registration of all potential planters and vegetables growers;

- (3) provide the necessary infrastructure in terms of laboratories, trained qualified officers;
- (4) inculcate the required technical know-how for use of pesticides through appropriate training and workshop, aggressive information, education and communication campaign not only for growers and planters, but for consumers also, and
- (5) provide for a proper monitoring process by regular random checks not only in fields, but also in market and hypermarkets.

Madam Speaker, we will fail in our mission if we only address the issue of pesticides. It remains as important to also consider imported packed vegetables and fruits sold in hypermarkets as they can also be contaminated with excessive use of pesticides. There must also be a strict control mechanism for imported fruits and vegetables.

Madam Speaker, in the quest for better production and eventually higher revenues or profits, researchers have gone a step further with the Genetically Modified Organism (GMO) to produce more. GMO has been an issue of controversy when it comes to health. It is no doubt that chemicals must have a major contribution in such situations.

Last, but not least, Madam Speaker, developing countries face another dilemma when pesticides or other chemicals which are banned or prohibited in developed countries are dumped in the markets of the third world or developing countries. This is why the use of Pesticides Bill is a must. We must remember that the Bill is only regulating and monitoring pesticide use. It is not banning the use of pesticides. We must, therefore, ensure that we are not victims of such situations or it will be a paradox. A paradox in the sense that we are restricting the use of pesticides and, at the same time, our markets are flooded with banned or prohibited substances.

Madam Speaker, the most effective strategy is the integrated pest management approach. We may be encouraged to use both the natural pest control method along with the right dosage pesticide use. This will ensure that pesticide impact on the environment and on our health is reduced considerably and in the long run its additive effects will alter the risk benefit equation.

With this, Madam Speaker, I end my intervention and I would like to thank the House for its attention. Thank you.

Madam Speaker: Hon. Leopold!

(7.04 p.m.)

Mr J. Leopold (Second Member for Rodrigues): Thank you, Madam Speaker. Madam Speaker, in an attempt into embarking in such an ambitious programme to become an ecological island by the year 2030, that is, in good practice with bio-farming, protection of our ecosystem, sustainable fishing, clean production of energy and maintenance of the clean environment plus management of our waste. I am glad tonight of having such an important occasion as elected representative of Constituency No. 21, that is, Rodrigues Island, to participate in the debate for the control and monitoring of the use of pesticides for sustainable development.

Having said that, Madam Speaker, pesticides are intended to be hazardous, with the ability to kill unwanted organisms, by interfering with their biochemical and physiological processes. They are widely used for the supposedly increased food protection or which may not be necessary true. Madam Speaker, if pesticides are made to kill small organisms and they are being applied on food products consumed by humans and other animals, they must have and will have side effects on humans. Therefore, all the measures that this Bill provides are important.

Controlling of pesticides to preserve human health and the protection of other species are so important, especially those which are important in the maintaining of food production for human consumption.

Therefore, Madam Speaker, this law must be applied correctly and effectively so as to serve the true purpose of its objective. I am sure that the Minister has already thought about improving or changing at structural level at his Ministry so as to have the right machine, the right apparatus and manpower so as to effectively enforce the regulation, because overuse of pesticides is a public health issue. It is not the type of law which we can wait to apply. So, we have been waiting for too long, but now the Bill is here. We are voting it in this Assembly and its application sooner will be better. As I have said, it is a public health issue of overusing pesticides.

The public health issue that most people have spoken about is the increasing number of cancer in humans where causes are unknown in most cases. Therefore, regulation of usage of toxic chemicals on consumables may be the best vaccine to prevent the occurrence of ill-health to humans.

Nonetheless, we cannot rely solely on this regulation to reduce or eliminate the use of pesticides which are injurious to health and environment. The Ministry needs to continue laying emphasis on the alternative ways of maintaining food production without the use of pesticides.

We have to sensitise farmers and work together with scientists to get use to the technology and the know-how into ways of increasing productivity in line with the critical measures we have to take to reduce overuse of chemicals to protect our planet for the future.

Zero budget farming is another alternative way of reducing use of insecticides. How? Simple! Zero budget farming allows farmers to reduce their expenses in using chemical fertilisers. Therefore, they do not need to use pesticides excessively to increase the yield. Control of pests and insects in an ecological or eco-friendly manner needs also to be encouraged, so as to enhance sustainable agriculture, therefore, avoiding the indiscriminate use of agrochemical to control diseases. Having mentioned those few alternative measures, it is obvious that agriculture and food production are very important in maintaining food security and reduce poverty.

With the event of climate change, global food security and poverty are becoming such a serious concern to Government. Government always needs to continue economic development, but it has to be done sustainably without affecting our national resources. Pesticides are used to kill pathogens that are affecting crop production, but they are no longer considered to be an effective way. Usage of pesticide for controlling of pathogens and diseases cause pollution to soil, water and the killing of non-target insects, which are themselves food sources. How can pesticide be important in maintaining food productivity by destroying the sources which produce food?

Madam Speaker, I support the approach of the Minister of Agro-industry and Food Security in controlling the usage of pesticides. Protecting of food sources and beneficial insects are better more important. Some pesticides are even need to be banned completely. Pesticide products belong to the Neonicotinoid family, need to be banned on the market as

they are the bigger killer of beneficial insects, which are very important in the maintenance of food production. Neonicotinoids kill bees which are important for pollination and honey production. The Ministry also needs to continue to invest in the field of research and development into finding out all those pesticides, which are no longer efficient as a result of pests being resistant to them and take them out of the market.

Most importantly, I have to mention that again, we need to change our way of producing food without harming the ecosystem which will be in the long-term injurious to human health. Production of food can be done sustainably now. For example, as I have already mentioned, biological control of pests, bio-farming and integrated agriculture. Proper land management, that is, maintaining and increase land for organic farming, keeping agricultural land for sole purpose of cultivation and food production is also one of the measures that needs to be taken to reduce the overuse of insecticides and pesticides.

Therefore, Madam Speaker, control of pesticides use is important as those products are available everywhere and are being misused. This piece of legislation will help to minimise risk to human health. All I hope is that this Bill will help in reducing our reliance on pesticides and preparing us to move to sustainable agriculture and keeping food production in pace with human population growth.

On this note, I thank you for your attention.

Madam Speaker: Hon. Dr. Joomaye!

(7.13 p.m.)

Dr. Z. Joomaye (Second Member for Rivière des Anguilles): Thank you, Madam Speaker, for giving me the opportunity to debate on this Bill. First and foremost, let me congratulate - as all my colleagues on both sides of the House as we have seen - the hon. Minister of Agro-Industry and Food Security for bringing this Bill in front of this House.

This issue about misuse or inappropriate use of herbicides and pesticides have been a question several times raised by different stakeholders. Many people, including myself as a health professional, have spoken about this issue and this has been a concern relayed in the Press as well. We all know that there is no control right now in this sector until now and, Madam Speaker, the negative impact on the health as well as on the environment is now well known and, therefore, cannot be denied.

We can no longer turn a blind eye to the fact that pesticides, even though considered as *un mal nécessaire*, have to be regulated. By bringing this new Bill to the House, again this Government - our Government - demonstrates its will and commitment towards the agricultural communities. In the recently presented Budget, the Prime Minister and Minister of Finance and Economic Development, hon. Pravind Jugnauth, has gone very far in his support to the agricultural world. The sugar sector has been provided with measures to ensure better sustainability. The winter allowance in the tea sector is a big relief for those depending on ploughing the tea belt, growing tea trees and plugging tea leaves for a survival.

The Bill in itself will provide a new legal framework for the use of pesticides and herbicides in Mauritius. There are several objectives in doing so. First, it is to protect the citizens from harmful effects of pesticides present in agricultural products. We all consume to a certain extent pesticides as they are widely used in agriculture and there is always a residual level at the end of the chain, that is, in our plates. That is why we need to know and control which chemicals are being imported, distributed and sprayed in the fields, as these are the same chemicals that we and our children will be ingesting.

The second objective is an occupational issue, that is, to protect the planters and people working in the agricultural sector, all those dealing and manipulating the pesticides. It starts from the employees of the importer, all those in contact, from warehousing to delivery. We should not forget that breathing permanent emanation of pesticides might be prejudicial to the health of the employee. Repeated skin contact might be an issue as well. It is well documented and accepted that there is a link between pesticides and skin and lung cancer in the planters. Increase incidence of blood disorders and lymphoma as well as brain tumour have been noted.

The third objective, Madam Speaker, is to protect the environment as the products being spread and used, will remain in the land for some time. After rainfall, these chemicals are washed and follow the course of water. It goes into the rivers and the sea. There it affects the marine ecosystem and residual level of pesticides can be detected in the fish that we consume. Birds and other insects can be affected when they consume contaminated seeds or other exposed plants. For all these reasons, the Minister of Agro-Industry and Food Security is coming with this piece of legislation. The Pesticides Regulatory Office will have a key role in the control of this sector, as it is more than urgent to establish a pesticide code of practice, which will give the guidelines to the planters. Right now, the planters do not have specific

information on how to use the chemicals. Either they get the information and some training from the importers themselves, and these importers and distributors, they are themselves conflicted as the more they sell, the better is the business. Sometimes, the planters only read from the notice present on the labels and learn in a very approximate way from their own experience.

Madam Speaker, educating our planters is a priority. Training them about the optimal use of pesticides is the way forward. Informing them about the risk for their whole health and how to better protect themselves from over exposure to pesticides should be promoted permanently through educational and targeted campaigns. They should be informed about the consequences of high maximum residual level of pesticides in their crops; the commercial impact in case of positive control, and they should realise the risk of a whole harvest being destroyed, to protect the interests of the consumer.

The training programmes approved by the Ministry should focus on all these points. A reflection on the mechanism of misuse of abuse of pesticides should be done as well. Why do planters use excess pesticides? Is it lack of information, poor education or other purpose? Is it by reflex? Is it because they have wrong beliefs or wrong expectations upon using more pesticides? Is it because of poor labour force, less people engaging in uprooting of weeds? We need to know. A survey has to be carried out, and information has to be collected on the ground. *C'est le cas de le dire.*

Awareness in the general population is very important as well. People have to be aware of this problem. Fruits and vegetables have to be well washed before consumption. It was taught in schools in the past for general hygiene, but now we need to talk about pesticides and its risks. The link with cancer is well-proven. The increased incidence of cancer in planters using pesticides is well documented. Oral cancers as well as blood diseases and other solid tumours are on the increase. People should be made to realise that through campaigns in the media and educational programmes at school, all this can be well diffused.

It is proven that the best way to change the habits of a population is to educate the children. The advantages of the bio-industry have to be promoted as well, but this is another debate. Our future dwells in pesticides-free agriculture. The bio-industry which grows fruits and vegetables without using chemicals can be developed as a sector on its own. The economic merits of large-scale production of tropical fruits have to be explored. A new

source of revenue can be obtained through exports to other markets, whereas for the local market, the cost of production remains higher and economic considerations have to be taken into account.

Aquaponics, where cultivation is done in enriched water, is another technique gaining momentum in the United States and China. Safety of fresh food products will become a growing concern internationally. We will have to keep the pace.

I will conclude here, Madam Speaker, that this new Bill is the beginning of a new era in our agricultural sector. Training our planters will enhance their status, preserve their health and our environment.

I wish again to congratulate the hon. Minister Mahen Seeruttun for this piece of legislation.

Thank you for your attention.

Madam Speaker: Hon. Dr. Sorefan!

Dr. Sorefan: Madam Speaker, I move that the debate be now adjourned.

Mr Rutnah rose and seconded.

Question put and agreed to.

Debate adjourned accordingly.

ADJOURNMENT

The Deputy Prime Minister: Madam Speaker, I beg to move that this Assembly do now adjourn to Tuesday 03 July 2018 at 11.30 a.m.

The Vice-Prime Minister, Minister of Local Government and Outer Islands (Mrs F. Jeewa-Daureeawoo) rose and seconded.

Question put and agreed to.

Madam Speaker: The House stands adjourned.

MATTERS RAISED

(7.23 p.m.)

WASTEWATER MANAGEMENT AUTHORITY – JETTING MACHINE

Mr R. Uteem (First Member for Port Louis South & Port Louis Central): Thank you, Madam Speaker.

Madam Speaker, I would like to raise an issue which concerns the hon. Deputy Prime Minister, Minister of Energy and Public Utilities. In fact, it concerns the Wastewater Management Authority. They have what we call a jetting machine, which is a sewer cleaning machine used to go and unblock sewers. There is one such machine for the region of Port Louis but, unfortunately, for the past few weeks now, it is broken down, and as a result, there have been lots of complaints from the inhabitants of Port Louis, whose sewers are blocked and cannot be cleaned because this machine is broken.

So, I would be grateful if the hon. Deputy Prime Minister could talk to the Wastewater Management Authority and see whether there are ways and means of either changing the machine or having a new machine, but, at least, give relief to the inhabitants of Port Louis.

Thank you.

The Deputy Prime Minister: First of all, I have to thank the hon. Member for his courtesy of having provided me notice of the matter on which he intended to raise. That has enabled me to find the information. The machine has been repaired today. I do not know whether he had the information or not. So, it has been repaired today, and they are going to work all through the weekend, that is, tonight, Saturday, Sunday, insofar as it is reasonable and practicable, to try and finish the work as soon as possible.

Madam Speaker: Hon. Baloomoody!

(1) LA BUTTE – METRO EXPRESS PROJECT

(2) MANGALKHAN – ROAD – BLUE & RED LIGHTS

Mr V. Baloomoody (Third Member for GRNW & Port Louis West): Thank you, Madam Speaker. My question is addressed to the hon. Minister of Public Infrastructure and Land Transport, Mr Bodha. It concerns the works being done at La Butte in the context of the Metro Express.

I do not know if in Port Louis there is a meeting every week with the Municipality like in Beau Bassin-Rose Hill. They are working there, especially at the place of La Butte,

using the *marteau-piqueur*, the jackhammer, late at night till early morning, every day, and this is creating much inconvenience and trouble to the inhabitants.

May I appeal to the hon. Minister to make a request to the contractors that, at least, they use another machine and that they do other work instead of using the jackhammer, *marteau-piqueur* till 2 o'clock or 3 o'clock in the morning.

Another issue which I will raise and on which I have concern again concerns the constituency of the hon. Minister. After Riverwalk, one inhabitant has put two lights, blue and red, on the right side of the road, just before you reach Mangalkhan. Especially at night and when it rains, when it is very foggy, it creates considerable disturbance and a serious accident might be caused because of these two sets of light.

So, I would ask the hon. Minister to look into both matters.

Thank you.

The Minister of Public Infrastructure and Land Transport (Mr N. Bodha): I will start with my constituency. I have talked to RDA. So, they are going to see the resident about the lights.

As regards the Metro Express, the problem is its piling and it is just a bit of about 100 metres. I will see what can be done, because I think there are about 14 piles there. So, let me see what can be done.

Madam Speaker: Hon. Ameer Meea!

MILITARY ROAD - CITE MARTIAL MARKET FAIR – TRAFFIC CONGESTION

Mr A. Ameer Meea (Second Member for Port Louis Maritime & Port Louis East): The issue I am raising tonight concerns the Police Force and the MPI. So, I shall address it to hon. Minister Bodha. It relates to the problem of traffic situated at Cité Martial Market Fair, which is also situated at Route Militaire. The problem we have there is that this road is well used by those entering the Capital, entering the city, going towards Vallée Pitot and Champ de Mars, and also those leaving the city in the evening.

On market fair days, that is, Tuesdays, Thursdays and Saturdays, normally there should be Police officers posted there. But very rarely we have Police officers at the market fair, and you can imagine the traffic there, especially because of parking problem.

So, I have two requests to the hon. Minister in relation to this issue. First, it is to ensure that we have Police Officers posted on the days of the market fair - the days that I have just mentioned - and second, to instruct the RDA or TMRSU to see to it if a study can be done in order to see whether it is feasible for that part of the market fair, alongside Route Militaire, be converted into a one-way traffic. I am not sure if this is the solution. That is why I am asking if a study can be done by the experts of his Ministry so that we can find a solution to this problem.

Thank you.

The Minister of Public Infrastructure and Land Transport (Mr N. Bodha): I will certainly look into the matter, Madam Speaker. I will also liaise with the Rt. hon. Minister Mentor for the Police.

As regards the market fair on Tuesdays, Thursdays and Saturdays, maybe we should also see at what time - you have a peak time. Maybe, if we cannot provide a Police presence all the time, at least we can have their service when you have a lot of people. I will look into the matter.

(1) **PLAINE VERTE GARDEN – LIGHTING**

(2) **PRIEST PEAK - UPGRADING**

Mr S. Abbas Mamode (Fourth Member for Port Louis North and Montagne Longue): I would like, first of all, to thank the hon. Vice-Prime Minister. Last time, during Adjournment time, I raised a problem of lighting and it was resolved. So, for that, thank you. Unfortunately, concerning the whole Garden of Plaine Verte, there is not enough light and in some regions there are no light at all.

And secondly, concerning Le Plateau Priest Peak, work has been abandoned. I am made to understand that this site was handed over to the City Council of Port Louis but, unfortunately, nothing is being done and it is in a very harsh situation; people are going there to do jogging, especially ladies, and *l'odeur et l'environnement ne sont pas agréables*. So, if the needful could be done, please.

Thank you.

The Vice-Prime Minister, Minister of Local Government and Outer Islands (Mrs F. Jeewa-Daureeawoo): Madam Speaker, I will certainly look into both issues and convey to my friends what actions have been taken.

Madam Speaker: Hon. Osman Mahomed!

HATCH STREET - SEWER SYSTEM

Mr Osman Mahomed (Third Member for Port Louis South & Port Louis Central): Thank you, Madam Speaker. I was out in the first part, talking to the wastewater engineer people about a problem in one specific part in my constituency called Hatch Street. There, for the last 3 to 4 weeks, the sewer system was clogged because the normal intervention did not resolve the problem. I talked to them, the truck came this afternoon; we saw the jetting truck, but they went back. I do not know for what reason they went back. And I am just told that they are coming this Sunday.

My request to the hon. Deputy Prime Minister is as follows. The reticulation system in Port Louis is very old and requires interventions many times because rocks go into the system and the normal truck cannot resolve the problem. I think we should buy one more that caters for this part of the country because otherwise we will have to call the engineers almost every day. So this is my request to the hon. Deputy Prime Minister, if there is some Capital Expenditure that can be made available for this truck for the region of Port Louis.

Thank you.

The Deputy Prime Minister: Well, for the immediate short-term, I have just said that the Jetting Unit has been repaired - the staffs have just talked to the General Manager of the Wastewater Management Authority - and they are working full blast. I do not know about this particular street, but generally they told me they are working full blast, at least, all over the weekend, as I informed hon. Uteem, who had raised the matter a few minutes ago.

Madam Speaker: Hon. Henry!

LE BOUCHON, CAMP CAROL & CARREAU ACACIA – ANIMAL FARMING - RELOCATION

Mr T. Henry (Fourth Member for Mahebourg & Plaine Magnien): Merci, Madame la présidente. Cela concerne le ministre de l'Agro-Industrie, c'est au sujet des éleveurs d'animaux dans la région de Le Bouchon, Camp Carol et Carreau Acacia qui

devaient être délocalisés, Madame la présidente. Malheureusement, ils attendent toujours et cela crée beaucoup de problèmes là-bas. Est-ce que le ministre peut urgemment regarder cela, s'il vous plaît ? Merci.

The Minister of Agro-Industry and Food Security (Mr M. Seeruttun): Madame la présidente, la question est en train d'être étudiée parce qu'il faut trouver un site approprié pour pouvoir les reloger. On a cherché un site, malheureusement on a trouvé que, pour le besoin environnemental, ce n'était pas approprié. Donc là, on cherche un autre site. J'espère qu'on trouvera le site idéal très bientôt pour pouvoir les reloger.

At 7.33 p.m., the Assembly was, on its rising, adjourned to Tuesday 03 July 2018 at 11.30 a.m.