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A Study to Examine the Use of Traditional Agricultural Practices to Fight the Effects of Climate Change

Authors: Rushva Parihar, Anushka Barua

Abstract : The negative repercussions of a warming planet are already visible, with biodiversity loss, water scarcity, and extreme weather events becoming ever so frequent. The agriculture sector is perhaps the most impacted, and modern agriculture has failed to defend farmers from the effects of climate change. This, coupled with the added pressure of higher demands for food production caused due to population growth, has only compounded the impact. Traditional agricultural practices that are routed in indigenous knowledge have long safeguarded the delicate balance of the ecosystem through sustainable production techniques. This paper uses secondary data to explore these traditional processes (like Beejamrita, Jeevamrita, sheep penning, earthen bunding, and others) from around the world that have been developed over centuries and focuses on how they can be used to tackle contemporary issues arising from climate change (such as nutrient and water loss, soil degradation, increased incidences of pests). Finally, the resulting framework has been applied to the context of Indian agriculture as a means to combat climate change and improve food security, all while encouraging documentation and transfer of local knowledge as a shared resource among farmers.

Keywords: sustainable food systems, traditional agricultural practices, climate smart agriculture, climate change, indigenous knowledge

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