



**REPUBLIC OF KENYA**

**THIRTEENTH PARLIAMENT**

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## THE HANSARD

Wednesday, 6<sup>th</sup> March 2024

The House met at 9.30 a.m.

*[The Deputy Speaker (Hon. Gladys Boss) in the Chair]*

### PRAYERS

### QUORUM

**Hon. Deputy Speaker:** I direct that the Bell be rung for 10 minutes.

*(The Quorum Bell was rung)*

You may stop the Bell.

Hon. Deputy Leader of the Majority Party, let us proceed to the first Order.

### PAPERS

**Hon. Owen Baya** (Kilifi North, UDA): I beg to lay the following Papers on the Table:

1. Report on project proposals, approvals, disbursement status and restrictions imposed on constituency accounts for the Second Quarter of the Financial Year 2023/2024 from 1<sup>st</sup> October 2023 to 31<sup>st</sup> December 2023, from the NG-CDF Board.
2. The annual report of the Kenya Law Reform Commission.
3. Report of the First Quarter of the National Government Budget Implementation Review for the Financial Year 2023/2024 from the Office of the Controller of Budget.
4. Reports of the Auditor-General and financial statements for the year ended 30<sup>th</sup> June 2023, and the certificates therein, in respect of:
  - (a) Kenya Medical Practitioners and Dentists Council.
  - (b) Clinical Officers Council of Kenya.
  - (c) National Syndemic Disease Control Council.
  - (d) Kenya Medical Training College.
  - (e) Kenya Plant Health Inspectorate Service.
  - (f) Kenya Plant Health Inspectorate Service Mortgage Scheme.
  - (g) Pest Control Products Board.
  - (h) Mechanical and Transport Fund – State Department for Roads.
  - (i) Land Settlement Fund.
  - (j) The National Government Affirmative Action Fund.

Thank you, Hon. Deputy Speaker.

### NOTICE OF MOTION

RECOGNITION OF PRIMARY CAREGIVERS OF PERSONS WITH SEVERE DISABILITIES

**Hon. Dorothy Muthoni** (Nominated, UDA): I beg to give notice of the following Motion:

THAT, aware that Article 21(3) of the Constitution provides that all state organs have the duty to address the needs of vulnerable groups within the society; further aware that the Persons With Severe Disabilities Cash Transfer Programme is one of the four cash transfer programmes implemented by the Government as part of the overall social protection interventions; noting that caregivers undertaking the immense responsibility of providing daily care and assistance to Persons With Severe Disabilities are oftentimes the immediate family members of the Persons With Severe Disabilities; concerned that this causes a disproportionate burden to these families as persons who would otherwise be engaged in gainful employment or other activities to provide for the families are limited by these immense responsibilities; further concerned that this loss of income opportunities and resources exacerbates the challenges faced by these families; cognisant that the government ought to take action to recognise the invaluable contributions of caregivers and support them in caring for individuals with severe disabilities; now therefore, this House resolves that the Government, through the Ministry of Labour and Social Protection, recognises primary caregivers of Persons With Severe Disabilities as a distinct category requiring social protection and support, and further, develops and implements a cash transfer programme for these primary caregivers.

Thank you Hon. Deputy Speaker.

## BILLS

### *Second Readings*

#### THE PUBLIC SERVICE COMMISSION (AMENDMENT) BILL (National Assembly Bill No.6 of 2023)

*(Moved by Hon. Mejjadonk Gathiru on 21.2.2024 – Morning Sitting)*

*(Debate concluded on 28.2.2024 – Morning Sitting)*

*(Question put and agreed to)*

*(The Bill was read a Second Time and  
committed to Committee of the whole House)*

#### THE COTTON INDUSTRY DEVELOPMENT BILL (Senate Bill No.5 of 2023)

*(Moved by Hon. Mary Emaase on 28.2.2024- Morning Sitting)*

*(Resumption of debate interrupted on 28.2.2024- Morning Sitting)*

**Hon. Deputy Speaker:** Hon. Julius Rutto had a balance of six minutes. In his absence, we can proceed to the next person. Kindly press the intervention button if you want to contribute to this debate. Member for Mwingi West, Hon. Charles Ngusya.

**Hon. Charles Nguna** (Mwingi West, WDM): Thank you Hon. Deputy Speaker for giving me this opportunity to contribute to this Motion.

On the onset, I thank Hon. Emaase Mary, the Mover of this Motion. Kenya was one of the biggest cotton producers when we started this industry. I very well recall from our history that this industry used to support over 500,000 households. As one of the crops that is labour intensive during planting, weeding, and harvesting, the cotton industry will create employment in our country if revived. Our youth will be fully involved in the production and other processes involved in cotton growing.

The Mover of the Bill raised issues like the creation of cooperatives and boards all the way from national to county levels. This will create massive employment opportunities in many sectors. Reviving this industry, which was killed by the importation of *mitumba* and other old clothes, will enable our industries to generate revenue for our government in taxes that we will be paying locally. When you grow an industry somewhere, we experience tremendous development and growth in all our counties, especially in our arid and semi-arid areas where cotton growing thrives. We can attribute many advantages to this.

I support this Bill. There are very many advantages that we can attribute to this. That is why I am supporting the Bill. I encourage Hon. Emaase to go beyond this and ensure proper implementation in all the counties, especially the arid and semi-arid counties. We will see many benefits. I cannot mention all of them. However, I know it will be a source of income and employment for our young people and those who will farm it. It will also increase our revenue collection as a Government and serve as a growth development tool in our region. This one will have more benefits than we can imagine.

With those few remarks, I support.

**Hon. Deputy Speaker:** Hon. Beatrice Adagala, Member for Vihiga County.

**Hon. Adagala Beatrice** (Vihiga County, ANC): Thank you, Hon. Deputy Speaker. I also want to contribute to this Bill. I support Hon. Emaase on cotton growing. Cotton was one of the lucrative industries in this country, but it went down. The proposed Bill is timely. It will encourage most farmers in cotton growing areas in the western region, like Busia, Bungoma, and Vihiga. I want to ask the Ministry of Agriculture to ensure that in most of the areas where cotton can be grown, cotton growing is revived so that our factories like Kisumu Cotton Mills (KICOMI) and RIVATEX East Africa Limited spring back to life and our farmers produce cotton in large numbers and get money.

I support the Bill. It should be passed so that our people are empowered economically. Hon. Emaase brought it at the right time, just when the country's economy is down. We want the economy revived so that most of our children who have finished school can be employed in some of these industries. Farmers will get money to pay school fees for their children. This is a nice venture. Farmers in all counties that can grow cotton should be encouraged to do so. A better seed should be developed so that cotton matures quickly and should be bought and taken to the cotton factories for production. Other cotton products, like cottonseed, can make cotton cakes for animals and chicken feeds. So, I am in total support of this initiative.

Thank you.

**Hon. Deputy Speaker:** Thank you. The Member for Matuga, Hon Kassim Tandaza.

**Hon. Kassim Tandaza** (Matuga, ANC): Shukrani, Mhe. Naibu Spika, kwa kunipatia fursa hii kuzungumza jambo hili, ambalo ni muhimu, na linaweza kuinua uchumi wa Kenya. Pia, linaweza kuhifadhi sarafu za kigeni, ambazo kwa wakati huu zinatumika kwa wingi. Tukileta nguo, hasa katika sekta ya mitumba – ninajua ni biashaara kwa wengine – athari yake kubwa ni kuwa tunawakosha vijana wetu ajira wakati tunatoa hizo nafasi kwa wale wanao zitengeneza ughaibuni. Kwa mfano, hivi sasa sehemu ya kwetu kule Kwale, kuna kiwanda ambacho Serikali inajenga eneo Bunge la Msambweni. Hilo ni jambo la kufurahisha. Ninaipa kongole Serikali ya Kenya Kwanza; kwa mara ya kwanza, imeweza kufufua viwanda katika

maeneo ya Pwani. Tuisahau kwamba kiwanda kikubwa cha korosho kilikuweco kwa miaka mingi. Mambo yaliyofanywa na Serikali iliyopita, ni Mungu tu anayeweza kuwatolea hukumu kwa kuwadhulumu wale waliokuwa wakikimiliki kiwanda kile, ambao walikuwa ni wenyeji wa Pwani.

Tuna kiwanda kidogo cha bixa ambacho kimefufuliwa katika hatamu ya Serikali hii ya Kenya Kwanza. Shirika la *Agriculture and Food Authority* (AFA) limechukua hilo jukumu, na limekuwa mashinani kuona ni vipi linaweza kufufua ukuzaji wa bixa, na hatimaye kutengeneza viwanda ili watu wapate ajira.

Hili zao la pamba sasa hivi lina kiwanda Pwani, ambacho katika wiki mbili zinazokuja, Rais atakizindua. Ni jambo la kufurahisha kuona kuwa Wapwani wameanza kuletewa viegezo vya kutega uchumi. Ninachukua fursa hii kuhimiza wizara husika kuwa ni muhimu kiwanda cha pamba kinapowekwa pale, kifikirie zao hili litaweza kupatikana vipi kuanzia kwa ukulima wake. Sasa hivi, hatuna mashamba ya pamba. Wenyeji hawana uzoefu wa ukulima wa pamba. Huo ndio ukweli. Kama ni uzoefu wa Wapwani, tuna uzoefu wa ukulima wa nazi, korosho na bixa. Kwa hivyo, kiwanda hicho kitakapojengwa, nasihi wizara husika ione ni vipi itaweza kuleta malighafi na pembejeo za kuhakikisha kwamba wenyeji wanahusika na wananufaika wanapoanza ukulima wao. Kwa mfano, walete matingatiga na mbegu ziwe ni za ukulima wa kisasa. Wakati unafanya ukulima na unategemea hali ya hewa, mara nyingi ukulima huo huwa hauwezi kuenda mbele.

Kule upande wa kwetu, wizara husika ina jukumu la kuelimisha wananchi. Tunajua kwamba pamba ni mali, ni zao lililo na faida, na linaleta ajira. Hata hivyo, pia, elimu kuihusu ni muhimu. Wizara ikiweka kiwanda bila ya kuelimisha watu juu ya manufaa wanayoweza kupata na kufanya ukulima wao uwe mwepesi, kuna uwezakano wa kiwanda hicho kufanya kazi kwa kutumia malighafi kutoja sehemu zinginezo, ilhali hilo si lengo la Serikali. Lengo la Serikali ni kuhakikisha wananchi wote, kuanzia pale chini, wananufaika na miradi yake yote.

Ninampa kongole Mhe. Emaase, aliyeleta Mswada huu, na ninauunga mkono, kwani ni miongoni mwa zile ajenda za kutoa ajira, kuleta mali kwa Serikali, na kuhakikisha kwamba sarafu yetu inazidi kupata nguvu kupitia upunguzaji wa gharama za vitu tunavyopata kutoka nje ya nchi.

Asante.

**Hon. Deputy Speaker:** Asante. Member for Kwanza, Hon. Ferdinand Wanyonyi.

**Hon. Ferdinand Wanyonyi** (Kwanza, FORD-K): Thank you, Hon. Deputy Speaker. First and foremost, I take this opportunity to congratulate and thank the Member of Parliament for Teso, *Mheshimiwa* Mary Emaase, for coming up with this very important Bill. I urge the House to pass it with amendments to assist cotton farmers. When we were growing up, farmers took cotton farming seriously, particularly in western Kenya and Nyanza. The cotton industry was a very productive industry, and it offered a lot of support to the farmers in terms of income. I do not know what happened towards the end. It just faded out. Hon. Emaase should listen to me so that she can have these points when replying and do what we want her to do.

First and foremost, we will involve the county governments because they will help regulate and develop the cotton industry in terms of inspection. This will help us to have an extension service because most farmers may not take part in it, and they may take it just as any other business. To revive this industry, we should have extension services in the county governments to work with the farmers. Those who have farms and want to take part in growing cotton can have seeds that produce very good results and even avoid pesticides. If cotton is not inspected correctly, this exercise will become futile, and people will be discouraged.

We have cooperatives in various areas. The county governments will be involved so local cooperatives can have leadership to promote this industry. They can create collection centres because cotton will be harvested and taken to a cooperative centre. We will also have extension service officers from the counties to assist in making sure that cotton is kept properly.

We expect it to be one of the products that can be exported from Kenya and bring in foreign exchange. We are exporting a lot, particularly to the East and Europe. I was told that our cotton was one of the best in terms of quality. Therefore, I ask that we take time and let the Ministry of Agriculture and Livestock Development, where I am a member, take cotton seriously. Besides growing food crops like maize and millet, our farmers should take this crop seriously. Therefore, the Ministry of Agriculture and Livestock Development headquarters will work with the county governments to promote the cotton industry.

The Ministry of Investments, Trade, and Industry should use these facilities to revive some of the industries like KICOMI and RIVATEX East Africa Limited in Eldoret. They offered employment to the locals and exported our finished products to the East and Europe. RIVATEX East Africa Limited in Eldoret is not there today because there are no raw materials. Therefore, we have missed a point. In collaboration with the county governments, the Ministry of Agriculture and Livestock Development and the Ministry of Investments, Trade and Industry should work hand in hand to promote this industry.

Without taking too much time, I once again thank Hon. Mary Emaase for coming up with this Bill. I will work with her to ensure cotton is promoted in Nyanza, western, and Coast. That is where we will have some of the industries. A Member is reminding me that Rift Valley is one of them. I come from there. I am sure we will promote it there as well.

Thank you very much. I support the Bill.

**Hon. Deputy Speaker:** Before I call the next Member, allow me to welcome Katheri Girls High School from Imenti Central Constituency, Meru County, and All Saints Kigari Day Secondary Schools from Manyatta Constituency, Embu County. Both are seated in the Public Gallery. On behalf of the Members of Parliament, myself, and the substantive Speaker, we welcome you to Parliament. Thank you.

Hon. Justice Kemei, Member for Sigowet /Soin.

**Hon. Justice Kemei** (Sigowet/Soin, UDA): Thank you, Hon. Deputy Speaker. Sigowet/Soin is not a very difficult name. It is a combination of two divisions: Sigowet and Soin. That is why it is called Sigowet/Soin.

Thank you, Hon. Deputy Speaker, for allowing me to contribute to this important Bill. At the outset, let me congratulate Hon. Emaase for bringing it to Parliament. As I do this, let us look back at the contribution of cotton to the economy of this country. There was a time when it was doing exceptionally well. However, when we mismanaged agriculture and the cooperative movement, the demise of this crop joined the rest of the crops in the country, including pyrethrum, whose production is declining.

Cotton grows in almost all parts of this country. The Arid and Semi-Arid Lands (ASALs), including the Sigowet/Soin Constituency, are places where we can grow cotton. As I speak, the lower parts of Kaplelartet Ward, Soliat Ward, and Soin Ward grow cotton. It is a crop that grows well along with other crops like sugarcane, which we grow in our area. As I support this Bill, I want us to look at the budget that we allocate the agriculture sector. It is very dismal and cannot enable us to realise the full potential of agriculture in this country. The budget that we allocate to the agriculture sector in the national Government is about three per cent of the country's overall budget. If you look at the county governments, the budgetary allocation for the agriculture sector is meager. We must encourage the national and county governments to invest more money in agriculture. The moment you do it, it contributes three times the money you have invested.

This is one area in which I wholeheartedly accept the contribution of biotechnology. We need to ensure that Bt cotton seeds are available in as many parts of the country as possible. We cannot avoid biotechnology in today's world. Let us adopt it in the growth of cotton. I am sure we will grow more cotton that can fulfill the market requirements at the global level. The

cotton market is enormous in the United States of America (USA) and other parts of the world. If we grow it, we will meet the demands of those countries.

I border Nyakach Constituency. There is a centre called 'Store Pamba', which used to be very liquid when cotton was doing extremely well where I come from. If we do this again, I am sure we will improve the livelihoods of our people in the lower parts of my constituency.

Finally, as I congratulate Hon. Emaase for bringing this Bill, I want us to look more increasingly at the contribution of the cooperative movement in this country. Let us do it so that the full potential of agriculture can be realised.

Thank you, Hon. Deputy Speaker, for allowing me to contribute to this Bill. I support it.

**Hon. Deputy Speaker:** The Member for Kacheliba, Hon. Titus Lotee. Hon. Members, press the intervention button if you want to contribute to this Bill.

**Hon. Titus Lotee** (Kacheliba, KUP): Thank you, Hon. Deputy Speaker, for giving me this opportunity to contribute to this very important topic on cotton. I appreciate and congratulate Hon. Emaase for bringing up this matter. There is a reading in the Bible that says those who have more will be added and those who do not have, even the very little that they have will be taken away from them. The reason I am saying this is when I look at this Bill by Hon. Emaase, it is on the basis that Kenya is made up of 85 per cent arid and semi-arid land. God was kind enough to say that you can grow cotton in the semi-arid land. We cannot belabour the point on the importance and potential of cotton in this country. The reason I talked about the reading in the Bible is because over time, instead of cotton being promoted, it is being killed. After all, it could have come from a place where people have little and so the very little they have is taken away from them.

We have land given by God, and we can transform it. One of the reasons I am speaking now is that I am looking at the potential of semi-arid areas like Kacheliba where I come from. People toil every year to plant crops that fail because of the little rain especially because of challenges of climate change. People go through losses every single year, and yet, if cotton was promoted, it being a perennial crop, we would not suffer losses every year trying to get food on our tables. We will grow cotton year in, year out to give us income. I have looked at the potential of cotton in this country. We used to export 70,000 bales of cotton, but by 2019/2020, we could hardly export 5,000 bales. Is it about the reading in the Bible that those who have little have the same taken away from them? This country should go back to its standards. Let this country think about semi-arid land. We need to have the industries that used to promote cotton in this country. We need to introduce BT cotton. I have looked through the records: One acre of BT cotton can produce 1,000 to 2,000 tonnes. One kilogramme of cotton goes at Ksh1,000. If you do the maths, you realise that one acre can make Ksh2 million in the semi-arid lands where people struggle and run away from because that is not where food comes from. If we put a lot of emphasis on this, and I want to appreciate Madam Emaase for doing this, people will go back to the lands that were given by God, the semi-arid lands, and produce cotton. That is what can turn around the economy of this country. I support that this Bill be given all the necessary approvals. Cotton is supposed to be one of the income earners of this country.

Lastly, immediately we created this animal called AFA, people went to look for food, coffee and tea and forgot that cotton that comes from the semi-arid land is also an income earner. I propose and put a lot of emphasis that cotton needs to be given its own authority. It is supposed to have an authority that looks at it in terms of development, marketing and quality assurance so that farmers living in semi-arid lands do not come and squeeze in the 15 per cent of this country. Let people go back to their areas and produce for this country. Cotton in this country is a potential earner and needs to be produced and given necessary inputs. The people

of Kacheliba are waiting. I told them we were going to do cotton. I was not a mad person because I knew it had the potential.

With that, I support. Thank you, Hon. Deputy Speaker.

**Hon. Deputy Speaker:** Member for Marsabit County, Hon. Naomi Waqo.

**Hon. Naomi Waqo** (Marsabit County, UDA): Thank you, Hon. Deputy Speaker, for allowing me to add my voice to this very important Bill. I also congratulate Hon. Emaase for coming up with this very important Bill touching on the lives of many people. Many people have referred to the old days when cotton farming was the pride of many Kenyans. Cotton helped many people and farmers. The cotton industry elevated lives, reduced poverty, educated and gave hope to many people. One thing that encourages all of us is that cotton farming can be done even in dry areas. As the Member who spoke before me said, 85 per cent of this country is arid and semi-arid, where we cannot do real farming of all that we want. Cotton farming, however, can be done in Marsabit where I come from, even beyond Saku area, and still be a productive industry. It does not need a lot of attention and investment. We have a lot of idle land that needs to be put to use. If we are serious as a Government, we need to strategise on how to utilise all the idle and community lands in this country and transform them into cotton farming. This will create employment and give hope to the young people, especially now that our economy is not doing well. The cotton industry can be one of the areas we can use to revive the economy.

This industry can be one of those that motivate the people, because they can easily identify themselves with it. If the Government can come up with incentives for farmers by giving them all the seeds and support they need, and have manufacturing system in every county, then this can help. That is why I encourage the national Government to partner with county governments to promote and ensure that this industry is revived in the country, and given the attention it deserves so that unemployed people who want to invest in the sector are empowered to invest. That will help us to revive the economy. It will be a pride for each of us and our Government will never regret doing this.

I support this Bill. Thank you.

**Hon. Deputy Speaker:** Member for North Imenti, Hon. Rahim Dawood.

**Hon. Rahim Dawood** (North Imenti, Independent): Thank you, Hon. Deputy Speaker. First, I join my colleagues in supporting this Bill by Hon. Mary Emaase. Cotton is a very important crop. We used to have cotton in Meru. I say we used to because we used to have Meru Ginnery at Gaitu. It was doing very well. Along the way, in the 1980s and 1990s, it started falling apart. The ginnery died a slow death. It is time we revived the cotton industry. There is a famous Indian leader by the name of Mahatma Gandhi. During his agitation for India's self-rule, he led a revolution and said that they will not wear anything imported from overseas. They did a march and burned all the clothes they were wearing. They put on *shukas* so that they could revive the cotton industry in India.

Hon. Deputy Speaker, I am not suggesting that we do the same here, but we need to revive the Kenyan cotton industry because it is doing badly. We need strategic interventions to build the cotton industry. Mountex Factory in Nanyuki closed down. It used to be the pride of East and Central Kenya, but it is now a pale shadow of what it was. RIVATEX was another one. How long are we going to sit and wait for our industries to close down and then try to revive them? We need to wake up and do something about cotton. We need to think about cotton farmers and give them subsidies. I am not saying that we ban *mitumba*, but we should produce clothes that are cheaper than the *mitumba* so that we can put money in the pockets of our farmers. We can then have cheaper and more affordable clothes.

I want to join my colleagues in congratulating *Mheshimiwa* Mary Emaase for this Bill. We need to strengthen the cotton industry.

Thank you, Hon. Deputy Speaker.



**Hon. Deputy Speaker:** The Member for Moiben, Hon. Phylis Bartoo.

**Hon. Phylis Bartoo** (Moiben, UDA): Thank you, Hon. Deputy Speaker, for giving me this opportunity to contribute to this Bill. I want to congratulate Hon. Mary Emaase for bringing this Bill to the House. We cannot underestimate the importance of cotton in Kenya since time immemorial. If you go down the memory lane, you will realise that in the early 80s, the cotton industry in Kenya was very vibrant, but over time, it has gone down. That could possibly explain the reason we have very many cases of unemployment.

The cotton industry should have a legal framework so that it can support its functions. Given that it is a devolved function domiciled in the county governments, it is very important to have a structured way of dealing with it. Cotton is not just for the industries because it is also a source of food. Since the production went down, industries closed down. In Uasin Gishu, there is RIVATEX and Ken-Knit (K), where most of our parents worked. That is how some of us got a chance to be educated. If you go back to those places today, you will find that they are closing down. The services they are providing and the number of employees have tremendously gone down.

As we support the cotton industry, we need to enhance capacity building for farmers so that they can increase production. Cotton can grow in every part of this country, including the semi-arid areas. The county governments should establish structures for the cotton industry the same way they do for other crops. They should build capacity for farmers on how to increase the production of cotton. This will go a long way in shaping the country.

At the moment, we are struggling with the dollar, which keeps fluctuating, and we need to increase our foreign exports. Cotton is one of the crops we can compete in the market with other cotton growing countries. In their Manifesto, the Kenya Kwanza Government promised to increase employment for the youth. If we develop a framework for building capacity for the cotton industry and revive the industries that have closed down in different parts of the country, we can employ very many young people who are idle. There will be too many activities going on in our farms in the entire country, and I am sure one gain will be putting to use the energy of the young people as they look for other greener pastures.

*[The Deputy Speaker (Hon. Gladys Boss) left the Chair]*

*[The Temporary Speaker (Hon. (Dr) Rachael Nyamai) took the Chair]*

At the moment, the country is grappling with illicit brews and young people are getting lost in the drinking business. Some are even getting involved in drugs. Reviving the cotton industry will engage most of these young people leading to eradication of drug abuse.

The Kenya Kwanza Manifesto also talked about women empowerment. Women and agriculture go hand in hand. Most of the people who will participate in these industries will be women. When you empower a woman, you empower the nation. If you want to grow a nation, you must build its capacity for women. Most of the people tending to farms in rural areas are women. This is an indication that most women will be employed in the cotton industry.

If we want to establish a legal framework for the cotton industry, then we must set up a board to manage affairs and streamline it. The identification and verification of the farmers who are growing cotton in the entire country should be enumerated. They will be trained and advised on how to tend to cotton, and supported until they produce quality crops. Many Kenyans are not knowledgeable on the importance of cotton. It is high time we started educating farmers on cotton the same way we have been doing for coffee, tea and pyrethrum farmers. We should educate our farmers on the importance of cotton so that we can increase production and our industries can get back to life again. The issue of our business people spending a lot of money to import second-hand clothes – *mitumba* - to compete with our

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industries will go down. I support this Bill, and I hope that it is given the necessary support so that it goes all the way until it is published.

Thank you.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Samuel Atandi, Member for Alego Usonga.

**Hon. Samuel Atandi** (Alego Usonga, ODM): Thank you, Hon. Temporary Speaker, for giving me the opportunity to make my contributions.

I thank Hon. Mary Emaase for coming up with this Bill. As most of my colleagues have pointed out, the cotton sector for many years was very instrumental in our foreign exchange earnings.

Cotton is one of the cash crops that is grown across the country: from North Eastern to Nyanza, Central, Rift Valley and the Coast. When I was growing up, cotton was the biggest cash crop in our household. My late father was one of the biggest cotton farmers in our region. When my father started growing cotton, loan facilities were available from the Agricultural Finance Corporation (AFC). We used the facility to invest in cotton farming. My brothers and I went to school because of cotton farming. In my view, this is one cash crop that this country has really lost. In fact, this Bill should have come from the Government and not private Members.

The Bill is here to revitalise the cotton sector, and has very many important chapters which I wanted to comment on. One of them is the fact that it is giving county governments the biggest role in cotton farming. As you are aware, agriculture is devolved, and we can never legislate on it without the input of county governments. The role of county governments in this Bill is prominent. Most county governments are moribund; they are doing nothing; and the fact that this Bill outlines what their role will be, is something which I appreciate. The Bill shows county governments what to do by forming groups up to the ward level and registering farmers and SACCOs. Serious farming cannot succeed if farmers are not organised. This Bill seeks to organise farmers into SACCOs and groups so that they can be involved in progressive farming that would help in giving the focus that is needed for cotton.

The Bill also seeks to make it easy for investors who want to engage in the processing of cotton to be licensed. County governments have been given the mandate to license processors, and this is going to be very important.

In some areas like where I come from in Siaya, we are cotton farmers yet we do not have any processor. This makes it very difficult for our farmers because they have to transport their cotton all the way to Thika where the factories are situated. The fact that this Bill has identified the licensing of cotton processors is something that I appreciate. The formation of the board that will strictly be involved in supervising the cotton business is also very important here. Right now, cotton matters are being handled by a parastatal known as AFA which does not have a network at the grassroots because it is based in Nairobi. It is not putting much effort into cash crop farming, but is more concerned with food crops. As a country, we are losing on this very important crop.

India is one of the countries that has developed its textile industry because their cotton sector is very advanced. Alongside this very important Bill, we must decide on whether we will continue to rely on cheap imported clothes from Turkey and all the other cheap countries. It is something that the country must decide on. Parliament must also play a role if we are to revitalise our cotton sector and industry. We cannot only love clothes from China and Turkey but also, ours. If you ask Members of this House to stand up, everybody is wearing clothes from China and Turkey yet we are interested in growing our cotton, textile sector and our foreign exchange.

Our shilling has been weakening against all foreign currencies because we have allowed this country to import everything including things that we can even get from our cotton

farming. The Indian Rupee is always strong and does not fluctuate because there, you are not allowed to import clothes but rather, get them from their factories. There are some decisions that we need to make, as a country, and if we do not, we will not be able to succeed in revitalising the cotton sector.

Kenya in the African region is the net importer of everything as I said when we were going through the Budget Policy Statement. We are importing even small things that we should not. We are importing things from Tanzania, Uganda and Ethiopia yet the same countries used to import things from us. This shows that we are doing badly.

This Bill is timely. I urge the Government to take it up so that it can run with it. Immediately it is passed, it should run with its implementation. We can pass these Bills, they become laws but are not acted upon for the benefit of the people of Kenya.

As I conclude, the Board which is being proposed to be formed to take care of the cotton sector must not be political. The Government tends to use boards for political aims. There are some people who have been appointed to boards, and are clearly incompetent. For example, the Board that is supposed to clean The Nairobi River has people who have not even gone to school yet you want the river to be cleaned. If we are going to revitalise cotton and the only option is the board, then it must be composed of people who understand cotton, and not people picked from the streets or someone who has contested in a political seat and failed, and are being given a position there. We must utilise our skilled labour in filling positions of Government if we want results.

I conclude. Thank you.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you. Hon. Gladys Boss, Member for Uasin Gishu County.

**Hon. Gladys Boss** (Uasin Gishu County, UDA): Thank you, Hon. Temporary Speaker, for the opportunity to speak to this Bill. I would like to salute the Member for Teso, Hon. Mary Emaase, for this very important Bill. It is timely. She has brought attention to this at a time when we are trying to raise our cash crops in order to improve the value of the Kenya Shilling. I remember many years ago when I was young and the cotton industry was big.

RIVATEX in Eldoret, Uasin Gishu County, where my father, Andrew Bomet Boss, worked until he retired recently, was a booming business. It was not just a booming business but, the cotton they were processing in the factory was actually from within the country. In the last Parliament, I remember we allocated a lot of funds to RIVATEX to modernise the factory and produce very high-quality cotton which it does at the moment. Unfortunately, we are not getting the full benefit as Kenyans because 80 to 90 per cent of the cotton they are using is imported. The people who are benefiting from the cash injection that was made to RIVATEX are not our local farmers. We are supporting farmers from other countries and tenderpreneurs. It has not boiled down to the grassroots level. Therefore, as parliamentarians, we must join hands to ensure that as we put money in the factory to produce cotton, we also put money in the growing of cotton by our farmers. That way, the benefit will be 360 degrees cycle as opposed to the current situation where it is only a part of it.

Many years ago, Kenya used to produce uniforms but today, school uniforms are being imported from other countries. They are very bad quality and they are benefiting other people from other countries. Kenya signed up the African Growth and Opportunity Act (AGOA) agreement and we received a specific quota to produce cotton fabric and clothes like jeans, overalls, *et cetera*, in our Export Processing Zones (EPZ) for export to America and Europe. Unfortunately, we have not been able to realise our full quota. In fact, the agreement is expiring this year yet we have not benefited from it because we were not strategic and deliberate as a country to run in parallel the two programmes. If you sign the AGOA agreement, you start increasing cotton growing. As you increase cotton growing, you inject money into the factories for the production of that.

This is not the only cash crop that we have lost as a country. We have also lost pyrethrum. In the 70s, Kenya was producing 90 per cent of the world's pyrethrum. Today, we are producing less than 10 per cent. On that one, I would like to recognise and congratulate the Governor of Elgeyo-Marakwet County because he has initiated a programme for cultivation of pyrethrum and it is doing extremely well. There are also cashew nuts at the Coast. That was a big foreign income earner which also went down. We also had palm oil at the Coast that failed. We had sunflower which also collapsed. If you look at the cost of fodder in Kenya now as a dairy farmer, you will find that the challenge that we have is the cost of buying animal feeds.

Today, we are importing animal feeds from Uganda. We get it from the cotton in Uganda. The cotton seed is a byproduct which is used for animal feed. Same thing with sunflower. Therefore, this is an extremely important subject. It will improve not only our foreign currency, but also reduce on some of the imports that we get into the country.

With that, I would like to congratulate Hon. Mary Emaase and I hope the Committee that will be tasked with it will give it the seriousness it deserves.

Thank you, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much.

Hon. Makilap, Member for Baringo North.

**Hon. Joseph Makilap** (Baringo North, UDA): Thank you very much, Hon. Temporary Speaker. I rise to support this Cotton Industry Development Bill, and I want to declare from the outset that I come from a cotton growing area. My first clothes were bought with money from cotton farming in the 1980s.

Hon. Temporary Speaker, what does this Bill try to raise? One, it is mobilising farmers throughout the Republic of Kenya to grow cotton in semi-arid lands that have high potential for cotton farming. Two, it develops the market industry. Three, research for cotton competitiveness in the world, and lastly, to put money in the pockets of farmers in Kenya.

Let us start from where we got it wrong as a country. In the 70s and 80s, cotton was booming business. In fact, the shopping centres that are in my village today were built when farmers were growing cotton. Kerio Valley, for that matter, is one of the most reliable areas to grow cotton because we do not require fertiliser. Fertiliser in Kerio Valley is not required because the soils are fertile, thus good for cotton. We have a ginnery called Salawa that does not have the capacity because the product is not there. So, what really happened? That is the question that we ask ourselves. What happened is that we entered into business. This country allowed importation of used clothes in the name of *mitumba* from the West. That killed the industry. That is what killed the RIVATEX, Raymond and other companies that were supporting the cotton industry in Kenya.

Hon. Temporary Speaker, when I was growing up, we used to say the highest cotton growing area is Nyanza, but there are potential areas in parts of the country. I have just given you an example of Kerio Valley. If you take cotton farming seriously and mobilise farmers in Kerio Valley, it will reduce insecurity because you will have changed the economic matrix of the people around that area by stopping them from running around with cows and making them engage in cotton farming. What do we require? We require what is called open-pollinated cotton. We also require what is called BT Cotton that has high production per acre. If we engage our farmers to grow BT Cotton and open-pollinated cotton, that will increase production of cotton for RIVATEX and other companies.

In 2023, our government raised the price of raw cotton from the farm from Ksh52 per kilogramme to now Ksh72 per kilogramme. It aims to increase the acreage in cotton from 40,000 in the previous year. In 2024, we target about 103,000. This is an economic pillar. What does that mean? In the next three to four years, we want to farm cotton in about 400,000 acres.

I am very sure that is what is going to change Kenya and even encourage other investors from other countries to invest in our country.

Look at RIVATEX, which the County Woman Representative of Uasin Gishu County and the Deputy Speaker talked about. The Government injected Ksh5 billion into RIVATEX to boost production, but it does not have enough raw materials. The company used taxpayers' money yet it buys cotton from India and China. What does this mean? It means farmers in those countries are getting revenue from the sweat of our people yet we have the capacity to grow cotton in this country. What should we do?

We should change the seeds that are used by farmers and subsidise their prices. For example, we could use Bt cotton and the open pollinated one. We should conduct proper market research. We should also establish the Cotton Development Board, which will oversee and organise farmers in Kenya so that they can grow cotton, especially in areas which receive little rainfall and require less fertiliser. I am sure, if we do that, we will have enough cotton for our ginneries.

We should not only look at cotton from the production point of view in the farm; rather we should do value addition. During the dry spell, many farmers were feeding their livestock on cotton cake which is very expensive. Its price ranges between Ksh3,000 and Ksh8,000. It is good for livestock and if you are in the business of fattening, it enables your livestock to grow fat.

How can we ensure that we wear clothes manufactured using cotton grown in Kenya? We must change the investment equation so that cotton trade favours Kenya as opposed to our neighbours. That way, we will earn income for our people. Look at cotton velvet wool. It costs Ksh450 per 500g. What does this mean? As a country, if we invest in this area, we shall have many people in business. They will earn income to pay school fees for their children, improve their living standards, and grow the economy.

I laud Hon. Emaase. Those of us from dry cotton growing areas should support this Bill like our brothers who come from the coffee and tea growing areas. This will make Kenya equitable. We will have a group of Kenyans growing cotton, tea, coffee and others in Mombasa growing cashew nuts. We will grow the economy of our country using our own resources.

I support and ask that we pass this Bill so that we can mobilise farmers throughout the Republic of Kenya to grow cotton. The revenue from cotton will be used to get the economy of this country in the right trajectory.

Thank you.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Member for Westlands.

**Hon. Tim Wanyonyi** (Westlands, ODM): Thank you, Hon. Temporary Speaker, for giving me an opportunity to contribute to this Bill. When I was growing up, we used to have cotton mills and textile industries in Kenya. In Eldoret, we had RIVATEX and Raymond while in Kisumu we had Kisumu Cotton Mills (KICOMI) among others. Cotton was grown in Bungoma, Busia and other parts of this country, and we used to produce textiles; not anymore. The other day, I read in the newspaper that Nakuru and other parts of Kenya have become a graveyard of industries. Many industries collapsed because they were being sustained by raw materials produced in our farms. Cotton and tobacco industries were among them.

I believe that if we want to sustain ourselves and develop our country, we must have homegrown solutions on how to revive the industries. If you go to the villages, you will see the level of poverty because of the collapse of industries. The county governments should do something to revive them and ensure they are sustained by products from our farms. This will give our people a lot of hope and boost our economy. As a country, right now we are struggling. Our economy is solely dependent on importation of goods from countries like China, India, and our immediate neighbours, yet we used to export. We would see blankets being produced in Nakuru, Eldoret, and Kisumu. There was Thika Cloth Mills which was also sustained by

local farmers. So, we used to do very little importation. For us to sustain and develop, we must revive these very important industries and encourage our farmers to grow cash crops.

The Government must deliberately invest in agriculture because this sector will sustain our economy. If you look around, you will see that pyrethrum and other cash crops are no longer grown in this country. Kenya is no longer a leading exporter of these products. We need to revive and invest more in our sugar and tea industries which are struggling. We should be very worried when we see headlines like what I saw in a newspaper on Sunday about Nakuru becoming a graveyard of industries. If you look around, you will realise that sugar industries have collapsed and ginneries are no longer there.

The sad thing is that the same people who were manufacturing in our country moved to our neighbours and continued with their businesses there. I believe something went wrong somewhere but we can revive them. Kenya has been rated as one of the biggest economies in the East African region and Africa as a whole. If we continue with this trend, then we will no longer be a factor in this region. This is because the industries that sustain our economy are collapsing. The lease for Del Monte in Thika has expired and some farms are being taken back. If this continues, this industry might go down.

I want to congratulate, Hon. Mary Emaase for bringing this important Bill. I hope that we will pass it, so that the Government can take serious steps of reviving the industries.

Thank you, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much, Member for Westlands. Hon. Members, I would like to welcome students seated in the Public Gallery this morning from the following schools: St. James Kiaritha Secondary School, Kaitheri Primary School, Kiringo Secondary School, and Karaini Mixed Day Secondary School. All the schools are from Kirinyaga Central, Kirinyaga County. You are welcome to the National Assembly to observe proceedings of the House. On behalf of the substantive Hon. Speaker and the House, I would like to call upon Hon. Gitari to welcome the students.

Kindly trace the Hon. Gitari seated on the right side at the back and give him the microphone. Please, try to get hold of a different microphone because that one seems to have a problem.

**Hon. Joseph Gitari** (Kirinyaga Central, UDA): Thank you, Hon. Temporary Speaker for giving me this chance to recognise the students. Before I introduce the schools to you, I want to confirm that Hon. KJ is our in-law and, maybe, that is why he was trying to sabotage this thing. Hon. KJ, *tutaonana nyumbani*.

*(Laughter)*

Hon. Temporary Speaker, I want to introduce to you some of the best schools in Kirinyaga Central among them Kiringo Mixed Secondary School, St. James Kiaritha Secondary School, Kaitheri Primary School and Karaini Mixed Day School. These are some of the day schools that we have, which are performing very well in Kirinyaga Central. The students from those schools wanted to come and see what we do here. They promised that when I exit from politics, one of them will replace me though not very soon.

*(Laughter)*

When I served here in the 10<sup>th</sup> Parliament, I also had a debt that I needed to pay. I had promised some chiefs that they would come to Parliament but I did not manage then because of a number of things. I am happy they are here today. I want to welcome all of them plus the teachers. I want to applaud them for the good work they are doing. I thank you.

(Applause)

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Members, unfortunately time for the debate on this Bill has come to the end, and I would like to call upon the Mover to reply.

I would like to encourage the Mover to, kindly, donate some time to Hon. Beatrice Elachi and others who may be in your list. You may proceed.

**Hon. Mary Emaase** (Teso South, UDA): Thank you, Hon. Temporary Speaker. I would like to donate part of my time as the demand to contribute to this Bill is overwhelming. I already had a list here. I will donate one minute each to Hon. Emathe Namuar, Turkana Central, Hon. Dorothy, Hon. Rindikiri, Hon. (Dr) Lilian Gogo, Hon. Yusuf of Mandera West, Hon. Elachi, and Hon. KJ.

**The Temporary Speaker** (Hon. (Dr.) Rachael Nyamai): Thank you very much. I will start with Hon. Beatrice Elachi, then Hon. Emathe.

**Hon. Beatrice Elachi** (Dagoretti North, ODM): Thank you, Hon. Temporary Speaker. Indeed, this is a co-joint Bill from our sister and we support it. I came in at 9.00 a.m. I do not think it is right for me to take a second only to contribute to the Bill. I wanted to really contribute, but since I did not catch the eye of the Hon. Speaker, let me leave others to contribute on it.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Emathe.

**Hon. Joseph Emathe** (Turkana Central, UDA): Thank you, Hon. Temporary Speaker. First, I want to thank Hon. Mary Emaase for the Bill. I share a name with her and the meaning is the same.

Growing up, while in primary school, we studied about KICOMI. It was one of the giant cotton mills in the country. How it died is a story for another day. However, I want to reiterate that this Bill has come at the right time. It is speaking to the Kenya Kwanza Manifesto, especially the plan on industrialisation and value addition. The Cotton Task Force that has already been established is one of the taskforces that we are looking forward to listen to. We want to hear what they will tell Kenyans. One thing they are raising is that cotton will raise our Gross Domestic Product (GDP) from 9 per cent to 16 per cent, which I agree.

This Bill is going to be an equaliser. As the persons in the highlands of Kenya speak about dairy, coffee, and tea, those from the warm areas of Kenya, the Arid and Semi-Arid Lands (ASALs), will also have something to speak about - cotton.

Hon. Temporary Speaker, I submit. Hon. Elachi, this will be a booster to the EPZ that you have been speaking so much about. This is one of the enablers.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Let us have Hon. Dorothy.

**Hon. Dorothy Muthoni** (Nominated, UDA): Thank you, Hon. Temporary Speaker. At the outset, allow me to thank Hon. Mary Emaase for co-sponsoring the Cotton Industry Development Bill (Senate Bill No.5 of 2023). Cotton is a cash crop which is an equaliser in this country. It is a very valuable crop as it does not need a lot of water to grow. It can grow both in arid and semi-arid areas. It will be an economic game changer for our country. I want to laud the Kenya Kwanza Manifesto as it is aimed at ensuring that all the counties in this country get value for what they are planting, including cotton seed. I want to thank the Ministry of Agriculture and Livestock because as it stands now, it is distributing cotton seedlings.

This Bill is aimed at establishing a framework to manage and improve the production, processing, and marketing of cotton. It is a very important Bill and I wish we pass it so that it is given the urgency that it deserves.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Rindikiri.

**Hon. Mugambi Rindikiri** (Buuri, UDA): Hon. Temporary Speaker, I donate my time to Hon. Ruku.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Ruku.

**Hon. Ruku GK** (Mbeere North, DP): Thank you, Hon. Rindikiri and Hon. Temporary Speaker. Climate change is a serious threat to food production. The Government should support crops which are resistant to climate change or drought. The Kenyan Government can support cotton production by coming up with cotton varieties that are resistant to climate change. Climate change is affecting households in semi-arid areas, and cotton production will go a long way in ensuring that those households generate income.

I support the Bill and congratulate Hon. Emaase.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Lilian Gogo.

**Hon. (Dr) Lilian Gogo** (Rangwe, ODM): Thank you very much, Hon. Temporary Speaker. Allow me to appreciate my sister, Hon. Emaase, for coming up with this Senate-sponsored Bill that has a National Assembly component. Well done, Hon. Emaase. This Bill provides for the production, processing, marketing and distribution of cotton and its products in Kenya. It also establishes the Cotton Industry Development Board, provides a framework for cotton farming, and ensures value-addition to cotton and its related products, and for connected purposes.

I must emphasise that I rise to support the Bill. Allow me to also bring Members up to speed with what is happening in my county. This is a Bill concerning counties and my Governor, Her Excellency Gladys Nyasuna Wanga, has done a perfect job ahead of time. This Bill will lay the legal framework, but Homa Bay County is ahead of the rest of Kenya by dint of what we are already doing to improve the lives of farmers and people who are at the grassroots level like *mama mboga*, *Min Akinyi* and *Min Adhiambo*. Within a short time, Homa Bay County will be ahead of everybody else because we recently had an investment conference and one of our priorities to empower the locals was through cotton production. We are waiting for the enactment of this Bill and for the establishment of the Board.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you for appreciating Hon. Nyasuna. Hon Yusuf Haji.

**Hon. Yusuf Adan** (Mandera West, UDM): Thank you, Hon. Emaase, for this very important Bill. Cotton can be grown in 50 per cent of this country because it does very well in ecological zones 3, 4, and 5, which is about 80 per cent of this country's landmass. Therefore, cotton will be an equaliser that can generate a lot of money.

It will also save us a lot of hard currency since we will not be importing other clothes, but we will instead manufacture our own. It will help revive dead industries such as the KICOMI, the RIVATEX, and Raymond Limited, which were all vibrant at one time.

Cotton is a labour-intensive crop, which means that in our country where many youths are jobless, this industry could create jobs for them. That way, they will engage in something meaningful and stop taking drugs.

Cotton seed cake is a very important animal feed during drought season. When there was a serious drought in this country and we lost many animals, we were importing cotton seed cakes from Uganda and Tanzania and taking them as far as North Eastern; to my constituency, Mandera West. The cotton seed cake helped some of our animals to survive. They really helped. Therefore, cotton seed cake is a very important by-product.

I remember we used to have many cotton ginneries all over the country, which have now collapsed. Very few of them are functional, which means that many jobs have been lost. Therefore, it is the right time to ensure that Bt cotton seeds are introduced. We should encourage our farmers to grow cotton so that we can go back to where we were many years ago.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. John Kiarie.

**Hon. John Kiarie** (Dagoretti South, UDA): Thank you, Hon. Temporary Speaker. I do not know how much justice I would do to this very important Bill in one minute, but I just want



to say one thing: there is a tendency to over-romanticise the past. With this new effort in the cotton production drive, we have to forget the past. Cotton was introduced in this country through borrowed means. It is the colonialists who brought an extremely sad and dark past through cotton picking in plantations. This was used in the enslavement of black people. The model that was used in the enslavement of black people is the one that we borrowed.

I am excited about this new drive because I am certain that in 2024, Kenya can devise its own new approach to cotton production. We also have to ask ourselves why a Member of Parliament from Nairobi is speaking about cotton. The cotton value chain starts from the farmer all the way to processing and marketing. Cities like Nairobi will be very critical when it comes to research, value addition, and marketing of cotton.

Finally, and I hope my minutes will be retained, we also need to explore new avenues. There is a drive to pull hemp products out of Healthy U branches in Kenya because people are unable to dichotomise between hemp and cannabis.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much, Hon. Kiarie. Mover, you have three minutes to conclude.

**Hon. Mary Emaase** (Teso South, UDA): Thank you, Hon. Temporary Speaker. As I rise to reply, I wish to appreciate all Members who have contributed in overwhelming support of this Bill.

Many Members who have spoken to this Bill have reiterated the importance of the cotton sector to this country, and this cannot be gainsaid. From creation of employment for farmers, to revival of industries, which will create employment for our youths, importers and exporters, the whole supply chain will benefit from this Bill.

Members have even spoken about how revival of the industry will contribute foreign exchange to this country. I am particularly looking forward to seeing all our ginneries across the country being revived and coming to life, including the Amukura Ginnery in my constituency, Malakisi and Mulwanda ginneries, and all other ginneries that collapsed across the country. The views, concerns, and recommendations that have been shared by Members have been very insightful and enriching. They will go a long way in improving this Bill, even as we get to the Committee of the whole House where Members are welcome to propose amendments.

I want to comment on a concern raised by Hon. Abdul Haro. He was concerned that the registration of farmers might be an impediment to onboarding farmers onto cotton farming. I want to assure the Member that registration of farmers is a good proposal because it is important for purposes of planning, determining how many farmers have been onboarded, providing farm inputs like fertilisers, capacity building, and estimating production so that we know how much cotton we will get.

I appreciate all the presentations by Members. They have spoken about cotton quality, the need for us to meet international standards so as to export our products, the high cost of electricity, and the general high cost of production that needs to be addressed so that farmers can get good minimum returns on their farm outputs. Members also spoke about delayed payments to farmers and the need for us to take cotton farming seriously for the benefit of our youths.

Hon. Temporary Speaker, I also commend the Chairman of the Departmental Committee on Agriculture, Hon. John Mutunga. He spoke about the outdated technology and the need for us to do away with all outdated technology and upgrade to enhance processing capacity, efficiency, and effectiveness. He also spoke about the need for us to take advantage of this opportunity. Production is hardly 3,600 metric tonnes of lint yet the expected output for even the existing industries to operate at maximum capacity is around 100,000 metric tonnes.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Give her a minute.

**Hon. Mary Emaase** (Teso South, UDA): There is an opportunity and, therefore, we need to take advantage of it. As I come to closure, cotton is one of the crops that is focussed on by the Bottom-up Economic Transformation Agenda (BETA). So, let us take it seriously and vote to support the Bill.

I request that we defer putting of the Question to the next Sitting pursuant to Standing Order 53(3). Thank you.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much. Hon. Members, putting of the Question is hereby deferred to the next Sitting or at a time when it will be scheduled by the House Business Committee.

*(Putting of the Question Deferred)*

Next Order.

## MOTION

### DEVELOPMENT OF A SATELLITE-BASED CLIMATE CHANGE MONITORING POLICY

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Abdul Haro.

**Hon. Abdul Haro** (Mandera South, UDM): Thank you, Hon. Temporary Speaker. I beg to move the following Motion:

THAT, aware that the Constitution recognises the people's respect for the environment as the country's heritage and the commitment to sustaining the environment for future generations; further aware that the cyclic drought in the country has caused devastating effects and serious disruption to the economy; recognising that climate change is a global problem with developing countries being the most affected as these regions are dependent on climate sensitive sectors such as agriculture and forestry; further recognising that the severe effects of climate change are already being experienced in the form of frequent droughts, flooding and other extreme weather occurrences; concerned that the current climate change monitoring mechanisms in the country are based on the traditional methods which rely on ground observations and climate models, which have limitations in terms of accuracy, timeliness, and spatial coverage; noting that the country recently launched its first operational satellite to collect and transmit high quality data; further noting that this technology can help in accurately monitoring and forecasting climatic and weather patterns; cognisant of the fact that other jurisdictions have made use of this technology to monitor climate change with marked positive impacts, appreciating that the use of technology, especially satellite technology, would allow enhanced monitoring that can have significant impact on sustainable environmental management; further appreciating that this technology would be useful in monitoring difficult to reach expansive and unsafe areas; now, therefore, this House resolves that the Ministry of Environment, Climate Change and Forestry develops a policy on Information technology (IT) that deploys the use of satellites in the monitoring and forecasting of climatic conditions, with the objective of ensuring timely and accurate data collection to enhance the country's capacity to respond to weather related risks and vulnerabilities, including climate change.

Kenya and East Africa have battled severe droughts, wildfires, floods, heat waves, crop failure and other natural disasters that have devastating effects on the region and the

community. Satellite technology in climate action is in its preliminary stages in Africa, but there are processes that we can leverage on to realise climate monitoring and prompt climate change action. The African continent has reached the potential of using satellite technology in climate monitoring. In fact, 12 countries including Egypt, South Africa, Algeria, Nigeria, Morocco, Ghana, Sudan, Ethiopia, Angola, Kenya, Rwanda and Mauritius have, at least, one satellite that is being used for climate monitoring. Early last year, Kenya launched the Taifa-1 Satellite that can provide critical multispectral imagery of Kenya needed for applications in agriculture, security, land use cover, forestry resources and disaster management to help combat these conditions.

In this country, the National Drought Management Authority operates Drought Information Systems, which provide information on drought and other weather-related events, but the systems we use for collecting data are dependent on mobility, that is, people moving from one area to another on vehicles which lack accuracy and timeliness. We need to improve this capacity as a country.

Recently, I visited Luigi Broglio Space Centre; a space centre run by the Italian Government and has also been in partnership with Kenya since 1966. That Centre collects a lot of data on the environment and climate, but unfortunately, most of that data benefits Italy and other European nations, despite the data being generated in this country because of lack of policy to use this kind of data for its benefit. We need to use all such tools and available technologies, including satellite imagery, remote sensing, and ground-based monitoring stations to collect data on rainfall, temperature, soil moisture and other indicators. The information gathered can be analysed and disseminated to relevant stakeholders, including farmers, pastoralists, government agencies, Non-Governmental Organisations (NGO) and communities.

Hon. Temporary Speaker, I beg to move this Motion and ask Hon. Malulu Injendi to second.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Yes, Hon. Injendi.

**Hon. Malulu Injendi** (Malava, ANC): Hon. Temporary Speaker, I beg to second this Motion.

I laud you, Hon. Temporary Speaker and the Hon. Member for coming up with this Motion. It is important for us Kenyans to know that Kenya launched into space its first earth-operational satellite called Taifa-1 in April 2013 after several attempts. The first attempt that failed was by the United States of America. So, this is something that is purely Kenyan. It was developed, designed and run by Kenyan engineers. Therefore, it is our own. Although this was launched in California, USA, we have all the advantages because this is a Kenyan product.

This product is a new phenomenon in our country which presents a huge milestone for Kenya's space industry from which we can reap maximally. With this achievement, there are very many possibilities for our country's future to benefit from in various sectors of our economy. Taifa-1 is programmed to go around the earth and fly over Kenya every four days.

When it comes to data provision with this kind of operation, we are at a moment where we will be getting timely and accurate information about the environment and the climate in the country. Taifa-1 is actually meant to provide data. The data is good for the country because it will enable us in terms of disaster management, environmental monitoring, and national security. For our country to reap maximumly from this, it has to develop a policy such as the one *Mheshimiwa* has come up with to use this data effectively. We have had many of our sectors collapsing. We have just spoken about cotton. We know of pyrethrum, sugar and many others. All these collapsed because we did not have very good policies in the country to run these sectors.

It is now a moment for us to come up with a policy that will ensure that we reap maximumly without losing on benefits of this launch. That is after the launch, because this is

a very important and new phenomenon in this country. The other danger is having it in our country. There will be collected information because this will run in space. If we are not very careful, we are likely to face the danger of exporting information or data to countries that may use this data negatively and against the country.

Kenya has faced many challenges due to lack of accurate climate data resulting in much destruction of our property, crops and animals. Quite often, we have wasted a lot of time on flights. Especially those who travel by air to western Kenya. You may book an early morning flight and you stay in the airport for almost three to four hours. The people who run the flights do not have information in advance, to provide it to users to avoid such situations.

Without belabouring, the benefits of these satellites are enormous. *Mheshimiwa* Abdul Haro has come up with a Motion that is very important for us as a country. It will develop a policy to ensure we get timely and accurate information that will allow us to prepare adequately with mitigation measures that will ensure that the country does not suffer as it is suffering when we have climate and weather changes in the country.

I second.

**The Temporary Speaker** (Hon. (Dr) Racheal Nyamai): Thank you very much, Hon. Injendi.

*(Question proposed)*

I will give the first opportunity to Hon. John Waweru, the Member for Dagoretti South, in the absence of Hon. John Mutunga.

**Hon. John Kiarie** (Dagoretti South, UDA): Thank you, Hon. Temporary Speaker.

What an amazing Motion brought by the Hon. Member for Mandera South. This goes to the core of the things we should be discussing in this day and age. In fact, a technology discussion is taking Kenya where it ought to be. Kenya has been known to be an innovator and is ahead of other countries in developing new technology. This launch of a satellite-based climate change monitoring policy speaks to the direction that Kenya ought to be taking. It is important to note that the Hon. Member is only talking about satellite-based climate change monitoring. However, in this day and age, I think we can modify this Motion to an extent that we also rope in new, nascent and emerging technology.

The clamour right now is towards the race for artificial intelligence. It combines perfectly with the technology that the Hon. Member is proposing. If we could have a policy that stipulates the merging of satellite technology and artificial intelligence in climate change monitoring, we shall have benefits accruing. One, most importantly, is accurate data collection. Any scientist, including Hon. Lilian Gogo, will tell you that data drives science. More so in this age of artificial intelligence.

The language that systems are learning, on how simulated human intelligence will be speaking, is the language of data. Here we are in Africa, where AI systems are looking for data and data sets in Africa yet our data is still speaking oral language and oral tradition. We risk sleeping through a revolution as the world moves towards artificial intelligence. We need accurate data to inform how we plan for climate change. Most importantly, even for checking the weather. We had a false announcement by the meteorological department talking about an El Nino that was never to be. With data, we will not go into such embarrassments.

There is a case to be made for adaptation planning. Climate change is happening. How are we adapting? If we are not on-boarding technologies like satellite-based climate monitoring and AI, we shall be victims of these changes. A great scientist named Louis Leakey told us that it is not the strongest or the fastest species that survive but the species that adapts best. Sorry. It was not Louis Leakey. That must have been Charles Darwin speaking about adaptation.

There are early warning systems. This benefit would accrue from adopting the development of a satellite-based climate change monitoring policy. The changes that are happening are also putting communities at extreme vulnerability. Communities are being exposed to risks in these climate changes. With such technology, we can very quickly have some early warning signs systems.

We are a country that prides itself as being one of the greenest countries in the world but we are losing our forest cover. When we are trying to re-plant trees, science informs us that we could be running the risk of over-planting in the wrong places because there is biodiversity of ecosystems. We need to be careful even in our drive to plant 15 billion trees. God intended some places to become savannah and grasslands. If we plant trees in such places, we will kill entire biodiversities and habitats. There is a case to be made on how we manage our resources like water, forests, wildlife, habitats and marine biodiversity using technology. This would best be informed by the application of science, technology and emerging fields like artificial intelligence (AI).

Finally, what information are we using in policy formulation in this country? Powered by AI, the satellite-based climate change monitoring system will help inform policy. We should not borrow policies from advanced countries which are totally different from our country. For us to benefit from useful technology, we need to apply appropriate technology in climate change monitoring.

There is also a place for international collaboration. If we choose to use the satellite-based climate change monitoring technology, we should partner with other jurisdictions that have either gone ahead of us or are at par with us. My colleague talked about Kenya's Taifa-1 Satellite Launch. This was a collaborative effort that can be advanced.

Hon. Temporary Speaker, I would not finish without going back to where I started. We are in the fourth industrial revolution. What data is Africa presenting as systems start to learn how to simulate human intelligence? Do we have data to present out there or are we going to end up as digital plantations condemned to the same plight in the former industrial revolutions? If we do not organise our data, we will become digital plantations, akin to the sugar and cotton plantations and the colonial villages in the colonial era.

I thank this Member for bringing such an innovative Motion. I pray that we shall push the ministry responsible to implement this policy. Nothing stops us from coming up with this policy. Let us not wait to get it right before we start. Martin Luther King tells us that we do not have to see the entire staircase. Let us take the first step in faith and adopt the development of a satellite-based climate change monitoring system powered by AI. The future generations will thank us for this.

Hon. Temporary Speaker, I thank you for the opportunity. I support.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much Member for Dagoretti South. Before we go to the Member for Dagoretti North, I would like to welcome our guests.

Hon. Members, I wish to introduce to you a delegation of Members of Parliament from the Parliament of Uganda seated in the Speaker's Row. The delegation is drawn from the opposition party and comprises:

1. Rt. Hon. Joel Ssenyonyi – Leader of the Opposition.
2. Hon. Lutamaguzi Semakula – Shadow Minister for Lands and Housing
3. Hon. Naluyima Betty Ethel – Shadow Minister for Local Government.
4. Hon. Hellen Nakimuli – Shadow Minister for Information and Anti-Corruption.
5. Hon. Nyeko Derrick – Shadow Minister for Tourism and

6. Hon. Nyakato Asinasi – Wildlife.  
Shadow Minister for Agriculture.

*(Applause)*

Hon. Members, the delegation that is accompanied by one member of staff is in the country to benchmark on their counterparts in the National Assembly, on best practices in executing their mandate as Members of the opposition, with a view of enhancing their oversight role in government programmes and projects. On my behalf and that of the National Assembly, I welcome them to the Parliament of Kenya and wish them fruitful engagements during their stay in the country.

Thank you.

Next is the Member for Dagoretti North, Hon. Beatrice Elachi.

**Hon. Beatrice Elachi** (Dagoretti North, ODM): Thank you, Hon. Temporary Speaker. I also rise to support this Motion and to appreciate...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Beatrice Elachi, I am sorry to interrupt you but there is a point of order from Hon. Ruku.

**Hon. Ruku GK** (Mbeere North, DP): Thank you, Hon. Temporary Speaker. I wish to comment on the delegation from Uganda.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): I will give you two minutes.

**Hon. Ruku GK** (Mbeere North, DP): As we welcome the delegation from Uganda, it is good to inform them that our Minority in Kenya is quite weak. As you can see, even its leadership is absent. Therefore, they might not benchmark properly because of the weaknesses portrayed by our Minority. This is not the best time for the Ugandan delegation to learn anything from our Minority side. These people are always out of the House when we are discussing important or key issues.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Ruku, you are completely out of order. Please take your seat. Hon. Beatrice Elachi, you may proceed.

**Hon. Beatrice Elachi** (Dagoretti North, ODM): Hon. Temporary Speaker, my colleague cannot say that in a House of records. He is quick to forget that the leadership from the Majority side is not present in the House right now.

I support this Motion on climate change. Globally, climate change is a sensitive subject. Therefore, the use of digital technology is critical in understanding and addressing the impact of climate change. I thank our colleague for bringing this Motion.

A good example of climate change effects is what happened in Mandera the other day. The floods eroded everything in Mandera after a long period of drought. Indeed, it is important to use technology to understand some of these changes. Recently, we experienced heat wave across the entire country that affected many people. People were just dropping dead and their relatives were left wondering what could be the cause. This was as a result of climate change effects.

The Meteorological Department in Dagoretti South should be equipped to offer different courses for our learners. This will teach them how to use digital technologies in dealing with climate change using data and the satellite-based monitoring system. In today's world, we can collect data even from here because we have advanced in AI. We have ChatGPT that students use today. However, we need to analyse it so that we make our original idea. When we talk about climate change in the African continent, we have to find out our challenges because we cannot be like Europe. As we bring the new technologies, we must ensure that they adapt to climate change within our country.

The Kenya Meteorological Department should use technology to tell us how our different seasons have changed. We shall bring in a policy. The Kenya Meteorological

Department must inform us the different seasons in Kenya. We must understand why we had heavy rainfall in January and then there was heat suddenly. We are about to have rains again. We are still talking about El Niño. Even as we embrace technology, and we want to understand its aspects, we must realise that each continent has different climate change issues.

As we support this Motion, there is need to look at the different aspects of how Kenyan scientists will tell us whether we are ready for technology. They tell us that there will be rain on a certain day but all of a sudden, you realise there is no rain. That is why we need new technology to assist us understand the seasons. This is important in places where there are very long droughts and then suddenly, they experience above average rainfall that keeps on fluctuating. By the time we get to April, the Kenya Meteorological Department will tell Kenyans the kind of weather we will experience. Is it the normal rain for planting or above average? Will we experience floods or it is rain we can contain?

Do we have students who are engaged in meteorological studies? I visited the Kenya Meteorological Department last week. I realised that we have very few students engaged in this course. I plead with the Form 4 leavers to look at their grades and find out if they can pursue courses in meteorology. The Institute for Meteorological Training and Research (IMTR) is near Dagoretti Corner. We need more meteorologists now than ever before.

As we engage with the Ministry of Environment and Forestry and make legislation, we should take care of the environment. We are planting trees but we need to find out the correct types. We need technology to understand the trees that can be planted in Nairobi or dry areas. There was debate about cotton in the morning. It is also part of tree planting because it can help in mitigating soil erosion in dry areas.

Finally, it is important to have technology, but it must be one that is easy to adapt and impact our lives in a better way. We should not have technology that we will not understand or one which cannot adapt with the climate that we have within Africa. There are regions that are within the equator. We must use experts to help us understand the climate. We should also encourage our young people to embrace technology and be part of it. I know we will have good monitoring policies that can help our country to appreciate climate change. We also need to take care of the environment.

*[The Temporary Speaker (Hon. (Dr) Rachael Nyamai) left the Chair]*

*[The Temporary Speaker (Hon. David Ochieng') took the Chair]*

Hon. Temporary Speaker, with those few remarks, I beg to support the Motion.

**The Temporary Speaker** (Hon. David Ochieng'): Thank you very much, Member for Dagoretti North. Before I give the next Member a chance to speak, I would like to recognise and welcome students from Koru Girls Secondary, Muhoroni Constituency, Kisumu County, who are seated in the Public Gallery. We welcome them to follow the proceedings of the House this morning. In this regard, I will give Hon. K'Oyoo one minute to welcome them.

*(Applause)*

**Hon. James K'Oyoo** (Muhoroni, ODM): Thank you very much, Hon. Temporary Speaker, for the consideration. We invited Koru Girls Secondary School from Muhoroni Sub-County in Kisumu County to visit the National Assembly today. It performs very well in the national examinations. In the 2022 Kenya Certificate of Secondary Education (KCSE) it fielded about 314 students. Only three students got grade C and did not meet the threshold for public university admission. The rest were all admitted to various universities.

*(Applause)*

In the results which were released this year, only eight candidates got grade C. The rest qualified with grades between A plain and C plus for direct entry into the public universities. We commend the hard work by the teachers. We also commend the discipline in the school because they have no cases of indiscipline. We thank God for that. We urge the students to remain sensible and the teachers united. They should continue serving this country in the best way possible.

*[The Temporary Speaker (Hon. David Ochieng') left the Chair]*

*[The Temporary Speaker (Hon. (Dr) Rachael Nyamai) resumed the Chair]*

Feel welcome. Thank you very much for excellent performance.

*(Applause)*

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much, Hon. K'Oyoo. He has been waiting for those students since 9.00 a.m.

Hon. Geoffrey Ruku.

**Hon. Ruku GK** (Mbeere North, DP): Thank you very much, Hon. Temporary Speaker. I rise to support this Motion. Climate change is a serious threat to the sustainability of our planet. We derive very many natural resources which are key to development and progress of the human race from our environment. This has been threatened seriously by climate change. Any effort towards ensuring that we manage our natural resources in the most appropriate way is much welcome. The only way to do that is through technology. It is extremely useful in ensuring that the projects which are implemented to adapt or mitigate climate change are managed well.

There are several companies which work extremely hard towards carbon neutrality and to ensure that natural resources are turned into assets which are managed properly. This can only be done, if we have technology which can give us spatial intelligence and big data, and remote sensing data to ensure that it is useful for companies or project developers out there working towards carbon neutrality.

Our country has committed to the Nationally Determined Contributions (NDCs) towards achieving climate neutrality. For this to happen, it is important that we employ satellite-based technology to collect data, as proposed by Hon. Abdul Haro. Those who have been in the business of climate change and finance realise how difficult it is to use manual systems of calculating carbon stock which is turned into carbon credits. Some of these projects which are turned into carbon credits are registered by different registries. Some of them have old methodologies of calculating carbon stock. With the employment of a satellite, it will be very easy to apply geospatial technology and calculate the carbon stock. The carbon stock can be easily be translated into carbon credit. The country can benefit from climate finance in the implementation of some of these projects.

There are companies from China and other European nations that may want to sell some of these services to us in the country. If we have such a service from other nations, we will not pay huge prices for it. This Motion is important because it seeks to ensure that we do not use the old methods of managing natural resource assets. We should use new technology to manage our natural resource assets. By so doing, we will cut down costs and the time incurred in implementing some of these projects. We will also have accurate data that can enable us to make the right decisions in calculating the impact of climate change on our land.

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Climate change has impacted food production and water availability. That is why it is important to ensure that our water infrastructure and roads are climate-proofed. We saw what happened to the majority of our roads when we experienced rainfall a few months ago. That means our roads were not properly climate-proofed during their construction. If there is a technology assisting us in climate-proofing our infrastructure, whether it is roads or water infrastructure or farming methods, it will go a long way in achieving sustainability in whatever we do as a nation.

With those few remarks, I support this important Motion.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much. Hon. Beatrice Kemei, Member for Kericho County. Hon. Moses Kirima, Member for Central Imenti. In the absence of those two Members, we go to Hon. John Mutunga, the Chairperson of the Departmental Committee on Agriculture and Livestock, and the Member for Tigania West.

**Hon. (Dr) John K. Mutunga** (Tigania West, UDA): Thank you very much, Hon. Temporary Speaker, for giving me an opportunity to add my voice to this very important Motion. Let me start by thanking Hon. Abdul Haro for bringing this Motion. It is, indeed, a very important Motion because policies guide the functions of government and institutions. Climate change monitoring is the ongoing observation of the changes in the climate, documenting them and assessing the changes in the global climate itself. It is important for us to do so. Its importance cannot be underestimated. We need to observe and know how climate is changing so that we know how the changes are likely to impact our survival, and how it impacts the earth. Such data helps us to understand past trends and prepare for future climate change possibilities. Once we know future climate change possibilities or scenarios, we can plan better.

Climate change monitoring involves numerous interlinked components. It is not just one issue; it has many components. One of the components is that it leads to observation of the changes themselves and collection of credible data. Scientists collect data from various sources, like the weather stations all over, satellite stations and the ocean buoys. The data can include information on temperatures, precipitation or rainfall. It can include weather patterns and sea level changes. It can also include emissions of greenhouse gases or gases that warm the atmosphere. After analysing such data, we may be able to predict what is likely to happen to the climate of our surroundings at any particular point in time.

After data is collected, then a monitoring system is put in place. From there, evaluation follows. Evaluation and analysis have to do with rigorous scrutiny of the data. Many statistical methods are applied to help identify patterns and trends that may point to potential future climate change or changes in some of these occurrences.

Hon. Temporary Speaker, another issue, in view of what happens, is the modelling attributes or components that enables us to forecast or predict. Modelling has to do with analysing the data that we have, which scientists do by using scientific or mathematical models to predict future climate scenarios. Climate scenarios enable a nation to plan better and to understand how the future outlooks are in terms of climate. Sometimes we fail to know what the future is likely to be. Many times, this country has been found unprepared for climate change. The rainfall patterns have changed in terms of intensity. Nowadays the weather patterns have tended to be very erratic with extremely high erosivity indices. We have not conserved ourselves as much. Therefore, rainfall always carries away the soil. This is something we can avoid if we are better prepared to collect data that we can use to predict.

Different models can predict how the climate will look like in future. We can foretell if greenhouse gases are going to increase by so much at a particular point in time. We can tell what is likely to happen to the ambient climate or the climate in our surroundings. We need to monitor climate changes to mitigate the climate itself or the effect of climate change. In other

words, what do we need to do to be able to monitor? We need to collect accurate data. If we can get accurate data, then we will understand how climate dynamics present themselves. The dynamics in this particular case are the trends, identifiers of these trends, regional changes and changes in the accompanying vulnerabilities.

The other important action is effective modelling – being able to effectively or forecast future weather patterns. The outcome of this is that we are enabled, as a nation, to predict the potential impact and assess possible intervention measures to mitigate that impact. This will guide the development of adaptive measures and other corrective measures. It will enable us to develop mitigation measures for climate change. It will also help us to develop mitigation strategies or policies that will enable us to cope with anticipated climate changes.

The other important action is informing the policy itself and the public. The public has a right to information. Article 35(2) of the Constitution says clearly that the public is entitled to information. If this information is kept by the state, the public needs to be given this information. The best way to get accurate information to the public is to predict what might happen in the future. So, remote satellite-backed climate change sensing is very important for us. It will help us to shape government policies for the future. It will help the public to understand what is happening. It will also help us to know what kind of actions need to be taken in the changing circumstances of greenhouse gas emissions.

How can climate be monitored? I will take one minute to address this particular issue. Ground-based monitoring of the climate involves looking at what factors change, like temperature, precipitation, pressure, wind and the direction of the wind. Long-term data provides crucial information and insights that help us to recollect historical trends and develop long-term projections that will input into our planning so that we are secure in terms of climate.

There are some observations that we can make if we are organised, as a country, in view of satellite-based climate change monitoring, for instance, observation of the ocean. If you go to the ocean, there are certain things that you are able to see.

Firstly, you learn that oceans absorb heat. When the ocean gets warm, there is likely to be huge precipitation as water will have evaporated thus forming clouds and it will eventually rain. We will then be able to prepare ourselves in view of getting that information.

Secondly, there are sea level changes. An increase in sea level is a result of ice melting in some parts of the world where there are snow-capped mountains. It is evident that at certain times of the year, the number of islands differ. When ice melts, the water sea level rises and submerges some islands leading to a decrease. When sea water evaporates, the water sea level goes down and some islands emerge. The Philippines experiences these scenarios.

Satellite monitoring is key as it also captures the orbiting of the Earth. In other words, it captures data across time and space in different parts of the world. As the Earth rotates, we are able to know the parts of the world where we have forests, ice sheets, atmospheric gas concentrations of various nature, and how all these interact with the surroundings.

Lastly, I would like to speak to the issue of computer modelling. It is key because it helps us intricate processes in our climate system patterns. We are able to get information through computers.

Hon. Temporary Speaker, my time is running out very fast. Please, give me one more minute to address the issue of satellite remote sensing technology and how it works. It is important for the students to understand how it works. Providing this particular multi-system information at the atmosphere, the Earth's surface and the sub-surface of the Earth helps...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Mutunga, I will add you one minute.

**Hon. (Dr) John K. Mutunga** (Tigania West, UDA): Thank you, Hon. Temporary Speaker, for adding me one minute. It has been recognised that this information is indispensable. We are able to observe methods of dispensation because of the capability to

provide timely and dynamic spatial temporal information. In this case, spatial temporal information in time and space. We basically get to know whatever is happening.

Satellite remote sensing can also dictate information in different variables at the same time. We can collect information on clouds, aerosols, greenhouse gases, land use and land cover changes, glacier ablation, water and energy flux. This information can be collected at the same time. It is then interpreted to tell us how the world is behaving at any time.

Lastly, satellite-based observation is singled out because of its contribution to monitoring of approximately two-thirds of essential climate variables, which are many. They include...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much, Hon. Mutunga.

Let us now listen to Hon. Julius Melly, Member for Tinderet.

**Hon. Julius Melly** (Tinderet, UDA): Thank you, Hon. Temporary Speaker. I want to salute Hon. Haro for bringing this timely Motion. The Motion requires that we develop several policies, programmes and laws that are going to address the issues of climate change. Climate change is happening and we cannot wish it away. Mother Earth takes care of our lives. If we do not take care of the Earth and the natural resources thereon to ensure that they remain in the same state we found them, it will really be harsh to us and our future generations.

Hon. Mutunga has taken us through the nitty-gritties of climate change and what the Government needs to do about it. He talked about scientific programmes and monitoring systems that can be put in place to collect data on climate behaviour. I want to speak to three or four issues.

Firstly, there is the issue of government policy on climate change and monitoring. Hon. Haro has pointed out that the traditional modes of monitoring weather patterns are no longer effective. It cannot help us to determine how the changes happen in various areas across this country. Our country has recently launched its first operational satellite into space, and we need to utilise it adequately by reporting on issues of climate changes taking place in various parts of this country. That is very important. Secondly, relying on traditional modes of observation is no longer tenable. The instruments are not very accurate. It might be hard to determine the actual damage caused by climate change.

Thirdly, we need to ensure that proper policies are in place. When such policies are in place, we are able to predict the vagaries of nature like floods and drought and mitigate their effects on our people. A few months ago, thousands of livestock died due to drought. This has happened in this country in a cyclic manner. People lost their livelihoods. The economy was affected. Families in the ASAL areas were traumatised because they lost all their livestock. If climate monitoring had been put in place, such effects could have been reduced or stopped.

Climate change also affects the economy. The Government's failure to monitor and give proper information on time made people lose their livestock and we had to restock. This affects our economy in a negative way.

There is also the issue of floods. As we speak, there are heavy rains in the western region and the central parts of the Rift, which are causing flooding in the lake region. This has affected families and has brought flood-related diseases. The Government did not have enough mechanism to predict this and move people to safe areas. The weather patterns have changed because of climate change. Right now, farmers cannot even predict the best season to plant. Nowadays, when we expect short rains, we get long rains and vice versa. Climate monitoring is very important in all aspects of life such as agriculture, economic development and national security.

On issues to with national security, as we speak, the North Rift region is experiencing issues related to climate change. There is no adequate pasture and this has made pastoralists to

be on the move to look for food for their livestock. If we are able to take care of this, we will be able to predict the weather patterns and ultimately curb issues of insecurity.

Hon. Temporary Speaker, this is a very important Motion. I would request the House to look at it keenly. I want to thank His Excellency the President because he has placed climate issues at the core of his Government. Even the Ministry of Environment and Forestry signifies the importance that the Government has given to the management of the nation. If you look at what the country is facing, it has an aspect of climate change. As part of the mitigating measures, we need to plant trees to ensure that we have enough forest cover so that we avoid mudslides and landslides in hilly areas. In my constituency, we have a very serious problem of mudslides, which displaces hundreds of people every time it occurs.

We also have problems in the ASAL areas, where we have depletion of forests. All these are zeroed in and can be effectively managed if we have a very good climate policy that uses both traditional methods, digital methods, and satellite system that gives us real-time situation of climate change. Kenya is a developing country that relies heavily on agriculture and extraction of minerals. There are areas where we rely on the extraction industry – open mining in quarries for extraction of raw materials for road construction, which has also affected the issue of climate and weather patterns in parts of this country.

I once again thank the Mover and ask that this Motion be taken a step further. I request the Ministry to come up with clear programmes and develop policies on how to execute this Motion.

Lastly, I request the Ministry to develop a legal framework to ensure that the policies and programmes that are going to be put in place are supported by law.

With those remarks, I support.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much the Member for Tinderet.

Hon. Members, we have guests seated in the Speaker's Gallery. They are students from Chogoria High School of Maara Constituency, Tharaka Nithi County.

*(Applause)*

On behalf of the Speaker and the House, we welcome you to the National Assembly to continue observing our proceedings.

We will now go to Hon. Bashir Abdillahi, the Member for Mandera North.

**Hon. Major (Rtd) Abdullahi Sheikh** (Mandera North, UDM): Thank you, Hon. Temporary Speaker for giving me an opportunity to contribute to this very important Motion brought by my brother and colleague from my neighbouring constituency of Mandera South.

The impact of climate change has been felt in Kenya. Climate change risks two events in extreme: drought and floods. The intensity and frequency are big factors. Previously, we experienced droughts of a smaller scale. We used to have enough rainfall but not floods. The frequency and intensity are nowadays so much that you might even pray that we do not have any more rainfall.

**Hon. John Kiarie** (Dagoretti South, UDA): On a point of order, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): We have an intervention from Hon. John Kiarie.

**Hon. John Kiarie** (Dagoretti South, UDA): Hon. Temporary Speaker, I thank you. I am extremely hesitant to interrupt my very good friend, Major (Rtd) Bashir. Kindly, protect me from the Major because being a second-term Member, he should understand that since I am standing on a point of order, he should not be on his feet.

Is the Hon. Member in order to tell this House, in presence of learners who are actually taking notes, that there has never been floods like the floods we experienced in the recent past when we know that throughout the history of the world, flooding has been a phenomenon that happens up to, including what is recorded in our religious books? I know of Noah's Ark story and the massive floods as narrated in the Bible. Therefore, Hon. Bashir ought to be factual as stipulated by our Standing Orders. He should not mislead this House into thinking that the only flooding that has ever happened in this country is the one that happened in his lifetime. He might want to look back and see that flooding is a phenomenon which has been there since time immemorial. It is only that it is happening at a frequency that has not been experienced before.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Major Bashir, would you like to re-look at your statement?

**Hon. Major (Rtd) Abdullahi Sheikh** (Mandera North, UDM): Hon. Temporary Speaker, I want to put the record straight. I added the issue of frequency and intensity in my speech. Hon. KJ did not capture me say that the frequency and intensity of flooding has been increasing over the years. We all know the story of Noah and the Ark as it is also captured in our Holy Quran. It is explicit. However, we are now talking about climate change, where nature has become furious with humans. We are making nature very angry.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): I take note that you are continuing with debate but Hon. KJ rose on a point of order on a statement of facts, which I would like you to address. I will, thereafter, give you an opportunity to continue with the debate.

**Hon. Major (Rtd.) Abdullahi Sheikh** (Mandera North, UDM): Thank you, Hon. Temporary Speaker.

I agree with Hon. KJ that flooding has happened before but we are talking about the intensity that is increasing. Historically, even when some of us were not born many years back, flooding used to be there.

The climate change phenomenon exhibits itself through extreme drought and flooding. However, my point is that the frequency and intensity is not the same as before. It is either too low or too high.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. KJ, I would like to give him a chance to finish what he was saying.

**Hon. Major (Rtd.) Abdullahi Sheikh** (Mandera North, UDM): Hon. Temporary Speaker, Hon. KJ is trying to eat up my time.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): I give Hon. KJ a chance.

**Hon. John Kiarie** (Dagoretti South, UDA): On a point of order, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): What else is out of order now, Hon. KJ? I take notice that Hon. Bashir has corrected himself on the facts. This being a House of debate, he can do so in whichever way he chooses.

**Hon. John Kiarie** (Dagoretti South, UDA): Hon. Temporary Speaker, he glossed over it and went on to make it even worse. He admitted it and went on to say that humanity is facing climate change in a more aggressive way than it has ever been seen before - something which falls flat on the issue of facts. The fact is that he has no data to prove that it is more intense or frequent today. If we go back to history and locally, apart from the Biblical stories, we know of *ng'aragu ya mianga* way back in the olden days.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. KJ, what exactly is out of order?

**Hon. John Kiarie** (Dagoretti South, UDA): Hon. Temporary Speaker, my point of order is a matter of facts. Kindly call upon Hon. Bashir to get his facts right. I will not stand on

an issue of opinion because he is entitled to one, but when it comes to facts, if he makes a scientific claim, it ought to be supported imperially by data. I will not interrupt Hon. Bashir again.

**Hon. Major (Rtd) Abdullahi Sheikh** (Mandera North, UDM): Thank you, Hon. John Kiarie.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Take a seat. Just a minute, Hon. Bashir. Hon. Owen Baya.

**Hon. Owen Baya** (Kilifi North, UDA): Hon. Temporary Speaker, this is a point of order on issues of facts. Last I checked, Hon. KJ had no credentials whatsoever in matters science. I have checked his education background and he has nothing related to science. He has no monopoly on facts since he relies on the internet. At least, Hon. Bashir, having been in the military, is well versed with scientific issues and has been schooled properly on matters of science. Therefore, Hon. Bashir, continue to give us your wisdom.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you to both of you, Hon. Waweru and Hon. Baya. I would like to allow Hon. Major Bashir to proceed. He is not debating as an expert in climate change, but as the Member for Mandera North and as a security expert. I would like to give him the chance to conclude. Please proceed, Hon. Major Bashir.

**Hon. Major (Rtd) Abdullahi Sheikh** (Mandera North, UDM): Thank you, Hon. Temporary Speaker. As I said, the Motion is on the use of technology to predict climate change to curb its adverse knock-on effects. In the past, our pastoralist communities could predict the rainy seasons and they would migrate. That pattern is currently non-existent due to the adverse effects. What we lack is accurate data to advise communities on the weather and climate patterns. The use of satellite technology will help to provide timely data.

I would like to go on record and quote the verse of the Holy Quran Surah al A'raf Verse (7:86) which says, "...and do no mischief on the earth after it has been set in order. That will be best for you if you have faith". What does that mean? That is very deep. Humans are causing the adverse effects that are happening on this earth. Some people say that we have natural disasters, but why is it happening? Besides humans, how many other creatures are living on earth that we are displacing? The Holy Quran says that if humans sin a lot, there will be frequent disasters. These effects and how to deal with them are captured in our scriptures. We have seen people building on riverine areas and when rainfall comes, it causes destruction. Thereafter people complain of what flooding has done yet we have blocked the natural pathways. We are now reeling from the effects of climate change.

Coming back to the Motion, we are in an era of smart technology. Let us make use of satellite technology to advise farmers and everyone for planning purposes. With weather data, farmers can plan their planting by checking the intensity of rain at different times. We are still using age-old technologies. If you visit the Kenya Meteorological Department, you will find that their programmes are outdated. Last time, we could not predict the El Nino and no proper information was given until it occurred. I fully support the use of satellite technology to help in prediction. Above all, humans are making nature angry. Let nature take its course and ensure that things are properly done. Things have been set in order by God, but humans want to interrupt and cause issues that nature did not anticipate. Let us ensure we take care of nature so that it takes care of us. This will enable us to plan better. I fully support the Motion to use satellite technology to generate proper data and advise our farmers and everyone affected by nature.

Thank you, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you, Hon. Major Bashir. Next is Hon. Owen Baya.

**Hon. Owen Baya** (Kilifi North, UDA): Thank you, Hon. Temporary Speaker. Climate change is real and because of this, we have had unprecedented issues that have affected our

people. Today, climate change has caused food scarcity. The fish in the ocean are getting depleted and people are sleeping hungry. In the last season, this country lost many herds of cattle due to climate change. Due to the issues climate change has brought to the human race, we need to leverage on technology to enable us to accurately predict weather patterns and changes for the sustainable development of this nation. If you look at other developed countries like the United States of America, they can accurately predict hurricanes and storms. In Europe, they can predict hourly weather changes because of their ability to leverage on technology.

In Ngomeni, where the former San Marco platform is, a lot of meteorological data is harvested by other countries to plan for the future using that technology yet Kenya has not been able to use it. Planning for the future is important in ensuring the country is not caught flat-footed. Three months ago, the weatherman predicted El Nino rains, and the Government started preparing and putting together resources to mitigate the rains, but three weeks later, we were told that the prediction was not accurate.

Again, it was announced that we do not have El Nino rains. Then, one day out of nowhere, we got the heaviest rain ever. I can remember, I was in my constituency and the rain was too much, such that bridges were washed away. People woke up, to the surprise of very heavy rain in many parts of this country. It rained for only one day, yet people had prepared for almost three weeks for El Nino rains. A question of where the resources set aside to prepare for El Nino rains went was asked in this Parliament. We need to know whether weather forecasting in this country is accurate and to what percentage. How about leveraging on technology? If we leveraged on technology and used satellite data, I think we shall reach somewhere.

*(Hon. Omboko Milemba spoke off the record)*

Hon. Temporary Speaker, as you ignore the Member, I would like to say...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Members, I can hear the voice of Hon. Omboko Milemba, but I cannot see him anywhere.

**Hon. Owen Baya** (Kilifi North. UDA): Hon. Omboko Milemba does not own a card. Just continue to ignore him.

*(Laughter)*

We need to move forward as a country by leveraging...

**Hon. Omboko Milemba** (Emuhaya, ANC): On a point of order, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): I am inclined. I will give him a chance to say what is out of order.

**Hon. Omboko Milemba** (Emuhaya, ANC): Thank you, Hon. Temporary Speaker for that magnanimity. As a matter of fact, the earlier speaker said that satellite technology is not in Kenya. The current speaker is also saying that we might not be using satellite technology. When Hon. KJ rose, he welcomed students. It is clear that Kenya is among the 13 nations that have satellites in space and in fact, Rwanda follows us. Basically, satellite technology is used for agriculture and climate data *et cetera*. As we speak on this Motion, being a teacher, I know that satellite technology is in this country. Thank you.

**Hon. Owen Baya** (Kilifi North. UDA): He has given us very important information, only that...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Members, the matter of making factual statements is being raised a second time by Hon. Omboko Milemba, after being raised by Hon. Kiarie Waweru. I encourage you to be factual, bearing in mind that we have

students watching us and they believe the statements we make are true. You may proceed, Hon. Baya.

**Hon. Owen Baya** (Kilifi North, UDA): Thank you, Hon. Temporary Speaker. I said that we might not be using satellite technology because having it is different from using it to accurately forecast weather. Hon. Omboko Milemba, I am a fellow teacher and I am aware of what I am talking about. That we have technology...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Please just proceed with the debate.

**Hon. Owen Baya** (Kilifi North, UDA): We have satellite technology at the Italian Space Agency at Ngomeni, which is one of the best in this country and the world. But is it useful to us? As a country, have we prepared enough human resource who can take cognisance of this technology and use it to our benefit?

I urge the Ministry of Environment, Climate Change and Forestry to train more people on the use of technology. My mother once told me to buy her a smart phone. I bought it for her and the only way she used it was to make and receive calls. The smart phone has a lot of technology which she was not using. So, I would rather have bought her a *kabambe* than a smart phone. This is the same thing which is happening in this country. We have a lot of smart technology, but we are not using it to help this country move forward. That is why this debate is very important. Apart from just having a policy, we need to look at how it will be implemented to ensure it helps the Government.

Hon. Temporary Speaker, we all know that we have many policy documents lying in big shelves. I am sure we even have a big archive of policies. What percentage has been implemented in this country? Probably one or two per cent. As a country, we are very good at developing policies and investing a lot of money in developing them. Although, they have not helped us move forward, other countries have made leaps by developing policies which they implement and follow.

I support this Motion brought by Hon. Abdul. We need to not only develop policies, but also have an implementation matrix attached so that this august House can oversee and ensure they are implemented. It will then follow-up by ensuring that this year's budget has enough money for implementation. That way, Parliament will be useful to this country.

Thank you, Hon. Members for a robust debate on these issues. I also thank Hon. KJ and ask him to invest in learning science. Thank you very much.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Member for Mavoko Constituency, Hon. Patrick Makau.

**Hon. Patrick Makau** (Mavoko, WDM): Thank you, Hon. Temporary Speaker. I want to seek guidance from you on whether this Motion is properly before this House. It seeks to develop a Satellite-based Climate Change Monitoring Policy. Kenya, as a nation, has a policy on climate. Meteorologists use satellite to monitor weather patterns and climatologists use it to measure and understand long-term climate patterns. I, therefore, stood to ask whether...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Patrick Makau, I have given you a chance to debate. Are you on a point of order?

**Hon. Patrick Makau** (Mavoko, WDM): Yes. Before I debate, I want to understand whether the Mover of this Motion seeks to amend the existing policy on satellite-based climate monitoring. I do not know why he wants to introduce this Motion to...

*(A Member spoke off the record)*

Exactly. There is a policy already. Hon. Temporary Speaker, please tell us whether the Motion is properly before the House, because we have an existing policy on satellite-based climate monitoring.



**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Makau, I think you are questioning whether this Motion is rightfully here. It went through all the stages including the House Business Committee. I am sure it has been properly scrutinised. The Member is trying to encourage the country to make use of contemporary approaches to ensure that we have timeliness, in as far as weather forecasting is concerned.

**Hon. Ferdinand Wanyonyi** (Kwanza, FORD-K): On a point of information, Hon. Temporary Speaker.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Ferdinand Wanyonyi is a Member of the House Business Committee. Do you want to comment?

**Hon. Ferdinand Wanyonyi** (Kwanza, FORD-K): Hon. Temporary Speaker, let me inform my good friend. I was speaking to the Deputy Leader of the Majority Party because I went to Mombasa and saw an abandoned satellite. According to what he said, the country recently launched its first operational satellite. So, the Motion is quite in order.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Ferdinand, you may take your seat. Hon. Makau, this Motion is rightfully before the House. Would you like to debate or you wanted to raise a point of order? Please give him the microphone.

**Hon. Patrick Makau** (Mavoko, WDM): Thank you, Hon. Temporary Speaker. Having guided me, I just wanted to be aligned with the Motion. Hon. Owen who is from Malindi knows that Kenya borrows a lot from the Italian satellite which is there and so are other satellites. Hon. Ferdinand has just confirmed that Kenya launched its satellite because we have been borrowing from other satellites. This is a House of records with traditions. Sometimes Motions can pass without enough scrutiny. When you sit on that seat, you can also guide because this is an ongoing Motion that can be withdrawn due to technicalities. That is what I was standing to seek your guidance on but...

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Hon. Makau, this Motion is rightfully before the House.

**Hon. Patrick Makau** (Mavoko, WDM): Thank you. I stand guided.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): I assume that you are done. Hon. Linet Chepkorir, Member for Bomet County. Is she in the House? In the absence of the Hon. Member for Bomet, I give a chance to Hon. Lillian Gogo, the Member for Rangwe.

**Hon. (Dr) Lillian Gogo** (Rangwe, ODM): I thank you very much, my sister, Hon. Temporary Speaker. There was an emergency and I thank you for giving us an opportunity to go and handle it. I appreciate you.

I thank my brother who has brought up this Motion that has been duly debated. It is a very good idea. Moving forward, as a country, we must rely on technology which is what is being practiced. We have science and technology. Science generates scientific ideas as a matter of what goes on and the thought process. Technology is what will benefit this country, the implementation of scientific systems and processes. I rise to support what my brother and senior proposed that we have our natural ecosystems. The Data Systems and Information Technology appreciated in climatic change prediction and also climatic change practice so that we can have accurate data systems that would be reliable to the country.

If we have anything that we do as a nation pegged on proper legislation and policy, it is a plus for the nation. We want to have a system that is satellite-based so that we do not make mistakes, and that our departments that predict the weather, seasons and the happenings of nature do not miss it. One of the Members, the Chairperson of the Departmental Committee on Communication, Information and Innovation, had earlier talked about AI which is what is currently going on. He knew what he was talking about. We must go together with the rest of the world in the things that we do. So, when *Mhe* proposes that we have these housed in our satellite systems, we will do that but in a friendly satellite system so that if we were to have any that has a problem with our system, then we do not lose our data in its entirety. We will

have backup systems but we also want accuracy. We want efficiency and efficacy so that whatever we are going to do is time-bound and deliverable.

It is very unfortunate that we come here and use big English terms. I know that we have very learned Members of Parliament, who are very serious in their various disciplines. However, I came to talk about efficacy. The policies, ideas and laws that we legislate, and that touch on various disciplines, must benefit Wanjiku. They must benefit *mama mboga*. They must benefit farmers who toil left, right and centre in this country.

If we are talking about rainfall, how much can we expect? How much will be in excess? How long of a dry spell will we have? How much of a milk glut will we have? I ask the Kenya Revenue Authority (KRA) to leave our avocado farmers alone as long as they get basic income. They should just be allowed to live.

We should have reliable systems as proposed in the Motion. We want reliability. We also want accountability so that we can predict weather and climatic changes on the basis of accurate and reputable scientific data. We should have reputable data so that when somebody else tests what we have done, they can get accurate results.

I rise to support this Motion so that our youths can use this data to harness their ideas. Many young people want to get into farming. Many people have very good ideas, but they just need data.

As I contribute to this Motion and share the ideas of the great people of Rangwe Constituency, I know that this Motion will benefit them as well. Before considering this Motion, we were talking about cotton. Cotton production has its own timetable in terms of rains and dry spells, and when it sprouts; oh! the beauty of cotton. I want to thank my Governor, Hon. Gladys Nyasuna Wanga, for coming up with the idea of reviving cotton production in our county. If we have reliable data and predictions on climate and climatic changes, we will meet our great objectives of oil processing and cotton production as Homa Bay County. This will not only be for local use, but also cotton and sunflower farmers in my county will earn a living and export the excess so that they can get extra income.

Apart from that, we will also be able to predict how and when to add value. All this comes down to and adds up to the effects of climate and climate change. That is what this Motion proposes. The policy that we come up with should favour us. We will work on ordered scientific systems and already established value systems. We will look at traceability. We will work on moving forward with new technology like AI, as has been proposed. I propose that we move forward with technology because letting machines think like human beings will be in the best interest of this country, the users that have proposed it, and our people. This is real empowerment. Thank you for giving me this time, Hon. Temporary Speaker. I appreciate Parliament.

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): Thank you very much, Hon. Members, for the good work that we have done this morning.

### ADJOURNMENT

**The Temporary Speaker** (Hon. (Dr) Rachael Nyamai): May you be upstanding. Hon. Members, the time being 1.00 p.m., this House stands adjourned until this afternoon at 2.30 p.m.

The House rose at 1.00 p.m.

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