ID: 107

Farmers' indigenous knowledge indicators employed for climate change adaptation in the Tolon District, Ghana

Ammal Abukari

Department of Forestry and Forest Resources Management, Faculty of Natural Resources and Environment, University for Development Studies, Tamale, Ghana

Abstract

In Ghana, many indigenous farmers rely on rain-fed agriculture for their subsistence. Thus, reliable local weather predictions are crucial for informing indigenous farmers of climate change alternatives. The literature is replete with examples of how scientific understanding has fallen short in rural areas.

Over the past century, indigenous knowledge has aided rural farming families in meeting the challenges posed by climate stresses and enhancing decisions for adaptation mechanisms. To guarantee that indigenous knowledge systems receive enough commendation, there is much space for improvement in the assessment procedures. This research seeks to investigate farmers' perspectives on indigenous knowledge of weather forecasts for climate adaptation and to evaluate farmers' perceptions regarding climate change in the Tolon district of Ghana. The study used questionnaires, interviews and focus group discussions to gather information on farmers' indigenous knowledge indicators for weather forecasting within communities in the Tolon district. The findings showed an array of farmers' indigenous indicators for weather forecasting, including the star and moon movement, the emergence of red and black ants, wind movement, flowering and fruit production of some indigenous trees, behaviour of certain trees (unfurling baobab tree new leaves), croaking of frogs, birds, the appearance of rainbow and lightening. A deeper understanding of indigenous knowledge networks should be a critical factor in choosing effective adaptation methods for climate change. Therefore, it is recommended that policymakers improve indigenous communities of the effects of climatic stresses to boost agricultural output.

Keywords: *Indigenous knowledge systems; adaptation strategies; indigenous farmers; Tolon district; indigenous indicators; climate change*