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CHANPHEN CHUTIMATAEWIN : THE IMPACT OF A KAREN
 UPLAND-RICE CULTIVATION ON SOIL EROSION : A CASE STUDY OF
 BAN MAE RID PA KAE, MAE SARIANG DISTRICT, MAE HONG SON
 PROVINCE. THESIS ADVISORS: PONGPIT PIYAPONG, M.Sc. (Soil Science).
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This study challenges a general assumption that Karen upland-rice cultivation has largely contributed to soil erosion. As this study demonstrates, soil erosion impact from the cultivation by the *Pa-kar-ka-yor* Karen at the Mae Rid Pa Kae village of Mae Sariang District, Mae Hong Son Province falls under acceptable limits of erosion (2 ton/rai/year), a level accepted by Thailand's Department of Land Development.

The study is inter-disciplinary in nature, employing different methods used in various fields. Community, in-depth interviews and direct observation were used in order to establish cultivation techniques and cultural practices applied by the Karen. Soil survey and analysis were conducted in ten sampled sites. Finally, the Universal Soil Loss Equation (USLE) was applied to assess levels of soil erosion.

Results show that all of the upland-rice cultivation techniques employed by this *Pa-kar-ka-yor* Karen at the Mae Rid Pa Kae village, in fact, are characterized as effective in helping to reduce soil loss. These include the use of a variety of techniques such as no-till cropping, individual planting, mixed cropping, green manure cropping and mulching. Of the ten sites sampled, six fall under the acceptable limits of erosion. Of the remaining four, the range of erosion is within three levels: very slight, slight and moderate.

It is recommended that the use of erosion factor-values necessary for an assessment of soil erosion must be collected from field-experiments conducted locally. In this way data are more accurate, as Karen upland-rice cultivation systems differ from general practices elsewhere. Reduction of soil erosion can be done by avoiding the use of areas prone to erosion, namely those characterized by low fertility, long and high slopes. These are three major factors causing soil erosion.