

Trade and Biodiversity

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Trade and Environment

Even though the relationship between trade and the environment seems obvious, it has only recently been an issue in the field of trade negotiations. It is still avoided by some, kept away from the center of attention, barely considered as a side topic or, more commonly, remains totally absent. The theme has been promoted by the developed countries as a result of the pressure coming from civil society organizations. It has provoked more resistance in the developing countries, where it is considered a non-tariff barrier and a way to lose competitiveness due to the rise of production costs.

In the field of economics, the focus of study on trade and environment for many years emphasized the microeconomic aspect, so eventually macroeconomic analysis and economic development in general were left behind. On the other hand, politically the concern was about the viability of the subject and the obstacles it would introduce to the implementation of trade opening and export promotion strategies. There also seems to be a perception of environmental groups as radical groups who use the issue in order to oppose the market system. But despite this defensive attitude towards the trade and environment topic from several sectors, it is slowly becoming more explicit, clear and legitimate. After having long been discussed, it has become part of the Doha trade negotiation agenda.

The important consequences it brings for trade made the topic part of a considerable number of regional and bilateral trade agreements, such as NAFTA, CAFTA, Chile-Canada, Chile-United States, United States-Australia, Canada-Central America, United States-Jordan, United States-Singapore, and the European Union among its members. This has stirred up attention among negotiators, governments, the private sector and civil society, who have responded by taking the matter more seriously.

During the last few years different groups have established different kinds of negative or positive associations with respect to this relation between trade and environment. Some groups say that the impacts of trade on environment are negative due to the material basis of trade, which grows and inevitably increases the pressure on ecosystems, affecting the use of natural resources by demanding more inputs.

Other groups have dedicated all their energy to proving that there is a positive relationship between the use of natural resources and the market. They argue that trade promotes an efficient use of natural resources and that with the deepening of market economy, the relation between growth and pollution will eventually be inverse. At the beginning the relationship is positive, which means that pollution increases with growth, but as the economy grows further, the relationship inverts and the result is that the more growth, the less pollution. As usual, the critic has also been present, declaring that the results depend on the kind of indicators, as well as on the phenomena to be measured.

Likewise, important attempts to diminish the negative image of the relationship between trade and environment have been carried out, emphasizing its positive aspects and the opportunities it offers.

The truth is we cannot draw a priori conclusions, positive or negative, about the relation between trade and environment. The fact is that it will vary from country to country according to each sector and product, and it will also depend a great deal on the legislation, institutional settings and level of enforcement. It is most common-

ly said that the stronger the institutions, the better the relation, and vice versa: the weaker the institutional setting, the more likely there is to be a negative relationship.

Kinds of Impact

Among the main impacts that can be established between trade and environment, the following are very important.

- *Impact of scale* refers to the growth of productive activity, the kind of growth there is, and the impacts it has, e.g., more extensive land use, greater use of particular natural resources, larger amounts of disposed wastes.
- The *technological impact* refers to the kind of technology promoted, particularly whether it is more polluting or not. An example of this would be certain non-traditional products in the agricultural sector, such as flowers and watermelons, which tend to utilize technologies that use larger quantities of agro-chemical substances.
- *Geographical impact* refers to the place where the new production will be located: whether it is within rural or urban areas, and what exactly will be the environmental consequences of this.
- The *product impact* refers to the features of the product itself. Is it more contaminating or not?
- The *composition effect* refers to the changes that could be made in the productive sectors as a result of the growth of trade. For example, if the service, agricultural or industrial sector grows, what would be the environmental impacts of each specific kind of change in the composition of the economy?

As noted above, despite the influence of other factors, in the long run the nature of each of these impacts will depend on the regulations and institutional capacity of the country.

International Trade

Trade has always been considered an engine for development. After the Second World War a special stimulus was intended to be given to international trade by establishing an international organization responsible for regulating and promoting trade. When the Bretton Woods Institutions (World Bank, International Monetary Fund) were created, this interest resulted in a proposal to create an International Trade Organization (ITO) as well. However, at that time it never came into being, leaving the GATT (General Agreement on Tariffs and Trade) as the place for multilateral trade negotiations until 1995, when the World Trade Organization was created as a result of the Uruguay Round.

International trade has grown in a vertiginous way in the last 50 years, at a much faster pace than the growth of world production. However, not everyone has received the benefits in the same way, because the gap between rich and poor countries has been growing wider. This is why there was a commitment in the Doha Ministerial to make greater efforts to extend the benefits of trade to the poorest countries. And likewise, these inequalities do not only show up among countries, but also within a country itself, creating poverty and social inequalities inside of the country. This is why transparency, participation and information processes are core issues in the search for equity. The WTO is based on the principle that trade promotes economic development, and its task is to promote trade based on four main principles. In general, the first two principles, national treatment and most favored nation, refer to non-discrimination; tariff consolidation refers to transparency; and progressive tariff reductions refer to the promotion of trade.

Subsidies

Despite efforts to promote trade and the important advances achieved, inaccuracy and imbalance still persist, and an area in which distortions can be easily detected is the field of subsidies. These subventions, or subsidies, as they are commonly known, have

long played an important role in economic policies and still do so, even when considered undesirable. At the beginning, the reason given for them was market imperfections. Subsidies were established in order to compensate for the flaws and to generate conditions that would promote, develop, or stimulate a specific economic activity if it was considered important.

Although these kinds of instruments have long been used, their use is becoming an issue that requires attention, considering their negative impacts on the economy and environment. Particularly, their distortion of the efficient use of production factors has recently been more widely recognized.

Subsidies were commonly used by developing countries as part of a national strategy when they tried to promote an industrialization process in their economies. These countries stated that the reason for their underdevelopment was that they arrived late to the industrialization era and thus lacked a dynamic industrial sector to serve as an engine to the economy. In order to create the conditions for industrialization they protected local markets, allowing national companies to develop under artificial and favorable conditions. Subsidies were used to cheapen imported inputs or as a soft credit, among other techniques. The result was the promotion of capital intensive technologies, for instance, which underutilized the abundant factor, such as labor, in these countries.

From the environmental point of view, the distortion is generated by promoting the excessive use of a particular natural resource, with consequences for its management and preservation. For example, many agrarian reform processes that gave a high value to land as a resource were widely promoted during the fifties. Encouraging the creation of farms to promote cattle production or other agricultural activities was supposed to add more value to the land, but in the end these policies ended up being a means of deforestation.

Another problem related to subsidies is the cost to the public treasury. The subsidies are paid by the government, which in the intermediate term requires more taxes or an increase in the fiscal deficit.

This is why subsidies are currently decreasing: the developing countries do not have the financial resources to afford them or they are not willing to pay the political cost of justifying a high fiscal deficit and the consequences in inflation, macroeconomic instability and the economy in general.

Subsidies are nevertheless still used today despite the negative consequences they carry. In multilateral negotiations the topic is regulated by the Subventions and Compensatory Measures Agreement (SCM) and the Agriculture Agreement (AA). The first refers to the industrial sector, and the second to the agricultural sector. Given the great interests involved in the subject, the WTO applied to subsidies the same treatment given to tariffs: first freeze them and make them transparent, and later promote a policy of decreases. In other words, subsidies were not forbidden completely, but rather arranged in groups in order to determine which were not desirable and so should diminish, as well as which ones were to be allowed and under what conditions.

The different kinds of subsidies are explained in both agreements, including the forbidden ones, known as the red box, which are directly related to export subsidies and are considered the most undesirable today. The agreements also include a commitment of the countries to reduce these subsidies in a specified period of time until total elimination has been reached. The type of subsidy known as the amber box refers to domestic trade distorting policies. The blue box subsidies refer to certain direct payments with production-limiting characteristics. These are allowed only under certain conditions, and there is also a commitment from the countries to reduce them.

The green box refers to the subsidies considered to have no or minimal trade-distorting effects. These are general rather than specific and are not directly associated with exports or production. An example would be funding research and development with the purpose of raising competitiveness.

One Kind of Environmental Subsidy

However good this identification of subsidies may seem, it cannot be taken as an exhaustive classification, considering that it does not even take into account the environmental dimension. For instance, the lack of internalization of environmental costs by the producers could be considered as a type of subsidy, but it is not classified in any of the former categories. From this point of view, it would be necessary to develop a whole new set of categories and considerations in order to focus on the subsidies that are not acknowledged today in the framework of the WTO. The fact that they are not codified today does not mean that they do not exist or that they do not have a relevant environmental impact. Unlike traditional subsidies, these do not consist of a payment or compensation to the producer or exporter. They are subsidies in the sense that they do not incorporate environmental cost that should be included. The one providing the subsidy by paying the environmental cost turns out to be society, not the producer that causes the environmental damage.

It is important for trade negotiators to take into consideration the economic implications of these kinds of subsidies. At present there is recognition of the severe damage that certain practices can produce to the environment, and the principle of "polluter pays" is widely known but not quite applied around the world. It is still necessary to analyze the viability of various solutions, particularly when we must deal with poor countries that cannot count on the financial resources or the required institutions to carry out those solutions. In spite of these obstacles, a gradual strategy of cooperation must be found and implemented. With this kind of subsidies, those who are more likely to be negatively affected are the developing countries.

Biodiversity and Trade

The question for this Forum is, to what extent do international trade rules - particularly subsidies - constitute an obstacle to the preservation and development of biodiversity? Biodiversity has many byproducts and externalities, each one affected in a different

way by international trade regulations. For example, the intimate connection between biodiversity and the pharmaceutical sector is strongly regulated by the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS), the WTO, and the Convention on Biological Diversity (CBD). Biodiversity is also associated with biotechnology, and from this point of view it is governed by the Biosecurity Protocol of Cartagena. One could also focus on biodiversity from the point of view of technology transfer, and again from this aspect it would be affected by TRIPS and related to the topic of investment. There are no doubt many other relationships between biodiversity and trade.

In general terms trade affects biodiversity directly in all its multiple facets like pharmaceutical, agricultural, biotechnological, and ecosystem services. As long as subsidies keep distorting the use of resources, they will continue to affect biodiversity. A good example of how subsidies can distort the use of natural resources and affect biodiversity is the case of corn production in United States and Mexico. The United States subsidizes corn producers, allowing them to export at 20-33% below the cost of production and to increase exports to Mexico (from 0.8% to 2.1% of total U.S. corn production). U.S. corn production relies more heavily on the use of agrochemicals and the introduction of genetically modified organisms. Mexican consumption increases, production remains constant, and the gap is filled by U.S. instead of Mexican production, which is a more traditional way of production and thus much friendlier towards biodiversity.

One of the biggest obstacles developing countries must face in order to gradually take economic advantage of their biodiversity is the high investment required to expand or increase production in the pharmaceutical sector. The high barriers to entry move the development and consolidation of this activity to the Northern hemisphere, where countries can afford the required initial investment.

On the other side, the developing countries who usually own the richest biodiversity cannot actually take adequate advantage of it. The Convention on Biodiversity in 1992 highlighted the relevance of

a better distribution of benefits, and the need for the countries possessing abundant biodiversity to have their rights recognized. In prior years, the big pharmaceutical companies would simply enter the forest, extract the resource, and return to their labs to develop their products without acknowledging any credit to the country where they found the raw material they needed. The same happens regarding traditional and folkloric knowledge.

In general terms, TRIPS and CBD have different perspectives. Although not necessarily antagonistic, they do aim at different targets. The main concern of the TRIPS is to support property rights and to establish conditions to ensure an adequate return on investment, while the CDB is more concerned about the use, preservation and fair distribution of the benefits of biodiversity. From the commercial standpoint, TRIPS strengthens the status quo, the companies and the main innovation system.

If there is no adequate compensation for the owners of primary forests and mangroves (where much of the world's biodiversity is reproduced), these countries are subsidizing the world by preserving the ecosystem without fair compensation. It seems that the most important problem for them is the lack of capacity to take advantage of their own resources.

Recommendations

Making Conservation Profitable

It is necessary to promote and create initiatives to be able to establish a positive relationship between trade and biodiversity, giving the latter a more appropriate value - or fairer price than it has received so far - by turning it into a profitable activity. One of the greatest obstacles to primary forest conservation is the lack of benefit to owners, making it difficult for them to preserve or maintain their property. Their conservation does not pay off and the forests are more profitable as lumber.

In some cases, the government compensates or directly protects forests by creating national parks and protected areas, but this is not enough to preserve resources or to avoid threatening biodiversity. This is why we need to create the conditions that will facilitate profitable preservation.

Markets do not always function to the advantage of biodiversity, so we must be able to know when there is the need to promote policies that will complement market efforts, and in many cases those policies mean that we must create those inexistent markets. This is true for both national and international levels. For example, there have been some pilot plans that acknowledge and remunerate carbon sequestration in a way that establishes transferences from North to South.

Capacity Building

In order to help establish appropriate economic use of biodiversity, the international cooperation agencies should work towards building capacity in the developing countries in the intermediate and long term so they can take advantage of their assets. In certain countries there are solid scientific institutions committed to the preservation and adequate management of biodiversity, but in other countries this institutional development is completely missing. For this reason another recommendation would be to join forces with specialized institutions and international cooperation organizations to help establish institutes related to biodiversity where they do not exist. Little by little they would launch the topic and related research in regions with abundant biodiversity resources. Initially the new institutions could work under the guidance of institutions of longer tradition.

Information and Monitoring

A related topic is the issue of monitoring and developing information systems. To the extent that we can understand the process related to biodiversity extinction and preservation, to that same extent we will come up with responsible, efficient, long lasting solutions. As long as we have a well informed society, there will be groups and organizations that can propose solutions, keeping trans-

parency in all processes. This information is already growing in regions and countries, so the efforts could be worked cooperatively, saving costs and taking advantage of experienced programs. Furthermore, it is also a way of educating ourselves in working together to resolve planetary problems.

Trade Agenda

Another goal that needs attention is related to the Doha Ministerial Mandate. It consists in reviewing the relation between TRIPS and CBD, particularly regarding the patenting of plants and vegetables. Given that innovation via patent is an expensive route and not quite available for developing countries, alternative innovation processes must be encouraged. Nowadays 90% of the patents belong to the United States, European Union and Japan.

The issue of environmental services was also determined to be relevant during the negotiations in the Doha Round. Until now, emphasis has been centered on “end-of-pipe” technologies for the processing of solid and liquid waste. A more comprehensive definition of environmental services is needed, for instance one that includes services derived from biodiversity. The issue of environmental services should also be linked to another issue on the environmental Doha negotiation agenda, i.e. market access for ecological goods and services and how to promote trade and eliminate barriers for environmental friendly goods and services.

Making Trade Work for Biodiversity

As mentioned before, subsidies can work against biodiversity preservation. We must make a commitment and conscious effort to make this relation a positive one that works for both sides. In order to do that, we have to establish trust among trade partners and make sure that environment will not be used as a non-tariff barrier. On the contrary, multilateral trade should encourage and promote market access for environmental goods and services.

Sustainable Agriculture

A tangible goal is to make agriculture sustainable over time. This is important given its role in employment, rural development and

trade, for both developed and developing countries. Since the Uruguay Round, the topic has been on the negotiation table with growing relevance. As of now, the different parties are making hard efforts to liberate the sector from distortions and make trade transparent. This process must involve not only large companies but medium and small ones as well, including not only exporters, but those producing for the local market. Therefore, dealing with this sector could be a way to work at the rural, national and multilateral levels, with the possibility of a larger impact in case of success.

Sharing the Benefits

As mentioned before, the benefits of trade have not accrued to everyone in the same way. This creates instability and poverty, which do not create a good environment for business or environmental care. We must include, as part of the equation of development, the fair sharing of benefits in order to make sure that preservation and equity are compatible with trade, keeping the spirit of Agenda 21 and the Convention of Biological Diversity.

Overall, the best way to preserve biodiversity is to have a proactive attitude and a vision focused on biodiversity that includes the creation of wealth and improvement of the quality of life that poor countries desperately need. It is in these countries where biodiversity is clearly present and abundant. From this standpoint trade can constitute an important tool to pursue these goals.

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