

## **A study on the impact of field related non-crop factors on the worker productivity in rubber plantations**

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This study tries to identify field related non-crop constraints faced by the workers in rubber estates. In this study any factor exist in the field that might have a bearing on worker productivity other than the rubber crop was envisaged as non crop field factor. Special emphasis was given to the non crop factors like quality of the knife, physical disturbances caused by weeds on the field, occurrence of leeches and serpents, and slope of the land.

This study was carried out in selected rubber estates in Horana, Deraniyagalla and Mawathagama areas. Data were collected by conducting face-to-face, in-depth interviews with workers, field staff and the executive management of relevant estate using a questionnaire. In addition to that some of the relevant data were collected by observations at the field.

Among many non-crop field related factors, which are affecting the worker productivity quality of the knife, slope of the land, existence of leeches and serpents and physical disturbance caused by weeds are found to be the major contributors respectively.

60% of the overall respondents admitted that quality of knives is poor. The study revealed that tappers with higher yields have very good quality knives. According to the workers responses, slope happens to be another major disturbing factor. Serpents and leeches reduce the level of productivity of tappers significantly. Worker productivity of the tappers who are tapping on lands with weeds is significantly low ( $p= 0.05$ ) compared to better managed fields. Non-crop field factors such as quality of the tapping knife, slope of the land, existence of leeches and serpents and physical disturbance caused by weeds has significant effect on the tapper productivity (grams per tree per tapper) in rubber plantations in Sri Lanka.