Influence of Assets in Shoring Up Risk Bearing Ability of Smallholder Family Operated Coconut Farm Households

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In Sri Lanka, 99 % of the coconut supply for Sri Lankan consumer is provided by the small holder cultivators, whose meager assets make them vulnerable to swinging climatic pattern. If risk bearing ability (RBA) of the small holder farmer is enhanced, it would be possible to prevent them from abandoning coconut cultivation altogether. if import can be stalled in coconut industry by improving the RBA of farm households, it would be considered a success. From literature it could be argued that one of the critical determinants of RBA is the assets belonging to the small holder farmer. But research with regards to the specific case of coconut plantation small holders and the role of their assets in RBA are hard to come across. Hence the objective of this research is to identify these arrangements or determinants that buttress the risk bearing ability of the sample community. Taking 128 small holder family managed coconut farmers in the Kurunagala district as a typical-case purposive sample, pretested structured questionnaire being employed; the required data were elicited. Having checked the normality of the collected data it was analyzed in the Structural Equation Model (SEM). The inference revealed that the small holder farmers' 'Risk bearing ability' exogenous latent variable- was significantly correlating with 'Assets' -endogenous latent variable- in possession of the small holder coconut cultivators. The elements of assets which are 'land extent in cultivation' (5.825), 'Numbers of bearing trees' (59.347), 'Land leased or rented out by the farmer' (0.0156), 'Livestock or poultry if in possession of the farmer' (0.0105), all these are statistically significant at 1 %, 1 %, 1 % and 10 % α levels respectively, and are positively correlated with RBA of the farmer. However, 'Age of bearing trees' (-0.2508), 'Other agricultural land' (-0.0223), and 'Uncultivated land' (-0.0102) are statistically significant at 5 %, 10 %, and 10 % α levels respectively, and correlated negatively with RBA. Thus, it is expedient to give an understanding of the causes for dwindling coconut yield and compensatory measures to address the adverse effect of climate change with awareness of avenues to be explored such as livestock or poultry farming to the smallholder coconut farmers to head off risk.

Key words: Smallholder, RBA, coconut farmers, Assets, Structural Equation Model