Ideation Phase
Literature Survey

Date	19 September 2022
Team ID	PNT2022TMID21508
Project Name	Project - Exploratory Analysis of RainFall Data in India for Agriculture

S.NO	RESEARCH PAPER	AUTHORS	ALGORITHM USED	DATASET	INFERENCE
1	An Exploratory Study on Occurrence and Impact of Climate Change on Agriculture in Tamil Nadu, India	R.Jayakumara Varadan, Pramod Kumar, Girish Kumar Jha & Suresh Pal Division of Agricultural Extension, Indian Agricultural Research Institute, New Delhi, India	**Magnitude and significance of temperature trend:** Sen's Slope Estimator, Mann-Kendall Rank and Correlation Test **Climate change:**Pettitt's Homogeneity Test, Cumulative Sum Charts, sequential version of Mann Kendall Rank Statistic and **Change in rainfall pattern:** The Box-and-Whisker Plot	India Meteorological Department (IMD) is operating 16 weather stations across Tamil Nadu, the 31st sub-division whose daily data are being maintained since 1969. Among them, five stations located at Vellore, Salem, Coimbatore Airport Tiruchirapalli Airport and Madurai Airport with best set of data were selected for the study	This journal has been undertaken to examine the occurrence of climate change in Tamil- -Nadu, and its impact on rainfall pattern which is a primary constraint for agricultural production and examined across the State, the minimum temperature has been increased and decresed Consequently, Further climate change seen across the State necessitates devising different indigenous and institutional adaptation strategies for different regions to overcome the adverse impacts of

					climate change on agriculture.
	LINK: yhttps://www.researchgate.net/profile/R-Varadan/publication/285673014_An_exploratory_study_on_occurrence_and_impact_of_climate_change_on_agriculture_in_Tamil_Nadu_India/links/585f54d508ae8fce4901808f/An-exploratory-study-on-occurrence-and-impact-of-climate-change-on-agriculture-in-Tamil-Nadu-India.pdf				

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2	Statistical Analysis of Rainfall Data Subject To Maharashtra, India	Govind Satkur , Ajinkya Jadhav and	The nonparametric test namely Mann-Kendall is employed to analyse the overall trend in the monthly rainfall data and All the Statistical analysis is carried out using R programming Language.	The secondary data is collected from The government website namely data.gov.in. From the period 1901-2017	Rainfall being the most significant climatic variable it is necessary to analyse it over a long period of time. It's crucial factor mainly for those who are associated with primary activities. It directs us to cope with lot of possible adversities that may cause either due to lack of rainfall or due to more than adequate rainfall. To detect the trend the non-parametric Mann-Kendall test was applied. The declining trend was found throughout these years It suggests that minimum rainfall dominated the maximum rainfall in all sub regions of Maharashtra
	LINK: http://researchdirections.org/Management/articleupload/article744.pdf				

S.NO	RESEARCH PAPER	AUTHORS	ALGORITHM USED	DATASET	INFERENCE
3	Flood forecasting using Internet of things and artificial neural networks	Prachatos Mitra; Ronit Ray; Retabrata Chatterjee; Rajarshi Basu; Paramartha Saha; Sarnendu Raha Rishav Barman Saurav Patra	Wireless Sensor Network Internet of things Artificial Neural Network ZigBee	The optimal input data is selected with consideration of the correlations between rainfall and inundation data.	India is one of the worst flood-affected countries in the world based on the annual rainfall. They use number of IOT and based techniques but the challenge is that no one has attempted the possibility of occurrence of flood rainfall intensity. So they can deep neural network for accuracy flood prediction.
	LINK : https://iwaponline.com/jwcc/article/11/4/1766/70881/Flood-prediction-based-on-weather-parameters-using				

S.NO	RESEARCH PAPER	AUTHORS	ALGORITHM USED	DATASET	INFERENCE
4	Rainfall Distributions in Sri Lanka in Time and Space An Analysis Based on Daily Rainfall Data	T. P. Burt 1, And K.D.N. Weerasinghe 2	An extended series of SST anomaly data for equatorial regions of the Pacific Ocean based on were used and The Southern Oscillation Index (SOI) can also be used to characterize the strength of an El Niño event. Pearson correlation coefficients were used to identify significant relationships between seasonal rainfall dat	A complete record of daily rainfall data was compiled for the Mapalana station, which is maintained by the Faculty of Agriculture,University of Ruhuna. And Daily rainfall data have also been used to provide measures of direct value to the farming community.	Daily rainfall totals are analyzed for the main agro-climatic zones of Sri Lanka. The emphasis is on daily rainfall rather than on longer-period totals, in particular the number of daily falls exceeding given threshold totals. To detect positive correlations with Pacific sea-surface temperatures during the north east monsoon and negative correlations at other times. It is emphasized in the discussion that Sri Lanka must be placed in its regional context and it is important to draw on regional-scale research across the Indian subcontinent and the Bay of Bengal.
	LINK: https://mail.google.com/mail/u/3/#inbox/QgrcJHsbfltGsGNdpxDnWFnZKqlcGdgwKZV?compose=new&projector=1&messagePartId=0.1				