

## **The Interlinkage of International Trade, Development and Environment**

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### **ABSTRACT**

Trade provides path for sustainable development. The trade policy should be framed parallel to the environmental policy. With the help of green economy the problems of economy and environment can be solved. Increasing trade is rising the problem of removal of the wild animal from there habitat. The boom in the economy increases the extraction of natural resources for flourishing the construction sector, chemical industry but on the cost of degradation of natural resources. In the beginning the countries enjoy the export benefit but it increases the extraction of resources. Actually increasing pollution is pressurising the demand and for fulfilling the demand the countries are increasing the cultivation which affect the soil fertility. There are impacts like deforestation which causes soil erosion, floods and loss of biodiversity. The one policy which combine the trade, development and environment together is not easy to frame.

**Keywords:** Green Economy, Habitat, Boom, Cultivation and Soil Erosion

### **INTRODUCTION**

Trade, development and environment are interlinked with each other. They can get mutual benefit. International trade can provide path for the sustainable development, if trade policies are parallel with the environmental policy (Mannur, 2012). The transition to sustainable production and consumption will create new path for environment. These are important in covering the Paris agreement and 2030 agenda. Trade is the process of getting the sustainable development.

The aim is to follow the trade which is green. This is possible by adapting at globally, nationally and private sector together for green trade. For getting this, trade hub works on production and consumption which is green. It is possible by focusing on improving the sustainable standard of few sectors and providing market access for those products which are sustainable (Bhagwati, 1993).

Green economy improves the well being of human and create social equity in reducing the environmental

degradation. The green economy is solving the concern of today's economic concept which increase the inequality, waste, scarcity of resources and threat to human wealth and environmental degradation (Daly, 1996; Kindlerberger *et al.*, 1978).

Now the green economy is the strategic priority of various countries. The UN launched the green economy initiative in 2008. Its objective was to research and motivate the policy makers to support environmental investment. UN in 2015 had published a document which stresses on the concept such as collaboration and opportunities. It works for spreading the program for transition towards green economy. It give advice, assistance and capacity building. It help the countries to transforming them towards green economy and towards more inclusive models of economy. They do research for helping the policy makers to shift their policy and investment for protecting the environment. It support countries for getting the sustainable development by 2030 through trade as a driving force. It provides guidance,

practice and tools for supporting the policy maker to move towards green economy. It works with the agencies of UN for supporting the countries in adopting and implementing the green economic policies. It creates partnership with financial institution for changing and supporting the sustainable world. Its objective is to mobilise the capital for supporting the sustainable and low carbon economy (Sodersten, 1970); Hussan, 2004).

The hub of UNEP is working with member of WTO, to transform the multilateral trade agenda as green. By using the policies of subsidies, liberal trade for environmental goods and services, with the contribution of developing countries. It is also working on the financial assistance to trade and export. It gives suggestions to the member to be in the Nexus of trade and environment (Karpagam, 2006; Bhattacharya, 2006; Kolstad, 2004).

### For Making the global value chain green:

Industry of textile is practicing growth and it is growing from 1.6 trillion U.S. dollar to 3.3 trillion U.S. dollar by 2030 from 2023. They have also faced the crisis of COVID in 2020. The textile export and apparel export is serving a economic support to countries like Pakistan, Bangladesh, Turkey and Egypt. It provides employment opportunities to women's in these countries (Karlsson, 2002). By targeting the important areas where the policy is required, guideline for trading in textile, joint venture with Pakistan, Kenya, Ghana and Turkey government, integration of innovative designing of product and new business structure for increasing the sustainability. Establishment for monitoring and evaluation of mechanism (Dua *et al.*, 1997; Esty, 2001 & 2003).

Trading in natural and agricultural commodity are the foundation of economic growth. By removing the wild animal and plants there can be decline in the population. By removing land for crops can clear the habitats to wildlife and this would reduce air, water and soil resources.

The UKRI and GCRF works for trade, development and as a environment hubs, it's objective is to make sustainable trade for plants and people. With 15 countries and 50 organization, they target for 5 years working. The project of UNEP and WCMC is working on the inquiry about wildlife trade, wild meat and goods from Brazil, central part of Africa, China, Tanzania and Indonesia. The UNEP's environment and trade hub is helping in the public policy for making trade in agricultural goods green.

The demand for extracted material is rising due to boom in the construction sector, chemical industry etc.

Minerals are important for these activities and they are in huge demand. Trade is driver of economic growth. But it is also driving the environmental degradation and resource extraction due to increase in the demand of traded goods. The trade policy and agreement can be used in controlling the rising demand of mining resources. And it will give more environmental sustainable ideas. UNEP's environment and trade is focusing on the collaboration by analysing and engaging the stakeholder. For addressing the global crisis and for showing the opportunities to developing countries. UNEP is showing that trade is not only driving the prosperity of economy rather it is also improving the environment and helps in getting the sustainable development goals (Charnovitz, 2002).

As trade is reason for material extraction. The trade of material is more than the trade in products which is produced from traded goods. Trade of material increase the waste and emission in country which export them. The analysis by international resource panel shows that this process of resource intensive is shifted to low income countries who export to high income countries who import. It is also shifting the burden on environment from high income countries to low income countries. The increase in extraction of resources is reducing the natural assets of countries (Joshi, 2005; Gupta, 2007).

It is increasing waste, loss of biodiversity, land degradation and water pollution. Suitable policies required to address these negative impact of trade on environment. It would show that trade is driving the sustainable environment and economic activity. Both multilateral trade rules and regulations of trade agreement can be used for the economy and controlling the environmental effect which is related with extraction.

The activities like, workshop by expert can help in improving the sustainability in mining sector and sustainable development and trading in minerals.

The forum on trade environment and sustainable development goals is focusing on the trading system which is addressing environmental crisis and addressing the goal of sustainable development. They focus on four key areas like climate change, loss of nature, plastic pollution and circular economy.

Areas where they are focusing are subsidies, technology, sustainability, trade and finance, standards and environmental goods and services.

They initiates in forming the expert group for guidance:

- Group of experts who guide on the dimension of trade
- Group of experts who guide on tackling the harmful agricultural subsidy
- Group of experts who guide on designing the principles for framing the measures and policies related to trade and climate.
- They do negotiation by the cooperation for reducing plastic pollution
- They also support and cooperate the WTO on trade environment and sustainable development matters.

#### **Multilateral trade agenda in green:**

Changing the subsidies is the main objective of trade and environment communities. The UN environment program is creating efforts towards subsidy reform. UNEP is supporting government and stakeholder in developing global inclusion for sustainable reform.

Subsidies on energy is focused by UNEP with sustainable development objective.

UNEP has collaborated with International Energy Agency (IEA) for workshops on reforming the subsidies for sustainable development.

Subsidies on fisheries should also need attention. As the increasing population and demand has increased the unsustainable practice. They support in framing a road map for reducing the harmful subsidies of fisheries. The agreement on fisheries is pending due to COVID-19.

It support countries for trade and investment in more sustainable way. By knowing the adverse effect on environment, health and society there should be solution for it.

Trade community is finding ways to addressing the sustainable issues. Paris agreement created a pressure on these trade community to find innovative techniques for reducing the greenhouse gas emission and global warming. Trade community eliminated the custom duties on environmental goods and this make business and consumer goods cheaper. After long negotiation there is improvement in trade liberalisation of environmental goods has increased.

The UNEP in 2013 reported that, from 2001 to 2007 the total value of export of environmental goods has increased by 100%. But there is question that which type

of countries are involving in importing environmental goods and who is exporting these environmental goods.

#### **Trade in environmentally sound technology:**

By targeting the 2030 Agenda and Paris Agreement for sustainable development and climate change.

The blueprint is formed for trade in technology which is environmental friendly. This clean and environmental friendly technologies will protect the environment, they are less polluting, it rise the resources in more sustainable manner, it recycle the waste and manage the waste in a environmental friendly manner. Trade can arrange these clean technologies through open trade and increase the innovation. This will reduce for cost of these clean technologies and it will become affordable for the least developed countries. Then these countries will able to trade with global market and it will help in achieving the SDGs.

The clean technologies can improve sustainable development for achieving the goal of sustainable development. It protects the environment, it helps in reducing pollution, use the resources in more sustainable manner. The technology that are renewable are also clean technologies like solar panel as a new source of energy and wind turbines. It is good for the environment.

The use of clean technologies can be increased by trade through its policies like opening market, increasing innovation. This reduce the cost of technology which are for reducing the environmental problems. And make it more easy to use for least developed countries. This policy of trade can give good path to the development and it improve environment also.

As per UN Environment Report, of the South-South trade in renewable energy. This study shows the opportunity of developing countries in choosing the renewable product through trade. It found that trade of such energy is increasing.

Workshop on technology nexus by experts, UN Environment invite all experts from different ministries, business, organisation for discussing the linkage between technology, trade and sustainable development goals.

Strategy of solar project proposed by Ghana, a study on Ghana solar export, shows that environment hub increase the development of such solar panels and but it requires finance for installation.

Sustainable Trade and export finance is important key areas which should be addressed. Trade is important part of economic activity and the trade is 25% of global

growth of domestic product. The goods and services are produced and transported have some effect on environment and it creates crisis. So the trade negotiation plays an important role in promoting the best framework for product and sale for emphasising the sustainable trade. The trade is dependent on finance and the most of the operation of trade is dependent on the instrument of finance which arranges the payment and offer financial assistance. Banks and other financial institutes are assisting the sustainable trade, through some agencies which help in financing from 20 years.

### **Trade and green economy:**

The e-learning courses are required for sustainable trade because the learning can bridge the gap between trade and environment.

Mongolia's trade and green economy, is the best project. The UNEP's Environment and Trade Hub merged with the government of Mongolia for this project. The objective was to see the benefit of opportunities of green trade.

The project for capacity improving of textile industry in Jiangsu, China is for knowing the good trade and opportunities of growth in textile sector. The objective is to see the effort from transforming to more green economy and upgraded industries.

The project on green and trade opportunities is the study to create a framework that shows the relation between trade and green economy. The infrastructure and transport that is green for sustainable trade, development and tourism should be improved. As the climate change threatened the coastal areas of small island developing states. The trade is based on transport and the transport facility help them for their betterment and make trade useful.

The various evidences are suggesting that the rapid increase in the trade has also increased the rate of deforestation and desertification. Trade with developing countries has increased the deforestation manifold in Latin America and South East Asia. The trade has increased the rate of desertification and the loss of biodiversity. This is the opposite of conventional approach. The free trade has not been consistent with the trade that is environmentally sustainable. There is something wrong with the trade between developed and developing world because they both have different objectives and criteria. In the free trade structure all the international exchanges are evaluated on the basis of market prices. There are

various factors that can lead to distortion in these market prices. In developing countries the prices of natural resources are affected by many factors like:

- The developing economies are weak economies and they are dependent on the debt and for financing that debt the government of these countries are offering their natural resources to the developed countries at a discounted rate.
- The failure of market is the another factor because the market price for such natural resources in these countries are not considering the external factors.

If there is no framework is used for balancing this externality then free trade will exploit the natural resources. And there are nations and peoples who are highly dependent on these natural resources for their livelihood.

Trade is not working for poor due to many reasons. The exploitation of resources are directly affecting the poor nations and citizens because they are dependent on these natural resources for their livelihood.

On the other side, the economic policies of international trade is also not supporting the poor section of the nation.

### **Sustainable production and consumption:**

The Trade and Environment Committee is a forum for dialogue between government of countries on the impact of policies of trade on environment and vice versa. It was created in 1995.

In the Doha Development Agenda, the committee is focusing at the effect of measures on market access, the agreement on intellectual property, biodiversity and labelling.

For any developing country the international trade is a driving force for accelerating the economic growth. So many empirical evidences are suggesting that the important factor for increasing the deforestation and extinction of some plants and animal species globally are international trade. The deforestation has increased when trade in developed countries was increased in Latin America and South East Asia. And due to increase in this international trade the desertification was also increased in Africa and some of the extinct species of plant and animal. The increase in population in developing countries has increased the pressure on resources which are renewable and this pressure is increasing because of increase in the world market.

As the countries have inequality in the natural resources and after the drawback of traditional resource management system. The dependency of such countries on natural resources has increased. There is interrelationship between population, development and the environment. These issues are the policy matter. The increasing population is deteriorating and depleting the environment of the developing countries. The rise in the demand has also increased the cultivation. The demand has increased the production and it is affecting the soil fertility. There is increase in deforestation due to rise in population and the consequences of deforestation is, soil erosion, siltation of soil, floods, change in climate and loss of biodiversity. The increase in population is creating pressure on agriculture and other natural resources. The environment is degraded in developing countries was the reason of increasing population and in few countries this problem is worse.

Trade which is free has not considered the sustainable trade together with environment. Daly had written that, Countries should produce in their domestic market and favour their products. Trade is helpful but it is creating risk for environment and society. The economists are suggesting free trade and the environmentalists are saying that the increasing trade is degrading the environment. The free trade is supporting the countries by increasing the output and profit but there is a negative impact on the environment and society. The economist are saying that the damage by trade can be resolved by using the income which it generates.

Few economists and environmentalists are in believe that the increasing environmental cost is more than the benefit from the increasing trade. As David Ricardo argues that various countries are using different techniques, and different resources at different cost. And there is different cost of producing the same product in different countries. So countries are producing those goods in which they have comparative advantage and they trade those goods with other countries. He assumed that free trade is focusing on the developmental strategy but the capital are not mobile (Antweiler *et al.*, 2001).

When any country specialised in the production then they do trade. The increase in competition will reduce the cost of production and this will reduce the standard without increasing the efficiency. When we see the conservation of natural resources then there is difference between the trading pattern of developed and developing countries. By managing the natural resources and

environment, the international trade is distorted. In the free trade pattern the value of all exchanges is based on the market prices. And there are various factors which distort the market prices.

And this distortion is wide then there is linkage between international trade, environment and commodities. The distortion of price of the natural resources of developing countries.

In the developing countries the economies are poor and unstable. They are dependent on the finance from domestic and international market and for financing such debt. The government and governing authorities of these developing countries offer their natural resources to developed countries at a lower prices and at discount.

Several studies shows that how the pressure on the countries create a burden of debt on them. In 1970s and 1980s the Brazil had followed a economic policy which emphasis on the ranching of cattle's and that had increases the rate of deforestation. Study shows that cattle ranching in Brazil has created massive loss of forest area of Brazil. It has increased the deforestation rate just for paying the debt.

The government of Brazil in 1960s, has introduced few policies for developing the Amazon area. They started using the forest as pasture just for increasing the financial incentives. In 1970s about 8000 to 10,000 square kilometre of Amazon forest area was used as pasture in between 1970 to 1985. The use of land for pasture has increased in Rondonia. About 2.5% to 25.6% of land was used for pasture in Amazon. It is now studied that, the use of Amazon as a ranch land is affected the Brazilian economy and environment.

As a soil of the Amazon become infertile due to lack of forest cover area, because they get moisture under the shade of the big trees. About 20% of pasture are about to deteriorate. The ranching is important cause of deforestation in countries. And the cattle ranching in Brazil at Amazon region has increased the deforestation manifold. As the ranching is giving opportunities for employment. There was reduction in employment as the income was declining from tree crops because the nuts of Brazil was destroyed for grazing purpose. The ranching incentives was good. The Government's Superintendency for the Development of Amazon (SUDAM) was dominant. The incentives which they provide was tax holidays for 10 to 15 years, investment tax credits, tax on exports and exemption of import duties.

In 1974 the ranching project was also get

encouraged from subsidised credit. The ranchers get loan at 12% rate of interest though the market rate of interest was 45% ,that has also increased the deforestation in that area. This offer was given by the Program of Agriculture Livestock and Mineral Poles in Amazonia (POLAMAZONIA).

The ranchers were encouraged to go for the project due to subsidies and reduction in taxes. The study of World Resource Institute showed that, the subsidy investment give economic loss which is equal to 55% of the previous investment. But the subsidies which was received by the private investment are accounted, than the return will be equal to 250%. The incentive which are fiscal and financial are poor investment and it convert the tropical forest which are superior asset of Brazil into its inferior use as cattle ranching. The SUDAM analysis was also revealed that five projects that had received the funds of tax credit, which was not implemented.

The another important factor which distort the natural resource market is market failure. As the prices of natural resources in these developing countries are not considering the externalities. The limit to growth and sustainable development by Ekin and Daly, analyse the concept of sustainable development. In sustainable development the growth is balanced with social, development and environmental conservation. It is important to focus on the issues of environmental degradation, inequality of society and instability of economy.

Ekin and other have proposed principles to manage the stock of natural capital. Exploitation of renewable resources should be less than its regeneration, Exploitation of the non renewable resources at a limit that allow for future use, pollution at a limit which ecosystem can absorb and to support life and conservation of the natural capital as it provides benefits to the human.

Environmental Sustainability Gap (SGAP) shows that, how the consumption of natural resources is increasing than the sustainable environmental level.

A report of 1972 shows that, use the simulation for analysing the economic and population growth under limited supply of resources. The report was focused on the technological progress, output competition and different possibilities of substitute.

Ekins explained that, the GDP is not good measure of production and welfare of any country because it is not using the economic factors which are non monetary in nature.

The timber is exported in South East Asia to France or Japan, then the country who import pay the market price which is so high to add the environmental effect. They have ignored the benefit that if the natural resources will be stored for future use than that will be more profitable for countries.

When no framework is used to improve these externalities then definitely the free trade will exploit the natural resources of the developing countries. On these natural resources there are so many families and many countries are dependent for their livelihood and subsistence. The free trade will make the environment unsustainable and use the natural resources inefficiently on a global scale.

The international trade is affecting the poor nations due to many reasons like:

- Collaboration of poor countries, who produce and consume their domestic products can increase the demand which will not satisfy the sustainable supply. The natural resources which they use in their domestic market will be over exploited, when the market will increase. It happened in the South East Asia in shrimp industry.
- Industrial trade will expose the household of rural areas to risk as the increase in trade shifted the pupil towards more livelihood industries and those industries are less risky and agricultural based industries.
- The IMF imposed , the structural adjustment programme, which limits the countries ability to give subsidies to poor.
- The macroeconomic factors are adjusted for encouraging the resource reallocation as the opportunities for the new investment. The resources are reallocated in the economy where the growth is fast. This will withdraw the natural resources from those long term investment to the investment in the poor.

### Conclusion:

It is true that trade provide path for sustainable development. The trade policy can be framed parallel to the environmental policies. With the help of green economy the various problems of economy and environment can be solved. As trade provide economic growth by transforming the natural and agricultural commodity but on the other side it remove the wild animal and their habitat. Due to boom in the economy the

extraction of natural resources are increasing just for flourishing the construction sector, chemical industry etc. But on the cost of extraction of natural resources. In the initial stage the countries who export their natural resources they get export benefits but due to increase in the extraction of natural resources such countries are also facing reduction of natural assets. The increasing pollution is pressurising the demand and for fulfilling the demand the countries are increasing their cultivation which affect the soil fertility. This has negative impacts like deforestation which causes soil erosion, siltation of soil, floods, change in climate and loss of biodiversity. Suitable policies can solve such problems but adding trade, development and environment together in one policy is not easy. Through a joint agreement on trade, development and environment can help in solving the problem of extraction of natural resources. As we know that there is positive relationship between increasing trade and

## REFERENCES

Antweiler, Werner, Brian R. Copeland and Scott M. Taylor (2001). Is Free Trade Good for the Environment? *American Economic Review*, **91**(4):877-908.

Bhagwati, Jagdish (1993). The Case for Free Trade. *Scientific American*, 42-43.

Bhattacharya, R.N. (2006). Environmental Economics; Oxford University Press, New York.

Boosting Trade Opportunities for Least-Developed Countries: Progress Over The Past ten years and current Priorities (Published in 2022),World Trade Organization.

Compendium of Environmental Statistics: Ministry of Statistics, Government of India.

Charnovitz, Steve (2002). A World Environment Organization. *Columbia Journal of Environmental Law*, **27** (2) : 323-362.

Daly, H.E. (1996). Beyond Growth: The economics of sustainable development, Boston: Beacon Press.

Dua, Andre and Daniel C. Esty (1997). Sustaining the Asia Pacific Miracle: Environmental Protection and Economic Integration. Washington: Institute for International Economics

Esty (2001). Bridging the Trade-Environment Divide. *Journal of Economic Perspective*, **15**(3):113-130.

Esty (2003). Toward a Global Environmental Mechanism. In *Worlds Apart: Globalisation and the Environment*, edited by J.G. Speth. Washington, DC: Island Press.

Gupta, Partha Das (2007). Economics; A very Short Introduction, Oxford University Press, New York.

<https://www.oecd.org/trade/topic/tradr-and-the-Environment/>

Hussan M. Ahmed (2004). The Economics of the Environment; Rloutlebge, London (2001).

Implementing the WTO Agreement on Fisheries Subsidies: Challenges and Opportunities for Developing and Least Developed Country Members (Publication of WTO in 2022).

Joshi, M.V. (2005). Theories and Approaches of Environmental Economics. Atlantic Publishers and Distributors. New Delhi.

Karpagam (2006). Environmental Economics; Sterling Publication Pvt. Ltd., New Delhi (1991)

Karlsson (2002).The North-South Knowledge Divide: Consequences for Global Environmental Governance. In *Strengthening Global Environmental Governance: Options & Opportunities*, edited by D.C.Esty and M.H Ivanova. New Haven, CT: Yale School of Forestry & Environmental Studies.

Kindlerberger, Charles P. and Lindert, Peter H. (1978). International Economics, Tokyo Japan.

Kolstad, Charles D. (2004). Environmental Economics; Oxford University Press, New York.

Mannur, H.G. (2012). International Trade, Vikash Publication House Pvt Ltd. (2012)

Report (2017-18). Ministry of Environment, Forest and Climate Change (MoEFCC)

Sodersten, Bo (1970). International Economics, NewYork: Harper and Row.

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