

CLIMATE CHANGE AND SEA LEVEL RISE IN THE LAST DECADE, FROM THE PERSPECTIVE OF GOALS SET IN THE PARIS AGREEMENT-AN APPRAISAL

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ABSTRACT

In the United Nations Framework Convention on Climate Change (UNFCCC), during the conference of 196 parties on 12 December 2015, the Paris Agreement was an international treaty on climate change aiming to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. It was for the first time a binding agreement took place bringing all nations into a common cause towards undertaking ambitious efforts to combat climate change. The parties agreed to adopt economic and social transformation, based on the best available state of the art of science to strategize the adaptability to unavoidable imminent changes. The first 5-year cycle of increasingly ambitious climate action carried out by countries is now over and at the end of 2020, while entering into the new decade, it's time to evaluate the effect based on the decided obligations of the participating national governments – the most important being the development and implementation of their “nationally determined contributions” (NDCs). Scientific research, being a continuous process there has been evaluation in the theories related to climate models and the speculations had been undergoing changes. Although the melting of large quantity of ice was not fully unexpected but the acceleration of melting in the last lustrum and the expected huge volume of melt water has led the scientific community to believe that the speculations on the resultant effects of warming could vary to a large extent. The agreement was entered into force on 4 November 2016 and meanwhile there has been continuation of accelerated increase in melting of ice shelves in Greenland and Antarctica. Besides, almost simultaneously in the decade from 2010-20, a number of anomalies in IPCC projections, observations on uncertainties and advent of CMIP5 to CMIP6 have also been documented in literature. Based on these facts by researching in different randomly chosen publications vis-à-vis current observations of United Nation Environment Programme Report 2020 and Climate-Transparency-Report-2020, this paper retrospectively inspects the past findings. The paper attempts to evaluate the present situation and assess how much has been achieved as per Paris agreement. While evaluating the achieved goals, the recent approaches on effect of orography, glacier geo engineering and ansatz approach have been examined this may usher out a clue towards newer direction of research.

KEYWORDS: Climate Change, Global Warming