What risks are associated with climate change and what should we be doing about it?

Climate change is one of the most pressing challenges facing our planet today, with farreaching consequences for the environment, society, and the global economy. Rising global temperatures, extreme weather events, and sea level rise are just a few of the physical risks associated with climate change. In addition to these, there are ecological risks such as biodiversity loss and habitat destruction, as well as socio-economic risks like food and water scarcity and population displacement. This essay explores these climate change risks and delves into the role of climate change protest groups, their successes in raising awareness about the climate crisis, and the controversies surrounding their actions.

One of the most evident physical risks of climate change is the rise in global temperatures. Currently, the global surface temperature has reached 1.1 degrees centigrade above 1850-1900 in 2011-2020. (IPCC [Core Writing Team), this figure is "more likely than not" (Hodgson) going to increase to 1.5 degrees centigrade in the near-term. Increased greenhouse gas emissions trap heat in the Earth's atmosphere, leading to heatwaves that can have dire consequences for human health and agriculture. Moreover, climate change intensifies extreme weather events, such as hurricanes, droughts, and floods. Hurricane Katrina 2005 is a well- documented example, causing extensive damage and displacement of communities in New Orleans (NOAA) Rising temperatures also contribute to sea level rise, resulting in coastal flooding and the endangerment of low-lying coastal communities. The Marshall Islands in the Pacific face the risk of becoming uninhabitable due to sea-level rise. (Malcolm Skinner).

Climate change poses significant threats to ecosystems and biodiversity. As temperatures shift, species are forced to migrate to adapt to changing conditions, often resulting in the displacement or extinction of vulnerable species. The decline of polar bears due to melting sea ice in the Arctic serves as a poignant example (Parmesan). Additionally, habitat destruction due to factors like deforestation and urbanization exacerbates these risks. The Amazon rainforest, often called the "lungs of the Earth," faces deforestation and habitat fragmentation, endangering countless species (Hannah)

The socio-economic risks associated with climate change are wide-ranging. The altered climate patterns can lead to food and water scarcity, affecting global food security and exacerbating conflicts over resources. Syria's civil war, in part attributed to water scarcity exacerbated by climate change, exemplifies this (Wheeler and von Braun)Displacement of populations due to climate-related events, such as rising sea levels and extreme weather events, has become a pressing concern, leading to climate refugees. Bangladesh is experiencing this first-hand, with millions at risk of displacement due to flooding (UNHCR). Furthermore, the economic impacts of climate change are substantial, affecting industries, agriculture, and infrastructure development, resulting in substantial economic losses.

Climate change protest groups are grassroots movements and organizations that advocate for urgent action on climate change. Their objectives include raising awareness, influencing policies, and pressuring governments and corporations to take meaningful steps to combat climate change. Notable groups include Just Stop Oil, Extinction Rebellion, and Greenpeace. These groups have been instrumental in raising awareness about climate change on a global scale. Events like the Global Climate Strikes, led by young activists like Greta Thunberg, have garnered immense media attention and inspired millions to join the movement. The

pressure exerted by these groups has led to significant policy changes in several countries, including the adoption of ambitious climate goals and the divestment from fossil fuels by institutions and corporations (Thunberg). Despite their successes, climate change protest groups have faced controversy. Critics argue that their tactics, which often involve civil disobedience and disruptive protests, inconvenience the public and disrupt daily life. The Extinction Rebellion's blocking of major roads in London in 2019 is a notable example. Some question the effectiveness of such disruptive actions in achieving long-term change, and often causing more harm than good as the public view of addressing climate change, in some cases, is becoming negative. However, supporters argue that these tactics are necessary to draw attention to the urgency of the climate crisis and force decision-makers to take immediate action (Stephens). Therefore, whilst climate change protestors are key to bringing a voice to the movement, much more needs to be done to address climate change.

Mitigation Strategies such as transitioning to renewable energy sources, implementing energy efficiency measures, and supporting reforestation and afforestation projects are crucial for reducing greenhouse gas emissions. As these measures can help slow down the rate of global warming and mitigate its impacts. Yet as climate change is a global problem, it requires a global solution, with international agreements like the Paris Agreement play a pivotal role in fostering cooperation among nations to reduce emissions and mitigate climate change. Therefore, keeping governments accountable for their promises is critical. For example, governments alone have promised to plant 633mn hectares of trees to help save the planet, (Heal) such a 'laudable' task and a great step in the right direction for resolving the climate crisis. However, there are many issues with its plausibility, as seen through the example of India, whose climate pledge involves changing the land use of nearly two-thirds of its land (59%). In the world's most populous country (Ellis-Petersen), it is clear to see the potential issues with carrying out such a project. This shows that although international agreements and climate pledges may seem like the key to ending climate change, the public need to be wary of 'greenwashing' by governments (and companies).

In conclusion, climate change presents a wide range of risks to our planet, affecting the environment, society, and the global economy. Climate change protest groups have played a significant role in raising awareness and pressuring governments and corporations to act. While controversies surround their methods, their successes in mobilizing the public and catalysing policy changes are undeniable. To combat climate change effectively, a comprehensive approach involving mitigation, adaptation and international cooperation, is necessary. It is incumbent upon us all to address this urgent global challenge and work towards a sustainable future for our planet and future generations.

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