

Delegation from

Represented by

São Tomé and Príncipe

Andrea Degan and Alessandro Gazzea

Position Paper for the Commission on Science and Technology for Development

São Tomé and Príncipe wants to solve the issues about introducing genetically modified crops to developing countries and establishing standards for Internet use and governance.

I. Introducing Genetically Modified Crops to Developing Countries

Introduction

Many countries around the world are skeptical about Genetically Modified (GM) crops and their introduction in the fields. GM crops are types of crop that differ from conventionally grown crops as their genetic material has been modified to achieve a specific purpose and to develop specific characteristics. Unfortunately, with the population growth, probably reaching 9 billion by 2050, the global food production must greatly increase; in this context a strong response can be given by the production of GM crops. Indeed, modifying genetically only the twelve species of crops which provide more than 90 % of all food consumed, it is possible to maintain a food supply large enough to sustain population growth and establish food security. On the other hand, there are some problems within the International Community which are slowing down the spread of GM foods, first of all the possible allergic reactions and potential gene transfer to bacteria native to the human stomach or plants surrounding GM crops. Invoking the Agreement on the Application of Sanitary and Phytosanitary Measures, there is a common policy about this issue: “Members shall ensure that any sanitary or phytosanitary measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without

sufficient scientific evidence” (Agreement on the Application of Sanitary and Phytosanitary Measures, article 2, 2). However this approach could degenerate and, as a result, the most of the European countries developed a sentiment against GM crops for fear of harm to human health or the environment. This affects Genetically Modified Organisms (GMOs) regulation in developing countries as Europe is the major importer of many of African agricultural products, thus these countries would see their international market declining if they decided to adopt GM crops technology.

Description of the issue

Despite, nowadays, agreements on GM issues are yet to be found and a solution is still far to be achieved, the topic is very current within the International Community. For example the World Health Organization (WHO) and Food and Agriculture Organization (FAO) of the United Nations (UN), “have convened several expert consultations on the evaluation of GM foods and provided technical advice for the Codex Alimentarius Commission which was fed into the Codex Guidelines on safety assessment of GM foods. WHO will keep paying due attention to the safety of GM foods from the view of public health protection” (World Health Organization). GMOs could be an answer to the widespread hunger in the developing countries which are, indeed, beginning to assume an increasingly important role in their production, even if the biggest producers (United States, Argentina, Canada and Brazil) still own the 90% of GM crops (Freedman, 82). However, the presence of international issues about GMOs limits their global diffusion, due to clashing international regulations, food and environmental safety concerns and trade relations. At the base of many of these problems there is the precautionary principle, stating that governments should proceed with caution in the case of scientific uncertainty to prevent possible damages. This “precautionary principle can be an understandable approach to uncertainties about genetically modified products, but there is a risk that when used in an international trade context, it can develop into protectionism against any new technology. It would be extremely difficult to assess whether a

measure is there for precautionary reasons or simply as a form of hidden protectionism” (Nielsen and Anderson, 10) . This protectionism leads to rifts in trade relations such as the already mentioned problems between Europe and most of African countries. For example, the most of São Tomé and Príncipe exports consist of agricultural goods (80% cocoa) and almost the 70% of our importers are European countries (Netherlands: 33%; Belgium: 22%; Spain: 11%). Thus, without some substantial changes within the international market, and as long as Europe forbids GMOs from its market, we, as many other African countries, are not willing to change our economic policy. The degeneration of the precautionary principle also generated the bad reputation which usually surrounds GMOs; here, under the pressure of people, who want to know the origins of the food they buy, comes the proposal of GM labels. Nevertheless, this could ironically reduce the choice of the consumers and the profits of GMO companies as well: the prejudice around GMOs would indeed make costumers avoid GM labelled products, pushing them out of market. This is the reason why producers are extremely against this project and it will take a very long time of mediation between the two sides to find a common solution.

Solutions

African countries, included us, and developing countries in general, might embrace GM crops if only a more extended part of the international community was willing to trade GMOs. The first step to solve this issue is to find a common solution for the current status of GM crops in international trade through, for example, a campaign of information about the topic, which could be worked out within the UN, in order to get rid of GM prejudices definitively. In effect, despite the general fears about GMOs, like gene transfer to stomach bacteria or plants surrounding GM crops, there is no proof at all. Indeed, as Mr. J. Ralph Blanchfield wrote in 2010, “GM crops and foods have now been available and consumed for over 13 years and there appears to be no credible scientific evidence to show that the ingestion of transgenic products is injurious to human health or the environment” (Blanchfield, 4). Furthermore, “there is no evidence of any deleterious environmental effects having

occurred from the trait/species combinations currently available” (Persley, 9). In this context starting a dialogue within the UN between developed countries (Europe above all) and their major exporters is recommended in order to find an agreement. Finding an path to persuade developed countries to adopt a more indulgent policy about GMOs would allow the developing world to grow GM crops to export, but also to face the increasing domestic demand for food. As already said, labeling could be the most recommended settlement to the issue, but as long as prejudices persist, it is only a counter-productive measure. Considering that prejudice hails from public opinion, we believe that talking people into embracing GMOs as something useful and not dangerous, would make labeling not be a problem anymore. In this way GM companies would benefit from labeling and, at the same time, people would be aware of what they eat.

II. Establishing Standards for Internet Use and Governance

Introduction

Internet has been a powerful tool for development, giving new opportunities, improving communication and offering the possibility to connect an increasing number of industries and services between developed and developing countries. However, the rapid development of the Internet has made the rules governing these sectors obsolete, creating legal grey areas which might hold developing countries down from using the Internet in the best way. Anyway, it is an instrument which can also be utilized to achieve nefarious goals such as theft, fraud, espionage and even to commit cyber warfare between states: this is, in a few words, the cybercrime issue, one of the worst problems of Internet nowadays, which, in extreme cases, could jeopardize the international balances. “The Convention on Cybercrime of the Council of Europe is the *only* binding international instrument on this issue. It serves as a guideline for any country developing comprehensive national

legislation against cybercrime and as a framework for international cooperation between State Parties to this treaty” (Council of Europe). Furthermore, intellectual property concerns have recently arisen: they deal with censorship against free information, and privacy versus surveillance; even if they are issues concerning domestic jurisdictions, the International Community might play an important role about them.

Description of the issue

As we said before, usually cybercrimes are a more advanced form of already existing crimes. These issues, inevitably, derive from the development of Internet, thus, the only way to avoid them is to keep up with the domestic and international standards to regulate it. Cybercrime, wrongly, is often reduced to a simple problem, but, as modern services continue to integrate the Internet into everyday life, more targets become vulnerable to criminals from cyberspace. A solution about this problem is still far but the topic is very current within the International Community. In 2001, under the supervision of the Council of Europe, the Budapest Convention on Cybercrime was signed in order to improve sophisticated methods of combating it and to support the cooperation between states: it is an effort from which UN could learn to give a great response to cybercrime. This issue brings to a more dangerous one, the cyber warfare, which involves hacking rival countries to steal secret information. This way, governments with advanced Internet capabilities are able to use surveillance programs to gain strategic advantage over others, or employ attacks to disable or destroy a country’s infrastructure. Worryingly, there are no international norms about this case, as it is a very recent issue. Actually, “the United States and the Russian Federation are creating a new working group, under the auspices of the Bilateral Presidential Commission, dedicated to assessing emerging ICT [Information and Communications Technologies] threats and proposing concrete joint measures to address them” (White House), but this is only the first step, and UN members should move toward this kind of solution. However, if the UN did not play a major role in this argument, the intellectual property concerns and copyright laws are two very debated topics anyway . In 1952, indeed, the

United Nations Educational, Scientific and Cultural Organization (UNESCO) developed the Universal Copyright Convention (UCC), one of the two principal international conventions about this issue (the other is the Berne Convention, 1886). Nevertheless, “there is [still] no such thing as an international copyright that will automatically protect an author’s writings throughout the world” (U.S. Copyright Office). Another aim of the UN should be finding a balance between open access to information and appropriate content restrictions. In fact, even if São Tomé and Príncipe is a promoter of free thinking, we believe that there are some controversial cases which should be discussed within the UN. Internet censorship, for example, is a typical action perpetrated by tyrannical regimes, but sometimes it allowed domestic Internet services to develop. Moreover, in Europe was recently established the *right to be forgotten* which allows users to delete from the Internet some information about them. Although it enhances the privacy of people, it is not so different from other kinds of censorship, because it could become inimical to free speech (Rosen Jeffrey, 1).

Solutions

As a newly connecting country, São Tomé and Príncipe is now facing the basic Internet issues for the first time, so we are eager to offer our support to fight cybercrime and to solve Internet intellectual issues, and we trust the International Community in order to start a collaboration with other states, aiming at avoiding the mistakes other countries have committed in the past. First of all, São Tomé and Príncipe realizes that the major issues with Internet topics are about obsolete laws and dated standards. Indeed, even though a lot of measures have already been taken, nowadays they are far too outdated so they need to be upgraded. For example, in the copyright and intellectual property field, we propose to develop a new universal convention to overcome legal grey areas and establish an international baseline for conduct on the Internet. The Universal Copyright Convention is a good starting point, but some serious improvements are necessary in order to employ similar principles and solutions to the digital world. In addition, every nation needs to improve cyber

security in order to fight the growing threat of cybercrime. It seems that encryption could be an effective response, and the UN may organize international collaboration to bring every country to the same security level; we have to keep in mind that maintaining cyber security is more and more difficult as time passes, and it is a never-ending battle. Cyber warfare is another topic which needs further debate, and there is a necessity to achieve international agreements on what types of attacks constitute an aggression and what responses are licit, aiming to provide clarity in digital conflicts . In addition, the International Community has to reach an agreement to balance liberal and restrictive policies through international dialogue. It is a matter of choosing between sacrificing a little security for a little more freedom, or vice versa. “Privacy concerns must be weighed against the needs of law enforcement in cracking down cybercrime” (IMUNA, 35), but despite some extreme solutions like radical censorship have proven to provide a better monitoring, “continued discussion is necessary to establish what powers states must retain to protect their countries and what powers are excessive infringements upon basic rights” (IMUNA, 28).

Bibliography:

Topic I:

UN Sources:

Nielsen (Chantal) and Anderson (Kym), “*GMOs, Trade Policy, and Welfare in Rich and Poor Countries*”.

UNESCO, “*The Precautionary Principle*” (Paris, 2005),
<http://unesdoc.unesco.org/images/0013/001395/139578e.pdf>

World Health Organisation, “*20 questions on genetically modified foods*”,
http://who.int/foodsafety/areas_work/food-technology/faq-genetically-modified-food/en/

World Trade Organization, “*Agreement on the Application of Sanitary and Phytosanitary*

Measures” (Geneva:, 1998), www.wto.org

Other sources:

Blanchfield, J. Ralph, *Biotechnology and Food (Ontario: The International Union of Food Science and Technology, 2010)*, <http://www.ilsa.org/NorthAmerica/Documents/IUFoST2010.pdf>.

Freedman (David H.), “Are Engineered Foods Evil?” *Scientific American* 309 (2013), www.nature.com/scientificamerican/journal/v309/n3/pdf/scientificamerican0913-80.pdf.

McWilliams (James E.), “The Price of Your Right to Know,” *Slate*, 20 May 2014, http://www.slate.com/articles/health_and_science/science/2014/05/gmo_food_labels_would_label_laws_in_vermont_maine_connecticut_increase_food.html.

Kuiper (Harry A.), “Assessment of the food safety issues related to genetically modified foods”

Persley (G.J.), *New Genetics, Food and Agriculture: Scientific Discoveries –Societal Dilemmas* (Paris: International Council for Science, 2003), <http://www.ilsa.org/NorthAmerica/Documents/ICSU%202003.pdf>.

Philips (Theresa), “Genetically Modified Organisms (GMOs): Transgenic Crops and Recombinant DNA Technology”, *Nature Education* 1(2008), www.nature.com

Ruttan (Vernon W.), “Controversy about Agricultural Technology Lessons from the Green Revolution”, *International Journal of Biotechnology* Vol. 6, No. 1 (2004)

Tegel (Simeon) , “In Latin America, A Growing Backlash against Genetically Modified Food,” *Globalpost*, 2 January 2013, www.globalpost.com

Topic II

UN Sources:

IMUNA, “CSTD Background Guide”.

Interpol, “Cybercrime.”, <http://www.interpol.int/Crimeareas/Cybercrime/Cybercrime>.

ITU News, “Intellectual Property Rights in Today’s Digital Age.”, September 2011,

<http://www.itu.int/net/itunews/issues/2011/07/38.aspx>.

Other Sources:

Council of Europe, “Action against economic crime”,

http://www.coe.int/t/DGHL/cooperation/economiccrime/cybercrime/default_en.asp

Economist, “Searching Questions,” 22 March 2010,

<http://www.economist.com/node/15760510>.

Indiana University, “Encryption Explained”,

<https://protect.iu.edu/cybersecurity/data/encryption>.

Rosen (Jeffrey), “The Right to Be Forgotten,” *Stanford Law Review Online* 64 (February 2012): 91, <http://www.stanfordlawreview.org/sites/default/files/online/topics/64-SLRO-88.pdf>.

U.S. Copyright Office, “International Copyright”, <http://www.copyright.gov/fls/fl100.html>.

White House, “Fact Sheet: U.S.-Russian Cooperation on Information and Communications Technology Security” ,<http://www.whitehouse.gov/the-press-office/2013/06/17/fact-sheet-us-russian-cooperation-informationand-communications-technol>.