# Economic Analysis of Cowpea (Unguiculata spp) Production in Northern Nigeria: A Case Study of Kano Katsina and Jigawa States

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**Abstract :** Nigeria is the largest cowpea producer in the world, accounting for about 45%, followed by Brazil with about 17%. Cowpea is grown in Kano, Bauchi, Katsina, Borno in the north, Oyo in the west, and to the lesser extent in Enugu in the east. This study was conducted to determine the input–output relationship of Cowpea production in Kano, Katsina, and Jigawa states of Nigeria. The data were collected with the aid of 1000 structured questionnaires that were randomly distributed to Cowpea farmers in the three states mentioned above of the study area. The data collected were analyzed using regression analysis (Cobb–Douglass production function model). The result of the regression analysis revealed the coefficient of multiple determinations, $R^2$, to be 72.5% and the F ration to be 106.20 and was found to be significant ($P < 0.01$). The regression coefficient of constant is 0.5382 and is significant ($P < 0.01$). The regression coefficient with respect to labor and seeds were 0.65554 and 0.4336, respectively, and they are highly significant ($P < 0.01$). The regression coefficient with respect to fertilizer is 0.26341 which is significant ($P < 0.05$). This implies that a unit increase of any one of the variable inputs used while holding all other variables inputs constants, will significantly increase the total Cowpea output by their corresponding coefficient. This indicated that farmers in the study area are operating in stage II of the production function. The result revealed that Cowpea farmer in Kano, Jigawa and Katsina States realized a profit of N15,997, N34,016 and N19,788 per hectare respectively. It is hereby recommended that more attention should be given to Cowpea production by government and research institutions.

**Keywords :** coefficient, constant, inputs, regression