

## **GLOBALIZATION AND ENVIRONMENTAL ISSUES: A NEW FRAMEWORK FOR SECURITY ANALYSIS**

**Ufomba Henry<sup>1</sup>**

*<sup>1</sup>Department of Political Science and Public Administration University of Uyo, Uyo, Akwa-Ibom State, Nigeria*

### **ABSTRACT**

*This paper is situated within the growing literature on globalization and environment issues as a vital sector in international security. Using a game theoretic approach, it makes hypothetical assumptions on how the impact of globalization on the environment will lead to future security problems in two dimensions- horizontal and vertical. It presents the threat of cross- border pollution between nations sharing geographical boundaries (horizontal dimension) and between developed and developing nations (vertical dimension) as a result of environmental scarcity.*

**Keywords:** Globalization, Environment, Threat, Corporations, International security.

### **Contribution/ Originality**

The paper contributes the first logical assumptions on how the environmental impact of the economic agents of globalization will become an issue in future international security.

### **1. INTRODUCTION**

The term 'globalization' is increasingly becoming one of the most defined concepts in social science literature as a whole. From been referred to as the mere process that stimulate the increasingly close international integration of markets for goods, services and factors of production, labor and capital (Burdo *et al.*, 2003) the concept has been used to connote an erosion of the importance of state boundaries in the international system where there were once barriers there are now bridges to allow the free flow of goods, services, people, ideas, culture and so on (Hislope and Mughan, 2012). Generally, these definitions like most others insisted that globalization has more to do with the dynamic shrinking of the factors that divide the world economically and socially (Nye, 2008) since it creates commonalities and connections that cut across political borders, national identities and cultural differences (Rourke, 2008). Or what Conth-Morgan (2002) refers to as the internationalization of the state through the blurring of boundaries between international and domestic politics (producing 'intermestic' politics). Put in a more generalized context, globalization is the dynamic shrinking of distance between hitherto

divided societies through the breaking of legal barriers and diminishing of state boundaries which is necessitated by technology-driven socio-economic and cultural integration which shapes the perception of the local individual and determined by the interaction between the state and economic agents. This definition takes into account the role of the state in the globalization process rather than looking at the process as the sole game of economic agents. State policies as witnessed in North Korea on one hand, China in the middle and the United States at the right hand of the spectrum show that the globalization process is not completely autonomous of the State. Rather it is the state through the creation of an enabling environment- social, political and economic stability- that establish the necessary pre-condition for the penetration of the agents of globalization.

But as globalization integrates two or different societies it do not put into condition the socio- political and economic differences in these societies these led to the formation of a 'potpourri' of contradictions which creates long time problems. Many scholars have discussed the various problems of globalization which has been identified to be multidimensional<sup>1</sup>. Our focus in this paper is to securitize globalization in relation to pivotal issues arising from environmental problems and how this will become a critical issue in future international security debate. Going beyond socio- cultural<sup>2</sup>, political<sup>3</sup> and economic<sup>4</sup> dimensions of security, this paper shall use a game theoretic approach to simulate possible scenario showing how environmental issues arising from the globalization process could lead to inter- state conflict at the regional level (horizontal dimension) and in the South (vertical) due to cross- border pollution and environmental scarcity.

## **2. GLOBALIZATION AND THE ENVIRONMENT: A GAME- THEORETIC ASSUMPTION ON FUTURE INTERNATIONAL SECURITY ISSUE.**

The environment is for long a critical theme in defense and security analysis<sup>5</sup>. While this is primarily a small sector nevertheless, the linkage between environmental issues<sup>6</sup> on one hand and individual and community security on the other hand has become an expanding security debate<sup>7</sup>. Situated within this debate, we shall bring into limelight how the interplay between globalization and environment issues will become security threats in the future international system. Our focus here shall be based and limited to assumptions and game simulation which shall focus on conflicts in two dimensions-horizontal and vertical.

### **2.1. Horizontal Dimension**

One of the key driving focus of globalization is Trans-national and Multi-national Corporation (TNC/MNC).As the cost of production rises in developed countries<sup>8</sup> TNC/MNCs move to developing countries to take advantage of not only cheaper labors and lower taxes in these countries but more relaxed government oversight on their activities<sup>9</sup>, since laws are framed by their host countries to suit them in order not to lose the much needed investment and jobs that they bring<sup>10</sup>.The result is that corporate practices of TNC/MNC in developing

countries are very different from what is obtainable in their mother countries<sup>11</sup>. Most of these practices such as slow response to oil spillage and compensation, gas flaring, uncontrolled and unapproved discharge of toxic waste into the environment among others are known to have negative environmental implications. While environmental pollution can be endured by the host country since it is a by-product of its economic activities and has been compensated for through tax, job creation, among others, its cross-border impact is totally different, and could lead to inter-state tension<sup>12</sup>. This can be depicted in the game in figure1. This game is based on four assumptions.

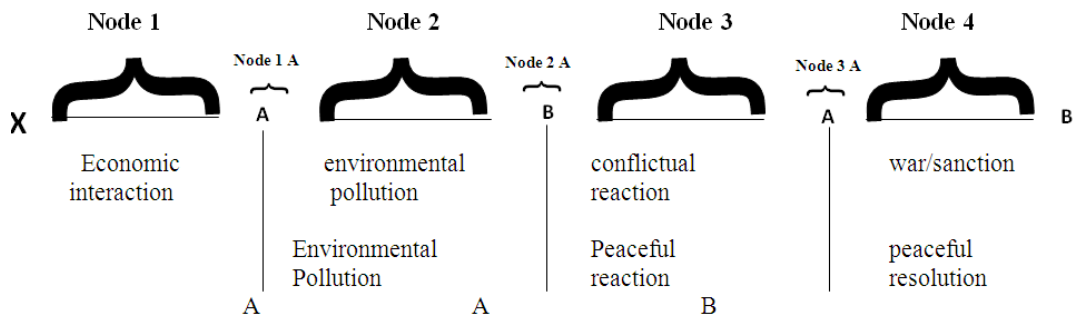
**Assumption-1.**Environment resources are scarce

**Assumption-2.**Each state looks forward to optimize and protect its limited environment resources.

**Assumption-3.**Everything been equal environment resource issues are considered as possible threat to a state's survival.

**Assumption-4.**In line with assumption 3, a state is expected to react to such threat with suitable action(s) and reaction(s).

**Fig-1.**Globalization, environmental pollution and a two-nation (A and B) game interaction.



In node 1, agents of globalization, x, interacts with nation A. these interactions range from such economic activities as oil exploration and exploitation to heavy industrial activities and farming among others. In Node 1A, the economic activities of x as expected may lead to the discharge of industrial wastes and toxics into the environment of A, polluting it. In Node 2, the pollution of A's environment diffuses into B's territory polluting it, through what many describe as cross-border pollution. In node 2A, there is a possible break in the game. If nations A and B have prior agreement(s) on this issue in form of existing treating, B's reaction is peaceful due to an already laid down mechanism of compensation or any other form of alleviating the problem. Where such an agreement does not exist, the game moves to node 3, where B in the face of A's environmental threat or 'eco-invasion' responds, taking an engaging position. Under this condition, A and B are expected to engage each other, where such engagement results in a kind of agreement. The game moves to and ends in node 3A in a peaceful resolution similar to node 2A

but where this is not the case, B is expected to protect the environment from A's threat through a sterner diplomatic posture which could involve sanctions or militarized engagement (node 4).

## 2.2. Vertical Dimension

As global environmental condition deteriorates, there exists tendency in the long run for the developed economies-global North-with their huge financial resources to switch from environmental unfriendly technology to the more expensive environmental friendlier technology in their quest to check ecological deterioration as a result of its massive scale of industrial activities.

This position is not attainable in global South (developing nations). These nations will attempt to use the cheaper technologies to continue production in their bid to catch up<sup>13</sup>. The result is that since the environmental implication of pollution has a global effect<sup>14</sup> the impact of the expensive environmental friendly policy of the developed North will to some extent be undermined by the activities of developing countries<sup>15</sup>. The dilemma here is that developing nations cannot stop their activities since it is their means of sustenance. And for developed nations to sustain their environmental agenda they have to either make provision for developing countries to use developed countries' advanced technology for their own good- a position which appears quite difficult<sup>16</sup>.

These leaves developed countries with two options: either to use their hegemonic influence to make environmental issues an international convention that will give room to the use of diplomatic instrument such as sanction against nations at eco-unfriendly industrial level. In the face of their feeble economy, this is being a threat to the survival of third world countries. On the other hand developed nations may be tempted to take a hawkish stance by making pre-emptive attacks on the environment threatening industrial facilities in the developing south. Whichever way, in the near future environmental threat and the role of globalization in sustaining it will be a key issue in the international security<sup>17</sup>.

## 3. CONCLUSION

As economic activities of corporations move faster across state boundaries penetrating hitherto unexplored markets under the auspices of globalization, the environmental effects of these activities are increasing becoming more of concern to scholars and policy-makers alike. This paper securitized the issue, and using a game-theoretic approach present it as a possible source of conflict in the international system in the near future. To this end, this security threat is viewed in two dimensions:

1. Horizontal dimension: Environmental related inter-state conflicts between two states sharing common geographical boundaries or belonging to the same region.
2. Vertical dimension: the threat posed by the use of cheaper and more environmental hazardous technology in less developed nations on the environmental security of developed nations

(when the latter has made a shift to more friendlier and costlier technology to preserve its own environment)

While current scholarship focuses on present international security threat like terrorism, nuclear weapons etc it is needful to begin to look beyond the present and take seriously environmental threats as a crucial issue in international security. It is against this background that the assumptions in this paper are made, with the focus of providing a framework for future studies on the subject matter.

### End note

1. Globalization has been linked to the rising gap between the poor and the rich individuals, inequality among nations, terrorism etc.
2. The literature on social securitization is extensive. See for example [Waever \*et al.\* \(1993\)](#)
3. The political dimension of security analysis has been the focus of many scholarly works-(see [Walker \(1990\)](#), [Buzan \(1994a; 1994b; 1996; 1991\)](#), [Buzan \*et al.\* \(1998\)](#), [Buzan and Little \(1996\)](#), [Ayoob \(1995\)](#), [Jackson \(1990\)](#) among others)
4. Like social and political dimensions of securitization, the economic aspect has received a fair share of attention in the literature. Some important works in this regard includes [Luciani \(1989\)](#), [Buzan \(1991\)](#), [Cerny \(1995\)](#), [Buzan \*et al.\* \(1998\)](#) among others
5. The study of environmental security is quite extensive. See for example [Matthews \(1989\)](#), [Levy \(1995a\)](#), [Levy \(1995b\)](#), [Sjostedt \(1995\)](#), [Thomas \(1992\)](#), [De Wilde \(1994\)](#), [MacNeil \*et al.\* \(1991\)](#), [Buzan \*et al.\* \(1998\)](#), [Matthew \(1995\)](#), [Lodgaard \(1992\)](#), [Brown \(1989\)](#), [Westing \(1988; 1990\)](#), [Boge \(1992\)](#). [Homer-Dixon \(1991\)](#), [Myers \(1986\)](#). Later works includes [Dodds and Pipard \(2005\)](#) and [Kobtzeff \(2000\)](#)
6. Issues on environmental security have been compartmentalized by [Buzan \*et al.\* \(1998\)](#) to include: Disruption of ecosystems (climate change, deforestation, desertification, ozone layer depletion etc), energy problems (depletion of natural resources etc), population problems, food problems, economic problems and civil strife.
7. Environmental issues here are being perceived from the angle of security. It “concerns the maintenance of the local and planetary biosphere as the essential support on which all other human enterprises depend” ([Buzan, 1991](#)).
8. Here we assume that the tighter environmental concerns in developed countries and the policies arising from it will increase the cost of production to the TNC/MNC making the movement of their activities to developing countries more and more attractive.
9. Government oversight is more relaxed in developing countries due to corruption and weaker institutions among other factors.
10. An example of this is the “race-to-the-bottom” between Puerto Rico and Virgin Island where each of them attempt to lure a United Kingdom brand ‘Captain Morgan’ to site its factory in their territory. At the end, Virgin Island won after making such offer as to construct a new

production plant from its treasury, a 90% reduction in corporate taxes, tax exemption for properties and gross receipt and other marketing and production support (Kocieniewski, 2010; Hislope and Mughan, 2012).

11. The environmental unfriendly activities of TNC/MNC in their host countries has extensively been researched especially those related to the oil sector (Ikein, 1996; Douglas, 1997; Agagu, 2008; Allen, 2012)
12. Recently, the Great Renaissance Dam (GRD) constructed by the Ethiopia on the Nile River has been considered by Egypt as a threat to its survival. While natural resources, territory, power, deference (Ufomba, 2010) among other has been identified in conflict literature as sources of inter-state conflict, the protection of a state's environment from cross- border pollution and threat will become a non – negligible source of conflict in the near future.
13. The current position of China on the environmental implication of its industrial activities as it pursues its economic goals support this assumption. The United States position towards the Kyoto protocol is a pointer that nations may put economic well-being ahead of environmental pollution.
14. For example, greenhouse emissions are not limited to the territory of its origin but have a more cross – border effect. Global warning and the climate change even affects such terrain as Antarctica which has little human activity.
15. This situation is made more precarious due to the influence of globalization. As the cost of production in developed nations increase due to government environmental policies. Corporations will move their activities to developing nations where the relaxed emphasis on environmental sustainability will provide an interesting platform for profit optimization.
16. This is difficult due to several reasons. Among this include the pressure of such venture in the economic wellbeing of developed nations. Another reason is the possible failure of such a venture due to gross corruption and weak institutional structures in developing countries.
17. The threat by Morsi – led government in Egypt to use military measures if necessary against Ethiopia's Grand Renaissance Dam on the River Nile is a warning of the tendencies of environmental issues creating conflict between state actors.

## REFERENCES

- Agagu, A.A., 2008. Effects of the oil industry on the environment and the future of the Niger Delta of Nigeria. Department of Political Science, University of Ado – Ekiti Conference Compilation. pp: 59-78.
- Allen, F., 2012. Implementation of oil related environmental policy in Nigeria. Government inertia and conflict in Niger Delta. Newcastle Upon Tyne. Cambridge Scholars Publishing.
- Ayoob, M., 1995. The third world security predicament: State making, regional conflict and the international system. Boulder: Lynne Rienner.

- Boge, V., 1992. Proposal for an analytical framework to grasp environmental conflicts. Zurich: ENCOP (Environment and Conflicts Projects) Occasional Paper.
- Brown, N., 1989. Climate, ecology and international security. *Survival*, 31(6): 519 – 532.
- Burdo, M.D., A.M. Taylor and J.G. Williamson, 2003. Globalization in theoretical perspective. Chicago: University of Chicago Press.
- Buzan, B., 1991. People, states and fear: An Agenda for international security studies in the post – Cold War Era. 2nd Edn., Boulder: Lynne Rienner.
- Buzan, B., 1994a. National security in the post – cold war third world strategic review for Southern Africa, 16(1): 1- 34.
- Buzan, B., 1994b. The post – cold war Asia – pacific security order: Conflict or cooperation. In Andrew Mack and John Ravenhill (eds) Pacific cooperation: Building economic and security regimes in the Asia – pacific region. Boulder: Westview Press. pp: 130- 151.
- Buzan, B., 1996. International security and international society. In Rick Fawn and Jeremy Larkin (eds), International society after the cold war: Anarchy and order reconsidered. London: Macmillian. pp: 261 – 287.
- Buzan, B. and R. Little, 1996. Reconceptualizing anarchy: Structural realism meets world history. *European Journal of International Relations*, 2(4): 403-438.
- Buzan, B., O. Weaver and J. Wilde, 1998. Security: A new framework for analysis. Boulder: Lynne Rienner.
- Cerny, P., 1995. Globalization and structural differentiation. Unpublished Paper, European Consortium for Political Research – Standing Group on International Relations (ECPR- SGIR) Conference, Paris.
- Conth-Morgan, E., 2002. Globalization and human security: A neo-gramscian perspective. *International Journal of Peace Studies*, 10(2).
- De Wilde, J., 1994. The power politics of sustainability, equity and liveability. In Philip B. Smith, Samuel E Okoye, Jaap De Wilde and Priya Deshing Kar (eds). The world at the crossroads: Towards a sustainable, liveable and equitable world. London: Earthscan. pp: 159 – 176.
- Dodds, F. and T. Pipard, 2005. Human and environmental security: An agenda for change. London: Earthscan.
- Douglas, O.N., 1997. An overview of environmental protection law and practice in the Niger Delta. Port Harcourt. LASS.
- Hislope, R. and A. Mughan, 2012. Introduction to comparative politics: The states and its challenges. New York: Cambridge University Press.
- Homer-Dixon, T., 1991. On the threshold: Environmental changes and acute conflict. *International Security*, 16(2): 76-116.
- Ikein, A.A., 1996. The impact of oil on a developing country. London: Praeger Publications.
- Jackson, R.H., 1990. Quasi-states: Sovereignty, international relations, and the third world. Cambridge: Cambridge University Press.
- Kobtzeff, O., 2000. Environmental security and civil society. In Gardner Hall (ed) Central and South-Central Europe in transitions. Wesport: Praeger. pp: 219-296.

- Kocieniewski, D., 2010. A rum battle, a tax hangover. The New York Times (October 16). Available from [http://www.nytimes.com/2010/10/16/business/16rum.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2010/10/16/business/16rum.html?pagewanted=all&_r=0) [Accessed 15th February 2014].
- Levy, M.A., 1995a. Is the environment a national security issue? *International Security*, 20(1): 35-62.
- Levy, M.A., 1995b. Time for a third wave of environment and security scholarship. In P.J Simmons (ed.) *Environmental change and security project report*, No. 1. Princeton: Woodrow Wilson Center. pp: 44-46.
- Lodgaard, S., 1992. Environmental security world order and environmental conflict resolution. In Nils Peter Gleditsch (ed) *Conversion and the environment*. Oslo: International Peace Research Institute (PRIO). pp: 115 – 136.
- Luciani, G., 1989. The economic content of security. *Journal Of Public Policy*, 8(2): 151-173.
- MacNeil, J., P. Winsemans and T. Yakushiji, 1991. *Beyond interdependence: The meshing of the world's economy and the earth's ecology*. New York: Oxford University Press.
- Matthew, R.A., 1995. Environmental security: Demystifying the concept, clarifying the stakes. In P.J Simmon (eds) *Environmental change and security project report*, No. 1. Princeton: Windrow Wilson Center. pp: 14-23.
- Matthews, J.T., 1989. Redefining security. *Foreign Affairs*, 68(2): 162 – 177.
- Myers, N., 1986. The environmental dimension to security issues. *The Environmentalist*, 6(1): 251 – 257.
- Nye, J., 2008. *The powers to lead*. New York: Oxford University Press.
- Rourke, J., 2008. *International politics on the world stage*. 8th Edn., New York: McGraw-Hill.
- Sjostedt, G., 1995. *International environmental negotiation*. London: Sage.
- Thomas, C., 1992. *The environment in international relations*. London: Royal Institute of International Affairs.
- Ufomba, H., 2010. Collective security or the security of the hegemony: The United States policy in the Middle East and the two Gulf Wars. *Middle East Studies Online Journal*, 1(3). Available from <http://www.middle-east-studies.net/wp-content/uploads/2010/10/ufomba-article1.pdf>.
- Waeber, O., B. Buzan, M. Kelstrup and P. Lemaitre, 1993. *Identity, migration and the new security order in Europe*. London: Pinter.
- Walker, R.B.J., 1990. Security, sovereignty, and the challenge of world politics. *Alternatives*, 15(1): 3-28.
- Westing, A.H., 1988. *Cultural norms, war and the environment*. New York: Oxford University Press.
- Westing, A.H., 1990. *Environmental hazards of war: Releasing dangerous forces in an industrialized world*. London: Sage.

*Views and opinions expressed in this article are the views and opinions of the author(s), Humanities and Social Sciences Letters shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/ arising out of the use of the content.*