Impacts Of El Nino On South African Economy, Food Security, Farm Practices And Labour Relations

Introduction

This assay is based on El Nino as a frequent event, the impacts El Nino attributes on South African economy, food security, farm practices and labour relations. It also includes what global warming is, its causes and the difference between global warming and climate change. Furthermore, discuss why global warming and climate change effects serve on developing countries.

El Nino

According to Accuweather (2019), El-Nino is a routine climate pattern that occurs when the sea surface temperatures in the Tropical Pacific Ocean rise above normal level for a long period of time. El Nino can also be described as an unusual warming of the surface of the tropical Pacific Ocean which we can name the “warm phase” of a phenomenon called El Nino-Southern oscillation.

Conditions needed for the formation of El Nino

The Pacific Ocean must be warmer than usual which depends on the atmospheric pressure and warm winds blowing over the ocean. The easterly trade winds lose momentum or strength, then turn into westerlies. According to Petersen et.al. (2017:135) this allows the warm water to move irregularly and causes the upwelling of cooler water from deep in the ocean. This reverses the ocean currents along the equator. This also allows moisture-rich air to rise and develop into rainstorms which may result in floods or drought in certain areas. El Nino requires warm water on the Pacific Ocean, atmospheric pressure, trade winds and the rise of moist air to occur.

Impacts El Nino attributes on S.A economy, food security and labour relations of farm workers.

The El Nino event increases the risk of having heavy rainfall which result in floods and in some places because of reduced rain this result in drought. This does affect the South African economy, food security and labour relations. This type of even can induce dry conditions and decrease water table, raising concerns over water availability. Crops need water and during cropping season, less water made it difficult for farmers to produce goods in time and this resulted is food inflation. Due to dry conditions brought by El Nino some farmers who are involved in mixed farming had a greater challenge because their live stocks also developed certain diseases and could no longer sell then stock without treating them which is expensive and this left most farmers bankrupt and in deep debts. More problems occurred some farm owners had to fire some farm workers because of the debts they had to pay. After El Nino period the South African economy suffers as most farmers lose their jobs and the government gets strained as it must support farm owners financially to provide employment. In some places

in South Africa they experienced heavy rain which contributed into creating floods. These floods ruin the infrastructure that would have to be fixed by the government. Some floods wash away crops and fertilizers which end up in rivers and lakes. If the fertilizers end in rivers and lakes this causes eutrophication which makes the aquatic life vulnerable and those farmers involved in marine agriculture cannot sell the fishes and other aquatic animals. According to the journal of sustainable development (2017), South African economy mostly depends on agriculture and resources that are extracted from underground, during El Nino period it becomes difficult for workers to produce goods and sell them in good quality, and this decreases the economy and leads to a lot of unemployment and no food security.

Global warming and Climate change

Global warming is the average atmospheric temperature increase on earth, occurs when CO2, pollutants and other greenhouse gases collect in the atmosphere and absorbs excess sunlight and solar radiation. These pollutants and greenhouse gases can trap heat from escaping the atmosphere and this causes the planet's heat to increase even more, this is well known as greenhouse effect (Wired, 2018: par. 2).

According to Schar & Jendritzky (2004) there is always a risk of hot summers by just observing the emissions of greenhouse gases and using the comparison of observed summer temperatures to whether they are man-made warming or natural warming, while Climate change is created by burning fossil fuels and producing CFCs which add heat to the earth's atmosphere because they also contain carbon dioxide that is also produced during greenhouse emissions and a is the average weather for a place that occurs at a place over seasons. The climate change is mostly caused by the carbon dioxide and methane. Methane is release from burning fuels and carbon dioxide has natural sources such as decomposition and animal respiration. Deforestation also contributes as one of the causes of climate change because of the reduced amount of plant life available was supposed to turn carbon dioxide into oxygen.

Differences between global warming and climate change

Global warming

Climate change

average atmospheric temperature of earth

average weather of a region for over seasons

Caused by concentrated greenhouse gases emission

Caused by greenhouse effect, burning fossil fuel releasing carbon dioxide and deforestation reducing plant life that could turn CO2 into O2.

occurs on the whole planet

occurs on a certain region or place

Natural course

human-made course

Earth gets warmer or hotter gradually.

a certain region can experience drought, heavy rainfall and strong winds for over a very long period

Effects of global warming and climate change serve on developing countries

Most developing countries do not have necessary equipment to warn them about upcoming climate change or global warming because these equipment is expensive and because they are major greenhouse gases emitters the countries lack finance to buy clean technology that will adapt to reduce global warming nor climate change. Global warming and climate change serve on developing countries because of various reasons. According to Nancy Bindell, she states that poor people in developing countries feel the impact because of a vulnerable geography and being unable to cope with the damage caused by severe weather patterns. Already some developing countries struggle with access to water, after these weather patterns the people who live in such places are left without necessities and this threatens their live hood. Furthermore, those in developing countries who depend on natural resources for food and income suffer the effects of such phenomenon.

Reference list

1. Anon. 2018. What is climate change?. The definition, cause and effects. Wired.co.uk/article/what-is-climate-change-definition-cause-effect Date of access: 15 Oct. 2019.
2. Anon. 2019. National geographic magazine. El Nino- nature’s vicious cycle. Nationalgeographic.org/enclopedia/el-nino/ Date of access: 16 Oct. 2019.
3. Anon. 2017.Canadian centre of science & education: Journal of sustainable development 29 Sep. https//doi.ord/1.5539/jsd.v10n5p268 Date of access: 16 Oct. 2019.
4. Broaker, W. S. 1975. Are we on the brink of pronounced global warming science? Climate change science, 189(4201), 460-463. https://doi.ord/10.1126/science.189.4201.460. Date of access: 16 Oct. 2019.
5. Byrne, K. 2019. Accuweather. Accuweather.com/en/weather-news/what-is-el-nino Date of access: 17 Oct. 2019.
6. Carlowicz, M. & Schoolaertz, S. 2019. NASA. Earth observatory. https:/earth observatory.nasa.gove/features/ElNino Date of access: 17 Oct. 2019.
7. Mancini, M. 2019. Here’s the important difference between global and climate change. Environment. sciencealert.com/what-s-the-differencebetween-global-and-climate-change Date of access: 17 Oct. 2019.
8. Petersen, J.F. Sack, D. & Gabler, R.E. 2016. Physical geography. 11th ed. Canada: Cengade learning.
9. Schwaltz, E. 2019. How climate change affects people living in poverty?. Mercy corps. 13 Aug. mercycorps.org/articles/climate-change-affectspoverty Date of access: 16 Oct. 2019.

10. Schar, C. & Jendritzky, G. 2004. Nature: international journal of science. https://doi.org/10.1038/432559a Date of access: 16 Oct. 2019.