

# Arresting the Climate Deterioration and its Impact on Health in Small Islands: World Health Organization

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## Abstract

The global consensus is that climate change is no longer confined with environmental aspects; instead it remains a grave risk for the health, wellbeing and survival of all of us, regardless of our geographical location. It has been observed that those who account least for the climate deterioration have to face the maximum impact, as experienced by 65 million people living in the small island states, who are quite vulnerable to the various climate adversities. In order to meet the needs of these vulnerable people, the World Health Organization in collaboration with other international agencies & national governments has developed an initiative to protect people from climate-related consequences. To conclude, the health of people living in small islands is directly determined by the prevailing environment standards. Thus, it is of immense importance to arrest climate deterioration, which essentially requires careful planning and immense collaboration between different stakeholders.

**Keywords:** Public health. Climate. Small islands. Environmental health. World Health Organization.

## Introduction

The global consensus is that climate change is no longer confined with environmental aspects, instead it remains a grave risk for the health, wellbeing and survival of all of us, regardless of our geographical location [1,2]. It has a significant impact on the social and environmental attributes of health, whether it is pertaining to the availability of clean air or safe drinking water or even adequate food and safe housing. Moreover, climate change adds to the spread of communicable diseases, as well as rise in the incidence of lifestyle diseases. Considering the multiple effects of climate on different aspects of human life and survival, it is the need of the hour to prioritize the issue on global forum and take targeted interventions to arrest the climate deterioration and also implement measures to improve it further [1-4].

## Consequences of Climate Changes

At this juncture, it is important to acknowledge that the adverse consequences of climate changes are not a futuristic event, but the people have started to feel its impact in the form of extreme weather conditions, and increase in frequency & intensity of disasters [1,3]. It won't be wrong to say that regions with poor health infrastructure will be finding it very difficult to meet the needs arising because of climate change, especially

without any aid from the external agencies [2,3,5]. In-fact, it has been estimated that climate change will be accounting for almost \$ US 3 billion on an average each year in terms of direct health expenses [1].

Climate change has been linked with the development of a spectrum of health consequences, including adverse environmental attributes (such as rise in temperatures, extremes of weather, increase in the level of carbon dioxide in atmosphere and rising water levels in sea), which directly as well as indirectly affects the health status [2,5]. Extremes of weather have been linked with the occurrence of injuries, mortality and mental health issues, while the air pollution has been associated with the development of asthma and cardiovascular diseases [6]. It is important to note that climate deterioration brings about a change in the vector ecology and thus the incidence of various vector-borne diseases (viz. Malaria, Dengue, Chikungunya, Japanese Encephalitis, etc.) has shown a considerable rise [1-3].

Further, the increasing allergens in atmosphere has accounted for the development of respiratory allergies and asthma, including their exacerbations [6]. Moreover, the water quality also takes a toll and it manifests in the form of development of cholera, cryptosporidiosis and leptospirosis. At the same time, the water and food supply mechanism are also affected, which then plays an important role in the development of malnutrition and various diarrheal diseases [7]. In addition, due to the environmental degradation, people are compelled for forced migration and even rise in the incidence of civil conflicts. Finally, extreme heat has been linked with the development of heat-related illnesses (viz. heat hyperpyrexia, heat stroke, etc.), cardiovascular failure and even deaths [2-4].

## Impact of Climate Change on Small Islands

Further, it has been observed that those who account least for the climate deterioration have to face the maximum impact, as experienced by 65 million people living in the small island states, who are quite vulnerable to the various climate adversities [1]. In order to meet the needs of these vulnerable people, the World Health Organization in collaboration with other international agencies & national governments has developed an initiative to protect people from climate-related consequences [1,3]. The plan is set to accomplish four goals by 2030, namely to support stakeholders in small island nations to draw more attention towards the impending climate-related threats, to accumulate facts to attract financial support to contain the health effects of climate change, to have a better preparedness & prevention strategies, and to triple the existing monetary support for climate and health in small island nations [1].

Moreover, most of such vulnerable island nations have initiated newer approaches to improve the flexibility of the health care delivery system to effectively respond to the climate deterioration [1,8]. However, the extent of outcome cannot be sustained, unless we address the basic causes responsible for climate change [2,3]. Nevertheless, approaches to develop partnership with various agencies, creating awareness about the impact of climate change on health, and providing support for the implementation of the public health response to climate alteration, is expected to deliver long-term benefits [1-4,8].

## Important Milestones in Climate Control

The member states of the United Nations formulated a Framework Convention on Climate Change and these members have been meeting every year once since 1995 to assess the progress of the world in dealing with the climate deterioration. One among the first important milestones has been the signing of the Kyoto Protocol in 1997, which set legally

binding norms for the developed nations to minimize the emission of greenhouse gas. This was followed by a conference in 2010, where it was decided that the future level of global warming should be reduced to less than 2.0°C [9]. Subsequent important milestones were Doha Amendment and Paris Agreement [9].

Despite all these interventions, some nations have not contributed towards the reduction of the emission of the green-house gases. These nations have been offered carbon credits and also made to sign the legally binding documents, which compels them to take targeted interventions to improve the existing status. Further, technical assistance has also been offered by the developed nations to mechanize and adopt better methodologies to minimize production of greenhouse gases. Further, the international welfare agencies have come forward and have given more emphasis towards the need of the research activities to ensure that adequate evidence is available to help the policy makers to take evidence-based and informed decisions [10].

## Conclusion

To conclude, the health of people living in small islands is directly determined by the prevailing environment standards. Thus, it is of immense importance to arrest climate deterioration, which essentially requires careful planning and immense collaboration between different stakeholders.

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