Climate change as a key contributor to migrant crisis: a case study of developmental & environmental challenges to Kiribati people

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OIDA International Journal of Sustainable Development, Ontario International Development Agency, Canada. ISSN 1923-6654 (print) ISSN 1923-6662 (online) www.oidaijsd.com Also available at http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html

Abstract: Environmental Conservation discourse and concepts like 'Climate Change' and 'Sustainable Development' is not a new phenomenon; it is an intrinsic part of the third generation of human rights. Therefore, the right to a healthy environment is indeed a human rights issue and its denial is a human rights violation. As a part of the developing discourse on environmental conservation, a phenomenon which has been noted recently is the issue of 'Climate Refugee', which is used to refer to that group of people who have been forced to migrate from their original habitation due to climate processes such as rise in sea-level, salinization of agricultural land, desertification etc.

Although the genesis of this term can be traced back to 1985 when it was first used in United Nation Environment Programme (UNEP) report yet unfortunately, it has not been recognized officially in the international domain and is only limited to academic texts and U.N. reports. The apparent reason for such a lacklasdial approach is due to the reason that the term 'Refugees' has a very narrow definition in the legal context, environment-related migration is not covered within their ambit.

The issue of human migration due to environmental issues had been predicted three decades ago. The 1990 report of the Intergovernmental Penal on Climate Change (IPCC) had explicitly warned that the greatest impact of climate change could be on human migration- with millions of people displaced due to factors like shoreline erosion, coastal flooding, and agriculture disruption. Since then, several analysts have tried to predict the number of people likely to become climate refugees, the latest estimate pegging them at 200 million by the year 2050. The problem has assumed a grave proportion due to the lack of proper support from the international organizations and various countries. Perhaps the greatest irony related to climate refugees is that it affects those who have the least involvement in environmental degradation.

This paper deals with one such place *viz.*, Kiribati, a small island country located in the Pacific Ocean, which is facing various environmental and developmental challenges for many decades. Factors such as - rise in sea level, water pollution, water-borne diseases and loss of land due to the contraction of the Island have forced the people of Kiribati to relocate themselves to a safer place.

According to IPCC, Kiribati may become uninhabitable for humans by 2050 due to coastal water erosion and freshwater contamination. What makes their task even more challenging is the fact that Climate refugees are not covered under the domain of 'Refugees'; therefore, the inhabitants of Kiribati face challenges whether they continue with their lives in Kiribati or choose to migrate to other countries. This has denied them access to basic amenities of life, security and the future, as a result, they have been pushed to the margins and are forced to live an inhuman life. The indifference of the international community towards this grave issue can be appropriately dealt with by treating the climate refugees as victims of climate change and economic crisis.

In a recent development, their efforts received a boost when it received support from UNHCR, which recognised the status of 'Climate Refugee', in a case related to a native of Kiribati i.e. Ioane Teitiota. However, mere labelling of persons as climate refugees is a futile exercise and does not change their situation nor does it assure them of protection. There is an urgent need for Proper

recognition and a coordinated approach at both the national and international levels (refugee laws, environmental laws and migration laws) are needed.

Therefore, this paper seeks to integrate the existing research and analyse the prevalent discourse to understand the challenges and predicaments of the people of Kiribati and explore various options through which their interests can be safeguarded effectively. Furthermore, the researchers have attempted to come up with an efficacious solution for the protection of migrants who have been victims of climate change.

Keywords: Climate Change; Climate Refugees; International Community; Kiribati

Introduction

S.A. in 2017 announced its decision to withdraw itself from Paris Agreement. The decision received worldwide criticism since U.S.A. is considered as one of the major emitters of greenhouse gases. The experts allege that the efficiency of the agreement would be significantly affected owing to the absence of U.S.A, which might further ensue in the failure of this agreement. While it is uncertain whether it would affect U.S.A., but countries that are prone to climate change and its citizens would undeniably be affected by such actions. It is vital to note that climate change affects not only the environment but also the people living within that environment. It is a disturbing fact that although incidents occurring in developed nations catch the attention of media and International institutions, regrettably, some places are worst hit by various factors (climate change to be one of the most significant factors), but these are sequestered from the international domain. Even if policies are made to tackle such issues, they are somehow impeded by the capricious approach of developed countries. This paper analyzes one such problem faced by the under-developed countries which are prone to climate change and environmental degradation viz. - Migrant Crisis.

The Researchers have used a doctrinal research methodology carried out on the basis of diverse academic resources in particular books, journals, newspaper articles and online surveys. In view of the surge in the migration crisis, the island country of Kiribati was selected for the present study. We have employed the method of critical inquiry to understand the challenges and predicaments of Kiribati people and how they can be safeguarded in the best manner possible. Furthermore, we have attempted to comprehensively understand the available materials and cases on the topic to come up with efficacious solution for protecting migrants who have suffered due to climate change.

The paper is divided into five parts. Part I provides an overview of the concept of the Migrant crisis and the problem of its recognition in aligned with other refugees. The role of climate change in facilitating the migrant crisis has been explained in the second part. To explain the role of climate change, the authors have analyzed the environmental and developmental challenges of the Kiribati nation. Part III highlights the transgression of various human rights of the Kiribati people as a consequence of climate change. Part IV discusses the response of national and international authorities to tackle the problems faced by the Kiribati natives. Part V adds the suggestion that governments and international authorities should comply to protect the rights of climate refugees and to further provide them a compatible life. And Part VI is the conclusion.

Concept of Migrant crisis and its recognition

Migrant crisis is a situation where citizens of a particular area are forced to move to other places as a consequence of different factors, the most popular being 'persecution'. According to the World Migration Report 2020, the current global estimated migrants were 272 billion, which equates 3.5% of the world's population.ⁱ It has been recognized as a global issue at various conventions and policies have been made to tackle this issue, but most of the policies are narrowed to protect the interest of persecuted refugees. However, this paper focuses on the environmental causes of migration, especially Climate Change.

There are various terms to address these migrants, such as environmental refugees, climate refugees, environmentally displaced persons, forced climate migrants, etc. (This paper will use **climate refugees** to refer to such migrants). Although these terms are not legally or officially defined, but various scholars and international organizations have analyzed and tried to define these terms. Essam El Hinnawi, in a UNEP report in 1985, has given one of the most prominent definitions of the term 'Environmental Refugee'. According to him, they "are those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and triggered by people) that jeopardized their existence and seriously affected the quality of their life".ⁱⁱ Since then, these terms have been referred at various reports and research to illuminate the suffering of such migrants.

However, due to the narrow definition of the term 'Refugee' in International laws, the utmost pitfall with the climate refugees is they haven't been recognized as a 'Refugees'.The term 'Refugee' has been defined in '1951 convention on refugees' as 'those who have a well-founded fear of being persecuted on grounds related to race, religion, nationality or membership of a particular social group or political opinion, and are unable or unwilling, owing to fear of persecution, to seek protection from their home countries'.ⁱⁱⁱ Pursuant to this definition, in order to get the status of 'Refugee', a climate migrant needs to be persecuted in their own country, which is rare. Thus, environmentally displaced persons don't fall under the purview of the term 'Refugee' of the 1951 convention and its protocols even though the one-tenth population of countries like Kiribati has migrated due to environmental conditions in the last decades.^{iv}

The repercussions of such deprivation are that they are not entitled to rights and protections guaranteed to the refugee that further makes their situation more vulnerable (discussed in the later parts of the paper). Before discussing the rights and problems of refugees, it is important to understand how climate change forces the climate refugees to migrate.

Role of Climate change in facilitating migrant crisis

Climate change is one of the primary reasons for human migration. It facilitates migration directly as well as indirectly. Directly associated outcomes are rise in sea level, extreme weather events, coastal erosion and flooding, etc. In contrast, contamination of water, destruction of crops, and spread/outbreak of water and vector-borne diseases are Indirect repercussions of Climate Change. As per the Inter-governmental Panel on Climate Change (IPCC), it is estimated that around 200 million people will be forced to migrate as a consequence of climate change by 2050.^v To understand the role of climate change in facilitating the migrant crisis, we will analyze the problems of the Kiribati nation that has been considered as the first country to be completely wiped out as a consequence of climate change.

Kiribati Island - Overview

Kiribati is a "small island country" situated in the central Pacific ocean, between Australia and Hawaii. Although having an actual habitable area of 800 kilometers, the island country spreads over to an area of about 3.5 million square kilometers. It also consists of 32 low-lying atolls that show a rise of about 2-3 meters above sea level. According to the latest data, the country has an estimated population of about 1,20,000, the majority of which is confined to the capital of Kiribati, 'Tarawa'. Fishing (and other linked activities) is the predominant occupation of the population of Kiribati.^{vi}

Due to its topography and climate change, Kiribati is facing continuous rise in sea levels and other environmental issues, making it one of the most vulnerable nations to climate change.^{vii} Consequently, people of Kiribati are forced to migrate to other places in order to get a better life. As per the experts, the island will be disappeared entirely in the future.^{viii}

Development & Environmental Challenges of Kiribati People

There are various challenges faced by the people of Kiribati. However, the paper focuses on a few of the most important developmental and environmental challenges, which are forcing the people of Kiribati to migrate.

Rise in Sea level

Kiribati is continuously facing a rise in sea levels. As per the data, the rise in sea level in Kiribati is approx.1-4 mm per year while the global average rise being 2.8-3.6mm per year.^{ix} Consequently, two of its uninhabited islands (Abanuea and Tebua) have already been disappeared^x and it is expected that by 2030, the rise in sea levels would be approx. 70 to 170mm.^{xi}

One of the prime reasons for this rise in sea levels is the atolls in the islands of Kiribati, which are naturally low-lying and consists high ratio of coastline to land area.^{xii} Majority of the country's population (nearly about 112,000 people) resides in the Capital, Tarawa (in the atolls) which is located in less than 3 meters above sea level.^{xiii} As a result, they are getting affected due to storm-surges and sea-level rise. The natural year-to-year variations, along with the continuous rise in sea level, will elevate the repercussions of coastal flooding and storm surges. Furthermore, this would lead the sea to invade the land more often than now.

There are multifaceted implications of the rise in sea level, which includes aggravating coastal erosion, affecting the economy, transportation problems, submerging farmlands, housing, natural landscape, negatively affecting the water (both for drinking and irrigation purposes) quality and even worse, turning the inhabitants into climate refugees.^{xiv}

Shrinking of Economy

The Economy of Kiribati is majorly dependent on Fishing and Agriculture.^{xv} According to the 2010 report, 22.1 percent of total employment was in the agriculture and fishing sector, which generates most of the income (30%) of the island of Kiribati,^{xvi} which has a GDP of \$0.19 billion USD.^{xvii}

The negative impact of the rise in sea levels, high temperatures, displacement, water and food scarcity, and inundation have consequences like a decline in agricultural production and breakdown in the food system.^{xviii} Not only this, these disproportionately impact the people who are most vulnerable (like children, persons with disabilities, older persons and women) and put them at the risk of malnutrition and food scarcity.

Besides, subsistence agriculture on small islands is endangered due to the ill impacts of rising sea levels through increased occurrences of coastal flooding.^{xix} The ill-effects of rising sea-level also include salt deposition in the soil, harming the agriculture and contaminating the groundwater. Adverse weather conditions also impacts agricultural crops as they eventually become less resilient to changing weather conditions, making reliability on agriculture insecure (both in terms of subsistence and economic activities).^{xx} Due to climate change, there might be increased and intense periods of droughts in some regions.

Talking about the most common occupation in Kiribati, i.e. fishing; It is also threatened in multiple ways due to climate change. Rising sea surface temperatures can induce coral bleaching; the ocean may become more acidic due to increased absorption of CO₂. Combining the negative effects of these two issues, the entire reef ecosystem could become endangered and might even get destroyed; thereby, restricting or even eradicating access to critical food sources. Likewise, circulation patterns of ocean currents might as well be disrupted causing the adverse distribution of ocean fisheries.^{xxi}

In the wake of climate change, the rising sea-level, and the resulting erosion, people living at coastlines could be forced to safeguard their homes with seawall. Protecting the houses by seawalls would require aggregate mining that would in turn, exterminate the reef ecosystem. A larger part of the population residing in South Tarawa relies on seashells from the lagoon (due to the inability to afford fishing nets and boats). Seawall construction would also require digging the lagoons; thus, destroying the habitat of seashells and the means of subsistence of most of the people in South Tarawa. The livelihood of low-income families is thus at risk following the above-mentioned scenario.^{xxii}

Due to improper and unstable market and agriculture infrastructure, the unemployment rate is drastically changing. Almost 30 percent^{xxiii} of the population is unemployed and most of the employed are even underemployed. According to ILO Report on "Employment and Environmental Sustainability Fact Sheets 2019", the youth unemployment rate was 54 percent, with the female youth rate 14.2 percentage points higher than the male rate. Only those working in government offices(12 percent) are being paid formal employment.^{xxiv} As per the World Bank report, the average annual per capita income of people of Kiribati is US\$1,650.^{xxv}

Water Scarcity

"Water scarcity, combined with the impacts of climate change, threaten the livelihoods, wellbeing and the very existence of communities in South Tarawa,"

- Michel Kerf, World Bank

Kiribati being one of the most remote and geographically dispersed nations on earth, has its own set of developmental and growth challenges. The challenges brought a threat to access to safe drinking water, hygiene and sanitation.^{xxvi} In fact, the problem of water security is one of the key causes of all other security implications in Kiribati. Evidently, the whole population of Kiribati relies on groundwater for survival.^{xxvii} Unfortunately, the underground water due to saltwater intrusion is either contaminated with brackish water or is already brackish. This problem is grievous for atoll islands, which are vulnerable and are prone to flooding.

Tarawa (capital) has scarce water resources due to meagre land area and lack of storage capacity.^{xxviii} These meagre freshwater resources are further adversely affected due to climate change and overcrowding and are contributing negatively to the problem of water scarcity. Higher air temperature has worsened the existing problem as it is leading to an increased rate of water evaporation, reducing soil moisture and decreasing groundwater recharge.^{xxix} The scarcity of freshwater is a major threat to social security. Due to the scarcity of freshwater, people are now encountering social security threats, especially in some of the southern islands. This is rather an issue of social instability derived from the issue of water security.

Health Security

Undoubtedly, human health is regulated by the surrounding weather and climatic patterns.^{xxx} Climate change has brought about risks in the form of an increased threat to infectious, vector-borne diseases, cholera, dengue, and diarrheal diseases.^{xxxi} The most adverse impact of these diseases is on populated regions like Tarawa. It is not an astonishing fact that some of the world's most virulent infectious are highly sensitive to temperatures, humidity and patterns of precipitation. The life-cycle of the infectious agents and vectors is dependent on these factors through which they influence the transmission of water and food-borne diseases.^{xxxii} Already the life expectancy of people in Kiribati is on an average 64 years^{xxxiii} and further, the consumption of bacterially contaminated food would be resulting in many diseases in the population (like food poisoning) and is fatal.

The triple burden of climate change, infectious diseases and non-communicable diseases are having a crushing impact on Pacific island countries. What is more unfortunate is the highest mortality rates in some Pacific island states due to non-communicable diseases. Also, there have been over 40 large infectious disease outbreaks in the region since 2012.^{xxxiv} Most of these outbreaks are the result of climate-sensitive diseases like dengue, chikungunya and Zika virus infections. Recently, the Pacific has witnessed what has been called the record-breaking extreme climate events. These events are not less than havoc as these often lead to the destruction of health facilities and essential health services, especially when required the most.^{xxxv}

Over Population

According to the Kiribati census (2015), the total population of the island country was about 110,136, of whom 50.9 per cent were female and 49.1 percent male.^{xxxvi} The majority of the population (51.2%) is located in the capital of South Tarawa (Gilbert Islands). Surprisingly, the population density in South Tarawa has mushroomed from 2,500 (2005) to 5,500 people at present.^{xxxvii} The population is further increasing rapidly (about 4.4%). This is majorly due to internal migration and high birth rates.

Worsening climate issues, overcrowding has led to numerous challenges such as the problem of sanitation and health aspect. The problems are further aggravating due to rapid population growth (2.2%). These challenges have amplified the vulnerability of Kiribati towards climate change, creating enormous pressure upon the population to migrate. The Government of Kiribati has been preparing itself for the worse. The former President, Anote Tong has even purchased 23 sq. Km of land in Fiji that cost around \$8 million USD in 2014.^{xxxviii} The main intention behind this was to prevent Kiribati natives from becoming refugees in the coming times.

One of the most vulnerable areas of Kiribati is Betio (a small islet joined to SouthTarawa). The population density here is even greater than that of Hong-Kong. Although, Betio doesn't have a few urban services and almost no high-rise apartments.^{xxxix} Due to the high population, pollution is high and sanitation poor. Only 20% of households have access to sewerage systems. Much to dismay, 64% of the population do not use toilets. Septic tank seeps into groundwater supply (leading to brackish water). The poor infrastructure and facilities are not in line with the rapid population growth.^{xl}

These are some of the many challenges faced by Kiribati people as a consequence of climate change. In spite of being the least contributor to economic degradation, these countries are facing extreme repercussions of climate change. These factors affect the countries at large but infringe on the human rights of Kiribati people that have been recognized as fundamental rights by the most nations and the U.N.

Transgression of Rights of the People of Kiribati due to Corollary of Climate Change

Right to Life and Livelihood

The universality of significance attached to the right to life could be perceived by its protection in both the UDHR^{xli} and the ICCPR^{xlii} as well in The Human Rights Act.^{xliii} It is evident that climate change affects multiple facets of human life. Due to climatic fluctuations and sea-level rise in Kiribati, there is consistent saltwater contamination, inability to grow crops, scarcity of drinkable/freshwater and severe health issues. The steps taken to prevent such environmental damages by the Kiribati Government are not sufficient. Such a grave situation poses a clear threat to the enjoyment of right to life of the people of Kiribati.

Toroua Beree(63), a resident of Kiribati says, "The reason that I left my village is because they don't have any more life on this piece of land. This is community land and so everyone has a right to live on it but now it seems like the sea has taken that away."^{xliv} This is not the plight of just a single citizen of Kiribati, instead the majority of the residents share the same plight. The real predicament lies not just in the direct violation of right to life but in the indirect

violation of various birth inherited human rights (such as right to livelihood, right to health, right to food, right to water, etc.) that are a threat to the proper enjoyment of right to life.

Apart from that, due to the rapid surge in population of Kiribati (84,396 in 2000 to 119,916 in 2020) and scarcity of habitable land, social tensions in form of violent fights that often lead to injuries and even death. Further, Due to the lack of Industrial and Agriculture infrastructure, unemployment rate in Kiribati is high which clearly indicates the grievous violation of right to livelihood, which is a basic right enshrined under UDHR.^{xlv}

Right to Health

The Universal Declaration of Human Rights, 1948 asserts health as a right within the adequate standard of living^{xlvi}. ICESCR acknowledges the right in connection with the attainment of both physical and mental health.^{xlvii} However, as the problem of overpopulation has been augmented in the islands of Kiribati, there is a constant spread of diseases (as the houses are now built close to each other). Consequently, the health of the population has deteriorated. There are problems of malnutrition, fish poisoning, Vitamin A deficiencies and other problems due to lack of food security.^{xlviii}

Moreover, poor quality of drinking water has brought down the health of children due to diarrhea and other hygiene issues.^{xlix} Amidst such conditions, it is not abrupt that Kiribati has the highest infant mortality rate in the western pacific.¹ Such conditions of poor health and improper standard of living are in clear violation of Right to Health, which is one of the essential rights. It is not obscure that the existing health problems in Kiribati are not a direct consequence of climate change, but undoubtedly, these problems have been exacerbated due to climate change.

Right to Water

The right to water is defined as the right of everyone to competent, secure, admissible, physically obtainable and affordable water for personal and domestic use.^{li} It is imperative to note that the right to water is restricted to water for personal and domestic use and does not cover other water uses.^{lii} The Right to water is deemed as an independent right imperative for subsistence. However, no Island on Kiribati has surface freshwater.^{liii} The only source of freshwater supply is water lenses in Tarawa.^{liv} Freshwater gathers in water lenses whenever rainfall occurs and rainwater seeps through the ground. Much to the dismay, the major source of freshwater on the islands of Kiribati is unfit for the supply of fresh drinking water due to waste contamination by the population living near them.^{lv} The contamination is not just limited to the freshwater source. The lack of accessibility to toilets has forced the people to use the sea or the beach, rendering the inshore fish uneatable and thereby contaminating the seawater too.^{lvi} This clearly indicates the lack of proper accessibility of the population to water for personal and domestic use. The lack of enjoyment of the right to water is a violation of a substantial number of rights (such as the right to food, right to health etc.), which are inter-linked to this right. Undeniably, climate change has pessimistically impacted water quality affecting the health of the population and rendering the realization of many substantial rights as impossible.

Right to a Healthy Environment

Right to Healthy Environment has been recognized at various international conventions, including UDHR, ICCPR and U.N. Conference on the Human Environment in 1972(Stockholm declaration).^{Ivii} In fact, the Inter-American Court of Human Rights has explicitly held that it is a basic human right that everyone should be entitled to.^{Iviii} However, the unstable situation in Kiribati has rendered these essential requirements extremely challenging. Climate change has made the situation in Kiribati as untenable and wrought a violent environment. Storm surges, high spring tides, and flooding of residential areas have led to environmental degradation, which results in issues like rise in sea level, saltwater contamination, housing crisis, land disputes and other fatalities. Further, due to saltwater contamination, crops are often destroyed. Even severe health crisis (particularly in children) and deaths are reported due to poor quality of drinking water and an overall lack of access to a healthy environment.

Kiribati's Government and Global Response Towards the Protection of Interest of Kiribati People

This research aims to identify and address global (including Kiribati's government) response related to the plight of Kiribati people. In this context, it would be inappropriate to state that the threat to livelihood and securities of people of Kiribati hasn't been addressed. The special case and vulnerability of the Island have been acknowledged in the 1989 UN Report on the Greenhouse Effect^{lix} and in the Rio Summit in 1992^{lx} followed by the legislations and the policies of Kiribati itself.

In order to safeguard the well-being of Kiribati's, the main agenda of Kiribati's Government is to build resilience and equip them with multifarious skills to combat challenging times ahead. To mitigate the effect of climate change, the following policies and legislations have been formulated during the last decade:

- National Disaster Risk Management Plan, 2019
- Kiribati Joint Implementation Plans for Climate Change and Disaster Risk Management 2014-2023 and 2019-2028
- Kiribati Climate Change Policy, 2018
- Kiribati 20-Year (2016-2036) Vision (KV20), 2016
- Kiribati Development Plan 2016-19
- Climate Change and Climate Risk Strategy 2014-2018
- National Framework for Climate Change Adaption, 2013
- Kiribati Integrated Environment Policy,2012
- National Sanitation Policy, 2010
- National Energy Policy, 2009
- National Water Resource Policy and Implementation Plan, 2008

All above-mentioned Policies and Legislations share the objective; to fulfill the obligations of Kiribati under the Rio Convention and other International Agreements by increasing resilience through sustainable climate change adaption and disaster risk reduction. To ensure efficient implementation and coordination at the national level, Kiribati's Government has established centralized coordination of climate change adaption (CCA) and financing, and a Climate Finance Division has also been established under the Ministry of Finance and Economics.^{bit}

These steps have been primarily taken to comply with the obligations under the United Nations Framework Convention on Climate Change (UNFCCC).^{kii} The country's struggle to combat the adversities of climate change is not just limited to the formulation of legislation but is, much more than that.

Kiribati has mainstreamed climate change and is continuously working in order to formulate responses and develop a framework. Construction of sea walls to protect the villages, infrastructure and roads have been supported continuously by the Government (which provides aid in the form of materials and required machinery). This has helped people to counter the imminent threat up to some extent. However, in long-run this would not be feasible as the resources are finite and other challenges are forthcoming.

At the Global level, the emphasis of Neighboring Countries International organization's aid in regard to the scenario in Kiribati has deflected towards climate change adaptation measures during the last few years.

Since Kiribati is one of the least developed nations and having the lowest GDPs and per capita income in the world, it gets foreign aid mostly from Taiwan, Japan, Australia, and New Zealand in order to maintain infrastructure development and public health initiatives.^{kiii} With the view to get employment at national and international labour markets, Kiribati people get skills under Australia's aid program. Australia had started a program '*Development for All 2015-2020*' with the aim to implement its educational policies by enabling disabled children to learn through the strategies adapted for the Kiribati context.

Under the supervision of the World Bank and Global Environment Facility, the Government of Kiribati commenced Kiribati Adaptation Programme (KAP) in 2003.^{lxiv} The main objective of KAP was to alleviate the country's vulnerability to climate change in three phases spread across the period of 2003-2016. Furthermore, in order to strengthen the resilience towards climate change and with a view to address the immediate requirement for adaptation, the government of Kiribati, in collaboration with the United Nations Developmental Programme (UNDP) and Global Environment Facility (GEF) broadened the scope of its earlier adaptation programs through the implementation of National Adaptation Programme of Action (NAPA). The action plan was implemented through a period from 2004-2007 with a funding of about USD 5,000,001 - USD 10,000,000.^{lxv} The key object of NAPA was to assist and impart a scheme that establishes a framework of adaptation by recognizing urgent adaptation requirements that are not in contradiction with the national development and climate change policies. Through NAPA, nine key project areas (that includes water supply, public awareness, education and planning, technology transfer, alternate energy source, resource and information programme, coastal zone management plan, climate change, and sea level monitoring plan) were specified for adaptation needs.^{lxvi} To strengthen the centralized planning of the adaptation plans, NAPA was integrated with KAP activities.

Although the Government of Kiribati, in collaboration with International organizations, has taken substantial steps to reduce the impact of environmental degradation, no concrete results have been visible. These plans were initially thought to bring about a massive change and the adaptation policy of the government was thought to be a potential solution for the time being. But, the constantly growing challenges (like saltwater contamination, lack of access to fresh water resources, inability to grow crops due to salt deposition and hygiene issues) are making it inevitable to adapt to changes brought forth by climate change.

They have failed in protecting the interest of Kiribati people at various stances, the most prominent being failure to incorporate climate refugees within the purview of the definition of 'Refugees'. This recognition could protect their rights and they could be subject to various privileges and protection which a designated 'Refugee' entails. This could be understood by the case of 'Ioane Teitiota', ^{lxvii} a Kiribati native who was denied asylum in New Zealand and was forced to return to Kiribati. He even appealed to UNHCR to grant him the status of 'Refugees', but the UN organization declined his request. ^{lxviii} Other natives of Kiribati have faced similar problems and this makes their situation worse. Consequently, they can neither enjoy their rights within their own territory nor move to another country as a 'Refugees'.

Suggestions

After a close look at the uncertain fate of the Kiribati population it is crucial to address the plight of climate refugees. There could not be a permanent solution for combating the hardships faced by climate refugees as the scope of improvement is almost negligible, especially for the Island countries like Kiribati, which is on the verge of getting wiped out in nearly a few years. In order to formulate proper solutions to redress the situation, the authors have discussed suggestions that could be effective in redressing the plight of climate refugees.

For an effective solution, a multi-faceted approach at the local, national and trans-national levels that includes not just the governments and national and international organizations but also the local people are essential. The authors aim to discuss both temporary and permanent solutions in this regard.

Temporary solution

The surge in the number of climate refugees could not be combated at once. This necessitates the formulation of some temporary measures to help those who are affected by climate change. Seeking refuge in neighboring countries could be challenging. Assisting the migrants in their own country would save many pain and hardships that they might face. Assistance could be provided in various ways, such as:

- By setting up of 'climate funds' at local level for financing the people who are worst-hit by climate change. Funds could be set up at the national level to provide financial assistance to those who seek refuge in neighboring countries. This would be a self-sufficient measure that would involve local people to resolve their own plights in a dignified manner.
- Conversion of compatible inhabitable places into habitable shelter-homes could serve as an alternative. This would prevent the locals from migrating to other countries and would provide an opportunity for them to establish themselves in their home country.
- Construction of 'climate-resilient' towns to cope up with climate change. The contribution of the International community in this regard is crucial.
- Mass Awareness and proper implementation of policies is also essential.

Even the temporary solution would require full assistance from the international community. These temporary solutions would act as a dignified alternative to migration. This would also reduce the burden on neighboring countries that deal with a regular influx of climate refugees and provide ample time for the countries dealing with climate change to take-up permanent measures for their re-location.

Permanent solution

After looking at the case of Kiribati Island, it is certain that the temporary solution for countries like Kiribati would not only be ineffective but also would diminish the chances of their relocation. Since Climate change is a product of man's actions all around the world, immediate permanent measures that would encompass the assistance of neighboring countries would be an impactful remedy. Permanent solutions could include the following:

- The home country should initiate a 'skill-teaching scheme' that would enable the local population to learn some essential skills that are productive. These skills could be advantageous and would provide a medium to earn while the population permanently relocates to other countries. This would provide a dignified refuge.
- Countries should start an incentive to provide citizenship to the migrants who have spent a considerable amount of time in a particular region.
- Global Community needs to take seriously and fulfill its obligations as per the Paris Agreement of UN COP 21 i.e. to reduce or control emission levels or temperature rise.
- International documents and Conventions should be amended to provide incentives and recognition to climate refugees.
- · Globally, encouragement and support must be provided to create Artificial Island or purchase habitable Island for the Government to Kiribati and respect the policy 'Migration with Dignity 'of Kiribati's Government.
- The neighboring countries should not de-limit the people migrating due to the environmental crisis to the shelter-homes. Rather they should be given basic opportunities to earn their livelihood in a dignified way.

It is a well understood fact that the permanent solution to this predicament would first involve recognizing climaterefugees on a broader scale by the countries. The lacuna in the existing laws and the deteriorating situation of the climate refugees necessitates the formulation of a widely accepted definition of the term and determining the solutions for their very survival. Consolidation and harmonization of efforts on a global level in an integrated manner could reduce the burden of developing countries to deal with the situation. Policy support is essential to standardize the prospects of re-location internationally.

Conclusion

It is manifest from the various reports that the countries responsible for high emission rarely face such adverse effects of climate change in comparison to countries like Kiribati, who play a negligible role in high emission. In pursuant to the IPCC Report and the address of Kiribati's President, Anote Tong, in the 60th session of the UN General Assembly of 2005, it is imperative that the people of Kiribati have to look upon the likelihood of permanent relocation with the developing adoption strategies as the other form of adaption might be too late for the people as well as for the nation.

Keeping the vulnerability and alarming conditions of Kiribati's people, it can be concluded that the need of the hour is to interpret and define the term 'Climate Refugee' in the broader sense to protect their kaleidoscopic basic birth inherited social, political, and economic rights. To curb the abuse of these rights, the Government of Kiribati has to augment resilience through sustainable climate change adaptation and disaster risk reduction using a whole-of-country holistic approach and the global community needs to take two stringent steps; to fulfill their obligations enshrined under various human rights and environmental conventions, treaties, and declarations; with the aim to respect and promote 'dignified migration' and to control or reduce emission levels to minimize the rise in sea level and other deteriorating factors of climate change, respectively.

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