

**Convention on  
Biological Diversity**

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**CONFERENCE OF THE PARTIES TO THE CONVENTION  
ON BIOLOGICAL DIVERSITY SERVING AS THE  
MEETING OF THE PARTIES TO THE CARTAGENA  
PROTOCOL ON BIOSAFETY**

Seventh meeting

Pyeongchang, Republic of Korea, 29 September - 3 October 2014

**REVIEW OF THE INFORMATION GATHERED THROUGH A DEDICATED SURVEY AND  
CORRESPONDING TO INDICATORS IN THE STRATEGIC PLAN**

**I. INTRODUCTION**

1. At its sixth meeting, the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety (COP-MOP), in its decision BS-V1/15, paragraph 3, requested the Executive Secretary to:

(a) Undertake a dedicated survey to gather information corresponding to indicators in the Strategic Plan that could not be obtained from the second national reports or through other existing mechanisms;

(b) Review the information gathered through the survey referred to in subparagraph (a) above and make the results available to the Parties before their seventh meeting.

2. The survey was intended to generate information necessary for addressing the gaps in the baseline referred to in paragraph 3 of the same decision and to facilitate measuring progress in the implementation of the Protocol.

3. Accordingly, on 27 May 2013, the Executive Secretary launched the survey through the Biosafety Clearing-House (BCH)<sup>1</sup> and, in the following months, collected responses from both National Focal Points for the Cartagena Protocol on Biosafety (CPB-NFPs) and Biosafety Clearing-House (BCH-NFPs).

4. The Executive Secretary initially gave a deadline of 15 July 2013<sup>2</sup> for the receipt of responses to the survey but in order to allow a maximum number of Parties to submit their responses, two extensions were announced with a final cut-off date of 15 October 2013. However due to the low level of participation in the survey, the Secretariat further engaged in direct correspondence with National Focal Points and extended the deadline for submission to the end of February 2014.

<sup>1</sup> The online survey is available at <https://bch.cbd.int/managementcentre/register/2ndNatRepAddendum.shtml>

<sup>2</sup> Notification 2013-042 of 2013-05-27 at <http://www.cbd.int/doc/notifications/2013/ntf-2013-042-bs-en.pdf>

5. In accordance with the COP-MOP decision above, the review of the information gathered from Parties through the survey is presented as below:

6. The complete set of data gathered through the dedicated survey is available on the Biosafety Clearing-House at <https://bch.cbd.int/database/reports/surveyonindicators.shtml>

## II. SUMMARY OF THE RESPONSES

7. As of 28 February 2014, the Secretariat had received survey responses from 109 of the 166 Parties to the Protocol, representing 66% of the Parties. The responses received were regionally distributed as follows:

- Africa: 32 reports (65% of the Parties in the region);
- Asia and the Pacific (AP): 24 reports (54% of the Parties in the region);
- Central and Eastern Europe (CEE): 15 reports (68% of the Parties in the region);
- Latin American and Caribbean Group (GRULAC): 21 reports (70% of the Parties in the region);
- Western European and other States Group (WEOG): 17 reports (81% of the Parties in the region).

8. Due to the significant differences in the level of implementation among Parties, and in particular the least developed and small island developing States among them, this summary, in addition to providing the breakdown of results at the regional level, also provides, where possible, the aggregated data of the following two groups:

- Least developed countries (LDCs): 20 reports (50% of the Parties in the LDC group) and
- Small island developing States (SIDS): 19 reports (61% of the Parties in the SIDS group).<sup>3</sup>

9. The first section of the survey format (Questions 1-2) addresses the contact details of the national reporting officer. The responses provided in this section of the report are not included in this document.

### ***Focal Area 1: Facilitating the establishment and further development of effective biosafety systems for the implementation of the Protocol (questions 3-18)***

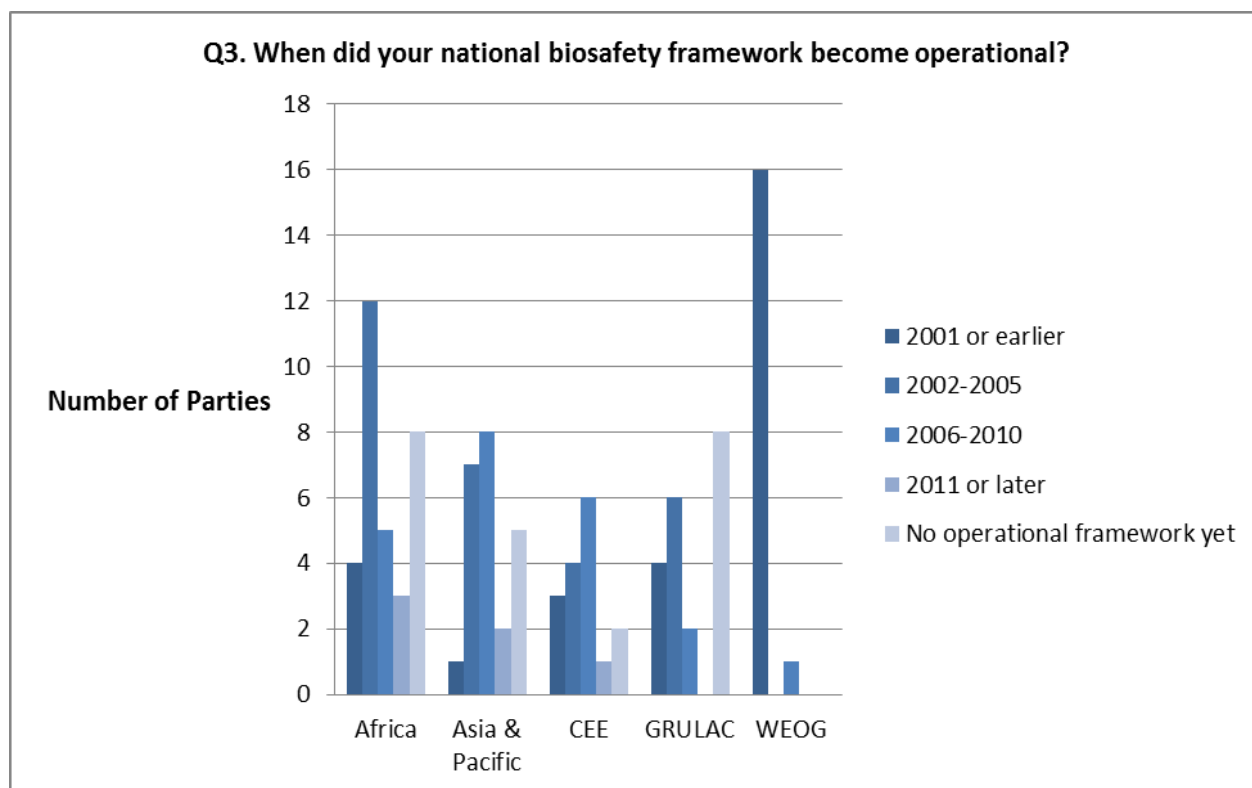
10. In *Question 3*, countries were asked when their national biosafety framework became operational (indicator 1.1.1). All 109 Parties answered this question as follows:

- 28 Parties (26% of the respondents) in 2001 or earlier;
- 30 Parties (28% of the respondents) between 2002 and 2005;
- 17 Parties (16% of the respondents) between 2003 and 2009;
- 11 Parties (10% of the respondents) between 2010 and 2013;
- 23 Parties (21% of the respondents) stated they have no operational framework yet.

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<sup>3</sup> The current list of LDCs includes 48 Member States of the United Nations (33 in Africa, 14 in Asia and the Pacific and one in the Caribbean), of which 40 are Parties to the Protocol. The current list of SIDS includes 38 States Members of the United Nations (6 in Africa, 16 in Asia and the Pacific and 16 in Latin America and the Caribbean) and 14 non-Members/associate members of the regional commissions, of which 31 are Parties to the Protocol. The two groups (LDCs and SIDS) have 10 States Members of the United Nations in common, of which five are Parties to the Protocol. More information about LDCs and SIDS is available on the website of the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLS) at <http://www.unohrlls.org/en/home/>.

Below is a breakdown of the results by region:



11. The percentages of respondents that reported not having an operational framework yet, are as follows: 7% of respondents from the Africa region (25% of the total respondents from the Africa region), 5% from Asia and the Pacific (21% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), and 7% in GRULAC (38% of the total respondents from the GRULAC region). Among economic groupings, 3% of respondents from LDCs (15% of the total respondents from the LDC group) and 8% of respondents from SIDS (47% of the total respondents from the SIDS group).

12. In each question, countries were also invited to provide further details on their response. With reference to the above question, 80 Parties provided comments and their answers varied widely. Some responding Parties reported not having a national biosafety framework (NBF), due to a lack of financial resources. Many Parties that reported having an NBF, but not yet one that has been implemented, stated that they had been participants in the UNEP-GEF NBF projects and that, to varying degrees, the passing of biosafety legislation is imminent. A number of Parties that were not part of the UNEP-GEF NBF projects, but do have an NBF, reported that their NBFs have been elaborated but are not yet operational due to lack of capacity. Other Parties, mostly from WEOG, reported having passed biosafety legislation many years ago and have created a comprehensive legal framework for ensuring safety in the development, use and transfer of LMOs. Some of these Parties elaborated more on the details of their biosafety legislation and regulations.

13. In *Question 4*, countries were asked how many biosafety short-term training programmes and/or academic courses are offered annually in their country (indicator 1.2.3). All 109 Parties answered this question as follows:

- 7 Parties (6% of the respondents): 10 per year or more
- 17 Parties (16% of the respondents): 5 per year or more
- 41 Parties (38% of the respondents): 1 per year or more

- 13 Parties (12% of the respondents): less than 1 per year
- 31 Parties (28% of the respondents): none

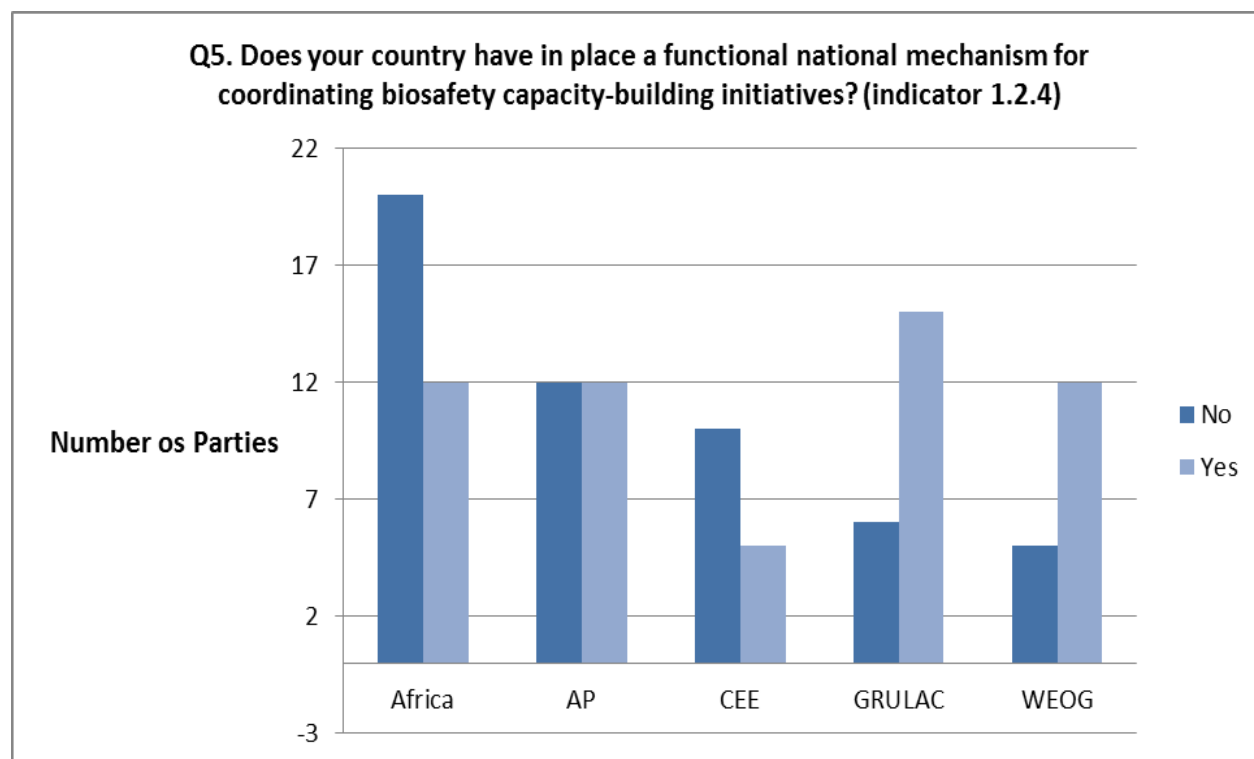
14. The percentages of respondents that reported not offering biosafety short-term training programmes and/or academic courses, are as follows: 13% of respondents from the Africa region (44% of the total respondents from the Africa region), 7% from Asia and the Pacific (33% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), 4% in GRULAC (19% of the total respondents from the GRULAC region) and 2% in WEOG (12% of the total respondents from the WEOG group). Among economic groupings, 7% of respondents from LDCs (40% of the total respondents from the LDC group) and 11% of respondents from SIDS (63% of the total respondents from the SIDS group).

15. With reference to the above question, 68 Parties provided some comments. Many Parties simply listed their short-term training programmes and/or academic courses. Some reported a lack of expertise and specialized labs for risk assessment and expressed the need to develop training in this area. Others reported the training undertaken through UNEP-GEF's BCH I and BCH II projects. While some Parties reported having no short-term training programmes and/or academic courses due to a lack of human resources and insufficient financial support, others, mostly from WEOG, reported having developed extensive facilities and training in biosafety. Parties that have academic programs often reported that biosafety is a component in another program (e.g. Molecular Biology) that offers courses in biosafety, gene technology, etc. Other Parties reported their experiences undertaking training at European institutions such as GenØk, the Joint Research Centre (JRC) of the European Commission, the International Centre for Genetic Engineering and Biotechnology (ICGEB), etc.

16. In *Question 5*, countries were asked whether they have in place a functional national mechanism for coordinating biosafety capacity-building initiatives (indicator 1.2.4). All 109 Parties answered this question as follows:

- 56 Parties (51% of the respondents): Yes
- 53 Parties (49% of the respondents): No

Below is a breakdown of the results by region:



17. The percentages of respondents that reported not having in place a functional national mechanism for coordinating biosafety capacity-building initiatives, are as follows: 18% of respondents from the Africa region (63% of the total respondents from the Africa region), 11% from Asia and the Pacific (50% of the total respondents from the AP region), 9% from CEE (67% of the total respondents from the CEE region), 6% in GRULAC (29% of the total respondents from the GRULAC region) and 5% in WEOG (29% of the total respondents from the WEOG group). Among economic groupings, 14% of respondents from LDCs (75% of the total respondents from the LDC group) and 10% of respondents from SIDS (58% of the total respondents from the SIDS group).

18. With reference to the above question, 62 Parties provided comments. Many Parties reported that National Focal Points (NFPs), often with Competent National Authorities (CNAs), are primarily responsible for coordinating biosafety capacity-building initiatives. The work of the NFPs and CNAs is sometimes supported with the help of coordinating government ministries (e.g. Ministry of the Environment, etc.) and agencies (e.g. National Biosafety Committee, National Biodiversity and Biosafety Center, National Biosafety Advisory Council, National Biotechnology Authority etc.). Some Parties noted that biosafety capacity-building initiatives be coordinated through UNEP-GEF's Project on Implementation of NBFs. Parties also referred to European institutions such as GenØk, the Joint Research Centre (JRC) of the European Commission, the International Centre for Genetic Engineering and Biotechnology (ICGEB), etc., as mechanisms for coordinating biosafety capacity-building initiatives.

19. In *Question 6*, countries were asked how much additional funding (in the equivalent of US dollars) they had mobilized in the last four years to support implementation of the Biosafety Protocol, beyond the regular national budgetary allocation (indicator 1.2.5). All 109 Parties answered this question as follows:

- 6 Parties (6% of the respondents): USD 1,000,000 or more
- 5 Parties (5% of the respondents): USD 500,000 or more
- 17 Parties (16% of the respondents): USD 100,000 or more

- 8 Parties (7% of the respondents): USD 50,000 or more
- 24 Parties (22% of the respondents): USD 5,000 or more
- 7 Parties (6% of the respondents): Less than USD 5,000
- 42 Parties (39% of the respondents): No funds mobilized

20. The percentages of respondents that reported not having mobilized funds in the last four years to support implementation of the Biosafety Protocol, beyond the regular national budgetary allocation, are as follows: 10% of respondents from the Africa region (34% of the total respondents from the Africa region), 8% from Asia and the Pacific (38% of the total respondents from the AP region), 9% from CEE (67% of the total respondents from the CEE region), 5% in GRULAC (24% of the total respondents from the GRULAC region) and 6% in WEOG (41% of the total respondents from the WEOG group). Among economic groupings, 7% of respondents from LDCs (40% of the total respondents from the LDC group) and 6% of respondents from SIDS (37% of the total respondents from the SIDS group).

21. With reference to the above question, 68 Parties provided some comments. Most Parties enumerated the sources of support. These include government ministries and agencies, customs agencies, support from the countries of developed countries to developing countries, UNEP-GEF's Project on Implementation of NBFs, the European Commission, UEMOA, the USDA, RAEIN Africa, CropLife, NEPAD/ABNE, CONACYT, and the budget allocated to Competent National Authorities.

22. In *Question 7*, countries were asked whether they have predictable and reliable funding for building capacity for the effective implementation of the Protocol (indicator 1.2.6). All 109 Parties answered this question as follows:

- 43 Parties (39% of the respondents): Yes
- 66 Parties (61% of the respondents): No

23. The percentages of respondents that reported not having predictable and reliable funding for building capacity for the effective implementation of the Protocol, are as follows: 23% of respondents from the Africa region (78% of the total respondents from the Africa region), 11% from Asia and the Pacific (50% of the total respondents from the AP region), 8% from CEE (60% of the total respondents from the CEE region), 12% in GRULAC (62% of the total respondents from the GRULAC region) and 6% in WEOG (41% of the total respondents from the WEOG group). Among economic groupings, 13% of respondents from LDCs (70% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

24. With reference to the above question, 55 Parties provided comments. Most Parties reported having predictable and reliable funding and indicated that the funding, the amount of which is highly variable, is allocated in the national budget. One Party stated that there is a legislative provision which "calls for the creation of a fund that collects resources to be invested in human capacity building, infrastructure for public institutions, research projects and other activities related to the safe use of modern biotechnology". Most developing country Parties indicated that they have no predictable and reliable funding. It was widely reported that, although *ad hoc* funding for various capacity building initiatives are sometimes received, once the initiatives are completed, support declines totally with the resultant loss of the capacity building momentum.

25. In *Question 8*, countries were asked how many LMO-related collaborative bilateral/multilateral arrangements they had established with other Parties/non-Parties (indicator 1.2.8). All 109 Parties answered this question as follows:

- 4 Parties (4% of the respondents): 10 or more
- 1 Parties (1% of the respondents): 5 or more
- 3 Parties (3% of the respondents): 3 or more
- 14 Parties (13% of the respondents): one or more
- 87 Parties (80% of the respondents): none

26. The percentages of respondents that reported not having predictable and reliable funding for building capacity for the effective implementation of the Protocol, are as follows: 24% of respondents from the Africa region (81% of the total respondents from the Africa region), 20% from Asia and the Pacific (92% of the total respondents from the AP region), 10% from CEE (73% of the total respondents from the CEE region), 17% in GRULAC (86% of the total respondents from the GRULAC region) and 9% in WEOG (59% of the total respondents from the WEOG group). Among economic groupings, 15% of respondents from LDCs (80% of the total respondents from the LDC group) and 17% of respondents from SIDS (95% of the total respondents from the SIDS group).

27. With reference to the above question, 30 Parties provided some comments. Many Parties reported having few or no LMO-related collaborative bilateral/multilateral arrangements. However, some Parties reported using existing trade agreements in cases where there are issues involving LMOs. Some Parties also reported having these arrangements with European countries and their institutions. In Africa there was limited collaboration with the only example the UEMOA initiative.

28. In *Question 9*, countries were asked whether they had adopted or used any guidance documents for the purpose of conducting risk assessment and/or risk management (indicator 1.3.1.1). All 109 Parties answered this question on risk assessment and 108 on risk management. The breakdown of the responses is as follows:

Risk assessment:

- 63 Parties (58% of the respondents): Yes
- 46 Parties (42% of the respondents): No

Risk management:

- 55 Parties (51% of the respondents): Yes
- 53 Parties (49% of the respondents): No

29. The percentages of respondents that reported not having adopted or used any guidance documents for the purpose of conducting risk assessment, are as follows: 19% of respondents from the Africa region (66% of the total respondents from the Africa region), 8% from Asia and the Pacific (38% of the total respondents from the AP region), 4% from CEE (27% of the total respondents from the CEE region), and 11% in GRULAC (57% of the total respondents from the GRULAC region). Among economic groupings, 12% of respondents from LDCs (65% of the total respondents from the LDC group) and 14% of respondents from SIDS (79% of the total respondents from the SIDS group).

30. With reference to the above question, 64 Parties provided comments. Many Parties reported that the Guidance on Risk Assessment of Living Modified Organisms developed through the CBD's "Open-ended Online Forum" and the Ad Hoc Technical Expert Group (AHTEG) is used as the guiding document for the risk assessment of LMOs and their products. Parties from the EU reported adopting and using the guidance documents for risk assessment and management as set out in EU Directives. Other Parties reported setting their own guidance for risk assessment and risk management, typically based on other national and international standards. Some African Parties made reference to a common manual of risk assessment and management methodologies elaborated by the UEMOA biosafety regional programme.

31. In *Question 10*, countries were asked whether they had adopted or used any guidance documents for the purpose of evaluating risk assessment reports submitted by notifiers (indicator 1.3.1.2). All 109 Parties answered this question as follows:

- 51 Parties (47% of the respondents): Yes
- 58 Parties (53% of the respondents): No

32. The percentages of respondents that reported not having adopted or used any guidance documents for the purpose of evaluating risk assessment reports submitted by notifiers, are as follows: 21% of respondents from the Africa region (72% of the total respondents from the Africa region), 12% from Asia and the Pacific (54% of the total respondents from the AP region), 5% from CEE (33% of the total

respondents from the CEE region), 15% in GRULAC (76% of the total respondents from the GRULAC region), and 1% in WEOG (6% of the total respondents from the WEOG region). Among economic groupings, 14% of respondents from LDCs (75% of the total respondents from the LDC group) and 17% of respondents from SIDS (100% of the total respondents from the SIDS group).

33. With reference to the above question, 59 Parties provided comments. Only EU Parties reported using guidance documents for the purpose of evaluating risk assessment reports submitted by notifiers. The guidance documents for risk assessment, as set out in EU Directives, were used.

34. In *Question 11*, countries were asked whether they had adopted any common approaches to risk assessment with other countries (indicator 1.3.2). All 109 Parties answered this question as follows:

- 40 Parties (37% of the respondents): Yes
- 69 Parties (63% of the respondents): No

35. The percentages of respondents that reported not having adopted any common approaches to risk assessment with other countries, are as follows: 23% of respondents from the Africa region (78% of the total respondents from the Africa region), 17% from Asia and the Pacific (75% of the total respondents from the AP region), 5% from CEE (33% of the total respondents from the CEE region), 16% in GRULAC (81% of the total respondents from the GRULAC region), and 4% in WEOG (24% of the total respondents from the WEOG region). Among economic groupings, 10% of respondents from LDCs (55% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

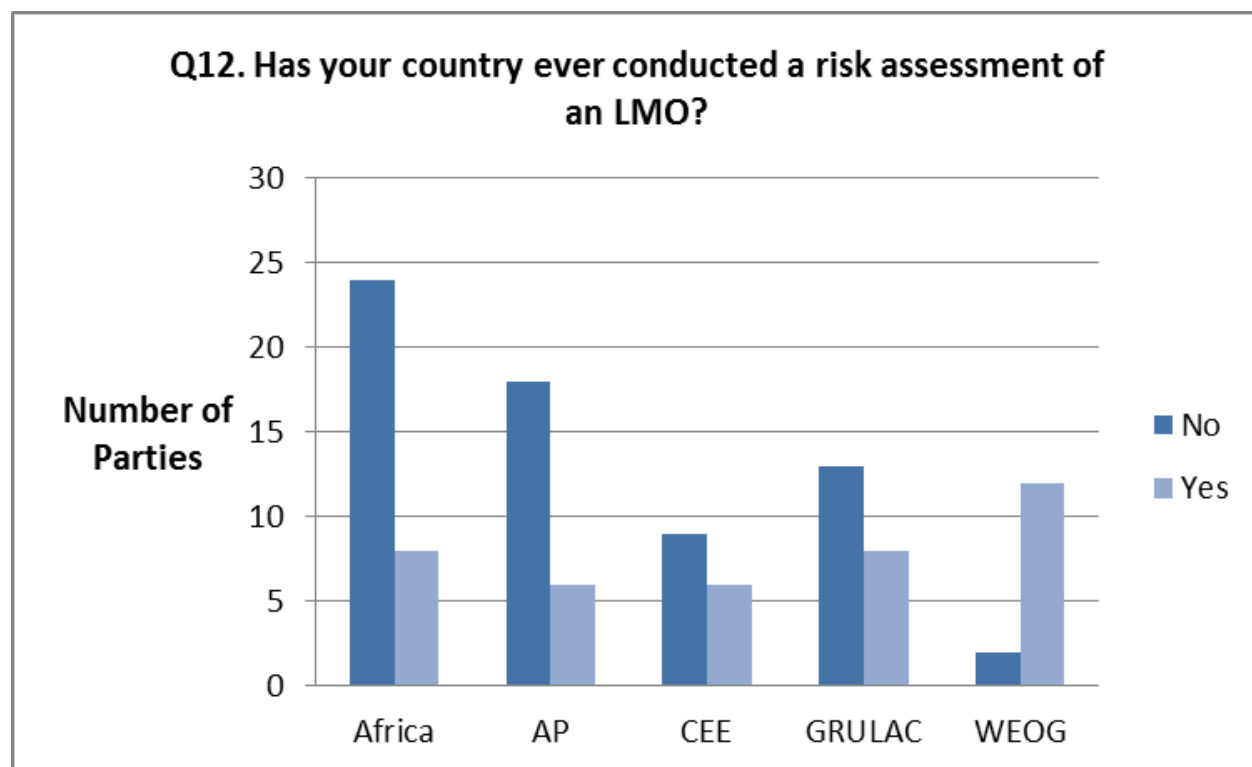
36. With reference to the above question, 45 Parties provided some comments. One Party from Africa reported that “in principle, the African Model Law approach is largely considered”. Another reported that COMESA member states adopted, in Addis Ababa, a common approach to risk assessment. A third reported “In the WAEMU, a sub-regional assessment and risk management manual is being developed. Its adoption will be from the incorporation of amendments from other countries of ECOWAS”. It was also reported that there is a common manual of risk assessment and management methodologies elaborated by UEMOA biosafety regional programme. A number of EU Parties reported being partners in the discussions under the FAO’s Codex Alimentarius and the Organization for Economic Co-operation Development (OECD).

37. In *Question 12*, countries were asked whether they had ever conducted a risk assessment of an LMO (indicator 1.3.3). All 109 Parties answered this question as follows:

- 43 Parties (39% of the respondents): Yes
- 66 Parties (61% of the respondents): No



Below is a breakdown of the results by region:



38. The percentages of respondents that reported not having ever conducted a risk assessment of an LMO, are as follows: 22% of respondents from the Africa region (75% of the total respondents from the Africa region), 17% from Asia and the Pacific (75% of the total respondents from the AP region), 8% from CEE (60% of the total respondents from the CEE region), 12% in GRULAC (62% of the total respondents from the GRULAC region), and 2% in WEOG (12% of the total respondents from the WEOG region). Among economic groupings, 15% of respondents from LDCs (80% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

39. With reference to the above question, 52 Parties provided some comments. Approximately half of the responding Parties reported that they had not conducted a risk assessment of an LMO. Many reported that the risk assessments were conducted in the context of field trials. A number of predominantly WEOG Parties reported that they had conducted risk assessments in the context of the importation of LMOs.

40. In *Question 13*, countries were asked whether they have the capacity to identify, assess and/or monitor living modified organisms or specific traits that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health (indicator 1.4.2). All 109 Parties answered this question as follows:

Identify:

77 Parties (71% of the respondents): Yes

32 Parties (29% of the respondents): No

Assess:

67 Parties (61% of the respondents): Yes

42 Parties (39% of the respondents): No

Monitor:

62 Parties (57% of the respondents): Yes

47 Parties (43% of the respondents): No

*All the above:*

*58 Parties (53% of the respondents): Yes to all three questions*

*24 Parties (22% of the respondents): mixed responses*

*27 Parties (25% of the respondents): No to all three questions*

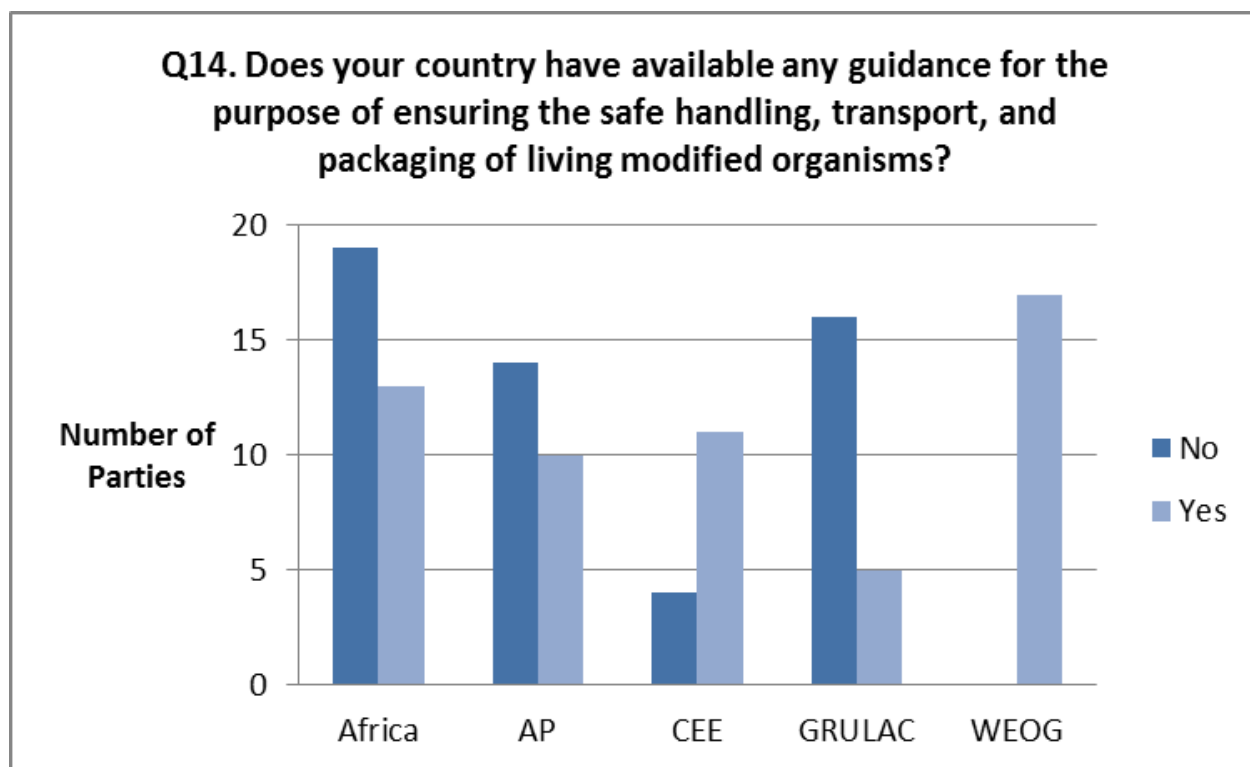
41. The percentages of respondents that reported NOT having the capacity to identify, assess OR monitor living modified organisms or specific traits that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health, are as follows: 7% of respondents from the Africa region (25% of the total respondents from the Africa region), 9% from Asia and the Pacific (42% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), and 6% in GRULAC (29% of the total respondents from the GRULAC region). Among economic groupings, 6% of respondents from LDCs (35% of the total respondents from the LDC group) and 10% of respondents from SIDS (58% of the total respondents from the SIDS group).

42. With reference to the above question, 63 Parties provided comments. The responses to this question varied widely. A number of Parties reported they had no capacity in this area while others stated that they needed to further develop and improve their institutional capacities. Bt cotton was singled out as one that is more easily identifiable due to “accumulated experience”. One Party reported that it has the capacity to identify, assess and monitor LMOs and their effects on biodiversity, but not on human health. It was also reported that the Guidance on Risk Assessment of Living Modified Organisms developed through the CBD’s “Open-ended Online Forum” and the Ad Hoc Technical Expert Group (AHTEG) has increased capacity. Parties that reported they had full capacity typically detailed that capacity.

43. In *Question 14*, countries were asked whether they have available any guidance for the purpose of ensuring the safe handling, transport, and packaging of living modified organisms (indicator 1.6.4). All 109 Parties answered this question as follows:

- 56 Parties (51% of the respondents): Yes
- 53 Parties (49% of the respondents): No

Below is a breakdown of the results by region:



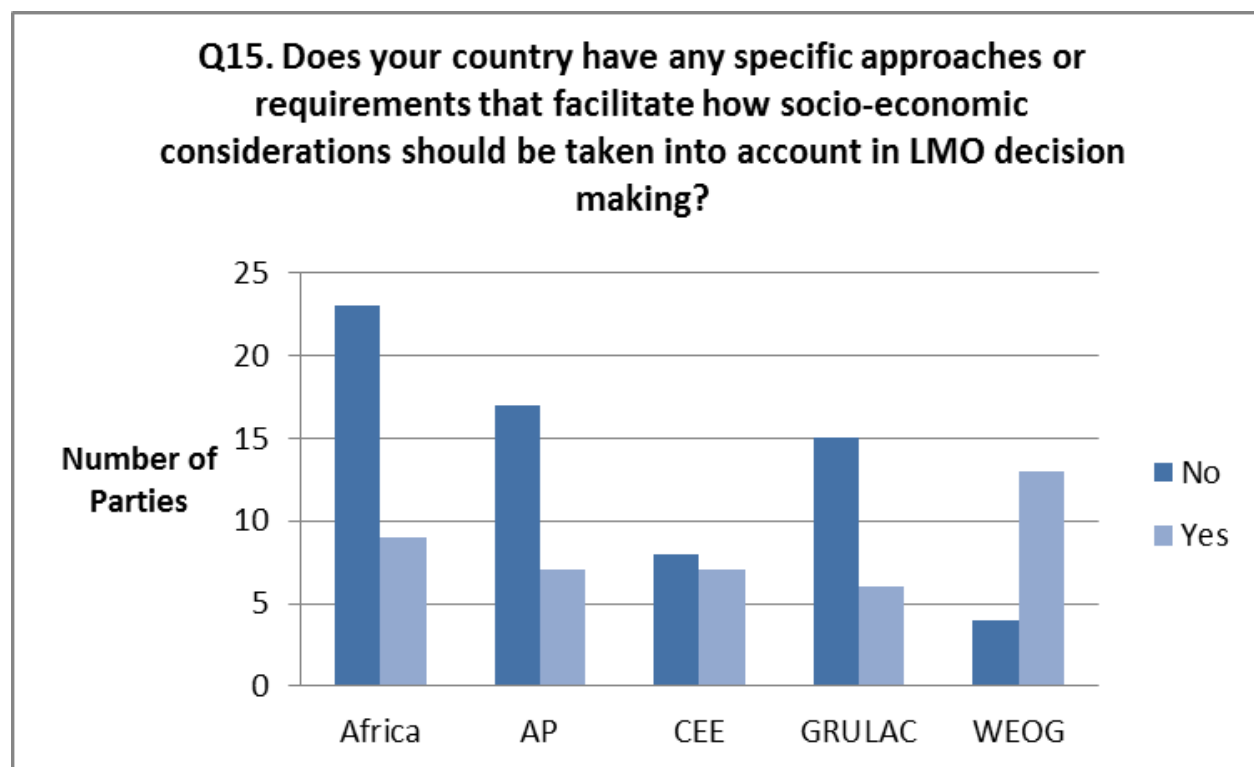
44. The percentages of respondents that reported not having available any guidance for the purpose of ensuring the safe handling, transport, and packaging of living modified organisms, are as follows: 17% of respondents from the Africa region (59% of the total respondents from the Africa region), 13% from Asia and the Pacific (58% of the total respondents from the AP region), 4% from CEE (27% of the total respondents from the CEE region), and 15% in GRULAC (76% of the total respondents from the GRULAC region). Among economic groupings, 14% of respondents from LDCs (75% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

45. With reference to the above question, 65 Parties provided comments. Parties that have implemented their biosafety legislation reported that there are provisions for the safe handling, transport, and packaging of LMOs. Parties that have not implemented biosafety legislation reported that there are provisions in their National Biosafety Frameworks. Parties from the EU reported that the EU legal framework on LMOs comprehensively addresses the issues of handling, transport and packaging.

46. In *Question 15*, countries were asked whether they have any specific approaches or requirements that facilitate how socio-economic considerations should be taken into account in LMO decision making (indicator 1.7.2). All 109 Parties answered this question as follows:

- 42 Parties (39% of the respondents): Yes
- 67 Parties (61% of the respondents): No

Below is a breakdown of the results by region:



47. The percentages of respondents that reported not having any specific approaches or requirements that facilitate how socio-economic considerations should be taken into account in LMO decision making, are as follows: 21% of respondents from the Africa region (72% of the total respondents from the Africa region), 16% from Asia and the Pacific (71% of the total respondents from the AP region), 7% from CEE (53% of the total respondents from the CEE region), 14% in GRULAC (71% of the total respondents from the GRULAC region) and 4% in WEOG (24% of the total respondents from the WEOG region). Among economic groupings, 15% of respondents from LDCs (80% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

48. With reference to the above question, 54 Parties provided comments. A number of Parties that have implemented their biosafety legislation reported that socio-economic considerations should be taken into account in LMO decision making. One Party reported that socio-economic considerations will be conducted separately from risk assessment and in “a transparent and rigorous manner”. Some Parties that have not implemented biosafety legislation reported that these considerations are included in their National Biosafety Frameworks. Other Parties reported that draft guidelines are under discussion. Some Parties report that socio-economic considerations are not taken into account at all. For example, it is not included in the EU legislation. However, in the EU context, it is reported that socio-economic considerations are taken into account when making decisions about field trials only as a part of risk management measures. They have also been relevant at a level of “co-existence between conventional, organic and GM crops.”

49. In *Question 16*, countries were asked how many peer-reviewed published materials had them used for the purpose of elaborating or determining national actions with regard to socio-economic considerations (indicator 1.7.1). All 109 Parties answered this question as follows:

- 7 Parties (6% of the respondents): 50 or more
- 7 Parties (6% of the respondents): 10 or more
- 3 Parties (3% of the respondents): 5 or more
- 18 Parties (17% of the respondents): one or more
- 74 Parties (68% of the respondents): none

50. The percentages of respondents that reported not having used peer-reviewed published materials for the purpose of elaborating or determining national actions with regard to socio-economic considerations, are as follows: 20% of respondents from the Africa region (69% of the total respondents from the Africa region), 16% from Asia and the Pacific (71% of the total respondents from the AP region), 8% from CEE (60% of the total respondents from the CEE region), 17% in GRULAC (86% of the total respondents from the GRULAC region) and 7% in WEOG (47% of the total respondents from the WEOG region). Among economic groupings, 13% of respondents from LDCs (70% of the total respondents from the LDC group) and 17% of respondents from SIDS (100% of the total respondents from the SIDS group).

51. With reference to the above question, 34 Parties provided comments. A majority of Parties reported that that little to no peer-reviewed published materials were used for the purpose of elaborating or determining national actions with regard to socio-economic considerations. However, there were exceptions. For example, one Party reported that “plenty of published materials both of international and local publications were used”.

52. In *Question 17*, countries were asked what was their experience, if any, in taking socio-economic considerations into account in LMO decision making (indicator 1.7.3). All 109 Parties answered this question.

53. All but four of the responding Parties reported that they had no experience in taking socio-economic considerations into account in LMO decision making and the four that did respond reported that their experience was minimal. One Party reported a specific experience: “the confined field trials of GM cotton and corn are approved considering socio-economic impacts on the farmers and society. Same was true for the commercial release of Bt cotton in the country”.

54. In *Question 18*, countries were asked whether they have the capacity to take appropriate measures in the event that an LMO is unintentionally released (indicator 1.8.3). All 109 Parties answered this question as follows:

- 60 Parties (55% of the respondents): Yes
- 49 Parties (45% of the respondents): No

55. The percentages of respondents that reported not having the capacity to take appropriate measures in the event that an LMO is unintentionally released, are as follows: 17% of respondents from the Africa region (59% of the total respondents from the Africa region), 14% from Asia and the Pacific (63% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), and 11% in GRULAC (57% of the total respondents from the GRULAC region). Among economic groupings, 13% of respondents from LDCs (70% of the total respondents from the LDC group) and 12% of respondents from SIDS (68% of the total respondents from the SIDS group).

56. With reference to the above question, 56 Parties provided some comments. Many Parties reported that the capacity to take appropriate measures in the event that an LMO is unintentionally released is quite limited. For example, one Party answered “theoretically, yes.” On the other hand, another Party responded that appropriate measures are set out in the country’s Criminal Code. The EU stated: “Specific capacities include information channels among Member States of the European Union allowing for rapid

dissemination of the information in case of unintentional release of a GMO, expertise of the European Union Reference Laboratory for GM Food Feed and detection capacities in the Member States.”

***Focal Area 2: Capacity-building (question 19-34)***

57. In *Question 19*, countries were asked how many people had been trained in risk assessment, monitoring, management and control of LMOs (indicator 2.2.3). All 109 Parties answered the question on Risk assessment (108 the also answered other two) as follows:

**Risk Assessment:**

- 8 Parties (7% of the respondents): 100 or more
- 19 Parties (17% of the respondents): 50 or more
- 33 Parties (30% of the respondents): 10 or more
- 37 Parties (34% of the respondents): one or more
- 12 Parties (11% of the respondents): none

**Monitoring:**

- 4 Parties (4% of the respondents): 100 or more
- 14 Parties (13% of the respondents): 50 or more
- 37 Parties (34% of the respondents): 10 or more
- 32 Parties (30% of the respondents): one or more
- 21 Parties (19% of the respondents): none

**Management and Control:**

- 8 Parties (7% of the respondents): 100 or more
- 17 Parties (16% of the respondents): 50 or more
- 32 Parties (30% of the respondents): 10 or more
- 33 Parties (31% of the respondents): one or more
- 18 Parties (17% of the respondents): none

***All the above:***

- *83 Parties (76% of the total respondents): one or more (1, 10, 50 or more than 100) to all three questions*
- *17 Parties (16% of the total respondents): mixed responses*
- *9 Parties (8% of the total respondents): none to all three questions*

58. The percentages of respondents that reported NOT having personnel trained in risk assessment, monitoring, OR management and control of LMOs, are as follows: 2% of respondents from the Africa region (6% of the total respondents from the Africa region), 5% from Asia and the Pacific (21% of the total respondents from the AP region), 1% from CEE (7% of the total respondents from the CEE region), and 1% in GRULAC (5% of the total respondents from the GRULAC region). Among economic groupings, no respondents from LDCs and 4% of respondents from SIDS (21% of the total respondents from the SIDS group).

59. With reference to the above question, 43 Parties provided some comments. Many Parties referred to the UNEP-GEF project on the Development of National Biosafety Frameworks. In general, the answers varied in range from 1-2 to more than 50 (as reported from one EEC Party).

60. In *Question 20*, countries were asked whether they have the infrastructure (e.g. laboratory facilities) for monitoring or managing LMOs (indicator 2.2.4). All 109 Parties answered this question as follows:

- 80 Parties (73% of the respondents): Yes
- 29 Parties (27% of the respondents): No

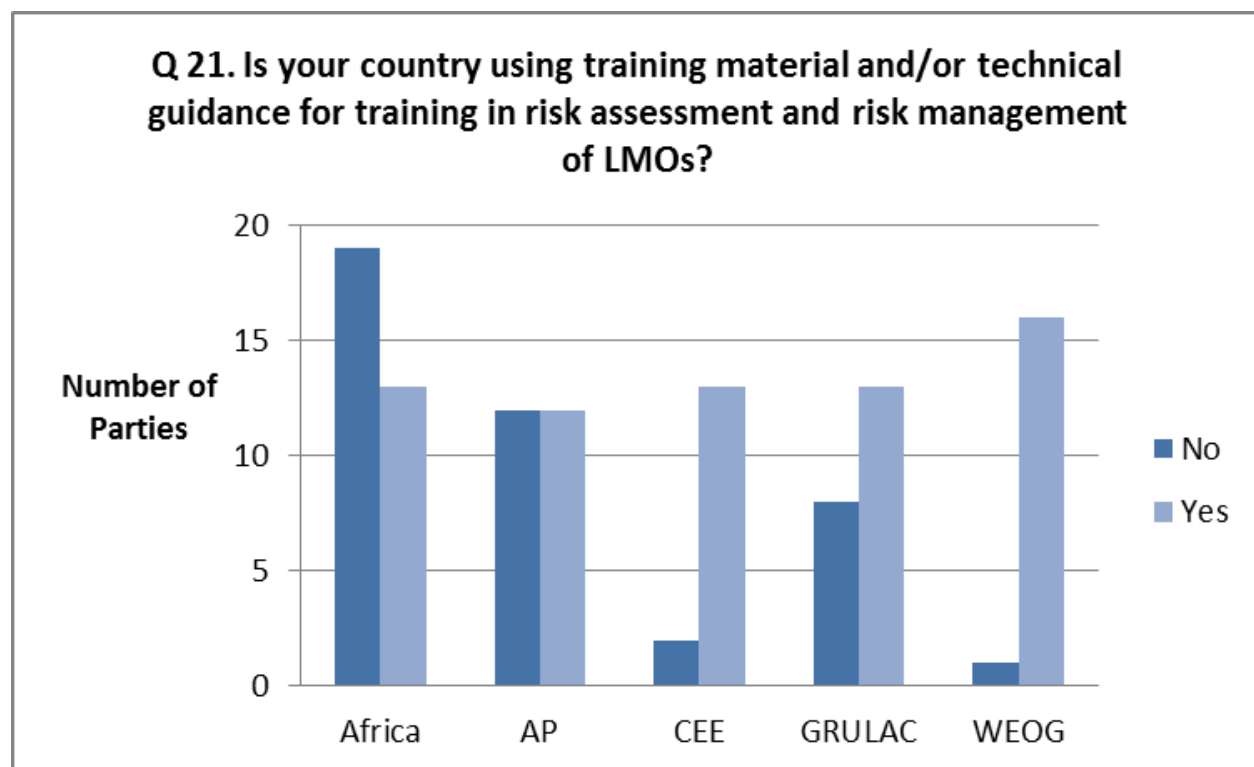
61. The percentages of respondents that reported not having the infrastructure (e.g. laboratory facilities) for monitoring or managing LMOs, are as follows: 8% of respondents from the Africa region (28% of the total respondents from the Africa region), 7% from Asia and the Pacific (33% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), and 9% in GRULAC (48% of the total respondents from the GRULAC region). Among economic groupings, 7% of respondents from LDCs (40% of the total respondents from the LDC group) and 9% of respondents from SIDS (53% of the total respondents from the SIDS group).

62. With reference to the above question, 68 Parties provided comments. A number of Parties reported that they have some infrastructure (e.g. laboratory facilities) but that these are not specifically designed for monitoring or managing LMOs. Accordingly, some Parties appealed for technical support for, in particular, laboratory facilities. These Parties typically pointed to their existing laboratories having very limited capacity for detection and monitoring of LMOs. Many reporting Parties that have the infrastructure in place stated that facilities are required to be approved by statute and, for example, must have an operator and adequate structural and operational provisions in place to ensure that LMOs are contained.

63. In *Question 21*, countries were asked whether they were using training material and/or technical guidance for training in risk assessment and risk management of LMOs (indicator 2.2.5). All 109 Parties answered this question as follows:

- 67 Parties (61% of the respondents): Yes
- 42 Parties (39% of the respondents): No

Below is a breakdown of the results by region:



64. The percentages of respondents that reported not using training material and/or technical guidance for training in risk assessment and risk management of LMOs, are as follows: 17% of respondents from the Africa region (59% of the total respondents from the Africa region), 11% from Asia and the Pacific (50% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), 7% in GRULAC (38% of the total respondents from the GRULAC region) and 1% in WEOG (6% of the total respondents from the WEOG region). Among economic groupings, 12% of respondents from LDCs (65% of the total respondents from the LDC group) and 10% of respondents from SIDS (58% of the total respondents from the SIDS group).

65. With reference to the above question, 51 Parties provided comments. A number of responding Parties referred to training material and/or technical guidance for training in risk assessment and risk management of LMOs during the preparation of their National Biosafety Frameworks under the UNEP-GEF project. A number of other Parties referred to using the Guidance on Risk Assessment of Living Modified Organisms developed through the CBD's "Open-ended Online Forum" and the Ad Hoc Technical Expert Group (AHTEG). Some Parties referred to using guidance developed by FAO's Codex Alimentarius and the Organization for Economic Co-operation Development (OECD). Some EU Parties reported the use of guidance from the Joint Research Centre (JRC) of the European Commission and the European Food Safety Authority (EFSA). An African Party also cited the African Model Law as a source.

66. In *Question 22*, countries were asked whether the available training materials and technical guidance on risk assessment and risk management of LMOs are sufficient and effective? (indicator 2.2.6). All 109 Parties answered the question about "Sufficient" (104 also answered the one about "Effective") as follows:

Sufficient:

- 49 Parties (45% of the respondents): Yes
- 60 Parties (55% of the respondents): No



Effective:

- 51 Parties (49% of the respondents): Yes
- 53 Parties (51% of the respondents): No

*All the above:*

- 41 Parties (38% of the total respondents): Yes to both questions
- 20 Parties (18% of the total respondents): mixed responses
- 48 Parties (44% of the total respondents): No to both questions

67. The percentages of respondents that reported the available training materials and technical guidance on risk assessment and risk management of LMOs NOT being neither sufficient nor effective, are as follows: 17% of respondents from the Africa region (59% of the total respondents from the Africa region), 13% from Asia and the Pacific (58% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), and 10% in GRULAC (52% of the total respondents from the GRULAC region) and 2% in WEOG (12% of the total respondents from the WEOG region). Among economic groupings, 11 respondents from LDCs (60% of the total respondents from the LDC group) and 12% of respondents from SIDS (68% of the total respondents from the SIDS group).

68. With reference to the above question, 35 Parties provided comments. In general, Parties expressed a high degree of satisfaction with the sufficiency and effectiveness of training materials and technical guidance on risk assessment and risk management of LMOs, in particular with the Guidance on Risk Assessment of Living Modified Organisms developed through the CBD's "Open-ended Online Forum" and the Ad Hoc Technical Expert Group (AHTEG). Parties made a number of suggestions. For example, materials and guidance need to be adjusted to "local specifics when conducting RA&RM training at the national level"; technical guides need more details on a "case by case" basis; existing guidelines will need to be amended from time to time to keep abreast with the fast expansion of modern biotechnology; and "guidance needs to be further developed, e.g. for focal applications (LM crops for cultivation) and emerging fields of application (e.g. LM animals)."

69. In *Question 23*, countries were asked how many customs officers had received training in the identification of LMOs (indicator 2.3.1). All 109 Parties answered this question as follows:

- 2 Parties (2% of the respondents): 100 or more
- 8 Parties (7% of the respondents): 50 or more
- 14 Parties (13% of the respondents): 10 or more
- 34 Parties (31% of the respondents): one or more
- 51 Parties (47% of the respondents): none

70. The percentages of respondents that reported that no customs officer had received training in the identification of LMOs, are as follows: 13% of respondents from the Africa region (44% of the total respondents from the Africa region), 10% from Asia and the Pacific (46% of the total respondents from the AP region), 5% from CEE (33% of the total respondents from the CEE region), 9% in GRULAC (48% of the total respondents from the GRULAC region) and 10% in WEOG (65% of the total respondents from the WEOG region). Among economic groupings, 7% of respondents from LDCs (40% of the total respondents from the LDC group) and 12% of respondents from SIDS (68% of the total respondents from the SIDS group).

71. With reference to the above question, 53 Parties provided comments. Most responding Parties reported that the number of customs officers who have received training in the identification of LMOs is zero or quite limited. Many stated that their customs officers are not responsible for the identification of LMOs; rather they are trained in labelling, other identification documents and sample taking, while identification takes place in specialized laboratories. Some Parties reported that customs officers took part

in the international Green Customs initiative. Others stated that some of their customs officers were included in risk assessment and risk management workshops.

72. In *Question 24*, countries were asked how many laboratory personnel had received training in detection of LMOs (indicator 2.3.1). All 109 Parties answered this question as follows:

- 4 Parties (4% of the respondents): 100 or more
- 12 Parties (11% of the respondents): 50 or more
- 29 Parties (27% of the respondents): 10 or more
- 40 Parties (37% of the respondents): one or more
- 24 Parties (22% of the respondents): none

73. The percentages of respondents that reported that no laboratory personnel had received training in detection of LMOs, are as follows: 6% of respondents from the Africa region (22% of the total respondents from the Africa region), 8% from Asia and the Pacific (38% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), 5% in GRULAC (24% of the total respondents from the GRULAC region) and 1% in WEOG (6% of the total respondents from the WEOG region). Among economic groupings, 4% of respondents from LDCs (20% of the total respondents from the LDC group) and 8% of respondents from SIDS (47% of the total respondents from the SIDS group).

74. With reference to the above question, 38 Parties provided comments. Most Parties reported that the number of laboratory personnel who have received training in detection of LMOs is zero or quite limited. However, there were some notable exceptions. One Party stated it has a National Reference Laboratory for GMOs that is composed of 3 laboratories involving between 10 and 50 staff members. Another has “50 or more [laboratory personnel] –There are 18 laboratories for GMO detection in the country. Highly skilled personnel of those laboratories have been training in detection and identification of LMOs.” At the EU level, the Joint Research Centre (JRC) of the European Commission is distributing information on LMO detection methods to the personnel of more than 100 laboratories in the Member States.

75. In *Question 25*, countries were asked whether they have reliable access to laboratory facilities for the detection of LMOs (indicator 2.3.2). All 109 Parties answered this question as follows:

- 71 Parties (65% of the respondents): Yes
- 38 Parties (35% of the respondents): No

76. The percentages of respondents that reported having no reliable access to laboratory facilities for the detection of LMOs, are as follows: 12% of respondents from the Africa region (41% of the total respondents from the Africa region), 11% from Asia and the Pacific (50% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), and 9% in GRULAC (48% of the total respondents from the GRULAC region). Among economic groupings, 9% of respondents from LDCs (50% of the total respondents from the LDC group) and 12% of respondents from SIDS (68% of the total respondents from the SIDS group).

77. With reference to the above question, 43 Parties provided some comments. Some Parties reported not having sufficient laboratory facilities and infrastructure while others stated they have sophisticated laboratory facilities. Others stated they have reliable access to laboratory facilities, but those facilities have not been specifically targeted for LMO detection. Typically though, these laboratories do have some basic equipment which can assist in the identification. One Party reported that reliable access is achieved through specialized academic and research institute laboratories. Another stated “if the detection of LMOs is required, regulatory authorities have access to several government diagnostic laboratories for this purpose. In addition, access arrangements to technical diagnostics with several universities and research institutes is also available”.

78. In *Question 26*, countries were asked how many laboratories are certified for LMO detection (indicator 2.3.3). All 109 Parties answered this question as follows:

- 5 Parties (5% of the respondents): 10 or more
- 8 Parties (7% of the respondents): 5 or more
- 42 Parties (39% of the respondents): one or more
- 54 Parties (50% of the respondents): none

79. The percentages of respondents that reported no laboratories certified for LMO detection, are as follows: 18% of respondents from the Africa region (63% of the total respondents from the Africa region), 11% from Asia and the Pacific (50% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), 16% in GRULAC (81% of the total respondents from the GRULAC region), and 2% in WEOG (12% of the total respondents from the WEOG region).. Among economic groupings, 12% of respondents from LDCs (65% of the total respondents from the LDC group) and 15% of respondents from SIDS (84% of the total respondents from the SIDS group).

80. With reference to the above question, 42 Parties provided comments. Responding Parties that reported having certified laboratories for LMO detection typically reported having between 1 and 3. However, one Party reported having 18. While some Parties reported having no specialized laboratories in the country to detect LMOs, a number of Parties reported having uncertified national laboratories conducting LMO detection. At the EU level, only the Joint Research Center of the European Commission is certified for LMO detection.

81. In *Question 27*, countries were asked how many of the certified laboratories in the previous question are operational (indicator 2.3.4). All 109 Parties answered this question as follows:

- 4 Parties (4% of the respondents): 10 or more
- 7 Parties (6% of the respondents): 5 or more
- 44 Parties (40% of the respondents): one or more
- 54 Parties (50% of the respondents): none

82. The percentages of respondents that reported none of the certified laboratories in the previous question being operational, are as follows: 18% of respondents from the Africa region (63% of the total respondents from the Africa region), 12% from Asia and the Pacific (54% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), 16% in GRULAC (81% of the total respondents from the GRULAC region), and 1% in WEOG (6% of the total respondents from the WEOG region). Among economic groupings, 11% of respondents from LDCs (60% of the total respondents from the LDC group) and 15% of respondents from SIDS (84% of the total respondents from the SIDS group).

83. With reference to the above question, 32 Parties provided comments. Many Parties reported that their certified laboratories are not operational. In three instances only, Parties reported that all certified laboratories are operational. At the EU level, only the Joint Research Center of the European Commission is certified and operational for LMO detection.

84. In *Question 28*, countries were asked whether they had received any financial and/or technical assistance for capacity-building in the area of liability and redress relating to living modified organisms (indicator 2.4.1). All 109 Parties answered this question as follows:

- 18 Parties (17% of the respondents): Yes
- 91 Parties (83% of the respondents): No

85. The percentages of respondents that reported not having received any financial and/or technical assistance for capacity-building in the area of liability and redress relating to living modified organisms, are as follows: 20% of respondents from the Africa region (69% of the total respondents from the Africa region), 20% from Asia and the Pacific (92% of the total respondents from the AP region), 10% from CEE (73% of the total respondents from the CEE region), 17% in GRULAC (90% of the total

respondents from the GRULAC region), and 16% in WEOG (100% of the total respondents from the WEOG region). Among economic groupings, 12% of respondents from LDCs (65% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

86. With reference to the above question, 28 Parties provided some comments. Most Parties reported receiving zero to limited financial and/or technical assistance for capacity-building in the area of liability and redress relating to living modified organisms. Parties that did receive such assistance referred to assistance to attend workshops conducted through the CBD. One Party reported receiving assistance through the West African Economic and Monetary Union (WAEMU).

87. In *Question 29*, countries were asked whether they have administrative or legal instrument that provide for response measures for damage to biodiversity resulting from living modified organisms? (indicator 2.4.2). All 109 Parties answered this question as follows:

- 63 Parties (58% of the respondents): Yes
- 46 Parties (42% of the respondents): No

88. The percentages of respondents that reported not having administrative or legal instrument that provide for response measures for damage to biodiversity resulting from living modified organisms, are as follows: 13% of respondents from the Africa region (44% of the total respondents from the Africa region), 15% from Asia and the Pacific (67% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), 11% in GRULAC (57% of the total respondents from the GRULAC region), and 1% in WEOG (6% of the total respondents from the WEOG region). Among economic groupings, 8% of respondents from LDCs (45% of the total respondents from the LDC group) and 13% of respondents from SIDS (74% of the total respondents from the SIDS group).

89. With reference to the above question, 60 Parties provided comments. Some Parties, who have not yet enacted their biosafety legislation, reported that provisions for administrative or legal instruments that provide for response measures for damage to biodiversity resulting from living modified organisms are contained in their national biosafety frameworks. Most Parties that have enacted biosafety legislation report provisions for minimizing impacts upon biodiversity caused by LMOs, as well as some compensation provisions. However, some of these Parties report that the provisions set out in biosafety legislation are not yet operational. In the EU, the provisions of the Cartagena Protocol on Biosafety are covered by the European legislation on biosafety which establishes a framework based on the “polluter pays” principle. Other Parties reported that provisions are set out in broader environmental legislation. One Party reported that provisions are set out in its civil code while another stated the provisions are contained in its criminal code.

90. In *Question 30*, countries were asked whether they had informed the public about existing modalities for public participation in the decision-making process regarding living modified organisms (indicator 2.5.2). All 109 Parties answered this question as follows:

- 80 Parties (73% of the respondents): Yes
- 29 Parties (27% of the respondents): No

91. The percentages of respondents that reported not having informed the public about existing modalities for public participation in the decision-making process regarding living modified organisms, are as follows: 7% of respondents from the Africa region (25% of the total respondents from the Africa region), 12% from Asia and the Pacific (54% of the total respondents from the AP region), 1% from CEE (7% of the total respondents from the CEE region), and 6% in GRULAC (33% of the total respondents from the GRULAC region). Among economic groupings, 6% of respondents from LDCs (30% of the total respondents from the LDC group) and 10% of respondents from SIDS (58% of the total respondents from the SIDS group).

92. With reference to the above question, 61 Parties provided comments. A majority of Parties stressed the importance for public participation in the decision-making process regarding living modified

organisms and that this is a standard requirement for all field trials and general releases. Many stated that the process is on-going. One Party stated that “Through the establishment of the Public Awareness and Participation Platform (PAPP) the general public were made aware through various methodologies on their rights and modalities of voices their concerns on any LMO introduced in the country.” Another stated “Within the UNEP-GEF project “Capacity building for effective participation in the Biosafety Clearing House for the CPB”, several modules of trainings have been implemented, mainly with regard to the awareness raising regarding the Protocol and biosafety.” An African Party reported that the National Institute for Scientific and Industrial Research (NISIR) is conducting a Public Awareness and Participation (PAPP) project in conjunction with RAEIN Africa. Reference was also made by Parties to involving public participation in decision-making processes through national BCH portals. At the EU level, before an LMO can be approved, the Commission consults the public on the risk assessment done by the European Food Safety Agency (EFSA). After the consultation, the Commission analyses the comments and checks with EFSA whether the scientific ones have an impact on its opinion. By contrast, one Party reported that “the whole Risk Assessment process has not been well understood and the public participation has not taken any role yet into being a part of the decision process.”

93. In *Question 31*, countries answering yes to question 30 above, were asked to indicate the modalities used to inform the public (indicator 2.5.2). Sixty Parties answered this question as follows:

- 60 Parties (75% of those responding Yes to Q30): National website
- 45 Parties (56% of those responding Yes to Q30): Newspaper
- 38 Parties (47% of those responding Yes to Q30): Forums
- 20 Parties (25% of those responding Yes to Q30): Mailing lists
- 36 Parties (45% of those responding Yes to Q30): Public hearings
- 53 Parties (66% of those responding Yes to Q30): Others (i.e. seminars; scientific journals; magazines; public consultation; workshops and meetings with different associations; biosafety related publications; booklets; GMO steering committee; workshop on biosafety in regions; Twitter and Facebook; social networks; Posting of Public Information Sheets in field trials areas; official gazette).

94. In *Question 32*, countries indicating multiple modalities for public participation in question 31 above, were asked which one was most used (indicator 2.5.2). Parties answered this question as follows:

- 41 Parties (75% of those responding Yes to Q30): National website
- 20 Parties (56% of those responding Yes to Q30): Newspaper
- 21 Parties (47% of those responding Yes to Q30): Forums
- 8 Parties (25% of those responding Yes to Q30): Mailing lists
- 10 Parties (45% of those responding Yes to Q30): Public hearings

95. With reference to the above question, 26 Parties provided some comments. Responding Parties stated the following most used modalities for public participation: focus group approach (“this is because we always find it more effective when the materials that are being delivered are tailored according to the audience”), workshops, online consultation, newspapers (including newspaper websites), national websites, and the national BCH.

96. In *Question 33*, countries were asked how many national academic institutions are offering biosafety education and training courses and programmes (indicator 2.7.1). All 109 Parties answered this question as follows:

- 5 Parties (5% of the respondents): 10 or more
- 14 Parties (13% of the respondents): 5 or more
- 9 Parties (8% of the respondents): 3 or more
- 43 Parties (39% of the respondents): one or more
- 38 Parties (35% of the respondents): none

97. The percentages of respondents that reported no academic institutions offering biosafety education and training courses and programmes, are as follows: 13% of respondents from the Africa region (44% of the total respondents from the Africa region), 8% from Asia and the Pacific (38% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), 9% in GRULAC (48% of the total respondents from the GRULAC region), and 3% in WEOG (18% of the total respondents from the WEOG region). Among economic groupings, 6% of respondents from LDCs (35% of the total respondents from the LDC group) and 13% of respondents from SIDS (74% of the total respondents from the SIDS group).

98. With reference to the above question, 50 Parties provided some comments. Responding Parties reported limited activity in terms of academic institutions offering biosafety education and training courses and programs. Typically, Parties state that biosafety is only being taught as one element under the broader umbrella topic of biotechnology. Some Parties state that biosafety/biotechnology should become an integral part of Environmental Sciences programs. At the EU level, the Joint Research Centre (JRC) of the European Commission organizes workshops and training courses on GMO detection and analysis.

99. In *Question 34*, countries were asked how many biosafety training materials and/or online modules are available to them (indicator 2.7.2). All 109 Parties answered this question as follows:

- 2 Parties (2% of the respondents): 25 or more
- 5 Parties (5% of the respondents): 10 or more
- 15 Parties (14% of the respondents): 5 or more
- 34 Parties (31% of the respondents): one or more
- 53 Parties (49% of the respondents): none

100. The percentages of respondents that reported no biosafety training materials and/or online modules available, are as follows: 16% of respondents from the Africa region (53% of the total respondents from the Africa region), 13% from Asia and the Pacific (58% of the total respondents from the AP region), 5% from CEE (33% of the total respondents from the CEE region), 10% in GRULAC (52% of the total respondents from the GRULAC region), and 6% in WEOG (35% of the total respondents from the WEOG region). Among economic groupings, 10% of respondents from LDCs (55% of the total respondents from the LDC group) and 12% of respondents from SIDS (68% of the total respondents from the SIDS group).

101. With reference to the above question, 40 Parties provided comments. Responding Parties inputs regarding how many biosafety training materials and/or online modules are available are as follows: “BCH material” (including the BCH Training website), “UNEP-GEF material”, “RA training modules”, “brochures”, and “university training materials”. At the EU level, the Joint Research Centre (JRC) of the European Commission published an interactive course on ‘The Analysis of food and feed samples for the presence of genetically modified organisms (GMOs)’ (interactive DVD) as well as a User Manual “The Analysis of Food Samples for the Presence of Genetically Modified Organisms”.

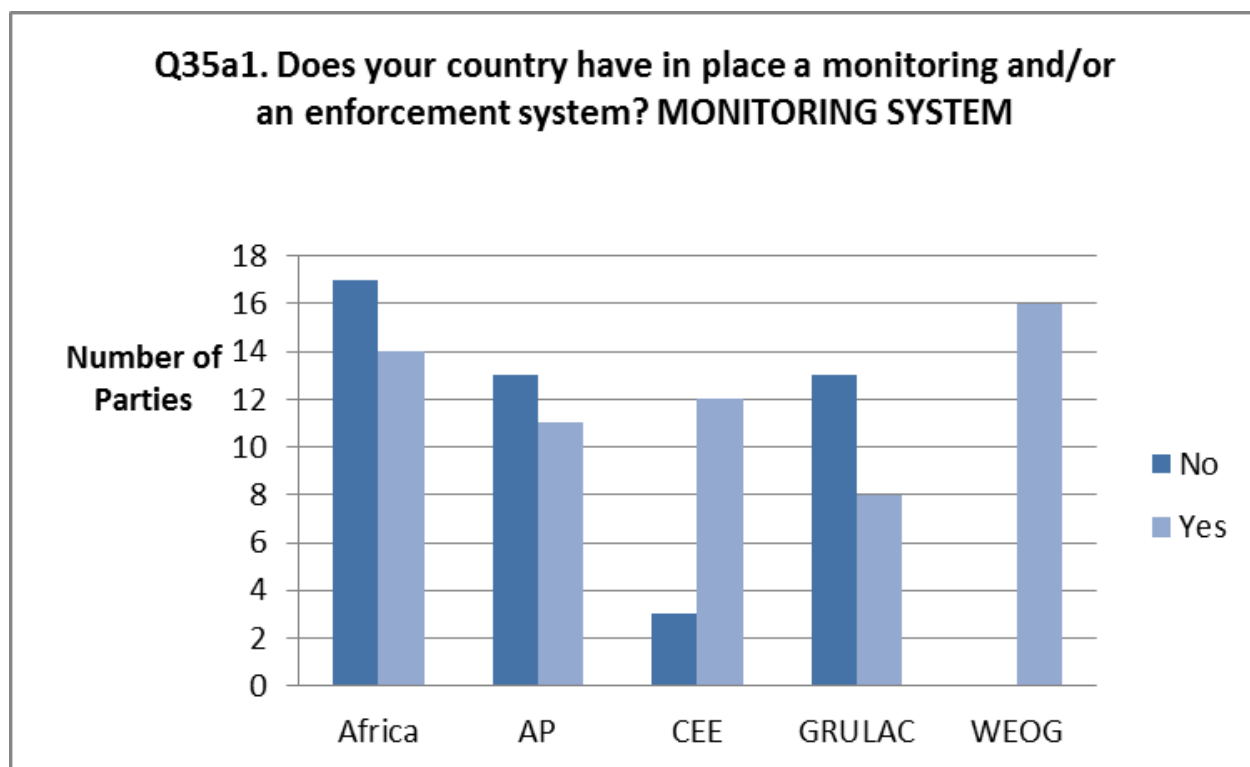
### ***Focal Area 3: Compliance and Review (question 35)***

102. In *Question 35*, countries were asked whether they have in place a monitoring and/or an enforcement system (indicator 3.1.6). 107 Parties answered the question about “Monitoring” and 104 answered the one about “Enforcement” as follows:

Monitoring system:

- 61 Parties (57% of the respondents): Yes
- 46 Parties (43% of the respondents): No

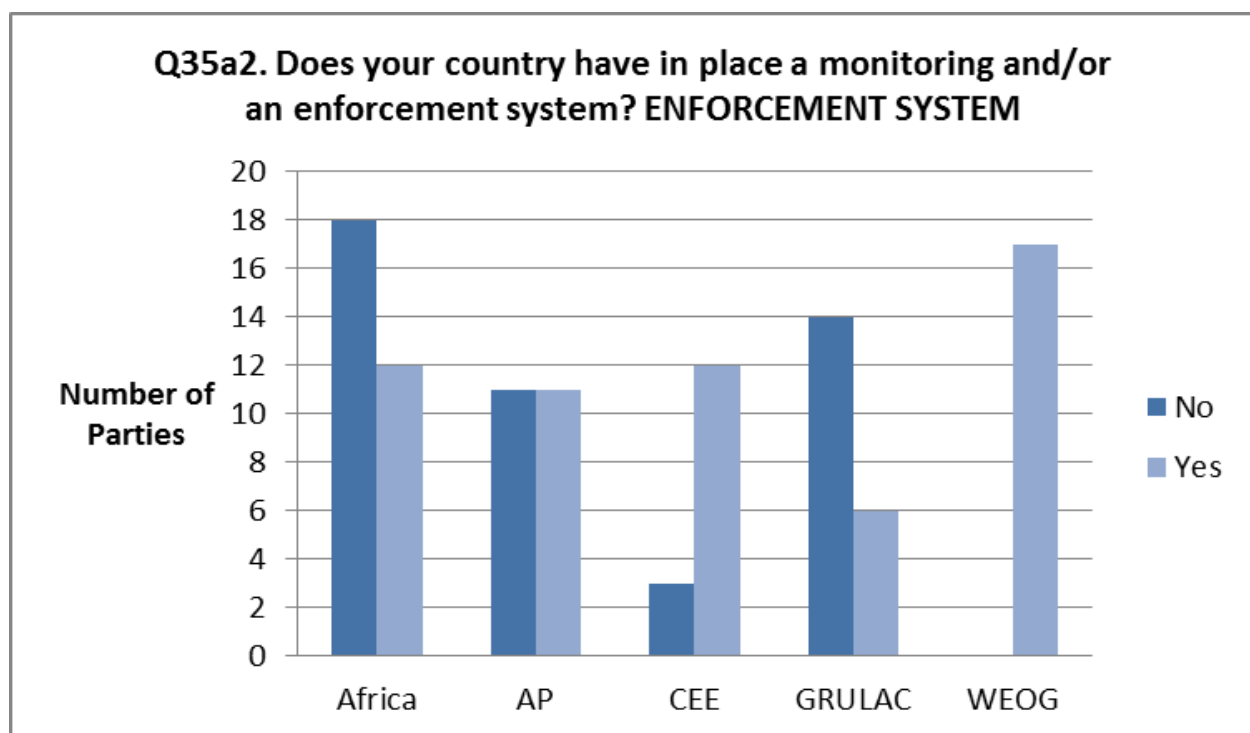
Below is a breakdown of the results by region:



Enforcement system:

- 58 Parties (56% of the respondents): Yes
- 46 Parties (44% of the respondents): No

Below is a breakdown of the results by region:



*All the above:*

- 55 Parties (51% of the total respondents): Yes to both questions
- 10 Parties (9% of the total respondents): mixed responses
- 42 Parties (39% of the total respondents): No to both questions

103. The percentages of respondents that reported not having in place neither a monitoring nor an enforcement system, are as follows: 15% of respondents from the Africa region (50% of the total respondents from the Africa region), 10% from Asia and the Pacific (46% of the total respondents from the AP region), 3% from CEE (20% of the total respondents from the CEE region), and 11% in GRULAC (57% of the total respondents from the GRULAC region). Among economic groupings, 8 respondents from LDCs (45% of the total respondents from the LDC group) and 13% of respondents from SIDS (74% of the total respondents from the SIDS group).

104. With reference to the above question, 43 Parties provided comments. A number of Parties reported that a monitoring and/or an enforcement system is envisioned in their draft National Biosafety Frameworks but is not yet operational because biosafety legislation has not yet been enacted. Other Parties referred to their Competent National Authorities being responsible for their monitoring and/or enforcement system. While there is also no mention of punitive measures for non-compliance, one Party reported making annual audits and putting in place “an enforcement regime under statute to ensure that non-compliances with the regulatory frameworks are appropriately managed.” One Party refers to monitoring and/or enforcement provisions in its civil code and another to its criminal code.

#### ***Focal Area 4: Information Sharing (questions 36-38)***

105. In *Question 36*, countries were asked to indicate the number of regional, national and international events organized in relation to biosafety (e.g. seminars, workshops, press conferences, educational events, etc.) in the last 2 years (indicator 4.3.1). All 109 Parties answered this question as follows:

- 7 Parties (6% of the respondents): 25 or more
- 19 Parties (17% of the respondents): 10 or more
- 30 Parties (28% of the respondents): 5 or more
- 37 Parties (34% of the respondents): one or more
- 16 Parties (15% of the respondents): none

106. The percentages of respondents that reported no regional, national or international events organized in relation to biosafety, are as follows: 4% of respondents from the Africa region (13% of the total respondents from the Africa region), 5% from Asia and the Pacific (21% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), 3% in GRULAC (14% of the total respondents from the GRULAC region), and 2% in WEOG (12% of the total respondents from the WEOG region). Among economic groupings, 2% of respondents from LDCs (10% of the total respondents from the LDC group) and 7% of respondents from SIDS (42% of the total respondents from the SIDS group).

107. With reference to the above question, 60 Parties provided comments. Many Parties referenced the capacity building workshops conducted by the CBD with regards to regional, national and international events organized in relation to biosafety. Others referred to assorted training workshops, academic courses, press releases, education seminars, radio talk shows, television panel discussions, etc., as well as UNEP-GEF's Project on Implementation of NBFs. One Party reported on AfricaBio events. At the EU level, the European Commission organized at least 10 events since 2011, the largest ones being: - 3 public hearings.



108. In *Question 37*, countries were asked to indicate the number of biosafety related publications that had been made available in the last year (indicator 4.3.2). All 109 Parties answered this question as follows:

- 3 Parties (3% of the respondents): 100 or more
- 3 Parties (3% of the respondents): 50 or more
- 23 Parties (21% of the respondents): 10 or more
- 47 Parties (43% of the respondents): one or more
- 33 Parties (30% of the respondents): none

109. The percentages of respondents that reported no biosafety related publications made available in the last year, are as follows: 11% of respondents from the Africa region (38% of the total respondents from the Africa region), 7% from Asia and the Pacific (33% of the total respondents from the AP region), 4% from CEE (27% of the total respondents from the CEE region), 6% in GRULAC (29% of the total respondents from the GRULAC region), and 3% in WEOG (18% of the total respondents from the WEOG region). Among economic groupings, 7% of respondents from LDCs (40% of the total respondents from the LDC group) and 9% of respondents from SIDS (53% of the total respondents from the SIDS group).

110. With reference to the above question, 44 Parties provided some comments. Responding Parties mostly listed the types of publications that had been made available. For example one Party reported publishing national technical guidelines on 1. Risk assessment and management; 2. Traceability and LMO detection; 3. Notification and handling requests; 4. National strategy and action plan on biosafety; and 5. National legal framework on biosafety. Another reported publishing its biosafety policy in three languages and the text of the Supplementary Protocol on Liability and Redress in the country's native language. A procedures manual on assessment and management of risks associated with LMOs was adopted in September 2012 by the WAEMU. As of June 2013, the European Food Safety Authority (EFSA) had published 44 opinions since 2012 related to the biosafety of LMOs. A number of publications were made available specifically on Bt cotton.

111. In *Question 38*, countries were asked, when biosafety-related publications had been made available (see question 37 above), to indicate which modalities were preferred (indicator 4.3.2). All 109 Parties answered this question as follows:

- 25 Parties (23% of the respondents): National website
- 16 Parties (15% of the respondents): BCH Central Portal (BIRC)
- 12 Parties (11% of the respondents): National libraries
- 56 Parties (51% of the respondents): Others (i.e. handbooks and analytical reviews; peer-reviewed and scientific journals; email; newspapers; distribution at workshops, meetings and conferences; sending the publication to relevant stakeholders; university libraries; seminars; general distribution; hand delivery; government reports; conferences, seminars, workshops, etc.; leaflets, booklets and brochures).

### ***Focal Area 5: Outreach and Cooperation (questions 39-43)***

112. In *Question 39*, countries were asked how many collaborative initiatives (including joint activities) on the Cartagena Protocol and other Conventions and processes had their government established in the last 4 years? (indicator 5.2.1). All 109 Parties answered this question as follows:

- 4 Parties (4% of the respondents): 10 or more
- 7 Parties (6% of the respondents): 5 or more
- 42 Parties (39% of the respondents): one or more
- 56 Parties (51% of the respondents): none

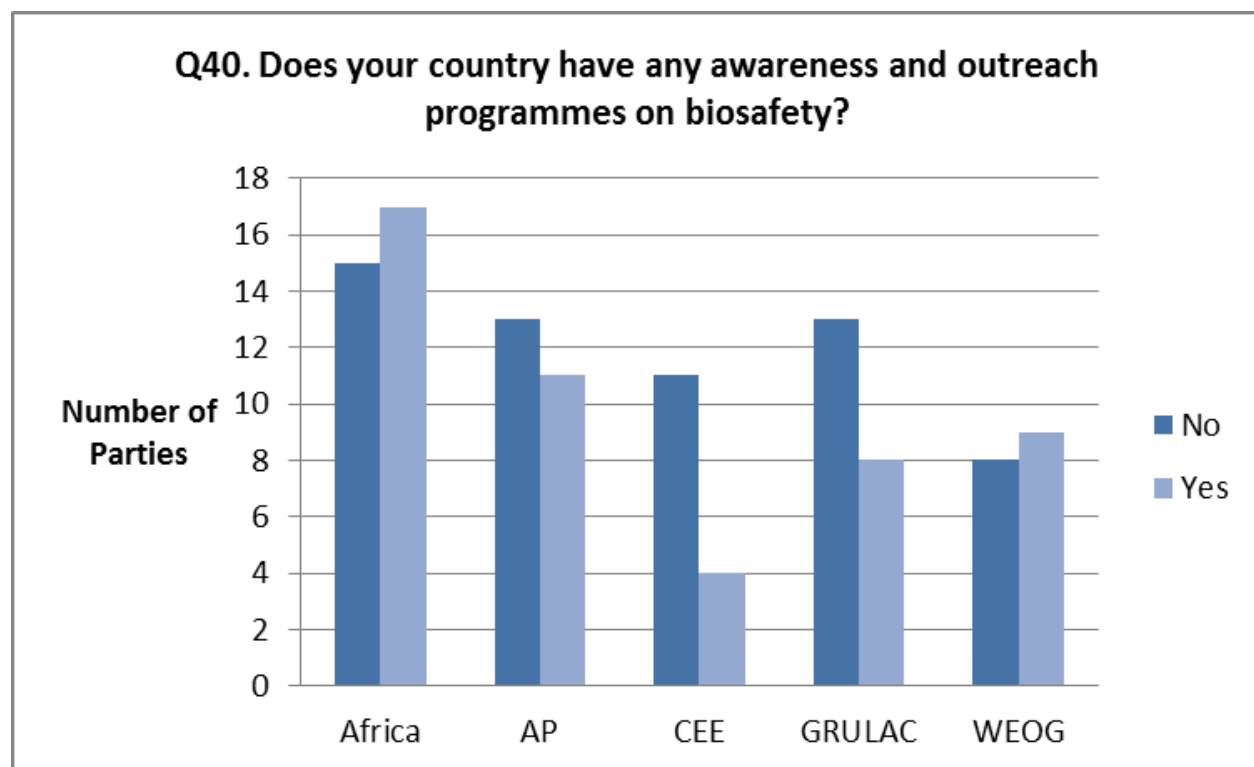
113. The percentages of respondents that reported no collaborative initiatives (including joint activities) on the Cartagena Protocol and other Conventions and processes established in the last 4 years, are as follows: 13% of respondents from the Africa region (44% of the total respondents from the Africa region), 13% from Asia and the Pacific (58% of the total respondents from the AP region), 8% from CEE (60% of the total respondents from the CEE region), 6% in GRULAC (33% of the total respondents from the GRULAC region), and 11% in WEOG (71% of the total respondents from the WEOG region). Among economic groupings, 6% of respondents from LDCs (35% of the total respondents from the LDC group) and 8% of respondents from SIDS (47% of the total respondents from the SIDS group).

114. With reference to the above question, 35 Parties provided some comments. One responding Party reported collaboration with RAEIN AFRICA which undertook capacity building on public awareness and socio-economic considerations. COMESA member states agreed on a common biosafety policy on LMOs, risk assessment, etc. A Party from CEE reported undertaking a joint initiative for the Cartagena Protocol and the Aarhus convention to ensure public information and access to decision making. A number of Parties referenced the UNEP-GEF Capacity Building support for the BCH, the UNEP-GEF BCH I and BCH II Projects and the LAC Biosafety Project.

115. In *Question 40*, countries were asked whether they have any awareness and outreach programmes on biosafety? (indicator 5.3.1). All 109 Parties answered this question as follows:

- 49 Parties (45% of the respondents): Yes
- 60 Parties (55% of the respondents): No

Below is a breakdown of the results by region:



116. The percentages of respondents that reported not having awareness or outreach programmes on biosafety, are as follows: 14% of respondents from the Africa region (47% of the total respondents from the Africa region), 12% from Asia and the Pacific (54% of the total respondents from the AP region), 10% from CEE (73% of the total respondents from the CEE region), 12% in GRULAC (62% of the total respondents from the GRULAC region), and 7% in WEOG (47% of the total respondents from the WEOG region). Among economic groupings, 9% of respondents from LDCs (50% of the total

respondents from the LDC group) and 14% of respondents from SIDS (79% of the total respondents from the SIDS group).

117. With reference to the above question, 48 Parties provided comments. Many Parties reported that the process of developing awareness and outreach programmes on biosafety is ongoing. One stated that a “Biosafety Communication strategy” is currently being developed and should be ready by the end of the first quarter of 2014. It was also reported that “PAPP (Public Awareness and Participation Platform) has been undertaking various outreach activities working with the NCA which covered: debates, media houses study tours, CSO workshops, politicians seminars.” Awareness and outreach programmes were conducted by AfricaBio. Some Parties reported on the use of workshops, television and radio programs and a variety of print media. One Party reported that it had conducted more than 50 awareness and outreach workshops/training programmes.

118. In *Question 41*, countries answering yes to question 40 above, were asked to indicate what entity is responsible for carrying out the programmes and/or services and at which level the programmes take place (e.g. local, national, etc.) (indicator 5.3.1). 65 Parties answered this question and reported entities that include: National Focal Points, National Competent Authorities, universities, multi stakeholder committees, Ministries of Environment and other Ministries, UNEP/GEF projects, CIBIOGEM, inter-ministerial committees, and National Biosafety/Biotechnology Authorities.

119. In *Question 42*, countries were asked whether they have designed and/or implemented an outreach/communication strategy on biosafety? (indicator 5.3.2). All 109 Parties answered this question as follows:

- 43 Parties (39% of the respondents): Yes
- 66 Parties (61% of the respondents): No

120. The percentages of respondents that reported not having designed and/or implemented an outreach/communication strategy on biosafety, are as follows: 21% of respondents from the Africa region (72% of the total respondents from the Africa region), 16% from Asia and the Pacific (71% of the total respondents from the AP region), 8% from CEE (60% of the total respondents from the CEE region), 10% in GRULAC (52% of the total respondents from the GRULAC region), and 6% in WEOG (35% of the total respondents from the WEOG region). Among economic groupings, 14% of respondents from LDCs (75% of the total respondents from the LDC group) and 16% of respondents from SIDS (89% of the total respondents from the SIDS group).

121. With reference to the above question, 50 Parties provided comments. Many responding Parties reported that the designing/implementation of an outreach/communication strategy on biosafety is ongoing. One Party stated “Yes, this includes Media engagement, theatre, journalist training on biosafety, scientist training on communication, critical thinker sessions which the media are invited to, and curriculum development”. Another reported that the “National Biosafety Strategy is one of the expected outputs upon the completion of the UNEP/GEF Project “Support for the Implementation of NBF”. Other strategies include national BCH, seminars, meetings of Ministerial Biosafety Committees, expert committee meetings, official national websites, and CNAs.

122. In *Question 43*, countries were asked to indicate the number of educational materials on biosafety that are available and accessible to the public (indicator 5.3.4). All 109 Parties answered this question as follows:

- 1 Parties (1% of the respondents): 100 or more
- 8 Parties (7% of the respondents): 25 or more
- 13 Parties (12% of the respondents): 10 or more
- 22 Parties (20% of the respondents): 5 or more
- 37 Parties (34% of the respondents): one or more
- 28 Parties (26% of the respondents): none

123. The percentages of respondents that reported no educational materials on biosafety are available and accessible to the public (indicator 5.3.4), are as follows: 10% of respondents from the Africa region (34% of the total respondents from the Africa region), 6% from Asia and the Pacific (29% of the total respondents from the AP region), 2% from CEE (13% of the total respondents from the CEE region), 6% in GRULAC (33% of the total respondents from the GRULAC region), and 1% in WEOG (6% of the total respondents from the WEOG region). Among economic groupings, 7% of respondents from LDCs (40% of the total respondents from the LDC group) and 8% of respondents from SIDS (47% of the total respondents from the SIDS group).

124. With reference to the above question, 50 Parties provided comments. Most responding Parties reported the types of educational materials on biosafety that are available and accessible to the public. They include: unofficial and official websites, brochures, books, manuals, guidance materials, PowerPoint presentations of training materials, policy notes, magazines, posters, flyers, leaflets, videos, CDs/DVDs, games, etc.

### III. GENERAL TRENDS

125. Notwithstanding the need of an in-depth analysis of the results collected through the dedicated survey, some relevant aspect about Protocol implementation have been identified and summarized as follows:

- Only 50% of the LDC Parties to the Cartagena Protocol participated in the survey. Similar percentages are also characterizing the limited participation of Parties in the Asia Pacific region (54% of Parties) and SIDS group (61% of Parties).
  - 23 Parties (14% of the total number of the Parties to the Protocol, including 9 from SIDS and 3 from LDC groups) reported not having an operational national biosafety framework yet (Q3);
  - 66 Parties (39% of the total number of the Parties, including 17 from SIDS and 14 from LDC groups) reported not having predictable and reliable funding for building capacity for the effective implementation of the Protocol (Q7);
  - 66 Parties (39% of the total number of the Parties, including 17 from SIDS and 16 from LDC groups) reported not having ever conducted a risk assessment of an LMO (Q12);
  - 27 Parties (16% of the total number of the Parties, including 11 from SIDS and 7 from LDC groups) reported not having the capacity to identify, assess or monitor living modified organisms or specific traits (Q13);
  - 49 Parties (29% of the total number of the Parties, including 13 from SIDS and 14 from LDC groups) reported not having the capacity to take appropriate measures in the event that an LMO is unintentionally released (Q18);
  - 29 Parties (17% of the total number of the Parties, including 11 from SIDS and 6 from LDC groups) reported not having informed the public about existing modalities for public participation in the decision-making process regarding living modified organisms (Q30); and
  - 60 Parties (36% of the total number of the Parties, including 15 from SIDS and 10 from LDC groups) reported not having implemented any awareness or outreach programmes on biosafety (Q40).
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