WORLD TRADE ORGANIZATION

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Committee on Sanitary and Phytosanitary Measures

STDF WORKSHOP
"USING ECONOMIC ANALYSIS TO INFORM SPS DECISION MAKING"
GENEVA, 30 OCTOBER 2009

BACKGROUND NOTE AND DRAFT AGENDA

Note by the Secretariat[1]

Introduction

1. In accordance with its mandate to exchange experiences and disseminate good practice in relation to the provision and receipt of SPS-related technical cooperation, the STDF plans to organize a workshop in Geneva on 30 October 2009 on the use of economic analysis to inform and enhance decision-making in the area of food safety, animal and plant health (sanitary and phytosanitary measures or SPS). This document provides general information on the objectives and scope of the workshop, and a draft provisional agenda (see Annex).

Objectives of the workshop

2. Political support and commitment is essential to ensure that adequate resources are available to control potential SPS risks and implement SPS measures. However, competing priorities and financial constraints often mean that resources are in short supply in countries. In some cases it is only after a major food safety incident or animal disease or plant pest outbreak has occurred – and considerable resources have been spent on control – that attention focuses on the benefits and cost-savings of improving SPS systems and capacities to prevent such outbreaks.

3. The purpose of this workshop is to share experiences from countries and organizations that have used economic analysis to support SPS decision-making. The aim is to demonstrate how economic analysis can generate information that is valuable to improve SPS decision-making and enhance the effectiveness and efficiency of available resources. In doing so, the workshop will illustrate why it makes economic sense to invest in improvements to SPS systems and capacity, which will help to garner high-level support for SPS capacity building, including the allocation of the resources required.

4. The specific objectives will be to:

(i) Present research and experiences on the use of economic analysis to support decision making in the SPS area, including decisions on where to allocate resources. This will address the potential impacts of pest/disease outbreaks on trade and the costs of prevention and control versus outbreaks, as well as the expected returns of investments in SPS capacity in terms of human health and trade.

[1] This document has been prepared under the Secretariat's own responsibility and is without prejudice to the positions of Members or to their rights or obligations under the WTO.

(ii) Share information on practical tools and approaches to incorporate economic analysis into SPS decision-making.

(iii) Identify challenges in expanding the use of economic analysis to inform SPS decision making in developing countries, and seek possible solutions.

Overview of available research and the scope of work to be presented

5. A number of organizations and countries have applied economic analysis to the SPS area, and other work is ongoing. For instance, the OIE recently completed an extensive study – focused on transboundary animal diseases in Argentina, Viet Nam, Nigeria and Romania – which concludes that the costs of preventing major animal diseases are significantly less than those associated with managing outbreaks, and the benefit:cost ratio of investing in prevention versus control is high.[2] This study showed that investments in improvements to animal health in Latin America of some additional US$157 million per year over 15 years generate a net present value of US$1.9 billion, while in Asia eradication programmes for foot and mouth disease (FMD) provide benefits in terms of improved trade and enhanced market access worth several times the investment.

6. A follow-up OIE study[3], financed by the World Bank and the European Commission, estimates the costs of operational veterinary services in "peace time", focusing on the costs of surveillance and prevention, early detection and rapid response mechanisms, as opposed to sanitary crisis due to non-prevented animal disease outbreaks. This work includes in-depth case studies from Costa Rica, Krgyz Republic, Mongolia, Morocco, Romania, Turkey, Uganda, Uruguay and Viet Nam. In addition, FAO is involved in work to assess the economic impact of FMD control and eradication in Asia[4] and is leading economic analysis work to identify at which point in the poultry value chain interventions targeting Avian Influenza are most cost-effective.

7. Economic analysis has also been applied in the plant health area. For instance, members of the International Regional Organization for Agricultural Health (OIRSA) decided to invest resources to prevent the possible introduction of a pest into the region on the basis of an ex ante cost/benefit analysis for control of the Pink Hibiscus Mealybug carried out by the Belize Agricultural Health Authority (BAHA). [5] Another study on the impact of investments to control fruit flies in 17 countries in the Asia-Pacific Region, recently completed by the Australian Centre for International Agricultural Research (ACIAR), indicated an overall benefit:cost ratio of over 5:1 for the total investment and an internal rate of return of 33 percent. [6]

8. In the area of food safety, research has been carried out on the costs of the Danish *Salmonella* surveillance and control programme and the benefits in terms of public health and trade. The Economic Research Service of the US Department of Agriculture has done considerable work on the costs and benefits of implementing HACCP and pathogen reduction programmes. Other work is

[2] OIE. 2007. Prevention and control of animal diseases worldwide. Economic analysis – Prevention versus outbreak costs. Final Report. Part 1. Submitted by Civic Consulting – Agra CEAS Consulting. September 2007.

[3] This follow-up study is currently being peer-reviewed. It will be published in the summer of 2009.

[4] T.F. Randolph, B.D. Perry, C.C. Benigno, I.J. Santos, A.L. Agbayani, P. Coleman, R. Webb & L.J. Gleeson. 2002. The economic impact of foot and mouth disease control and eradication in the Philippines. Rev. sci. tech. Off. int. Epiz., 2002, 21 (3), 645-661 (available at: http://www.oie.int/boutique/extrait/32randolph.pdf). Other research on this subject has subsequently been published by Benigno.

[5] BAHA. March 2003. Cost Benefit Analysis for the Pink Hibiscus Mealybug Biological Control Program in Belize.

[6] Lindner B. and McLeod P. 2008. A review and impact assessment of ACIAR's fruit-fly research partnerships, 1984–2007 (available at: www.aciar.gov.au/publication/IAS56).

underway, including in the Netherlands and under the WHO Initiative to Estimate the Global Burden of Foodborne Disease, to generate information on the economic cost of foodborne diseases. The International Food Policy Research Institute (IFPRI) is doing research on the development of cost-effective control strategies for foodborne disease for different sized producers, including strategies focused on agricultural practices, and distributional aspects.

9. Other work has sought to develop methodologies and frameworks to guide decisions on SPS investments and/or resource allocations in general. For instance, one STDF project (STDF 20) developed a methodology to support decision-making on investments in SPS capacity development, primarily on the basis of export performance.[7] Work is going on within the Southern African Development Community (SADC) and in Cambodia under STDF 246 to measure costs and benefits along particular value chains. The New Zealand Ministry of Agriculture and Forestry has developed an economic model for efficient resources allocation for surveillance.[8]

10. This workshop would present the findings of some of the above-mentioned research, drawing practical lessons and experiences for developing countries interested in using economic analysis to improve resource allocation and investment decisions. The presentations would provide guidance on the types of methodologies that can be used (e.g. cost-benefit analysis, cost-effectiveness analysis, multi-criteria analysis), as well as the requirements and challenges for developing countries seeking to apply these approaches. Presentations addressing the expected returns on investments in SPS systems would start from the premise that meeting minimum requirements is necessary to facilitate trade but that the binding constraint(s) may not be SPS specific.

Participants

11. The workshop will be open to delegates attending the SPS Committee meeting. In addition, the STDF will fund the participation of approximately 10 officials from developing countries. Efforts are underway to identify experts in developing countries involved in the use of economic analysis in the area of food safety, animal and plant health, who would be able to share their experiences during the plenary discussion.

Outcomes

12. The workshop is expected to raise awareness among participants about the benefits and costs (direct and indirect) of investing in SPS capacity building, the potential impacts of SPS problems on trade, etc. It will further clarify how economic analysis (including cost-benefit analysis, cost-effectiveness analysis, multi-criteria decision analysis, etc.) could be used more widely in developing countries to enhance the allocation of resources. The presentations and discussions at the workshop will be used by the STDF to prepare a Briefing Note.

[7] Henson, Spencer. 2009. STDF. Independent external evaluation of STDF 20 by Spencer Henson for the Standards and Trade Development Facility (STDF).

[8] Prime Consulting International / Nimmo.-Bell Company. June 2002. An Economic Model for Efficient Resource Allocation to Surveillance. A Decision Making Framework prepared for the Ministry of Agriculture and Forestry, New Zealand (available at: www.biosecurity.govt.nz/files/pests/surv-mgmt/surv/review/economic-model.pdf).

Annex

STDF WORKSHOP ON THE USE OF ECONOMIC ANALYSIS TO INFORM SPS DECISION-MAKING
30 OCTOBER 2009

DRAFT PROGRAMME

10:00 Welcome and opening remarks

10.15 Session 1. Measuring the benefits, costs and distributional effects of adopting better food safety practices

This session will consider the costs, benefits, impacts and distributional effects of implementing better food safety practices, in terms of consumer health as well as market access. Research on the costs and benefits of the Salmonella control programme in Denmark for public health and market access will be presented. Experiences and lessons will be drawn from research by the US Department of Agriculture on the marketplace impacts and costs and benefits of pathogen control programmes (e.g. for HACCP and/or exports of green onions from Mexico to the United States)

- US Department of Agriculture (USDA), Economic Research Service. Speaker to be confirmed (tbc).
- Danish *Salmonella* control: Benefits, costs and distributional impacts. Speaker tbc.
- Discussion.

11.30 Session 2. Costs and benefits of the prevention and control of animal diseases in "peace time" and in response to outbreaks

This session will explore the costs and benefits of preventing and controlling animal diseases in "peace time" and in response to outbreaks. Examples from recent economic studies led by the OIE and the FAO will be presented. The direct and indirect costs of outbreaks of specific animal diseases (such as avian influenza, foot and mouth disease) for particular countries/ regions will be considered, as well as the generic costs of operational veterinary services that meet OIE standards in "peace time". The presentations will illustrate the role that economic analysis can play in supporting responsible decision-making in the areas of policy and strategy, and the challenges faced.

- Prevention versus outbreak costs for animal diseases worldwide. Alain Dehove, Coordinator, World Animal Health and Welfare Fund, OIE.
- Costs of national prevention systems for animal diseases and zoonoses: A systemic perspective. Lead consultant (Agras CEAS) for OIE study.
- Economic impact of foot and mouth control and eradication in the Philippines. Reildrin Morales, Chief, Disease Control Section, Bureau of Animal Industry, the Philippines.
- Discussion.

13.00 Lunch

15.00 Session 3. Assessing the economic effects of investing in plant health control programmes

This session will consider the costs and benefits of investing in phytosanitary capacity with examples from Belize and the Asia Pacific Region. The presentations will draw on studies undertaken by the Belize Agriculture Health Authority (BAHA) to guide (ex ante) the allocation of resources in the plant health area, and by the Australian Centre for International Agricultural Research (ACIAR) to evaluate the ex post impact of investments in several countries in the Asia Pacific Region from 1984-2007.

- Analysing the costs and benefits of the Pink Hibiscus Mealybug in Belize. Hernan Zetina, Coordinator, Medfly Programme, Belize Agricultural Health Authority (BAHA).
- Use of economics and cost benefit analysis in assessing post border activities in New Zealand. Mr Douglas Birnie, Director, Policy and Risk Management Directorate, Biosecurity New Zealand, New Zealand Ministry of Agriculture and Forestry.
- Quantifying investments in fruit fly research and development in the Asia-Pacific region. Paul Vitolovich, Manager SPS Section & Special Advisor, Department of Agriculture, Fisheries and Forestry, Australia.
- Discussion.

16.15 Session 4. Incorporating economic analysis into SPS decision-making in practice

Building on the previous presentations and discussions, this session will consider practical approaches and strategies to make greater use of economic analysis in SPS-related decision-making processes, and the expected benefits. Presentations will discuss what is required to integrate economic analysis into SPS decision-making , as well as the challenges (e.g. availability of data and expertise), and future needs in this area for SPS technical cooperation.

- Tools and approaches to use economic analysis in SPS decision-making. Spencer Henson, Professor, International Food Economy Research Group, University of Guelph, Canada.
- Integrating economics with risk assessment to inform SPS decisions. Clare Narrod, Senior Research Fellow, Markets, Trade and Institutions, International Food Policy Research Institute (IFPRI).
- Taking a value chain approach in economic analysis for Avian Influenza. FAO. tbc.

17.45 Concluding remarks and close, STDF