



## Foundation Year Student Essay with Annotated Tutor Feedback

### How does climate change pose different challenges for developed and developing societies?

In this essay, I seek to analyse climate change as a phenomenon based on its effects on developed and developing countries. In so doing, clarifying the different effects to both types of countries. This means everything stated about climate change is in direct relation to its impact on countries and I will continuously differentiate both the effect on the type of country and the innate reason for the relative differences in effect to either developed or developing countries. It will be accepted as a premise or a given that Climate change not only exists, but is occurring at an alarming rate (Karl et al. 2009). This is to avoid pedantic information about the scientific and geographical source of climate change which would be unnecessary and would not be a suitable answer to the question.

The United Nations Framework Convention on Climate Change came to an agreement that every nation should accept its "common but differentiated responsibilities". The aim was made to limit the global temperature rise to 2 °C relative to preindustrial levels. Though the world attempts in this instance to address climate change together it must be understood that there's a clear distinction in the Conference dividing the countries. There's a clear difference in impact of climate change on developing and developed countries as I will argue throughout this essay. However a similarity for both countries is the unpredictability of the challenges that Climate Change create (s. Regardless, in my analysis, I will offer certain challenges that surely and without doubt developed and developing countries will face.

Developing countries will be regarded as states with less developed industrial sectors and an underwhelming living standards in this essay (O'Sullivan, 2003 p.471). I will begin by assessing the effect of climate change on the agricultural sector of these countries. A high majority of people living in an under class in the world live in developing countries, having their livelihoods reliant on climate-sensitive resources examples like local water supplies, agricultural land, livestock husbandry and natural resources like wild herbs and fuel wood (Hunter 2007). Rapid climate change specifically target and reduce the availability of the services that these resources sustain. This will limit the access of people in the under-class to the means to consumption or trade. This is due to the specific geographical effects of global warming. Global warming impacts the agriculture intensely because as the global temperature increases, the global hydrologic cycle intensifies resulting in a change in the degree of precipitation and soil moisture content; increasing the likelihood of events like floods, drought, cyclones, changes in monsoon trend (Kumar et al. 1999) etc (Loaiciga et al. 1996). This had to be clarified to relate the innate characteristics of Global warming to the innate weaknesses of developing countries. A concrete example of this global warming effect on developing countries is that 75-250 million people in Africa are in danger of water stress by 2020, and the yields that are made could fall by up to 50 percent. (Prouty, 2009 520).

To further establish the specific effects of climate change on developing countries, I will proceed in this chapter to list specific dangers categorical to developing nations. There's a health risk from the lack of water and poor water quality as a result of global warming. In developing countries, with the prevalence

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**Commented [DM2]:** Repetitive from previous paragraph- relates to '**disorganization of structure**' (CSE) and possibly, the '**flow of argument**' (AA)

**Commented [DM3]:** This concluding sentence connects the example to your point and should be presented at the end of the paragraph. The final sentence seems misplaced and together relates to potential '**difficulty in following idea/argument**' (CSE)

of water-borne diseases, there will be a rapid increase in diseases like diarrhea and malaria, which is estimated to kill 1.8 million people each year (WHO 2004). Women in developing countries, due to historical gender barriers, will bear a disproportionate burden of climate change. Examples of historical gender barriers that will be exacerbated and result in an uneven effect on women are the existence of gender roles, sexist discrimination, poverty and household oppression (Parikh 2008). The effects consist of a challenge to their educations, healthcare and life. A real world example is that of North Eastern Uganda, Karamoja, where women and girls walk an average of ten kilometers during the dry season for water; it has been estimated that an average woman in the area spends 16 hours a week searching for water. Migration is an inevitable effect of all these factors upon the populace, The Intergovernmental Panel on Climate Change (IPCC 2001) predicted that the biggest, most important effect of climate change could be on migration (Brown 2007). There is an increase of the urban population between 2005 to 2010 in Burundi and Northern Nigeria by 6.8 percent (UNFPA 2006) and 7 percent clearly tracing back to the change of the climate in the rural areas. |

**Commented [DM4]:** This paragraph needs to be broken up into three- you have three points here- water borne diseases, gender issues and migration. Each examples deserves its own paragraph and needs more thorough explanations to how climate change is directly linked to these points- link to '*structural disorganization*' (CSE) or perhaps a '*patchy or disparate argument*' (AA)

The problems facing developed countries are mainly economical as developing countries are faced with obvious life-threatening impacts. The economic output of developed countries is the major aspect to be galvanized by global warming. This will mean the decrease of the availability of commodities that are needed for economic growth namely water, energy and food. Areas in developing countries with high latitudes such as Northern Europe will lose crops due to the low tolerance threshold for crops against rising temperatures (Stern 2006). Forests in Mediterranean Europe will be more vulnerable to drought and fires due to a decrease in rain fall (IPCC 2007, ). Climate Change is sure to reduce water resources in areas where water is scarce namely arid and semi-arid places like western USA (IPCC 2008, ). The value of capital within developed countries is sure to fall rapidly due to the high amount invested by stakeholders in fixed capital (Hallegatte et al. 2006). All important dangers to developed countries are a result of their advancement. The major reliance on commodity exchange and value of capital are, as I said earlier clearly threatened by climate change, these factors are less of a problem to developing countries as agricultural dangers are not as problematic to developed countries.

**Commented [DM5]:** Another example of informal language that could relate to a '*basic but competent standard of language*' (CSE)

Although, to understand why climate change poses a lesser threat (or at least a different type of threat) to developed nations as opposed to developing ones, three factors have to be explained. Developed countries are not reliant on climate worsening sectors like agriculture or at least not as much as developing ones (Tol et al, 2004). Developed countries are in cooler temperatures so are away from critical temperature thresholds for humans and crop. Thirdly, the existence of more financial resources means developed countries have flexible economies and have higher chance of resiliency to climate change (Tol et al, 2004). The most important factor is the financial capital of developed countries, due to greater access to greater technical and financial resources the developed countries can prepare better than developing countries of global warming. An example is the Netherlands where they have already created the strongest flood defense in the world.

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When discussing the approaches to global warming, there is a divide between mitigating responses and adaptive responses. The former refers to a solution that attempts to address the cause of climate change whilst the latter refers to addressing the impact of climate change. Developing countries are more likely to undertake adaptation techniques in the face of climate change as opposed to Developed countries attempting to mitigate climate change.

An example of developed countries mitigating than adapting is in Germany. Where it has had a vast reduction in the emissions of greenhouse gases and there has been a rapid movement towards production

of renewable energy such as biomass and solar. This has resulted in a remarkable reduction of emission in Germany (de Oliveira 2009). Germany's example goes further, it has led the movement to promote the use of low-emission cars that will keep check on emission. Climate Challenge poses a different challenge that developed countries will have to reach due to their capabilities. Civil societies and non-governmental organisations are active in the mitigating process. An example is the Kiko Network, a Japanese NGO that that partakes in a wide variety of methods to help mitigate global warming. It partakes in international negotiations over global warming mitigation, makes proposals to states, sends information to newsletters, emails, environmental education programs and conducting research and studies. Greater public awareness about the effects of global warming, superior financial base and institutions and availability of information should mean that developed countries have to rise to the challenge brought about by climate change to mitigate it.

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**Commented [DM12]:** Reference needed here- relating to *'support for interpretations'* (AA)

Developing countries clear challenges are regarded as adaptation goals. The clear adaptation goals are the needs for development of food security, the reduction of poverty and the provision of a decent living standard. Adaptation requires sufficient information and knowledge about global warming and this is the foremost challenge of developing countries. The ability to adapt will rely on the social networking and interacting, private ownership of assets, access to healthcare, infrastructural support and the education of the populace especially the farmers. Developing countries have the capability to adapt under the mentioned conditions especially in the case of irrigation and farming. Examples are Kazakhstan, where it was found that seed banks were the most affordable alternative to droughts. Also in Egypt, a method of changing crops is considered to be optimal in light of climate change. This is not the general case though, even as developing countries strive to adapt, how the challenge exists within the structures of a developing country make a huge difference. The World Bank in 2007 discovered that developing countries in a large part lacked enough resources to sustain the effects of poverty and climate vulnerability. The developing countries were said to require an increase in resources to assist the countries with the higher danger of climate change (Mani et al. 2008). The difference in this case between developing countries and developed countries is the former's lack of appropriate technology, reputable information and financial assistance that make developed countries adapt with ease. A way by which developing countries will rise to the challenge is to efficiently pool its resources to sustain the risk (Preker et al. 2001). As was the case in northern Nigeria where communities have increased agricultural production per capita in the latter part of the twentieth century (Adger et al. 2003).

**Commented [DM13]:** Adaptation needs to be defined better and referenced before discussing its relevance...link to *'analytic procedure used with mixed success'* (AA), or demonstrating *'patchy evidenced knowledge'* (KU)

The point is, climate change has different effects on developed and developing countries due to the nuances within both countries. These nuanced differences for example financial base and geographical locations means that the two countries react differently to global warming. To simplify, developed countries due to their advancement, face the challenge of mitigation as adaptation is not a challenge due to its ease. Whilst developing countries have to adapt to climate change because they lack the capability to mitigate and adaptation is a goal.

**Commented [DM14]:** These points needed to be expressed more clearly in the introduction, and then referred to as your essay progressed, giving your essay a more *'persuasive line of argument'* (AA)

## Bibliography

- Adams, R., McCarl, B., Segerson, K., Rosenzweig, C., Bryant, K., Dixon, B., et al. (1999). The economic effect of climate change on US agriculture. In R. Mendelsohn & J. Neumann (Eds.), *The economic impact of climate change on the economy of the United States*. Cambridge: Cambridge University Press.
- Adger, W. N., Huq, S., Brown, K., Conway, D., & Hulme, M. (2003). Adaptation to climate change in developing world. *Progress in Development Studies*, 3(3), 179–195.
- Aguilar, L. (2004). *Climate change and disaster mitigation*. Switzerland: IUCN
- Blaikie, P., Cannon, T., Davis, I., & Wisner, B. (1994). *At risk: Natural hazards, people's vulnerability, and disasters*. London: Routledge
- de Oliveira, J. A. P. (2009). The implementation of climate change related policies at the subnational level: An analysis of three countries. *Habitat International*, 33(3), 253–259.
- Few, R. (2007). Health and climatic hazards: Framing social research on vulnerability, response and adaptation. *Global Environmental Change*, 17(2), 281–295.
- Hallegatte, S., Hourcade, J. C., & Dumas, P. (2006). Why economic dynamics matter in assessing climate change damages: Illustration on extreme events. *Ecological Economics*, 62(2), 330–340
- IPCC. (1992). *Climate change 1992: The supplementary report to the IPCC scientific assessment*
- Kumar, K. K., Rajagopalan, B., & Cane, M. A. (1999). On the weakening relationship between Indian monsoon and ENSO. *Science*, 284(5423), 2156–2159.
- Mani, M., Markandya, A., & Ipe, V. (2008). *Climate change: Adaptation and mitigation in development programs*. Environment Department, The World Bank.
- Nyong, A., Fiki, C., & McLeman, R. (2006). Drought-related conflicts, management and resolution in the West African Sahel: Considerations for climate change research. *Die Erde*, 137(3), 229.
- O'Sullivan, Arthur ; Sheffrin, Steven M. (2003). *Economics: Principles in Action*. Upper Saddle River, New Jersey 07458: Pearson Prentice Hall. p. 471
- Prouty, A.E., 2009. The clean development mechanisms and its implications for climate justice. *Columbia Journal of Environmental Law* 34 (2), 513-540.