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Trade, environment and public health

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Ce texte n'engage que son auteur. En mettant ce document en ligne sur son site, l'Iddri a pour objectif de diffuser des travaux qu'il juge intéressants pour alimenter le débat.

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Report on

Trade, Environment, and Public Health

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Trade, Environment, and Public Health

Preface

The Concerted Action on Trade and Environment (CAT&E) is designed to provide an opportunity for the large and growing community of European researchers working on trade and environment issues to meet regularly, to discuss research hypotheses and methods, to review results, and to develop new lines of co-operative research. CAT&E will launch a dialogue with policy makers at all levels. It aims to create a process that can document the progress of research and generate new research impulses in this area. It seeks to advance the resolution of current conflicts between trade and environment. The information obtained in the course of the Concerted Action is annually summarised in state of the art reports and bibliographies in a fashion that is useful to both researchers and policy makers. The bibliographies focus on the most recent literature. The reports serve as an input to CAT&E's annual members' meetings and open conferences. To structure the reporting and discussions, the following themes have been identified initially (in random order; the theme of the present paper is underlined):

- ✓ Subsidies
- ✓ Government Procurement
- ✓ Investment
- ✓ TBT, SPS, and Labelling
- ✓ Trade and Development
- ✓ Trade, Environment and Human Rights
- ✓ Trade in Commodities
- ✓ Implementation Procedures
- ✓ Trade in Services
- ✓ Intellectual Property Rights
- ✓ Trade and Multilateral Environmental Agreements
- ✓ Dispute Settlement
- ✓ Transparency and Participation
- ✓ Sustainability Impact Assessment of Trade Agreements
- ✓ European Trade Policy Development
- ✓ Trade and Agriculture
- ✓ Trade, Environment and Labour
- ✓ Trade, Environment, and Public Health
- ✓ Science and Precaution
- ✓ Trade and Environment in the Architecture of International Governance.

Introduction and scope of the paper

Most articles on trade, environment and public health do not discuss the meaning of these three terms, nor the variety of links that might exist between them. There are two possible reasons for this. Many research papers are interested in trade agreement exemptions that are designed to protect health and the environment. Trading involves an agreement to trade products and services, and a specific product could pose a threat to public health. Another group of papers deals with the impact of environment on health, and, in these cases, trade not only means an agreement, but also the notion of 'growth of trade'. So, it would be useful to start by defining what is meant by public health and environment in order to clarify hypotheses that will be discussed further on.

The notion of public health is wide-ranging: it includes a state of complete physical, mental and social well-being, as well as the absence of disease or infirmity. This World Health Organization (WHO) definition expresses an ideal, which should be the goal of all health development activities. In medicine and in research, health is often understood as an absence of a diagnosed disease or disorder. Public health covers all social, political and organizational efforts, which are aimed at improving the health of groups or of a whole population. This includes all organized approaches to, or systems of health promotion, disease prevention, disease eradication, rehabilitation or care that are oriented toward this goal. A health policy has to deal with numerous health determinants: gender, age, income, neighborhood, occupational environment, quality of life, diet.

The relationship between environment and health covers many different situations that have already been listed (Ezzati et al., 2002). There are two categories of situation:

- environmental risks; water, air pollution (indoor, outdoor), global climate change;
- environmental and occupational risks ; carcinogen exposure, airborne particulates, noise.

From a public health point of view, particularly when health determinants are taken into consideration, the notion of environment also includes individual environments. Public health policies also include the household environment: lead exposure, indoor pollution, bad food habits or consumption habits that lead to dependence and risks such as addictive substances abuse (alcohol, tobacco and others). In health matters, the environment must be considered globally: it involves everything that affects well-being.

The term 'trade' is polysemic. Trade can be understood as an activity that consists in exchanging goods and services. In terms of the relationship between trade, environment and health, this definition is satisfactory when we study multilateral trade agreements that authorize restrictions on exchanges between States in order to protect life or health. This is particularly the case with SPS measures. However, this definition does not cater for the economic, political and social aspects of trade, which contribute to the wealth of shareholders, nations and individuals. Here, trade becomes an activity that puts producers into competition with each other, but it is also an activity that gives rise to conflicts or alliances between producers and the representatives of civil society or States. So, trade then becomes an issue of economic, political and social power.

In the first definition of trade, the exchange of goods and services, links between trade and public health are clear. Whether it is trade in goods (medicines, syringes, apparatus)

or trade in services (nurses, doctors, technologies, knowledge), these types of trade could have an impact on health systems. In the second definition of trade, protection of the environment and health could conflict with the notion of trade as a competitive activity that produces wealth, and requires lobbying of political decision-makers and marketing to consumers. These contradictions can take several forms creating de facto links between trade and public health. It could be the producer's way of doing business that is incompatible with protecting health and the environment, for example, deforestation for the development of agriculture, or the production of polluting energy or toxic wastes. The means used for exchanging goods may themselves create problems for health and the environment, for example, the development of road traffic and of air transport with their noise pollution or emissions into the atmosphere. Or, it could even be products on sale that damage health or the environment when they are consumed, or through the waste they generate, for example, phytosanitary products in agriculture that cause metabolic changes.

In order to promote development, a State may choose to neglect the environment and the health of its people. For the same reasons, some States may accept an exchange of goods or services that have an impact on the environment or on health. Whether it is at a national, regional or international level, it is these arrangements between social groups, governments, firms or civil society that make it possible or impossible to take environmental or health issues into consideration in trade by defining what are acceptable norms.

For this reason, considering that the definition of public health is very extensive, trade, environment and public health issues have to be addressed from a wide-ranging point of view. This paper will try to cover recent literature in a large number of fields, under headings such as legal analysis, where 'trade' means 'trade agreement', or public health analysis where 'trade' is used to describe all human activity that contributes to exchanges. Many aspects of this question of the links between trade, environment and public health crop up in other reports by CAT&E, in particular: TBT, SPS and labeling, Trade and multilateral environment agreements, Science and Precaution.

Identification of relevant research hypotheses

In the section above, we have provided a few definitions of public health and we have made a rough distinction between trade agreement and trade activities. The following hypotheses are not built on these clarifications, but on the possible links between trade, environment and public health. The hypotheses can be separated into two major groups: the first could be classified as 'normative', examining causal interactions between trade, environment and health. The second would be 'reflective', considering social processes and the power underlying those interactions. These two ways of looking at this question are not mutually exclusive.

Causal and normative hypotheses

The first hypothesis is that trade has an impact on the environment that in turn affects public health. This hypothesis implies a linear causality. Trade must be considered in two ways, trade as a human activity with its impact on the global environment, and trade in goods that may have an impact on health. In the first case, 'global activity oriented',

examples of the link with health would be the rise in infectious diseases due to biodiversity reduction (deforestation and the spread of malaria), climate change and the impact on health (from extreme heat in particular). However, the link could also be the growth of road traffic, local air pollution and respiratory morbidity or mortality. In the second case, it could be a 'product oriented' hypothesis: trade in products that could cause harm, or that are controversial due to the risk they pose to health. This is the problem of the precautionary principle and concerns genetically modified organisms (GMOs), pesticides and fertility, nuclear energy and cancer, mobile phones and health. This hypothesis must take into account social or gender determinants of health. Exposure to environmental or occupational risks may be linked with social determinants. So, we have to consider specific problems of occupational risk to women or working children. This is linked with labor conditions influenced by international trade.

A second hypothesis adopts a more interdependent point of view and partly reverses the previous one, which considered the potential negative impact of trade on the environment and health. An environmental and sanitary crisis may have an impact on trade, like the legionella epidemic that was linked to industrial cooling towers and led to factory closures. However, some of these crises could have their origins in the growth of trade or the way trade has considered environmental or safety questions: this is the case with the SARS and BSE outbreaks, smog caused by forest fires in Asia in 1997/98 or the Chlorofluorocarbon (CFC) ban.

A third hypothesis is that trade agreements have an impact on environment and public health, whatever the result (improvement or restriction): the Trade-related Aspects of Intellectual Property Rights (TRIPs) Agreement and access to medicine; the General Agreement on Trade in Services (GATS) and health services or the migration of human resources for health; technical barriers to trade (TBT) and harmonization of pharmaceutical products; sanitary and phytosanitary standards (SPS) and food safety. Trade agreements may change access to tobacco or alcohol, water services or food. The impact of trade agreements on the global environment of consumers must be addressed.

Reflective hypotheses

In the first set of hypotheses, the people involved in drawing up trade regulations or the scientific evaluation of environmental risks and health impact are not taken into consideration. A second set of hypotheses needs to address the actors involved, the social uses of science and law and the political issues. So, the constructivist approach of social sciences has to be adopted (Berger & Luckmann, 1966; Wendt, 1999) and the way in which norms are constructed and used has to be considered (Kratochvil, 1991; Ryan, 1998; Sell, 1998). The link between trade, environment and public health is a political and ethical issue (Jensen & Sandoe, 2002).

First of all, trade, environment and public health generate scientific controversies for political reasons. The definition of risks involves power relations and competition between numerous stakeholders in order that the impact trade has on health or on the environment can be ascertained. Producers of industrial food or cars spend huge amounts of money on marketing and lobbying in order to influence perceptions of environmental and health risks related to their product. Science becomes a tool for them, as well as for their oppo-

nents. This question is central to our subject: who produces the data and studies on the effect of trade on the environment and health and how is this translated into rules?

Secondly, trade, environment and public health must be examined by considering political bargaining, whatever the level. A dispute resolution process offers material for studying coalitions of actors and for understanding interests at local, national, regional and international levels. For example, the role of trade unions or interest groups may shed light on national political considerations that influence the use of words or principles like 'precautionary principle' and 'scientific considerations' or on why interest groups want to use agricultural biotechnologies instead of GMOs. Trade, environment and public health, taken separately, are the mainstays of international political disputes. Therefore, considering the three together has to include this international political dimension.

Survey of methodological approaches

The literature on trade, environment and public health covers a very wide field and many papers combine methodological approaches or go in for rigorous analysis (scientific or legal) coupled with a partisan position and, yet, manage not to sound like a paper published by a stakeholder. Papers published by stakeholders are those that offer the most security insofar as their position is clear, and the reader does not need to detect any defense of hidden interests behind the scientific or legal arguments. For practical reasons we have chosen to divide the papers into three groups. The first group comes under the heading legal analysis and concerns papers that clarify or discuss the place of health in multilateral trade agreements. The papers in the second group are more heterogeneous, but they all share one common point; they deal with public health, whether it is health systems or health protection. Finally, the third group concerns papers published by stakeholders.

Legal analysis

Every World Trade Organization (WTO) agreement considers this subject and few dispute resolution processes have addressed the balance between trade promotion and environmental and health protection. Thus, the heading legal analysis covers a wide range of trade, environmental and public health issues. It is a more comprehensive approach considering the diversity of papers covering this particular topic. Some articles review environmental and health issues in WTO agreements (Charnovitz, 2000; WHO/WTO, 2002), sometimes criticizing their lack of precision (Howse, 2004). Others deal more specifically with one agreement or another and the way in which they have been used in dispute resolution (Howse & Mavroidis, 2000; Bohanes, 2002). While exploring trade, environment and public health in trade agreements, some papers study the way appellate bodies work (Kelly, 2003) or how democratic these procedures are (Howse, 2004). Health regulation of a product or health regulations concerning one single article of GATT (Mavroidis, 2000; Covelli & Hohots, 2003b) may be the central theme of a paper.

Papers on the SPS agreement have the most direct link with their subject; many articles offer a global perspective of this attempt to reconcile trade and health by presenting the disagreements between member countries of the WTO; e.g. the cases of asbestos, of hormones, a salmon dispute (Pauwelyn, 1999; Van Calster, 2001; Bloche, 2002; Kelly, 2003). Others outline the nature of the SPS and TBT agreements, sometimes using cases

that were the subject of dispute resolution (WHO/WTO) or even by taking an interest in a product like biotech foods (Covelli & Hohots, 2003a).

Legal articles dealing with the impact of trade agreements on public health offer a partial approach. Those that address health services and GATS (Smith, 2004) are sometimes speculative, but most of them deal with TRIPS and access to drugs. They might adopt a global point of view (Correa, 2000) or concentrate on particular case studies (Bermudez & Oliveira, 2004). However, some are interested in TBT and global standards for the pharmaceutical market (Timmermans, 2004).

Public health analysis

Articles in the public health analysis group may adopt various methodological approaches depending on the author's background: medicine, science, sociology, or politics. Nevertheless, grouping these papers together under the label of public health analysis enables us to highlight what they have in common, which is that they do not approach the subject from the legal point of view. Public health articles that deal specifically with trade, environment and public health are rare and recent. One of the more interesting is the paper by Hodges and Kimball (2005) on the development of trade in food production and novel infections.

Most papers in this domain deal with globalization and its impact on health (Spiegel et al., 2004). A frequent approach is to examine how trade rules constitute a threat to existing health systems (Shaffer & Brenner, 2004). Some papers deal with the impact on public health of implementing existing agreements instead of the way health is considered in the agreement (Pollock & Price, 2003). They contribute to improving health levels, for example by influencing occupational environmental safety (Brown, 2005). Trade integration is examined for its impact on public health systems (Harvey, 2004), particularly the GATS (Pollock & Price, 2000; 2003; Sanger, 2001; Chanda, 2002; Smith, 2004) or for its impact on public health policies, for example, tobacco consumption (Gilmore & McKee, 2005). Some economic approaches examine the impact of trade integration on health, but failure to include health determinants lessens the interest of this approach (Beghin et al., 1999). In the context of social determinants of health, quality of water supply is an interesting aspect of the link between trade and health and the effects of economic integration (Bartram et al., 2005).

Despite the examples above, most papers dealing with public health do not directly address the question of trade and leave it in the background. Papers on the environment and health emphasize the idea of a causal link between the development of trade and environmental degradation. Links between trade and global environmental degradation are listed by Von Schirnding (2002). Some papers discuss the effects of global climate change on health through the spread of infectious diseases (Lipp et al., 2002) or the impact of hot weather (Kovats et al., 1999; Patz & Kovats, 2002). There are many more papers dealing with air pollution and health, showing that health can be adversely affected at lower concentration (Brunekreef & Holgate, 2002) or by road traffic (Künzli et al., 2000). Reproductive health and the environment is dealt with by evaluation of environmental chemicals (Sharpe & Irvine, 2004) or by examining the nuclear industry (Machonochie et al., 1999) and its adverse effects on human reproduction. The relationship between social health determinants is studied too, especially poor housing condi-

tions, which are associated with a wide range of health conditions: respiratory infections, lead poisoning (Kriegger & Higgins, 2002), However, more research is needed in this area.

Finally, some papers look at the actions of interest groups in the regulation of certain products. It could be trade union action against tobacco (Pan et al., 2005), or the efforts of transnational tobacco companies to promote their products (Bettcher et al., 2000; Yach & Bettcher, 2000; MacKenzie et al., 2004). Others deal with apparently harmless products, but which have a strong impact on health, where there are enormous marketing and trade interests, as with fast food habits and insulin resistance (Pereira et al., 2005) or the effects of portion size and sugar-sweetened soft drinks on childhood obesity (Ebbeling et al., 2002).

Stakeholder papers

Stakeholder papers offer the advantage of explaining their point of view (Médecins du monde, 2003; Paris Appeal, 2004) and they shed light on what is at stake and the interest of authors as the people who condemn problems (CISIS, 2001; NFTC, 2003; 2004). By displaying the actors' position after an in-depth analysis of a problem, stakeholder papers turn out to be useful for working on both normative and reflective hypotheses (FIELD et al., 2001; 2004). Guidelines make it possible to assess a problem by giving instructions (Johannessen, 2000; IFC, 2004).

Above all, these papers enable us to follow procedures that are under way like the discussions within the European Union relating to the REACH project (Registration Evaluation Authorization of Chemicals). They explain how the project came into being, outline ongoing controversies and, of course, they present the proposals of the stakeholder publishing the document (Palmer, 2004).

Conclusion

The law is the essential factor in understanding how health and environment are affected by trade agreements. However, focusing on dispute resolution and on WTO agreements is not sufficient: what is it about trading a product that is not contested by a government, but which has an impact on environment and health? Public health and medical literature offers clear classification of the environmental impact on health, but only recently addresses trade. Research in public health offers various case studies. Those conducted by Kelley Lee on globalization and health point the way to new areas of research by associating public health with studies on international relations.

There are many papers on trade agreements, there is no gap in research into these approaches and good specialized journals publish articles regularly. On the other hand the lack of studies on the legal aspects shows where the gap in research lies. First, there is the absence of research dealing with trade agreements without using trade agreement frameworks (SPS, TBT) and categories (precautionary principle) to think about trade, environment and public health. Secondly, there is a great need for non-normative work. A very common hypothesis underlying all papers is the question of the 'good' or the 'bad' aspect of trade. As many papers fail to free themselves from trade agreement frameworks, they fall into the trap of partisanship. Research studies on trade, environment and public health have less distance from their subject.

Thus, the main gap in research is political science and international relations. When reading these papers, apart from a few exceptions, they all seem to refer to a world with no States, no political parties, no national elections, no firms, no trade unions, no interest groups, no international organizations. Research is needed on the way all these political actors are involved in the definition of trade rules and environmental risks, and their impact on health.

Secondly, to avoid the 'good' or 'bad' debate on the WTO, retrospective multidisciplinary research on empirical case studies (Seveso, Bophal, Minamata, asbestos cancer) would be useful in order to identify the relationship between trade and environmental or sanitary norms. Multilateral trade agreements are only ten years old, but some examples of economic integration like the European Union (EU) are older, and they have had a proven impact on trade. The growth of trade in the Union offers a good case study for evaluating the impact on environment or health and the impact of the regulation of sanitary measures on food safety, for example. Some non-European countries, like Thailand and Brazil, due to their proven integration in international trade, provide case studies too. They have experienced trade development, environmental changes and probably some health-related problems.

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