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AGREKON

Vol 40 Number/Nommer 3
September 2001



Published by the
Agricultural Economics
Association of South Africa

Gepubliseer deur die
Landbou-ekonomievereniging
van Suid-Afrika

AGREKON is published quarterly by the Agricultural Economics Association of South Africa (AEASA). All contributions and correspondence should be directed to:

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Agrekon aims to promote research and discussions on agricultural economic issues related to southern Africa. It includes disciplinary, multi-disciplinary and problem orientated work. The journal welcomes all original contributions of an acceptable professional standard. AEASA and the editors do not necessarily subscribe to or accept responsibility for viewpoints or opinions expressed, or the correctness of facts and figures.

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- To promote education, research and interest in agricultural economics.
- To promote the application of agricultural economics to solve agricultural, rural and national problems in southern Africa.
- To promote liaison between agricultural economists at regional, national and international levels.
- To promote the interests of agricultural economists.

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AGREKON

Volume 40
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September 2001

ARTICLES/ARTIKELS

- Determinants of adoption of physical soil conservation measures in Central Highlands of Ethiopia: The case of three districts of North Shewa
M. Enki, K. Belay & L. Dadi 293
- Adoption and intensity of fertiliser and herbicide use in the Central Highlands of Ethiopia
L. Dadi, M. Burton & A. Ozanne 316
- Determining association among production enhancing factors: Case of Mankweng district in the Northern Province
M. Makhura M. Mathye, & M.C. Mathabatha 334
- Efficiency of small scale communal farmers of Zimbabwe
A. Mushunje & A. Belete 344
- Projecting international demand for and supply of protein feed
S.M. McGuigan & W.L. Nieuwoudt 361
- Minimum economic farm size: A case study of the smallholder tea sub-sector in Kenya
M.M. Kavoi, P.O. Owuor & D.K. Siele 393
- How transaction costs influence cattle marketing decisions in the northern communal areas of Namibia
P. de Bruyn, J.N. de Bruyn, N. Vink & J.F. Kirsten 405
- Random coefficients analysis of changes in meat consumption preferences in South Africa
D. Poonyth, R. Hassan & J.F. Kirsten 426

Biases and effectiveness of extension services to maize farmers
in Kenya before and after the Training and Visit system
R.M. Hassan & D. Poonyth

438

INFORMATION TO AUTHORS/INLIGTING AAN OUTEURS

457

 ISSN 0303-1853

DETERMINANTS OF ADOPTION OF PHYSICAL SOIL CONSERVATION MEASURES IN CENTRAL HIGHLANDS OF ETHIOPIA: THE CASE OF THREE DISTRICTS OF NORTH SHEWA

Mulugeta Enki¹, Kassa Belay² and Legesse Dadi³

This paper examines factors influencing farmers' adoption decision of physical soil conservation practices in the Central Highlands of Ethiopia. Data were collected from 116 randomly selected farmers through a structured questionnaire. Results from a logistic regression analysis show that security of land ownership, size of cultivated land, technology-specific characteristics, level of schooling, wealth status of the household head, availability of off-farm income and assistance from different sources were important determinants of adoption of physical soil conservation practices. About 97 percent of the sample cases were correctly predicted using the model.

1. INTRODUCTION

In Ethiopia, as in most developing countries, land degradation has manifested itself in rapid rates of natural capital depletion exemplified by deforestation and soil erosion¹. According to the Soil Conservation Research Project (SCRIP, 1996), land degradation from soil erosion and depletion of organic matter and nutrients is taking place at a much faster pace than they can be replaced. This fact can be substantiated by the rate of soil erosion from the highland areas of the nation, which constitute about 45 percent of the total area of the country. The rate of soil erosion from the highland areas is estimated to be 35 tons per hectare per year (EHRS, 1986). According to the same source, it is also estimated that 80 percent of the gross soil loss is from cropped lands, which brings the estimated soil loss in this area to about 100 tons per hectare per year. This happens because of the inherent erodible nature of the soils and the likely expansion of cultivation to these areas to feed the steadily growing population of the country.

With increasing intensity of cropping on slopping lands and with intensive cultivation of smaller farmlands without amendments to replace lost

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