

Good soils have names: local soil classification and management in West New Britain Province, Papua New Guinea.

Claire Docherty¹, Paul N. Nelson², Gina Koczberski³, Steven Nake⁴, and Lisa Law⁵

¹ James Cook University, Cairns QLD 4870, Australia, claire.docherty@my.jcu.edu.au

² James Cook University, Cairns QLD 4870, Australia, paul.nelson@jcu.edu.au

³ Curtin University, Perth WA 6845, Australia, g.koczberski@curtin.edu.au

⁴ Papua New Guinea Oil Palm Research Association, Kimbe WNB 621, Papua New Guinea, steven.nake@pngopra.org.pg

⁵ James Cook University, Cairns QLD 4870, Australia, lisa.law@jcu.edu.au

This paper reports on a study of local perceptions of soil fertility and management in a region of West New Britain Province, Papua New Guinea, where the bulk of the population are semi-subsistence farmers involved in the cultivation of food crops and oil palm. The aim was to determine local soil knowledge and to understand how this knowledge shapes the management of soil for food crops and oil palm (introduced within the last 40 years). Soil knowledge was found to be interwoven in the daily practices associated with food cultivation. The process for passing down agricultural and ecological practices was characterised by oral transmission and a culture of learning through experience, repetition and amendment. There was also strong evidence in the local soil classifications of a dominant discourse on soils and their relationship with particular crops, especially taro. If the soil ceased to produce adequate taro it was not considered soil, it was *kama ko kora magassa* translated literally as ‘no good ground’, and it would be fallowed until regarded as fertile. Soil discourse and practices indicated that local soil management is inherently sustainable ensuring the biophysical limits of the soil are never surpassed, making the fallow sequence successful and beneficial for future generations. There was also evidence of local soil management systems being resilient to broader environmental and economic changes. This paper suggests that farmers and the oil palm industry may benefit from marrying local and outside ‘scientific’ concepts of soil fertility, which has not happened to date.