Impact of international trade on the environment

Environment, Ecology

International trade has a great potential to uplift the lives of people in developing countries as well as increasing profits for companies in the developed world. It can also have environmental consequences if the transactions are not consciously provisioned. This potential can flourish when countries come to a common agreement on trade laws that protect against the damages that using these products can bring upon the local community. Pesticide use for agriculture and disease control has been a controversial topic for decades given its toll on people and theenvironment.

Its monitoring has been increasingly successful in industrial countries but almost non-existent in developing countries causing detriment to thehealthof thousands of farm workers around the world as they repeatedly come in contact with and inhale harmful chemicals. According to theFoodand Agriculture Organization of the United Nations (FAO), different pesticides, when consumed, have varying and inter-related effects as they pass through the food chain. Therefore, the larger concentrations of pesticides are found on larger predators, including men.

Among the damages to living organisms, including aquatic species, are cancers, tumors and lesions, reproductive inhibition orfailure, suppression of immune system, disruption of endocrine system, cellular and DNA damage, physical deformities such as hooked beaks on birds, poor fish health marked by low red to white blood cell ratio, and death. In some cases, chronic effects are passed from generation to generation and only become apparent in time 1. The persistent and rapidly spreading properties of toxic chemicals present in pesticides do not concern only the developing world.

Some, including PCBs can originate in India and ride the wind to the Arctic in just 5 days 2. The FAO’s research discovered that “ in the Great Lakes of North America bioaccumulation (or movement of a chemical from the surrounding medium into an organism) and magnification of chlorinated compounds in what is, on global standards, a relatively clean aquatic system, caused the disappearance of top predators such as eagle and mink and deformities in several species of aquatic birds” 3.

In recognition of the disadvantages many harmful pesticides such as DDT have been banned in the United States, yet their manufacture for exportation is still permitted. The Environmental Protection Agency (EPA) regulates the imports and exports of these products in an effort to prevent health and contamination issues as well as to supervise fair competition. The law requires that “ exporters of unregistered (or unapproved) pesticides first obtain a statement signed by the foreign purchaser indicating the purchaser's awareness of that product in the U. S” 4.

Despite this awareness, some countries continue to use them because it is an inexpensive way to keep their crops blemish-free and fight diseases like malaria, for example. In tropical and subtropical regions, “ in addition to pesticides used in the normal course of irrigated agriculture, control of vector-borne diseases may require additional application of insecticides such as DDT which have serious and widespread ecological consequences” 5. Such large demand in countries with endangered eco-systems like Brazil has lured many companies in industrial countries to keep producing and exporting.

More than 312 million kg were exported from the US in 1996, a 40% increase since 1992. Some even move their production to third world countries where environmental regulations are far less restrictive. In many past cases pesticide packages were exported without the proper disclosure of all chemicals, making it difficult to distinguish their consequences. This was especially unsafe for farmers in developing countries where protecting equipment is scarce 6. Improvement is underway, but sometimes it also means taking a few steps backwards. Since the Rotterdam Convention on the Prior Informed Consent (PIC), adopted in February 2004, the U.

S. is also making an effort in sharing the responsible use of 39 hazardous chemicals listed by the Convention 7. Some developing countries followed on the initiative to ban or restrict hazardous pesticides for health and environmental reasons, yet this positive step towards resolving the situation has led to water contamination concerns. These countries lack the monetary resources to properly store or dispose of about 100, 000 tons they no longer use, sometimes because they have deteriorated in storage. Drums are kept exposed to sun and rain running the risk of bursting open or leaking.

Some are kept near markets contaminating the soil, groundwater, drinking water, and irrigation. In efforts to decrease their stocks some countries have opted to donate them in foreign aid programs. Far from resolving the problem, this only moves it elsewhere. Solutions seem farfetched for the developing world since FAO estimates it would cost $80-100 million in Africa alone to dispose of them appropriately 8. EPA’s law to allow exporting banned pesticides is greatly flawed because these harmful chemicals return on imported food, wind currents and rain orsnow.

Despite efforts to regulate the tolerable chemical residue on imported foods, as long as toxic chemicals are still manufactured the global environment and public health will continue to deteriorate. Unfortunately, environmental legislation usually takes years to take effect and is mostly driven by business interests. A sensible solution would be to radically eliminate the use of these chemicals globally and replace them with natural ingredients and greentechnology.