# FIRST REGULAR NATIONAL REPORT ON THE IMPLEMENTATION OF THE CARTAGENA PROTOCOL ON BIOSAFETY

# Origin of report

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Date of submission:	
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Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report:

### **SUMMARY OF THE PROCESS:**

The first regular National Report on the implementation of the Cartagena Protocol on Biosafety was prepared by the team of experts from key competent authorities. Thereafter, the document was submitted to other sectors, government and non-government institutions for review and comments. The document was finalised by incorporating comments from stakeholders and peer reviewers. Finally, the document was submitted to the secretariat of the CBD.

The stakeholders consulted include:-

- Government ministries and institutions,
- Policy makers
- Academic and research institutions,
- Private sector,
- Non Government Organizations (NGOs),

The type of materials used in the preparation of the report relate to:-

- The Convention on Biological Diversity,(CBD)
- The Cartage Protocol on Biosafety
- Decisions of the Conference of the Parties to the Convention,
- 3<sup>rd</sup> National CBD report,
- Draft State of Environment Report,
- Country Study Report: Biosafety and Biotechnology,
- National policies, various pieces of legislation, strategies and action plans, programmes and project reports,
- National reports and Country studies.

This report has been prepared by the National team members who were selected from various sectors and institutions. The members were:-

- Dr. S. R. Mwinjaka, Senior Agricultural Research Officer (NBF-NPC)
- Dr. Emmarold Mneney, Biotechnologist,
- Dr. Nicholas Nyange, Chief Scientific Officer
- Mr Onesphory Kamkuru-Public Health Engineer,
- Mr. Thomas Bwana-Seniors Agricultural Officer.

The team undertook consultations with a wide range of stakeholder before submission of the report to the CBD Secretariat. The stakeholders consulted include:-

- Government ministries and institutions,
- Policy makers,
- Academic and research institutions,
- Private sector,
- Non Government Organizations (NGOs),
- Civil societies.

In addition this document was reviewed by the following sectors/institutions

- Ministry of Science, Technology and Higher Education,
- Sokoine University of Agriculture,
- University of Dar-es-salaam,
- Tanzania Food and Drugs Authority,
- National Environmental Management Council,
- Tropical Pesticide Research Institute
- Central Veterinary Laboratory
- Tanzania Food Nutrition Centre
- ENVIROCARE,
- Government Chemist Laboratory Agency
- Ifakara Medical Research
- National Institute for Medical Research
- Cabinet Secretariat Environment

#### **PREFACE**

The United Republic of Tanzania ratified the Cartagena Protocol on Biosafety to the Convention on Biological Diversity on 16<sup>th</sup> March 2003, whose objective is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements.

As a party to the Protocol, Tanzania is required to fulfill the obligation of reporting under Article 33 that requires the Parties to present reports to the Secretariat of the Convention on Biological Diversity on measures taken on the implementation of the Cartagena Protocol on Biosafety. This report will help Parties to review the extent to which they are successfully implementing the provisions of the Protocol and will assist the Conference of the Parties serving as the meeting of the Parties to the Protocol to assess the overall status on the implementation of the Convention. The report highlights the initiatives and strategies put in place to implement the Protocol during the reporting period. It also provides an account of achievements and constraints encountered during the implementation process.

The challenge in implementing the Protocol arises from limited capacity in terms of skilled human and financial resources, infrastructure as well as limited public awareness. The Government of the United Republic of Tanzania is committed to continue to invest and build the necessary capacity for effective and efficient implementation of the Protocol. Enactment and operationalization of the Environmental Management Act of 2004 paved the way for the establishment of a functional National Framework for Biosafety in the country. The Framework covers key elements that include national policies related to biosafety, regulatory regime, administrative and decision making, monitoring and public awareness and participation mechanisms. Tanzania has started to build capacity in risk assessment and management, detection of GMOs, enforcement of the regulatory regime and public awareness.

We are grateful to the Global Environmental Facility (GEF) through the United Nations Environment Programme (UNEP) for providing financial and technical support. We look forward for a continued fruitful collaboration.

### Hon. Prof. Mark. J. Mwandosya (MP)

Minister of State (Environment) Vice President's Office

### **ACKNOWLEDGEMENT**

The successful of this first regular national report on the implementation of the Cartagena Protocol on Biosafety is the result of joint efforts of several experts and institutions that deserve a vote of appreciation. Due to space limitation we cannot refer to all of them. However, we assure all of them of our heartfelt appreciation and that we value their continued cooperation and support.

We would like to express our gratitude to the governmental ministries, institutions, civil society and individuals who were involved in completing the questionnaires that formed the basis of this first regular national report on the implementation of the Cartagena Protocol. We are indebted to all institutions that sent their representatives to the technical retreat that took a considerable time to provide additional information in completing the questionnaires.

We are grateful to the Director of Environment, Vice President's Office, Mr. E.K. Mugurusi, for the many roles he played as Designated National Executing Agency Officer and his contribution to this first regular report.

Gratitude is equally due to the team of experts that compiled and edited the report for their commendable effort and input towards completion of the report. The team comprises Dr. E. Mneney (MARI), Ministry of Agriculture, Food Security and Cooperative, Dr. N. nyange (COSTECH), Dr. D. Issa (SRI- Kibaha), Dr. S.R. Mwinjaka, National Project Coordinator, Mr. T Bwana, Mr. O.M. Kamukuru, all from Vice President's Office.

Last but not least we are grateful to UNEP/GEF for funding the implementation phase of National Biosafety Framework for Tanzania.

### Ruth Mollel

Permanent Secretary Vice President's Office

### **ACRONYMS**

ABSAC Agricultural Biotechnology Steering and Advisory Committee

ASARECA Association for Strengthening Agricultural Research in Eastern and Central Africa

AU African Union

BCH Biosafety Clearing House

BioEARN East African Regional Programme and Research Network for Biotechnology, Biosafety

and Biotechnology Policy Development

CBD Convention on Biological Diversity

CHM Clearing-House Mechanism

COP Conference of the Parties

COSTECH Commission for Science and Technology

DoE Division of Environment

EMA Environment Management Act (2004)

FAO Food and Agriculture Organisation

GEF Global Environmental Facility

GENØK Norwegian Institute of Gene Ecology

GMOs Genetically Modified Organisms

IPBO Institute Plant Biotechnology for Developing Countries

LMOs Living Modified Organism

NA Not Applicable

NBAC National Biotechnology Advisory Committee

NBC National Biosafety Committee

nBCH National Biosafety Clearing Mechanism

NBF National Biosafety Framework NGOs Non Government Organizations

PBS Program for Biosaferty Syastems

SADC Southern Africa Development Cooperation

SUA Sokoine University of Agriculture

UDSM University of Dar Es Salaam

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

URT United Republic of Tanzania

VPO Vice President's Office

1. Several articles of the Protocol require that information be provided to the Biosafety Clearing-House (see the list below). For your Government, if there are cases where relevant information exists but has not been provided to the Biosafety Clearing-House (BCH), describe any obstacles or impediments encountered regarding provision of that information (note: To answer this question, please check the BCH to determine the current status of your country's information submissions relative to the list of required information below. If you do not have access to the BCH, contact the Secretariat for a summary):

#### Status

- The united Republic of Tanzania has relevant information but not yet provided to the national BCH,
- Currently we are in the process of finalizing the national BCH and building capacity for effective operationalization of the national BCH.

### **Impediments**

• To date wee are not linked to the central portal,

Untimely release of project funds.

2. Please provide an overview of information that is required to be provided to the Biosafety Clearing-House:

Type of information	Information	Information	Information
	exists and is	exists but is not	does not exist
	being provided to	yet provided to	/not
	the Biosafety	the Biosafety	applicable
	Clearing-House	Clearing-House	
a) Existing national legislation, regulations and guidelines for implementing the Protocol, as well as information required by Parties for the advance informed agreement procedure (Article 20.3(a))		X	
b) National laws, regulations and guidelines applicable to the import of LMOs intended for direct use as food or feed, or for processing (Article 11.5);		X	
c) Bilateral, multilateral and regional agreements and arrangements (Articles 14.2, 20.3(b), and 24.1);		X	
d) Contact details for competent national authorities (Articles 19.2 and 19.3), national focal points (Articles 19.1 and 19.3), and emergency contacts (Article 17.2 and 17.3(e));	X	X	
e) In cases of multiple competent national authorities, responsibilities for each (Articles 19.2 and 19.3);		X	

f) Reports submitted by the Parties on the operation of the Protocol (Article 20.3(e));		X	
g) Occurrence of unintentional transboundary movements that are likely to have significant adverse effects on biological diversity (Article 17.1);			X
Type of information	Information exists and is being provided to the Biosafety Clearing-House	Information exists but is not yet provided to the Biosafety Clearing-House	Information does not exist /not applicable
h) Illegal transboundary movements of LMOs (Article 25.3);			X
i) Final decisions regarding the importation or release of LMOs (i.e. approval or prohibition, any conditions, requests for further information, extensions granted, reasons for decision) (Articles 10.3 and 20.3(d));			X
j) Information on the application of domestic regulations to specific imports of LMOs (Article 14.4);			X
k) Final decisions regarding the domestic use of LMOs that may be subject to transboundary movement for direct use as food or feed, or for processing (Article 11.1);			X
l) Final decisions regarding the import of LMOs intended for direct use as food or feed, or for processing that are taken under domestic regulatory frameworks (Article 11.4) or in accordance with annex III (Article 11.6) (requirement of Article 20.3(d))			X
m) Declarations regarding the framework to be used for LMOs intended for direct use as food or feed, or for processing (Article 11.6)			X
n) Review and change of decisions regarding intentional transboundary movements of LMOs (Article 12.1);			X
o) LMOs granted exemption status by each Party (Article 13.1)			X
p) Cases where intentional transboundary movement may take place at the same time as the movement is notified to the Party of import (Article 13.1);			X

q) Summaries of risk assessments or environmental reviews of LMOs generated by regulatory processes and relevant information		X
regarding products thereof (Article 20.3(c)).		

# *Article 2 – General provisions*

3. Has your country introduced the necessary legal, administrative and other measures for implementation of the Protocol? (Article 2.1)	
a) full domestic regulatory framework in place (please give details below)	X
b) some measures introduced (please give details below)	
c) no measures yet taken	

4. Please provide further details about your response to the above question, as well as description of your country's experiences and progress in implementing Article 2, including any obstacles or impediments encountered:

# **Progress**

- Legal instruments are in place (EMA,2004, National Biosafety Guidelines, National Biosafety Framework and Draft Biosafety Regulation which are is in the final stage),
- Legal, administrative and decision making structure for implementation of the Protocol is in place, as indicated below
- Stakeholders' participation in the development and implementation of National Biosafety Framework was promoted.
- .Mechanism for public awareness, education, and participation were identified. (e.g. Mass media using radio, television, newspapers, posters leaflets etc)

To see a flow chart of the Administrative Structure and Decision Mechanisms for Importing and Exporting of Genetically Modified Organisms (GMOs) – see original report posted at

# **Impediments**

- Low level of public awareness
- The country is under equipped in terms of capacity building (Human and physical infrastructure)
- Untimely release of project funds

Articles 7 to 10 and 12: The advance informed agreement procedure

See question 1 regarding provision of information to the Biosafety Clearing-House.

5.	Were you a Party of import during this reporting period?	
	a) yes	
	b) no	X
6.	Were you a Party of export during this reporting period?	
	a) yes	
	b) no	X

7. Is there a legal requirement for the accuracy of information provided by exporters 1/ under the jurisdiction of your country? (Article 8.2)		
a) yes	X	
b) not yet, but under development		
c) no		
d) not applicable – not a Party of export		
8. If you were a Party of export during this reporting period, did you request any Par review a decision it had made under Article 10 on the grounds specified in Article 12.		
a) yes (please give details below)		
b) not yet, but under development		
c) no		
d) not applicable – not a Party of export	X	
9. Did your country take decisions regarding import under domestic regulatory frame by Article 9.2(c).	eworks as allowed	
a) yes		
b) no		
c) not applicable – no decisions taken during the reporting period	X	
10. If your country has been a Party of export of LMOs intended for release into the environment during the reporting period, please describe your experiences and progress in implementing Articles 7 to 10 and 12, including any obstacles or impediments encountered:		
N/A		
11. If your country has taken decisions on import of LMOs intended for release into the environment during the reporting period, please describe your experiences and progress in implementing Articles 7 to 10 and 12, including any obstacles or impediments encountered:		
N/A		
Article 11 – Procedure for living modified organisms intended for direct use as food or feed, or for processing		

See question 1 regarding provision of information to the Biosafety Clearing-House.

12. Is there a legal requirement for the accuracy of information provided by the applicant with respect to the domestic use of a living modified organism that may be subject to transboundary movement for direct use as food or feed, or for processing? (Article 11.2)	
a) yes	X
b) not yet, but under development	
c) no	
d) not applicable (please give details below)	

<sup>1/</sup> The use of terms in the questions follows the meanings accorded to them under Article 3 of the Protocol.

13. Has your country indicated its needs for financial and technical assistance and capacity-building in respect of living modified organisms intended for direct use as food or feed, or for processing? (Article 11.9)		
a) yes (please give details below)		
b) no	X	
c) not relevant		
14. Did your country take decisions regarding import under domestic regulatory frameworks as allowed by Article 11.4?		
a) yes		
b) no		
c) not applicable – no decisions taken during the reporting period	X	
15. If your country has been a Party of export of LMOs intended for direct use for food or feed, or for processing, during the reporting period, please describe your experiences and progress in implementing Article 11, including any obstacles or impediments encountered:		
N/A		
16. If your country has been a Party of import of LMOs intended for direct use for food or feed, or for processing, during the reporting period, please describe your experiences and progress in implementing Article 11, including any obstacles or impediments encountered:		
N/A	<u> </u>	

# Article 13 – Simplified procedure

See question 1 regarding provision of information to the Biosafety Clearing-House.

17. Have you applied the simplified procedure during the reporting period?	
a) yes	
b) no	X
18. If your country has used the simplified procedure during the reporting period, or if you have been unable to do so for some reason, please describe your experiences in implementing Article 13, including any obstacles or impediments encountered:	
N/A	

Article 14 – Bilateral, regional and multilateral agreements and arrangements See question 1 regarding provision of information to the Biosafety Clearing-House.

19. Has your country entered into any bilateral, regional or multilateral agreements or arrangements?	
a) yes	X
b) no	
20. If your country has entered into bilateral, regional or multilateral agreements or are you have been unable to do so for some reason, describe your experiences in implement during the reporting period, including any obstacles or impediments encountered:	

SADC has provided guideline for handling transboundary movement of food aid. The guideline requires exporters to mill grain before transported to the final destination and prior informed consent from transit

country.

# Articles 15 and 16 – Risk assessment and risk management

21. If you were a Party of import during this reporting period, were risk assessments of decisions taken under Article 10? (Article 15.2)	carried out for all
a) yes	
b) no (please clarify below)	
c) not a Party of import / no decisions taken under Article 10	X
22. If yes to question 21, did you require the exporter to carry out the risk assessment	?
a) yes – in all cases	
b) yes – in some cases (please specify the number and give further details below)	
c) no	
d) not a Party of import / no decisions taken under Article 10	X
23. If you took a decision under Article 10 during the reporting period, did you requir bear the cost of the risk assessment? (Article 15.3)	e the notifier to
a) yes – in all cases	
b) yes – in some cases (please specify the number and give further details below)	
c) no	
d) not a Party of import / no decisions taken under Article 10	X
24. Has your country established and maintained appropriate mechanisms, measures a regulate, manage and control risks identified in the risk assessment provisions of the P 16.1)	
a) yes – fully established	X
b) not yet, but under development or partially established (please give further details below)	
c) no	
25. Has your country adopted appropriate measures to prevent unintentional transbour of living modified organisms? (Article 16.3)	ndary movements
a) yes – fully adopted	X
b) not yet, but under development or partially adopted (please give further details below)	
c) no	
26. Does your country endeavour to ensure that any living modified organism, whether locally developed, undergoes an appropriate period of observation commensurate with generation time before it is put to its intended use? (Article 16.4)	
a) yes – in all cases	X

b) yes – in some cases (please give further details below)	
c) no (please give further details below)	
d) not applicable (please give further details below)	
27. Has your country cooperated with others for the purposes specified in Article 16.5	5?
a) yes (please give further details below)	X
b) no (please give further details below)	
28. Please provide further details about your responses to the above questions, as well your country's experiences and progress in implementing Articles 15 and 16, including impediments encountered:	
The country has no practical experience of handling LMOs. However, Tanzania in regional and international initiatives* has trained experts on risk assessment and mana confined field trials and LMO detection.	
*FAO, BioEARN, PBS, ASARECA, AU, UNEP/GEF,ICGEB, GENØK, IPBO	
Article 17 – Unintentional transboundary movements and emergency me	easures
See question 1 regarding provision of information to the Biosafety Clearing-House.	
29. During the reporting period, if there were any occurrences under your jurisdiction have led, to an unintentional transboundary movement of a living modified organism have had, significant adverse effects on the conservation and sustainable use of biolog taking also into account risks to human health in such States, did you immediately conpotentially affected States for the purposes specified in Article 17.4?	that had, or could gical diversity,
a) yes – all relevant States immediately	
b) yes – partially consulted, or consultations were delayed (please clarify below)	
c) no – did not consult immediately (please clarify below)	
d) not applicable (no such occurrences)	X
30. Please provide further details about your response to the above question, as well as description of your country's experiences in implementing Article 17, including any obstacles or impediments encountered:	
N/A	
Article 18 – Handling, transport, packaging and identification	
31. Has your country taken measures to require that living modified organisms that are transboundary movement within the scope of the Protocol are handled, packaged and conditions of safety, taking into account relevant international rules and standards? (A	transported under
a) yes (please give details below)	X
b) not yet, but under development	
c) no	
d) not applicable (please clarify below)	

32. Has your country taken measures to require that documentation accompanying liver organisms for direct use as food or feed, or for processing, clearly identifies that they modified organisms and are not intended for intentional introduction into the environmentation of the information? (Article 18.2(a))	'may contain' living
a) yes	X
b) not yet, but under development	
c) no	
33. Has your country taken measures to require that documentation accompanying living modified organisms that are destined for contained use clearly identifies them as living modified organisms and specifies any requirements for the safe handling, storage, transport and use, the contact point for further information, including the name and address of the individual and institution to whom the living modified organisms are consigned? (Article 18.2(b))	
a) yes	X
b) not yet, but under development	
c) no	
34. Has your country adopted measures to require that documentation accompanying living modified organisms that are intended for intentional introduction into the environment of the Party of import and any other living modified organisms within the scope of the Protocol, clearly identifies them as living modified organisms; specifies the identity and relevant traits and/or characteristics, any requirements for the safe handling, storage, transport and use, the contact point for further information and, as appropriate, the name and address of the importer and exporter; and contains a declaration that the movement is in conformity with the requirements of this Protocol applicable to the exporter? (Article 18.2(c))	
a) yes	X
b) not yet, but under development	
c) no	
35. Please provide further details about your responses to the above questions, as well	as a description of

35. Please provide further details about your responses to the above questions, as well as a description of your country's experiences and progress in implementing Article 18, including any obstacles or impediments encountered:

Tanzania has no practical experience on handling, transporting and identification of GMOs

Article 19 – Competent national authorities and national focal points
See question 1 regarding provision of information to the Biosafety Clearing-House.

Article 20 – Information-sharing and the Biosafety Clearing-House

See question 1 regarding provision of information to the Biosafety Clearing-House.

36. In addition to the response to question 1, please describe any further details regarding your country's experiences and progress in implementing Article 20, including any obstacles or impediments encountered:

### **Progress:**

In implementing Article 20, of the Cartagena Protocol, the United Republic Tanzania has done the following.

• Two training of trainers workshops on BCH, involving about 50 representatives from Competent

Authorities were conducted, and

• National BCH (NBCH) website was established: URL <a href="http://www.vpodoe.go.tz/bch/">http://www.vpodoe.go.tz/bch/</a> However, NBCH is not yet to be finalized (not operational)

# **Impediments**:

- Insufficient facilities (Computers and internet connectivity among Competent Authorities) have limited the process of sharing and updating of country information on the national BCH.
- The NBCH is not yet connected to the central portal for accessibility

# Article 21 – Confidential information

Article 21 – Confidential information	
37. Does your country have procedures to protect confidential information received under the Protocol and that protect the confidentiality of such information in a manner no less favourable than its treatment of confidential information in connection with domestically produced living modified organisms? (Article 21.3)	
a) yes	X
b) not yet, but under development	
c) no	
38. If you were a Party of import during this reporting period, did you permit any notifier to identify information submitted under the procedures of the Protocol or required by the Party of import as part of the advance informed agreement procedure that was to be treated as confidential? (Article 21.1)	
a) yes	
If yes, please give number of cases	
b) no	
c) not applicable – not a Party of import / no such requests received	X
39. If you answered yes to the previous question, please provide information on your experience including description of any impediments or difficulties encountered:	
N/A	
40. If you were a Party of export during this reporting period, please describe any impediments or difficulties encountered by you, or by exporters under your jurisdiction if information is available, in the implementation of the requirements of Article 21:	
N/A	

# Article 22 - Capacity-building

41. If a developed country Party, during this reporting period has your country cooperated in the development and/or strengthening of human resources and institutional capacities in biosafety for the purposes of the effective implementation of the Protocol in developing country Parties, in particular the least developed and small island developing States among them, and in Parties with economies in transition?	
a) yes (please give details below)	
b) no	

c) not applicable – not a developed country Party	X
42. If yes to question 41, how has such cooperation taken place:	
N/A	
43. If a developing country Party, or Party with an economy in transition, during this reporting period has your country contributed to the development and/or strengthening of human resources and institutional capacities in biosafety for the purposes of the effective implementation of the Protocol in another developing country Party or Party with an economy in transition?	
a) yes (please give details below)	X
b) no	
c) not applicable – not a developing country Party	
44. If yes to question 43, how has such cooperation taken place:	
<ul> <li>The United Republic of Tanzania provided technical assistance in the development of National Biosafety guidelines and framework for some developing countries such as Rwanda, Swaziland, Liberia and Eritrea.</li> </ul>	
<ul> <li>Sharing of experience during establishment of NBFs in the SADC, East Africa region</li> </ul>	a and ASARECA
45. If a developing country Party or a Party with an economy in transition, have you benefited from cooperation for technical and scientific training in the proper and safe management of biotechnology to the extent that it is required for biosafety?	
a) yes – capacity-building needs fully met (please give details below)	
b) yes – capacity-building needs partially met (please give details below)	X
c) no – capacity-building needs remain unmet (please give details below)	
d) no – we have no unmet capacity-building needs in this area	
e) not applicable – not a developing country Party or a Party with an economy in transition	
46. If a developing country Party or a Party with an economy in transition, have you be cooperation for technical and scientific training in the use of risk assessment and risk a biosafety?	
a) yes – capacity-building needs fully met (please give details below)	
b) yes – capacity-building needs partially met (please give details below)	X
c) no – capacity-building needs remain unmet (please give details below)	
d) no – we have no unmet capacity-building needs in this area	
e) not applicable – not a developing country Party or a Party with an economy in transition	
47. If a developing country Party or a Party with an economy in transition, have you be cooperation for technical and scientific training for enhancement of technological and capacities in biosafety?	
a) ves – canacity-building needs fully met (please give details below)	

b) yes – capacity-building needs partially met (please give details below)	X
c) no – capacity-building needs remain unmet (please give details below)	
d) no – we have no unmet capacity-building needs in this area	
e) not applicable – not a developing country Party or a Party with an economy in transition	

48. Please provide further details about your responses to the above questions, as well as description of your country's experiences and progress in implementing Article 22, including any obstacles or impediments encountered:

# **Progress**

The University of Dar es Salaam and Sokoine University of Agriculture have introduced degree courses on Biotechnology and biosafety. In addition, specialized short term course on biosafety has been introduced at the University of Dar es Salaam. Also other institution such as Mikocheni Agricultural Research Institute is conducting short courses in collaboration with SUA, UDSM and FAO.

# **Impediments**

- Limited financial resources for implementation of capacity building programs
- Inadequate facilities to undertake training on Biotechnology

*Article 23 – Public awareness and participation* 

49. Does your country promote and facilitate public awareness, education and participation concerning the safe transfer, handling and use of living modified organisms in relation to the conservation and sustainable use of biological diversity, taking also into account risks to human health? (Article 23.1(a))	
a) yes – significant extent	X
b) yes – limited extent	
c) no	
50. If yes, do you cooperate with other States and international bodies?	
a) yes – significant extent	X
b) yes – limited extent	
c) no	
51. Does your country endeavour to ensure that public awareness and education encompass access to information on living modified organisms identified in accordance with the Protocol that may be imported? (Article 23.1(b))	
a) yes – fully	
b) yes – limited extent	X
c) no	
52. Does your country, in accordance with its respective laws and regulations, consult the public in the decision-making process regarding living modified organisms and make the results of such decisions available to the public? (Article 23.2)	
a) yes – fully	X

b) yes – limited extent	
c) no	
53. Has your country informed its public about the means of public access to the Biosa House? (Article 23.3)	fety Clearing-
a) yes – fully	
b) yes – limited extent	X
c) no	

54. Please provide further details about your responses to the above questions, as well as description of your country's experiences and progress in implementing Article 23, including any obstacles or impediments encountered:

### **Progress**

In implementing Article 23 concerning public awareness and participation, the URT has done the following:

- About ten, awareness raising workshops on biosafety has been conducted. The workshops targeted different groups of stakeholders (Policy and decision makers, researchers and academicians, farmers, civil society, consumers),
- About four Television programme on biotechnology and biosafety have been aired,
- Newspaper articles on biotechnology and biosafety issues,
- National website on BCH was established (Not operational),
- Establishment of multi-sectoral committees for decision making process(eg NBC, ABSAC, NBAC).

### **Impediments**

- Limited resource for country coverage on public awareness and participation in decision making,
- Most of the documents are in English, which is an obstacle to rural people.

Article 24 – Non-Parties

See question 1 regarding provision of information to the Biosafety Clearing-House.

55. Have there been any transboundary movements of living modified organisms betwand a non-Party during the reporting period?	veen your country
a) yes	
b) no	X
56. If there have been transboundary movements of living modified organisms between your country and a non-Party, please provide information on your experience, including description of any impediments or difficulties encountered:	
N/A	

Article 25 – Illegal transboundary movements

See question 1 regarding provision of information to the Biosafety Clearing-House.

57. Has your country adopted appropriate domestic measures to prevent and penalize, transboundary movements of living modified organisms carried out in contravention o measures? (Article 25.1)	
a) yes	X
b) no	
58. Have there been any illegal transboundary movements of living modified organism country during the reporting period?	ns into your
a) yes	
b) no	X
59. Please provide further details about your response to the above question, as well as your country's experiences in implementing Article 25, including any obstacles or impencountered:	
N/A	
Article 26 – Socio-economic considerations	
60. If during this reporting period your country has taken a decision on import, did it to socio-economic considerations arising from the impact of living modified organisms of and sustainable use of biological diversity, especially with regard to the value of biological indigenous and local communities? (Article 26.1)	n the conservation
a) yes – significant extent	
b) yes – limited extent	
c) no	
d) not a Party of import	X
61. Has your country cooperated with other Parties on research and information excha economic impacts of living modified organisms, especially on indigenous and local co (Article 26.2)	
a) yes – significant extent	
b) yes – limited extent	
c) no	X
62. Please provide further details about your responses to the above questions, as well your country's experiences and progress in implementing Article 26, including any obtaining impediments encountered:	
N/A	
Article 28 – Financial mechanism and resources	
63. Please indicate if, during the reporting period, your Government made financial re other Parties or received financial resources from other Parties or financial institutions of implementation of the Protocol.	
a) yes – made financial resources available to other Parties	
b) yes – received financial resources from other Parties or financial institutions	X
c) both	

### d) neither

64. Please provide further details about your response to the above question, as well as description of your country's experiences, including any obstacles or impediments encountered:

The country received funds to implement the following issues pertaining to the Protocol.

- Development and implementation of NBF (UNEP/GEF),
- Capacity building in risk assessment and management (FAO, AU, PBS, GENOK), and
- Public awareness (BioEARN, PBS, ASARECA, AU).

### **Comments**

There is a need for further financial and technical support for:-

- Human resource development on risk assessment, risk management, GMO detection, confined field trials,
- Public awareness and participation,
- Information sharing and networking,
- Monitoring and enforcement, and
- Physical infrastructure (Green houses, Laboratories and facilities).

# Other information

- 65. Please use this box to provide any other information related to articles of the Protocol, questions in the reporting format, or other issues related to national implementation of the Protocol:
  - Issues of liability and redress are not addressed in the reporting format,
  - There is a need for harmonising bilateral and regional agreements and arrangements in relation to the implementation of the Protocol e.g. transboundary movement of food aid in particular grains (refer question 20,)
  - Issues of pharmaceuticals are not covered in the reporting format,
  - Regarding pharmaceuticals, the Protocol should have a provision on the following:
    - LMOs which are not pharmaceuticals for humans (eg. LMOs that are intended for veterinary purposes),
    - LMOs which are intended to serve as raw material for the production of pharmaceuticals for humans, and
    - LMOs which are pharmaceuticals for humans but are not addressed by relevant international agreements or organizations.

### Comments on reporting format

The wording of these questions is based on the Articles of the Protocol. Please provide information on any difficulties that you have encountered in interpreting the wording of these questions:

- Many questions are too long e.g. questions 29, 34, 37, 41, 43. These should have been broken into two or more separate questions each addressing specific issue.
- Some questions are noncommittal e.g. questions 37, 41
- The numbering was not consistent e.g. questions 2, 41, 43, 45, 46, 47