

Debate No. 9 of 28.0513

Second Reading

THE SEEDS BILL

(NO. VIII of 2013)

Order for Second Reading read.

The Minister of Agro Industry and Food Security (Mr S. Faugoo): Mr Speaker, Sir, I beg to move that the Seeds Bill (No. VIII of 2013) be read a second time.

This Bill provides for the setting up of the National Plant Varieties and Seeds Office within my Ministry which I will henceforth refer to as NPVSO. This Office shall regulate the cultivation, production, trade, exportation and importation of any seeds of any variety of any kind of plant.

The Bill also provides for the setting up of a National Plant Varieties and Seeds Committee which shall inter-alia advise on national policies relating to the seeds of any variety of any kind of plant and make recommendations for the improvement of the seed regulatory system and on the release of any variety in Mauritius. The Bill further provides for the registration of varieties and seeds, for testing, inspection and certification of seed.

Mr Speaker, Sir, the enactment of this Seeds Bill constitutes yet another landmark in the reform process that my Ministry has embarked for the improvement of service delivery to the farming community. We are aiming at strengthening and modernising the agricultural and agri-business sector to make them more responsive to the emerging challenges in the sector.

It also goes in line with the firm commitment taken by Government in the Government Programme 2012-2015 to diversify and strengthen our agri-food production sector, to make it modern, competitive and sustainable, with the overall aim of further securing food supply, stability and safety.

Mr Speaker, Sir, this Government under the able and strong leadership of the Prime Minister, has started in-depth reforms of the agricultural sector including the sugar sector. In 2006, we enacted the Plant Protection Act and a National Plant Protection Office was set up to inter alia prevent, control and remove pest infestation of plants and facilitate the movement of plants into and out of Mauritius through the issue of phytosanitary certificates. We have merged six Service Providing Institutions in the cane sector into the Mauritius Cane Industry Authority (MCIA) to make them more efficient and cost effective. We have more recently on 16 April this year - to be precise - passed the National Agricultural Products Regulatory Office Act and its implementation is underway.

Mr Speaker, Sir, seed is one of the most critical and also costly inputs in agricultural production. For some crops like potato, seed cost may amount or account for almost 50 percent of the total cost of production. Indeed it is widely recognised that improved crop varieties and high quality seeds have played a significant role to usher the green revolution in many parts of the world. Good seeds have a significant potential in increasing on-farm productivity, farmers' revenue and enhancing food security. Indeed many authorities have emphasised that seed security is a precursor to food security.

With the resounding success of the Green Revolution where food deficit countries have become food surplus countries, planters have come to realise the real worth and benefits of improved varieties and quality seeds. Improved varieties of crops ensure higher yield, better quality of economic produce and lower cost of production due to inbuilt resistance to major diseases, insect pests and abiotic stresses like drought. However, breeders are unlikely to release valuable varieties into a country without adequate legal protection.

Concomitantly, the seed industry has also witnessed a revolution and new seed companies have emerged. High quality seeds are also more eco-friendly, since crops raised from them require less application of pesticides. Seeds are now produced under rigorous conditions and protocols recommended by the FAO (Food and Agricultural Organisation) and seed testing as per guidelines of the International Seed Testing Association (ISTA).

Despite these breakthroughs in the science of plant breeding and seed technology, yet some bad experiences have also been noted and these relate to insufficient control on seed multiplication, in particular to seed borne diseases.

In the early 2000, for example, the anthurium industry in Hawai and Reunion Island, which is next door to us, almost came to a collapse because of a bacterial disease that was introduced from the Netherlands along the tissue cultured plantlets. Reports have also indicated that planters in many parts of the world have also experienced poor yields and even crop failures which are attributed to poor quality seeds supplied by these companies in the absence of proper regulations on standards of quality.

Mr Speaker, Sir, the seed industry has over the years undergone dynamic changes worldwide and these changes have come with challenges that require institutional reforms in the local seed industry. Regional integration and international trade, together with scientific advantages in the area of biotechnology have posed additional challenges that require the local industry to quickly adapt to the changing environment in order to remain competitive both locally and at the regional level.

Mr Speaker, Sir, it is against this backdrop that we are presenting the Seeds Bill to the House. It is relevant at this stage to give a brief overview of the variety and seed situation in Mauritius to have a proper understanding of the rationale of this Bill.

Mauritius has a long history of sugar cane breeding and Mauritian sugar cane varieties are grown not only in Mauritius, but also in many countries across the world. Attempts have also been made to breed new varieties of vegetable and ornamental crops. Recently AREU has released two 100% locally bred varieties of onions namely: Bella Rose and Francia, which are widely grown by planters. AREU has also released five 100% locally bred varieties of anthurium for commercial cultivation in 2007. One local variety of potato, Belle Isle, was also released by the MSIRI in 2009. AREU has also an extensive programme of introducing for field testing of new crop varieties that have been bred abroad. After field evaluation, they are recommended to planters for commercial growing.

Mr Speaker, Sir, Mauritian planters have access to seeds of varying qualities for growing their crops. Some, in fact, use their own seeds, some purchase seeds produced by my Ministry

and some make use of imported seeds. Seeds of some 50 varieties of 30 species of vegetable crops are produced through our seven Agricultural Experiment Stations including the Barkly Experiment Station and these represent around 25% of our seeds requirements at national level.

The seeds produced by the Ministry and planters are mainly of open pollinated traditional varieties which are well adapted to our agro climatic conditions and have proven to be successful over the years. Most of these traditional varieties are, however, old and some are more than 40 years old and are now showing varying degrees of degeneration and are more susceptible to diseases. There is therefore an urgent need to promote the introduction and development of new improved varieties of crops with features such as improved yield, high quality and resistant to plant pests and diseases.

For several years, my Ministry has been playing a vital role in the production and supply of seeds of vegetable crops and planting materials, including seedlings, grafts, layers and tissue-cultured plantlets of fruits and ornamental crops at subsidised price to the planting community and the public at large. The seeds are sold at subsidised prices to growers and the public at our Stations and also at one-stop shops.

Mr Speaker, Sir, let me mention some statistical figures to the House: 3,519 kg and 3779 kg of seeds of vegetable crops were produced by the Agricultural Services of my Ministry in 2010 and 2011 respectively. During that same period 62,398 kg of vegetable seeds were imported in 2010 and 90,328 kg in 2011. In 2010 and 2011, 134 kg and 1,690 kg of flower seeds were imported.

Mr Speaker, Sir, we are now addressing this issue through two projects, namely maintenance breeding to ensure genetic purity and production of Quality Declared Seeds (QDS in short) which is an acceptable substitute by FAO for certified seeds.

This project aims at alleviating the problem of storage and irregular supply of seeds on the local market as well as improving the quality of seeds produced by local planters and agro-entrepreneurs. The Quality Declared Seed system provides an alternative for seed quality assurance and is particularly designed for countries with limited resources. This system is less demanding than full seed quality control and certification systems but, yet, guarantees a

satisfactory level of seed quality. It has proved to be particularly useful for those working in the field of emergency seed supply and as a source of practical information on seeds standards for a range of crop species.

We have also extended facilities to investors who have shown interest to undertake commercial seed production in Mauritius. Two companies have already benefitted from support from my Ministry, that is, from the Government, - Vitarice Company for hybrid rice seeds and Nirmal Seeds Company for growing of vegetable seeds.

Mr Speaker, Sir, we are conscious that the seed industry is a strategic and basic core industry and the foundation of ensuring long-term stable agricultural development and security in Mauritius and in the region. As a SADC Member State, we can supply seeds of improved varieties and high quality to SADC countries and other African countries in the region. To facilitate the trade of seeds with SADC countries, the Seeds Bill 2013 - which is presently before the House - has been harmonised with the SADC Seed Regulatory System.

The agri-business industry may, in the future, become another main sector of the economy in replacement of the sugar sector. It is a fact that with the fall in the price of sugar on the world market, more and more sugar cane planters are abandoning sugar cane cultivation. We, therefore, have lands which may be made available for the production of quality seeds for both local consumption and export. It is expected that with the high rate of return of the seed industry, farmers who have moved out of the sugar cane cultivation may be attracted to enter this new sector.

Mr Speaker, Sir, the full potential of the seed industry can only be exploited when we have in place a proper seed regulatory framework. At present, the cultivation, production, trade, exportation and importation of seeds of any variety of any kind of plant is not regulated in Mauritius with the result that the Ministry has no control over the quality of seeds and planting materials which are sold by seed dealers and private horticulture nurseries. Farmers have no guarantee of the variety and the quality of the seeds that they are buying.

Unscrupulous seed dealers may offer on sale poor quality seeds or varieties which have not been tested for cultivation. This may result in poor crop yields and productivity. This has, in

fact, happened in the past. In the absence of an appropriate legal framework and a seed certification system, no action can be taken against these seed dealers.

It is with this underlying aim of addressing these challenges that the NPVSO is being set up to regulate the seed industry, mainly the cultivation, production, trade, exportation and importation of seeds of any variety of any kind of plant as well as through the registration of varieties of seeds and seed testing, seed inspection and seed certification.

A Seeds Act is a necessary protection measure for farmers against the purchase of poor quality seeds and to promote the growth of the seed industry in general and crop productivity in particular.

It is to be pointed out that when a buyer purchases a good, the latter can judge the quality and suitability before the purchase. However, for seeds the buyer cannot assess the quality and suitability prior to the purchase, as a seed is a living material. Neither the buyer nor the seller can identify the variety or assess the germination capacity or purity of the seed. These can only be determined by specific laboratory tests or a seed certification scheme or schemes for that matter. Sowing seeds of poor quality may result in the loss of the entire plantations.

A seed regulatory system will contribute in improving the crop yield and productivity of farmers, as I said earlier. Planters can maximize their returns on each unit area of land cultivated as a genetic potentiality of the crop can be fully exploited.

With the growing population and expanding tourism industry, crop production in Mauritius should be intensified. By setting rules and standards for the cultivation, production, processing, labelling and trade of seeds, the Seeds Bill will contribute towards the creation of a level playing field among seed dealers and producers. *Bona fide* seed dealers and producers will be protected against unscrupulous ones.

Presently, there have been indiscriminate imports and trade of seeds by the private sector and growers, with the result that several imported varieties which have not been tested are being cultivated by growers. With the Seeds Bill, the genetic quality of the seed can be evaluated, the variety can be identified and only those varieties which are of proven value will be made available to growers. This will help to improve productivity, through higher yield, profitability

through better quality of economic produce and lower cost of production due to inbuilt resistance to major diseases, insect pests and abiotic stresses and are more eco-friendly at the same time.

With the Seeds Bill through the establishment of a plant variety registration system, we can now encourage growers and the private sector to introduce and develop new varieties of crops. An Industrial Property Bill which covers different forms of intellectual property rights, including Plant Breeders' Rights to protect new varieties of plants, is currently being prepared by the Ministry of Foreign Affairs, Regional Integration and International Trade. Once it is finalised and introduced into the National Assembly, it will complement the present Seeds Bill which is before the House.

As I indicated earlier, our close proximity to the African Continent and as a member of SADC, we have the potential of supplying seeds to the SADC markets. For us to trade seeds, an appropriate seed regulation system which is aligned with the SADC standards and procedures is required. The Seeds Bill 2013 complies with these standards and will, *inter alia* -

- (a) facilitate the availability of high quality seeds to growers within the SADC region;
- (b) make it easier and cheaper for new and existing varieties to gain access to SADC markets;
- (c) stimulate the availability of more varieties of seed and encourage more investment in the seed sector, and
- (d) encourage faster and safer movement of seeds and reduce costs related to seed trade.

Some international companies are still expressing an interest to invest in the production of seeds in Mauritius. With the appropriate legal framework, more companies, both local and international, may be interested to invest in this sector which can rapidly become an important diversification within the agricultural sector. In fact, we have secured lands from the Republic of Mozambique for this purpose and two international companies have already submitted the expression of interest for the production of vegetables seeds over there.

Mr Speaker, Sir, I would like, at this stage, to highlight and elaborate on some of the salient provisions of the Seeds Bill.

Let me start with Clause 3. Clause 3 provides that any seed will be covered by this Bill. However, by way of Regulations, any seed may be exempted from the Bill. Cane cuttings will be exempted as for the Cane Industry there is already an approved system of seed certification. Moreover, by way of Regulations, the use of certain produce which is meant for consumption may be prohibited to be used as seeds. Table potatoes will be one of the main crops which will be prohibited to be used as seed as such use may bring diseases. For strategic crops such as potatoes, onions and garlic only certified seeds will be allowed to be planted.

Clauses 4 and 5 establish the National Plant Varieties and Seeds Office with the objective of regulating the cultivation, production, trade, exportation and importation of seeds of any variety of any kind of plant, under the guidance and supervision of the Seeds Committee. The Office will be manned by public officers to be appointed by the Supervising Officer of my Ministry.

Clause 6 provides for the setting up of a National Plant Varieties and Seeds Committee comprising a Chairperson with experience in the field of agriculture and twelve (12) other members from various sectors including the private sector, planters' associations and the seed industry. The National Plant Varieties and Seeds Committee will have *inter alia* the following functions -

- (a) advise on national policies relating to the cultivation, production, trade, exportation and importation of seeds of any variety of any kind of plant;
- (b) guide and supervise the NPVSO in the enforcement of the Act;
- (c) make recommendations for the improvement of the seed regulatory system, and
- (d) make recommendations on the release of any variety in Mauritius.

Clauses 7 to 8 provide for the registration of any variety of any kind of plant with the NPVSO, the conditions for the registration of the variety of any kind of plant and the application procedure for the registration.

Clause 9 provides for the keeping of a National Variety List and the publication thereof at regular intervals.

Under clause 10, the NPVSO may, on approval of the Seeds Committee cancel the registration of a listed variety under specific conditions and for the cancellation to be published in the Government Gazette. No cancellation shall be made unless the breeder or agent has been given a reasonable opportunity of being heard in respect of the grounds for such cancellation.

Clause 11 provides for the maintenance of listed varieties by an applicant who has registered a variety.

Clause 12, under this clause, the conditions for the registration of a seed dealer is laid down.

Clause 13 provides for the setting up of a seed testing laboratory where the testing of the seed of any variety of any kind of plant shall be carried out in such manner as the NPVSO may determine.

Clause 14 provides for the designation of an officer as a seed analyst where he complies with such eligibility criteria as may be determined by the NPVSO.

Under Clause 15 any person who, having produced or acquired any seed which has not been tested and intends to sell the seed for the purposes of cultivation, shall cause a sample of the seed to be delivered to the NPVSO for testing.

Clause 16 provides for the NPVSO to designate an officer as seed inspector where he complies with such eligibility criteria as it may determine.

Clauses 17 to 20 lay down the powers of seed inspector.

Clauses 21 to 24 provide for the registration of seed producer and the certification of seeds by the NPVSO.

Clauses 25 to 29 provide for the conditions for the import, export and trade of seeds.

Clause 30 concerns the confidentiality clause.

Clause 31 provides for the setting up of an Appeal Board to hear and determine appeals against a decision of the NPVSO from any person who feels aggrieved by a decision of the Office. However, any person who is still aggrieved may still appeal to the Supreme Court through a judicial review.

Clause 32 of the Bill provides for a fine not exceeding Rs50,000 or to imprisonment for a term not exceeding one year for a first offence and for a second offence, to a fine not exceeding Rs100,000 or to imprisonment for a term not exceeding 2 years and for a third or subsequent offence, to a fine not exceeding Rs200,000 or to imprisonment for a term not exceeding 3 years.

Under Clause 33, the Minister may, after consultation with the Seeds Committee, make such regulations as he thinks fit for the purposes of this Act.

Under Clause 34, the Savings and transitional provisions provide for any variety that has been released by the Ministry, the Mauritius Cane Industry Authority, the Food and Agricultural

Research Council, including the Agricultural Research and Extension Unit, and is available on the market at the commencement of this Act, shall be entered in the National Variety List.

Mr Speaker, Sir, in light of the challenges ahead, institutional reforms of the local seed industry are required to adapt to the changing environment in order to remain competitive both locally and at the regional level. Through the setting up of the NPVSO the cultivation, production, trade, exportation and importation of seeds of any variety of any kind of plant will be regulated. The varieties of any kind of plant will be registered; seeds will be tested, inspected and certified.

Mr Speaker, Sir, with the Seeds Bill, we are going to promote the introduction and development of new improved varieties of crops with features such as improved yield, high quality and resistant to plant pests and diseases which are key elements to increase productivity and product quality in agriculture. Moreover, we will also encourage the local seed industry to develop and become a Seed Centre for Africa.

With this legislation, the local seed industry will be regulated and only improved varieties of high quality seeds will be supplied to growers.

Mr Speaker, Sir, I take this opportunity to thank all the stakeholders, the staff of my Ministry and also the Attorney General's Office for the preparation of this Bill which was long overdue.

I also thank my colleague, the hon. Attorney General for his help which he has extended to me and the Ministry.

With your permission, Mr Speaker, Sir, I shall be moving to some minor amendments which have been circulated already, at Committee Stage.

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

Thank you.

Dr. Jeetah rose and seconded.

(5.36 p.m.)

The Leader of the Opposition (Mr A. Ganoo): Mr Speaker, Sir, on this side of the House, we are in favour of the present piece of legislation. We endorse the contents of the Bill, but we also reserve our rights to make certain comments on a few features of this Bill. After me,

some of my friends on this side of the House will, therefore, adopt the same line of endorsing the contents of the Bill, but also making certain positive comments on certain aspects of this Bill.

Mr Speaker, Sir, as the hon. Minister said appropriate seed legislation is essential to create an enabling environment for the development of the seeds sector. In fact, the enhancement of a National Seeds Strategy necessitates the framing of a seed legislation to facilitate the development and the eventual growth of a seed industry in a country. A seed legislation, therefore, Mr Speaker, Sir, defines what are the means that can be best used to foster and enhance the seed sector namely seed certification, variety release, property rights, seed production, seed marketing, packaging, labelling, manpower development, credits and subsidies, international exchanges; all these, Mr Speaker, Sir, are the features that find themselves in a seed legislation. It is clear, therefore, that a multiplicity, a variety of domains should be tackled and addressed in a seed legislation. It is, in fact, a question of a proper, well-balanced elaboration, a *mise sur pied* of a policy formulation which should rest on a shared vision of all the stakeholders with regard to what type of structure we desire, we need and the role and the development of the sector.

Therefore, Mr Speaker, Sir, we fully agree that the elaboration of a seed law to provide a regulatory framework for harmonising a seed legislation is vital for the development of the seed sector in any country. Mr Speaker, Sir, seed is one of the most crucial element in the livelihood of many communities, particularly agricultural communities and a sustainable seed system can assure that high quality seeds of a wide range of varieties and crops are produced and fully available in time and affordable to planters, breeders, farmers, by whatever name we call them and other stakeholders.

Indeed, Mr Speaker, Sir, when we think about it, seed is the most unassuming patent gift in the life of the farmer, of the breeder and of man. In fact, it is vital in making our life fruitful. The right to good food and the right to safe food are the buzz of the day, Mr Speaker, Sir. Same can only be achieved by attaining food sustenance and food security. Seed, in fact, is the kernel of life itself, as we know Mr Speaker, Sir, the source of our food, and when contaminated, has an adverse effect on the health of the planet itself.

However, Mr Speaker, Sir, unfortunately, in many developing countries, populations, farmers and breeders have been deprived of the full benefit and advantages of using quality seeds due to several factors, amongst which is the absence of a comprehensive and elaborate legal framework legislation which can ensure an efficient seed production, distribution and quality assurance system and a good seed policy in general.

Mr Speaker, Sir, having said this, I reiterate our agreement with the provisions of this Bill which seems to have been somewhere inspired from what obtains in India. The law, as the hon. Minister just pinpointed, sets up the different bodies and institutions to carry out the objectives of the law, but I would wish to make a few remarks on a few points in the Bill.

The first point, Mr Speaker, Sir, is that the Bill refers to seeds only and does not make provision for horticulture nursery. To my mind, the Bill should also cater for horticulture nurseries. This is the point that I wanted the hon. Minister to clarify the House. So, I am asking the question why this is not the case.

Secondly, Mr Speaker, Sir, it is not clear whether the Bill bans certain genetic engineering technologies such as “genetic use restriction technology” or “terminator technology”. These technologies, Mr Speaker, Sir, preserve intellectual property rights by either requiring specific additives or by making the next generation seeds sterile. A farmer, for example, planting seeds containing terminator technology cannot use the seeds from his crop for the next generation and has to purchase new seeds every season. So, I would like the hon. Minister again to shed some more light on this aspect.

It is not also clear, Mr Speaker, Sir, whether the Bill makes special provisions for registration of transgenic varieties of seeds, as in the case of several countries such as India. Transgenic seeds refer to genetically engineered seeds whose DNA has been modified by integrating part of the DNA sequence from another organism. This results in the organism displaying new characteristics. For example, the flavr savr tomato developed by Kalgin incorporation in 1992 contains a gene that interfered with the production of an enzyme which softens the cell walls of a ripening fruit. This resulted for example, in the tomato resisting rotting without change in taste, vitamins, proteins and minerals. Therefore, I would be grateful if the hon. Minister could also shed some more light on this issue.

I come to section 6(2) of the Bill, Mr Speaker, Sir, dealing with the functions of the Seeds Committee. To my mind, this section should also have included the need for the Seeds Committee to advise on standards for registration, certification and seed testing, and secondly on seed registration and its enforcement.

As for section 6 (3), Mr Speaker, Sir - the Seeds Committee, in fact, a long list of members are listed in the Seeds Committee. I would not go into the provisions of the Bill, but the only question I am asking the hon. Minister is that besides several civil servants or Director of AREU, Dean of faculty of agriculture and so on, there is also provision for a representative of an association of planters other than sugar cane planters. I would ask the hon. Minister whether it should not be provided for, that the Seeds Committee should comprise also of a representative of GEPTA which is the *groupement des exportateurs, des producteurs et des transformateurs des produits agricoles* and of APEXUM which is the *association des producteurs et exportateurs des produits horticoles de Maurice*. These Bodies are two major industry associations and key players in the agro-business industry in Mauritius.

Another point, Mr Speaker, Sir, is that the Bill does not make mention of the minimum level of germination, be it genetic and physical. The Seeds Committee may, we are told by notification, specify the minimum limits of germination, genetic and physical purity and seed health with respect to any seed of any kind or variety, and if the hon. Minister can explain further this issue.

Also, Mr Speaker, Sir, section 31 of the Bill - appeal against the decision of NPVSO. In this section, I wanted to ask the hon. Minister one simple question: why the appeal against decision of the NPVSO

- “(1) Any person who feels aggrieved by a decision of NPVSO may, within the prescribed period and in the prescribed manner and on payment of the prescribed fee, appeal to the Minister against the decision.”
- (2) The Minister shall refer the appeal to an Appeal Board appointed by him.”

I was going to ask the hon. Minister why the appeal should not have been made to go directly to the Appeal Board and not through the Minister. Can the hon. Minister explain to us why the appeal should be made to the Appeal Board through the hon. Minister?

Furthermore, Mr Speaker, Sir, on the same issue, the Bill does not provide for any time-bound mechanism for the person making the appeal to get a hearing for his complaints. I repeat, the Bill does not provide for any time-bound mechanism for the appellant to get a hearing of his complaints nor does it set out any term for compensation. I submit Mr Speaker, Sir, that grievance redressal must be time-bound and compensation should have been fixed to cover costs incurred by the person.

Mr Speaker, Sir, one of the last points I want to make is that the Bill does that make provisions for compensation to breeders and farmers. All the registered varieties and seeds producers, distributors and venders have to disclose the expected performance of the seeds under certain given conditions. In case of failure to perform the expected standards, the farmer can claim compensation from the dealer, from the distributor or the vendor. The question I am asking is about the introduction of a Seed Crop Insurance for providing compensation to the farmers whose seeds do not give the desired yield.

The two last points I would like to make Mr Speaker, Sir, concern sanitary and phytosanitary measures. We are told in this Bill that the testing laboratory will be set up, the use and services of the analyst and so on will be resorted to. But as we know Mr Speaker, Sir, sanitary and phytosanitary measures regulate, restrict or prevent the import or the marketing of certain plant species or plant products. The *raison-d'être* of these measures is to prevent the introduction and spread of plant pests across international boundaries or limit the impact of pests, Mr Speaker, Sir, but this should be undertaken in a way that it does not limit trade while making trade in plants and plant products safe. These measures are essential for the protection of plant varieties, Mr Speaker, Sir. The hon. Minister was just mentioning of making our country a hub, a centre for Africa, but the question I am asking and the emphasis I want to lay, Mr Speaker, Sir, is in terms of our human resources, the capacity that we have. I am just making the suggestion, Mr Speaker, Sir, that we must ensure that we have all the necessary human resources, expertise in order to make Mauritius the centre for Africa.

Mr Speaker, Sir, we must be careful we are a small country vulnerable. Although we are no more a monocrop economy, Mr Speaker, Sir; no more a predominantly agricultural economy but this question of sanitary and phytosanitary measures is still vital for the Mauritian economy. There is only one danger in seed legislation, Mr Speaker, Sir and this has been commented upon in many countries which have, just like we are doing today, set up a seed legislation. The danger, Mr Speaker, Sir, is the danger of over regulation; over regulation can discourage our breeders, our farmers or our private industry from developing their crop varieties and this is why, Mr Speaker, Sir, laws and regulations should not be restrictive; should not bear pressure and should not constrain participation of the private breeders and impede the domestic producers of the seed industry.

With these remarks, Mr Speaker, Sir, I wish well the National Plant Varieties and Seeds Office and wish that this new law which comes at a timely moment to plug a loophole in our agricultural landscape succeed and help the enhancement of the seed industry; of the development of the seed industry in our country.

With these words, I thank you, Mr Speaker, Sir.

At this stage, the Deputy Speaker took the Chair

(5.53 p.m.)

The Minister of Arts and Culture (Mr M. Choonee): Mr Deputy Speaker, Sir, convergence of factors have made food security one of the most important global issues; those factors being an increase in population - today the world has seven billion people; an increase in demand for more resources and varied food; an increase in prices of petroleum, products and fertilisers, an effect of declining world food stockpiles; an effect of trade liberalisation; an effect of food for fuel, biofuel and energy production, agricultural subsidies, distorted global market, crop shortage from natural disasters, soil and productivity losses and, of course, climate change with the rising level of ozone. Over and above that, the signal was sent in 2008. The food price

hikes of 2008 were a warning to what is yet to come. Staple foods prices rocketed causing riots in several countries as people took to the streets.

In Mauritius, we have to agree that we are very fortunate. Despite the fact that we produce; we have been producing for years; we have been known for a monocrop country. Up to Independence, only sugar was being produced from sugar cane. Despite that we have been lucky and we have to congratulate all those who know how to deal with things to get Mauritius to where it is today. Today, we are in the process of diversification. I think everybody agrees that sugar is no more sweet, as sweet as it was those days. We don't get more returns from sugar. We have now called it no more the sugar industry but the cane industry with a diversification and using part of the cane plant for different purposes. Other countries have been equally doing well or much better. Brazil has become the biggest producer not only of sugar, but also of ethanol. Just to say, in Mauritius, though we are coming now with diversification - my colleague, the hon. Ministry of Agro Industry has mentioned – we have had a few products which have proved themselves. Yesterday only on Mauritius Broadcasting Television, we were shown Vita rice, a quality of rice coming from elsewhere, from Singapore being grown in Mauritius where usually the climatic condition needed, the soil needed for rice to grow should have been damp soil, humid soil with plenty of water. Yet that variety has come to Mauritius, has succeeded. Further to that, the most interesting thing about Vita rice is, it is being exported to the United States of America. American enjoy eating that rice and locally we still have a mindset that we should eat Basmati and other varieties. It is just to tell you how good Mauritian soil is; we can diversify and we will succeed. So the special seeds of that rice have proved to be very good. Similarly, we know very well our Victoria pineapple. World over, people enjoy eating it. It is one of the best pineapple that the world has and we export. Our lychees - world over people enjoy seeing from where the lychees come, it is from Mauritius. Now gradually the new entrepreneurs have got into the business. They are exporting breadfruit. They are exporting banana chips which means that Mauritius has the potential. The land of Mauritius, I believe, sugar will be there as the cane industry but somewhere because of scarcity of land in this country, because of our size being not increased but being what it is; no tsunami, no erosion comes to Mauritius touchwood but hopefully we'll make optimum use of the land available in Mauritius. Further it is not with pride that we will say: we only export sugar, we import everything for consumption. For how long can Mauritius say that? After all that is happening in the world, if ever it so happens that others can't

supply us with the food what do we do? Do we starve? Do Mauritians have to live without food? No. Let's take it very seriously. Let's try as early as possible to see to it that we produce, at least, most of the food that we consume. The potential is there. If, through this bill, we get the best of seeds; we'll get the best of quality; we'll get the best of products; we'll get the best of harvest; automatically Mauritius will, at a point in time, become self-sufficient and, of course, be in a position also to export. The Seeds Bill comes at the most opportune moment. It comes when the world has taken note of what challenges are in front of us, it comes when Mauritius has realised that depending only on sugar will not take us long, it comes when the population is now conscious of what is quality food and how diversified our food has to be for us to be healthy. Just imagine if Mauritius would be in a position to produce wheat, we would have the best if the required seeds, the necessary conditions are attached!

Mr Deputy Speaker, Sir, I heard the Leader of the Opposition commenting on the Bill. I understand we are not talking at all here, we have to be careful, we have nothing to do when we come of seeds here in this Assembly, it has nothing to do with GM seeds, the Genetically Modified Seeds. No! We are talking of the natural way we can fertilise seeds, we can carry out pollination, but get the best out of whatever we can do. Naturally, it takes place, but the human factor, human element allows it to go faster. You can, through first harvest, get the best of seeds. So, this is what we are talking about when we talk of the Seeds Bill and I am very happy that the National Plant Varieties and Seeds Office (NPVSO), the new unit that will be created will definitely look into all aspects and with the amendments which my colleague is bringing, it will again consolidate further all that can be done for us to get the best of seeds in this country.

Mauritius, scarcity of land, the best seeds ever - just imagine Mauritius playing the role of *la pépinière du monde et l'Afrique devient, à ce moment là, le grenier du monde! Vous vous rendez compte Maurice la pépinière, l'Afrique le grenier!* Because the future of the world, Mr Deputy Speaker, Sir, will depend on Africa, will have many more people in Africa, Africa being the emerging Continent, Mauritius being an African country, as my colleague likely said, he talked about SADC, but I am sure we can go beyond SADC. If we produce the right variety of seeds, we can export those seeds to the whole of Africa, if need be, because in Africa, there is no scarcity of land and we know already some of our friendly countries have even offered Mauritius land for growing vegetables and cane and what not. I am sure if Mauritius takes the lead as it has taken in different aspects, in different economic pillars, matters like education and other

industries, I am sure that tomorrow the seeds industry will become a pillar of the Mauritian economy. I am very happy and convinced that this dream of making of Mauritius a *pépinière* will be realised.

I thank and congratulate my colleague, the hon. Minister of Agro-Industry for having brought this Bill to this House and I am sure we will all benefit from the best quality of seeds and the best of food and enjoy the best of health in this country. Through this Bill, Mr Deputy Speaker, Sir, we are sowing the seeds of food security of our citizens.

I thank you for your attention.

(6.03 p.m.)

Mrs L. D. Dookun-Luchoomun (Second Member for Quartier Militaire & Moka):
Mr Deputy Speaker, Sir, we are, today, in presence of the Seeds Bill which was circulated some two weeks back and whose objective is to set up the National Plant Varieties and Seeds Office.

The office, I understand, will regulate the cultivation, production, trade, exportation and importation of seeds of any variety and of any kind of plant. The office will be responsible, through the National Plant Varieties and Seeds Committee, to register seeds and plant varieties and as well as be responsible for the registration of breeders, seed producers, cultivators, dealers, carrying out seed testing, certification and as well as inspection. Mr Deputy Speaker, Sir, a tall order, indeed!

If the intentions of the Bill are good and positive and, we, on this side of the House, would tend to welcome it. But nevertheless, Mr Deputy Speaker, Sir, I have certain fears and apprehensions regarding its effective implementation, its impact on small planters, its impact on small informal seed producers and also on the entry of transgenic and genetically modified plants on the subsequent loss of biodiversities that may result. All these are issues that I apprehend.

It is perhaps worth drawing the attention of the House to the fact that in India, since 2004, Government prepared a new Seeds Bill to replace the 1966 Seeds Bill, but because of the fears of the impact on the small farmers, the new legislation is still pending. In 2010, 2011, 2013, vast consultations were carried out among NGOs, plant breeders, seed producers, ecologists, farmers and even parliamentarians. It is good to note that parliamentarians, on both sides of the House, Opposition and Government in India, debated widely on the issue. So much so that the Chief

Minister of Bihar himself expressed his concern about the adverse effects of the Bill on small planters and farmers. He also conceded that such a Bill would tend to be in favour of large multinational seed producers.

Mr Deputy Speaker, Sir, there was even a Parliamentary Standing Committee which worked on a set of recommendations which were eventually approved by Cabinet, but still almost nine years later, this Bill, is still pending. The cautiousness shown by the Indian Parliament on this Bill must, of course, make us a bit more vigilant. We should act on the principle of caution, cautiousness. Mr Deputy Speaker, Sir, it is true, that ideally it will be very good and it will be positive to be in a position to carry out registration of all commercial plants, varieties and seeds or to be able to check on the quality, check on whether they correspond to the labelled characteristics. We all know that small planters complain very often about spurious seeds, about mislabelled products. First and foremost, Mr Deputy Speaker, Sir, I think it is very, very important to ensure that we have the necessary manpower, that we have the expertise required, that we have and I think we should have some capacity-building done before embarking on such a project.

Mr Deputy Speaker, Sir, we shall be needing professionals for the seed labs, we shall be needing seed analysts, we shall be needing a whole set of professionals who would be working at the office and who would be helping in determining whether any product, any seed or plant variety should be allowed in or should be allowed to be commercialised. So, Mr Deputy Speaker, Sir, my main concern is about our human resource, about setting up the technical units that we need. So, this tends to make me think that once again, Mr Deputy Speaker, Sir, we may have placed *encore une fois la charrue avant les boeufs*. Now this is the question which arises: as far as seed testing is concerned, what type of mechanism are we putting forward? We are going to test seeds produced in the country, but we are going also to test seeds which are imported: what is the mechanism proposed? How long will it take? Who are the specialists who will be working on it? Are we going to test the viability, the quality, the yield or are we going to see whether it is conforming with the label characteristics? Should we not also consider the adaptability of the product to our local conditions? All this needs to be cleared, Mr Deputy Speaker, Sir.

When we talk about registration, I know that the Bill refers to commercial varieties. We know that in Mauritius there are lots of small planters, small farmers who produce their own

seeds, their own plants, they may not be directly linked to the registration process, they may not have to register their products, but we know that in Mauritius small planters tend to sell their products. Will they be required to go and get these products registered if they are selling it to their neighbours?

I am glad to hear from the Minister that the cane industry has been exempted, that sugar cane planters will not have to go through the procedure because we all know that small planters in Mauritius normally give cane cuttings to their neighbours to ensure that they can also cultivate a particular variety that they are growing in their fields. This is at least something good. But, maybe the Minister should also let us know what are the other crops and plants that would be exempted from the need to get registered.

Mr Deputy Speaker, Sir, another thing that worries me is that small planters normally have a lot of difficulty in meeting the cost of their production or their cultivation. If ever they wish to get their products registered, will they be able to meet the cost of registration? The seed testing fees, will they be able to meet it? Are we not straight away asking them to refrain from entering the market? These are things that we have to consider, Mr Deputy Speaker, Sir.

We also have to consider that in the Bill, as mentioned by the hon. Leader of the Opposition, we talk about importation and the entry of seeds and plants but, there is no mention made, no distinction made for transgenic plants and for genetically modified organisms. Are we going to allow these in or if they are registered on our land, are we going to allow their commercialisation? Does registration in the list of varieties of Mauritius mean that they will also be commercialised? Here is another field where we need to protect our small planters. We know about cases which happened in India, for example, cases of whole set of seeds being sold to small planters. These people found that the seeds failed and up to 61,000 acres of land which was placed under the cultivation of that particular seed – all these farmers met with losses. The Government had to contribute to compensate the farmers and the value of the compensation went up to 61 crores, which is an enormous amount. Maybe we have to ensure that whatever products are coming into the island and whatever seeds that we are going to allow to be sold to our planters are seeds that will not cause any adverse effect on our planters.

It is also important to note, as mentioned by the hon. Leader of the Opposition that some seed producers have techniques which ensure that farmers always cling to them, that the country will always have to turn to them for the seeds. He mentioned the terminator gene. He mentioned the technology used normally by seed producers to ensure that the farmers always return to them where seeds are used only once and seeds cannot be collected later because the products of these seeds later on are sterile. These are techniques used to ensure that they retain their genetic products. All these are things that we have to consider.

We have noted also, Mr Deputy Speaker, Sir, that the Bill does not make provision for any liability clause. What do I mean by liability clause? Just as I have mentioned about what happened in India, it may happen that a particular product sold to the farmers turn out to be a failure. Now, should not there be a clause in the Bill to compensate the farmers? The problem of compensation will also be related to who will pay the compensation. Will it be the importer? Will it be the exporter of the product or will it be the National Plant Variety and Seeds Office because they are the people who will be registering it and will be giving the authorisation for commercialising the product. So, these are issues that we have to consider. We have to make sure that if we want seed quality to improve, if we are taking measures to promote seed production all this must be in the interest of all stakeholders, not only the seed producers but also the farmers.

There is another issue that needs to be considered – genetic contamination. We know that we can get improved seeds and plant varieties that are imported. For example, we know that there are certain plants, even sugar cane plants, which have been genetically modified so that they may become resistant to herbicides. What if this particular gene through pollination gets transferred to other plants? Who is going to bear the responsibility for this? We know that recently in India there was a Bt brinjal which was a genetically modified brinjal, and which, through pollination managed to contaminate other wild forms, making the wild forms resistant to herbicides. These are things that have to be considered. Who is going to compensate the farmers and who is going to be responsible for the cleanup measures, if ever there has been a contamination?

Mr Deputy Speaker, Sir, we are all for a regulatory framework to ensure that seeds produced and sold are of quality to help to promote the type of food products produced in the

island. However, Mr Deputy Speaker, Sir, we have to consider the issue with a broad mind. We have to make sure that whenever approval is given for the commercialisation of a product that the people at the other end, the people receiving the product, the people who are going to use the products are protected as well.

Mr Deputy Speaker, Sir, when we consider the case of sugarcane, I have noted that the hon. Minister mentioned that sugarcane will be exempted from the provisions of this Bill. I have noted also that in the Seeds Committee no representative of the sugarcane planters' community has been included and no representative of the MSIRI has been included. I agree that these products will not be associated with the registration process but then, through the experience gathered in cane cultivation, they could help in better understanding the procedures for registration and for commercialisation of the products.

Mr Deputy Speaker, Sir, the Seeds Bill comes at the right moment as mentioned by a former orator. But, it also makes us realise that Mauritius has the potential and the capacity of becoming a major seed and plant variety producer of the region. I have noted that there is a possibility to re-register a plant for a period of about twenty years. This, however, would tend to give a certain tendency for monopoly and to protect the producers and it will not be in the advantage of the planters, of the small farmers. It will also be interesting to see whether it will be possible to include in the legislation the setting-up of what we call seed crop insurance to ensure that farmers are further protected.

Mr Deputy Speaker, Sir, the justification for this Bill are full. We all agree that there is a need to check on seed quality and to promote the type of seeds that are produced and commercialised in the island. We feel that these steps should have been carried out in a phased manner. We should have beforehand prepared or trained our personnel, our people to be able to better implement this particular legislation. I would like here to ask the hon. Minister whether he could consider coming up with a mechanism for compensation and to ensure that it is included in this Bill. I have noted as I went through the Bill that there is a possibility that the Court may ask the producer, the seller, the vendor to compensate farmers in case of seed failure but there is a need to include in the Bill itself a compensation mechanism to ensure this protection to small farmers.

My last worry, Mr Deputy Speaker, Sir, is that of loss of biodiversity. In Mauritius, we have plenty of small planters growing their own products, growing different varieties of vegetables, fruits, etc. But with the coming into action of this particular Bill, farmers will tend to go for registered varieties and will tend to use these varieties. Very soon, we shall suffer from what we call genetic uniformity in all our fields, our orchards and our *potager*. The problem is that we are slowly going to lose genetic diversity. When we lose genetic diversity, the cost of that is really very, very high. We cannot know to what extent these losses might be harmful to us.

I would like here to recall just one incident, which occurred in the United States. In 1948, one scientist went around the world to collect sheatplants. He collected one weed plant from Turkey in 1948 and that wheat plant was so bad in terms of its characteristics, it lodged, it was lanky and it had very weak stems. They did not even bother to give it a name. It was just given an identification number 178383. This plant was kept aside. It is only when an epidemic hit the United States and all the wheat crops got damaged that they realised that this single plant taken from Turkey, which was not even given a name, was the only plant which had the resistance genes against the disease that was afflicting that particular area at that time. And this weed plant had resistance for, at least, 40 pests of the area. So, now this plant is being used widely in breeding experiments, in breeding programmes to ensure that the weed plants in the United States are resistant to a number of diseases of the area. This is just to show that genetic diversity is not something that we can play with and we cannot afford to lose genetic diversity.

My fear is that with the coming into play of this particular Bill, with the need to register all varieties that are in use, to make sure that all plants that are cultivated need to be from the list that has been prepared through the National Plant Varieties and Seeds Office, we may in the long run lose our genetic diversity and this is something that we cannot afford to do.

It is also important, Mr Deputy Speaker, Sir, to ensure that all the varieties that we have on the Mauritian land, be scrutinised. A survey should be carried out and all these plant varieties should be placed in the registered list of plants and seeds of the area. Mr Deputy Speaker, Sir, the idea of having this Bill, obviously, is for the promotion of the seed industry, and I just hope that we succeed on this line, but, again, we have to make sure that everything is done stepwise so that we get maximum returns on the measures that we are taking.

Thank you, Mr Deputy Speaker, Sir.

(6.24 p.m.)

Mr J. Leopold (First Member for Rodrigues): Mr Deputy Speaker, Sir, allow me from the very beginning to thank the hon. Minister for having brought this Bill to the House.

In fact, this piece of legislation intends for the setting up of a National Plant Varieties and Seeds Office, commonly known as NPVSO and is providing the appropriate framework to regulate the cultivation, production, trade, importation and exportation of seeds. In other terms, it tends to ensure seeds security within our Republic. This is a State, Mr Deputy Speaker, Sir, where farmers are certain, year after year, to obtain on time the quality and quantity of seeds to fulfil the production terms. This Bill offers a very big step towards modernisation of our agriculture and ensuring auto sufficiency in food production at a time when people are called upon to go back to agricultural production to counterbalance possible negative effects of climate change, particularly in small island States like ours, which is very vulnerable to natural calamities such as cyclones, droughts, floods and so on.

Mr Deputy Speaker, Sir, my intervention today will allow me to share a few observations with regard to my deep appreciation of the numerous positive aspects of the Bill and at the same time to formulate certain propositions here and there in view of strengthening further same, including maybe a possible suggestion for a minor amendment to the Bill for the welfare of traditional local farmers.

Mr Deputy Speaker, Sir, the Bill makes it clear that cultivation production trade, importation and exportation of seeds will now be regulated by the setting up of a National Plant Varieties and Seeds Committee, which will have the power to register seed producers, seed dealers, perform seed testing and inspection and have such powers for the enforcement of the Act. This will guarantee farmers or anyone engaging in cultivation of seed quality. Since seed quality, Mr Deputy Speaker, Sir, is affected namely by varietal purity, clean seeds, that is, seeds without weeds, germination capacity, freedom from disease and seeds selection, this will in turn ensure more confidence about what we want to plant to obviously have higher yields and better quality at a competitive rate on the market.

Mr Deputy Speaker, Sir, who has not at a point in time, be it professional planters or not, been victims, been very disappointed after buying seeds from supermarkets or other so-called specialised shops, particularly those of flower plants, but, unfortunately, after sowing no germination at all or very low percentage of germination happens even though all the specifications on the packets have been duly respected with regards to timing and sowing conditions. Mr Deputy Speaker, Sir, this may be due to the very simple fact that the seeds were dormant. Unfortunately, this important crucial note, I would say, was not indicated on the packet, nor any method or treatment for breaking such dormancy. In fact, the information, at times, could be very misleading.

In this Bill, Mr Deputy Speaker, Sir, parts (5) and (6) make provisions so that seed traders and seed producers will have the proper certificate to minimise recurrence of such misadventures as the NPVSO will be equipped with the adequate laboratory to dwell with seed testing and seed inspection and all appropriate powers to contravene those not respecting the law. Therefore, Mr Deputy Speaker, Sir, professional planters and amateurs will have value for money and peace of mind.

Mr Deputy Speaker, Sir, paragraph 6 of the Bill has stated earlier, makes provision for the setting up of a NPVSC, the Committee. I have gone through the Bill about the composition of this Committee, but I was quite disappointed that no provision is made to clearly state the inclusion of an officer from the Agricultural Services of Rodrigues to sit on same. Because, Mr Deputy Speaker, Sir, in Rodrigues we do have valuable endemic seeds of plants with commercial, medical and even cosmetic values. I have in mind, Mr Deputy Speaker, Sir, our local, very tasted red beans, the *phaseolus vulgaris* and the small chillies commonly known as the *ti-piments Rodrigues*, capsicum minimum among others. This is our cultural heritage and represents our cultural identity, that is, the Rodriguan identity.

In a spirit of fairness and respect for seed producers and agricultural officers from Rodrigues and as a result of such provisions made in that paragraph for the setting up of that Committee, I am of the opinion that this should be addressed and there is still sufficient room to accommodate same.

Mr Deputy Speaker, Sir, being given the smallness of the island, we are not above the devastating risk of homozygosity which inevitably results in loss of genetic vigor, making the

variety more disease prone or loss of biodiversity. On part of that, Mr Deputy Speaker, Sir, present craze for monoculture is another significant factor which may accelerate genetic erosion in the island, and the need, therefore, to catalogue existing varieties while opening the door for improvement such as to have more resisted and higher yield varieties.

Mr Deputy Speaker, Sir, as we are embarking on a good and fresh start, let us take everyone on board. Mr Deputy Speaker, Sir, I highly appreciate that at paragraph 8, the Bill makes provisions for registration of variety. Surely, Mr Deputy Speaker, Sir, this will decrease the risk of illegal introduction of seeds of exotic varieties, namely, what we call alien species which may have harmed our local varieties. The conditions laid down will surely help to minimise cross breeding and the possibility that resulting offspring developed into super weeds, that is, plantlets.

I have in mind, Mr Deputy Speaker, Sir, the case in Rodrigues of the so-called *piquant loulou* or *acacia nilotica*. I would, therefore, suggest that the common name, the local name or vernacular name be also included in the definition of the variety because, very often, the same plant may bear different local names in different parts of our Republic. There are so many examples, Mr Deputy Speaker, Sir. For example, we have the Bois Malaya with a scientific name *Olea lancea*. In Rodrigues, we call it Bois Malaya but in Mauritius we call it Bois Cerf. Very close to us, in Reunion Island, we have for example *vieille fille*, the *cantana camara* which we, in Mauritius and in Rodrigues, we call *vieille fille* but in Reunion they call it *corbeille d'or*.

Therefore, Mr Deputy Speaker, Sir, in the same paragraph, at subsection 6, it is spelt out that the certificate of registration has a validity of ten years. My first question is whether this certificate will be considered as a sort of *brevet* or intellectual property as a fees paid for same because, Mr Deputy Speaker, Sir, it is not clear in the Bill. In the event the answer is in the affirmative, my next question is: how to guarantee the quality of the seeds with respect to the whole period during which the certificate is dully valid, that is, the period of 10 years. Will the inspection and testing alone be sufficient?

Mr Deputy Speaker, Sir, since producing a given variety of seeds is not only time-consuming, but, at times, it is also very expensive as it may take as long as 10 to 15 years in certain cases, shouldn't it be wise that the MVPSO be also equipped with a proper seed bank or a seed library or even a seed swap? This can be made available to seed producers or traders upon

payment of a prescribed fee because, Mr Deputy Speaker, Sir, when we look at the definition of seed in the Bill, it reads and I quote –

“(...) the whole or any part of a plant capable of regeneration and giving rise to a plant which is true to such type.”

In my opinion, this is a quite fair definition which takes into account both types of seeds, namely, generative seeds and vegetative seeds. Generative seeds, Mr Deputy Speaker, Sir, are those true seeds and fruits derived from flowers. It covers both *l'appellation française de grains et graines*. Just to explain, Mr Deputy Speaker, Sir, *la graine c'est issu de la fécondation de l'ovule tandis que le grain – par exemple on parle de grains des céréales, des caryopses. Donc, c'est l'ensemble du fruit fusionné avec la graine*. Both names in English it's the seed whereas vegetative seeds are those from bulbs as in the case of onion, garlic, corms, as in *arouille*, tubers as in potato, *rhizomes* as in ginger, stem cutting as in manioc and roses and even suckers as is the case for banana and likes. Yes, it is clear, Mr Deputy Speaker, Sir, but it is difficult for our farmers to have the necessary logistics to keep seeds, particularly, vegetative ones in the state to give rise to plant which is true to the type as it is in the definition for a period of ten years in accordance with the validity of the certificate. This is why, Mr Deputy Speaker, Sir, I consider the setting-up of a seed bank or a seed library which is valid and fair being given that most of our seed producers are traditional farmers and may not be well versed with conditions for keeping seeds to ensure seed quality. In a seed bank, we will be sure that all the efforts producers have deployed in producing new varieties, will be preserved as appropriate control conditions for humidity of air, temperature, ventilation and genuine conservation methods will be applied.

In fact, Mr Deputy Speaker, Sir, to guarantee seed quality even in the seed bank seeds, depending on the species, will have to be planted from time to time. You will agree with me, Mr Deputy Speaker, Sir, that these facilities may not be available at the very end of our local farmers. At paragraph 21, I would like to be enlightened by the strategies the Minister intends to develop to ensure that traditional farmers take advantage of provisions in the Bill and be in conformity with. Being given that the fine to be paid for those found contravening this Act is not that low, Mr Deputy Speaker, Sir, my concern is about those farmers who are, most of the time, with low literacy level but with a quite long experience as seed producers since years fall unofficial, will there be any aggressive sensitisation campaign for them to leave their traditional

habits *pour entrer dans les rangs*? What would be the faith *des récalcitrants*? Mr Deputy Speaker, Sir, it is a fact that traditional farmers store seeds for three main reasons: consumption, sale and seed stock. However, the activities provide an important backup to the overall agricultural crop production in our country. Their contribution, up to now, is inestimable in our economy *et dans nos assiettes*.

One has to be careful enough as discouraging traditional farmers may lead to a steady depletion of traditional crop varieties and this can become a cause for a shortage or disappearance of locally adapted seeds. This has been revealed by several independent surveys worldwide. Therefore this will cause a threat to our biodiversity. How can we go, Mr Deputy Speaker, Sir, and tell a planter of 60 years or above, who has been producing and planting his own seeds since his childhood, that from now on he is not allowed to produce seeds unless he is a registered seed producer? This will not be encouraging for the farmer at a time that we are calling upon for more and more people to go back to agriculture as a means to fight against poverty, food shortage and the so-called *crise alimentaire* in order to achieve food security.

I am afraid, Mr Deputy Speaker, Sir, that this may not be perceived as an incentive or a sign of encouragement. This is why, Mr Deputy Speaker, Sir, I would suggest the Minister to consider that the very first sentence of paragraph 21 be amended so that it reads -

‘No seed shall be used to produce another seed which is true to the type for commercial purposes unless (...).

This will, be in my opinion, show respects to *nos grands dimounes* who have spent all their lives cultivating their land everyday so that when we go to the market our *tente bazaar pas reste vide*.

Furthermore, Mr Deputy Speaker, Sir, seed sharing among planters or neighbours is still a common practice in our everyday life. Will somebody contravene the law by having in his possession a handful of seedlings of onions, garlcs or whatever that he intends to grow for his own consumption? The law has to be clear, Mr Deputy Speaker, Sir.

In conclusion, Mr Deputy Speaker, Sir, the Bill has many positive aspects, even the right for making appeals against the decision of the NPVSO has been provided. However, my humble contribution to the debate today is to share my observations and concerns so that seed producers, farmers and seed dealers can carry out their vital activities in all confidence and no doubt with

this Bill we are on the right track to ensure food security of our population. Again, I thank the hon. Minister for bringing this Bill to the House.

I thank you, Mr Deputy Speaker, Sir.

(6.40 p.m.)

Mr P. Roopun (Third Member for Flacq & Bon Accueil): Mr Deputy Speaker, Sir, the Bill appears to be fairly non-contentious, it goes in the right direction and we should welcome it.

I have the intention today to speak on three aspects of the Bill and my main intervention was to be on the intellectual property side, and I heard the hon. Minister stating that there will be another Bill which is in preparation to deal essentially with the intellectual property matters relating to plant varieties. I reserve some of my comments for some other time, but I would like first of all to make an urgent appeal to the Minister and through him to Government. Already we have got two Ministries dealing with IP matters. We have got the Ministry of Foreign Affairs, Regional Integration and International Trade dealing with patents, trademark, and so on. We have got the Minister of Arts and Culture dealing with copyright and yet, even if it is not directly related to IP matters, it would seem that to some extent a third Ministry now, will be dealing with other aspects. I think that this should be reviewed and, if possible, we should come with a consolidated authority to deal with all IP matters.

Having said so, Mr Deputy Speaker, Sir, as intimated, we welcome the Bill because when we look at the economic aspect of seeds, it is important that we have got clear authorities to deal with the trade, cultivation and, most importantly, importation of seeds.

I will be very brief by asking a few clarifications from the hon. Minister and my intervention will join those of the hon. lady who spoke before me as regards the conservation part of our local varieties. I see in the Bill not much is written about the conservation part and I think that it is very important, very important that the authorities which are being set up today consider also local varieties of vegetables and all our vegetables, flowers, and whatever which form part of our cultural diversity - and also hon. Leopold did mention - and I think it is one of the first things that the Committee should look after; a complete repertoire of all our local species. Because, we should not forget that there has been on the international front various cases of biopiracy and to combat any possible biopiracy in the future there is, first of all, need for a

well-documented repertoire of our various species. I think that this is something which should be included as a matter of urgency and I urge the hon. Minister to consider whether any amendment has to be brought to this present Bill to include also the conservation part of the work which has to be done at his level.

Another aspect over which I wanted the hon. Minister to respond is: what measures are there in the Bill to ensure that they will not encourage a concentration of the seed market in the hands of a few enterprises. This is very vital, Mr Deputy Speaker, Sir. We should not create a monopoly. There should be sufficient level playing field. We should have sufficient competitors on this market. It is something very specialised. Even worldwide, we know there are only a few multinationals dealing with the commerce of seeds and we should try to be as flexible as it is needed so as to ensure that there is fair and competition among the various stakeholders, and it is still for us - a small country - we know how it will be difficult if there is only one or two enterprises which will be having the monopoly and what may result in the short and medium term.

I join also hon. Mrs Dookun-Luchoomun to raise some apprehensions about the situation of small farmers and, here, I must say that I myself a home grower of vegetables, I want to ask a few simple questions to the hon. Minister. The first one is whether when I travel overseas, I used to purchase a few seedlings which I came across, will it be a criminal offence afterwards, after this Bill is being passed. I wanted to have the response of the hon. Minister on that issue, because I take it that it is not on a commercial level, but I wanted nevertheless for the hon. Minister to reassure us that this is so.

There is another aspect which disturbs me, I must say, about the restriction being put on onions. I must say, be it onions, be it garlic, I regularly purchase onion seedlings, garlic also, which I cultivate for my own consumption. It is being sold openly. You go in the main markets, you can have it. You can also have it at the Flacq Market and this is something which the local planters do for economic reasons. They are going to buy, let us say, a whole packet and they are not going to use the whole of it. Perhaps, they are going to use half or more than this, but the excess, they tend to sell it to some other planters or some other persons. I want to know whether there is some latitude which can be given to those type of activities which are not basically commercial in nature, but which to a certain extent, subsidiarily may have some commercial

aspect over which I wanted the hon. Minister to, at least, as hon. Leader of the Opposition stated that we should not be too rigid and we should try to understand the local situation and, in fact, hon. Leopold did mention also. I see in the definition about trade and, in fact, when we see the division of trade we do mention even barter which means that even if there is an exchange of seedlings among planters, it would seem that it may fall under this definition, and I wonder whether the commercial aspect of it is going to be taken care of or whether the issue of barter will predominate. I also want the hon. Minister to enlighten us on this issue and there is also the question of preservation of our local varieties over which I mentioned earlier and also whether the different authorities will also take into account varieties which are on the phase of extinction. I have heard, for example, some types of varieties of tomatoes which we don't see on the market and if there could be some exercise to that effect so that we can preserve whatever had been here for generations.

With these few points, Mr Deputy Speaker, Sir, I thank you, and I wish the hon. Minister to respond. Thank you.

(6.49 p.m.)

Mr Faugoo: Mr Deputy Speaker, Sir, let me start by thanking all hon. Members from both sides of the House for their participation in the debate on the Bill which is before the House, that is, the Seeds Bill. I am also pleased to note that the Opposition is in agreement with the Bill and they have also endorsed, I must say, most of the provisions which are to be found in the proposed Bill. I have taken good note of some of the points raised. I must say that some of them are quite pertinent and also overlap with those raised on the same issues. I will try, as much as I can, to answer some of the issues raised by hon. Members collectively. On some of the particular points raised, I will, may be, try to explain individually.

Mr Deputy Speaker, Sir, this Bill, in fact, charts the regulatory framework and all technicalities at operational level will rest with competent technicians of the Ministry and also, of the office where they will be posted henceforth, rather the office which has been created under this present Bill and also with the competent authorities.

I will try to focus on the framework and policy matters rather than on the technical aspects which, as I said, will be dealt with by technicians of the Unit and also by the Institutions.

On the first point, Mr Deputy Speaker, Sir, which was raised concerning whether the Bill covers horticultural nurseries which are growing horticulture products, the answer is yes. The short answer to that question is, yes, it does. In fact, a nursery is one unit of the Seed Production System. There is the whole chain which is in place when there is production of seeds. One nursery is just one unit, but it covers the whole chain of seed production. It covers all seeds to do with food crop, fruits and also, flowers.

With regard to the second point and third point, maybe, I can take them together. Does it ban any genetic technologies or any genetically modified crop or seed and also, if there is provision for transgenic varieties of seeds? Here, I must say, Mr Deputy Speaker, Sir, the Bill does not impose a ban on genetic engineering and transgenic variety of seeds; it does not. These varieties are taken care of GMO Act which was, in fact, passed in the 2004. Transgenic seeds, in fact, imply two issues. First, it has to be registered. The fact that it is a seed, so anybody importing or producing the seed, they have to register the same and, secondly, once it is registered they won't be allowed to release the seed until and unless it is allowed under the GMO Act. It means that it has to pass two tests. First, they have to register and while registering they have to comply with all the criteria which have been set already in the law and some of them which will be set by regulations and, as I said, secondly, they have to pass the test under the GMO Act. This is to do with transgenic varieties.

There was a point which was raised by the hon. Leader of the Opposition which is under Section 6, Clause 6 sub-clause 2, whether the Bill should have provided for standards for registration. Again, this is an operational matter and, as I said, we will have to come up with lots of Regulations and those Regulations will apply at Committee level - the Seed Committee. They will have to abide by the Committee. There will be also protocols that will be put in place, Mr Deputy Speaker, Sir and in this matter; we will have to respect the international norms which are already set. We have to respect the norms which have been set by FAO and also other recognised institutions in this field.

There was also issue of whether there can be more members in that Committee. Already, I must say, it is a large Committee. I was minded to make it a bit smaller. There are twelve members, I believe, if I am not mistaken and there is a proposition from the Opposition side to

take onboard somebody from GEPTA. This can be done - I am not saying this is the way it is going to be - under the last section where the Minister has the power to appoint three persons.

There was also the question of whether there should have been somebody from MSIRI. I have said it in clear terms that this Bill does not include sugarcane. It is dealt with separately under different laws. We have a specialist already in food crop, in fruits that are doing well in AREU, in FARC. It would have been a surplus aid, I must say. Maybe we need experts, but they can be co-opted if the need arises. If the Board or the Committee feels the need of having an expert in a particular field from outside, I don't think there is anything which will stop them from bringing in, taking onboard somebody from outside, Mr Deputy Speaker, Sir.

Another point which was raised was on the minimal level; whether provisions should have been made on the minimum level of germination, whether genetic or physical purity. Again, I must say here we will be making regulations to govern this and we will have to follow the guidelines which have been established by FAO and also, best international practices. I must say, why regulations, why we are not putting this in the law? It is because guidelines in this field are very dynamic, Mr Deputy Speaker, Sir; they change. This is why we are bringing it by regulations, so that whenever the need arises we can change it easily. We don't have to come to Parliament to amend the Act. This will be taken care of by regulations.

Another point raised by the hon. Leader of the Opposition concerns the appeal against the decisions of the NPVSO. He asked the question as to why the appeal is not made directly to the Appeal Board, why to the Minister. There are two issues here. Why not to the Board? It is because the Board is not a permanent one. The Board is an *ad hoc* Board which is appointed by the hon. Minister to hear one particular case on the particular appeal.

The second point raised by the hon. Leader of the Opposition is quite a pertinent one and it is about the time frame. The Minister, I feel, has the power when appointing the Board, he can put a time frame that the case has to be heard within three weeks and the report submitted. This can be taken care of administratively, Mr Deputy Speaker, Sir.

The question of compensation was raised, whether if something goes wrong along the chain and it causes prejudice to either the breeder or the farmer at the lowest rung of the ladder, what is the way forward. This is going to be basically civil matter because it has to be

established who is at fault. We cannot put provisions in the law and decide beforehand who is going to be responsible for the fault. If seeds are sold to a planter and he does not respect the conditions for sowing the seeds, he does not respect the delay or he does not do what is required to be done technically, who is going to be held responsible? Is it the office, the NPVSO? Is it going to be the registered owner of the seeds? It is a question which, at the end of the day, has to be decided by the Court. But nevertheless, Mr Deputy Speaker, Sir, I must say that, at page 26, one can read, in the Bill, Clause 32(3) (c), it says-

“Where a person is convicted of an offence under this particular Act, the Court may, in addition to any penalty - for the criminal offence- imposed under subsection (2) –

(c) order that person to compensate the person who has suffered such lost or damage.”

So, there is power given to the Court, to the Magistrate, to make an Order for compensation. Over and above sentencing the person who is in breach of the Act, the Court can also order compensation. But, at the same time, it does not disbar the person who has made loss to go for a civil action, Mr Deputy Speaker, Sir.

There was also the point of sanitary and phytosanitary measures, whether tests are carried out. This is provided for under the NPPO Act (National Plant and Protection Office Act), which is a bit similar to what is being set up. So, that deals specifically with plants. This is an extension in fact of the NPPO. This is another office, parallel to the NPPO, which is going to deal only with seeds, seeds of all kinds of any plants. So, testing, for example - there was one question which was raised by hon. Roopun, whether a traveler, a person travelling abroad, when he is coming back, he can bring along with him seeds of any kind albeit in a small quantity, but this is forbidden under the NPPO Act. It is already forbidden and if you are found at the airport with such seed, it is seized and destroyed at the airport. It is an illegal act. So, this is there already.

And as for testing for seeds now under this particular Bill, it will be tested for quality, for free of disease, purity, percentage of germination, and also freedom from any insect. We have already to answer to one of the points which were raised by hon. Mrs Dookun-Luchoomun. We have already a laboratory at Barkly which is providing services in the sector. This is the whole issue. There are lots of services we are providing already. There is a seed industry in Mauritius

which is not regulated. So, this is why we are coming up with this present Bill to regulate the production, importation, exportation and also the testing and selling of seeds. So, the seeds are going to be tested.

There was one last point which was raised by the hon. Leader of the Opposition on capacity building as to whether we have the required human resources to take care of what is being proposed in the Bill. The answer is yes and no. We have expertise, they are known for their expertise and they are doing a good work, but still we need to train them further wherever and whenever required, Mr Deputy Speaker, Sir.

There was another point which was raised by hon. Mrs Dookun-Luchoomun. She asked whether there will be effective implementation of the present provisions of the Bill. As I said, Mr Deputy Speaker, Sir, we have a seed industry, but it is not a seed industry as it exists in other countries. But there is potential because we are producing only about 25,000 kilograms of seeds per year for local consumption, for local use. We are importing on the other hand 90,000 kilograms of seeds. I don't know the economic value. It is a big quantity, 90,000 kilograms of seeds, Mr Deputy Speaker, Sir. This shows the economic space that is available. As I said, people who are neglecting their land because of the problem which the sugarcane industry is facing, they can go, they can shift. They can go for seed production. Not only for the country, as I said we are already importing 90,000 kilograms of seeds. One of the highest costs of input in any production, I can say for potato, for example, apparently it is 50%, the cost of seeds. 50% of the cost of production goes into the seeds. So, it is a very, very high cost which can be taken care of here only.

As I said, there are already in place certain facilities, certain services, and certain competences which are being put at the disposal of the farming community. And this we are going to look into, and, again, maybe train the people, update the laboratory which is there already. Update it so that it conforms to the international standard. This is there already. What we are doing, for example, for Quality Declared Seeds (QDS), it is something which is being carried out now. We have a scheme, where we do contract farming. We choose farmers who are known to the institutions like AREU and all, on whom we can rely on, on the quantity, we choose them. In fact, we go public for expression of interest, and then we apply the norms which

have been set by FAO already. So, some works have already been started and are being done already, Mr Deputy Speaker, Sir.

Another concern was on the cost of registration, and also the cost of testing whether this is not going to hamper growers to go for registration, go for recognition with the office. We have in place in the Budget of this year, in fact, 2013, there was a scheme which we developed in fact. It is called pre-market testing. It is for growers, planters, and whatever the cost of test, Government gives a 100% grant. Government pays for the cost. This can be extended. This scheme can be extended to applicants for registration of their seeds, Mr Deputy Speaker, Sir. We can come up with other schemes also, whereby they will be helped and supported because we are coming in with lots of measures under the Food Security Programme, lots of measures where we are helping and supporting, because at the end of the day, food security is a national issue. It is not only an issue for one community, the planting community or the farmers' community. It is a national issue. We are all concerned. Government is conscious of the problem facing the world and Mauritius as well. So, we have been giving a lot of support.

There was the issue of intellectual property which hon. Roopun raised and he also said when the Bill comes to the House, he is going to speak on this. He is most welcome. But let me, at this stage, Mr Deputy Speaker, Sir, say that, in fact, initially when we are working on the Seeds Bill, it was our intention to have a consolidated Bill. That is a Bill which will cover the registration of the seeds and also give protection of plant varieties to the person who is registering, for example, a patent right.

However, Mr Deputy Speaker, Sir, I must say, following discussions with all stakeholders on the issue of intellectual property rights, it was agreed that it would be more appropriate to cover all forms of property rights, including plant breeders rights, an issue which was raised by hon. Roopun. There are so many property rights in different spheres of life, trade and profession. So, this is being taken care of in a consolidated Bill, namely the Industrial Property Bill, which is being worked out, it is being finalised by the International Trade Division of the Ministry of Foreign Affairs, Regional Integration and International Trade.

On the question of conservation of local varieties, in fact, this is the very purpose of the Bill, Mr Deputy Speaker, Sir, because we are creating a mechanism whereby any breeder can go

and register a variety. And on what name! My friend hon. Leopold raised several issues concerning the name. The name will be the choice of the applicant who is applying to register. He can give any name albeit that it should not be false, it should not be an invention, something relevant and something to do with that particular product, particular crop or whatever. Whether by creating the registration system for seeds, are we not creating some kind of monopoly in the sector?

This is not the case at all, Mr Deputy Speaker, Sir. It is a free market. All the forces of market mechanism will apply. Demand and supply will apply and also we should not forget that we have the Competition Commission. There is the Competition Commission which looks after. If one there is a situation of monopoly, one is free to go and knock the door of the Competition Commission, Mr Deputy Speaker, Sir.

There was another issue which was raised on the loss - whether there is a possibility of losing our biodiversity. This is not the case. As I understand, we have the plant genetic resource centre. In fact, there are three under my Ministry. We also have a seed bank at Barkly Experiment Station. We also collaborate with the International Plant Genetic resource centre, Mr Deputy Speaker, Sir. This is being taken care of and there is no loss of biodiversity. Another question which was raised by hon. Mrs Dookun-Luchoomun - with the coming of this Bill, whether a grower will not be able to share the seeds which he is producing with his neighbours, of course, he can share just like he shares cakes at Divali time. He cannot sell. He cannot engage himself in business because if we allow exceptions where do we stop Mr Deputy Speaker, Sir. It's a law which is regulating the production and sale of seeds on a commercial basis. So anybody for that matter, who is engaging in the production and commercialisation, will have to act and abide by the provisions of this law. Then as I said, as an exception, if somebody is giving free of charge some to his neighbour, this is not covered here. Then when this happens we have to look at the danger because when there is no control and when seeds are supplied which are not certified; this puts in question the whole industry. The whole industry can be affected at the end of the day, Mr Deputy Speaker, Sir, just because of a few seeds. This is exactly one of the points which is being taken care of in the present Bill. I have dealt with the issue of compensation; I have also dealt with the issue of laboratory. As I said, there is one already. There is one issue which was raised on genetic contamination, Mr Deputy Speaker, Sir. The Bill, in fact, aims at

reducing genetic contamination and maintaining genetic and purity trueness to type. The NPVSO is empowered to devise such schemes to ensure genetic purity. The Bill, in fact, provides for the breeder to maintain the purity of the variety. In fact, the Bill is giving the power to the relevant officer to go and check; to go and collect samples and countercheck not only once, but any time. He has the power to enter and take a sample and go and check. If it is not consistent with what has been registered and what was been tested in the first place, he can be deregistered and there is a mechanism which is being provided in the Bill Mr Deputy Speaker, Sir.

With these words, I think I have dealt with all the points which have been raised. I again reiterate my thanks all the Members who have taken part in the debate.

With these words, Mr Deputy Speaker, Sir, I commend the Bill to the House.

Question put and agreed to.

Bill read a second time and committed.

(7.14 p.m.)