The Effect of Public Influence on Policy Alternatives to Mitigate Climate Change Risks : A Comparative Study in Developed and Developing Countries

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Agriculture plays a decisive role in the global economies and remains central to the lives of a great many people around the world. It has been widely accepted that climate change has caused numerous challenges to the agriculture sector, but comprehensive and effective steps are yet to be taken by some nations. Sri Lanka is identified as one of the nations severely affected by climate change risks and falling into this category. This is a policy deficiency because most developed economies have taken policy decisions to limit carbon dioxide emissions that cause climate change even though their economies are dependent on the fossil fuel. During the past decades public opinion has shifted to concern climate change risks across the world demanding government policy alternatives to limit the carbon dioxide emissions. In this context, in developed economies public opinion has substantially influenced development of policy alternatives to investment in renewable energy to reduce carbon dioxide emissions caused by fossil fuels. This benefits the agricultural sector because the agriculture is the sector worst hit by climate change. To address this policy gap, the objective of this paper is to explore how Sri Lankan public concern about climate change and agriculture effects on policy alternatives to mitigate the climate change risks, by comparing it with the same trend in the United States. The secondary data obtained from the Google trends information from 2015 - 2020, and the emissions data disclosed by fossil fuel companies for the same period. Excel spreadsheets are used to give graphic and numerical outputs in a time - series using descriptive analysis method. The outcome of our graphical analysis reveals public concern has had a real impact on emission reductions in the US, an advanced economy, leading to a reduction of over 100 million tonnes of emissions annually, while, Sri Lankan's public concern about climate change is highly unlikely influence policy alternatives to avoid climate change risks, leading to increasing emissions and risking the agricultural industry and the Sri Lankan economy.

Keywords: Agriculture, Carbon dioxide emissions, Climate change, Policy, Public Concern