

INTERNATIONAL TRADE AND INTERNATIONAL AGREEMENT

INTRODUCTION

Owing to enhancement in education and general awareness among the people over time, social sensitivity is revealed regarding drastic consequence of environmental problems, risk hazards and future threat and insecurity to human and non human beings and to our planet itself. It has been realized that economic advance and industrialization, fast growing population and urbanization are largely responsible for pollution problems and environmental hazards. Such realization seemed to suggest an unacceptable trade-off between competing social objectives - economic prosperity and environmental quality. This has led to policy initiatives to improve environmental quality and reduce the risk of exposure to hazards like urban smog polluted waterways, and abandoned hazardous waste sites.

With regard to environment policies generally it has been seen that the public officials are more concerned with high costs, the unattained policy goals, and the conflict between economic growth and environmental protection. And in view of this incentive approach has been followed in place of command and control approach and launching integrated programs to combat over all environmental issues. This has resulted in to global transition in policy development toward broader, more long term solutions to environmental damage.

Now an optimism prevails about this new direction of environmental policy. The wisdom of experience coupled with scientific and technological advances can bring about significant change. Perhaps more importantly, environmental objectives have broadened to consider the future along with the present and to accommodate global interests along with national and local needs. Such is the fundament promise of sustainable development - a goal that integrates economic prosperity with environmental preservation, as a legacy to future generations.

This module is an attempt to present an overview of sustainable development and the implications of population growth on the environment. It also examines the intent of international agreements to control trans- boundary pollution, and the interaction of international trade and environmental issues.

(1) COMMAND & CONTROL APPROACH

We know that the command and control approach, that is, direct regulation of economic activity has certain limitations namely (1) it does not adequately address the long-term implications of environmental damage, (2) it does not accommodate the broader objective of sustainable development-achieving environmental quality and economic prosperity, which is difficult for the third world. Hence the market-based approach should be followed with consistency between motivations and economic incentives. The fact is that economic growth and environmental quality can be reforming rather than competing objectives. Perceptions must be changed to recognize that resource conservation and population abatement can enhance private as well as social interests. Communication must be improved both within and among nations- to share information about technologies and process that can protect the environment without diminishing profitability successful cooperation must be welcomed to prevent the adversaries between the public and private sectors of the society and there should be less reliance on costly monitoring and enforced procedures.

Since the module is focusing on sustainable development in the context of international environmental agreement and international trade. It is worth to note what Kofi Annan has said in this regard, "far from being a burden, sustainable development is an exceptional opportunity economically, to build markets and create jobs; Socially to bring people in from the margins and politically, to give every man and woman a voice and a choice, in deciding their own future."

(2) SUSTAINABLE DEVELOPMENT AS A GLOBAL OBJECTIVE

(A) *Redefining Environmental Objectives.*

Since last several decades there has been constant endeavourance to achieve environmental quality in the environmental policy development debates. Achieving environmental quality means a reduction in anthropogenic pollution to a level that is "acceptable" to society. In order to achieve this objective the policy makers are facing a challenge of devising cost-effective instruments. Through revisions, political debate, and a growing social consciousness there has been progress and some needed adjustments in policy development.

(1) *Moving Toward Sustainable Development*

A consensus is forming that both public and private decision making should be driven by a broader goal that is global in scope and dynamic in perspective. One such goal is sustainable development - managing the earth's resources such that their long-term quality and abundance are ensured for future generations. This objective, posed a pressing issue at the 1992 Rio summit is also referred to as intergenerational equity. It is wise to pursue environmental objective keeping in mind the long run and the future economic consequence.

(2) Sustainable Development in Practice

One has to be fair with regard to sustainable development. All is not well with the concept-perhaps much cry and little truth. Nobel Laureate Robert Solow has shown his discontentment with the concept of sustainable development. According to him the concept itself is vague and hence not a good notion to guide policy. Furthermore the idea of each generation leaving the earth as they found it for future generations is not feasible and in some instances, not even desirable. Imagine that society is not engaged in construction activity and is using no deflectable resources, such as copper or oil, it means no rational recognition of scarce resources, such inactivity does not make sense.

As an alternative, Solow (1991) argues that sustainability ought to be considered as :...an obligation to conduct ourselves so that we leave to the future the option or the capacity to be as well off as we are.

There is still the difficulty of attempting to forecast both the preferences and the technological capability of future generations, which is no easy task by any measure. Solow also asserts, though somewhat controversially, that sustainability need not mean preservation of a particular species or tract of land. Rather, sustainability ought to be allowed in applying the notion of intergenerational equity, or distributional equity over time, to policy prescriptions. lastly, he argues that if policy is to be guided by this idea of intergenerational equity, to be consistent, it must also consider intergenerational equity, with clear effort expended toward reducing poverty today.

Note that the practicality of Solow's idea does not dispel the importance of recognizing the obligation to future generation. Nor does it minimize the challenge of doing so in the face of population growth. This reality is, of course, more of an issue for developing nations, which means we need to consider the ramifications of growth a bit more carefully.

(B) Implications of Growth on the Environment

Sustainable development is based on the promise that economic growth and environmental quality must be reconciled. Statistical estimates on worldwide population and income growth help to explain why this is important.

(1) What the Data Imply?

According to one source, per capita income levels have to grow by at least 2 percent per year to reduce world poverty and close the gap between the rich and the poor. This communicates the importance of achieving economic growth. Furthermore, world population is growing at about 1.7 percent each year, a rate that is expected to decline only very slowly. Recognizing that economic growth has an effect on the environment, these data imply that the associated environmental impact per unit of income must decline at a rate between 3.5 and 4 percent per year to avoid further pollution and natural resource depletion.

To generalize this assertion, we can characterize the relationship among population growth, income growth and the environment at a point in time as follows.

Environmental Impact = Income per capita * Environmental impact per unit of income * population

This relationship is just an identity, which is more apparent when the equation is rewritten using ratios, as follows :

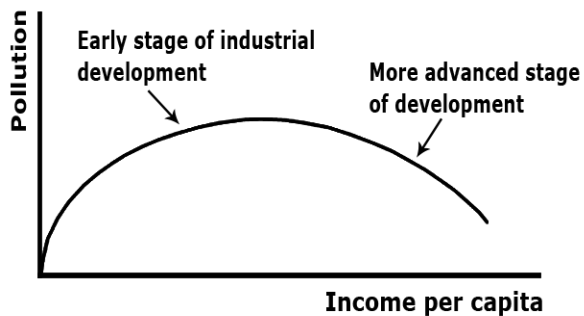
Environmental impact = Income/population * Environmental Impact/income * population

Developing countries are struggling to advance economically to accommodate a rapidly rising population and at the same time confronted with the environmental contamination. If an economy's productive capacity cannot accommodate the population growth, shortages arise and resources are misused in an attempt to compensate for the imbalance.

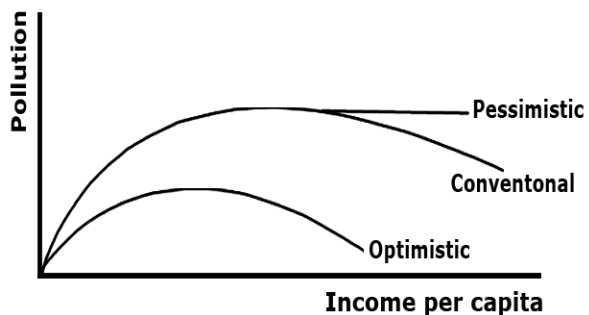
(2) Environmental Kuznets curve

The environmental Kuznets curve models a theorized relationship between economic development and environmental degradation that can be depicted as an inverted U shape. This model suggests that early stages of industrialization are associated with rising levels of pollution, and that more advanced development is

linked to an increasing concern for environmental quality and an associated strengthening of environmental regulation.



Das Gupta (2002) presents an overview of the literature which suggests three different view about the shape of the EKC. Which can be depicted by following figure.



The conventional curve shows the usual relationship between income growth and pollution. The pessimistic curve shows that how after certain stage of growth the EKC become flat, shows no trade-off after certain stage of growth a nation maintains the level of pollution. The optimistic EKC falls below the conventional

one, shows low pollution with income growth. According to Das Gupta this depiction is the most likely because of increasing effectiveness of environmental regulation, improvements in abatement technology, and greater public awareness of pollution and its effect.

(3) GLOBAL FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

Sustainable development is intended to be a global objective, the benefits of which should accrue to all segments of society and to all nations. Because of this intent and its pervasive implication it calls for a collaborative effort from all stakeholders. Fundamental to such an effort is communication on a global scale, which can be facilitated at conferences that set an agenda and establish a framework for achieving growth and improving the environment.

(A) United Nations Conference on Environment and Development (UNCED)

More commonly called the Rio summit, the U.N. conference on Environment and Development (UNCED) was a 12 day worldwide forum held in Rio De Janeiro Brazil, in Jan 1992. Thousands of delegates from over 170 nations attended the event to discuss issues and concerns dealing with sustainable development. Among the major documents produced from the Rio summit are Agenda 21 and the Rio declaration. A brief description of each follows :

(1) Agenda 21

This 40 chapter document is a voluntary action plan, outlining the course for worldwide progress toward sustainable development.

Major issues covered within the 900 pages of Agenda 21 include :

- * Financing for developing countries
- * Conservation and sustainable development for forests
- * Preservation and minimization of hazardous and solid wastes.
- * Risk assessment and management of toxic chemicals.

Perhaps the most important achievement of the Rio summit, Agenda 21 is the result of 2 1/2 years of negotiations to reach an international consensus.

(2) Rio Declaration

The Rio Declaration outlines 27 principles to as guidelines for achieving global environmental quality and economic development. Among these principles is a requirement that environmental protection be an integral part of development and a call for a reduction in unsustainable production and consumption. Reportedly the declaration is a compromise from what was originally anticipated. The preparatory meetings were intense, often immersed in seeking a balance among the views of developing and industrialized countries. So fragile was this agreement that it was adopted in Rio without further negotiation, for fear that further discussion would jeopardize what was left of the intended Earth chart.

(B) World Summit on Sustainable Development (WSSD) Johannesburg -2002

In August September 2002, 10 years after the Rio Summit, more than 20,000 participants converged in Johannesburg, South Africa, at the World Summit on Sustainable Development (WSSD). Heads of state, national delegates, and representations from industry trade unions, and the scientific community attended this major event. The objective was to renew worldwide interest in sustainable development and to assess progress achieved since the 1992 Rio Summit.

Among the Summit's reported accomplishments were:-

- * Adoption of a declaration and implementation plan in confirmation of the commitment to fully implement Agenda 21
- * Strengthening of the notion of sustainable development and the relationships among resource use, poverty and the environment.
- * Establishment of over 300 partnership initiatives to complement government actions aimed at achieving sustainable development.

By the conclusion of the worldwide meeting, participating nations made commitments to a variety of efforts in what are called the five WEHAB initiatives water and sanitation, energy, health, agriculture, and biodiversity. For example, the European Union announced a new program aimed mainly at achieving Water and sanitation objectives in Africa and Central Asia, and the United States committed \$ 90 million to support programmers' in sustainable agriculture.

While seemingly encouraging, these accomplishments were not without critics. Reportedly, heads of state in attendance at the worldwide meeting believe that the implementation plan is too weak. Moreover, some of the action plans

apparently will difficult to monitor, erring on the side of generality and lacking specific timetables. Accurate, the summit's objectives may not be met, and the associated initiatives may be disappointing.

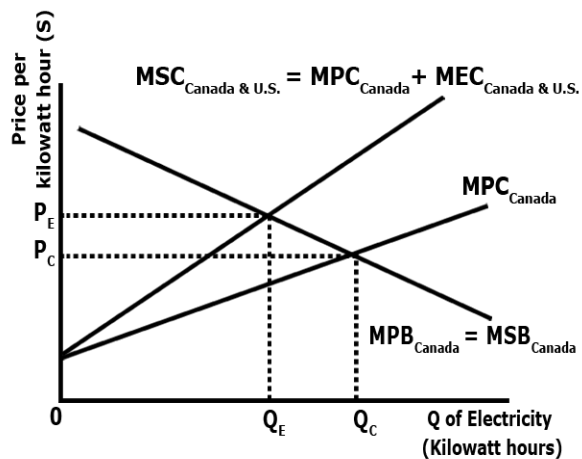
(c) Rio + 20 - United Nations Conference on Sustainable development

To recognize the twentieth anniversary of the Rio Summit, officials organized the Rio + 20 United Nations Conference on Sustainable Development (UNCSD) which was held in Brazil in 2012. The overarching goal of this conference was to remorse political commitment to sustainable development, to examine progress to date, and to face new challenges . To help achieve its objectives two themes were defined to focus discussion at Rio + 20

- * To examine greening markets and a green economy within a sustainable development context.
- * To address opportunities to strengthen the institutional framework for sustainable development .

(4) INTERNATIONAL AGREEMENTS TO CONTROL TRANS BOUNDARY POLLUTION

Some pollution problems are trans boundary such as acid depletion, ozone depletion, global warning, and some surface water pollution. This means that contamination in one nation can travel beyond its borders - a type of international externality. For example, air pollution associated with electricity generation in Canada near the U.S. border imposes external costs that extend Canada's borders to Americans who live near the border are not part of the market transaction. This trans boundary air pollution is modeled in the following figure.



Notice in the figure that the marginal private benefits (MPB_{Canada}), assumed equal to the marginal social benefits (MSB_{Canada}) accrue only to Canadian consumers. The production externality, which is captured by the marginal external cost ($MEC_{\text{Canada and United States}}$), accrues to both Canadian and American Society. Just as in more conventional externality models, the outcome is over allocation of Canadian resources at the competitive output level, Q_C , which is greater than the efficient output level, Q_E . The difference here is that solutions are more complex. Specially, formal treaties must be negotiated and agreed to by all affected countries to achieve a resolve.

(A) *Montreal protocol Amendments*

Originally signed by 24 countries in September 1987, the Montreal protocol on substances that deplete the ozone layer is an important example of international cooperation aimed at environmental protection. Strengthened by a series of amendments, this treaty is aimed at phasing out chlorofluo carbons (CFCs) and other ozone depleting substance.

(B) *U.N. Framework convention on climate change (UNFCCC)*

Now adopted by 195 nations, including the United States, the U.N. framework convention on climate change (UNFCCC), and one that prompted much contention, was a commitment by each signatory to implement a national strategy to limit the release of greenhouse gasses (GHGs). Each strategy was to support the common objective of reducing emission to 1990 levels by 2000. In

march 1994, the treaty became legally binding following its ratification by the requisite number of 50 countries in 1993.

Kyoto protocol to the UNFCCC

At a conference of the Parties (COP) held in Japan in December 1997, participants reached an agreement, or protocol, about GHG emissions beyond 2000. Specifically GHG emission targets were set for developed nations. These were to become effective when 55 nations ratified the protocol, as long as these nations included developed countries responsible for at least 55 percent of CO₂ emissions for 1990. Achieving these limits was to accomplished in part through emissions trading.

It is worth noting that in spite of U.S.A. intervention and certain objection and condition the Kyoto, protocol continued to proceed ahead with its objectives. At the 2011 cop in Durban, South Africa, nearly 200 nations agreed to extend the Kyoto protocol and to meet at a later date to develop a successor agreement by 2015. This new agreement is to involve all nation that are major GHG emitters- both developed and developing countries.

The London convention 1972 (LC72) and the 1996 protocol aimed restricting the ocean dumper of certain waste including radioactive wastes. In March 1991 the U.S. Canada Air Quality Agreement was finalized to combat the problem of acid rain and visibility impairment.

(5) INTERNATIONAL TRADE AND ENVIRONMENTAL PROTECTION

International trade negotiations have always been the subject of political and economic debate. Although trade is advantageous to nations in any respect, but the trade negotiations are hardly free from political objectives and national defense issues. It is unfortunate that the gains from trade can easily become clouded by protectionist attitude which are fueled by differences in product safety regulations, labour laws and nationalism. In recent years, international trade discussions have triggered controversy of another sort - the potential conflict between the associated gains from trade and a decline in environmental quality.

(A) Overview of the controversy : Free trade versus protectionism

Benjamin Franklin (1774), rightly said, 'no country was ever ruined by trade', to add to this Frank Taussing (1905) writes, '...the doctrine of free trade however, is

widely rejected in the world of politics, holds its own in the sphere of the intellect'. Still more to this Richard Cohen British politician (1857) very aptly said, "free trade is God's diplomacy. There is no other certain way uniting people in the bonds of peace."

Thus the proponents of free trade are right and believing that free trade is good and beneficial to all. They show that countries who opt for free trade accrue the following economic benefits.

- * Greater consumer choice
- * Higher world output
- * Efficiency gains from specialization
- * International political stability from forming trading partnerships
- * More competition and lower prices in a global market place.
- * Increase in output, employment income and the welfare

On the other side the opponents of trade argue for protection, believe that trade can threaten national security, create unfair competition, lose jobs to nations with cheap labour, and limit the growth of infant industries. The protectionist justify trade barriers such as quota and tariffs.

Recently the protectionists have shown concern about environmental quality. These concerns arise from the disparity of environmental standards among trading nations - a disparity that is particularly striking, between developing nation and their more advanced trading partners. In order to understand this in a better way , we need to explore exactly how environmental policies can tangibly influence trading arrangements among nations.

(B) International Trade and Environmental objectives

Advanced countries are restricting themselves to trade with less developed and developing countries, because they believe that they are adversely affected specially in terms of employment by lenient labour laws and low wages prevailing in developing countries. They are also apprehensive about differences in environmental regulations between the trading partners. The relevant issue is changes in trade patterns caused by cost differences among nations due to varying environmental regulations which is called as the pollution haven effect.

Another source of controversy is the quality and desirability of imports produced in nations with tax regulations on such issues as toxic chemical use, fuel efficiency, and coal consumption. Beyond cost considerations, these imports would be associated with environmental externalities that can extend beyond national borders. For example, importing goods produced with high sulfur coal has negative implications for global air quality, which identifies the market failure as an international externality.

The advocates of trade development argue that the gains of trade would give means to clean up the environmental pollution. An improved economy by trade will also provide the financial support to design and implement more comprehensive environmental policy, as suggested by the environmental Kuznets curve. These arguments are consistent with the promise of sustainable development - the economic prosperity, in this context enhanced through trade, can bring about improvements in environmental quality.

(c) International Trade Agreements and the Environment.

(1) North American Free Trade Agreement (NAFTA)

After difficult series of negotiations, centered on environmental issues, the NAFTA was reached by United States, Mexico and Canada in 1992 and approved by congress in 1993. This agreement on free trade in the region would cover about 454 million people and produced more than \$ 17.2 trillion goods and services by 2010.

NAFTA provisions aimed at economic advance and improving environmental quality are the following:

- * Explicit language asserting the signatories commitment to sustainable development.
- * Agreement to implement NAFTA in accordance with the aim of environmental protection and not to lower health, safety, or environmental standard to attract investment.
- * consensus to aim for congruence of each country's respective environmental regulations, while preserving each nations right to select a level of environmental quality that it deems appropriate.

- * Agreement that NAFTA dispute settlement panels will solicit environmental experts for advance on factual issues as needed.

To address the environmental impact of the increased trade, the North American Commission for the three trading nations in 1993. This international organization complements NAFTA and is aimed at protecting and improving the natural environment. The CEF has engaged in a number of environmental efforts aimed at such issues as biodiversity, pollutant reporting, chemical management, and trade environmental issues.

(2) General Agreement on Tariffs and Trade (GATT)

GATT came into being in 1947 as a major international treaty on foreign trade, aimed at reducing tariffs and other trade barriers. After Uruguay Round (1986) it considered environmental issues.

GATT as an international trade organizing and paving way for free trade. It's institutional belief is that the organization is concerned with trade and trade related issues, the environmental issues are not in its purview and should be addressed by international environmental institution trade issues and environmental issues are to be dealt separately. However after Uruguay Round countries are required to the least restrictive measures to achieve environmental goals, and in most cases, international standards should be employed rather than national one.

The important outcome of Uruguay Round was the birth of World Trade Organization (WTO), which is the successor to GATT. However, the multilateral rule based trading system that was developed and established under GATT continues under the WTO.

(3) World Trade Organization (WTO)

WTO is an organization that advocates for free trade which performs the following functions.

- * Administering trade agreements
- * Facilitating trade negotiations and resolving trade disputes.
- * Overseeing national trade policies
- * Helping developing nations in trade policy matters

That the WTO has a role to play in environment matters was initially established at the Rio Summit. The Rio Declaration specifically asserts that a multilateral trading system can make an important contribution to protect the environment and achieve sustainable development. Indeed, called for by the 1994 Ministerial Decision on Trade and Environment at the end of the Uruguay Round, the WTO established a committee on trade and Environment (CTE). The committee's directive is :

- * To identify the relationship between trade measures and environmental measures to foster sustainable development.
- * To recommend any necessary changes to the multilateral trading system.

The WTO's commitment to the environment was confirmed at the Doha Ministerial Conference held in 2001. At this meeting an agreement was reached to begin a new round of negotiation on issues, dealing with trade and the environment. A special session of the CTE was created to participate in this process and to focus on three issues: the influence of environmental measures on market access, intellectual property rights and environmental labeling requirements.

To accomplish its goals, the organization fosters coordination and cooperation among nations to address environmental issues and supports the identification of market access opportunities that will aid developing countries in achieving sustainable development.

CONCLUSIONS

In this module we have analyzed concepts and international institutions related to trade and environment and sustainable development. WE have covered sustainable development as a Global objective. Global framework for Sustainable Development International Agreements to Control Trans Boundary Pollution and International Trade and Environmental Protection. The important point is that the world has begun to recognize the importance of achieving a balance between economic growth and the preservation of natural resources. Although the population of the World is increasing specially with the larger share of developing countries. (In order to sustaintiate this population increase attempts have been made to increase products for this growth will place inordinate stress on the ecology and earth's stock of resources.

Critical to meeting this challenge is a true understanding of the interdependence between economic activity and nature. Recognizing this connection is a precondition for effective policy development and informed decision making, both of which are essential elements of global environmental management.

If sustainable development is to be achieved there must be a co-operative and educated effort from industry, private citizens and public officials at all levels of government and around the world. As this process unfolds, certain strategies are evolving that may be effective in realizing long term environmental objectives.