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Climate Change, Global Warming and Global Inequity in Developed and Developing Countries (*Analytical Perspective, Issue, Problem and Solution*)

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Abstract : Climate change becomes one of the most significant challenges faced by most environmentalist all over the world. Every country either developed or developing one has the same need in climate change impact mitigation and adaptation. However, developed countries are believed to have better ability rather than developing countries in particular to climate change adaptation impact. It is described by several indications pointed out by several practitioners. The methods compare findings in both developing and developed countries. It is analyzing two salient data justified by rational arguments and emphasizing with some justifications then finally summarizing with solutions and recommendations.

Keywords: *Developed, developing, Climate change, and Adaptation.*

1. Introduction

In the beginning of the 21st century, Climate change begins to be a new challenge a priority concern of various stake holders. It is taking place due to human activities, and will have significant social, economic and environmental consequences. These consequences will be unevenly distributed across geographical, social and generational boundaries. There are unequal conditions related its mitigation and adaptation impact between developed and developing countries. Development countries or developed countries are countries that already had sufficient economic income and infrastructure facilities and likely to have better mitigation and adaptation strategy dealing with climate change. In contrast, the developing countries just began their development including adapting with climate change. Developed nations have adequate preparation with climate change impact owing to their finances and technology, whereas developing countries have limited capability while they become more vulnerable from climate change. This essay will explore how climate change brings global inequity particularly for developing countries then analyze whether developed countries are having better position than developing nations and expel some solutions for climate change impact.

2. Discussion, Methods, and Analysis

Climate change and global warming have more impact on third world nations or developing countries rather than in developed nations. (Shukla 1999) claimed that the distribution of world funding, military stock, knowledge and natural resources is controlled by the developed nations. The power of developed countries in bargaining the world economy had a great influence on the developing countries. It can be argued that developing countries have limits and insufficient financial capacity compare to developed nations. This situation has direct effect on developing countries dealing with climate change impact. To illustrate from the agricultural yields of developing countries, the lack of funding resources, human resources, and technology have been contributing to their sustainable agricultural activities. Nevertheless, Most of Common wealth countries, European countries and The United States have better in those capacities to protect their agricultural production from climate



change impact. This indicates the imbalance capacity between developed and developing nations which is not only from one sector like agriculture but also from others such as natural resource management adapting with climate change. However, developed countries can assist developing nations through international cooperation. For example, USAID and AUSAID programs for climate change project in some developing countries.

Developing nations seems to be more vulnerable to climate change due to their economy relying more heavily on climate-reliant activities in particular farming (Fankhauser et al. 2000). In a specific finding, Guldberg reported that storms and coral bleaching as the consequences of climate change activities could potentially destroy fishing grounds and farming systems particularly in the world Coral Triangle (Guldberg et al. 2009). The coral triangle is located at several developing countries in south East Asia including Indonesia. This area supplies more than 50 percent of fish nutrients for world consumption. It can be calculated if this area is continually threatened by climate change, then the world community would no longer be able to consume fish. A solution that the developing countries particularly in this area may apply to minimize the effect of coral destruction due to climate change is by adopting the coral conservation in the Great Coral Barrier in Queensland Australia. The regional governments of North Queensland in cooperation with the community who are living in the GBR are have made strong regulation toward the national park of the great barrier. This can be applied in some coral islands which located in the World Coral Triangle. As a result, the fish ecosystem in particular coral fishes in GBR is properly being protected by both the government and the community. Furthermore, ecotourism concept is also applied by the North Queensland Government to conserve the ecosystem values of the Great Barrier Reefs considering its World Heritage Area status.

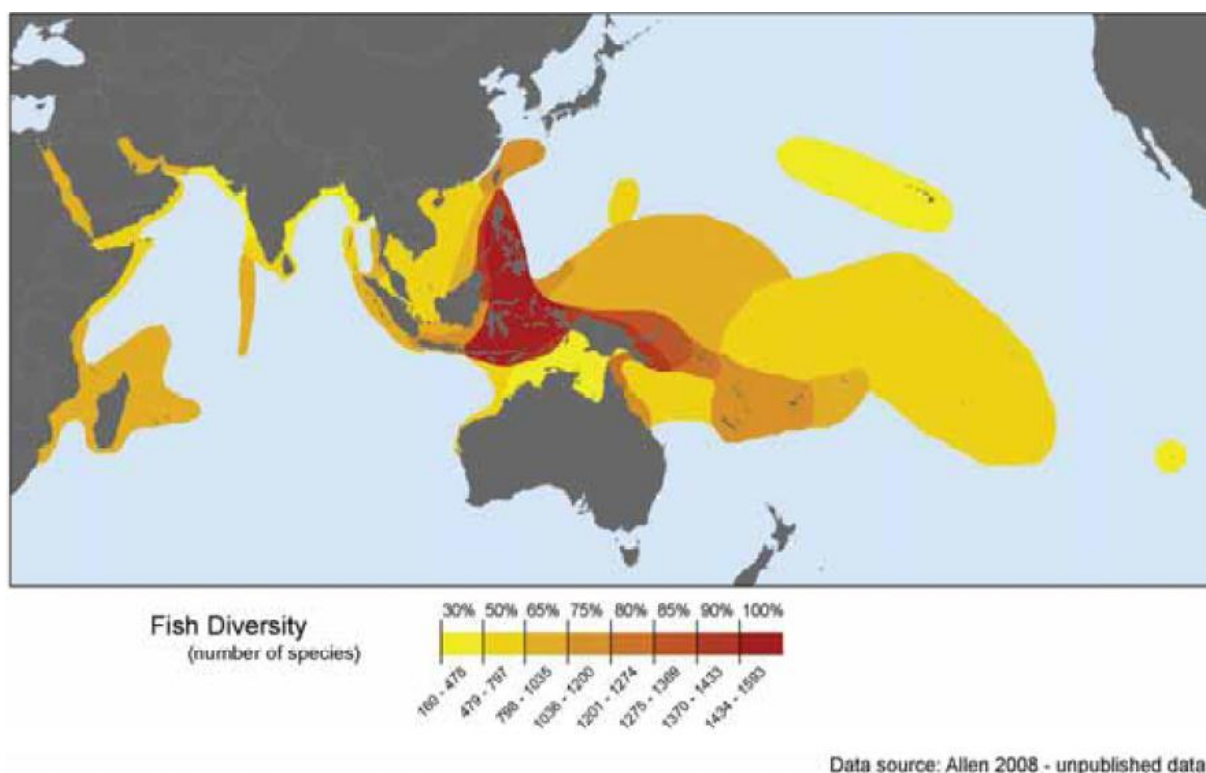


Figure 1. Coral reef fish diversity in the Indo-Pacific Region (Allen 2007, unpublished data). The highest diversity areas (90-100% of species) include most of the Coral Triangle

Other data stated that people in the developing nations have limited access to modern energy (PODOBNIK 2006). Contrarily, the highest rates of energy consumption are founded in developed countries and this is a major cause of global greenhouse gases. Developed nations become rich nations due exploring and utilizing more energy in their industrial activities that is also higher than developing nations. This can be claimed as hegemony of developed nations toward developing countries. Additionally, This condition is discriminating to developing countries especially at international carbon trading system because the developing countries becomes the emission filter for the green houses gases which is excessively produced by the developed countries.

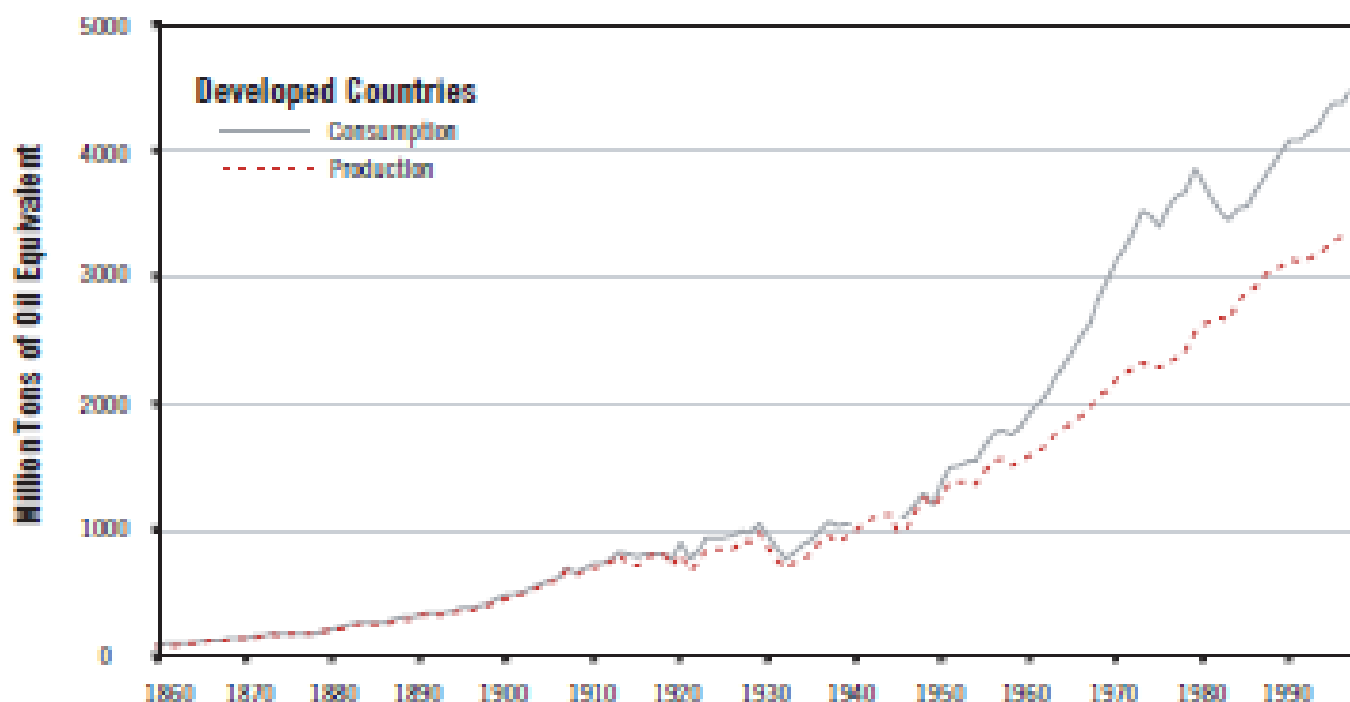


Figure 2. Commercial Energy Production and Consumption, 1860–1998

Despite the fact that developed countries seem to occupy developing countries through some indicators aforementioned, there are a number of opposing arguments. Firstly, the Virgin Group chairman in 21th, September, 2006 said that the company would promise to grant about 1.6 billion that is similar to the income of the Virgin group for 10 years to support the developing countries in environmental program (Prudham 2009). However, there might be a conspiracy in promoting a green movement like in that initiated by the Virgin Group. There are many companies like Virgin group which have already pledged to subsidize their income for environmental conservation including for climate change adaptation and mitigation. In fact, many of those companies have been failed applying their promises in environmental conservation. There should be an independent law institution like the commission for eradication corruption in Indonesia (KPK) that can control, oblige, or even prosecute such companies. The second is several developed nations initiate and support the need to provide global financial assistance in climate change adaptation for developing nations. Yet, most of developing countries are strongly vulnerable affected by the climate change impact due to the countries' population, dynamical profit, natural resources, poor condition, and their land declination

(Smit and Pilifosova 2003).

Actually, the Kyoto Protocol in 1996 has already recommended developed countries to have commitments in alleviating the impact of climate change especially in lessening carbon emission (Harte et al. 2000). Several international agreements have been signed by most of countries, Developed countries such as United States and Australia likely to stay in different position. Albeit climate change and the impact could not be prevented by world communities, either developed countries or developing countries could work together. Developed countries should give financial subsidies in dealing with the climate change impact especially on community's livelihood, for instance in agriculture or aquaculture sectors. In addition, developed countries can empower the capacity of human resources in developing countries by training and courses in climate change mitigation and adaptation. Furthermore, professional climatologist from developed countries could share their knowledge and experiences with scientists in developing countries through cooperation in educational development. Developed countries could provide supporting technology of climate change sciences for developing countries. This is very important to initiate and even strengthen research toward climate change science in developing countries. The research reports would be the salient recommendation for whole stakeholders including the community in developing countries to be able to adapt into the climate change. Whereas the developing countries, for example those which have global forest, would be beneficial for the developed countries that contribute more in global warming.

Although climate change and the impact could not be prevented by world communities, either developed countries or developing countries could work together. Developed countries should give financial subsidies in dealing with the climate change impact especially on community's livelihood, for instance in agriculture or aquaculture sectors. Developed countries can empower the capacity of human resources in developing countries by training and courses in climate change mitigation and adaptation. In addition, professional climatologist from developed countries could share their knowledge and experiences with scientists in developing countries through cooperation in educational development. Developed countries could provide supporting technology of climate change sciences for developing countries. This is very important to initiate and even strengthen research toward climate change science in developing countries. The research reports would be the salient recommendation for whole stakeholders including the community in developing countries to be able to adapt into the climate change. Whereas the developing countries, for example those which have global forest, would be beneficial for the developed countries that contribute more in global warming.

3. Conclusion and Solution

Summing up, it is clear that climate change has more impact on developing countries compared to the developed countries. The impact can be seen from the environmental damages due to climate change that is more significant in developing countries than that in developed and development countries. The developing countries have insufficient funding to apply programs and actions dealing with climate change impact in its regions. Developing countries tend to be fragile and vulnerable in term of climate change impacts and related natural disasters such as drought and storms due to their geographical conditions compare to developed countries. The developed countries consume more global energy and contribute more to global emission than developing countries that cause global inequity in energy consumption in the world and the developing countries contribute in reducing the global carbon emission.

Finally, the impact of climate change and global warming in developing countries absolutely outweighs that of developed countries and this situation has led to global inequity regarding the urgency to give the same attention in climate change action across the world as emphasized in the Kyoto protocol, Copenhagen, and so on. Therefore, developed countries must support developing countries in all solutions related to climate change impact. For instance, by granting funds, providing

technology, and assisting through educational development and research in collaboration with scientists between both countries. In some extents, the developed countries can help the community in developing countries dealing with climate change through environmental education programs not only by granting financial support to build schools but also approaching the developing countries to initiate and make education curriculum for environmental education like climate change awareness. This curricula could be taught from primary schools to senior high schools. The developed countries can award scholarships to the young generation of developing countries to study on climate change science in developed countries.

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