B-68: A comparative analysis of the risk of growing pigeonpea, cowpea, maize and chilli under raintfed conditions in the Dry Zone

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Farming in the Dry Zone under rainted conditions is characterized by high variability in profits and a section of the farming community incurring losses. Crops that generate losses frequently are not acceptable to risk averse farmers. This study was conducted to compare the risks of growing pigeonpea, cowpea, maize and chilli under rainfed conditions in Anuradhapura district of the Dry Zone. The inter-farm variations of the profit over cash and opportunity costs, the profit over the cash costs, the profit components of yield, price, and gross income were also analysed.

Data relevant for 1995/96 Maha season were gathered by a survey after the season. Profit components were standardized and made comparable among crops by computing the ratio of the farmer's value and maximum value component from the sample. Cumulative relative frequencies were estimated for the profits and standardized components of profits and point estimates of the variability of profit components was also made.

The yield and income risks rise from maize, cowpea, pigeonpea to chilli. Having a fixed forward price for pigeonpea has eradicated the price risk and the price risk increases from pigeonpea, chilli, maize to cowpea. All cowpea and maize farmers and 65% and 69% respectively of pigeonpea, and chilli farmers incurred losses when costs were imputed for family owned inputs. For commercial farming, the risk increases from pigeonpea, maize, cowpea, to chilli. All cowpea farmers but 6%, 11%, and 25% respectively of pigeonpea, maize and chilli farmers have not recovered at least the cash cost. For subsistence farming, the risk increases from cowpea, pigeonpea, maize to chilli.