

Current FAO Mechanisms for Dealing with the Deliberate Release of Detrimental Biological Agents

Biological Weapons Convention (BWC) Meeting of States, Geneva, Switzerland

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1. Distinguished delegates, ladies and gentlemen. As a representative of the Director-General of the Food and Agriculture Organization of the United Nations, it is a great pleasure to address you here today at this Meeting of States of the Biological Weapons Convention.
2. The Food and Agriculture Organization (FAO) has participated in the Biological Weapons Convention (BWC) work programme over the past seven years. Such coordination and collaboration between agencies is welcomed and we believe this has benefited FAO member countries as they have been able to address the issue of deliberate release of detrimental biological organisms. This has also ensured that relevant existing programmes could be adjusted and strengthened when practical.
3. Although FAO does not have a specific programme dealing with biological weapons or bio- or agro-terrorism, we do have a number of processes and activities that are directly related to the possible deliberate release of detrimental biological agents. These include country, regional and global surveillance, monitoring, reporting, diagnostics and emergency response – most of this in the context of international cooperation, international standards and national and regional capacity building. There are essentially three main areas where this work is relevant: food safety, animal health and plant health.
4. The greatest danger from biological agents used as weapons against agriculture is economic loss due to the destruction of livestock and crops, and the impact on small family operations. This would include the loss of food production and also the cost of eradicating the disease and the cost of continued surveillance. Probably the most significant loss in developed countries would be the loss of income from exports and the subsequent impact on the international economy and global food supplies.
5. It is the FAO's considered opinion that the deliberate release of detrimental biological organisms (in terms of food and agriculture) does not require any new processes to be developed that are either not in place already or in addition to those already being foreseen. However, innovative ways of approaching established processes and functions, new technologies, improved collaboration and a great deal more capacity building to build on existing national expertise and systems required urgently.
6. I would like to take this opportunity to expand a little in the areas of animal and plant health and food safety.

Animal Health

7. Zoonotic agents could also cause disease in humans. The animal pathogens that have been reported to be the best biological weapons for livestock are, to name a few: foot-and-mouth virus in numerous species (ruminants and swine), rinderpest virus in cattle; classical swine fever virus and African swine fever virus in swine; highly pathogenic avian influenza virus and Newcastle disease in poultry. All of these viruses spread quite readily and would not require any microbiological manipulation to become very effective in starting an outbreak.
8. The role of the World Organization for Animal Health (OIE) in disease reporting is very significant from a biological weapons standpoint. This role is critical to the identification and control of pathological agents that are used as a biological warfare weapon.
9. The role of the FAO is crucial in terms of emergency response, management in the field and national or regional capacity building (particularly in terms of monitoring surveillance, diagnostics and control). This is naturally undertaken in close cooperation and coordination with the OIE and the World Health Organization (WHO) when appropriate.
10. In this regard, FAO and OIE have a joint work programme to develop and expand the Global Early Warning System (GLEWS) for Transboundary Animal Diseases (TADs) and major zoonoses with the WHO.
11. In direct response to the Highly Pathogenic Avian Influenza Virus (H5N1) outbreaks that have occurred over the past four years, and have been reported in Asia, Middle East, Africa and Europe – in a total of 63 countries, an Emergency Response Unit (CMC-AH) was jointly established one year ago by OIE and FAO to deal with livestock disease outbreaks that need a rapid and significant response. The CMC-AH has been active in over 10 countries in the past months.
12. FAO has accumulated extensive experience in terms of capacity building and emergency response in the field over the past few years with the outbreaks of SARs, H5N1, foot-and-mouth disease, African swine fever virus, and Rift Valley fever. Although systems are now in place that ensure vastly improved response to such disease outbreaks, there is still significantly more work that can be done in terms of surveillance, management, emergency response and capacity building. Although the primary focus has been H5N1, many other surveillance programmes will benefit from this capacity development, funding and increased coordination.

Plant Health

13. Plant pests can, and do, impact negatively on food security. These direct and indirect effects that plant pests have on plants and plant products include:
 - Reducing yield of the plants and/or plant products, namely the amount of food available for human and/or animal consumption,

- Reducing quality of the plants and/or plant products, namely nutritional changes, mycotoxins, storage, etc.
 - Negative effects on human health through reduced nutrition based on quantity and quality (both of plant and animal products)
 - Negative socio-economic effects.
 - The negative psychological effects associated with such potential disasters.
14. A factor often not considered, or given the appropriate emphasis, is that of damage to plants in the natural environment (possibly reducing biodiversity – including indirect damage to various ecological entities such as those in agriculture). Intentional environmental sabotage is probably a more appropriate term than biological warfare. In this case, the management options and implications for countries are very different from those deployed in agricultural systems.
 15. Currently the international multilateral treaty governing the safe transboundary movement of plants and plant products is the International Plant Protection Convention (IPPC). The IPPC is also responsible for establishing international phytosanitary standards that are also referenced in the World Trade Organization. These standards form the basis for national phytosanitary processes such as surveillance, pest occurrence and outbreaks, pest (fungi, bacteria, viruses, insects and weeds) reporting, eradication, pest risk assessment, import and export certification, regulation, diagnostics and treatments. These standards are being implemented in most countries around the world, but considerably more capacity building is required in this regard.
 16. FAO has established some mechanisms that could be utilized in specific cases for non-quarantine pests, for example, the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases (EMPRES). Should plant pests become more important, such systems can be developed further.

Food Safety

17. Food safety and consumer protection are issues of global importance as we live in a world where our food supply is vulnerable to varying sources of contamination along the food chain. In recent times, increased attention is also being afforded to the possibility of a terrorist threat where the vehicle may be food.
18. FAO provides scientific advice and technical assistance to member countries to strengthen national food control systems and ensure food quality and safety. It is within the context of building a sound, sustainable food control system that FAO advises member countries to respond to all food safety hazards (microbiological and chemical) whether they are introduced into food ‘intentionally or accidentally’.
19. Developing countries with less developed food control systems and more dispersed food businesses will naturally face more difficulty in responding to an emergency. Initiatives

undertaken to prepare for any large-scale contamination of foods need to be administered in a practical, sustainable manner taking into account the local situation in each country, the current status of the food industry and the national food control system.

20. The essence of the approach is to respond to the threat of terrorist attacks on food is to strengthen a number of key aspects of food safety management programmes, and government controls over the food supply.
21. It is in this context that FAO provides assistance to member countries through targeting the aspects of national food control programmes along the food chain that enhance the ability to respond in an emergency situation. This includes the provision of normative and guideline documents.
22. FAO is currently strengthening its ability to support member countries in dealing with all emergencies along the food chain, plant pests and food safety through an holistic approach. This entails the establishments of the FAO Crises Management Centre and a proposed centre entitled EPIC – Emergency Prevention and Intelligence Centre for the food chain – from production to consumption, that should provide long-term trend and risk analysis, forecasting and risk mitigation to avert emergencies and crises along the food chain.

In Conclusion

23. FAO already deals with many of the processes and systems necessary to monitor, diagnose and control deliberate pest and disease introductions as part of the system that already exists for natural plant and animal pest and disease outbreaks, and food safety.
24. However, considerable further capacity building is necessary to provide an effective and reliable international system based on national capabilities, particularly in the area of plant pests.
25. FAO looks forward to continuing to collaborate in the area of deliberate release of detrimental biological organisms and would welcome any discussions on how national capacity can be enhanced in this regard.
26. FAO would also welcome any discussion with member countries should they wish to find out more about the issues and subjects mentioned earlier.
27. Once again, I would like to say thank you for the invitation to address this meeting of the parties to the BWC and we are looking forward to increased synergies in future.