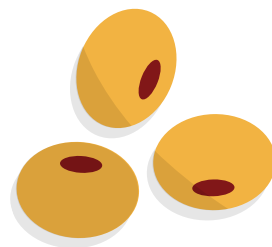
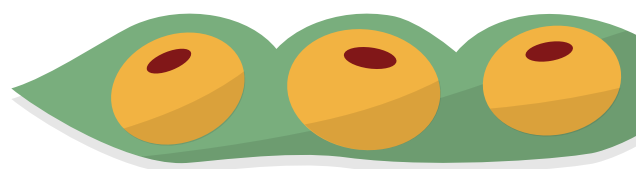




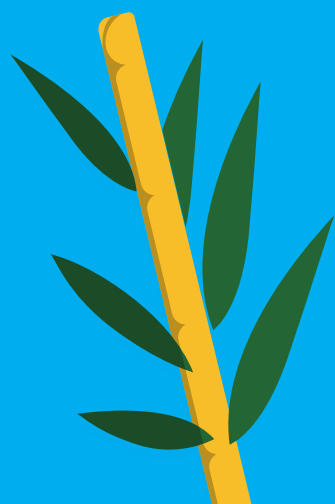
Food and Agriculture
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Stock-taking report: food biotechnology communication materials in the world

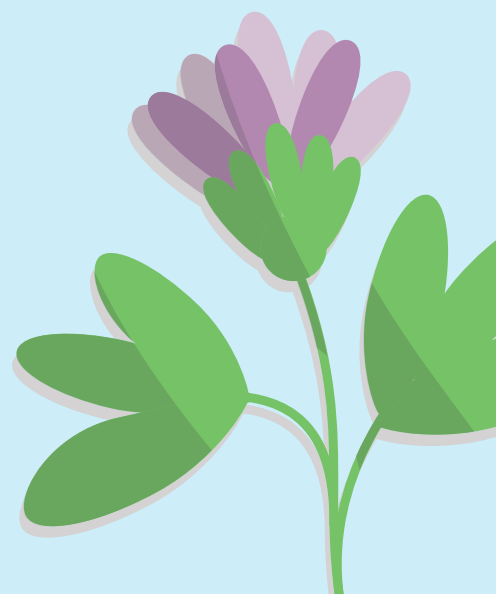


Background paper for the 2020
technical consultation meetings
on developing a communication
toolkit about food biotechnologies



Stock-taking report: food biotechnology communication materials in the world

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Summary

Advancements in food and agricultural biotechnologies have tremendously increased in recent decades. As biotechnologies have been applied widely in various sectors, there have been more opportunities for people to become aware of their use. However, the science behind the techniques is not necessarily simple to explain to the general public, and thus, the information can be easily misunderstood or misinterpreted. As a result, many people form opinions about food biotechnologies that may not be scientifically correct. During the Global Community Meeting on the FAO GM Foods Platform, held in September 2019, many participants expressed the strong need for a set of impartial and science-based communication materials that would address the communication challenges at a national level around food biotechnologies.

To address this need, Food and Agriculture Organization of the United Nations (FAO) in collaboration with Kenya's National Biosafety Authority, and scientific and consumer education/communication experts initiated the process of developing a communication toolkit on food biotechnologies. The toolkit is to be used by governmental agencies that assess the safety of foods derived from biotechnologies to better communicate with the general public. The toolkit will contain a series of guiding documents with various example materials. The target users of the toolkit itself are the food safety and biosafety competent authorities in the government sector, whereas the example materials are for the general public.

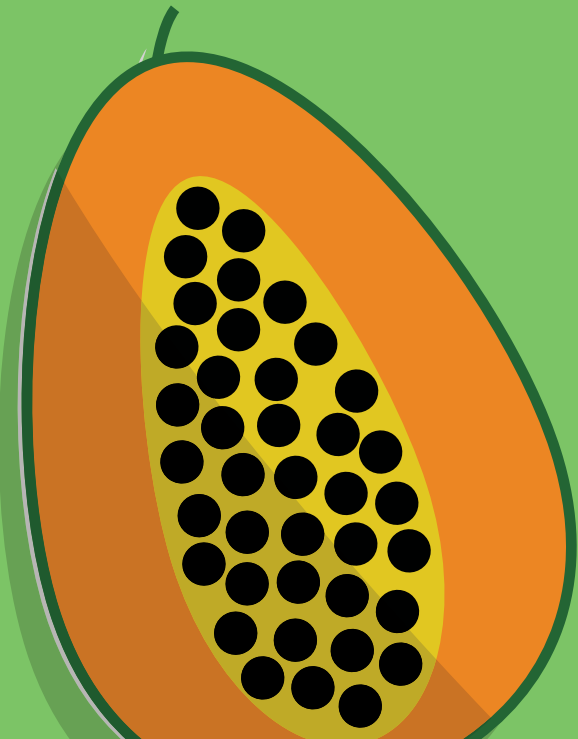
A step-by-step approach has been planned to develop the example materials with the first steps being the analysis of existing consumer education and communication materials worldwide, the identification of gaps in the information that is needed for consumers to gain a better understanding, and the selection of consumer education and communication materials to be used as a basis to develop example materials. This document summarizes these initial steps.

A total of 278 communication materials from approximately 50 countries were collected through online searches and with the assistance of Focal Points of the FAO GM Foods Platform. The following four global needs and suggestions for producing example materials were identified. First, among a wide range of food biotechnologies, a strong need to communicate about genetically modified organisms was identified. Second, the example materials should cover various aspects of food biotechnologies in a balanced manner including the regulatory aspects, applications and benefits, farmers' perspectives and socio-economic issues. Third, simple and clear messages with more infographics have to be conveyed for effective communication with the general public. The materials produced by the competent authorities tend to be lengthy text-oriented materials with limited infographics, which may be less immediate or more difficult to understand. Fourth, the example materials should be prepared in a way that countries can tailor them to their own national contexts, as targeted products in local languages seem to facilitate better communication with the public.

Considering all the results, 34 materials were selected to serve as a basis to develop the example materials. The materials will be discussed at the first technical consultation meetings to be held on 11–12 June 2020. Building on the discussions, the last two steps will be completed through various dialogues with experts including the second consultation meetings to be held on 26–27 August 2020.

Keywords: food safety, biotechnologies, communication, genetically modified organism (GMO), biosafety, regulatory framework, public engagement, health concerns, environmental concerns, safety assessment, history of the food improvement, use and applications, benefits, future direction, Food and Agriculture Organization of the United Nations (FAO)

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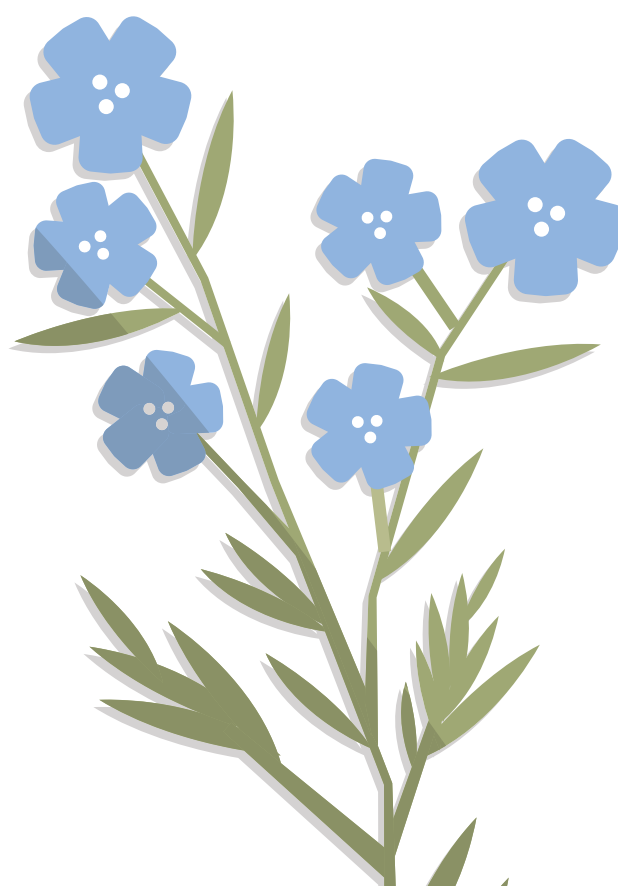
The Food and Agriculture Organization of the United Nations (FAO) would like to express its appreciation to many people who contributed to this report. Development of the report was coordinated by Kosuke Shiraishi through the biosafety project managed by Masami Takeuchi under the overall direction provided by Markus Lipp. Technical input was provided by several people in FAO, Isabella Apruzzese, Shan Chen and Mia Rowan, who are gratefully acknowledged.

FAO is grateful to the FAO GM Foods Platform community members and participants of the series of technical consultations on developing the communication toolkit about food biotechnologies held throughout 2020 for sharing their communication materials and participating in the review process of this report.

FAO would like to thank Kenya's National Biosafety Authority, which conducted the online searches to identify a substantial amount of communication materials and compiled the results under a Letter of Agreement.

Abbreviations and acronyms

CCAFRICA	FAO/WHO Coordinating Committee for Africa
CCASIA	FAO/WHO Coordinating Committee for Asia
CCEURO	FAO/WHO Coordinating Committee for Europe
CCLAC	FAO/WHO Coordinating Committee for Latin America and the Caribbean
CCNASWP	FAO/WHO Coordinating Committee for North America and South West Pacific
CCNE	FAO/WHO Coordinating Committee for Near East
FAO	Food and Agriculture Organization of the United Nations
FAQ	Frequently asked question
FP	Focal point
GM	Genetically modified
GMO	Genetically modified organism
NGO	Non-governmental organization
Q&A	Questions and answers
UN	United Nations





Introduction

Background

Advancements in food and agricultural biotechnologies have tremendously increased in recent decades, namely genetic modification and gene/genome editing. As these technologies have been applied widely in various organisms and fields, including but not limited to crops, livestock, forestry, fisheries, aquaculture and agro-industry, people have become aware of their use more than ever before. However, the science behind these techniques is not necessarily simple to explain to the general public. The information conveyed for instance through mainstream or social media can be misunderstood or misinterpreted. As a result, many people form opinions about food biotechnologies that may not be scientifically correct.

During the Global Community Meeting on the FAO GM Foods Platform, held in September 2019 (FAO, 2020a), many participants expressed the strong need for a set of impartial and science-based communication materials at a global level that would address the public communication challenges surrounding food biotechnologies at a national level. Communication materials already exist in various countries, covering the essential information including research and development, food applications, benefits and opportunities, international guidelines and regulatory frameworks, and the global trends with emerging technologies. However, the diversity and scope of the materials do not provide countries with a standard starting point to develop communication materials on food biotechnologies.

To address the need expressed at the global meeting, Food and Agriculture Organization of the United Nations (FAO) in collaboration with Kenya's National Biosafety Authority, and scientific and consumer education/communication experts

initiated the process of developing a communication toolkit on food biotechnologies. The toolkit is to be used by technical-level government officials in the competent authorities and ministries in charge of safety assessment of foods derived from biotechnologies to better communicate with the general public. The toolkit contains a series of guiding documents with various practical example materials. The target users of the toolkit itself are the food safety and biosafety competent authorities in the government sector, whereas those of the example materials are the general public. For this reason, the example materials are designed for people with limited technical and scientific background.

To develop such example materials, the following five steps have been planned: (1) a stock-taking analysis of existing consumer education and communication materials produced in various countries, (2) identification of the gaps on contents that are needed but not fully addressed, (3) identification of consumer education and communication materials to be used as a basis to develop example materials, (4) extraction of five to ten essential elements for each of the aspects, e.g. food safety assessment, regulations and benefits, from the materials picked up at step 3, and (5) development of the example materials. This document summarizes the results of the first three steps described above and serves as a background document for key discussions at the first technical consultation meetings to be held on 11–12 June 2020. Building on the discussions, the last two steps are to be completed through various dialogues with international experts including the second consultation meetings to be held on 26–27 August 2020.

Objectives

The objectives of this document are to:

- compile communication materials on food biotechnologies that have been produced by various countries to serve as the global examples that other countries can further tailor to use for their country contexts;
- understand what types of information are covered by the already existing communication materials and what are the gaps of communication contents that are needed but not fully addressed; and
- identify communication materials to be used for extraction of essential elements that will become a basis to develop example materials.

Scope

This document covers the communication aspects of food biotechnologies that are not limited to genetically modified organisms (GMOs) or genetically modified (GM) foods but encompass a wide range of traditional technologies such as tissue culture, fermentation and mutagenesis, as well as cutting-edge technologies including gene/genome editing. Communication materials were gathered through online searches and with the assistance of the Focal Points (FPs) of the FAO GM Foods Platform (hereafter referred to as Platform with a capital “P”) (FAO, 2020b). The online searches were conducted by looking for relevant communication materials on the following six aspects (Table 1). The materials collected vary from written products such as brochures, newsletters, infographics, flyers and institutional web contents to pictures and media materials such as video clips and social media images.

TABLE 1. Aspects of food biotechnologies used for the online searches

#	Aspects	Explanation
1	Interactions with stakeholders	Good practices of the governments in terms of interacting with other stakeholders such as academia and civil society organizations
2	Public concerns and misperceptions	Good practices of effectively addressing common questions, concerns, misperceptions and misconceptions of the general public
3	Basic facts	Basic facts of food biotechnologies including terminology, history of food improvements and developments, and scientific methods
4	Uses and benefits	Practical uses and applications, and potential and factual benefits of food biotechnologies
5	Experts' views	Experts' views and opinions on food biotechnologies
6	Regulatory frameworks	Regulations, policies and laws on food biotechnologies

Methodology

To prepare this document, 278 communication materials from approximately 50 countries were collected. Among them, 102 materials were identified through online searches using the keywords stated in Table 2 for each of the six aspects. Google was the search engine used for this purpose. The other 176 relevant communication materials were contributed directly by 34 countries and one regional organization through the FPs of the Platform (Table 3). Those contributors are listed by Codex region (Codex, 2020a) in the table. There are six Codex regions each represented by one of the following regional coordinating committees jointly managed by FAO and the World Health Organization (WHO), FAO/WHO Coordinating Committee for Africa (CCAFRICA), FAO/WHO Coordinating Committee for Asia (CCASIA), FAO/WHO Coordinating Committee for Europe (CCEURO), FAO/WHO Coordinating Committee for Latin America and the Caribbean (CCLAC), FAO/WHO Coordinating Committee for North America and South West Pacific (CCNASWAP) and FAO/WHO Coordinating Committee for Near East (CCNE).

It should be noted that while the online searches looked into various websites from different sectors including the private sector and academia, the focus was on materials from governmental regulatory agencies as they would be the primary users of the toolkit and the guiding documents. Therefore, the analysis results may not represent all the existing communication materials in the world. It is also noted that the online searches were conducted in English only and many communication tools and resources available online in other languages have not been included.

TABLE 2. Keywords used for the online searches

#	Aspects	Keywords
1	Interactions with stakeholders	food and agricultural biotechnologies, good practices, interaction with stakeholders, government agencies, academia and research institutes, media, private sector and industry associations, communication
2	Public concerns and misperceptions	food and agricultural biotechnologies, good practices, effective communication with public, frequently asked questions, common misperceptions and misunderstandings
3	Basic facts	food and agricultural biotechnologies, basic facts, history of food improvements and developments, methods, genetics, food production and processing, industrial and research applications, tissue cultures, genetic engineering, plant, animal
4	Uses and benefits	food and agricultural biotechnologies, uses and potential benefits, production, economic, health, climate, nutrition, consumers, farmers, now and future, safety assessment, sustainability
5	Experts' views	food and agricultural biotechnologies, experts view and opinions, science-based, safety, concerns of consumers, user and potential benefits, now and future, interview, truth
6	Regulatory frameworks	food and agricultural biotechnologies, regulations, policies and laws, safety assessment, genetically modified organism, gene editing, conventional and modern technologies, approval, ethical issues

TABLE 3. Platform community members that shared relevant communication materials

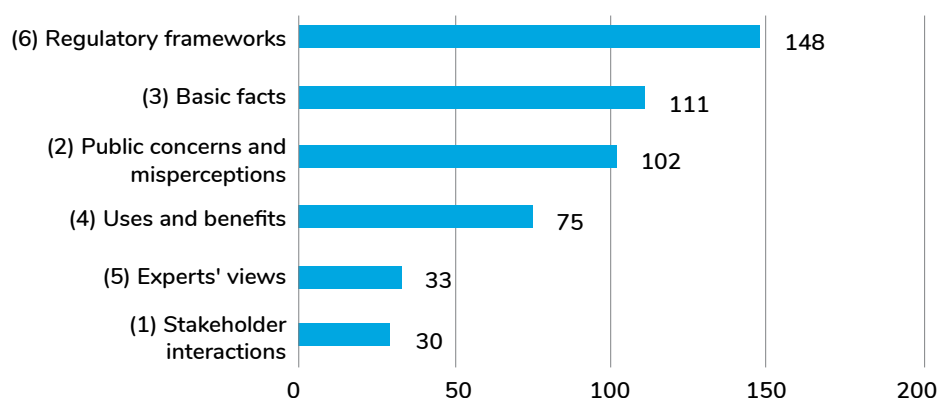
Codex region	Platform community members
CCAFRICA (8)	Eswatini, Ethiopia, Kenya, Mali, South Africa, Uganda, Zambia, Zimbabwe
CCASIA (6)	Bangladesh, Bhutan, Malaysia, Philippines, Singapore, Thailand
CCEURO (10)	Belarus, Belgium, Bosnia and Herzegovina, European Union, Ireland, Latvia, Luxembourg, Norway, Sweden, United Kingdom
CCLAC (3)	Argentina, Grenada, Uruguay
CCNASWAP (4)	Australia, Canada, New Zealand, United States of America
CCNE (4)	Iran, Lebanon, Sudan, United Arab Emirates

Analysis results

Most of the communication materials analysed focus on genetically modified organisms

The 278 communication materials collected were first analysed by aspect. Those materials were tagged with one or more aspects among the six described in Table 1 and 2, and the number of each aspect distributed was summed up. For example, if a communication item was about the history of food improvements and developments and national legislation, it was given two aspect tags, “basic facts” and “regulatory frameworks”. Figure 1 shows that the most common aspect covered by the identified materials was “regulatory frameworks” (148) which explain regulations, policies and laws regarding food biotechnologies. This was followed by “basic facts” (111) and “public concerns and misperceptions” (102). The aspect on basic facts covers fundamental information including explanations of various technical terms, history of food improvements and developments and scientific methods, whereas communication materials in the public concerns and misperceptions category address common questions, concerns, misperceptions and misconceptions of the general public. The primary concern of the general public seemed the safety for human health and the environment of foods derived from biotechnologies. The area least covered is that of governments’ good practices on interacting with other stakeholders (30). There were only a few products that speak about engagement of stakeholders in the approval process of food derived from biotechnologies and in other opportunities.

FIGURE 1: Aspects of food biotechnologies covered by the communication materials identified



To further investigate the areas that are most frequently addressed by the communication materials collected, a maximum of five keywords were distributed to each of the materials among the 45 listed in Table 2. As shown in Table 4, a keyword “genetically modified organism” ranked second (115), highlighting the fact that most communication materials focused on GMOs. Comparatively, modern technologies other than GMOs were discussed in a limited number. These results indicate that there is a strong need to communicate with the public about GMOs. It was also found that traditional biotechnologies such as conventional breeding, tissue culture, fermentation and mutagenesis, as well as cutting-edge technologies including gene/genome editing, were not widely talked about. In addition, few keywords related to the social aspects of food biotechnologies were represented by the communication materials such as “economic” (9), “sustainability” (7), “farmers” (6) and “ethical issues” (6). While key words “commercialization” (9) and “trade” (7) were not used for the online searches, some communication materials specifically covered those aspects of food biotechnologies. On the other hand, “private sector and industry associations” and “truth” were not assigned to any materials although they were used for the online searches.

TABLE 4: Keywords from the communication materials collected

Keyword	Number	Keyword	Number	Keyword	Number
regulations	144	history of food improvements and developments	21	conventional technologies	8
genetically modified organism	115	policies and laws	21	now and future	7
uses and potential benefits	79	production	21	sustainability	7
safety assessment	65	climate/environment	19	trade	7
basic facts	57	genetic engineering	18	ethical issues	6
concerns of consumers	46	food production and processing	17	farmers	6

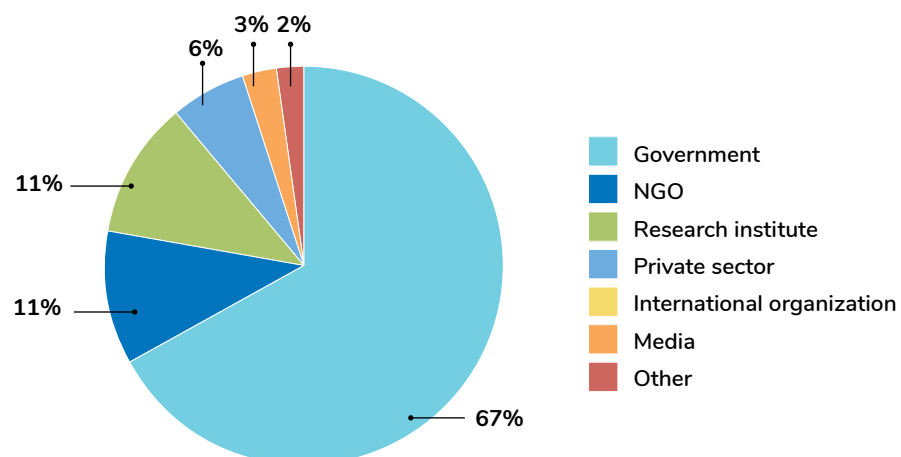
(cont.)

Keyword	Number	Keyword	Number	Keyword	Number
modern technologies	41	interaction with stakeholders	17	plant	6
approval	34	genetics	16	animal	5
government agencies	32	common misperceptions and misunderstandings	15	industrial and research applications	5
safety	32	health	15	good practices	4
science-based	29	academia and research institutes	12	labelling	3
methods	27	experts view and opinion	12	media	2
frequently asked questions	25	effective communication with the public	11	nutrition	2
gene editing	25	economic	9	interview	1
consumers	23	commercialization	9	tissue cultures	1

Communication materials produced by governments mainly address their regulatory frameworks

Figure 2 shows who produced the communication materials collected. The most popular sources of the communication materials outsourced were governmental agencies (67 percent, or 187), followed by non-governmental organizations (NGOs) (11 percent, or 32) along with academic and research institutes (11 percent, or 30). On the other hand, the materials gathered from the private sector and industrial associations were limited to six percent (16). The online searches have found many materials that have been published for promotion and advertisement purposes. However, those products were considered to be out of scope due to their subjectivity and were not included in the list of the identified materials.

FIGURE 2: Producers of the communication materials gathered



Subsequently, aspects on food biotechnologies covered by the communication materials identified were further analysed by each of the following producers: governmental agencies, NGOs, academia and research institutes, and the private sector and industrial associations. A similar analysis to Figure 1 was performed for each of the four producers. As expected, the aspect on regulatory frameworks came first for the communication materials produced by governmental agencies (Figure 3), and this tendency was more obvious than Figure 1. Those materials were mainly regulatory and policy documents specific for their country with most being lengthy and with few infographics. On the other hand, those produced by NGOs speak about uses and benefits of food biotechnologies as the most popular aspect (Figure 4). Similar results were yielded by communication materials produced by the private sector and industrial associations. Academia and research institutes published the products that gained a categorization “experts’ views” as the most popular aspect followed by basic facts and regulatory frameworks (Figure 5).

FIGURE 3: Aspects of food biotechnologies covered by the materials produced by governmental agencies

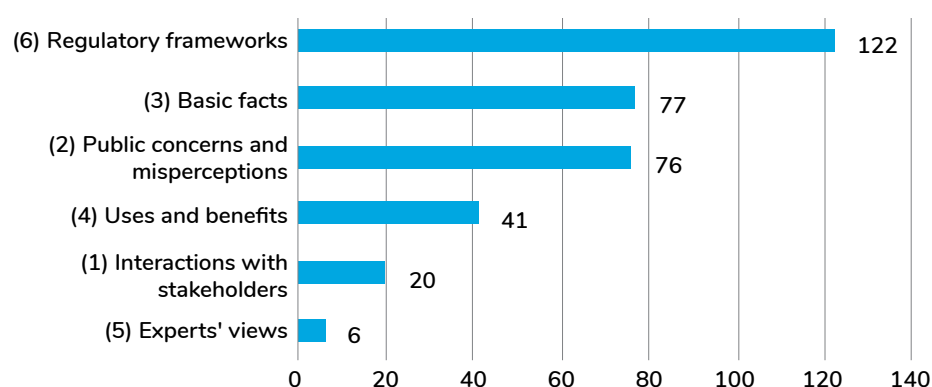


FIGURE 4: Aspects of food biotechnologies covered by the materials produced by non-governmental organizations

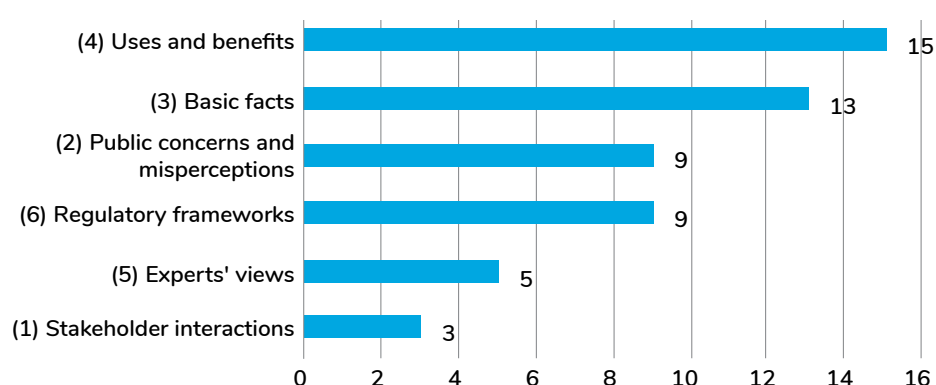
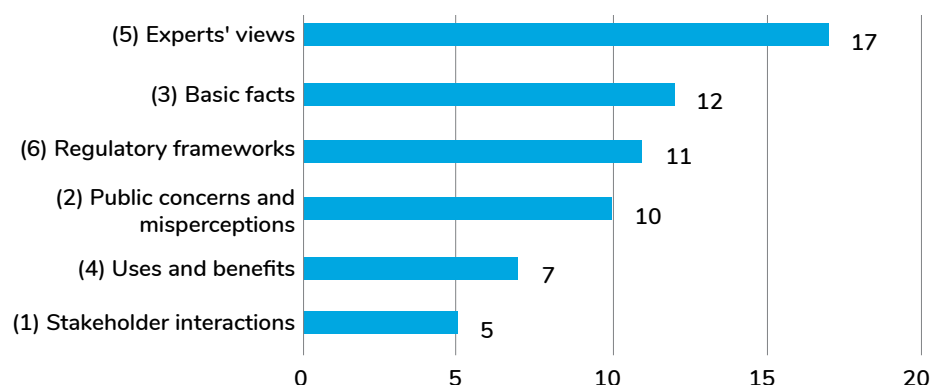


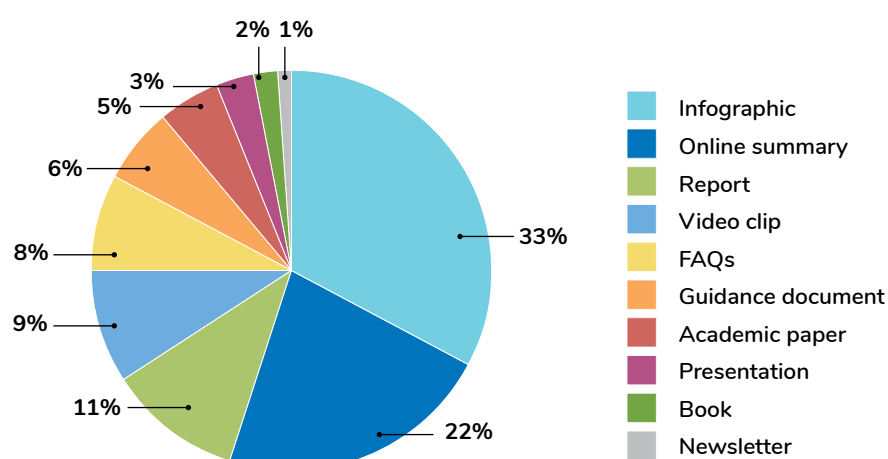
FIGURE 5: Aspects of food biotechnologies covered by the materials produced by academia and research institutes



Infographic is a useful format for communication with the public

Communication materials have been produced in various formats. Figure 6 shows that the most common format among the 278 products collected was an infographic (33 percent) which includes a brochure, leaflet and fact sheet. This is followed by an online summary (22 percent) such as text-based information in institutional websites, a scientific blog and an archive of useful links, along with a various types of reports (11 percent). Video clips (9 percent) were collected mainly through the Platform FPs most of which are composed of animations explaining about food biotechnologies in a science-based but easy-to-understand manner. Frequently asked questions (FAQs) (8 percent) ranked fifth which address various questions and concerns of the general public about the topic. Aside from those formats, guidance documents (6 percent) and academic papers (5 percent) were identified as communication materials. However, those publications did not seem easy for the general public to understand as they contain technical and scientific information targeting primarily scientists and researchers. These results indicate that infographic is a useful format for communicating with the public about food biotechnologies.

FIGURE 6: Communication materials by format



Similar to figures 3, 4 and 5, further investigations were conducted to see if any differences could be observed in terms of the format of communication materials among governmental agencies (Figures 7), NGOs (Figures 8), academia and research institutes (Figures 9), and the private sector and industrial associations (Figures 10). A remarkable difference was observed between governmental agencies and the private sector and industrial associations regarding the use of infographics. As per academia and research institutes, the format, academic paper, such as peer reviewed articles ranked first followed by report and guidance document. It was not surprising that many of the materials identified focused on describing new developments and innovative researches and that infographics were not widely used.

FIGURE 7: Format of communication materials produced by governmental agencies

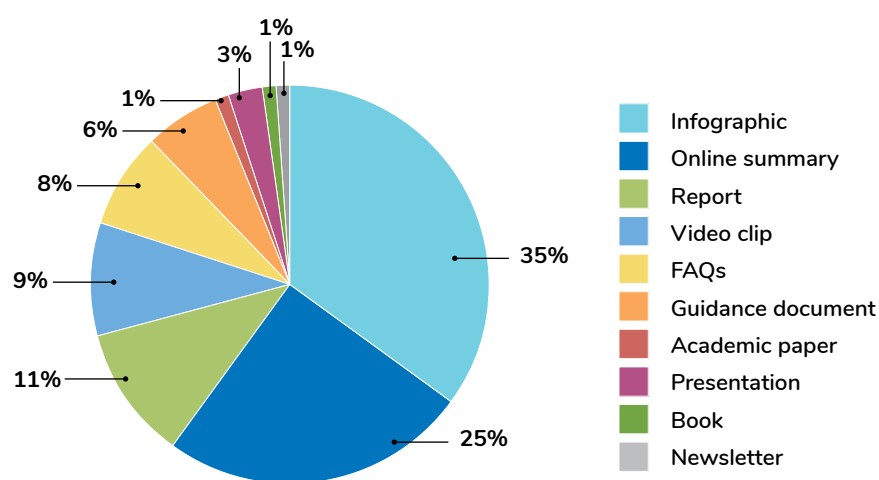


FIGURE 8: Format of communication materials produced by non-governmental organizations

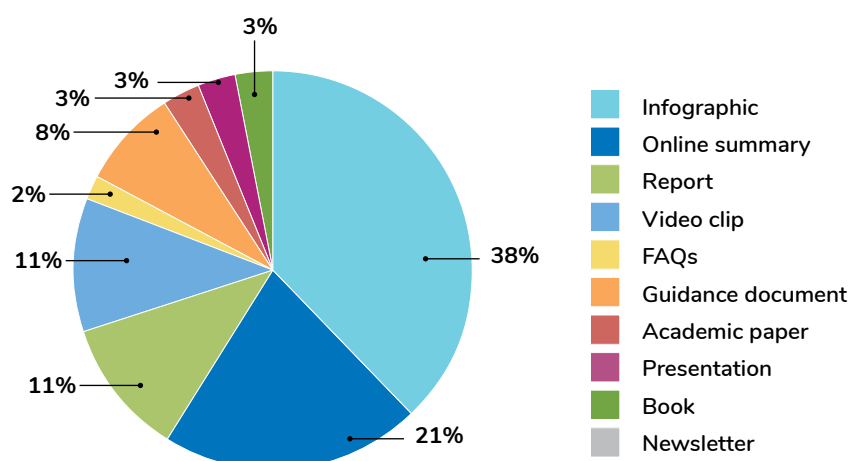


FIGURE 9: Format of communication materials produced by the private sector and industrial associations

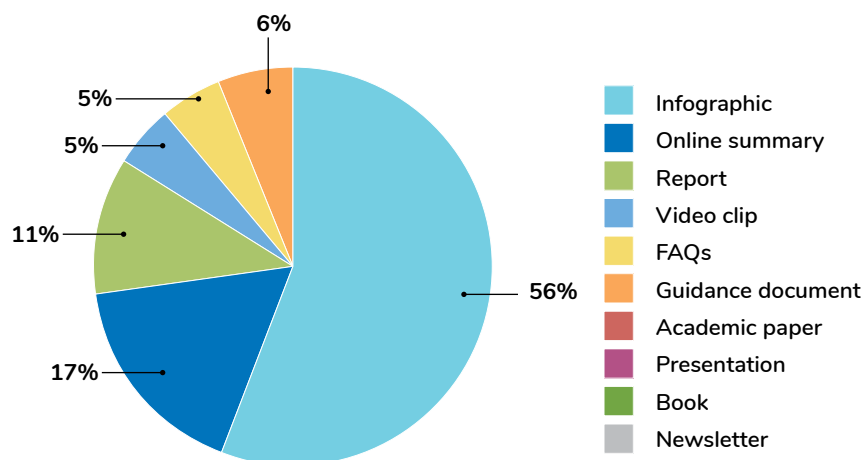
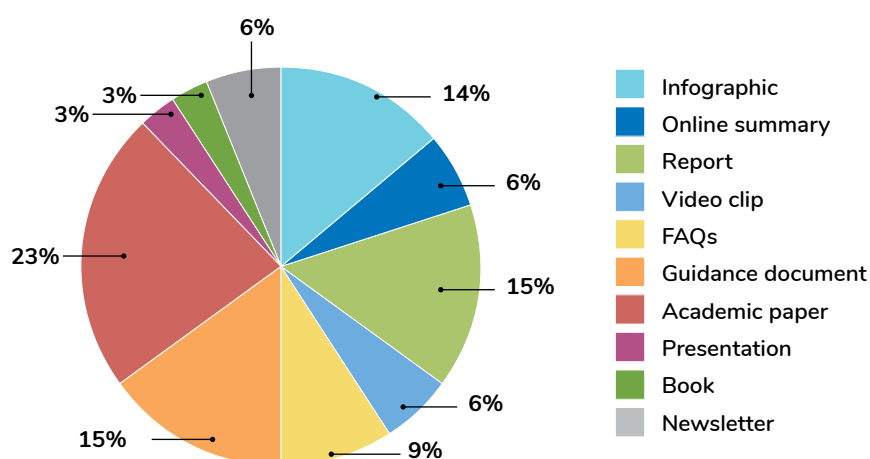


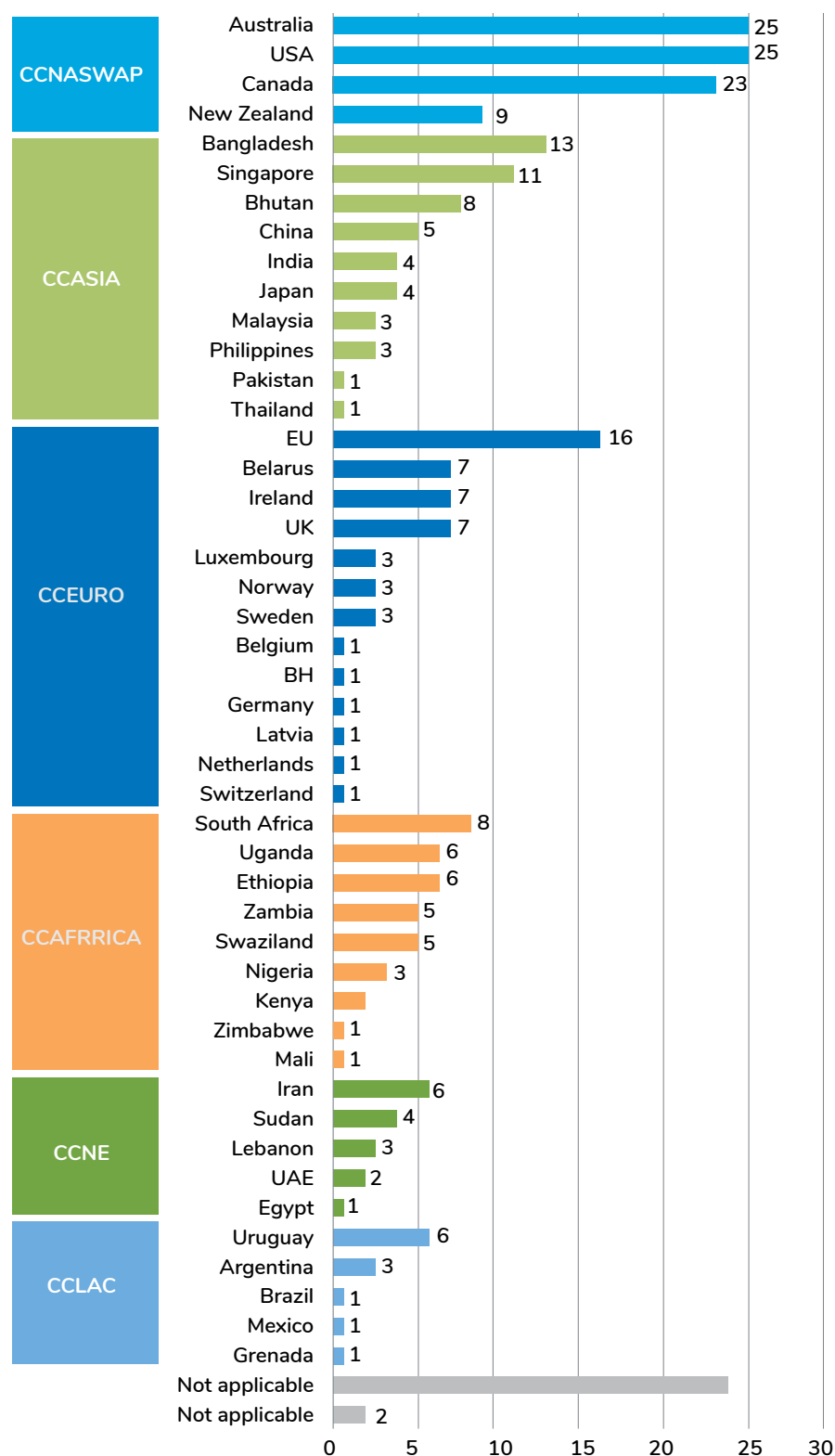
FIGURE 10: Format of communication materials produced by academia and research institutes



There is a need to make communication materials available in local languages and in a manner that is easy to access

Figure 11 shows the number of gathered materials by country which were grouped by Codex region (Codex, 2020a). Those which were produced by intergovernmental organizations such as United Nation (UN) agencies and international NGOs were categorized as “Not applicable” (24). A total of 81 communication materials were collected from the CCNASWAP region, followed by CCASIA (55) and CCEURO (49). In some countries, in particular those of the CCASIA and CCNE regions, websites of the governmental agencies, as well as their communication materials, are not available in English, which made the online searches difficult. This, however, indicates that there is a strong demand for producing communication materials in local languages to

FIGURE 11: Countries in which the communication materials collected were produced



Some names of countries abbreviated; from the left, USA is the United States of America, EU is European Union, UK is United Kingdom, BH is Bosnia and Herzegovina and UAE is United Arab Emirates.

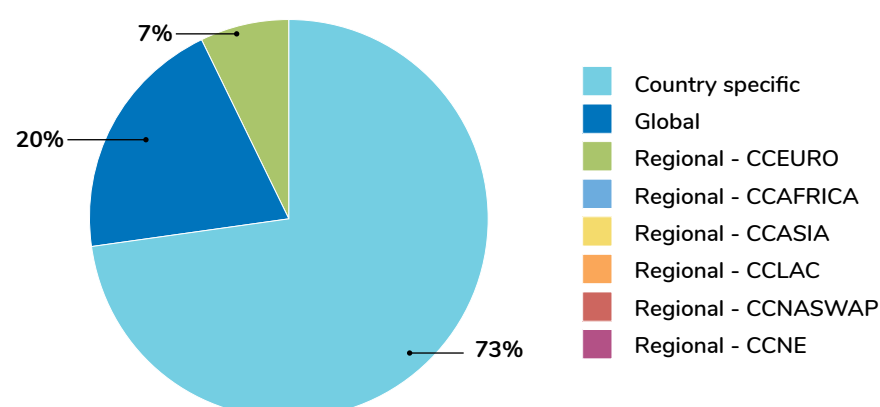
engage in communication with the public. In addition, many identified materials such as those received directly from the Platform FPs were not posted by the competent authorities or were difficult to find on their national websites. Therefore, the public could have difficulty in finding and benefiting from those materials. To address this, it is advisable to post the communication materials on governmental websites where the general public can easily access them.

Communication materials produced by governments specifically target their citizens

Figure 12 shows that 73 percent of the collected communication materials were produced for a national audience illustrating the uses and potential benefits, regulations and basic facts of the food biotechnologies in their countries. Twenty percent of the materials were for readers around the world, most of which were produced by academia and research institutes, private sector and industry associations, and by UN and international organizations.

Of the communication materials targeting a worldwide audience (20%, or 54), only seven of them were produced by UN agencies along with other international organizations, while the rest were produced by the private sector and industrial associations, and academia and research institutes. The results indicate that few communication materials on food biotechnologies exist which help achieve a good and thorough understanding, convey neutrality and build credibility, and can be used by governmental officials worldwide. Thereby it was confirmed that having a set of science-based standard communication materials at a global level is an urgent need. This could initiate the discussion on GM food safety assessment to be conducted at a national level. Given that most of the materials produced by governmental agencies targeted their citizens, it might be useful to produce the communication toolkit in a format that would allow countries to customize the content to include some country specific information.

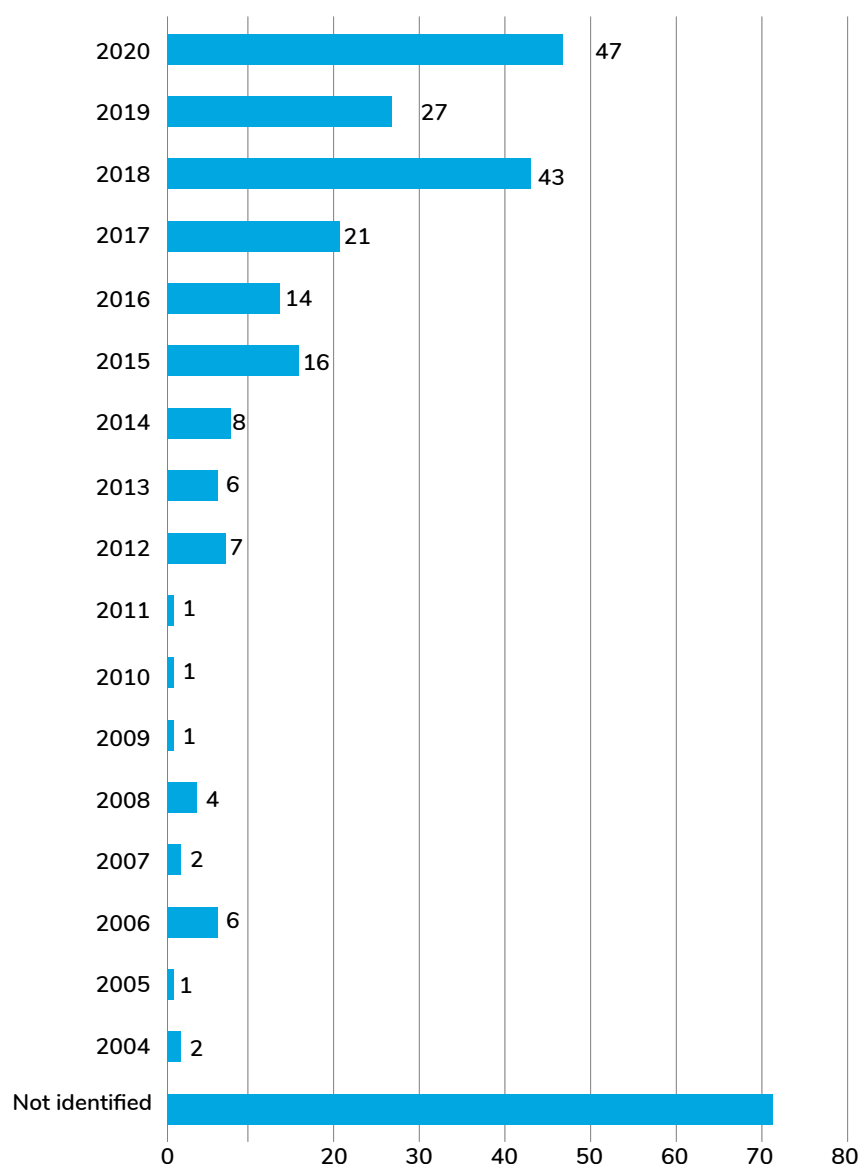
FIGURE 12: Intended audience of the communication materials identified



Most of the materials identified were published in the last five years

Figure 13 shows when the communication materials collected were published. Twenty-six percent (71) of the communication materials did not have a clear date of issuing, while 60 percent (168) were published since 2015. These results suggest that many of the collected communication materials were recently published and are ready to be used for the example materials.

FIGURE 13: Year of the communication materials were published



Gaps identified and considerations made

The analysis identified the following gaps on the communication materials collected and helped make some considerations to develop the example materials.

- Most of the identified materials focused intensively on GMOs, while modern biotechnologies other than GMOs, as well as conventional and cutting-edge technologies, were discussed in a limited number. Therefore, while the set of example materials that will be included in the toolkit will need to cover various aspects of food biotechnologies that are not fully discussed in the existing communication materials, its focus should be on modern biotechnologies, in particular on GMOs, to address global needs.
- There was a general observation that regulatory aspects were well covered, whereas many other areas, such as information on applications and benefits, farmers' perspectives, socio-economic issues and nutrition-related considerations were not well captured by the majority of the materials. Given the toolkit is intended to be used by authorities around the world, the example materials will need to cover various aspects in a balanced manner such as the basic science behind food biotechnologies, benefits to consumers, farmers and the environment, and safety of the products.
- Communication materials produced by the competent authorities tend to be some lengthy text-oriented materials focusing on their regulatory and policy information, with limited infographics. Hence, the example materials in the toolkit should improve the messages and include more infographics for effective communication.

- There is a strong need that governments produce communication materials in local languages and contexts to effectively engage the public. In order for the example materials to be effectively used by various countries, the example materials should be customizable to enable countries to include national information of interest to their public. The materials will need to be posted on governmental websites where the general public can easily have access to them.



Communication materials proposed for the development of the example materials

Taking the above-mentioned identified gaps into consideration to the extent possible, 34 communication materials have been drawn to be further reviewed by international experts to develop the example materials. Annex 1 is a list of those 34 materials and Annex 2 compiles the communication materials produced by governmental agencies, academic and research institutes, and UN agencies and other international organizations that were reviewed.

The 34 materials were produced by 14 countries and one regional organization from various regions, i.e. Kenya (2), South Africa (2), Uganda (3) and Zambia (1) from CCAFRICA region; Bhutan (1), Malaysia (1) and Singapore (7) from CCASIA; European Union (3), Ireland (1), Norway (1) and United Kingdom (1) from CCEURO; and Australia (2), Canada (2), New Zealand (2) and USA (5) from CCNASWAP. Numbers in the brackets indicate how many materials from each of the countries were picked up.

It should be noted that the main reason for the shortage of communication materials from CCLAC and CCNE regions is mainly due to the language barrier previously discussed in section 2.2.

The majority of communication materials (30 out of 34 in number) were produced by governmental agencies while the rest were by NGOs (3), academia and research institutes (1). As for the format of the communication materials, the most common type was infographic (15). This was followed by FAQs (9) and online summary (6). The remaining four materials were categorized into either one of the following group: report, newsletter and video clip.

The 34 materials cover various aspects of food biotechnologies with genetically modified organism (16), uses and potential benefits (13), consumer concerns (12) and regulations (12) being the top four keywords identified in the materials. Other major keywords are gene editing (9), methods (8), modern technologies (7), science-based (7), safety (6), safety assessment (6), basic facts (5) and production (5).

These communication materials will be reviewed at the first technical consultation meetings to be held on 11–12 June 2020, and used for extraction of essential elements. The identified elements will then be used as a basis to develop key messages and designs of the example materials. Figure 14 represents a possible type of such example materials (Government of Malaysia, 2019).

FIGURE 14: Possible type of the example materials



Courtesy of the Government of Malaysia

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Annex 1: List of 34 communication materials to be reviewed by experts

Serial No.	Unique ID	Material title	Producer	Country	Link and note
1.	213	2018_FSANZ GM food Facebook posts	Food Standards Australia New Zealand	Australia	link (link created on the Platform)
2.	216	New breeding techniques - Outcomes	Food Standards Australia New Zealand	Australia	link
3.	22	Awareness brochure NBFPA BAFRA	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
4.	175	Technical trade issues in agriculture	Agriculture and Agri-Food Canada	Canada	link
5.	176	Insight report backgrounder	Canadian Centre for Food Integrity (CCFI)	Canada	Report is not available in the public domain. Contact the CCFI for information.
6.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
7.	206	Risk assessment vs risk management	European Food Safety Authority	European Union	link
8.	207	Risk assessment of genetically modified plants	European Food Safety Authority	European Union	link
9.	191	Genetically modified food	Food Safety Authority of Ireland	Ireland	link
10.	71	Frequently asked questions on GMOs	Kenya's National Biosafety Authority	Kenya	link
11.	72	National Biosafety Authority brochure	Kenya's National Biosafety Authority	Kenya	link
12.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
13.	198	Gene editing technologies	Royal Society of New Zealand Te Apārangi	New Zealand	link
14.	202	Gene editing in Aotearoa	Royal Society of New Zealand Te Apārangi	New Zealand	link
15.	217	CRISPR: Five new debates on genetic engineering	Norwegian Board of Technology	Norway	link
16.	178	GM crops: Are they safe?	Singapore Food Agency	Singapore	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
17.	180	Applications of genetic modification	Genetic Modification Advisory Committee	Singapore	link
18.	182	FAQ - Environment and health risks	Genetic Modification Advisory Committee	Singapore	link
19.	183	FAQ - genetically modified animals	Genetic Modification Advisory Committee	Singapore	link
20.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link
21.	185	FAQ - genetically modified microorganisms	Genetic Modification Advisory Committee	Singapore	link
22.	186	FAQ - genetically modified Organisms	Genetic Modification Advisory Committee	Singapore	link
23.	114	Effective regulation & sustainable use of GMOs in South Africa	Biosafety South Africa	South Africa	link (link created on the Platform))
24.	116	GM timeline	Biosafety South Africa	South Africa	link (link created on the Platform)
25.	131	Biotechnology - a catalyst for economic development, improved nutrition, health and wealth of Ugandans	National Agriculture Research Organization	Uganda	link (link created on the Platform))
26.	134	Top 10 facts about biosafety and biotechnology in Uganda by 2016	Uganda biosciences information center	Uganda	link (link created on the Platform)
27.	135	Common concerns associated with introduction of GM crops in Uganda	National Agriculture Research Organization	Uganda	link
28..	189	genetically modified foods	Food Standards Agency	United Kingdom	link
29.	151	How to make GMO	Harvard University, the Graduate School of Arts and Sciences	United States of America	link
30.	161	GMOS 101: Your basic questions answered	US Food and Drug Administration	United States of America	link
31.	162	Science and history of GMOs and other food modification processes	US Food and Drug Administration	United States of America	link
32.	163	Understanding new plant varieties	US Food and Drug Administration	United States of America	link
33.	164	Agricultural biotechnology	US Food and Drug Administration	United States of America	link
34.	167	Biosafety newsletter	Zambia's National Biosafety Authority	Zambia	link (link created on the Platform)

Annex 2: List of communication materials collected for analysis

A total of 224 communication materials produced by governmental agencies, academia and research institutes, and UN and international organizations are categorized by 12 topics. Most materials cover multiple aspects, presenting various types of information on food biotechnologies. Therefore the same materials appear in different topics for multiple times.

01. Can I have a say in the authorization process of biotechnology products?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
35.	1	Communicating biosafety - A new approach for agrobiotechnology adoption	Agrotechnology	Argentina	link
36.	9	International peer review of FSANZ GM food safety assessment process	Food Standards Australia New Zealand	Australia	link
37.	13	Fact sheets on various topics relating to the regulation of genetically modified organisms and the regulatory scheme	Australian Government, Department of Health	Australia	link
38.	213	2018_FSANZ GM food Facebook posts	Food Standards Australia New Zealand	Australia	link (link created on the Platform)
39.	214	Consultation paper	Food Standards Australia New Zealand	Australia	link
40.	230	Reporting misuse of genetically modified organisms (GMOs)	Department of Health	Australia	link
41.	231	Public participation in assessing gene technology	Department of Health	Australia	link
42.	237	Ongoing monitoring of the safety of GM crops in Australia	Department of Health	Australia	link
43.	175	Technical trade issues in agriculture	Agriculture and Agri-Food Canada	Canada	link
44.	270	Obstacles techniques au commerce agricole	Agriculture and Agri-Food Canada	Canada	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
45.	203	Public consultation - Applicability of the EFSA opinion on site-directed nucleases type 3 for the safety assessment of plants developed using site-directed nucleases type 1 and 2 and oligonucleotide-directed mutagenesis	European Food Safety Authority	European Union	link
46.	204	Public consultation on the draft EFSA Scientific Committee opinion "Evaluation of existing guidelines for their adequacy for the microbial characterization and environmental risk assessment of micro-organisms obtained through synthetic biology"	European Food Safety Authority	European Union	link
47.	209	Advances in genetic engineering: EFSA public consultations in 2020	European Food Safety Authority	European Union	link
48.	72	National Biosafety Authority brochure	National Biosafety Authority, Kenya	Kenya	link
49.	80	The role of scientists in policy-making regarding agricultural biotechnology - From traditional to alternative views	Delft University of Technology	Netherlands	link
50.	85	Nigeria national biosafety communication strategy	The National Biosafety Management Agency, Abuja	Nigeria	link

02. Is food biotechnology safe for human health?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
51.	4	¿Son seguros los productos de la edición génica?	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
52.	7	GM Foods - Safety assessment of genetically modified foods	Food Standards Australia New Zealand	Australia	link
53.	13	Fact sheets on various topics relating to the regulation of genetically modified organisms and the regulatory scheme	Australian Government, Department of Health	Australia	link
54.	17	National biosafety framework project	Ministry of Environment, Forest and Climate Change	Bangladesh	link
55.	251	Biosafety guidelines of Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
56.	257	TV spot disseminated by the Department of Environment towards education and awareness on biosafety	Ministry of Environment, Forest and Climate Change	Bangladesh	link
57.	79	Enhancing the cee collaboration and know-how transfer in biotechnology and biosecurity	National Biosafety Coordination Center	Belarus	link
58.	19	Awareness program on biosafety	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
59.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
60.	22	Awareness brochure NBFPA BAFRA	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
61.	24	Awareness calendar for 2014	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
62.	27	Genetically modified organisms - Present situation and future prospects	Food Safety Agency of Bosnia and Herzegovina	Bosnia and Herzegovina	link
63.	32	The safety of genetically-modified (GM) foods	Health Canada	Canada	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
64.	264	Innocuité des aliments génétiquement modifiés (GM)	Health Canada	Canada	link
65.	244	Genetically modified food does not cause infertility	Ministry of Agriculture	China	link
66.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
67.	173	New advances in biotechnology	European Food Safety Authority	European Union	link
68.	191	Genetically modified food	Food Safety Authority of Ireland	Ireland	link
69.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
70.	70	GMOs in Japan - Challenges to prejudice against GMOs in Japan	Hokkaido University	Japan	link
71.	71	Frequently asked questions on GMOs	National Biosafety Authority, Kenya	Kenya	link
72.	73	Latvian national biosafety clearing house	Latvian national Biosafety clearing house	Latvia	link
73.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
74.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
75.	200	About genetic modification in New Zealand	Ministry for the Environment	New Zealand	link
76.	104	Biosafety and genetically modified organisms FAQs	Ministry of Environment	Pakistan	link
77.	178	GM crops: Are they safe?	Singapore Food Agency	Singapore	link
78.	182	FAQ - Environment and health risks	Genetic Modification Advisory Committee	Singapore	link
79.	183	FAQ - genetically modified animals	Genetic Modification Advisory Committee	Singapore	link
80.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link
81.	186	FAQ - genetically modified Organisms	Genetic Modification Advisory Committee	Singapore	link
82.	187	FAQ - GMOs in the biomedical sciences	Genetic Modification Advisory Committee	Singapore	link
83.	188	Important facts you need to know about GM food	Genetic Modification Advisory Committee	Singapore	link
84.	113	Telling the story of GMOs in South Africa	Biosafety South Africa	South Africa	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
85.	124	Biosafety brochure	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
86.	126	Modern biotechnology and biosafety	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
87.	131	Biotechnology - a catalyst for economic development, improved nutrition, health and wealth of Ugandans	National Agriculture Research Organization	Uganda	link (link created on the Platform))
88.	132	Questions and answer about GMOs	Uganda biosciences information center	Uganda	link (link created on the Platform)
89.	135	Common concerns associated with introduction of GM crops in Uganda	National Agriculture Research Organization	Uganda	link (link created on the Platform)
90.	143	GM plants questions and answers	Royal Society	United Kingdom	link
91.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link
92.	155	Safety of genetically modified foods and food ingredients	Iowa State University	United States of America	link
93.	161	GMOS 101: Your basic questions answered	US Food and Drug Administration	United States of America	link
94.	163	Understanding new plant varieties	US Food and Drug Administration	United States of America	link
95.	164	Agricultural biotechnology	US Food and Drug Administration	United States of America	link
96.	227	Bioteconología Agrícola	Food and Drug Administration	United States of America	link
97.	172	Food safety top 10 GM foods	National Biotechnology Authority	Zimbabwe	link
98.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

03. Does biotechnology make a problem for environment?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
99.	254	SOPs for confined field trials	Ministry of Environment, Forest and Climate Change	Bangladesh	link
100.	79	Enhancing the cee collaboration and know-how transfer in biotechnology and biosecurity	National Biosafety Coordination Center	Belarus	link
101.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
102.	24	Awareness calendar for 2014	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
103.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
104.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
105.	71	Frequently asked questions on GMOs	National Biosafety Authority, Kenya	Kenya	link
106.	73	Latvian national biosafety clearing house	Latvian national Biosafety clearing house	Latvia	link
107.	76	Sixth national report of Lebanon to the Convention on Biological Diversity	United Nations Development Program	Lebanon	link
108.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
109.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
110.	182	FAQ - Environment and health risks	Genetic Modification Advisory Committee	Singapore	link
111.	183	FAQ - genetically modified animals	Genetic Modification Advisory Committee	Singapore	link
112.	126	Modern biotechnology and biosafety	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
113.	130	Readiness for environmental release of genetically engineered (GE) plants in Uganda	National Agriculture Research Organization	Uganda	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
114.	135	Common concerns associated with introduction of GM crops in Uganda	National Agriculture Research Organization	Uganda	link (link created on the Platform)
115.	142	Gene drive research: Why it matters	Royal Society	United Kingdom	link
116.	143	GM plants questions and answers	Royal Society	United Kingdom	link
117.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

04. How long are we using agricultural biotechnologies?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
118.	213	2018_FSANZ GM food Facebook posts	Food Standards Australia New Zealand	Australia	link (link created on the Platform)
119.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
120.	243	A picture to understand the ubiquitous GM technology	Ministry of Agriculture	China	link
121.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
122.	212	What are novel foods?	European Food Safety Authority	European Union	link
123.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
124.	83	Profile of genetically modified plants authorized in Mexico	Universidad Autónoma Chapingo	Mexico	link
125.	179	The basics of genetic modification	Genetic Modification Advisory Committee	Singapore	link
126.	180	Applications of genetic modification	Genetic Modification Advisory Committee	Singapore	link
127.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
128.	114	Effective regulation & sustainable use of GMOs in South Africa	Biosafety South Africa	South Africa	link (link created on the Platform)
129.	116	GM timeline	Biosafety South Africa	South Africa	link (link created on the Platform)
130.	134	Top 10 facts about biosafety and biotechnology in Uganda by 2016	Uganda biosciences information center	Uganda	link (link created on the Platform)
131.	155	Safety of genetically modified foods and food ingredients	Iowa State University	United States of America	link
131.	174	History of agricultural biotechnology: How crop development has evolved	University of Hi at Manoa	United States of America	link
132.	161	GMOS 101: Your basic questions answered	US Food and Drug Administration	United States of America	link
134.	162	Science and history of GMOs and other food modification processes	US Food and Drug Administration	United States of America	link
135.	166	Genetically engineered crops in the US	United States Department of Agriculture	United States of America	link
136.	247	El mejoramiento genético y nosotros	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link

05. How can safety of biotechnology products be assured?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
137.	7	GM Foods - Safety assessment of genetically modified foods	Food Standards Australia New Zealand	Australia	link
138.	9	International peer review of FSANZ GM food safety assessment process	Food Standards Australia New Zealand	Australia	link
139.	213	2018_FSANZ GM food Facebook posts	Food Standards Australia New Zealand	Australia	link (link created on the Platform)
140.	214	Consultation paper	Food Standards Australia New Zealand	Australia	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
141.	233	Genetically modified (GM) canola in Australia	Department of Health	Australia	link
142.	237	Ongoing monitoring of the safety of GM crops in Australia	Department of Health	Australia	link
143.	238	Genetically modified (GM) safflower in Australia	Department of Health	Australia	link
144.	239	Genetically modified (GM) cotton in Australia	Department of Health	Australia	link
145.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
146.	27	Genetically modified organisms - Present situation and future prospects	Food Safety Agency of Bosnia and Herzegovina	Bosnia and Herzegovina	link
147.	30	Novelty and plants with novel traits	Canadian Food Inspection Agency	Canada	link
148.	32	The safety of genetically-modified (GM) foods	Health Canada	Canada	link
149.	33	Guidelines for the safety assessment of novel foods derived from plants and microorganisms	Health Canada	Canada	link
150.	34	Completed safety assessments of novel foods including genetically modified (GM) foods	Health Canada	Canada	link
151.	36	Biotechnology and human health	Health Canada	Canada	link
152.	262	Nouveauté et végétaux à caractères nouveaux	Canadian Food Inspection Agency	Canada	link
153.	264	Innocuité des aliments génétiquement modifiés (GM)	Health Canada	Canada	link
154.	265	Lignes directrices sur l'évaluation de l'innocuité des aliments nouveaux	Health Canada	Canada	link
155.	266	Evaluations d'innocuité achevées pour les aliments nouveaux, y compris les aliments génétiquement modifiés (GM)	Health Canada	Canada	link
156.	268	Biotechnologie et santé humaine	Health Canada	Canada	link
157.	242	Guidance on safety evaluation of genetically modified plants	Ministry of Agriculture	China	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
158.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
159.	205	GMO	European Food Safety Authority	European Union	link
160.	206	Risk assessment vs risk management	European Food Safety Authority	European Union	link
161.	207	Risk assessment of genetically modified plants	European Food Safety Authority	European Union	link
162.	208	Genetically modified animals	European Food Safety Authority	European Union	link
163.	210	Nanotechnology	European Food Safety Authority	European Union	link
164.	211	What are GM plants?	European Food Safety Authority	European Union	link
165.	212	What are novel foods?	European Food Safety Authority	European Union	link
166.	196	Nanotechnology and food	Food Safety Authority of Ireland	Ireland	link
167.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
168.	67	Standards for safety assessment of food/feed additives produced using GMOs	Food Safety Commission Japan	Japan	link
169.	68	Stance on safety assessment of GM food/feed additives	Food Safety Commission Japan	Japan	link
170.	71	Frequently asked questions on GMOs	National Biosafety Authority, Kenya	Kenya	link
171.	73	Latvian national biosafety clearing house	Latvian national Biosafety clearing house	Latvia	link
172.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
173.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
174.	86	National biosafety risk analysis framework	The National Biosafety Management Agency, Abuja	Nigeria	link
175.	107	GM food safety - Philippine regulations and food safety assessment	Department of Agriculture Bureau of Plant Industry Biotechnology Office,	Philippines	link
176.	182	FAQ - Environment and health risks	Genetic Modification Advisory Committee	Singapore	link
177.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
178.	117	GMO regulation and use in South Africa	Biosafety South Africa	South Africa	link (link created on the Platform)
179.	189	genetically modified foods	Food Standards Agency	United Kingdom	link
180.	155	Safety of genetically modified foods and food ingredients	Iowa State University	United States of America	link
181.	150	Guidance for Industry and other stakeholders - Toxicological principles for the safety assessment of food ingredients	US Food and Drugs Administration	United States of America	link
182.	163	Understanding new plant varieties	US Food and Drug Administration	United States of America	link
183.	247	El mejoramiento genético y nosotros	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
184.	248	¿Qué es y cómo funciona el Sistema Nacional Bioseguridad?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
185.	249	What is the National Biosafety System and how does it work?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
186.	169	Frequently asked questions on biosafety	Zambia's National Biosafety Authority	Zambia	link (link created on the Platform)
187.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

06. What is biotechnology?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
188.	3	Edición génica	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
189.	4	¿Son seguros los productos de la edición génica?	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
190.	7	GM Foods - Safety assessment of genetically modified foods	Food Standards Australia New Zealand	Australia	link
191.	13	Fact sheets on various topics relating to the regulation of genetically modified organisms and the regulatory scheme	Australian Government, Department of Health	Australia	link
192.	14	What is gene technology	Department of Health	Australia	link
193.	213	2018_FSANZ GM food Facebook posts	Food Standards Australia New Zealand	Australia	link (link created on the Platform)
194.	214	Consultation paper	Food Standards Australia New Zealand	Australia	link
195.	216	New breeding techniques - Outcomes	Food Standards Australia New Zealand	Australia	link
196.	16	The food safety act, 2013	Ministry of Food	Bangladesh	link
197.	17	National biosafety framework project	Ministry of Environment, Forest and Climate Change	Bangladesh	link
198.	255	Biosafety development in Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
199.	256	Video documentary of the department of environment on labsafety and GMO detection	Ministry of Environment, Forest and Climate Change	Bangladesh	link
200.	257	TV spot disseminated by the Department of Environment towards education and awareness on biosafety	Ministry of Environment, Forest and Climate Change	Bangladesh	link
201.	258	Biotechnology and biosafety	Ministry of Environment, Forest and Climate Change	Bangladesh	link
202.	259	Biosafety leaflet in Bangla	Ministry of Environment, Forest and Climate Change	Bangladesh	link
203.	260	Manual on GMO detection and good laboratory practices	Ministry of Environment, Forest and Climate Change	Bangladesh	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
204.	79	Enhancing the cee collaboration and know-how transfer in biotechnology and biosecurity	National Biosafety Coordination Center	Belarus	link
205.	190	Belgian biosafety server	Service Biosafety and Biotechnology	Belgium	link
206.	19	Awareness program on biosafety	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
207.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
208.	21	Awareness program on Introduction to GMO	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
209.	22	Awareness brochure NBFP BAFRA	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
210.	24	Awareness calendar for 2014	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
211.	25	Application handling on import of product derived from GMO	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
212.	27	Genetically modified organisms - Present situation and future prospects	Food Safety Agency of Bosnia and Herzegovina	Bosnia and Herzegovina	link
213.	30	Novelty and plants with novel traits	Canadian Food Inspection Agency	Canada	link
214.	31	About novel and genetically-modified (GM) foods	Canadian Food Inspection Agency	Canada	link
215.	262	Nouveauté et végétaux à caractères nouveaux	Canadian Food Inspection Agency	Canada	link
216.	263	Au sujet des aliments nouveaux et génétiquement modifiés (GM)	Canadian Food Inspection Agency	Canada	link
217.	243	A picture to understand the ubiquitous GM technology	Ministry of Agriculture	China	link
218.	53	Detection of food and feed plant products obtained by new mutagenesis techniques	European Network of GMO Laboratories	European Union	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
219.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
220.	173	New advances in biotechnology	European Food Safety Authority	European Union	link
221.	208	Genetically modified animals	European Food Safety Authority	European Union	link
222.	210	Nanotechnology	European Food Safety Authority	European Union	link
223.	211	What are GM plants?	European Food Safety Authority	European Union	link
224.	42	Harnessing genome editing techniques to engineer disease resistance in plants	University of Agricultural Sciences and Technology of Jammu	India	link
225.	57	Basic concept of biotechnology	Dr. K.N. Chandrashekara and Dr. Ashok Yakkaldevi; Laxmi Book Publication	India	link
226.	191	Genetically modified food	Food Safety Authority of Ireland	Ireland	link
227.	192	Genetically modified organisms (GMOs) - institutional website	Food Safety Authority of Ireland	Ireland	link
228.	196	Nanotechnology and food	Food Safety Authority of Ireland	Ireland	link
229.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
230.	71	Frequently asked questions on GMOs	National Biosafety Authority, Kenya	Kenya	link
231.	73	Latvian national biosafety clearing house	Latvian national Biosafety clearing house	Latvia	link
232.	54	Qu'est-ce qu'un OGM?	Ministère de la Santé	Luxembourg	link
233.	177	Organismes génétiquement modifiés	LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG Ministère de la Santé	Luxembourg	link
234.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
235.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
236.	200	About genetic modification in New Zealand	Ministry for the Environment	New Zealand	link
237.	217	CRISPR: Five new debates on genetic engineering	Norwegian Board of Technology	Norway	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
238.	218	Norwegian consumers' attitudes toward gene editing in Norwegian agriculture and aquaculture	Norwegian Board of Technology	Norway	link (link created on the Platform)
239.	219	Biotechnologiskolen	Norwegian Board of Technology	Norway	link
240.	104	Biosafety and genetically modified organisms FAQs	Ministry of Environment	Pakistan	link
241.	178	GM crops: Are they safe?	Singapore Food Agency	Singapore	link
242.	179	The basics of genetic modification	Genetic Modification Advisory Committee	Singapore	link
243.	180	Applications of genetic modification	Genetic Modification Advisory Committee	Singapore	link
244.	181	Decode the mystery of genes	Genetic Modification Advisory Committee	Singapore	link
245.	183	FAQ - genetically modified animals	Genetic Modification Advisory Committee	Singapore	link
246.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link
247.	185	FAQ - genetically modified microorganisms	Genetic Modification Advisory Committee	Singapore	link
248.	186	FAQ - genetically modified Organisms	Genetic Modification Advisory Committee	Singapore	link
249.	188	Important facts you need to know about GM food	Genetic Modification Advisory Committee	Singapore	link
250.	111	How does GM differ from traditional breeding?	Biosafety South Africa	South Africa	link
251.	112	Biosafety and GMOs in South Africa - what is biosafety?	Biosafety South Africa	South Africa	link
252.	115	Genome editing	Biosafety South Africa	South Africa	link (link created on the Platform)
253.	122	Biosafety Act organizational structure	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
254.	124	Biosafety brochure	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
255.	126	Modern biotechnology and biosafety	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
256.	131	Biotechnology - a catalyst for economic development, improved nutrition, health and wealth of Ugandans	National Agriculture Research Organization	Uganda	link (link created on the Platform)

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
257.	132	Questions and answer about GMOs	Uganda biosciences information center	Uganda	link (link created on the Platform)
258.	142	Gene drive research: Why it matters	Royal Society	United Kingdom	link
259.	143	GM plants questions and answers	Royal Society	United Kingdom	link
260.	139	What are GMOs?	Health and Safety Executive	United Kingdom	link
261.	189	genetically modified foods	Food Standards Agency	United Kingdom	link
262.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link
263.	151	How to make GMO	Harvard University, the Graduate School of Arts and Sciences	United States of America	link
264.	174	History of agricultural biotechnology: How crop development has evolved	University of Hi at Manoa	United States of America	link
265.	158	Biotechnology regulatory service factsheet	United States Department of Agriculture	United States of America	link
266.	245	Puzzle didáctico: Para aprender jugando.	Sistema Nacional de Bioseguridad	Uruguay	link
267.	246	Información didáctica	Sistema Nacional de Bioseguridad	Uruguay	link
268.	247	El mejoramiento genético y nosotros	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
269.	248	¿Qué es y cómo funciona el Sistema Nacional Bioseguridad?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
270.	249	What is the National Biosafety System and how does it works?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
271.	250	Lanzan video para niños sobre plantas mejoradas con técnicas de la biotecnología	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
272.	89	FAQs on the Cartagena Protocol on biosafety	Convention on Biological Diversity		link
273.	90	Technical tools and guidance for the detection and identification of LMOs	Convention on Biological Diversity		link
274.	91	Frequently asked questions about FAO and agricultural biotechnology	Food and Agriculture Organisation of the United Nations		link
275.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

07. What kinds of biotechnology products do we have?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
276.	7	GM Foods - Safety assessment of genetically modified foods	Food Standards Australia New Zealand	Australia	link
277.	13	Fact sheets on various topics relating to the regulation of genetically modified organisms and the regulatory scheme	Australian Government, Department of Health	Australia	link
278.	14	What is gene technology	Department of Health	Australia	link
279.	215	Genetically modified organisms in Australia	Department of Health	Australia	link
280.	232	Genetically modified (GM) crops in Australia	Department of Health	Australia	link
281.	251	Biosafety guidelines of Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
282.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
283.	21	Awareness program on Introduction to GMO	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
284.	24	Awareness calendar for 2014	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
285.	36	Biotechnology and human health	Health Canada	Canada	link
286.	268	Biotechnologie et santé humaine	Health Canada	Canada	link
287.	243	A picture to understand the ubiquitous GM technology	Ministry of Agriculture	China	link
288.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
289.	51	EU register of authorized GMOs	European Commission	European Union	link
290.	66	GMO approval process in Japan	Technische Universität München	Germany	link
291.	58	GM crops	Government of India Ministry of Agriculture & Farmers Welfare	India	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
292.	191	Genetically modified food	Food Safety Authority of Ireland	Ireland	link
293.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
294.	71	Frequently asked questions on GMOs	National Biosafety Authority, Kenya	Kenya	link
295.	73	Latvian national biosafety clearing house	Latvian national Biosafety clearing house	Latvia	link
296.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
297.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
298.	83	Profile of genetically modified plants authorized in Mexico	Universidad Autónoma Chapingo	Mexico	link
299.	217	CRISPR: Five new debates on genetic engineering	Norwegian Board of Technology	Norway	link
300.	219	Biotechnologiskolen	Norwegian Board of Technology	Norway	link
301.	106	Regulations of genetically modified (GM) crops in the Philippines	Department of Agriculture Bureau of Plant Industry Biotechnology Office,	Philippines	link (link created on the Platform)
302.	180	Applications of genetic modification	Genetic Modification Advisory Committee	Singapore	link
303.	183	FAQ - genetically modified animals	Genetic Modification Advisory Committee	Singapore	link
304.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link
305.	185	FAQ - genetically modified microorganisms	Genetic Modification Advisory Committee	Singapore	link
306.	187	FAQ - GMOs in the biomedical sciences	Genetic Modification Advisory Committee	Singapore	link
307.	188	Important facts you need to know about GM food	Genetic Modification Advisory Committee	Singapore	link
308.	112	Biosafety and GMOs in South Africa - what is biosafety?	Biosafety South Africa	South Africa	link
309.	128	Publications from National Center for genetic engineering and biotechnology	National Center for Genetic Engineering and Biotechnology	Thailand	link
310.	131	Biotechnology - a catalyst for economic development, improved nutrition, health and wealth of Ugandans	National Agriculture Research Organization	Uganda	link (link created on the Platform)

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
311.	133	Examples of biotechnology tools used globally in plant breeding	Uganda biosciences information center	Uganda	link (link created on the Platform)
312.	134	Top 10 facts about biosafety and biotechnology in Uganda by 2016	Uganda biosciences information center	Uganda	link (link created on the Platform)
313.	143	GM plants questions and answers	Royal Society	United Kingdom	link
314.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link
315.	155	Safety of genetically modified foods and food ingredients	Iowa State University	United States of America	link
316.	5	GAIN report - Argentina - Agricultural biotechnology annual	United States Department of Agriculture foreign Agricultural Service	United States of America	link
317.	161	GMOS 101: Your basic questions answered	US Food and Drug Administration	United States of America	link
318.	164	Agricultural biotechnology	US Food and Drug Administration	United States of America	link
319.	227	Biotechnología Agrícola	Food and Drug Administration	United States of America	link
320.	246	Información didáctica	Sistema Nacional de Bioseguridad	Uruguay	link
321.	247	El mejoramiento genético y nosotros	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
322.	250	Lanzan video para niños sobre plantas mejoradas con técnicas de la biotecnología	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
323.	172	Food safety top 10 GM foods	National Biotechnology Authority	Zimbabwe	link

08. What benefits do food biotechnologies bring?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
324.	3	Edición génica	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
325.	17	National biosafety framework project	Ministry of Environment, Forest and Climate Change	Bangladesh	link
326.	251	Biosafety guidelines of Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
327.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
328.	21	Awareness program on Introduction to GMO	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
329.	22	Awareness brochure NBFP BAFRA	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
330.	173	New advances in biotechnology	European Food Safety Authority	European Union	link
331.	207	Risk assessment of genetically modified plants	European Food Safety Authority	European Union	link
332.	210	Nanotechnology	European Food Safety Authority	European Union	link
333.	196	Nanotechnology and food	Food Safety Authority of Ireland	Ireland	link
334.	71	Frequently asked questions on GMOs	National Biosafety Authority, Kenya	Kenya	link
335.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
336.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
337.	83	Profile of genetically modified plants authorized in Mexico	Universidad Autónoma Chapingo	Mexico	link
338.	217	CRISPR: Five new debates on genetic engineering	Norwegian Board of Technology	Norway	link
339.	219	Biotechnologiskolen	Norwegian Board of Technology	Norway	link
340.	104	Biosafety and genetically modified organisms FAQs	Ministry of Environment	Pakistan	link
341.	180	Applications of genetic modification	Genetic Modification Advisory Committee	Singapore	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
342.	183	FAQ - genetically modified animals	Genetic Modification Advisory Committee	Singapore	link
343.	185	FAQ - genetically modified microorganisms	Genetic Modification Advisory Committee	Singapore	link
344.	186	FAQ - genetically modified Organisms	Genetic Modification Advisory Committee	Singapore	link
345.	112	Biosafety and GMOs in South Africa - what is biosafety?	Biosafety South Africa	South Africa	link
346.	113	Telling the story of GMOs in South Africa	Biosafety South Africa	South Africa	link
347.	114	Effective regulation & sustainable use of GMOs in South Africa	Biosafety South Africa	South Africa	link (link created on the Platform)
348.	115	Genome editing	Biosafety South Africa	South Africa	link (link created on the Platform)
349.	131	Biotechnology - a catalyst for economic development, improved nutrition, health and wealth of Ugandans	National Agriculture Research Organization	Uganda	link (link created on the Platform)
350.	132	Questions and answer about GMOs	Uganda biosciences information center	Uganda	link (link created on the Platform)
351.	142	Gene drive research: Why it matters	Royal Society	United Kingdom	link
352.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link
353.	161	GMOS 101: Your basic questions answered	US Food and Drug Administration	United States of America	link
354.	164	Agricultural biotechnology	US Food and Drug Administration	United States of America	link
355.	248	¿Qué es y cómo funciona el Sistema Nacional Bioseguridad?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
356.	249	What is the National Biosafety System and how does it works?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
357.	167	Biosafety newsletter	Zambia's National Biosafety Authority	Zambia	link (link created on the Platform)
358.	172	Food safety top 10 GM foods	National Biotechnology Authority	Zimbabwe	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
359.	89	FAQs on the Cartagena Protocol on biosafety	Convention on Biological Diversity		link
360.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

09. What new agricultural biotechnologies are coming up?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
361.	7	GM Foods - Safety assessment of genetically modified foods	Food Standards Australia New Zealand	Australia	link
362.	173	New advances in biotechnology	European Food Safety Authority	European Union	link
363.	210	Nanotechnology	European Food Safety Authority	European Union	link
364.	196	Nanotechnology and food	Food Safety Authority of Ireland	Ireland	link
365.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
366.	217	CRISPR: Five new debates on genetic engineering	Norwegian Board of Technology	Norway	link
367.	182	FAQ - Environment and health risks	Genetic Modification Advisory Committee	Singapore	link
368.	143	GM plants questions and answers	Royal Society	United Kingdom	link
369.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link
370.	151	How to make GMO	Harvard University, the Graduate School of Arts and Sciences	United States of America	link
371.	161	GMOS 101: Your basic questions answered	US Food and Drug Administration	United States of America	link
372.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

10. What do experts say about the safety of agricultural biotechnology?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
373.	1	Communicating biosafety - A new approach for agrobiotechnology adoption	Agrotechnology	Argentina	link
374.	28	A study of stakeholder views to shape a communication strategy for GMO in Brazil	Frontiers in bioengineering and biotechnology	Brazil	link
375.	42	Harnessing genome editing techniques to engineer disease resistance in plants	University of Agricultural Sciences and Technology of Jammu	India	link
376.	74	First comprehensive GMOs testing in Lebanon - Screening, identification and quantification of GM soybean imports	Lebanese University	Lebanon	link
377.	75	Comprehensive matrices for regulatory approvals and genetic characterization of genetically modified organisms	American University of Science and Technology	Lebanon	link
378.	80	The role of scientists in policy-making regarding agricultural biotechnology - From traditional to alternative views	Delft University of Technology	Netherlands	link
379.	217	CRISPR: Five new debates on genetic engineering	Norwegian Board of Technology	Norway	link
380.	221	GMO or not GMO? Here are the issues we should talk about instead	The Swedish University of Agricultural Sciences, SLU	Sweden	link
381.	222	Consumers react negatively on the term "biotechnology"	The Swedish University of Agricultural Sciences, SLU	Sweden	link
382.	130	Readiness for environmental release of genetically engineered (GE) plants in Uganda	National Agriculture Research Organization	Uganda	link
383.	137	Minister of state for food security visits UAEU	United Arab Emirates University	United Arab Emirates	link
384.	88	Consumer perception of genetically modified organisms and sources of information	Montclair State University	United States of America	link
385.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
386.	151	How to make GMO	Harvard University, the Graduate School of Arts and Sciences	United States of America	link
387.	155	Safety of genetically modified foods and food ingredients	Iowa State University	United States of America	link
388.	174	History of agricultural biotechnology: How crop development has evolved	University of Hi at Manoa	United States of America	link
389.	167	Biosafety newsletter	Zambia's National Biosafety Authority	Zambia	link (link created on the Platform)

11. How are the products of biotechnology regulated?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
390.	4	¿Son seguros los productos de la edición génica?	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
391.	6	Australia New Zealand Food Standards Council Joint Communique	Food Regulation	Australia	link
392.	7	GM Foods - Safety assessment of genetically modified foods	Food Standards Australia New Zealand	Australia	link
393.	8	Final report - Review of food derived using new breeding techniques	Food Standards Australia New Zealand	Australia	link
394.	9	International peer review of FSANZ GM food safety assessment process	Food Standards Australia New Zealand	Australia	link
395.	10	Evaluation report series of the impact, effectiveness and appropriateness of new food regulatory measures in Australia and New Zealand	Food Standards Australia New Zealand	Australia	link
396.	11	Frequent asked questions on food standards	Food Standards Australia New Zealand	Australia	link
397.	13	Fact sheets on various topics relating to the regulation of genetically modified organisms and the regulatory scheme	Australian Government, Department of Health	Australia	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
398.	213	2018_FSANZ GM food Facebook posts	Food Standards Australia New Zealand	Australia	link (link created on the Platform)
399.	214	Consultation paper	Food Standards Australia New Zealand	Australia	link
400.	215	Genetically modified organisms in Australia	Department of Health	Australia	link
401.	228	Who needs to apply to import or use a GMO?	Department of Health	Australia	link
402.	229	Biohacking and community science	Department of Health	Australia	link
403.	230	Reporting misuse of genetically modified organisms (GMOs)	Department of Health	Australia	link
404.	232	Genetically modified (GM) crops in Australia	Department of Health	Australia	link
405.	233	Genetically modified (GM) canola in Australia	Department of Health	Australia	link
406.	234	Stock feed and genetically modified (GM) crops	Department of Health	Australia	link
407.	235	How we regulate the intentional releases of GM crops and other GMOs into the environment	Department of Health	Australia	link
408.	236	How are genetically modified organisms (GMOs) regulated in Australia	Department of Health	Australia	link
409.	237	Ongoing monitoring of the safety of GM crops in Australia	Department of Health	Australia	link
410.	238	Genetically modified (GM) safflower in Australia	Department of Health	Australia	link
411.	239	Genetically modified (GM) cotton in Australia	Department of Health	Australia	link
412.	240	Genetically Modified (GM) Carnations in Australia	Department of Health	Australia	link
413.	16	The food safety act, 2013	Ministry of Food	Bangladesh	link
414.	17	National biosafety framework project	Ministry of Environment, Forest and Climate Change	Bangladesh	link
415.	251	Biosafety guidelines of Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
416.	252	Bangladesh biosafety rules	Ministry of Environment, Forest and Climate Change	Bangladesh	link
417.	253	Biosafety policy of bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
418.	254	SOPs for confined field trials	Ministry of Environment, Forest and Climate Change	Bangladesh	link
419.	255	Biosafety development in Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
420.	272	Regional workshop on the risk assessment for the CEE region	National Biosafety Coordination Center	Belarus	link
421.	273	Experience of the republic of Belarus in the field of safety of genetic engineering activity	National Biosafety Coordination Center	Belarus	link
422.	276	Обнаружение, идентификация и количественное определение ГМО в пищевых продуктах, сырье и семенах в контексте законодательства	Convention on Biological Diversity	Belarus	link
423.	190	Belgian biosafety server	Service Biosafety and Biotechnology	Belgium	link
424.	19	Awareness program on biosafety	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
425.	20	Awareness Q&A booklet	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
426.	21	Awareness program on Introduction to GMO	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
427.	23	Awareness poster GMO regulations	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
428.	25	Application handling on import of product derived from GMO	Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests	Bhutan	link
429.	27	Genetically modified organisms - Present situation and future prospects	Food Safety Agency of Bosnia and Herzegovina	Bosnia and Herzegovina	link
430.	31	About novel and genetically-modified (GM) foods	Canadian Food Inspection Agency	Canada	link
431.	32	The safety of genetically-modified (GM) foods	Health Canada	Canada	link
432.	35	Regulating agricultural biotechnology in Canada	Canadian Food Inspection Agency	Canada	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
433.	36	Biotechnology and human health	Health Canada	Canada	link
434.	37	Gene editing techniques	Health Canada	Canada	link
435.	261	Health Canada's role in the regulation of products from biotechnology	Health Canada	Canada	link
436.	263	Au sujet des aliments nouveaux et génétiquement modifiés (GM)	Canadian Food Inspection Agency	Canada	link
437.	264	Innocuité des aliments génétiquement modifiés (GM)	Health Canada	Canada	link
438.	267	Réglementation de la biotechnologie agricole au Canada	Canadian Food Inspection Agency	Canada	link
439.	268	Biotechnologie et santé humaine	Health Canada	Canada	link
440.	269	Techniques de modification génétique	Health Canada	Canada	link
441.	271	Rôle de Santé Canada en matière de réglementation des produits issus de la biotechnologie	Health Canada	Canada	link
442.	40	Attention on GM with authorisation	Ministry of Agriculture and Rural Affairs of the People's Republic of China	China	link
443.	241	Regulations on the Safety Management of Agricultural genetically modified Organisms	Ministry of Agriculture	China	link
444.	53	Detection of food and feed plant products obtained by new mutagenesis techniques	European Network of GMO Laboratories	European Union	link
445.	49	Fact sheet: questions and answers on EU's policies on GMOs	European Commission	European Union	link
446.	50	GMOs: EU decision-making process explained	European Commission	European Union	link
447.	51	EU register of authorized GMOs	European Commission	European Union	link
448.	52	Regulating GM crops: EU countries' rights	European Commission	European Union	link
449.	205	GMO	European Food Safety Authority	European Union	link
450.	206	Risk assessment vs risk management	European Food Safety Authority	European Union	link

(cont.)

Serial No.	Unique ID	Material title	Producer	Country	Link and note
451.	208	Genetically modified animals	European Food Safety Authority	European Union	link
452.	209	Advances in genetic engineering: EFSA public consultations in 2020	European Food Safety Authority	European Union	link
453.	66	GMO approval process in Japan	Technische Universität München	Germany	link
454.	55	GMO application process in Grenada	Ministry of Agriculture & Lands	Grenada	link (link created on the Platform)
455.	56	Status of regulation of genetically engineered products in selected countries - An Analysis	Department of Biotechnology, Ministry of Science & Technology, Government of India	India	link
456.	191	Genetically modified food	Food Safety Authority of Ireland	Ireland	link
457.	192	Genetically modified organisms (GMOs) - institutional website	Food Safety Authority of Ireland	Ireland	link
458.	193	Genetically modified food surveillance	Food Safety Authority of Ireland	Ireland	link
459.	194	Genetically modified feeds	Department of Agriculture, Food and the Marine	Ireland	link
460.	195	Genetically modified organisms	Department of Communications, Climate Action & Environment	Ireland	link
461.	196	Nanotechnology and food	Food Safety Authority of Ireland	Ireland	link
462.	197	The relevance for food safety of applications of nanotechnology in the food and feed industries	Food Safety Authority of Ireland	Ireland	link
463.	67	Standards for safety assessment of food/feed additives produced using GMOs	Food Safety Commission Japan	Japan	link
464.	68	Stance on safety assessment of GM food/feed additives	Food Safety Commission Japan	Japan	link
465.	69	To genome editing technologies users	Ministry of health labor and welfare	Japan	link (link created on the Platform)
466.	72	National Biosafety Authority brochure	National Biosafety Authority, Kenya	Kenya	link
467.	73	Latvian national biosafety clearing house	Latvian national Biosafety clearing house	Latvia	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
468.	75	Comprehensive matrices for regulatory approvals and genetic characterization of genetically modified organisms	American University of Science and Technology	Lebanon	link
469.	76	Sixth national report of Lebanon to the Convention on Biological Diversity	United Nations Development Program	Lebanon	link
470.	110	Le contrôle des OGM dans la chaîne alimentaire	Ministère de la Santé	Luxembourg	link
471.	77	Biosafety Q&A	Department of Biosafety Malaysia	Malaysia	link
472.	78	FAQ for Biosafety	Department of Biosafety Malaysia	Malaysia	link
473.	83	Profile of genetically modified plants authorized in Mexico	Universidad Autónoma Chapingo	Mexico	link
474.	200	About genetic modification in New Zealand	Ministry for the Environment	New Zealand	link
475.	201	Health claims, alcohol, GM, and irradiated food	Ministry of Primary Industries	New Zealand	link
476.	86	National biosafety risk analysis framework	The National Biosafety Management Agency, Abuja	Nigeria	link
477.	104	Biosafety and genetically modified organisms FAQs	Ministry of Environment	Pakistan	link
478.	105	GM application process	Department of Agriculture Bureau of Plant Industry Biotechnology Office,	Philippines	link
479.	106	Regulations of genetically modified (GM) crops in the Philippines	Department of Agriculture Bureau of Plant Industry Biotechnology Office,	Philippines	link (link created on the Platform)
480.	107	GM food safety - Philippine regulations and food safety assessment	Department of Agriculture Bureau of Plant Industry Biotechnology Office,	Philippines	link
481.	182	FAQ - Environment and health risks	Genetic Modification Advisory Committee	Singapore	link
482.	184	FAQ - genetically modified foods	Genetic Modification Advisory Committee	Singapore	link
483.	186	FAQ - genetically modified Organisms	Genetic Modification Advisory Committee	Singapore	link
484.	188	Important facts you need to know about GM food	Genetic Modification Advisory Committee	Singapore	link
485.	112	Biosafety and GMOs in South Africa - what is biosafety?	Biosafety South Africa	South Africa	link
486.	113	Telling the story of GMOs in South Africa	Biosafety South Africa	South Africa	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
487.	114	Effective regulation & sustainable use of GMOs in South Africa	Biosafety South Africa	South Africa	link (link created on the Platform)
488.	116	GM timeline	Biosafety South Africa	South Africa	link ((link created on the Platform)
489.	117	GMO regulation and use in South Africa	Biosafety South Africa	South Africa	link (link created on the Platform)
490.	118	South Africa specific legislation	Biosafety South Africa	South Africa	link (link created on the Platform)
491.	120	Biosafety information brochure	Director of Technical BioSafety Department Technical Department	Sudan	link (link created on the Platform)
492.	121	The National Biosafety Council, Republic of Sudan - Mandate, objectives and public awareness	The National Biosafety Council	Sudan	link (link created on the Platform)
493.	277	Standard Operation Procedures for Introduction of new GMOs	National Biosafety Council	Sudan	link (link created on the Platform)
494.	278	Regulation of procedures for the transformation of genetically modified organisms	National Biosafety Council	Sudan	link (link created on the Platform)
495.	122	Biosafety Act organizational structure	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
496.	123	Biosafety Act 2012	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
497.	124	Biosafety brochure	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
498.	125	Biotechnology - Notice	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
499.	134	Top 10 facts about biosafety and biotechnology in Uganda by 2016	Uganda biosciences information center	Uganda	link (link created on the Platform)
500.	135	Common concerns associated with introduction of GM crops in Uganda	National Agriculture Research Organization	Uganda	link (link created on the Platform)
501.	136	General food labelling requirements	Abu Dhabi Agriculture and Food Safety Authority	United Arab Emirates	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
502.	143	GM plants questions and answers	Royal Society	United Kingdom	link
503.	140	Who is responsible for the GMO contained use regulations?	Health and Safety Executive	United Kingdom	link
504.	141	GMOs and the law	Health and Safety Executive	United Kingdom	link
505.	189	genetically modified foods	Food Standards Agency	United Kingdom	link
506.	145	Genetically modified (GM) Crops - Techniques and applications	Colorado State University	United States of America	link
507.	155	Safety of genetically modified foods and food ingredients	Iowa State University	United States of America	link
508.	5	GAIN report - Argentina - Agricultural biotechnology annual	United States Department of Agriculture Foreign Agricultural Service	United States of America	link
509.	144	Uruguay annual biotechnology report 2012	United States Department of Agriculture	United States of America	link
510.	157	USDA foreign agricultural service global trade and acceptance of genetically engineered (GE) crops	United States Department of Agriculture	United States of America	link
511.	158	Biotechnology regulatory service factsheet	United States Department of Agriculture	United States of America	link
512.	245	Puzzle didáctico: Para aprender jugando.	Sistema Nacional de Bioseguridad	Uruguay	link
513.	246	Información didáctica	Sistema Nacional de Bioseguridad	Uruguay	link
514.	247	El mejoramiento genético y nosotros	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
515.	248	¿Qué es y cómo funciona el Sistema Nacional Bioseguridad?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
516.	249	What is the National Biosafety System and how does it work?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
517.	250	Lanzan video para niños sobre plantas mejoradas con técnicas de la biotecnología	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
518.	89	FAQs on the Cartagena Protocol on biosafety	Convention on Biological Diversity		link
519.	101	Frequently asked questions on genetically modified foods	World Health Organization		link

12. Are there any communication materials available in my language (ES, FR, AR, etc.)?

Serial No.	Unique ID	Material title	Producer	Country	Link and note
520.	3	Edición génica	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
521.	4	¿Son seguros los productos de la edición génica?	Ministerio de Agricultura, Ganadería y Pesca	Argentina	link
522.	15	Food safety	Bangladesh Food Safety Authority	Bangladesh	link (link created on the Platform)
523.	252	Bangladesh biosafety rules	Ministry of Environment, Forest and Climate Change	Bangladesh	link
524.	253	Biosafety policy of bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
525.	255	Biosafety development in Bangladesh	Ministry of Environment, Forest and Climate Change	Bangladesh	link
526.	256	Video documentary of the department of environment on labsafety and GMO detection	Ministry of Environment, Forest and Climate Change	Bangladesh	link
527.	257	TV spot disseminated by the Department of Environment towards education and awareness on biosafety	Ministry of Environment, Forest and Climate Change	Bangladesh	link
528.	258	Biotechnology and biosafety	Ministry of Environment, Forest and Climate Change	Bangladesh	link
529.	259	Biosafety leaflet in Bangla	Ministry of Environment, Forest and Climate Change	Bangladesh	link
530.	274	Биотехнология. Биобезопасность. Биоэтика.	Institute of Genetics and Cytology of National Academy of Sciences	Belarus	link
531.	275	Оценка рисков воздействия гмо на сохранение и устойчивое использование биологического разнообразия с учетом рисков для здоровья человека	Institute of Genetics and Cytology of National Academy of Sciences	Belarus	link
532.	18	Resolution No. 963 - Role of Belarus National Coordination Biosafety Centre	National Register of Legal Acts of the Republic of Belarus	Belarus	link
533.	79	Enhancing the cee collaboration and know-how transfer in biotechnology and biosecurity	National Biosafety Coordination Center	Belarus	link

Serial No.	Unique ID	Material title	Producer	Country	Link and note
534.	272	Regional workshop on the risk assessment for the CEE region	National Biosafety Coordination Center	Belarus	link
535.	276	Обнаружение, идентификация и количественное определение ГМО в пищевых продуктах, сырье и семенах в контексте законодательства	Convention on Biological Diversity	Belarus	link
536.	262	Nouveauté et végétaux à caractères nouveaux	Canadian Food Inspection Agency	Canada	link
537.	263	Au sujet des aliments nouveaux et génétiquement modifiés (GM)	Canadian Food Inspection Agency	Canada	link
538.	264	Innocuité des aliments génétiquement modifiés (GM)	Health Canada	Canada	link
539.	265	Lignes directrices sur l'évaluation de l'innocuité des aliments nouveaux	Health Canada	Canada	link
540.	266	Evaluations d'innocuité achevées pour les aliments nouveaux, y compris les aliments génétiquement modifiés (GM)	Health Canada	Canada	link
541.	267	Réglementation de la biotechnologie agricole au Canada	Canadian Food Inspection Agency	Canada	link
542.	268	Biotechnologie - Rapports et publications par Santé Canada	Health Canada	Canada	link
543.	269	Techniques de modification génétique	Health Canada	Canada	link
544.	270	Obstacles techniques au commerce agricole	Agriculture and Agri-Food Canada	Canada	link
545.	271	Rôle de Santé Canada en matière de réglementation des produits issus de la biotechnologie	Health Canada	Canada	link
546.	40	Attention on GM with authorisation	Ministry of Agriculture and Rural Affairs of the People's Republic of China	China	link
547.	241	Regulations on the Safety Management of Agricultural genetically modified Organisms	Ministry of Agriculture	China	link

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Serial No.	Unique ID	Material title	Producer	Country	Link and note
548.	242	Guidance on safety evaluation of genetically modified plants	Ministry of Agriculture	China	link
549.	243	A picture to understand the ubiquitous GM technology	Ministry of Agriculture	China	link
550.	244	Genetically modified food does not cause infertility	Ministry of Agriculture	China	link
551.	54	Qu'est-ce qu'un OGM?	Ministère de la Santé	Luxembourg	link
552.	110	Le contrôle des OGM dans la chaîne alimentaire	Ministère de la Santé	Luxembourg	link
553.	177	Organismes génétiquement modifiés	LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG Ministère de la Santé	Luxembourg	link
554.	219	Biotechnologiskolen	Norwegian Board of Technology	Norway	link
555.	120	Biosafety information brochure	Director of Technical BioSafety Department Technical Department	Sudan	link (link created on the Platform)
556.	278	Regulation of procedures for the transformation of genetically modified organisms	National Biosafety Council	Sudan	link
557.	125	Biotechnology - Notice	Eswatini Environment Authority	Swaziland	link (link created on the Platform)
558.	227	Biotecnología Agrícola	Food and Drug Administration	United States of America	link
559.	245	Puzzle didáctico: Para aprender jugando.	Sistema Nacional de Bioseguridad	Uruguay	link
560.	246	Información didáctica	Sistema Nacional de Bioseguridad	Uruguay	link
561.	247	El mejoramiento genético y nosotros	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
562.	248	¿Qué es y cómo funciona el Sistema Nacional Bioseguridad?	Ministerio de Ganadería, Agricultura y Pesca	Uruguay	link
563.	171	Translation of biotechnology and biosafety scientific terms phrases	Zambia's National Biosafety Authority	Zambia	link (link created on the Platform)



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