

Social Inequality Caused by Climate Change and Legal Countermeasures to Achieve Social Justice: A Specific Insight Towards Africa and Middle East Regions

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Abstract: Apart from the environmental effects resulted from global climate change, social impacts can not be ignore while tackling climate issues. The association of human rights and scarce resources are causing growing consequences of social inequality, especially in Africa and some Middle East regions. This paper is targeted to explain the formation of unbalanced distribution of resources of vulnerabilities and demonstrate the countermeasures of legislation after the role of legal managements' role are clearly identified. The Uae, Saudi Arabia, Ethiopia and Kenya are countries specifically researched on as being some of the most severe region affected by rising water.

Keywords: climate change, social inequality, social justice, Africa and Middle East regions

1. Introduction

While climate change is becoming a crucial issue that are faced by human globally, people are struggling making environmental protections and ignoring a side effect caused by rising temperatures, whereas some specific groups of people are facing a severe inequality of resource allocation and deficient protections, they encounter medical deficiencies, susceptibility to infection, and homelessness, creating a vicious cycle that will grow until more and more people are harmed by the warming climate. As an example, sea level rise has negatively impacted the safety and way of life of many coastal residents, and rising temperatures are having a significant impact on the Arctic ecosystems that support many indigenous communities. Some regions are heavily impacted than others, with more obvious links to climate change. Additionally, due to recent warming trends, some high-latitude locations, such northeast China and the U.K., have seen a minor boost in production. Maps of the world showing how prepared various nations are to deal with the consequences of climate change have been revealed by specialists in the field. 192 countries are graded according to their "vulnerability" and "readiness" to provide an overall assessment of their future. Overall, the results reveal that Scandinavian countries and the UK are among the most likely to survive - but areas of sub-Saharan Africa will be hardest hit. During the longitudinal fight towards climate justice, the consensus of social justice can be more intractable than physical effects and complex to explain owing to the various interactions between climate and humanity. The duties for society to protect vulnerabilities is vague and legal frameworks currently need further well-establishments to seek a reasonable and balanced solution, this means the attributional style for

this problem is not united yet. Given that it has long been recognized that the fulfillment of human rights, including the rights to life, health, food, and a high standard of living, depends on a clean, healthy, and functional environment, human rights are inextricably linked to this issue, whereas currently it is both physically and ideologically unsatisfied. The discussion of a balanced society is a permanent issue while all counterparts of humans are longing for a independence from their communities but also cooperation simultaneously, towards the specific issue of climate change.

2. The Formation of Social Inequality and Its Inner Causes

Regional inequality within a nation frequently intersects with inequality based on race, ethnicity, and religion and manifests itself in the form of income and asset disparity, which are some of the justifications for the identification of social inequality. Therefore, social inequality may be used to describe within-country geographical disparity. It should be highlighted that significant disparities also exist within families. Social inequality manifests itself in several ways, with women, refugees, those who are stateless, the elderly, etc. as its physical victims.

There are disparities based on demographic traits including gender, race, ethnicity, religion, and age that categorize people into social groups. Regarding assets and income, there is a second sort of inequality. Inequality in public decision-making and access to resources, such as publicly funded health, education, housing, and other services, is a third sort of inequality. It goes without saying that these many inequities are connected. As individuals are only vulnerable and unable to access existing resources when they are dealing with problems like healthcare, housing, food, and jobs as an individual at first, it appears that the impact of social inequality in inner-country areas is an indirect result of climate change. However, when the problem becomes more serious and forms a regional problem, or a regional problem for a certain group, the social inequality becomes more apparent and more difficult to solve. It illustrates how the relationship between social inequality and climate change is marked by a vicious cycle, in which initial inequality leads to disadvantaged groups experiencing the negative effects of climate change more severely than other groups, which then results in increased subsequent inequality. For instance, some persons suffer economic losses immediately following a climatic hazard, and thus are classified as a disadvantageous group. Additionally, climate risk has a negative impact on prices and markets, which can cause indirect losses for disadvantaged groups and make them more vulnerable and raise the susceptibility to the consequences of climate change over time.

3. Social Inequality, Human Rights and Social Justice

Climate change is having a profound effect on human rights, whereas the poor, women and climate refugee and other vulnerable groups towards the warming weather are suffering from losing various kinds of resources and lose their rights to access higher quality lives or sometimes even lose their ability to resist the illness and other damages that extreme climate inflicted to live healthy and stably. The African Union Commission rural economy and agricultural commissioner Josefa Leone Correia Sacko said that the weather and climate of Africa became increasingly greater, causing various disasters and damaging economic, ecological and social systems. It is estimated that by 2030, if appropriate response measures are not taken, Africa will have as many as 118 million extreme poor people (that is, living expenses less than 1.90 US dollars/day) to face the risk of drought, flood and extreme high temperature. This will significantly impede prosperity and add new obstacles on efforts to reduce poverty. She suggested: "The Sahara area of southern Africa may see a further decline in GDP to 3% by 2050 due to climate change. Additionally, there are more and more people who are afflicted." Temperatures, hydrologic conditions, ecosystem health, and agricultural output are already being impacted by climate change in numerous areas. For other populations, slike those in the Arctic

that is fast melting and low-lying coastal areas, displacement is also a real possibility [1]. The failure of accessing resources including food resources, accommodation and healthcare are a result of the failure that the rights for certain groups of people are not satisfied. The issue of right to food accessing, right to have adequate standard of living, rights to health and right to housing should be considered and the concrete elaboration is shown below.

3.1. Water Resources

According to the 2018 World Water Development report, water consumption would rise by 20-30% by 2050 as a result of changes in wealth and population. Around 3 billion people would likely live in areas with severe water shortages as a result of the probable decline in global water supplies [2].

Apart from decreasing water resources, The increased frequency of extreme weather due to warming will exacerbate the uneven distribution of water resources, making less water available in arid areas, while flooding is more frequent in water-rich areas.

Climate change will have a significant effect on people's lives and livelihoods, especially those of the poor, by affecting coastal resources and water resources system through water-related disasters that cause fatalities, damage to infrastructure, and destruction of economic assets.

3.2. Healthcare

There is evidence to show that in certain places, climate change has already made health problems worse. The following significant health impacts might occur if climate change develops as predicted under various scenarios: a higher risk of undernutrition due to decreased food production in underdeveloped areas; health effects resulting from impaired labor capacity increased risk of food-, water- illnesses, as well as decreased work productivity in susceptible groups; and a higher risk of undernutrition due to increased risk of harm, illness, and demise brought on by more intense heat waves and fires.

3.3. Food

Due to the fact that food security is a complicated and multifaceted idea that includes availability, access, use, and stability, it affects people's lives in various aspects.

The majority of dry subtropical regions' surface and groundwater resources will be significantly depleted as a result of the warming effect of climate change. This will make agriculture, ecosystems, urbanization, industry, and energy production more competitive for water, which will have an impact on regional water, energy, and security of food.

3.4. Human Settlement

A World Bank report released last year warned that up to 216 million people would become refugees by 2050, including 86 million from sub-Saharan Africa, 49 million from the Asia-Pacific region and 40 million from South Asia. The refugees here are "climate refugees" while this term does not have a certain identification internationally, in the paper, climate refugees are simply considered as people who loss their original settlement due to extreme water associated to climate change.

According to an April 24 report in the Nihon Keizai Shimbun, the abnormal weather accompanying global warming is creating a large number of "climate refugees" in many places, and the number is already three times the number of refugees caused by armed conflicts, and some estimates show that the size of climate refugees may exceed 200 million by 2050. Natural disasters know no borders, and countries must cooperate on disaster prevention and refugee issues.

"While flash floods occur every rainy season, they are different in frequency and scale," said Neil Titomamer, an expert with the Office of the United Nations High Commissioner for Refugees. He traveled by helicopter to the tribal areas of northern South Sudan in March and witnessed some unusual phenomena.

4. Legal Countermeasures and Effectiveness

4.1. The Role of Law

Numerous interventions are required to meet the adaptation imperative. Although the rule of law may not be an objective in itself, many proposed adaption measures will need solid legal support.

The discussion that came before it aimed to shed light on the different functions that law can play in encouraging societal adaptation to climate change. To optimize coping capacity with unpredictability change, and to reduce injustices or disparities brought on by the uneven consequences of climate change, the implications of climate change must be taken into consideration while developing, revising, implementing, and enforcing legislation. While not specifically related to climate change, certain significant aspects of the issue when combined create an unprecedented legal difficulty that will affect the selection, creation, and implementation of adaptation policies and legislation [3].

Human rights laws will offer a significant safeguard against the creation and use of adaptation strategies. As has already been mentioned, groups and communities who are already at a disadvantage due to their socioeconomic condition, age, health, or geographic isolation can be more severely impacted by the effects of climate change. International attorneys are already studying the ramifications of the global phenomenon of climate refugees. Legislation that implements adaptation laws must itself lessen any possible discrimination or socioeconomic inequities, in contrast to how adaptation methods will need to address the social justice implications of climate change at the national level. To ensure that the creation and use of adaptation laws address inequality and do not increase pre-existing causes of social vulnerability, it is possible to apply both human rights and anti-discrimination legislation.

With the goal of limiting vulnerability to climate change and improving living circumstances, the National Strategy for Climate Change was developed for the progress of the African and Middle Eastern regions [4].

4.2. Relevant Legislation in Africa and Middle East Regions and Progressive Differences

This part mainly focuses on four countries: The Uae, Saudi Arabia, Ethiopia and Kenya as some typical places affected by climate change.

Overall Objectives and Approaches. For Kenya, in April 2010, the National Climate Change Response Strategy was established by the Ministry for Environment and Mineral Resources (NCCRS). The main goal of the paper is to make sure that adaptation and mitigation strategies are incorporated into all government planning goals. The subjects covered range from research and development (R&D) and climate governance to adaptation and mitigation, with suggestions for the establishment of carbon markets and green energy. "Promote integration of climate change adaptation in agricultural development plans and policies," the 2011 administration pledged. The Policy aims to help local communities create quick adaptation mechanisms and furthermore looking into establishing a drought management authority and a drought emergency fund to "ensure rapid response to climate change related calamities" and more efficient drought prevention, preparedness, and mitigation mechanisms.

Ethiopia wants to break the link between growth and the use of nonrenewable resources and greenhouse gas emissions. According to the GTP, in order to reach middle-income status before 2025

and become carbon-neutral, countries must boost agricultural production, improve their industrial bases, and encourage export growth. Economically, this entails expanding quickly enough to raise GDP per capita from its current level of roughly USD 380 to USD 1,000, reducing agriculture's contribution to GDP. Using a sectoral approach, the CRGE program outlines over 60 measures that could assist Ethiopia in limiting emissions in 2030 to current levels. The CRGE also addresses Ethiopia's present climatic variability and potential future climate change by supporting climate resilience. This is crucial since Ethiopia's social stability are rather vulnerable to climate change and extremes. The economy is based on agriculture, which is mostly rain-fed and very vulnerable to variations in rainfall [4].

Fossil fuel exports, which are one of the primary causes of climate change, form the backbone of its economy nearly entirely. Saudi Arabia, on the other hand, is particularly susceptible to the negative consequences of global warming due to its desert climate.

Internationally, the UAE aggressively supports clean energy as a function of mitigation through both development aid and business investment. Through the Ministry of Foreign Affairs, the UAE hosts the International Renewable Energy Agency (IRENA), the principal international venue for cooperation in renewable energy. The first significant international organization with a Middle Eastern headquarters is IRENA [4]. A reduction in biodiversity, a major danger of coastal flooding, and serious water supply issues are all shown by research in the UAE. In this case, adaptation measures is required.

This paper also suggests utilizing religious themes to frame information about climate change. The majority of the aforementioned regions revere and are loyal to their religious leaders, hence religious leaders have a higher chance of influencing them than government officials do. The report also urges enthusiastic inclusion of climate change education in the curriculum to help kids have a thorough grasp of environmental issues, particularly the threat posed by climate change. Such a strategy will guarantee that children are made aware of this issue from a young age, as well as that they incorporate this knowledge into other areas of their lives and are aware of potential interventions [5].

Finally, considering the suddenness of climate disaster, even the emergency measures are necessary, which includes how to distribute resources to those in need in a short time, and also test the resistance of vulnerable groups.

Water Managements. Kenya approved a new water strategy for the management of its water resources. The strategy identifies certain particular actions to address issues that are directly related to climate change in view of the challenges provided by the the increasing temperature and the fact that "industrialized agriculture contributes on a huge scale to climate concerns." These include working together to implement a Disaster Management Policy. The UAE has also made energy demand management measures (particularly through sustainable policy planning) a key component of its long-term economic planning in response to rising energy consumption and its steadily expanding population [6]. Access to specific agricultural water management technology has significantly reduced poverty in Ethiopia. If this is the case, it would be helpful to know which AWM technologies had the greatest effects. In comparison to a rainfed system, the incidence of poverty was found to be reduced by 37%, 26%, 11%, and 9%, respectively. All technologies were found to have a significant impact on reducing poverty.

Food Resources. While considering the food environment and management, in Saudi Arabia, the Healthy Food Palm Dietary Guidelines were established by the Ministry of Health in 2012 to offer individuals and health care professionals culturally appropriate advice on healthy diets. These meals nutritional guidelines, which were meant to be utilized by healthcare practitioners, offered age-appropriate details on the daily recommended food group intake., included in awareness campaigns, and taught in schools [7]. All edible items must abide by the regulations set forth by the SFDA and the Gulf Standardization Organization (GSO) in KSA [8]. Technical rules that serve as a

stand-in for national policies and norms that member countries may choose to accept are the two types of regulating documents that the GSO issues [9]. The SFDA began enforcing general labeling rules on exported and domestically made packed foods that were sold in the nation's markets in 2013. Products had to contain a thorough ingredient list that was written in Arabic and listed them in alphabetical order. All prepackaged foods and beverages sold in Saudi Arabia were subject to an updated nutritional labeling requirement in 2018, in accordance with the GSO's technical regulation [9]. This restriction did not apply to spices, tiny packets, fresh fruits and vegetables, or containers containing only one nutrient or ingredient because they had very low levels of macronutrients, SSF, and/or TFA.

Despite the hard climate, lack of water, and small amount of rich soil, the UAE is determined to grow its own food, as evidenced by its agricultural program. The UAE is committed to maintaining food security, which includes doing this [10]. The state owns 85% of the land in the United Arab Emirates, especially in the Emirate of Abu Dhabi, which nonetheless permits its citizens unfettered access to farms. Significant oversight of these farmlands is also performed by the Ministry of Environment and Water (MEW)[11]. Moreover, consideration has also been given to food waste. One of the places with the highest rates of food waste is typically thought to be the nations that make up the Gulf Cooperation Council. Food waste makes about one-third of all trash produced in the United Arab Emirates, according to study done in 2009 and released by the Abu Dhabi Waste Management Center [12]. A portion of the problem could be solved by composting and recycling much of that garbage for animal feed. Food waste accounts for 38% of daily food consumption in Dubai and 33% of garbage created annually in Abu Dhabi [13].

The existence of elements including food costs, composition, safety, labeling, advertising, availability in contexts like schools, and food trade policies is also accepted. The availability, acceptability, and appeal of food for a person or a community are all included in the category of "food settings"[14]. According to statistics from Ethiopia's Demographic and Health Survey, there are considerable differences between the dietary diversity of children in urban and rural regions, with a greater diversity in urban areas. Surprisingly, disparities in household affluence, parental education, and access to healthcare between rural and urban regions account for the majority of the rural-urban discrepancy in dietary variety [15].

Ethiopia still has limited rural market integration compared to many other nations, with an average distance of 10.9 kilometers for a rural household to travel to a weekly market [16]. However, markets are really becoming more efficient. Markets are becoming more integrated, at least for cereals, and wholesale market margins are drastically shrinking [17]. With the rising urbanization and expansion of secondary cities, market functioning is anticipated to further improve.

Energy Strategies. The emirate of Abu Dhabi created the first renewable energy goal in the area. Waste-to-energy, wind, and solar photovoltaic (PV) projects are all now in the planning stages. To reduce the emirate's high gas costs for water supply, Abu Dhabi are also testing solar desalination.

Energy access is a crucial component of Ethiopia's economic and social growth.

In 1994, Ethiopia approved its national energy policy. Only 23% of the people in the country, who make up and over 80% of the population, have access to power. In Ethiopia, conventional energy sources are the main energy sources. The other 5% of Ethiopia's energy needs are satisfied by electricity, the bulk of which is produced by hydropower, and the remaining 95% by fuel wood, agricultural waste, and human labor [4]. The study paid particular emphasis to R&D aimed at expanding technological expertise in the field and upgrading the energy industry by eschewing conventional energy sources, all while preserving and safeguarding the environment. Despite the fact that a new one is currently being produced, this energy policy paper is still in effect.

5. Conclusion

The global climate change has strong effect on Africa and Middle East countries and social inequalities are formed due to lack of access to various resources such as water, food, energy and settlement. Meanwhile, human rights are affected as certain groups of people's ability to access resources are weak. In order to reach social justice, legal countermeasures play an important role in alleviating inequalities and issues about human rights. Compared with the environmental damage caused by climate warming, these problems are often ignored and a closed loop has been formed. The susceptibility of vulnerable groups will become stronger and stronger, so if reasonable resource distribution is not developed, social inequality will intensify. The policies in Kenya, Saudi Arabia, UAE and Ethiopia are demonstrated respectively, differences and progress can be seen. With the creation of the Ministry of Environment and Forest in Ethiopia, Middle East and North Africa have made some headway, and the Environmental Protection Agency was promoted to the status of a ministry, making it better equipped to handle the technical challenge of developing a climate-resilient green economy. Those investigated regions have made positive managements in order to mitigate and adapt climate change, especially towards agricultural and water management aspects as one of their main consideration. In the next three decades, countries will also need to strengthen the supervision of the planned plans, reasonably arrange the allocation of necessary resources to the distribution of disadvantaged groups and the use of energy, and try to solve the problem from the root. Social justice is a continuous proposition, and the negative impact on society is deeply rooted. It needs people to actively cooperate to achieve a more harmonious society. This is why adaptation is a huge challenge facing society in addition to reducing exhaust accidents. Based on the sudden nature of prevention, emergency treatment plans are also needed.

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