Government of Jamaica

PUBLIC CONSULTATION

The Biosafety Policy for Jamaica (Green Paper)

Ministry of Housing, Urban Renewal, Environment and Climate Change

October 15, 2020 at 10:00 a.m.

FINAL REPORT

CONTENTS

ACRONYMS

AIA	Advanced Informed Agreement
BSJ	Bureau of Standards of Jamaica
CAC	Consumer Affairs Commission
CASE	College of Agriculture, Science and Education
COTED	Council on Trade and Economic Development
DNA	Deoxyribonucleic acid
GATT	General Agreement on Trade and Tariffs
GMOs	Genetically modified organisms
IOJ	Institute of Jamaica
JACRA	Jamaica Agricultural Commodities Research Authority
JCA	Jamaica Customs Agency
LMO	Living modified organisms
MHURECC	Ministry of Housing, Urban Renewal, Environment and Climate Change
MICAF	Ministry of Industry, Agriculture and Fisheries
MOHW	Ministry of Health and Wellness
MRE	Ministry with Responsibility for Environment
MRST	Ministry with Responsibility for Science and Technology
NBC	National Biosafety Committee
NBP	National Biosafety Policy
NCST	National Council on Science and Technology
NEPA	National Environment and Planning Agency
NRCA	Natural Resources and Conservation Authority
OIE	World Organization for Animal Health
SIRI	Sugar Industry Authority
SRC	Scientific Research Authority
SPS	Sanitary and Phytosanitary Measures
TBT	Technical Barriers to Trade
TRIPS	Trade-Related Aspects of Intellectual Property Rights
Utech	University of Technology
UWI	University of the West Indies

CONTEXT

The National Biosafety Policy (NBP) for Jamaica is the product of deliberations by a range of state and non-state agencies, many of which were represented on the National Biosafety Committee (NBC) formed in 1997 (now defunct), as well as consultations with stakeholders. It sets out objectives, strategies, and implementation procedures for a range of state-led activities which, together, created the framework for a national biosafety regime. It addresses the safe use, transportation, containment, storage, and handling of living modified organisms (LMOs) – including requirements for transboundary movement and a policy framework for supporting research and public education on modern biotechnology.

While biotechnology is not new, recent advances have raised a host of concerns regarding environmental, social and health issues. The importance of modern biotechnology in advancing Jamaica as a country is seen to be desirable, but the inherent risks to the natural environment and health must be paramount in any considerations for its application. This Policy seeks to strike this balance by setting out the framework whereby Jamaica will be able to meet its international obligations under the Cartagena Protocol on Biosafety, to which Jamaica is a Party, while also meeting the peculiar needs and requirements of the country.

In the interest of ensuring that issues are effectively and comprehensively covered, the green paper was shared with the stakeholders impacted as well as the wider public to seek their input. Consultations were held on October 14 and 15, 2020 in this regard with public sector and private sector partners and members of the public, respectively.

EXECUTIVE SUMMARY

The consultation was chaired by Ms. Joni Jackson, Director, Natural Resources, Ministry of Housing, Urban Renewal, Environment and Climate Change (MHURECC).

The Honourable Pearnel Charles Jr, Minister of MHURECC, in his remarks, explained that the Biosafety Policy was aimed at highlighting the rules and procedures relating to the handling of biological and microbiological agents. The goal of the policy, he said, was to provide a safe and enabling environment, safe transboundary movement, handling and use of living modified organisms (LMOs) while managing any potential risk to human health and biodiversity. The implementation of the policy would see the effective regulation of transboundary movement, import and export of LMOs in compliance with international standards and the Cartagena Protocol.

Ms. Jackson advised that the consultations being implemented would inform amendments to the current document which would then be submitted to Cabinet for approval as a white paper. She advised that the green paper had been widely shared, including the placement of copies in libraries island wide. A copy

was also available on the website of the Ministry of Economic Growth and Job Creation for general consultation. Advertisements had also been placed in the daily newspapers inviting written submissions.

Ms. Gillian Guthrie Chief Technical Director (Acting) presented an overview of the Biosafety Policy for Jamaica. She explained that the Policy had been developed in compliance with the requirements of the Cartagena Protocol on Biosafety, a supplementary Protocol to the Convention on Biological Diversity, to which Jamaica is a Party. She presented the historical context of biotechnology in Jamaica, explaining that to date, a number of different government ministries, agencies and departments had different areas of responsibility but there was, as yet, no cohesive framework regulating and monitoring its implementation.

Ms. Guthrie listed various policies and legislation, some of which were still at the draft stage, that were necessary for the efficient implementation of the policy.

The Green Paper on the Policy had been approved in the fourth quarter of 2020 and, with the recommendations from the consultations, would be submitted to Cabinet for approval as a white paper in January 2021. She shared the purpose, vision, goals, and objectives of the Policy as well as the proposed institutional framework.

Ms. Guthrie said three competent authorities had been identified to assist in advancing the national biosafety framework – the National Environmental and Planning Agency (NEPA), the Ministry of Health and Wellness (MOHW) and the Ministry of Industry, Commerce, Agriculture and Fisheries (MICAF). They would be responsible for reviewing applications related to LMOs intended for release into the environment which would be used for food, feed and processing, for contained use and those for processing. The National Environment Planning Agency (NEPA) had been identified as one of the competent authorities with responsibility to develop a register and to act as the secretariat to the National Biosafety Committee (NBC). The MOHW would assist with LMOs related to health. MICAF would review applications and make decisions re LMOs for use in the agricultural and aquaculture sectors. A scientific panel was being recommended to advise the NBC on protocols and regulation.

Ms. Guthrie presented the proposed institutional framework which saw the ministry with responsibility for the environment (MRE), now MHURECC, as the lead ministry in the implementation of the Biosafety Policy. It would articulate policies in collaboration with the NBC and promulgate legislation relevant to the Policy.

Highlights of the discussion included: risk assessment and testing of imported honey and bee by-products; funding of the upgrading of government laboratories; incentivising of the production of LMOs and GMOs; possible grandfathering of existing GMOs; labelling, level and types of GMOs; ethics of biotechnology; utilization of the BCH and the role of the Bureau of Standards Jamaica (BSJ) in the sector.

Welcome – Ms. Joni Jackson, Director, Natural Resources, MHURECC

Ms. Jackson informed the meeting that biosafety was intended to protect human life and the environment from possible adverse effects of modern biotechnology. She advised that Ms. Gillian Guthrie, chief technical director in Ministry of Housing, Urban Renewal, Environment and Climate Change (MHURREC)

and the national focal point for the Convention on Biological Diversity and the Cartagena Protocol on Biosafety, would present an overview of the policy document.

In addition, resource personnel Ms. Yvette Strong, Senior Manager for the Conservation and Protection Division of the National Environment and Planning Agency (NEPA), Ms. La-Tanya Richards, Pest Risk Analysis Manager at the Plant Quarantine/Produce Inspection Branch at the Ministry of Agriculture and Fisheries (MOAF) and Dr. Wintorph Marsden, Senior Veterinary Officer of the Veterinary Services Division, MOAF.

Message from Honourable Pearnel Charles Jr., MP, MHURECC

Minister Pearnel Charles Jr. noted that substantive work had already been carried out under the Ministry of Economic Growth and Job Creation on several environmental policies. He congratulated the team at the Environmental Risk Management Branch on their efforts and for the preparation of the current policy and its presentation as a green paper. He explained that the Biosafety Policy was aimed at highlighting the rules and procedures relating to the handling of biological and microbiological agents.

He observed that any economic advances to be made by the country must be driven by science and technology as well as a healthy natural environment. He pointed to Jamaica's national outcomes 11 and 13 – "A Technology Enabled Society" and "Sustainable Management and Use of Environmental and Natural Resources", respectively. Minister Charles noted that recent advances in biotechnology had raised several health and social issues and mitigation of any inherent risk to environmental health had to be foremost in its application. The Policy provided the framework by which Jamaica could honour its international obligations, as outlined in the Cartagena Protocol, while also meeting national requirements.

The goal of the policy, he said, was to provide a safe and enabling environment, safe transboundary movement, handling and use of living modified organisms (LMOs) while managing any potential risk to human health and biodiversity. The minister highlighted the importance of the precautionary approach which meant that lack of scientific information should not prevent action to prevent environmental degradation or possible harm to human health.

The implementation of the policy would see effective regulation of transboundary movement, import and export of LMOs in compliance with international standards and the Cartagena Protocol.

Promotion of modern biotechnology at the national level would involve standards for the safe handling, transport, labelling, documentation, packaging, and disposal. He underscored the increased capacity of the relevant institutions to safely monitor and implement the national framework. In order to ensure the integration of biosafety in all sectors, continuous public education would be critical, he said.

Protocols governing public consultations on draft Policy

Ms. Jackson noted that the Green Paper had been tabled in the Houses of Parliament in June 2020. Consultations being implemented, currently, would inform amendments to the document in compliance with guidelines from the Cabinet office. The amended document would then be submitted to Cabinet for approval as a white paper. She advised that the green paper had been widely shared, including the placement of copies in libraries island wide. A copy was also available on the website of the Ministry of Economic Growth and Job Creation for general consultation. Advertisements had been placed in the daily newspapers inviting written submissions. She advised that the reports on the consultation, comprising all questions and responses, would be shared. At the end of the session an online survey requesting feedback on the session would be shared.

The Biosafety Policy for Jamaica (Green Paper) – Gillian Guthrie, Chief Technical Director (Acting), MHURECC

Ms. Guthrie began by citing the name Monsanto. It was a company well known for the production of pesticides as well as genetically modified organisms. Monsanto had also earned a bad reputation for the production of GMOs which it was believed negatively affected the environment and public health. Many protests were mounted against Monsanto. Th company had been taken over by Bayer which had been working to change the image regarding the use of GMOs and the benefits to be derived from them.

She pointed to the benefits of biotechnology which included benefits to the environment and progress made in terms of food security, particularly for developing countries. There had also been benefits for manufacturing and industry. On the flip side, many potential adverse effects existed. Genetically modified organisms (GMOs) introduced into the environment sometimes out competed other natural organisms hence creating possible threats to biodiversity. There had been discussions surrounding the potential long-term impact of LMOs on human health. However, these were still largely unknown, she shared. In addition, there was the potential for the transfer of GMOs to natural organisms.

The global response was the introduction of the Cartagena Protocol on Biosafety, a supplementary Protocol to the Convention on Biological Diversity, and had been in effect since 2003 and was ratified by Jamaica in September 2012. The Protocol aimed to safeguard human health and the environment by regulating the use, handling, and the safe transfer of LMOs resulting from the use of modern biotechnology.

Ms Guthrie reported that as of June 2020 there were 173 parties to the Protocol, including Jamaica. The focus of the Cartagena Protocol, Ms Guthrie said, was the safe transboundary movement of LMOs that could have a negative impact on biodiversity and human health. She emphasised that it did not apply to transboundary movements of LMOs which were: pharmaceuticals for humans that were addressed by

other international agreements/organizations; in transit (Advanced Informed Agreement [AIA] procedure does not apply); or destined for contained use (subject to the AIA procedure does not apply).

Ms. Guthrie shared key provisions of Cartagena Protocol.

- Articles 7-10 addressed the AIA procedure which required export states to notify the import states about the movement of LMOs. The exporting state was required to notify the competent authority in the state of import regarding the planned movement of LMOs which were to be intentionally released into the environment. Within 90 days, the importing state had to acknowledge receipt of the notice in writing. Within 270 days, the importing state must advise the exporting state of its decision to approve or prohibit the import of the LMOs. If the importation was to be allowed, then any special conditions should be included. Timelines were rigorously enforced.
- Article 11 dealt with LMOs being exported to be used for food, feed or for processing and also observed a rigorous time schedule. Within 15 days of receiving notification from the exporting state, the importing state must advise the exporting state whether the import of the LMOs was being allowed. The decision to import was based on the importing state's domestic regulatory framework. If an importing country did not have a domestic regulatory framework (as in the case of Jamaica) the decision had to be taken in accordance with the risk assessment done by the importing state. Risk assessment procedures were available on the Biosafety Clearing House to Parties.
- Article 13 of the protocol addressed a simplified procedure through which Parties could advise others that they had no restrictions on or objections to the transboundary movement of LMOs. This could be done through the Biosafety Clearing House.
- Articles 15 and 16 outlined risk management and risk assessment procedures.
- Article 17 spoke to the unintentional release of LMOs into the environment and the emergency measures to be taken to contain any potential adverse effects. The concerned state was required to advise the Convention through the Biosafety Clearing House and to execute the emergency measures.
- Article 18 was related to the handling, transportation packaging and identification of LMOs being transported.
- Article 19 addressed the need for Parties to designate national authorities which would have responsibility to review applications for the importation of LMOs intended for release into the environment, LMOs intended for direct use as food, feed or processing, or LMOs destined for contained use. and give the necessary approvals. National authorities were also to be identified for the impact of LMOs on health. This article also looked at the designation of a national focal point – MHURECC – which was responsible for communicating with the Convention on Biological Diversity Secretariat on the country's implementation of the protocol at the national level.
- Article 20 spoke to the Biosafety Clearing House which facilitated information sharing on legislation, research, policies, administrative measures, risk assessments, and so on. She noted that Jamaica had access to the BCH and, thus, could find information on other countries research and export decisions in regard to LMOs.

Identification of Key Terms

Key Terms	
Biotechnology	Technological applications that use biological systems, living organisms, or derivatives thereof to make or modify products or processes for a specific use.
Modern biotechnology	The application of: ▪ In vitro nucleic acid techniques, including recombinant deoxyribonucleic acid (DNA) and direct injection of nucleic acid into cells; or ▪ Fusion of cells beyond its taxonomic family that overcome natural physiological reproductive or recombination barriers and that are not techniques used in traditional breeding and selection (article 3)
Biosafety	Represents efforts to reduce and eliminate the potential risks resulting from modern biotechnology and its products.
Living modified organism (LMO)	Any living organism that possesses a novel combination of genetic material obtained through modern biotechnology.

Context – Locally, Regionally and Internationally

Ms. Guthrie provided the background to biosafety in Jamaica. A National Biosafety Committee (NBC) was established under the Plants Quarantine Act in 1997, in response to a request the from the Biotechnology Centre, UWI, Mona. The request was for permission to import genetically modified Solo variety papaya *(Carica papaya)* for research purposes. There was no mechanism in place to address applications of this nature and thus the committee was formed. She explained that this committee was no longer operational. However, imported LMOs were widely used locally. For example, soy products, corn and canola related products were primarily derived from LMOs. The LMO seeds available on the domestic market were developed and owned by overseas agencies.

Under the new policy framework, the NBC would be reintroduced to move the country's biotechnology agenda forward.

In terms of CARICOM, a Working Group on Biosafety and Biotechnology, established by the Council on Trade and Economic Development (COTED) of CARICOM, was mandated to develop a regional Biotechnology/Biosafety Policy. The regional Biotechnology/Biosafety Policy was approved by COTED at its 71st meeting in 2017.

The development of regional and local biosafety frameworks was guided by several international agreements relating to biosafety to which Jamaica is a Party. These included the:

- Cartagena Protocol on Biosafety to the Convention on Biological Diversity
- International Plant Protection Convention
- International Treaty on Plant Genetic Resources for Food and Agriculture
- World Trade Organization Agreements (GATT, SPS, TBT, TRIPS)
- Codex Alimentarius
- World Organization for Animal Health (OIE).

Local policy documents which addressed biotechnology included:

- Biotechnology Policy for Economic and Social Development (draft)
- Science and Technology for Socio-economic Development: A Policy for Jamaica (revised draft)
- National Foreign Trade Policy: Positioning Jamaica to increase Foreign Trade, 2018
- Policies in the agricultural sector

Relevant legislation included the:

- Plants (Quarantine) Act, 1993
    - Plants (Importation) Control Regulations
- Animals (Diseases and Importation) Act, 1948
- Natural Resources and Conservation Act, 1991
- Protection of Plant Genetic Resources for Food and Agriculture Act, 2013 (amended 2019)
- Food and Drugs Act, 1975
- Pesticides Act, 1975
- National Commission on Science and Technology Act, 2007
- The Scientific Research Council Act, 1988.

Ms. Guthrie pointed out that, currently, Jamaica did not have a cohesive biosafety framework. Various entities carried out different responsibilities and many were not compliant with the protocol. The entire situation represented a lack of compliance with the Cartagena Protocol. In addition, there was insufficient knowledge among the public about biosafety and LMOs.

Prevailing Institutional Arrangements

Institution	Responsibility
Ministry of Agriculture and Fisheries (MOAF)	Conducts research in disease and drug resistant crops, transboundary movement of LMOs and risk assessment
Sugar Industry Research Institute (SIRI); Scientific Research Council (SRC), Jamaica Agricultural Commodities Research Authority (JACRA), Banana Board, Coconut industry Board, University of the West Indies (UWI), University of Technology (Utech), College of Agriculture, Science and Education (CASE)	Additional research institutions
Natural Conservation Resources Authority (NCRA)/ National Environment Planning Agency (NEPA)	Issues research permits and permits for the introduction of flora and fauna
Bureau of Standards (BSJ)	Regulates and monitors the application of standards to trade
MRE	CBD and Cartagena Protocol focal point
National Council on Science and Technology (NCST)	Advance national strategy and policy for science and technology
Institute of Jamaica (IOJ)	Biosafety Clearing House Focal point (BCH) (https://jamaicachm.org.jm/CHM/biosafety/)

Ministry of Health and Wellness (MOHW)	Pharmaceuticals, medical research
Jamaica Customs Agency (JCA)	Transboundary movement of LMOs
Consumer Affairs Commission (CAC)	Consumer awareness and protection
National Biosafety Committee (NBC)	Development of procedural guidelines for the importation of plant LMOs for experimentation.

Ms. Guthrie made the point that biotechnology was recognised as a billion-dollar industry and that Jamaica was poised for growth in this area. However, there were several issues to be addressed if the country were to successfully develop the potential it promised. She highlighted the threat to the island's rich biodiversity by factors such as: (i) unsustainable development and consumption, (ii) climate change; (iii) the introduction of alien species; (iv) absence of a national regulatory system for biosafety; (v) non-compliance with the Cartagena Protocol; (vi) a defunct National Biosafety Committee; (vii) the need for capacity building; and (viii) an uninformed public. She observed that the monitoring of LMOs was critical.

The Biosafety Policy Green Paper

Ms. Guthrie reported that the draft Policy had been approved by Cabinet as a green paper in the fourth quarter of the 2019 financial year and was tabled in Parliament in June of 2020. She shared that this was the second of two public consultations to be held in October. Feedback received would be used to improve the draft and the resulting white paper should be submitted to Parliament by January 2021. She shared the purpose, vision, goals, principles, and objectives of the Policy.

Purpose – To meet the country's legally-binding obligations under the Cartagena Protocol on Biosafety as well as to meet its needs as it seeks to benefit from the advantages of modern biotechnology, while taking into account potential risks to biodiversity, health and the environment.

Vision – "Jamaica has an enabling environment for the safe development and utilization of modern biotechnology, resulting in minimal risks to human health and biodiversity while providing benefits to health, agriculture and industry."

Goals

1. To manage the risks to human health, agriculture and biodiversity from the development, transboundary movement, handling and use of living modified organisms.
2. To facilitate the development of a national modern biotechnology sector in a safe and regulatory environment.

Principles

1. The Precautionary Approach (*Principle 15 of the Rio Declaration on Environment and Development)*
2. Primacy of public health and environment

3. An enabling environment for resource development
4. Shared and accessible benefits
5. Public awareness and participation
6. Effective access to judicial and administrative proceedings, including redress and remedy.

The Jamaican Biosafety Policy was focused, she said, on principle 1 – the precautionary approach – the main principle on which the Cartagena Protocol is based. This meant that lack of scientific certainty should not be used as an excuse for lack of action in pursuing biotechnology, but every measure should be implemented to protect human life and the environment.

Objectives

1. Ensure the effective regulation of the transboundary movement (import and export) of LMOs is in keeping with the relevant international rules and standards as well as the tents of the Cartagena Protocol on Biosafety
2. Ensure that the possible adverse effects of LMOs on human health and biodiversity are effectively mitigated and managed
3. Promote the development and utilization of the modern biotechnology at the national level that may provide financial benefits to the relevant sectors considering issues of biosafety
4. Establish standards for the safe handling, storage, transport and use of LMOs including packaging, labelling, documentation, disposal, and contingency procedures, in keeping with international labelling standards
5. Increase public education and awareness and information sharing on biosafety to facilitate effective implementation of the national biosafety regime
6. Increase the capacity of national institutions to implement and monitor a national framework for biosafety

Ms. Guthrie presented a schematic showing the proposed institutional framework which saw the ministry with responsibility for the environment (MRE), now MHURECC, as the lead ministry in the implementation of the Biosafety Policy. It would articulate policies in collaboration with the NBC; as well as to promulgate legislation relevant to the Policy.

Proposed Biosafety Institutional Framework

National Biosafety Committee (NBC)

- Handling issues related to LMOs
- Facilitating collaboration and communication among GOJ entities
- Reviewing and making recommendations on policy statements on biosafety and on biosafety legislation
- Approving certified list of risk assessors
- Collaborating with NEPA on public awareness and decision making on in the Biosafety Policy

Scientific Panel

- Advisory to the NBC
- Reviews and Approves risk assessment
- Recommends risk management measures
- Advises on biosafety measures

(Plant Quarantine Branch – Pest Risk Analysis Unit; Veterinary Services Division; Scientific Authority, National Commission on Science and Technology (NCST), Scientific Research Council (SRC), representative from private sector, academia and NGO community)

Implementing Ministries and Agencies (MRE, MRST, IOJ, Jamaica Customs Agency, BSJ

- Participate in the National Biosafety Committee (NBC)
- Conduct designated functions under the Biosafety Policy (and legislation)
- Report to NBC on progress and challenges
- Share information through the Biosafety Clearing House
- Integrate public education on biosafety in communications activities
- Train staff in relevant departments/divisions on the Biosafety Policy and related issues
- Build internal capacity to implement designated functions under the Biosafety Policy (and legislation

Ministry with Responsibility for Environment (MRE)	**National Environment and Planning Agency/NRCA**
Lead Ministry for the Biosafety Policy ▪ Articulates policy statements on biosafety in collaboration with the NBC ▪ Promulgates regulations under the primary environmental legislation **Focal Point – Cartagena Protocol on Biosafety** ▪ Liaison with Secretariat of Cartagena Protocol ▪ Submits national reports- Cartagena	▪ Biosafety registrar as required under the protocol ▪ Secretariat to the NBC Competent National Authority – Cartagena Protocol NRCA, NEPA, MRE, MOH

Ms. Guthrie said three competent authorities had been identified to assist in advancing the national biosafety framework. They would be responsible for reviewing applications related to LMOs intended for release into the environment which would be used for food, feed and processing, for contained use and that may have impacts on human health. NEPA had been identified as one of the competent authorities with responsibility for the development of the biosafety framework – to include a biosafety registrar – and act as secretariat to the NBC. The MOHW would assist with regulating any adverse effects on LMOs

on human health. The third was the MOAF which would review applications and make decisions re LMOs for use in the agricultural and aquaculture sectors.

Ms. Guthrie pointed to the National Biosafety Committee (NBC) which would have responsibility for handling issues related to LMOs, facilitating collaboration and communication among GOJ entities, reviewing and making recommendations on policy statements on biosafety and on biosafety legislation, approving certified list of risk assessors and collaborating with NEPA on public awareness and decision making on in the Biosafety Policy. A scientific panel was being recommended as a subset of the NBC to advise the NBC on protocols and regulation. Several bodies had been recommended for membership of the panel in the accompanying schematic.

She emphasized that there would be accommodation for the full participation of the private sector, academia, and the general public. She underscored the need to streamline the biosafety framework and to advance biosafety issues in Jamaica. Ms. Guthrie reiterated the Ministry's commitment to finalising the policy and input received from the discussion among the players on the ground would assist in ensuring the rigor of the policy.

DISCUSSION

Ms. Jackson asked participants to consider the question, "How can we make the Policy work for everybody". She said that the input of stakeholders was critical to ensure that the Policy had the benefit of the appropriate knowledge and experience. She reminded the group that the document had been distributed to libraries island wide and was also available online on the MHURECC website and that comments were being accepted by email up to October 30.

Adrian Watson asked if there was enforcement of limits on the importation of bee by-products that had introduced the American foulbrood disease into the beekeeping industry in 2005? The Apiculture Unit had not been included as beekeepers were not necessarily registered with RADA but were in fact required to do so.

Dr Wintorph Marsden, Veterinary Services Division noted that the Apiculture Unit at Bodles was responsible for the regulation of the honey, honey by-products, and bees imported into Jamaica. He advised that the Veterinary Services Risk Assessment Unit carried out risk assessment on diseases and anything that impacted food safety including residue testing and metal testing for imported honey by-products.

Gregory Pascoe asked about the funding of development of the technical skills required for the research as well as equipment needs for the government laboratories to properly safeguard the country.

Gillian Guthrie said that under the Policy there was a plan for the government to continue to support public laboratories. She noted that the Global Environment Facility (GEF) was the financial mechanism for the Convention on Biological Diversity and, by extension, was also the funding facility for the Cartagena Protocol on Biosafety. She advised that the Convention on Biological Diversity had a strategic plan for the implementation of the Cartagena Protocol and with their support Jamaica would build local capacity

within government laboratories. It would be a combination of government intervention and support from the GEF.

Patricia Lewin asked if GMOs and LMOs coming into the country would be labelled and was there any consideration in the policy for incentivizing the production GMOs and LMOs for industry/food in Jamaica. She asked about the role of the BSJ in this regard?

Gillian Guthrie said that the necessary standards would be put in place to identify, label and package LMOs. The movement of LMOs within the country and across borders would also be regulated, in compliance with the Cartagena Protocol. She explained that standard setting was not unique to Jamaica. Consequently, assistance would be sought through information available on the Biosafety Clearing House where the technical capacity did not exist in Jamaica. She added that there was a wealth of information on the BCH. Many of Jamaica's trading partners also had access to the BCH and it included decisions they had made in relation to identifying LMOs, location of LMOs, and the health and environmental effects of certain LMOs. That type of information would be used in identifying and packaging LMOs in accordance with internationally recognised standards. She acknowledged that education and capacity building would be required to get Jamaica to that level. The BSJ would also be called on to assist with standard setting.

Incentivising the production of GMOs and LMOs, particularly in relation to the agricultural and pharmaceutical sectors, would have to be discussed with the MOAF, MOHW and MIC. Research, she pointed out, had to be done within a regulatory framework.

Patricia Lewin asked if the GMOs already in the island (seeds, food, materials, papayas) would be grandfathered.

Gillian Guthrie noted that issues such as those would be dealt with by the NBC when it was re-established.

Dr. Wintorph Marsden advised that not all imported GMOs and LMOs would be labelled. The vaccines produced by recombinant DNA technologies would not all be labelled LMOs and GMOs.

Gillian Guthrie reiterated that the NBC would be critical to regulating and tracking various LMOs. There were LMOs on which relevant research had already been done to determine the impact on health and environment.

Joseph Small asked if the situational analysis had indicated the levels and types of LMOs in Jamaica? If yes, how and when would that information be shared with interested parties?

Gillian Guthrie said the draft Policy did not go into that level of detail. She said no registry yet existed for LMOs and no agency was tracking LMOs. The plan was for the establishment of a Biosafety Registry which would fall under the aegis of NEPA. Each regulatory agency would have to advise if they were aware of any LMOs and GMOs and any impact they might have had. There was, as yet, no central repository for that type of information.

Patricia Lewin asked whether the movement of GMOs was seen as an ethical issue in the drafting of the policy. In drafting relevant legislation extensive public education would be first required to present it for public consultation. Or was it being looked at solely as an economic and industrial issue?

Gillian Guthrie noted that the advantages of modern biotechnology were well known and accepted. Jamaica, she said, was not at this point trying to determine whether or not the country should engage in the biotechnology sector. It was already operating in Jamaica. The objective of the Policy was to streamline a system that would allow the identification, regulation and management of activities already being pursued. The intention was not to track all LMOs but to ensure access to full and accurate information on LMOs to be used for processing or as food or feed, and this could be gleaned online from various trading partners and the BCH which was online and open to the public and private sectors. The Policy was not discussing an ethical question but advocated the awareness of any potential risks associated with biotechnology. She emphasised that by ratifying the Cartagena Protocol on Biosafety, the Jamaican Government had recognised that this was something that Jamaica should be involved in and thus there were obligations to be observed. These obligations were in line with advancing economic sectors through biotechnology while also being mindful of any adverse effects on public health and the environment.

Gillian Guthrie noted that in developing the Policy, she would be interested in getting feedback from this group of stakeholders, particularly entities involved in the food and pharmaceutical industries regarding their concerns relating to the packaging, handling, transboundary movement, identification and labeling of LMOs that may be utilised in their operations. Any additional information that could be gleaned from these sectors would be useful in finetuning the document

Lori-Ann Harris asked what role the BSJ was expected to play? If the focus were on economic products, wouldn't the BSJ be key in this process?

Gillian Guthrie reported that the role of the BSJ had been fully outlined in the Policy document. The BSJ would be assisting in standard setting and responsibilities for labelling, packaging.

Suzanne Davies said that the BCH had a dedicated database space for each Party to the UN Convention to support data management and sharing. Training was provided on its use.

Gregory Pasco noted that one of the considerations for labelling would be for it to be in line with international guidelines and not to be substantially different.

Gillian Guthrie observed that standard setting was the purview of the BSJ and in so doing they would be consulting in the establishment of standards and would not be redoing what was already established. The private sector would also be consulted in the establishment of any standards.

Lori-Ann Harris observed that when the issue concerning tissue safety had been discussed, the BSJ did not want to release certain information based on responsibility to their parent ministry, for example, they did not release names of brands that did not meet their standards. This would be a concern in relation to GMOs.

Gillian Guthrie advised that she could not speak for BSJ, but there would be consultation with the private sector and the public after adequate public education. The government, while welcoming the advances that may be derived from biotechnology in supporting the economy but was equally committed to protecting human health and the environment from any adverse effects. The regulatory agencies were expected to have continuous dialogue with the private sector on issues related to biosafety. She said that while she could not address the issue of releasing names, she was certain that enough information would be provided to the public to allow them to make informed decisions.

CLOSING REMARKS

Ms. Joni Jackson thanked all participants for their time and contributions. The team benefitted from extremely valuable feedback. She reminded the meeting that comments were welcome up to 30 October 2020. The email address was policycomments@megjc.gov.jm. She requested participants to complete the survey attached. Ms. Jackson thanked all resource personnel, technical team and rapporteur.