

Analysis of Coffee Output Variations as Correlate of Weather Variables in Nigeria

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SUMMARY

Rain-fed husbandry has remained the most established practice of crop cultivation in Nigeria. In spite of this, evaluation of crop-yield-weather relationship is not given a well deserved attention. In view of the fact that these variables play a key role in determining crop yield, this study evaluated weather effect on Nigerian coffee output for the period 1991-2005. Secondary data (from sources such as the international coffee organization) were obtained and analysed with Parvin model of decomposing total yield variation into technology and weather effect. The linear trend model was chosen as the lead equation for the Parvin model using statistical and econometric criteria. Also key parameters estimates were significant, the correlation coefficient (r) was 0.731 and F – stat = 14.62 ($p < 0.01$). Analysis revealed that if the weather was (consistently) “ideal”, bean yield could have been 14.22% higher than obtained while if (consistently) “unideal”, bean yield could have been 14.78% lower than obtained during the period under review. Therefore, attention need be paid to weather influence on crop production by policy makers and scientists to achieve the policy objective of resuscitated agro-allied driven (Nigerian) economy.

Key words: coffee, weather, Parvin model, rain-fed husbandry