

NATIONAL ASSEMBLY

OFFICIAL REPORT

Wednesday, 3rd October, 2007

The House met at 2.30 p.m.

[Mr. Speaker in the Chair]

PRAYERS

PAPERS LAID

The following Papers were laid on the Table:-

Report of the Fiscal Analysis and Appropriation Committee on their visit to the Republic of Ghana.

Report of the Public Accounts Committee on the accounts of the Republic of Kenya for the Financial Year 2000/2001.

(By Mr. Kipchumba)

Report of the Departmental Committee on Education, Research and Technology on the Biosafety Bill, 2007.

(By Mr. Karaba)

ORAL ANSWERS TO QUESTIONS

Question No.058

TARMAKING/UPGRADING OF
ROADS IN SAMBURU WEST

Mr. Lesrima asked the Minister for Roads and Public Works:-

(a) when the tarmacking of Rumuruti-Maralal Road will begin;

(b) whether he could consider tarmacking the road to Loiyangalani at Lake Turkana; and,

(c) whether he could further upgrade the road linking Kirimom, Lodokejek and Kimanchu in Laikipia.

The Assistant Minister for Roads and Public Works (Eng. Toro): Mr. Speaker, Sir, I beg to reply.

(a) Plans to upgrade Rumuruti-Maralal Road to bitumen standards are underway. The design of the road is completed. Currently, my Ministry is sourcing for a donor to fund the immediate implementation of the project.

(b) The tarmacking of the road to Loiyangalani at Lake Turkana will be considered as

Phase II upon the construction of Rumuruti-Maralal Road.

(c) The road linking Kirimon, Lodokejek and Kimanchu E464 in Laikipia falls under the District Roads Committee. Therefore, its upgrading can be done through the fuel levy at the district level.

Mr. Lesrima: Mr. Speaker, Sir, I would like to thank the Assistant Minister for that answer. Currently, the Maralal-Rumuruti Road is in very bad state. In fact, it has never been that bad since Independence.

Mr. Speaker, Sir, I say so because during the recent rainy season, our vehicles got stuck on that road for up to ten days. It is also becoming a security risk because of the bandits in the area. What is he doing to restore the roads to be motorable while we wait for the tarmacking?

Eng. Toro: Mr. Speaker, Sir, I am aware that the road is in bad condition and that the DWO has already started repair works. We have set aside Kshs10 million this financial year through the fuel levy to ensure that we repair this road to motorable standards. We have also set aside another Kshs10 million through the Development Vote, so that we can look into the issue of upgrading the road to tarmac.

Mr. Manoti: Mr. Speaker, Sir, this is a very important road. Since the Ministry has done the design work and they are looking for a donor, how much money have they estimated this road to cost and how long does the Assistant Minister think it will take to get the donor?

Eng. Toro: Mr. Speaker, Sir, it is not possible to say exactly how much it will cost because the road is about 107 kilometres. This road will require a lot of resources. We might, therefore, have to split it into two phases when we advertise. If you take a conservative figure, it will be in excess of Kshs3 billion.

Mr. Kombe: Mr. Speaker, Sir, the Assistant Minister has said that the Ministry is looking for a donor. All the donor funds amount to about seven per cent of the revenue. Could he not consider getting some funds from the 97 per cent which is sourced locally?

Eng. Toro: Mr. Speaker, Sir, as I said, the design for the road is ready. That is why it is in the Development Vote for this Financial Year. We have put a figure of Kshs10 million, so that if we happen to get a donor this financial year we will go ahead with the work. If that is not possible, we will look into the possibility of the Government funding the project from the Development Vote.

Mr. Lesrima: Mr. Speaker, Sir, the reason why I requested for upgrading of the Kirimon-Lodokejek-Kimanchu Road through Nanyuki is because it is now the alternate road to Maralal. The road from Kimanchu to Ewaso Nyiro River is fairly in good condition. When you cross the river towards Samburu the road there is in terrible shape. There are so many tourists using that road at the moment. Could the Assistant Minister consider instructing the Laikipia District Engineer to look into the repair of this road up to the Ewaso Nyiro River, from Laikipia side towards Kirimon?

Eng. Toro: Mr. Speaker, Sir, it is possible to use part of the Kshs10 million that we have set aside this financial year to do some repairs on the road that the hon. Member has requested. We will look into that.

Mr. Speaker: I think you got it wrong. The last question by Mr. Lesrima is not on Rumuruti-Maralal Road; it is another road, Kirimon-Lodokejek-Kimanchu Road. Therefore, that Vote will not apply. Mr. Lesrima, I hope that is what you said?

Mr. Lesrima: Mr. Speaker, Sir, this is the Doldol-Nanyuki-Mpolei Road.

Eng. Toro: Mr. Speaker, Sir, there are loud consultations here. I did not get it right. However, we will look into that road because it falls under DRC. I am sure the DRC has set aside some money for the maintenance of that road.

Mr. Speaker: Very well.

Next Question.

*Question No.456*IMPLEMENTATION OF REP
PROJECTS IN MUHORONI

Prof. Olweny asked the Minister for Energy:-

- (a) which rural electrification projects have been initiated in Muhoroni Constituency within the last four years; and,
(b) which of these projects have been accomplished.

The Assistant Minister for Energy (Mr. Kiunjuri): Mr. Speaker, Sir, I beg to reply.

(a) Rural electrification schemes financed by the Government in Muhoroni Constituency within the last four years are: Ogwedhi School and its environs - Kshs500,000; Kibigori Market - Kshs5.56 million, construction completed; Magare Secondary School - Kshs4.5 million, awaiting installation of a transformer; Masara Secondary School - Kshs1.3 million, construction completed awaiting installation of a transformer; St. Augustine Kadenge Secondary School - Kshs7.2 million, construction in progress to be completed by the end of November.

(b) The project covering Ogwedhi Secondary School and its environs, Kibigori Market and Masara Secondary School, are virtually complete and consumers will be connected once transformers, which are being imported, are installed. St. Augustine Kadenge Secondary School is under construction and is scheduled for completion by mid November, 2007.

Prof. Olweny: Mr. Speaker, Sir, let me remind the Assistant Minister that the project at Ogwedhi Primary School - it is not a secondary school - was done by the previous Government and not this Government. It is an old project. So, it should not have been included as having been done during the last four years. The reason why I brought this Question is that Kibigori Market Project has taken almost two financial years to be completed. It is a stretch of only 3 kilometres. Why has it taken this long and yet it is a small project? This means that this Government has virtually not finished any Rural Electrification Project in my constituency.

Mr. Kiunjuri: Mr. Speaker, Sir, it is because it is being done alongside others in the country.

Mr. Sambu: Mr. Speaker, Sir, could the Assistant Minister clarify once and for all this issue: Once transformers are installed in rural areas, what rate should be paid by the rural people for connection? The Minister said in the press that the amount has been reduced to Kshs15,000. However, when people go to the area managers in the towns, they are told to pay Kshs32,000. What is the actual amount to be paid by a rural household which desires to be connected to the transformer?

Mr. Kiunjuri: Mr. Speaker, Sir, the Minister made the announcement. It is true that they are supposed to pay Kshs5,000 and the remaining Kshs10,000 to be paid in instalments. That will be effected. I will issue a statement on the same, so that we can clarify this matter once and for all.

Mr. Ahenda: Mr. Speaker, Sir, the Assistant Minister answered Prof. Olweny's Question as if he is treating the symptoms and not the disease itself. Actually, the delay will be rampant in the entire country if---

Recently, the Ministry established the Rural Authority, which is a different entity from the Kenya Power Lighting Company (KPLC). The Rural Authority does not have staff of its own. Could the Assistant Minister, please, confirm that staff will be recruited under the Rural Authority so that it can be enhanced and finished on time, otherwise the programmes will stall for many months to come?

(Loud consultations)

Mr. Kiunjuri: Mr. Speaker, Sir, there is loud consultation. I cannot hear the question.

Mr. Speaker: Order, hon. Members! I think hon. Members have heard from the Assistant Minister that he cannot actually hear what is going on. He is entitled to hear so that he can respond to the hon. Member. For those hon. Members who want to hold a *kamukunji*, I will instruct the Clerk to avail the Old Chambers to you. So, could we now conduct business?

Could you repeat your question, please?

Mr. Ahenda: Mr. Speaker, Sir, Prof. Olweny has just asked why the project has taken almost two financial years and the Assistant Minister has answered that the situation is rampant in the whole country. Recently, the Ministry established the Rural Authority, which is a different entity from the KPLC, to deal with issues of connecting the people in the rural areas. However, the Authority does not have its own staff.

(Loud consultations)

Mr. Speaker: Order!

Mr. Ahenda: It is Dr. Murungaru!

Mr. Speaker: Order, hon. Members! Order, Mr. Attorney-General! You know, I do not want to do this, but I might be forced to remove noisemakers! This is not a classroom, hon. Members, and I do not want to assume the role of the headmaster! So, please, sit with dignity. Let us conduct the business of the House in an orderly manner. There will be enough time to chat to one another after we have completed business.

Could you proceed, Mr. Ahenda?

Mr. Ojode: On a point of order, Mr. Speaker, Sir. I do not want to challenge what the Chair has ruled, but did I hear you say that there are noisemakers? The Chair is the custodian of the Standing Orders and I do not believe that it can go too far to say that hon. Members are noisemakers!

(Applause)

Mr. Speaker: I think you are right, Mr. Ojode! There are loud consultations!
Could we now proceed?

(Laughter)

Mr. Ahenda: Mr. Speaker, Sir, for the third time, because of the loud consultations, I have to repeat my question.

While the Assistant Minister was answering Prof. Olweny's Question, actually, he conceded that there was a delay in completing projects under the Rural Authority in the entire country. But we need to treat the real disease and not the symptoms.

Recently, the Ministry established the Rural Authority, which is a different entity from the KPLC, and yet it does not have its own staff. Could he confirm that there are no staff under the Rural Authority although it has a Chief Executive Officer? They should be allowed to recruit their members of staff to enhance the implementation of the projects.

Mr. Kiunjuri: Mr. Speaker, Sir, I believe that the hon. Member is not aware of what is going on in the Ministry. This is because the truth of the matter is that the KPLC was even supposed to retrench some of its workers. All what we did was to second staff from the KPLC to

go to the Rural Authority. However, we still require more staff.

Mr. Karaba: Mr. Speaker, Sir, I am sure that the Assistant Minister is aware that there is very little that is happening on the ground with regard to the erection of poles. Also, some contractors have even dug holes, which are left bare. They pose a great danger to pedestrians. We also have poles which have been erected but there are no electric wires. What exactly is happening? Is there a go-slow or the Ministry has no money to complete the projects?

Mr. Kiunjuri: Mr. Speaker, Sir, a lot of work has been done, especially over the last three years. Just last month, you heard the hon. Members congratulate me for the good work that I am doing. But now with the general election fear catching up with hon. Members, they want the work done as soon as possible. They are demanding that in the next one month all projects should be completed. I understand the situation. However, we are trying to speed up the process. In most cases, the materials which are required will be availed by the suppliers within the course of this month. So, by next month, most of these works will be completed.

Mr. Ndolo: Mr. Speaker, Sir, it is true that among the Ministries which have done a good job is the Ministry of Energy. However, recently, the Minister for Energy visited our constituencies in Nairobi and initiated the Informal Sector Upgrading Programme. Before he left, he promised our people that everything was going to be done to implement the projects. But the issue of his officers going slow is doing us a big harm, because right now criminals have taken advantage. Could the Assistant Minister tell this House what action he is going to take against those officers who are making him to look as if he is not doing a good job? I think hon. Mwenje can support me on that!

Mr. Kiunjuri: Mr. Speaker, Sir, the Minister was in the hon. Member's constituency just two or three weeks ago. For us to be able to work on the ground we have to prepare. We have to conduct survey, design and acquisition of way-leaves. This process will take us four to six weeks. So, we are not delaying in connecting the hon. Member's constituents with electricity. The issue is that the procedure must be followed. The earliest they will be able to get this power is about December, 2007.

Mr. Manoti: Mr. Speaker, Sir, Prof. Olweny said that this particular project has taken two financial years. It is not the only project that has not been completed. While we appreciate what the Ministry has done, could the Assistant Minister tell us what was the contract period for this particular project?

Mr. Kiunjuri: Mr. Speaker, Sir, the projects vary. If it is funded under the French Programme, they are turnkey. If they are being done by the KPLC, they are referred to as Labour and Contract. Under this, we supply materials.

At the same time, the KPLC can also issue a contract for a turnkey project. So, it depends on which programme a project falls under. The issue in the particular market in Prof. Olweny's Constituency is just about a transformer which will be installed. That will not take more than three weeks. The transformer will be installed by the end of this month.

Mr. Omamba: Mr. Speaker, Sir, I am pleased to remind the Assistant Minister that he promised me that we would have electricity in two weeks' time. I informed the locals that the Ministry would upgrade the health centre to a sub-district health centre and electricity would be connected. I have waited in vain.

Why should the Assistant Minister keep on telling me to wait, until Parliament is about to be dissolved? When will electricity be connected to this health centre?

Mr. Kiunjuri: Mr. Speaker, Sir, over lunch hour I discussed this issue with the hon. Member. I also believe that he raised the question two weeks ago. I will ensure that electricity is supplied latest, Wednesday next week.

Prof. Olweny: Mr. Speaker, Sir, I am impressed by the schedule that the Assistant Minister has given me. The schedule shows when the projects will be connected. With regard to the Kibigori Project, the officers on the ground told me that they had problems with the contractors. They told me that they changed the contractors three times. Now this project is going to be

completed. What about the other projects?

Is the Assistant Minister sure that we will not have problems with the contractors of the other projects which are still in progress?

Mr. Kiunjuri: Mr. Speaker, Sir, I want to assure the hon. Member that we shall do everything possible to ensure that these projects are completed. We are also supervising them these days and we are following up the progress. That will be done.

Question No.482

LIST OF PEOPLE ALLOCATED
LAND AT BARARGET

Mr. Speaker: The Question by Mr. Bett is deferred to next Tuesday.

(Question deferred)
Question No.480

FAILURE TO ACCOUNT FOR FUNDS
FOR CONSTRUCTION OF
SAMBURU DO'S OFFICE

Mr. Rai asked the Minister of State, Office of the President:-

(a) whether he is aware that a sum of Kshs194,844.90 meant for the construction of the District Officer's office in Samburu Division has not been accounted for;

(b) who was the contractor awarded the tender; and,

(c) what measures he is taking to restore the confidence of the community and ensure the amount in question is accounted for.

The Assistant Minister, Office of the President (Mr. Kingi): Mr. Speaker, Sir, I beg to seek your indulgence to allow me to answer this Question on Tuesday next week, because there is very vital information that we have not received from our officers on the ground.

Mr. Speaker: Mr. Rai, what is your reaction to that?

Mr. Rai: Mr. Speaker, Sir, although the Assistant Minister has spoken to me, I need to get an undertaking that on Tuesday next week, he will come here with the full information on this Question.

Mr. Speaker: All right! I order that the Question be deferred to Tuesday next week.

(Question deferred)

That is the end of Question Time! There is an hon. Member who wanted to seek a Ministerial Statement. Mr. Wambora!

POINT OF ORDER

RELEASE OF KEMSA SUPPLIES
TO PARLIAMENTARY ASPIRANT

Mr. Wambora: On a point of order, Mr. Speaker, Sir. I wish to seek a Ministerial Statement from the Minister for Health, regarding the delivery of a new ambulance, Registration No.GK A564P, and medical supplies from the Kenya Medical Supplies Agency (KEMSA) to the

various public health facilities in Runyenjes.

Mr. Speaker, Sir, all these have been delivered through a parliamentary aspirant. I would like the Minister to clarify the circumstances under which the said ambulance was released to a parliamentary aspirant by the Medical Officer of Health (MOH) on instructions from a very senior official at the Ministry of Health Headquarters, on Friday, 28th September, 2007. This is an ambulance that I have been fighting for since last year.

Secondly, the Minister should explain the circumstances under which the said parliamentary aspirant issued KEMSA supplies to the following dispensaries; Mukuri Dispensary on Sunday, 28th March, 2007 and Gitare Dispensary on Sunday 29th July, 2007.

Finally, the Minister should state what measures she will take to discipline the persons involved in these irregularities and to prevent the cited irregularities from occurring?

The Assistant Minister for Health (Dr. Machage): Mr. Speaker, Sir, I undertake to give the Statement on Tuesday next week.

COMMUNICATION FROM THE CHAIR

DEFERREMENT OF COMMITTEE STAGE OF THE STATUTE LAW (MISCELLANEOUS AMENDMENTS) BILL AND THE FINANCE BILL

Mr. Speaker: Okay. Order hon. Members! Hon. Members, you will notice that the next Order, Order No.7 is Committee of the Whole House on two Bills, namely, the Statute Law (Miscellaneous Amendments) Bill, in respect of the Memorandum by His Excellency the President and also the Finance Bill, Bill No.21.

As regards The Statute Law (Miscellaneous Amendments) Bill, relating to the Memorandum by His Excellency the President, some hon. Members preferred to place some amendments on the Memorandum, as they are legally entitled to, both under the Constitution and the Standing Orders. But those amendments are not ready yet, as we sit here. Officers under me are working on those amendments. Therefore, the Bill is not ready for Committee now. I will, therefore, defer it to tomorrow afternoon.

As regards the Finance Bill, the Minister proposed to send some amendments. He tells me that he has already sent the amendments to the office, but as you notice on the Order Paper, they are not reflected at all. Consequently, that too, is not ready for Committee this afternoon. I will, therefore, also direct that, that Bill be placed on the Order Paper for tomorrow; Committee of the Whole House. This therefore, means that we will go to Order No.8.

I hope all of you are happy with that kind of arrangement! Next Order!

BILL

Second Reading

THE BIO SAFETY BILL

*(The Minister for Science and
Technology on 2.10.2007)*

*(Resumption of Debate interrupted
on 2.10.2007)*

Mr. Speaker: Order, hon. Members! Business is just commencing and hon. Sungu was on the Floor last time. He will continue today for 28 minutes.

Mr. Sungu: Mr. Speaker, Sir, May I thank you for the opportunity to address some issues on this Bill. Yesterday, I was saying that this Bill could not have come at a better time in the history of this country because of the importance of the protection of biodiversity.

There is clearly a need to institute adequate biosafety measures to protect our environment and the health of Kenyans. There are obvious benefits accruing from biodiversity research, which must be harnessed to improve the livelihoods of Kenyans. In harnessing and maximising the benefits of such scientific research, there is need to mitigate the potential risks to human health, the environment and everything on earth.

Mr. Speaker, Sir, yesterday I said that this Government ratified a protocol which means that it is legally bound by the provisions of the treaty. The Bill must address the level of protection in terms of safe transfer, handling and the use of genetically modified organisms. Living modified organisms resulting from this biotechnology research can be very dangerous as evidenced in some parts of the world, when such living organisms were used in the acts of war. Here I am referring to biological warfare. Such organisms, without proper and adequate legal framework, could be dangerous to our country.

We should not rule out such advanced effects and the potential effects to conservation and to the sustainable use of the biodiversity. It is necessary for this Parliament to ensure that we have some regulations. The question of the importation and exportation of these organisms is also important. Therefore, trans-boundary movements must be addressed to prevent the risk to human health and the environment and also to maintain our biodiversity.

Mr. Speaker, Sir, this country relies mainly on agriculture as the mainstay of the economy. We suffer from drought, floods and all kinds of extreme weather and, worst of all, about 60 per cent of this country is not arable. We also suffer from food insecurity. The vast majority of Kenyans are poor and are hungry most of the time. For Kenya to be self sustaining in food production, it is now necessary and incumbent upon the Government and our people to ensure that we apply all the benefits that accrue from scientific research to ensure that we can produce enough food for our people. These modern methods of agricultural production must be regulated.

We cannot allow our people to go hungry when other countries have foods which result from genetic research. As we talk now - this is why we must address this law properly - there are genetically modified organic foods in our stores. We import food from South Africa and other countries. As much as most Kenyans prefer imported foods, the dangers lying therein are not very clear. Therefore, I want to support this Bill wholeheartedly, to make sure that we put our best foot forward in terms of giving our scientists and those competent Kenyans an opportunity to regulate these foods and make sure that Kenyans are protected from the potential harmful effects of such foods.

Mr. Speaker, Sir, we know for certain that currently we have the National Council of Science and Technology, which addresses many other issues amongst the issue of biosafety. This council cannot handle all the matters therein. The Bill addresses this issue squarely by making sure that a specific authority is established to ensure that these issues are looked at by competent people.

Page 2052 of the Bill, particularly Part 2, deals with the establishing powers and the functions of the Authority, which will be known as the National Biosafety Authority. I would like to support that. It is important that this kind of Authority be installed to ensure that our people are protected.

This Bill is going to create an Authority which will be managed by a Board. I would take great exception to the fact that although the Bill names 15 or so members of the Board, most of whom will have relevant technical knowledge and direction in this matters and that the Minister is going to be empowered to appoint five competent persons, we still have a Permanent Secretary in

the Ministry of Science and Technology and a Permanent Secretary in the Ministry of Finance. We know very many Boards where the Permanent Secretary, Ministry of Finance is represented. The Permanent Secretary, Ministry of Finance is a Member in countless Boards and it is not possible for him, personally, to attend the meetings in those Boards.

Mr. Speaker, Sir, most often, you will find that he seconds someone else. Having worked in a parastatal, I know that they do not always second one person. So, the question of continuity is not there. I am on record for having recommended in this House that anybody to be appointed to be a member of a Board must be appointed by name, unless his position specifically demands that he must be in that Board. For example, the Director of the Kenya Bureau of Standards (KBS), the Director of the National Environment Management Authority (NEMA), the Director of Veterinary Services and Director of the Kenya Plant Health Inspectorate Services. But Permanent Secretaries are people who do many other things. I urge that the Minister considers naming another officer other than the Permanent Secretary to ensure that there is continuity in terms of institutional memory.

Mr. Speaker, Sir, the objects in Clause 7 are very clear. It says that:-

"The authority is subject to exercise general supervision and control over the transfer, handling and use of Genetically Modified Organisms (GMOs) with a view to ensuring safety of human health and provision of adequate level of protection of the environment".

Those ideals are noble and I support them. In particular, I am concerned with Subclause 72(f); the promotion of awareness and education among the general public in terms of matters relating to biosafety. This solely lacks in Kenya. It is necessary that some of these things should be addressed in the school curricula. I would not like to see many Kenyans living in ignorant bliss because of lack of information as it happens in other places. We need to put our education forward and we must make sure that some of these issues come to the fore at the early stages in our education system so that people are aware.

More often, when you make a law, it is very difficult to police such laws. We do not have enough policemen and competent officers to follow up. But if people are aware of the dangers and the potential benefits, they will take due care and that is very necessary.

Mr. Speaker, Sir, the powers of the Board, as addressed by the Minister in the Bill are okay with me and I would only like to say that in Clause 14, when the Board is given powers to appoint officers and other staff of the Authority for the proper and efficient discharge of the functions of the Authority under the Act, I do hope that they will exercise the question of competence and meritocracy. More often than not, you find that some people given some jobs are not competent. This is a very serious and delicate matter. It requires scientific knowledge. It also requires knowledge of a specialised nature and I do hope that when the Board is given those powers, then they will appoint the right people.

Mr. Speaker, Sir, part III deals with procedures for application or approval and assessment. It is amazing that we have had some of those GMOs in our country without any legal framework or procedure for application of importing such foods or how to handle them. As we go on, there are many foreign countries carrying out research on biodiversity in Kenya on this issue. In fact, there is no control. So, it is necessary that we support this Bill because it will be put in operation a system where there will be applications and approvals by a competent authority.

Mr. Speaker, Sir, even the question of importation is very important. I do not know of countries in this world where you can go with a living plant or even uncooked food. You may never import any plant there. They do that because they want to protect their biodiversity, their environment and their people because they do not know what may come with the plant. But in Kenya we are still open and we know people who bring flowers in. I know a story about the water hyacinth. Hyacinth was imported in Kenya by an American who was trying to use it as an

ornamental plant in the lake region. The end result now, 50 years later, is that we are suffering a disastrous loss because of the hyacinth. Boats have stuck in the lake with human life at risk. Fish has also disappeared and the lake is like some sort of a carpet. Even other inland water bodies have been affected. It is necessary to make sure that we regulate the importation of any product of living organisms in this country.

Mr. Speaker, Sir, Clause 23 deals with exports. Again, this is very necessary. I would like to ask the Minister to consider Clause 25 which talks about confidential information. What kind of confidential information could apply to GMOs unless it is something that is very dangerous to this country and potentially dangerous to the health of Kenyans? I would want him to consider that because there is absolutely no need for anybody who wants to import or export any GMOs into this country to have confidentiality. These things need to be in the public domain. I hope that the Minister will concur with me.

There are many other issues raised in the Bill, including review and appeals which, in my opinion, are important. Clause 24, is with regard to the question of offence of withholding information. I would like to draw the Minister's attention to the fact that the fine not exceeding Kshs2 million or imprisonment for a term not exceeding 10 years or both is lenient because of the potential disastrous consequences of such an offence. In law, they say that the punishment ought to fit the offence or the crime. This matter is so heavy that the fine should be so high and the punishment prescribed under the law should also be high as to discourage anybody from trying to flout the law absolutely.

With those few remarks, I want to congratulate the Minister for bringing this Bill to the Floor of the House. I beg to support.

Mr. Odoyo: Mr. Speaker, Sir, I wish to add my voice to the sentiments expressed on the importance of this Bill. Today, we have stem-cell research, HIV/AIDS research and DNA banks which are springing up in the world. All these will have a major impact on humankind and the environment in the near future. I commend the Minister for bringing this Bill because many times, HIV/AIDS research experiments have been undertaken in Kenya.

People have been injected with HIV/AIDS strains, people have been injected with what can and cannot cause HIV/AIDS infection without proper authority to monitor what the scientists have been doing in Kenya. This Bill will assist Kenya to monitor such activities. Many people have died or become specimens.

Prof. Olweny: On a point of order, Mr. Speaker, Sir. Did you hear Mr. Odoyo say that people have been injected with chemicals that cause HIV/AIDS in this country. This is scaring! Could he elaborate on that? I do not think that, that is true.

Mr. Speaker: Mr. Odoyo, could you substantiate?

Mr. Odoyo: Yes, Mr. Speaker, Sir. In undertaking scientific research, we will have two specimens; one with chemical and another one which has no chemical. With these specimens, we can study the behaviour of how that particular disease of that particular organism will behave.

Mr. Speaker: Mr. Odoyo, I think the problem is your statement. As a matter of fact, you said some people have been injected with the HIV/AIDS virus.

Mr. Odoyo: Mr. Speaker, Sir, the testing of a vaccine requires that you give small doses of that particular disease, so that the body is able to resist or grow the antibodies which can resist that particular disease.

Mr. Speaker: Mr. Odoyo, are you, therefore, referring to vaccination?

Mr. Odoyo: Yes, Mr. Speaker, Sir. An HIV/AIDS vaccine has been experimented in Kenya at a certain level by the one and famous Oxford University. It has been a subject in the newspapers and also in the public domain.

Mr. Speaker: Very well!

Mr. Odoyo: Thank you, Mr. Speaker, Sir. Stem cell research effectively means that we can

replicate our most learned Speaker through this type of research. We can in the future be able to replicate the one and only ole Kaparo by taking a cell from him and replicating him in the near future.

Mr. Speaker: What has Mr. Kaparo got to do with this?

(Laughter)

Mr. Odoyo: Mr. Speaker, Sir, it is in so far as we are able to get the best in society and try to replicate them.

Mr. Speaker: Are you saying that Mr. Kaparo is the best in society?

Mr. Odoyo: Mr. Speaker, Sir, I am saying the hon. Kaparo is one of the best in society.

Mr. Speaker: I am flattered.

(Laughter)

Will you now address yourself to the Bill?

Mr. Odoyo: Yes, Mr. Speaker, Sir. Part II (6) of the Bill has a 16 member Board. Most of them are Government officials. We have almost 11 Government officials and five so-called private members appointed by the Minister. I believe there should be room for other independent bodies to participate, especially in private research. There are private research bodies, including international bodies operating in Kenya, that could be able to assist in such a Board. I have in mind, for example, the universities like University of Nairobi (UON), Jomo Kenyatta University of Agriculture and Technology (JKUAT) and Kenyatta University who undertake a lot of research. Yet no university is represented in this Board. The Ministry of Education, the National Council of Science and Technology (NCST) are represented in this Board. I believe that the universities should be represented in this Board.

Mr. Speaker, Sir, the safety of the human health and the environment are the two issues that will affect mankind of the next generation. Today we are dealing with the weather and environment issues. These issues will affect our living standards and how we operate, especially the concept that living organisms can now be used to affect the environment. Ebola is a disease that at one time was said to have been created in a laboratory. The biowarfare and the poisonous gases are now within reach of scientists. Indeed, they can do a lot of damage unless we have an authority which will manage and control their movement. To that extent, I support the Minister for bringing this very most important Bill to create this Authority.

Mr. Speaker, Sir, under Part II (8) which deals with the Powers of the Board, while a lot of power has been given to the Board to control, I have not seen enough of consensus building. There are many stakeholders who I believe the Board should be empowered to consult as they establish this authority. Many diseases such as Severe Acute Respiratory Syndrome (SARS), HIV/AIDS or Ebola affect people globally. There is not enough room on the terms of reference for this particular Board to enable it consult at international level on a much higher frequency than will be expected of an ordinary Board.

Mr. Speaker, Sir, while the National Environment Management Authority (NEMA) is a board member, I see here, for example, that the Director of Meteorology is excluded. Today, the weather is an important part and parcel of the environment. I believe that he should be represented on this particular Board. Some of the activities that are proposed and that we saw here being done in the world of research will affect the weather. This will affect our environment. We have an avalanche of what we call immoral behaviour in the western world which may slip into the Kenyan society.

Mr. Speaker, Sir, the Chief Public Health Officer is a member of this Board. Whether that

should be an appropriate person or the Director of Medical Services who should have been the most appropriate member, leaves a lot to be desired.

I would propose that instead of the Chief Public Health Officer we should have the Director of Medical Services who the Chief Public Officer reports to. By so doing, we will be able to cut across a much wider human and medical fraternity than the Chief Public Health Officer whose main role is on prevention and protection of the general public rather than treatment of particular diseases.

[Mr. Speaker left the Chair]

*[The Temporary Deputy Speaker
(Mr. Sungu) took the Chair]*

Mr. Temporary Deputy Speaker, Sir, coming to Part III which deals with Applications for Approval and Risk Management, once again, we have a long bureaucratic process. While it is correct because of the nature of the application being a highly biological, scientific and environmentally risky element, there should be a two-way process. One to give the Board preliminary assessment over a period of time.

Secondly, those who pass at preliminary stage then should be approved immediately.

Mr. Temporary Deputy Speaker, Sir, as I was not able to go through many other clauses, I am limiting myself to Part IX, which is headed "Miscellaneous". The Miscellaneous part, especially Clause 51, says as follows:-

"The Minister may, in consultation with the authority, make regulations for the better carrying into effect of the provisions of this Act."

In particular, paragraph (e) is about procedures for genetically modified organisms in transit. The Minister has not put in place what we may call "the facilities", especially at our transit points, including border points and international airports. In order for the Minister to be able to put such facilities in place, it may require that certain other Acts be amended, especially the laws relating to immigration, transport and trade, because many of the genetically modified commodities are subject to trade. Some of them are bought and sold. Therefore, the Minister should also have informed us which other Acts will be affected by this Bill. I find that missing in this particular Bill, and I would like to urge the Minister that, in addition to what he has indicated here, he should get his officers to look at the other Acts that will be affected.

Mr. Temporary Deputy Speaker, Sir, finally, I would like to commend the Minister and caution him that the proposed authority must operate under the vanguard of research. It should not operate at what we may refer to as "purely local level". It must operate at international level. It must collaborate with the World Health Organisation and the International Livestock Research Institute (ILRI). It must be an organ of world bodies regulating matters like production of nuclear weapons. It must collaborate with the World Tropical Diseases Institute. It must operate as an international body, although it will be a body set up purely for Kenyan purposes. It is necessary to ensure that the proposed body is not overtaken by research. The built-in obsolescence in research today is such that if you do not operate under the vanguard of research, what you may be thinking will come tomorrow may, indeed, be a thing of the past.

Therefore, I caution the Minister that he has to ensure that those professionals who will form part of the board and the management will be people on the outer-level of research and speciality. I note that even though nuclear research is not included expressly, the Minister should look into the possibility of having a representative of the Department of Nuclear Research of the University of Nairobi as a member of this particular Board.

As we continue to expand the horizons of mankind, we have to be on the alert. I have had

the opportunity of travelling to Western countries as a council member of the International Fund for Agricultural Development (IFAD). I was appalled at what I saw. The closure of many churches. The decadence of morality in the Western World. I saw too many cases of man and man and woman and woman being legally married. The key words are "legally married".

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Odoyo! What is it that you are saying? What does it have to do with the Bill before the House?

Mr. Odoyo: Mr. Temporary Deputy Speaker, Sir, the conspiracy of the Western World, where a man marries another man, and a woman marries another woman, is that, in future, they will not have children biologically but will use genetically modified stem cells, through research, to create children for themselves as a way of enhancing this immoral behaviour in our society. Therefore, I appeal to the Minister to consider having a moral guardian in this particular Board. As we talk about society, there is no element in this Bill, containing any moral concept. It may be biologically right and environmentally correct, but it could very well be morally wrong. It could be against our societal norms. Today, science and morality are big issues in the United States of America (USA). Should we take it upon ourselves the task of playing God? Should we, for example, through stem cell research, allow people to re-create the honourable, venerable and the most respected "Gor Sungu"?

The Temporary Deputy Speaker (Mr. Sungu): Order! Order, Mr. Odoyo! Stick to the Bill. We know that stem cell research can also be used very positively. For example, the research against sickle cell anaemia. It can give cures to some diseases. So, it is not just negative only. Please, address issues in the Bill.

Mr. Odoyo: Mr. Temporary Deputy Speaker, Sir, I was coming to that. Stem cell research can be used positively. Therefore, I am saying that this Bill does not have enough provisions to enable the proposed Board to access areas, where experiments are being done. The Bill does not give the proposed board enough powers to assess and ensure that, indeed, what a person says he is going to research on is, indeed, what they research on, for example.

One may claim that he is doing research to ensure that he fights sickle cell anaemia, but in his laboratory, he could be recreating honourable or vulnerable creatures, or replicating the most respected "Gor Sungu".

The Temporary Deputy Speaker (Mr. Sungu): Order! Order, Mr. Odoyo! I take cognizance of the Standing Order on crucification! This is Parliament!

Mr. Odoyo: Mr. Temporary Deputy Speaker, Sir, let me substitute the name "Peter Odoyo" for the name "Gor Sungu". One could be recreating the hon. Peter Odoyo, MP for Nyakach, as he lies that he is doing research into diseases.

I am, therefore, appealing to the Minister that as we put this Bill together, its safeguards must go a step further. International researchers come to this country and say that they are doing research at the museums into AIDS using baboons. They go to places like Rarieda and do research among the population. Vaccine tests are also carried out. This is an issue which needs to be put to the fore.

Coming to that, again, I note that the Director of Medical Services will not be a member of the proposed board. I appeal to the Minister to re-consider this very much, because the chief public health officer is the Director of Medical Services. He should, really, consider having a much higher level of representation on the board, because amongst the objects of the Bill is the safety of human health. Human health is both plural and individual. We must protect the individual in order to protect the society. The achievement of a high level of protection of the environment is a vital objective, which has been given to this particular board.

So, I would urge the Minister to consider re-defining this particular objective on the environment, or what, indeed, forms the environment. Everything and anything can form the environment. Perhaps, the Minister will take his time to go to the first pages, which have got

definitions and tell us exactly what he had in mind, so that we capture the spirit of what he wants. He should in particular tell us whether this is to do with the in vitro nucleic acid techniques or DNA, or whether he is more interested in the fusion of cells beyond the taxonomic family. We need to understand exactly where the Minister is going with this system.

Mr. Temporary Deputy Speaker, Sir, as I come towards the end of my contribution, I wish to draw the attention of the House to what I consider to be an anomaly in this particular Bill. That is on the establishment of the Appeals Board. The Appeals Board will be chaired by a Judge of the High Court of Kenya and three other persons with experience in biology, environment and social sciences. At the moment, our system is that we have lawyers who are mainly arts-based. Those are people who studied history, geography and economics. Few of our lawyers today have a scientific background. That is mainly because law in Kenya is studied as a first degree whereas in India or the

United

States

of America (USA), law is studied as a second degree. Somebody could have started with Biology or Mathematics and became a lawyer through a second degree. Indeed, I question the idea of having a High Court Judge as the Chairperson of the Appeals Board---

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Odoyo! Clause 35(1)(a) of the Bill says:-

"There is hereby established an Appeals Board which shall consist of-

(a) a chairperson who shall be an advocate of the High Court qualified for appointment as a Judge of the High Court of Kenya, appointed by the Minister."

So, the chairperson of the Appeals Board does not need to be a Judge. Please, read the Bill carefully!

Mr. Odoyo: Thank you, Mr. Temporary Deputy Speaker, Sir, for enlightening me on Clause 35(1)(a). Indeed, I concur with what you have said. But I repeat that many of our lawyers, whether they are High Court Judges, are arts-based. They are experts in history, economics, geography, religion, *et cetera*, but as preliminary subjects. Few of them have expertise in the delicate world of physiological sciences, biology, chemistry, physics, *et cetera*. Therefore, I question whether putting such a person to chair such a Board would be the best thing. That is because he or she will be charged with the responsibility of determining heavy and strict scientific issues. The chemical formation of DNA, for example, has about 190 chemical formulas and processes. That is going higher and higher to thousands as we pursue the gene beyond DNA. We need someone who fully understands the delicate task of science, biology, chemistry, physics, nuclear and astro-physics, *et cetera*, to chair the Appeals Board.

I, therefore, appeal to the Minister to consider that matter. He should have it done the other way round. The lawyers should be members of the Board. But the chair should be a well-known scientific expert. If I were to envision that Appeals Board, there will be a lot of chemicals being floated here and there. There will also be many formulas, technical jargon and language. Therefore, if we have a chairperson who does not understand a single word about that--- I appeal to the Minister to really consider having a technical person to chair the Appeals Board of that particular Authority.

Mr. Temporary Deputy Speaker, Sir, since time is of essence, may I just make my last comment on one small clause. That is on Clause 55(1). It says:-

"The Authority shall promote public awareness and education of the public and those conducting the activities subject to the Act, concerning biosafety matters, through the publication of guidance documents and other materials aimed at improving the understanding of biosafety."

I would like to appeal to the Minister that, indeed, the first public awareness should come through the school system. They should try to incorporate many of those issues through the school system. Those in schools who are interested in research could be aware of those issues at a very

early stage. The Bill assumes that the general public will be made aware. But I am assuming that there is a particular scientific-oriented community that we must also target. They include those at the universities and high schools. Research and education of this particular Bill should be implemented partly through the curriculum that is undertaken by all the students, particularly those in the universities.

Mr. Temporary Deputy Speaker, Sir, with those humble remarks, I beg to support this important and essential Bill in today's world.

The Temporary Deputy Speaker (Mr. Sungu): Prof. Olweny, I will come to you later! Let us first hear Mr. Syongo!

Prof. Olweny: But Mr. Temporary Deputy Speaker, Sir, I stood---

The Temporary Deputy Speaker (Mr. Sungu): Order, Prof. Olweny! You will not challenge the Chair! Just like you do not share the same initials, you cannot speak one after the other. Let Mr. Syongo make his contribution and you will come next!

Mr. Syongo: Mr. Temporary Deputy Speaker, Sir, thank you for recognising that I enjoy some difference. I want to thank you for giving me this opportunity to make a few remarks on this Bill.

First of all, we are bringing this Bill very late! You will remember that it was one of the very first Papers that we discussed when the Ninth Parliament was inaugurated. We spent endless moments both at the Committee Stage as well as at a retreat in Mombasa, which was sponsored by others, to discuss this Bill. Given the urgency of adopting biotechnology, I just want to express disappointment that it has taken us five years to bring this Bill before the House.

Mr. Temporary Deputy Speaker, Sir, recently, although Parliament was not part of the arrangement, the Executive arm of the Government launched what they called Vision 2030. That vision cannot be achieved unless we incorporate in our systems - that is education systems and research centres - the essence of biotechnology. Why do I say so? I say so because we are now living in a global world and we have to compete. Yesterday, the Minister for Trade and Industry talked about preparing to sign the Economic Partnership Agreement (EPA) with the European Union (EU). That agreement essentially means that we must reciprocate in terms of giving each other market access. Without biotechnology being part and parcel of our production system in agriculture and agro-based business, we are not going to compete with the EU. Biotechnology gives those countries that use it considerable leeway and even more so, a head-start because they are able to produce much more per acre with much less input cost. So, they can compete very effectively. If the EU is going to be allowed market access into this region, our agro-business is going to collapse! So, I want to tell the Minister that, although it is late, at least, it has come!

Mr. Temporary Deputy Speaker, Sir, even as we discuss this particular Bill, the rest of the world has moved on. South Africa has completely embraced biotechnology. Even a small country like Burkina-Faso is now competing in the world market. It is one of the major producers under the Africa Growth and Opportunity Act (AGOA) arrangement of textile products. It is using BT Cotton. That is biotechnology designed or genetically modified cotton varieties, which give you more yield per acre than our basic organic cotton.

It is necessary that we move on. Under the African Union (AU), it was agreed by the Council of Ministers and endorsed by Heads of States that Kenya should be the centre of biotechnology research for Eastern Africa region, South Africa for Southern Africa region, Egypt for Northern Africa region and Nigeria for Western region. The other three centres have already moved on and are way ahead of us. Therefore, to that extent, as a country, we have also let down the entire region because we are not moving at the same speed as we were expected to do as envisaged by the African Union (AU)

Mr. Temporary Deputy Speaker, Sir, if you look at our country, in terms of its geography

and climatic conditions, a large part of our country cannot produce most of our food crops. These are now what are called the Arid and Semi-Arid Lands (ASALs). Through biotechnology, these sections of our country can actually be made to produce. Through research, we can develop suitable crop varieties which can survive the drought and the heat. Even within the high production areas, we can actually achieve a higher yield per acre so that if you are talking about food security for our people in the light of increasing population growth and obvious demand elsewhere, which gives us an opportunity to export, then we must really embrace biotechnology. For that reason, I, again, want to thank the Minister for bringing this Bill on board.

Mr. Temporary Deputy Speaker, Sir, my colleague, hon. Odoyo, has talked about biotechnology from the perspective of medicine and scientific research on medicine. He is right! However, I would like us to consider, particularly, the economic aspect of biotechnology. As I said, we cannot compete in the global market unless our products are cheaper and tastier. If you go to our supermarkets now, you will see all oranges and bananas looking alike. This is because these products are actually being genetically modified to make them more attractive in line with the market demand or consumer preferences. So, in fact, biotechnology is a major marketing tool. We should not be afraid of technology. In any case, even if you are afraid of technology and listening to a lot of noise being made by the civil society, we are not cushioned from biotechnology and Genetically Modified (GM) foods. I want to emphasise that every single item that is being imported from America and Europe is actually a product of genetic engineering. We must, therefore, move full throttle and embrace this technology.

Mr. Temporary Deputy Speaker, Sir, I like this Bill because even as it talks about embracing technology and adopting biotechnology, it is also taking care of safeguard measures. It is necessary for us to deal with safety measures because even though it has benefits, biotechnology can also have dangerous side effects. If you look at the safeguard measures which are proposed in the Bill in detail, they are part and parcel of a global system of safeguard measures. So, I thank the Minister for doing so, but also urge him to consult a little more because things change all the time. Thank God for ICT! He should be able to get his officers to update this Bill, especially in terms of safeguard measures so that we are not caught unawares given the potential dangers of genetic engineering.

Mr. Temporary Deputy Speaker, Sir, with those remarks, I would like to conclude by saying that I support this Bill. I want to encourage the Minister to move quickly so that we can go to the Committee Stage and have this Bill enacted into law before we break for the 2007 General Election.

Prof. Olweny: Thank you, Mr. Temporary Deputy Speaker, Sir. I stand to support this Bill. Being a scientist who has been involved in this business, I want to take it as my responsibility to allay the fears regarding genetic modification. My contribution will touch on a little history of genetic modification; from when it started up to today. This is because so many people outside there, particularly people in the civil society, say all kinds of things about Genetically Modified Organisms (GMOs). They have all kinds of misunderstandings, lies and rumours about this technology. They are actually poisoning people's minds with regard to research in genetic improvement of organisms, that is, crops and animals.

Mr. Temporary Deputy Speaker, Sir, genetic improvement started way back towards the end of the 19th Century when some gentleman by the name Mendel discovered---

(Mr. Ojode consulted loudly)

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Ojode! Even if you are withdrawing from the Chamber, please, do so quietly because there are other hon. Members who

want to hear what is going on.

Continue, Professor Olweny!

Prof. Olweny: So, Mr. Temporary Deputy Speaker, Sir, Mendel discovered the gene towards the end of the 19th Century. At that time, when he came up with the idea of genetic inheritance, he was insulted and abused. All kinds of things were said about him. However, in the early 20th Century, his work was rediscovered. When his work was rediscovered, the early scientists took it up. That is what led to the improvement of crops and livestock. Plant and animal breeding started immediately after the works of Mendel were rediscovered in the early 20th Century. Of course, the early work of breeding was on potatoes, maize, wheat and other major field crops and livestock. That, in a way, led to a solution to food insecurity in today's developed world. They also used to have problems of food insecurity in the early days. They did not have enough food, but it was their luck that Mendel came up with the idea of genetics.

Along the line came the technology of mutagenesis, which was used in breeding. So, we had mutation breeding applied to both animals and plants. That also led to substantial or very significant improvement of the livestock and plants that we eat. That is also called genetic improvement.

Instead of using the word "improvement", you can still use the word "modification", which is causing problems to people today. When you use the words, "genetic modification," some people think that you are introducing chemicals. But chemicals are not genes! The people who are saying all kinds of things out there should know that chemicals are not genes! Chemicals are products of genes in the bodies of organisms. So, let them not confuse people with regard to genetic improvement.

Of course, when mutagenesis was discovered, it had its fears. The gentleman who came up with it was also insulted. All kinds of abuses were hurled at him. Of course, mutagenesis had its problems, but as any other technology, if it is abused, it can be harmful.

Today, mutagenesis is being used in the right way. It is being used for medicine. It is being used for crop improvement. It is being used for animal improvement. So many crop varieties arose out of mutation breeding. Those are crops such as high yielding wheat and beans varieties. Even in this country, we have many varieties that are derived from mutation breeding here in our research stations, including the University of Nairobi. They are so many. That is genetic modification. Even using the mutagenesis approach is still genetic modification. You find people along the streets talking all kinds of things about genetic modification. To modify is actually to change. You can change it for the better or for worse. When you change it for the better, you use improvements. So, various crops, and even livestock, have been improved using mutation breeding across the world.

I have met a number of people saying that when you use genetically modified organisms, you are going to get an animal and a plant and put them together. Genes of animals and plants have never been compatible in any organism. It has never worked! But several plants belonging to different species have been hybridised in nature and also artificially.

In fact, wheat is a result of such natural hybridisation. That is two different species coming together! That is the wheat we eat! Strawberry is as a result of two different plant species that were brought together artificially by a human being. We have the strawberry which we eat today. Triticale was done the same way. That was done in Canada through plant breeding. I have never heard of animals and plants being brought together to give us an individual. There is no room for that!

So, people who are peddling rumours---

The Temporary Deputy Speaker (Mr. Sungu): But Professor, are you saying that there is no cross-pollination that we learnt with you at Nyabando?

Prof. Olweny: Pardon?

The Temporary Deputy Speaker (Mr. Sungu): Cross-pollination?

Prof. Olweny: Mr. Temporary Deputy Speaker, Sir, cross-pollination that did what?

The Temporary Deputy Speaker (Mr. Sungu): It is a natural breeding!

Prof. Olweny: Mr. Temporary Deputy Speaker, Sir, cross-pollination is a natural thing that makes the plants mate among themselves. You know that a female plant and a male plant would never walk towards each other. But they simply mate through the transfer of pollen grains from the male part of the plant to the female part of the plant. That is what we call cross-pollination. I have never seen plants walking towards each other. Of course, animals do for their courtship---

The Temporary Deputy Speaker (Mr. Sungu): Please, Professor, take us through the Bill!

Prof. Olweny: Mr. Temporary Deputy Speaker, Sir, I am addressing this issue because it is very serious! I have encountered it outside there. I want to solve the problem. I will come to that. I want this country to know that scientists in this country are doing good things, just like scientists in other parts of the world. We should not take them for granted. We should not say all kinds of things about them.

Mr. Temporary Deputy Speaker, Sir, on medicine, the vaccination that is done--- The material that is used for vaccination is actually as a result of biotechnology. It is part of the things that we are talking about. Penicillin is as a result of biotechnology. That drug is from a bacterium and yet, we make all kinds of complaints about technology that is helping us today. As a result of genetic modification and improvement, we have what we call the green revolution across the world. It has swept across United States of America (USA), Europe, USSR, Australia and China. But Africa was left out. That is when we had super varieties of maize, rice, wheat and barley in those countries. We were left out. Today, those countries have no problem of food security. We have problems of food security. We are begging around. We are asking for food. We are not aggressive enough when it comes to research. It is sad situation for Africa. But even in Kenya, when technology that can help us is just at the door, there are some people who go around demonstrating against technology. It is very saddening. We have failed to develop super varieties the way other countries did. Yet,

germplasm was taken to those countries to develop the varieties that they are feeding on today. Even the germplasm of our livestock was taken out to those other countries. Many Kenyans do not know that the hybrid maize varieties that we grow and eat are as a result of genetic modification and improvement. They are hybrids. There are different varieties and materials brought together. Ruiru 11 is a super variety that was developed at Ruiru. All kinds of strains are put together to give us that variety.

So, despite the efforts across the world on crop improvement and genetic modification, Africa still remains with food insecurity as a major problem. That has been worsened by the increase in population and inappropriate technologies that we have in Africa. Of course, genetic modification is one of the most appropriate technologies today. Because of technology, there is an improvement in farming.

Mr. Temporary Deputy Speaker, Sir, the time taken to develop improved crop varieties and animal breeds is lessened. That is what is supposed to be addressed. The time taken and cost is what is supposed to be addressed by genetic modification. That way, we shall have crop varieties that are developed faster. Scientists take less time to develop them. When you take less time to develop them, it costs less. Of course, genetic modification within the labs takes less space for the first few weeks, months or one or two years, before you take it out to the field. That is when you do full-blown assessment outside in the field. So, those are some of the issues which we wish to address. Scientists must adopt more refined technologies which we call genetic engineering or genetic modification. That way, they will spend less time and resources. They will use less space to help us come up with---

The Temporary Deputy Speaker (Mr. Sungu): Professor, you might help the House with your vast knowledge. I am already feeling like I am getting a tutorial in plant physiology. You could help us to enrich this Bill with that knowledge.

Prof. Olweny: Mr. Temporary Deputy Speaker, Sir, I still have a lot of time. So, do not be worried.

The Temporary Deputy Speaker (Mr. Sungu): My advice to you is to say whether the authorities will have powers to address some of the issues you are raising and those kinds of things. That is the Bill.

Prof. Olweny: Mr. Temporary Deputy Speaker, Sir, do not eat on my time by interrupting me!

It is all these things that brought us the word "Genetically Modified Organisms (GMOs)" that is scaring very many people. However, let us look at what GMOs have done to the rest of the world today, not in Kenya yet, because we are only testing one or two items. Bt cotton is being tested in Kenya and a few maize plants at the Kenya Agricultural Research Institute (KARI) in Kabete.

Today, major economies, like the USA, have adopted the GMOs. Let us see how many hectares are planted under genetically modified maize, soya beans, cotton, carrola and papaya. In the USA, 55 million hectares is being used to grow GMOs. In fact, it could be more than that. If you go to Canada, you will find that 6.1 million hectares is under genetically modified canola, soya beans and maize. In Mexico, 100,000 hectares are under soya beans and cotton. In Spain, there is 100,000 hectares under genetically modified maize. They eat it and sell it. They are not throwing it away. In Germany, there is 50,000 hectares under genetically modified maize. Bulgaria has 30,000 hectares under the same maize. China has 3.5 million hectares under genetically modified cotton. That is Bt cotton which is being tested here in Mwea Tebere, Kenya, today, yet we are still scared, if it will kill us. Most of us today are wearing cotton shirts made of genetically modified cotton fabric. In India, more than 3.5 million hectares of land are under genetically modified cotton. South Africa has more than 1.5 million hectares under genetically modified maize, soya beans and cotton.

I visited South Africa last year and I ate their maize. In fact, I chewed it raw! That was genetically modified maize that was being tested. I have not changed today. There are large tracts of land of genetically modified crops that are being grown across the world, including the one being tested in Kenya today; the Bt cotton, that is being tested today. Of course, it is like any other cotton. It will help our farmers when it is released with regard to control of ballworms. It will be a high-yielding material. Farmers will spend less money to spray it. So, they will have a higher marginal return from that material.

I have just talked about various countries that are growing GM crops. Similarly, a lot of trade is already being undertaken using biotech crops. Those biotech crops include the GM crops. By the year 2005 - I do not want to go through so many years but I just want to pick on one - the world trade in biotech crops was US\$5,000 billion. That includes the GM crops. As I have said, just like any other technologies, the GMO technology may have its own problems. It may have its dangers. That is the reason why we have this Bill to ensure that the technology will be safe for us, so that whatever is developed from GMO technology is safe for human beings, animals and for our environment.

I do not think that I would have anything to add to this Bill. Any fears that people may have will be addressed by Clause 7 of this Bill. That clause is good enough. It will take care of any fears that someone may have.

Clause 3 of the Bill talks about application for approval and risk assessment. That is where anybody who may have fears about GMO technology may refer to. Clauses 18 and 19 talk about applications to introduce into the environment--- What would be introduced into the environment?

Is it being adequately taken care of? If you look at Clauses 20 and 21, all the way down--- I am convinced that this Bill takes care of any fear that any individual may have. However, just like any other law that has been enacted in this country, if it is not implemented effectively, then we will have problems. It is up to those who will be implementing it to do it safely. That is what has caused problems.

I read in some articles someone saying that the *proposis*, the "Mathenge" tree, which is causing a problem in the North Rift today is a GMO. Some people also say that the water hyacinth is a GMO. Those are not GMOs. Those are just natural plants that some people introduced. As one of my colleagues said a few minutes ago, they were introduced the wrong way. When any plant material or any animal is being introduced into this country, it must pass through the quarantine stages.

It must also be assessed by our scientists to determine whether it is the right material to be introduced in our environment. Those materials were introduced in the wrong environment. They are more aggressive than other organisms that live with them. That is why they are colonising the places where they were introduced. They are now creating problems. Someone simply took the seeds of the Mathenge tree there, I do not know what for, without passing them through the right channels and planted them there. That is a very aggressive plant and it is causing problems. It is up to the person who was supposed to implement the law against the introduction of the Mathenge plant and water hyacinth into this country to---

With those comments, I highly and strongly support this Bill.

Mr. Karaba: Thank you, Mr. Temporary Deputy Speaker, Sir, for giving me the chance to contribute in support of this Bill which, as you have heard, should have come during the term of the Eighth Parliament and not in the life of the Ninth Parliament, which is about to be dissolved. This Bill is very important and significant in the livelihoods of Kenyans in the sense that once it is passed, it will confirm what other countries have done, the signatories of the Cartagena Protocol on biosafety in the world. The Bill tells us more about the deliberate relief and placing of what we produce and market. We have to import and export some of the products that we either grow here or produce through manufacturing.

Mr. Temporary Deputy Speaker, Sir, Kenya is not an island. It is surrounded by some other countries like Ethiopia, Uganda and the Sudan and they are signatories to the same protocol. So, if we do not, therefore, take our country to the global level, we might be singled out as a country which has been ignorant for some time, and which will continue to thrive in ignorance. The Bill, therefore, is going to establish the National Biosafety Authority. As you have heard from various speakers, this Authority is going to safeguard against rumours that Genetically Modified Organisms (GMOs) are not safe for human consumption. The majority of us should understand that we are not legalising the production of GMOs. We are trying to come up with an authority which will protect what is already here in the country.

So, the Bill is relevant to what is happening in other parts of the world. As you might have all heard, the word "modified" means to improve on something, which has been there or is there. We have been doing it for the last very many years. We have been able to modify even human beings through evolution. We are told that what we are now is not what we used to be during the Stone Age or the Iron Age; we continue to evolve. This is what we are asking every person in this House to understand. This is what we call evolution. The evolution that we are discussing here is evolution of genetically modified foods and other related organisms that continue to be produced, not only in Kenya but also in other countries in the world. The attempt by this Bill, therefore, is to make sure that what is produced in Kenya, or transported through Kenya is safe, either for our people or for our environment. This is the authority we are seeking to establish through this Bill.

Mr. Temporary Deputy Speaker, Sir, it also helps us to understand that Kenya needs, as a

country, food security. You realise that many a time we have problems with hunger. We hear of some catastrophes which happen. More often than not, there is drought, prolonged rainfall which causes floods, and all these lead to misery for very many people in our country. If we have enough food to be consumed by our people, this is what we are interested in. We cannot increase food production in this country if we have not improved the methods and systems that have been existing for some time. This is what this Bill is seeking to do, to cause a revolution in our food production by improving ecosystems that can support the growth of food crops.

We have some areas which would not even produce crops because of inadequate rainfall. Rainfall is not enough leave alone being reliable. So, when farmers take to various crop production, they suffer from drought or unreliable rainfall. This then leads to poor food production. If the Bill is passed, we envisage a situation where more food will be grown through the improvement of the environment, crops and seeds. When this happens, we are going to have drought-resistant crops similar to the *Katumani* variety maize which has been growing in Ukambani for some time. We have also heard about coffee varieties like Ruiru 11, which is doing well in some arid and semi-arid areas. We also have a tea variety, which is not grown in only highlands. We have tea growing in the lowlands. We also have rice which is growing in highlands and not in lowlands. All this is possible through modification. If this modification is, therefore, going to be supported, it should be enshrined in a legislation. This is what we want to do, because without doing it, we are not going to be partners, or members of, to the Cartagena Protocol. If Parliament passes this Bill, which I know it will do, because the mood shows it will, we are going to benefit a lot from international recognition, support and credit.

You hear of various economic unions and markets like the Common Market for Eastern and Southern Africa (COMESA), the European Union (EU) and the International Air Transport Association (IATA). Unless we pass legislation that will enable us to compete favourably with other economic regions, as a country, we are going to lose a lot in the struggle for economic development.

So, if we are thinking about economic development, we must also think about evolution in agriculture. The only evolution and revolution that we can have is through the introduction of the GMOs, which are going to be safeguarded by the Biosafety Bill. This Bill, therefore, will protect not only human beings but also animals and the environment, if it is passed. This is going to ensure that we proper, as a country.

Mr. Temporary Deputy Speaker, Sir, you have heard of the increase in yields in a number of countries. India has achieved a lot of cotton production. We also have the Philippines, Brazil and Argentina which have produced a lot of soya beans through biotechnology. This is something that Kenya should achieve, particularly in this region, where we are supposed to be seen as the front runner in most of the activities that are undertaken not only in Africa but in the world. This is like having an international airport. It is here that most of the products will be trans-shipped through. If we are not going to have legislation to prohibit and regulate most of what is trans-shipped through Kenya, then our country will be seen as a runway. Without the protection contained in the Bill, we will suffer unfairness.

The Bill also ensures publicity of GMOs in the country. It attempts to provide that several media houses will be used to make sure that before something is introduced in this country, people will be made aware of it through various publications and media. This is all contained in the Bill. So, we are trying to assure hon. Members that this is a very useful Bill. Once it is passed, we will become members of the African Union (AU) and, of course, join the market for GMOs.

Mr. Temporary Deputy Speaker, Sir, as the Chairman of the relevant Departmental Committee, I would like to say that we shall propose some amendments in the Committee Stage. I can assure you that we have gone through this Bill. We have seen that the Bill, itself, is an asset to

this Country. Most of the Members of the Committee, including some hon. Members here, have been to countries that have adopted biotechnology. The Committee visited South Africa and other countries. We have held various in-house meetings and workshops and we have been convinced that we should have passed this Bill yesterday and not now. If we do not do that, we will be sidelined. We will not have economic recovery and growth. It is going to be very bad for our future generation. It should not be seen like a rumour-mongering kind of Bill. It is something which is going to support this country. It is a revolution in terms of industrial development.

Mr. Temporary Deputy Speaker, Sir, we visited India to see how cottage industries are developed. They have developed them using biotechnology cotton. There have very good textile industries. It is based on locally produced BT Cotton. You will realize how important those industries are. They employ many people. So, employment opportunities will be created in this country. We cannot talk about employment without having a workforce that is going to perform certain industrial tasks based on the available raw materials. So, if we do not produce enough raw materials for our industries, we are not going to be an industrialized. We are not going to realise Vision 2030.

So, Mr. Temporary Deputy Speaker, Sir, this is a very important Bill. It seeks to make our country to be the front-runner in Africa. The number of farmers who are going to benefit from the production of those crops is going to increase. They will be economically empowered through the sale of the same. They will make use of idle land. Most of our population is made up of farmers. Therefore, we need to encourage them to grow those crops so that we can have industrial development in this country. We shall establish various cottage industries.

So, Mr. Temporary Deputy Speaker, Sir, the researchers have come up with different varieties. In Kenya, we have very eminent scientists. Our scientists, after they have done a lot of good work, seek greener pastures elsewhere. Sometimes, they are even poached! That is brain drain. That happens when they do not realise much from the research that they have undertaken. We continue to lag behind. The same scientists leave Kenya and go to advance their scientific methods in other counties. In the end, we stand to lose.

So, if this Bill is passed, there are various regulations that will govern brain-drain, the use and misuse of biotechnology products and the transfer of the same products through the country. The Bill will show what will be contained in this country. So, this Bill, therefore, is going to be very useful to our country.

Mr. Temporary Deputy Speaker, Sir, we have seen how other countries in the world have benefitted from biotechnology. You have heard from Prof. Olweny how America, India, Germany and other countries have benefitted. So, if those countries have benefitted through biotechnology and they have been industrialized for as many years as, maybe, 200 years, what makes Kenya not be one of them? If we are going to be a member of the same global institution, it means that we are going to benefit a lot from the interaction with other countries. Kenya, therefore, will benefit immensely from the introduction of GMOs.

So, Mr. Temporary Deputy Speaker, Sir, we need to understand that, without that technology, we are going to lag behind just like the way we lagged behind when computers were introduced. There are some countries that have not adopted Information Technology (IT). To them, IT is a mirage! So, that biotechnology will be a mirage to us if we do not adopt it. That will deny us the developmental advantage.

With those few remarks, I beg to support.

(Applause)

Prof. Anyang'-Nyong'o: Thank you, Mr. Temporary Deputy Speaker, Sir. I would like to

support this Bill, but with qualifications.

Mr. Temporary Deputy Speaker, Sir, I am one of those rather conservative people who fear genetically modified organisms (GMOs). When I was in high school, I was taught biology. I was taught that, somehow, if you do not believe in the theory of creation and believe in the theory of evolution, you will have some kindred to tadpoles. Somehow, human beings can trace their relationship to some tiny animals called tadpoles. That really frightened me. It made me believe further that we have evolved, if, indeed, we believe in the theory of evolution, from some very minute organisms, until we have reached where we are today, as sophisticated animals.

Now, Mr. Temporary Deputy Speaker, Sir, if I read Section 4 of this Bill, which is about the objects of this Act, they are listed as four. I want to read that out because it is the bottom of my fear. I need to be reassured. I have listened to the hon. Member who has just spoken before me--- He is in the relevant Departmental Committee. He has sought to reassure us that they have visited many countries, seen that technology in action and are convinced that it is good for this country. I also happen to have been to a laboratory in Cuba, where GMO research is done. I did not see it in action. At the level of scientific proof, it looks very convincing. But at the level of understanding what it might do to us in the long run, if we eat genetically modified foods--- Not being quite clear what they might do in the long run to the human body or to the history of evolution of human beings, is frightening!

Mr. Temporary Deputy Speaker, Sir, if I read Section 4, the objects of this Act are:-

"(a) to facilitate responsible research into and minimise the risks of harm that may be posed by genetically modified organisms;"

It means that even the Committee understands that there are risks that may be posed by GMOs. Unfortunately, in the Bill, some of those risks are not stated. But, of course, that is why the Authority is being established.

"(b) to ensure an adequate level of protection for the safe transfer, handling and use of genetically modified organisms that may have an adverse effect on the health of the people and the environment."

Again, you see, in the second object of this Act, we are taking precautions. The first precaution is the risk of harm that may be posed by such organisms. The second precaution is the protection for the safe transfer, handling and use of genetically modified organisms that may have an adverse effect on the health of the people and the environment.

Thirdly, it reads:-

"(c) to establish a transparent and predictable process of reviewing and making decisions of the transfer, handling and use of genetically modified organisms and related activities."

In other words, Mr. Temporary Deputy Speaker, Sir, they are establishing that Authority because of my fear. My fear is inscribed in these two objectives of the Act. They pose danger and they are risky. How are we, then, intending to protect ourselves against that fear? We are establishing an Authority, which shall be managed by a Board.

Mr. Temporary Deputy Speaker, Sir, again, my fear is here. When I look at the membership of the Board it, comprises nine bureaucrats and six scientists. I am not sure whether my fear is going to be allayed by a Board like this. Having been a Government Minister and knowing how these boards function and who attends them and whose word is carried; I am worried that the fears expressed in Clause 4 of this Bill and the precaution we are taking in Clause 6 by establishing a Board largely dominated by bureaucrats, does not allay my fears.

Mr. Temporary Deputy Speaker, Sir, let me read the members of the Board:

(i) A chairperson who shall be an eminent scientist appointed by the Minister.

That is fine, he or she can be an eminent scientist retired or whatever. If it is under the

present Government, we will likely to get a retired scientist who may no longer be practising in the laboratory and may not be up to date with the latest readings and research in biotechnology.

(ii) The Permanent Secretary in the Ministry for the time being responsible for science and technology.

This is a bureaucrat and not necessarily a scientist.

(iii) The Permanent Secretary in the Ministry for the time being responsible for finance. This is another bureaucrat, most likely an accountant, an economist for that matter or he or she could be anybody because there is no order that the Permanent Secretary Ministry of Finance must be a financial person or an economist. We have known times when the Permanent Secretary the Ministry of Finance was a historian. I am not saying that historians do not know economics.

(iv) The Director-General of the National Environment Management Authority (NEMA).

Again, there is no guarantee that he or she is a scientist.

(v) The Managing Director of the Kenya Bureau of Standards (KEBS).

(vi) The Managing Director of the Kenya Plant Health Inspectorate Services (KEPHIS).

Most likely, this would be a scientist, but there is no guarantee.

(vii) The Director of the Department of Veterinary Services or his representative nominated in writing.

(viii) The National Council for Science and Technology.

(ix) The Chief Public Health Officer.

(x) Director of Agriculture.

(xi) Five other persons appointed by the Minister of whom three shall be experts in the following respective sciences, namely; biological, environmental and social sciences.

Mr. Temporary Deputy Speaker, Sir, the only guarantee we have in this Act are these two scientists; biological and environmental. These are the two people we are sure will most likely have something very close to the science we are dealing with; that is biotechnology. I am quite sure that these are some of the amendments that the committee will bring before the House. If, indeed, our fears in the objects of this Act are to be allayed, then the composition of the Board should have enough numbers of people who will have the most up-to-date skills and knowledge to make sure that the Board does its work.

Mr. Temporary Deputy Speaker, Sir, biotechnology is a fast-growing field. The research in biotechnology takes place on an hourly basis. Something discovered at 12.00 o'clock today, may make a big difference to application of Genetically Modified Organisms at 4.00 p.m. in the afternoon. In these days of the internet communication, if you are a practising scientist, you will most likely have that posted on your website or e-mail and be up to date. But, if you are a mere bureaucrat in the Government of Kenya, it would be very unlikely that you would know it. If you are a bureaucrat in Rwanda, it may be different because Rwanda is much more up to date in ICT than we are. Like I heard a radio announcer say this morning in some of these talk shows that, "In Kenya, it is most likely that ourselves and Government officials, could easily confuse a computer for a piano". So, the extent to which we can be up to date in terms of ICT, as bureaucrats going to this Board, is quite questionable.

Mr. Temporary Deputy Speaker, Sir, my major contribution in this Bill is that if, indeed, we will allay our fears as put in Clause 4 of this Bill, then the composition of the Board must be reviewed. This is not an ordinary authority we are establishing. We are establishing an authority that will be at the cutting edge of scientific development in an areas in which the use of the GMO is extremely risky as the Bill itself says. So, we must take exceptional precaution in the kind of authority we are establishing. We should not do it like any other authority that has been established in this country which must be dominated by bureaucrats. The issues we are dealing with are very different.

Mr. Temporary Deputy Speaker, Sir, if I go further on Clause 7 - Objects and Functions of the Authority;

"The objects and purpose for which the authority is established is to exercise general supervision and control of the transfer, handling and use of Genetically Modified Organisms".

It says, "general supervision and control". That may explain why, when the Authority was being established, the membership was done this way. It was not expected to be a specialised Board. It is going to carry out a "general supervision and control". My question is: Who then will do a particular supervision and control in this area? If this is the first Authority that we are establishing in this very sensitive area and we give the Board general control and supervision, then somewhere in the law, there must be somebody who is concerned for specifics in this area.

Mr. Temporary Deputy Speaker, Sir, the devil is always in the detail in an area like this. I have said, having gone through this Bill, it is rather good on generalities and very poor in details. As the hon. Member said, even when they went around to other places like South Africa and so on, this is an area in which we cannot afford to be too general. We are dealing with human lives. Any mistake done in the research and application of GMOs can lead to the wiping out of the whole of the human race. We have not yet solved the mystery behind HIV/AIDS pandemic. How did the HIV/AIDS virus come into being? Did it come into being as a result of a research like this or a research in biological warfare? Indeed, biological warfare could have been based on research on genetically modified something!

Mr. Temporary Deputy Speaker, Sir, I would rather the committee be very careful in establishing an Authority like this, that somewhere in the law, we are very particular about the details. Make sure that the fears we have expressed in Clause 4 of this Bill are taken care of; not in generalities as, indeed, is seen both in the membership of the Board as well as the objects and functions of the authority, but in a much more specific provision in the law. These generalities cover; one, safety of human health and two, provision of an adequate level of protection. My belief is that we are not just concerned in general about the safety of human health. We are also concerned about the safety of human reproduction. We exist today, as it said in the Bible in the book of Genesis, God told us to go multiply and fill the whole world. If we can get GMOs that are going to interfere with reproduction of the human race, then even if we are particular about our health, we are going nowhere. I would have said that one of the things that should be put here, given that we have had experience with HIV/AIDS is the safety of human health and reproduction. One of the fears in the Western World in particular is that some of the foods we eat these days, interfere with human reproduction.

In the West, the population is going down, perhaps because of nutrition. There is authority today that in the next 20 years, Africa is going to be the only continent that can supply labour to the rest of the world. Also, Africa is going to be the only continent which is going to have the youngest population. In Japan, for example, today, they are closing nursery, primary and high schools because there are no children to go there. Indeed, nursery and high schools are being turned into old age facilities. People are living longer in Japan than those who are being born. So, rather than use nursery and primary schools for the young, they are being used for old people's homes. That tendency is emerging in Germany as well. Now, it can be said that it is a result of birth control, but it is also as a result of the low level of human reproduction in this society. I am not quite sure that this low level of human reproduction is simply just as a result of birth control. It could easily be as a result of the kind of nutrition and food that these people are eating. Do we want to risk the reproduction of the human race in Africa by going blindly into using genetically-modified foods, when we know for certain that there are certain risks that are stated in this Bill? If we must go into genetically-modified foods because we think that, that is the only way to feed our population, then

how are we taking care of this risk? I am not quite sure that this Bill gives us adequate ground for protecting ourselves against the risks mentioned in Clause 4.

Mr. Temporary Deputy Speaker, Sir, let me add that I do not believe that the way to feed people in Africa is through Genetically Modified Organisms (GMOs). I believe that we still have a wide latitude in improving the hybrid seeds without GMOs, through the kind of agricultural sciences and research that are extremely well-developed in Africa; for example, in Kenya and Nigeria. We have fantastic institutions which have been there for a long time with tremendous knowledge among Africans that can, if properly used, lead us to developing hybrid seeds naturally. If we use irrigation, we will become a bread-basket for the rest of the world in terms of normal and organic food. In any case, organic food is fetching much more money in Western markets today than ever before. Eggs that are laid naturally by runners or hens which run in the compound are extremely expensive in places like Europe. They are not like the ones laid by chicken from Kenchic. Why are we losing our comparative advantage in the world economy by rushing head-long to something that the West has developed because they are short of land, labour and everything and we think that, that is the solution to our problems, when we have not exhausted the natural pathways of reproducing ourselves?

Mr. Temporary Deputy Speaker, Sir, I would like to submit that in as far as I appreciate the work that the Committee has done and the fact that we should be at the cutting edge of modern science and technology, I think we should be better prepared in embracing GMOs than we are in this Bill. I would request the Committee to look very carefully at Clauses 4, 6, 7 and 8 of this Bill, and convince us and itself that, first, realising the objects of this Bill, we have sufficient and adequate institutional capacity established in this Board that will prevent us from running head-long into these risks that may easily end us up using GMOs without due consideration of the reproduction of ourselves in the future.

Thank you.

The Assistant Minister for Transport (Mr. Githae): Thank you, Mr. Temporary Deputy Speaker, Sir, for giving me this opportunity to make my contribution to The Biosafety Bill.

Mr. Temporary Deputy Speaker, Sir, let me begin by saying that this Bill could not have come at a better time. It should have come yesterday. I am saying this because, at the moment, we have no authority that monitors or even regulates various GMOs that may be brought into this country. So, at the moment, we do not know what is in this country, who brought it and what it was for. So, I think the first thing that the Authority should do is to take stock of what is existing in this country so that, at least, they have a base upon which they can begin their work.

Mr. Temporary Deputy Speaker, Sir, the contribution I am going to make are my personal views. Whereas the introduction of the Authority is a good thing, I am not very sure whether the GMOs are good for human health and environment. Why am I saying this? Whereas we agree that there are some benefits to be obtained from GMOs, at the same time, we must realise the dangers that they can bring. We have benefited from the research, for example, on *Katumani* maize, which has been very successful. *Katumani* maize can grow in areas where there is not much rainfall. So, to that extent, the research on *Katumani* maize, which is a GMO, was beneficial. But there are others which may not be beneficial and that is where the danger is. So, we must be careful. As this Authority proceeds to work on its mandate, it must be very careful that it does not license every application.

Mr. Temporary Deputy Speaker, Sir, the other reason I said that this Bill could not have come at a better time is because we have been late also as far as Information and Communication Technology (ICT) is concerned. Other countries have ICT policies or Acts of Parliament which regulate the ICT in those countries. For example, Rwanda is very much ahead of Kenya. It is only now that we are having an ICT policy and freed our airwaves. It is also only now that we are

having mobile phones, FM stations and the like. So, to that extent, it is good that we are now following the modern trend.

Mr. Temporary Deputy Speaker, Sir, let me now move to details of the Bill. I will begin with Clause 6(1) which gives the list of all the members of the Board. It says one member shall represent the interest of consumers. I think we need more than one representative because the people who were to be affected are the consumers. Then, it also says that there should be one member to represent the interests of farmers. I think we need to add that one member shall also represent the interests of livestock and another one to represent the interests of fishermen. These are important stakeholders

who seem to have been left out. So, I request the Minister to include those other categories so that the Board is well-representative.

Mr. Temporary Deputy Speaker, Sir, regarding Section 17, it says that the provisions of Section 16 shall not relieve the Authority of the liability to pay compensation on damages to a person. But I am seeing a case where it is not one person who may be affected but rather a class of persons. I am not very sure whether a class of persons could sue for any damages. So, we need a provision that authorises a class of persons to sue and not necessarily an individual. We have cases where, particularly, in the pharmaceutical industry, a drug has not affected a particular person but a class of particular people. So, we need to put a clause that says that even class actions can also be instituted against the Authority.

Regarding Section 19(4) on circulation, it says:-

"The Authority shall publish in a Gazette and in at least two newspapers with nationwide circulation---"

I am particularly concerned with the word "nationwide circulation". What is a newspaper with nationwide circulation? The Government's bureaucrats have interpreted this to mean only the *Daily Nation* and *The Standard*. We have other newspapers like *The People*, *Kenya Times* - It used to be called "Kenya Sometimes" but now it is appearing daily. So it is now *Kenya Times*. We now have the *Nairobi Star* and others like the second generation. I do not want to call them "gutter press" as other people call them. The Authority should also be allowed to put an advertisement in those newspapers. So, I will recommend that the Minister removes the words "nationwide circulation" to give room to other newspapers that are now in circulation. As I had explained, as far as Government bureaucrats are concerned, there are only two newspapers with nationwide circulation. But we need to give room to other institutions.

Mr. Temporary Deputy Speaker, Sir, in this country, only 10 per cent of the population read newspapers. The other 90 per cent depend on radio and FM stations. I would be happier if there was a requirement for Authority to advertise in the FM stations because we need to support them. We need to support the community FM stations. They are the future. I will be glad if we could remove the words "nationwide" and also include "radio". That would benefit our people. As I said, there are benefits to be received and I gave the example of *Katumani* maize. We also have pumpkins with very funny shapes. They look like gourds. We also have mangoes that grow only three feet tall. So, there are benefits, but what is the long time implication of those new substances?

In places like Europe, even in this country, there are some supermarkets that equip, receive or sell only organic foodstuffs. That is the future. One kilogramme of tomatoes grown organically costs more than Kshs200 compared to ordinary tomatoes that go for about Kshs10 per kilogramme. So, I am not very sure whether we are moving forward in this case or backwards.

Mr. Temporary Deputy Speaker, Sir, let me now turn to Section 25 which deals with information that the Authority receives. It says that it shall decide whether to keep the information designated by the applicant as confidential. I would have been happier if there was a provision that says that if the Authority declines to approve a certain application then no person should be

allowed to use that information for their own purposes. Why am I saying so? Before banking business was liberalised, when we only had a few major banks, you would make an application to the bank manager and say that you want to import this or that. The bank would reject it and supposedly within two or three months, the same application with the same item that you wanted to import, will be approved for someone else. So, there was that misuse of information by banks. I fear that the same information may be misused by the Authority. It was even worse when in the Central Bank of Kenya (CBK) you had to get authority to import or have foreign currency. You would make an application to import or to be allocated foreign currency but CBK would decline the application and within a few months, you would find the same item that you wanted to import had been given to another person. In other words, some of those officials would use the information that they had received to enrich themselves or to misuse that information for their own personal gain. So, I think we need a requirement that the Authority will not use that information that they have received to enrich themselves or to misuse it for their own person gain. So, we need a requirement that the Authority will not use that information or carry it to another person who then would use it for commercial gain.

Mr. Temporary Deputy Speaker, Sir, as I had said, we are trying to play God here. We have cases where scientists interfere with the reproductive system of the human being. We now have test-tube babies, surrogate mothers and so on. Even in today's newspaper, there is an article about an 82 year old Italian woman who has given birth to her grand-children. She used the eggs of the daughter to give birth to the daughter's babies. This only complicates things. What will those children call that lady? Is she the mother, grand-mother or great-great grand-mother. This will complicate things. We could wipe out the human population without knowing. It is good that we have this Authority but they need to be very careful when approving applications for Genetically Modified Organisms (GMOs). The same debate is raging in the United States of America (USA) as to how far the scientists should be allowed to experiment with sperms and the eggs from women. Others are even removing the nuclear of the egg and putting it in other places. That may amount to playing God and that could be dangerous.

Mr. Temporary Deputy Speaker, Sir, Section 35 deals with the court with jurisdiction to hear cases and appeals. The section says that it is the High Court that will deal with all applications. Speaking is an authority on law. If today you file a case in the High Court, it will take a minimum of five years before the case is heard and settled, unless it is deemed or certified to be urgent. We are now saying that we are going to increase the backlog in the cases in the High Court.

I would have been happier if it was the Resident Magistrate's Court because those courts are today manned by men and women of high reputation, schooled in law and experienced.

So, I would have preferred that any appeal should be taken first to the Resident Magistrate's Court and not the High Court for the reasons that I have given that this only increases the backlog. Some of these cases will be urgent and they require an urgent solution. For them to be taken to the High Court, this will only increase the backlog.

Mr. Temporary Deputy Speaker, Sir, turning to Part VI, Clause 40 which authorises the Authority to levy money or fines on people who have misused organisms or have not complied with its order - it says that it gives authority for the Authority to levy a charge on the person on whom it is served - there is no provision on how they will collect that money. If they have said they have levied a Kshs10 million charge to a company that has desecrated the environment, how will they collect it? I have looked at it and there is no provision of how they will do it unless they go to High Court. So, this again will take too long and I would have preferred that a mechanism be sought under which such a levy charged on a person can be collected. Otherwise, it will just be a waste of time.

Mr. Temporary Deputy Speaker, Sir, turning now to my last contribution which is Part IX,

Clause 52(g) where it slaps a maximum fine of Kshs1 million or imprisonment for a term not exceeding three years, we are dealing here with the health not of a single person, but of the human race. I think a fine of Kshs1 million is too low. We should increase it to something like Kshs10 million and a jail sentence of ten to 14 years so as to tell the corporations or individuals who may want to introduce organisms into the environment which affect the human race that is not acceptable and that if they do that then they have to bear the consequences.

So, on the whole, I am saying that I have absolutely no problem with the introduction of this Authority, but they need to take a very serious view of the application made to them so that in the process they do not wipe out the human race. They should authorise only those applications that will be beneficial to our people. They should not authorise those applications which may adversely affect the human race.

With those few remarks, I beg to support.

Mr. J. M. Mutiso: On a point of order, Mr. Temporary Deputy Speaker, Sir. I have been listening to this debate and I would like you to put the question whether it is possible to call upon the Mover to reply?

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Mutiso! Since I have recognised the presence of the Minister of State for Immigration and Registration of Persons, I am obliged to allow him to contribute. I would like also to advise hon. Members to avoid repetition so that we can move faster since this Bill is very interesting and hon. Members should have their own reasons.

The Minister of State for Immigration and Registration of Persons (Mr. Konchella): Thank you, Mr. Temporary Deputy Speaker, Sir. I do not know whether I will be repeating, but I will not take more than ten minutes because I just want to highlight one or two things which I feel are of interest to me and this country.

Mr. Temporary Deputy Speaker, Sir, the issue of obesity is one of concern to our health today. This is because Kenyans are eating a lot of food that has got hormones for example chicken in town. You will notice that a lot of children are eating this chicken and other foodstuffs which grow so fast because the market requires the supply of these commodities. Therefore, our people are subjected to eat foodstuffs that carry fast growing organisms. In the process, obesity is setting in. This has led to a big health problem thus incurring the nation lots of losses in terms of revenue and medical care. So, when we introduce some of these modified foodstuffs we hope that our scientists will ensure that they are not going to be a source of a health problem in the future. When we look at the societies or countries with a very high Gross Domestic Product (GDP), one of their biggest problem is how to deal with obesity, heart attacks and other blood pressure related diseases. This is mainly due the foodstuffs they eat. This is one of our concerns. I am happy that in the Bill, when you look at the members of this Board, they include scientists who are experts in biodiversity, biological, environmental and scientific issues, so that they are able to ensure we do not contract these diseases.

Mr. Temporary Deputy Speaker, Sir, another issue is that of the *Mathenge* shrub. People came to address the problem we have of desertification or loss of pasture for the pastoralists and then they introduced a tree product called *Mathenge*. I cannot mention its biological name at the moment, but that is how it is known in the market by the people. It has caused a lot of hardship and problems to the people of Baringo District. People are losing their livestock. They are dying because of this shrub which has been introduced from another part of the world. So, one of the things that this Committee should look at is the issue of this *Mathenge* shrub. I am glad that in this Bill they are saying that they shall control the importation of this shrub into this country and the marketing of this produce and, of course, the growth of all this produce. Now, it is very important that we have a very skilled and knowledgeable Board in this field to control and ensure these things

are not introduced into this country because we end up causing this country a lot of problems and our future generations are going to have problems.

Mr. Temporary Deputy Speaker, Sir, the issue of food, of course, is important because we need to feed our people. We have a lot of land and a very good environment to grow food. So, why does this nation not take advantage of this being an agricultural country to actually produce natural substances and foods that we eat in a way that is going to feed our people and even export it to other countries?

Mr. Temporary Deputy Speaker, Sir, we know of a lot of biodiversity substances in this country today. We need to patent them. You can see a lot of people are coming to look at our biodiversity. In the process they are actually extracting derivatives which end up producing medicines. Look at our Aloe Vera and other products which foreigners are coming to collect in this country. They extract it, modify it and then produce medicines from it which they sell globally. We do not benefit from anything and yet the raw materials come from Kenya. So, can we have the same body to ensure that nobody can extract and take our biodiversity products here for commercial use without the knowledge of this country and that the laws of this country should protect it? So, we want, for example, this Board to ensure that they become the patenting agency also for any biodiversity product that will be of economic value to the rest of the world so that this country can continue to benefit.

Mr. Temporary Deputy Speaker, Sir, lastly, I just came from Malaysia. I went to look at what is happening in that part of the world. They are now able to produce food without using soil.

The process being used is, indeed, incredible. They just collect water from the roof-tops into a tank. Then, through the capillary method, they pipe the water into a pan for each particular crop. So, all you need to do is mix the required nutrients in tanks. The water goes into the seed, which is only held by a rock as an anchor. This means that we actually do not need soil to produce food. We just need a few stones on which to put the seed, apply the required nutrients and you have a clean crop, which does not need to be washed. You can pick and eat it because it is very clean.

So, people in urban areas can produce vegetables. For example, the areas where we host refugees are dry, but, so long as there is water and you have the nutrients, you can produce vegetables and other crops for them. So, we can also look into ways of producing clean foodstuffs without soil. With a roof-top like that of this Chamber, we can produce enough food to feed Parliament through the new technology that is now in the offing. That technology has nothing to do with genetic modification of crops. They are just simple crops, but you can feed yourself in your house in an urban area, without using any soil.

With those remarks, I beg to support.

Mr. Muite: Thank you, Mr. Temporary Deputy Speaker, Sir, I beg to support the Bill, and say that human fear of the unknown is always there, and it is understandable. It is a normal human reaction. However, never allow fear to be the dominant consideration, and hold you hostage, so that you do not experiment. You must not experiment carelessly. You must be careful.

Mr. Temporary Deputy Speaker, Sir, when the first car was manufactured, the [Mr. Muite] House of Commons in England met very quickly and enacted a law. They thought that the new vehicle, which was able to move faster than a horse-drawn carriage, was a very dangerous thing. So, they passed a law to the effect that the vehicle must be preceded by a human being with a bell, so as to warn people to get out of the way. That was because of the fear they had. They could not understand this machine, which could go faster than a horse-drawn carriage. That law was enacted because of human fear.

The intention of this Bill is to provide a statutory framework for supervision of licensing to ensure that our people are safe. In the absence of the law, in fact, we expose our people to danger. What are we subjecting the foodstuffs that we import to, in terms of tests, to know how they have

been grown? So, it is time we joined the rest of the world in having this statute in place to enable our scientists monitor, regulate, license, give advice and so on and so forth. We have got brilliant scientists. Do you know the first person who pioneered tissue culture for bananas and trees? She was a Kenyan lady. She was plucked from here and taken to the United States of America (USA). It is the USA which has benefitted from her knowledge.

From there, she was taken to South Africa. Today, we import electricity poles from South Africa. Because of that technology, they are able to grow those trees. We need them, and we are now importing them from there. So, other nations are benefiting from the brains of our Kenyan scientists, because we are not giving them the space they need.

Do you know that the scientist who developed Ruiru 11 coffee variety? He went to a certain country, where he was given a free hand and managed to develop a new generation of Ruiru 11, which is why now Kenyan coffee is not able to compete favourably. One tree of the new generation Ruiru 11 is able to produce ten times the amount of coffee beans the Kenyan single tree is producing, without any chemicals. That has been possible through scientific research.

So, let us embrace this statute without fear. Let us allow our scientists to go. We must be able to feed our people. It is an embarrassment. Kenya is supposed to be an agricultural country, but is there any year when we do not import food? How do we then describe ourselves as an agricultural country? If more than 3 per cent of the country's population is engaged in agriculture, you are not efficient. In countries like Japan, less than 1 per cent of the population is engaged in agriculture. If more than 3 per cent of a nation's population is engaged in agriculture, you are not efficient. Let us look at ourselves. More than 90 per cent of our people are employed in agriculture and yet we cannot feed ourselves.

It is science which is going to enable us feed ourselves in a safe manner. Let us not confuse research with all the fear that sometimes one hears being expressed. In fact, do you know that if you do not make inquiries and go to the ordinary *nyama choma* joints, you will see very good-looking *sukumawiki*? Do you know how it is grown? It is grown using raw sewerage. That *sukumawiki* is grown in Nairobi's Eastlands. It looks very green and attractive, but it is dangerous for human consumption.

Human beings are not able to grow foodstuffs safely. So, they go into all sorts of short-cuts. We have got so many townships on the outskirts of Nairobi, which do not have a central sewerage system. So, they discharge raw sewerage and Kenyans, who want to make some money, are now growing arrow-roots, *sukumawiki* and cabbage and selling them to markets. They are dangerous foodstuffs! So, this is the sort of thing we want to bring to an end, so that safe food can be grown under supervision, and we can feed our people.

Mr. Temporary Deputy Speaker, Sir, I would, through you, urge hon. Members to put aside their fears. Let us vote in favour for this Bill. It is being supported by the relevant Departmental Committee. Its Members have listened to the scientists. They are recommending to this House that we enact this Bill. I have personally travelled the extra mile to talk to our scientists on this Bill, and they assured me that the Bill is good. It has no danger and, in fact, it will ensure that those dangers from imported food and that sort of thing are removed.

With those remarks, I beg to support.

Mr. Kagwima: Thank you, Mr. Temporary Deputy Speaker, Sir, for giving me the opportunity to contribute to this debate. I want to, very briefly, make a few points in support of this Bill.

For five years, between 1992 and 1997, I was in the Ministry of Technical Training and Technology. I spent those five years talking and listening about this subject. In fact, in 1997, I led the Kenyan Delegation to the International Symposium on Biotechnology in Algiers. Two years ago, we were in Japan, Taiwan and those other Eastern countries, as a Members of the

Departmental Committee on Education, Research and Technology.

So, I want to echo what Mr. Muite has said, namely that we should not, really, dwell on the fear and stop the advancement of this technology, or adoption of the same, in this country. What we need to do quickly is ensure that we have means of monitoring the foodstuffs, or whatever else we fear may be having substances that may affect the normal growth of our people.

Mr. Temporary Deputy Speaker, Sir, the Kenya Bureau of Standards (KEBS) should be strengthened in terms of human resource and equipment. It should be able, at any one time, to check and test those substances to know whether we are safe or not. Probably, we should move part of it to the area of importation. We should have a branch at the Port of Mombasa so that it can quickly sample and check the items that are being imported. Apart from genetically modified foods, even the foods that Mr. Muite has quoted, those that grow in areas that are not fit for crop production, we should be able to test them locally. That way, we will be sure that the imported and locally grown food is safe for our people. Therefore, we need to intensify in terms of human capacity and equipment.

Probably, in the next financial year, we should request the Minister for Finance to allocate enough resources to acquire the equipment. Although I am saying that we should not fear, one of the areas we are afraid of is lack of adequate equipment to monitor and control the usage of GMOs. That is the area we need to address quickly.

I hope that this Bill will be passed so that we can embrace ourselves to what the other world is doing. But we need to move very quickly and put in place that capacity. The capacity will only come when we have enough financial resources. The Minister should be able to do that. Otherwise, we want to encourage that. Let us move with the rest of the world. I am sure this country will be safe. We shall also be able to compete.

Mr. Temporary Deputy Speaker, Sir, at the moment, we are importing cheap foodstuffs from other countries, even from the COMESA region. We are not able to produce them locally. When the tariffs are properly harmonised, this country will be at a lose in terms of marketing our farm produce. We need to move quickly, so that we are able to produce competitively and sell without asking for protection from the other countries that we are competing with.

Mr. Temporary Deputy Speaker, Sir, in the next ten years, we do not have much to fear. Let us develop the capacity in terms of human resource and equipment.

With those few remarks, I beg to support.

Mr. Sambu: Thank you, Mr. Temporary Deputy Speaker, Sir, for giving me this opportunity to support this Bill on Biosafety. This is a timely Bill which will become an Act of Parliament. We tend to fear because of not understanding what really is involved in scientific development. There are certain efforts that have been made in the scientific world in breeding, agronomy and many other fields that are beneficial, without really being harmful as such.

In other developed countries, you will find animals that have been bred in such a way that, if they are for beef production, for example, cattle are reared within months. A cow takes a very little time to grow from a calf to a state where it is slaughtered. People are using those foods. We have not seen any serious nationwide harmful effects in those countries. It is time we educated our people and trained our scientists properly. We should then spread that information, so that we do not exploit the lack of knowledge of the people to cause fear.

Mr. Temporary Deputy Speaker, Sir, my colleague, Mr. Muite, just referred to the Ruiru 11. We spent a lot of money! In fact, Ruiru 11 coffee is not even genetically modified. But through breeding, we were able to get Ruiru 11. It is a coffee variety that is not susceptible to Coffee Berry Disease (CBD) and does not require spraying with fungicides and other things. But because we did not retain our scientists, it went to the country that was mentioned early. Those people are now benefiting, although we are the ones who developed that plant. That is why it was called Ruiru 11.

As my other colleagues have said, when this Bill becomes an Act, the Ministry, as headed by our colleague, Dr. Wekesa, should allocate more resources. It should train more people and promote that biotechnology.

Mr. Temporary Deputy Speaker, Sir, I want to thank the Government for re-opening Rift Valley Textiles (Rivatex). It closed down because of mismanagement. It also closed down due to the expensive cotton that was being imported. That is because cotton which is not genetically modified--- The lint is the one which is weaved into cloth. The cotton we were growing here - I cannot remember the name now because as an agricultural scientist, I dealt with it many years back. But we were not able to develop higher yielding varieties with better quality lint. Therefore, we were left behind. Our mills had to start importing cotton. We started by importing cotton from other neighbouring countries. Finally, we ended up importing the readymade cloth. We ended up closing our own industries. So, I thank the Government for re-opening Rivatex. I understand that, His Excellency the President will commission it tomorrow. I thank the Government for that. But we should develop high yielding varieties of cotton that will produce high quality lint. It should produce much more lint so that farmers in cotton producing areas--- There are many of them! Western Kenya used to have--- Malava-Malakisi, for example, had a big co-operative society in the colonial days, up to the late 70s and early 80s. It was one of the biggest co-operative societies handling cotton. They were producing the cotton lint. They were also pressing the cotton seed into edible oil. They also produced oil for other uses. They were able to sustain our factories then with the supply of cotton lint. But because we did not engage our scientists in producing better varieties-- Of course, there were other problems! Some of our co-operative societies were mismanaged. Farmers were not being paid. But if we had better varieties, private farmers or people doing it directly would have been able to take over and produce cotton. So, the Government should immediately direct its efforts to cotton farming, particularly,---

The Assistant Minister for Transport (Mr. Githae): On a point of order, Mr. Temporary Deputy Speaker, Sir. You have heard how Mr. Sambu has praised the Government for opening Rivatex! He has also praised His Excellency the President for doing a wonderful job and agreeing to re-open Rivatex factory tomorrow. Am I in order to find out why he is not supporting his re-election?

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Githae! We are discussing a very serious Bill. I am sure Mr. Sambu digressed a little, but he is still supporting the Bill. That is what we are concerned with here and not outside politics.

Proceed, Mr. Sambu!

Mr. Sambu: Thank you, Mr. Temporary Deputy Speaker, Sir. The President himself knows whether I support him or not. I do not have to tell it to my friend here. My people also know.

Mr. Temporary Deputy Speaker, Sir, I was talking about Rivatex, not as a local investment for the North Rift, but as Kenyan investment. It will create employment for Kenyans and save us foreign exchange, which we can use to import much more needed products, for example, fuel. Instead of getting ready-made clothes from Dubai, we could get them from our plant in Eldoret!

The Temporary Deputy Speaker (Mr. Sungu): Mr. Sambu, if I may help you, I used to work as an Insurance Loss Adjustor and used to inspect goods, for example, suiting material which was exported to Zimbabwe, South Africa, the UK and so on. Some people would go there thinking that they are buying new suits *kumbe* they are buying Kenyan clothes. They would get surprised when they see the lining. So, please, proceed!

Mr. Sambu: Thank you for your support, Mr. Temporary Deputy Speaker, Sir. You see, Rivatex was even supporting people like our good Temporary Deputy Speaker here when he was working for the insurance sector. When this factory opens its doors, it will support a lot of other

industries and not necessarily those people working in the factory. However, it all ends up with us, Kenyans, being able to produce good quality cotton in volumes which can be economical to the farmer whether he is in Busia, Bungoma, Kwale or other low altitude areas which receive good amounts of rain to support the growing of cotton. Farmers in those areas will not leave stocking cattle or growing bananas or cassava to grow cotton, if it does not pay well. If we grow cotton seed which produces good quality cotton, then farmers will shift to it and they will make money. If people make money, they will not care whether it is by growing maize or cassava.

Mr. Temporary Deputy Speaker, Sir, we need to really direct our efforts to producing cotton even if it is genetically modified. People should not care even if it is said that the cotton is genetically modified. They should not get scared about it because cotton does not get into your body. However, as I said before, I have seen in the USA and other areas where livestock is genetically modified and with proper feeding, it grows within--- There are other factors to be applied. It is not only modifying genetically. You have to put in other factors. That is why, even for cotton, if we have to produce a genetically modified variety of cotton that will produce high yields, there are also other agronomical factors that you need to apply. For instance, you have to put in fertiliser and proper agronomical methods so that the crop can produce a high quality yield.

Mr. Temporary Deputy Speaker, Sir, we have to help our farmers to get involved in other crops, like sunflower. This is a crop that can produce high quality oil, which can be used to produce fuel for warming houses and even driving vehicles. I feel that we should do something about crops such as sunflower. There are other several crops, even if genetically modified, which will improve the production in our fields, for example the fuel oils. What my friend referred to earlier on, that is, Eucalyptus plant, which grows in about five or six years to 200 feet and are quite thick, these trees are as strong as any other Eucalyptus tree. This type of tree was developed here. In fact, it is not even genetically modified. I think it is as a result of cross-breeding or hybridisation. We should, therefore, encourage our people to get involved in producing better quality crops and animals.

Mr. Temporary Deputy Speaker, Sir, I want to support this Bill by saying that we should not just condemn methods of improving, including biodiversity because it is not all wrong. It helps farmers and improves the quality of life of animals and people. With those few remarks, I beg to support.

The Temporary Deputy Speaker (Mr. Sungu): There being no further interest, I will call upon the Mover to reply. I wish to congratulate the hon. Members who have contributed to this debate so far. It has been a very well informed debate. I am amazed at the figures and facts that have come out. I wish that the Press would take that kind of debate seriously instead of looking at the question of quorum.

Please, proceed Mr. Minister!

The Minister for Science and Technology (Dr. Wekesa): I want to join you, Mr. Temporary Deputy Speaker, Sir, in thanking the hon. Members. In fact, I am overwhelmed. I am really overwhelmed that at this point in time, when hon. Members are busy with other things, we should have this number of my colleagues contributing to this Bill. I really want to thank hon. Members for their very good contributions, some of them very scientific as you noted. This goes to show that hon. Members are very well informed and that they do their research to be able to contribute to very scientific Bills such as this one before the House.

Mr. Temporary Deputy Speaker, Sir, it is important to point out to Kenyans that--- I think one of the best things that happened recently is when His Excellency the President hived off the Ministry of Science and Technology from the Ministry of Education so that it stands on its own. Because of that, it can address issues of this nature. You will agree with me that if, in 1989, when an Act of Parliament established this Ministry, had it continued to be on its own from that time, this Bill would have already been passed. Therefore, I thank His Excellency the President for

realising that in this day of technology, the Ministry of Science and Technology is an important Ministry in the development of our economy. I would just like to underscore the point by referring to the Vision 2030. The proposed law is actually designed to support the country's Vision 2030, which identifies agriculture as the pillar of economic development in our country. Vision 2030 underscores the fact that science, research and technical innovation are the bedrock of modern knowledge economy. Indeed, in that Vision 2030, for those of us who have read it, we know that science and technology is the greatest pillar which will bring our economy to the level of Brazil and Korea by the year 2030.

Mr. Temporary Deputy Speaker, Sir, on that score, I would also like to share with the House that as we pass this law - I hope it will be passed given time - Kenya is going to be one of the 23 countries that have actually passed the biosafety law.

In Africa here, we are going to be the 8th country to pass this biosafety law. Without wasting time, I just want to read those countries that have actually passed the biosafety law. They are South Africa, Uganda, Burundi, Botswana, Nigeria, Egypt, Burkina Faso and now, Kenya. So, that goes to show that we are identifying science and technology as a vehicle for development.

The other issue that is very important, before I go into the real Bill--- I touched on it when I moved the Bill.

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Minister! I am advised that you should stick to the issues raised by hon. Members. If you are going to bring amendments as recommended by Members, please say so, so that we can conclude, rather than raise new issues.

The Minister for Science and Technology (Dr. Wekesa): Mr. Temporary Deputy Speaker, Sir, I was just going to say that the fears and advantages have been properly articulated by hon. Members. Of course, I will not go into the details because that will be repeating ourselves. But I also want to point out that those fears---

QUORUM

Mr. Ojode: On a point of order, Mr. Temporary Deputy Speaker, Sir.

The Temporary Deputy Speaker (Mr. Sungu): Mr. Ojode, what is it?

Mr. Ojode: Mr. Temporary Deputy Speaker, Sir, you realise that this is a very important Bill. We want as many hon. Members as possible to contribute to this particular Bill. But, unfortunately, we lack quorum. Would I be in order to request the Chair to order that the Division Bell be rung so that majority of us could concentrate and contribute to this Bill?

An hon. Member: But the Minister is responding!

Mr. Ojode: Is that so? But there is no quorum! How can he reply without a quorum?

The Temporary Deputy Speaker (Mr. Sungu): Order, Mr. Ojode! You have raised your point. I would advise hon. Members to attend the House, sit here and follow the debate. But the issue raised is important. Under the Standing Orders, once a quorum issue is raised, the Speaker must confirm. I can see without even referring to the Clerk-at-the-Table that there is no quorum. Therefore, I order the Division Bell be rung.

(The Division Bell was rung)

ADJOURNMENT

The Temporary Deputy Speaker (Mr. Sungu): Order, hon. Members! Due to lack of quorum, we are unable to continue with our business. The House, therefore, stands adjourned until tomorrow, Thursday, 4th October, 2007, at 2.30 p.m.

The House rose at 6.00 p.m.