

International Networking to Prevent the Misuse of Biology for Hostile Purposes—Part 2

Southern African workshop organized by the BioWeapons Prevention Project, Johannesburg (South Africa), 14 July 2004

On 14 July 2004 the BioWeapons Prevention Project held a workshop in Johannesburg, South Africa. This workshop was the final stage of a 6-month BWPP pilot project, funded by the Norwegian government, to initiate discussion in South Africa and other states in southern Africa about the state of the norm against biological weapons (BW). The purpose of the workshop was to engage a range of constituents in discussion about BW issues of particular interest to them and their work in the region.

This workshop and the one held in April 2004¹ have provided valuable information for the further development of BWPP networking strategies and tools to raise issue awareness and build capacity so that constituencies can develop or participate in processes to strengthen the norm against BW development and use.

Thirty-two representatives from civil society organizations and government agencies participated in the meeting held on 14 July: Ceasefire Campaign; Council for Scientific and Industrial Research; Earthlife Africa; Health Professionals Council of South Africa; Institute for Security Studies; International Committee of the Red Cross; National Intelligence Agency; National Prosecuting Authority; New Zealand Consultative Committee on Disarmament; Safer Africa; South African Institute for International Affairs; South African Medical Association; South African Police Service Serious and Violent Crimes Unit; Special Forces Institute; and Wits University Department of Microbiology. In addition, a number of individuals associated with professional associations and scientific bodies.

¹ 'International Networking to Prevent the Misuse of Biology for Hostile Purposes', *BWPP Seminar Report #2* (7 April 2004), available at <http://www.bwpp.org/documents/200404BWPPSAseminar.pdf>.

Four speakers introduced the discussions:

Jean Pascal Zanders (Director BWPP) introduced the BWPP and spoke about the civil society response to the need to act against BW development, production and use. The following discussion indicated the participants' interest in the BWPP, its intentions and structure. Questions were asked about the BWPP's governance and funding. Zanders explained that the BWPP was initiated by a small group of organizations that are active in the field of BW control. These organizations responded to the failure of States Parties in 2001 to adopt a legally binding Protocol to strengthen the Biological and Toxins Weapons Convention (BTWC) by seeking to engage global civil society in efforts to strengthen the norm against BW. The BWPP is funded by governments of States Parties to the BTWC and foundations.

John Borrie (Mines, Arms Unit of the International Committee of the Red Cross (ICRC)) introduced the ICRC campaign on 'Biotechnology, Weapons and Humanity' and elaborated the ICRC's role in strengthening the norm against BW. He explained the need to decrease the risk of the misuse of science for hostile purposes and the resulting need to inform the scientific community of the dangers associated with the advances in the life sciences, as well as the international rules that apply to scientific research. In order to ensure that their work is not misused, the responsibilities of scientists need to be explicated.

Robert Rigg (Consultative Committee on Disarmament, New Zealand) addressed the international response to the perceived increase of the threat of BW use and development. He spoke of the role that the World Health Organization (WHO) has, and is, playing and the constraints which the organization faces in responding to unusual or deliberate outbreaks of disease. While the international community has given the WHO a wide-ranging mandate, he argued that it also needs to allocate specific funds so that the international organization can respond to an unusual or deliberate outbreak of disease. In the absence of such a mandate and sufficient funding countries will have to develop their own mechanisms to respond to disease outbreaks. This means that wealthy countries will clearly have an advantage over less developed ones, which, under the circumstances, would be unable to rely on support from international organizations such as the WHO. He also raised concern about the increasingly sophisticated bio-defence programmes in the West, noting that the lack of transparency in these programmes may result in the perception that BW are being considered and ultimately contribute to a biological arms race.

Laurel Baldwin-Ragaven (Professor of Health and Human Rights at Trinity College, Hartford, CT, USA) spoke of the effects of the US response to the BW threat on the scientific community and human rights issues both in the United States and elsewhere. She drew attention to the infusion of patriotism into scientific endeavour in the United States, the increasing secrecy surrounding bio-defence related work and the resulting ethical dilemmas facing scientists who engage in this type of work. She also drew attention to the increased funding of scientific research and development the field of bio-defence and how this trend has drawn funding away from other, perhaps socially more important research. She noted that there has been no challenge by the scientific community to the increased funding of bio-defence research and

development: its discussion has rather focussed on who would not benefit from the increased research funding.

The discussion that followed the presentations demonstrated the common interest of all participants in the issues raised by the speakers and also highlighted some areas of specific concern to particular constituencies. The following themes emerged from the discussion:

- **Realistic threat assessments.** There is a need to develop a realistic threat assessment with regard to the development or use of biological agents and weapons. Participants asked how real the threat is. Zanders noted that with regard to BW, the threat is largely in the future. Preventative actions need to be taken, including measures to prevent the misapplication of biology and biotechnology for hostile purposes. Participants noted the difficulties involved in developing realistic assessments in the absence of international consensus about threat levels.
- **Preparedness to respond to deliberate or unusual disease outbreaks.** It was noted that the South African public health infrastructure is entirely unprepared to respond to a deliberate or unusual disease outbreak. It was suggested that many countries, with the exception of those in the developed world, face the same problem. It was noted that advocating increased government spending on improving the capacity of the public health infrastructure to respond to infectious disease outbreaks would be a positive result of increased awareness of the bioweapons threat. It was also noted that the politics between countries can have a detrimental effect on the ability of international organizations to respond to disease outbreaks.
- **Transparency.** Participants discussed the need for transparency from governments and industry with regard to bio-defence programmes and scientific developments with potential dual-use application. The following questions were raised:
 - what does transparency mean?
 - who is responsible for fostering transparency?
 - how can NGOs contribute to the generation of transparency with regard to relevant government policies and actions and scientific and industrial activities?
- **Rules and responsibilities of the scientific community.** It was noted that while there are both national and international rules governing scientific research and development, all actors in the life sciences need to become more aware of the potential dual-use application of certain research and technologies. Discussion returned repeatedly to the low level of awareness in the scientific community, both about the rules which already exist and their individual responsibility as members of society. It was said that it is important that the scientific

community takes ownership of the discussions about the potential for the misuse of science. For this to happen there needs to be a sensitivity to the difference in language between that used by the arms control community and that of the scientific community. Life scientists were identified as an important target audience for issue-awareness raising programmes by the BWPP and its member organizations.

- **Raising issue awareness among students of the life sciences.** Participants noted the need to include information about the BTWC and the norm against the misuse of science in university courses. Students of the life sciences were identified as an important constituency for the BWPP.
- **Regulation of scientific research and development.** Participants discussed the effect of the increased regulation of science and noted the following effects in particular: a decrease in trust within the scientific community and between government agencies and the scientific community; a curtailment of the exchange of information between scientists; and decreased scientific collaboration. These and other effects have a negative impact on the advancement of science.
- **Whistleblowers.** The need to encourage professionals to report ethical and legal violations that may occur during the course of scientific research and development was also discussed. Participants asked who whistleblowers can turn to when they have ethical or other concerns about the work they are being asked to do. This debate is encouraged by the ICRC through its 'Biotechnology, Weapons and Humanity' campaign. It was noted that previous discussions in South Africa it had been suggested that professional associations need to enter the debate. In particular, they should consider what they can offer in terms of protection to their members who may wish to speak out about (possible) ethical or legal infractions of which they are aware.
- **Development and improvement of the relationship between scientific experts and law enforcement agencies.** This requirement was discussed in terms of the necessity to include scientific expertise in the investigation of suspected violations and criminal acts, as well as in terms of increasing awareness about national and international laws and regulations affecting the scientific community. It was noted that several attempts by government officials to inform the scientific community about new and existing laws and regulations have proved insufficient and that more work needs to be done. This was identified as an important area of work for NGOs. The idea emerged to encourage the inclusion of information about the BTWC in the company manuals of the biotechnology industry. Participants also suggested the establishment of an intermediary organization with credibility within the scientific community to interact with

government departments in order to ensure effective flows of information.

- **Challenges to control and regulation.** Participants from law enforcement agencies also drew attention to some important factors related to the development, implementation and enforcement of national non-proliferation legislation and regulations. These include: (i) the need for extensive and on-going research to inform legislation, (ii) the reliance on intelligence to detect violations and the need for intelligence agencies to develop good sources of information, (iii) the need for specialized prosecutors and investigators, (iv) the need for the courts to be aware of the issues and to be responsive to cases involving violations of non-proliferation legislation, (v) the potential for violators to use countries with good international standing such as South Africa as transit ports for sensitive goods and equipment, and (vi) the difficulty of collecting financial information of relevance to CBW-related criminal cases.
- **Public education.** It was noted by health professionals that the response of communities to disease outbreak is affected by their perception of the cause of the outbreak. Health professionals committed themselves to considering the message that a public education campaign needs to convey.

The BWPP workshop demonstrated the possibility and value of NGO-initiated dialogue between a range of constituencies with an interest in BW control. Representatives of the academic and scientific communities, people working in the industry, grassroots organizations and government agencies responsible for designing and implementing non-proliferation policies sat together to consider issues of common interest. Through the interaction it became clear to all participants that preventing BW proliferation and the misuse of biology and biotechnology for hostile purposes requires the joint action from all communities. The most prominent issue areas for the southern African region that emerged from the discussions were: (i) the development of ways to strengthen the public health system so that the state has sufficient capacity to respond to unusual or deliberate disease outbreaks; (ii) assessing the effectiveness of increasing regulatory control over biotechnology and (iii) the development of educational programmes to inform life scientists and students about the national and international laws and norms as well as the dual-use potential of their research and the processes and products they develop.

As to the next phase, the BWPP will now consider ways and means to support the processes of dialogue and joint action among the civil society constituencies and their interaction with government agencies. This includes the strengthening of the BWPP's relationship with the individuals and organizations that participated in the different meetings of the pilot project and facilitating on-going interaction among them; and the organization of further issue-awareness raising meetings in different parts of South Africa or for different civil society constituencies.

Building on the experience acquired during the pilot project, the BWPP will also expand its issue awareness and capacity-building activities to other parts of Africa and elsewhere in the world. These activities depart from primary local concerns about health and security, thus taking into account that perceptions of the threat posed by disease may differ significantly from one society to another. In turn they contribute to the BWPP goal of developing and nurturing a global network of civil society organizations whose common goal is to maintain and strengthen the norm against the weaponization of disease.