

# Ethno-Meteorology of Upper Mazaruni: Uncovering Indigenous Knowledge of the Kapon Akawaio People

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Despite ongoing research and interest into indigenous knowledge systems globally, Guyana has yet to draw on the insights of its indigenous peoples. This study describes how the Kapon Akawaio peoples predict and interpret various hydro-meteorological phenomena in Upper Mazaruni; an area with very limited to no access to scientific meteorological information produced by the Guyana Hydro-meteorological Service. The research adopted a mixed methods approach incorporating both quantitative and qualitative methods. Questionnaire survey (n=171), focus group discussions, and key informant interviews were used to collect data from randomly sampled household heads, and purposively sampled elders and community members, respectively. It was found that the Kapon Akawaios do have a repertoire of ethno-meteorological knowledge evidenced through the identification of 92 biophysical and cosmological indicators, which are used to predict rain, sun, water levels, and seasonal onsets. Seventy-seven (77) biological, eight (8) physical, and ten (10) cosmological indicator sets were elicited, of which the majority (85.7%) relied on plant phenology. The findings of this study augment global research on ethno-meteorological knowledge which suffers spatial gaps, and expose the need for further studies in this field across Guyana. They further show that indigenous knowledge systems can provide resources for indigenous peoples in improving livelihoods and adapting to climate variability and change. Importantly, there is need for an information dissemination network to supplement local knowledge in the Upper Mazaruni.

**Keywords:** Ethno-meteorology; indigenous knowledge; weather forecasting