

UNIVERSITY OF VENDA



SCHOOL OF ENVIRONMENTAL SCIENCES
DEPARTMENT OF ECOLOGY AND RESOURCES MANAGEMENT.

**ASSESSING THE CONTRIBUTION OF AGROFORESTRY TECHNOLOGIES
TO POVERTY ALLEVIATION IN THULAMELA MUNICIPALITY, LIMPOPO
PROVINCE, SOUTH AFRICA.**

MUHONI LINA HAZVIYEMURWE: STUDENT NUMBER 11585443

SUPERVISOR: PROFESSOR OMARA OJUNGU

CO-SUPERVISOR: PROFESSOR STEVEN. ONI

CO-SUPERVISOR: MR STEVEN. MWIHOMEKE

Submitted in partial fulfillment of the requirements for the Masters degree in
Environmental Science in the department of Ecology and Resource Management at the
University of Venda.

February, 2011

UNIVEN LIBRARY

Library Item : 20121183



ABSTRACT

Agroforestry is the sequential and spatial integration of multipurpose trees and shrubs with crops/livestock on the same piece of land. While much research and development effort is being undertaken in many countries to promote agroforestry land use in order to improve livelihood and reduce poverty in rural areas, relatively little has been done in South Africa. In Vhembe District of South Africa there is poverty and degradation of land due to declining soil fertility and land productivity for food, fodder, fuelwood and biodiversity loss of native flora and fauna.

The main aim of this research is to assess the role of existing agroforestry technologies as one of the tools for poverty alleviation among smallholder farmers in Thulamela Municipality of Vhembe District in South Africa. Thulamela is located approximately between 22 15' and 25 45' South latitudes and 29 50' and 30 05' East longitudes. The climate is characterized by lowveld (arid and semi-arid) region with an annual rainfall within the range of 300-1000mm. The area is composed of basalt rocks and various sedimentary lithologies. Soils in the research area vary from loamy clay to clay, sandy loam and sandy clay. Vegetation is characterized by Savanna forests with congested tall trees and grasses. Similar ecological conditions have supported agroforestry systems in Malawi, Tanzania, Zimbabwe and Mozambique.

Interviews using semi-structured questionnaire were administered to farmers practising or not practising agroforestry technologies. SPSS was the tool used to analyze the data. Major areas of investigation were on socioeconomic factors influencing use of agroforestry technologies, adoption of agroforestry technologies and its influence on household food security and poverty alleviation. The results indicated that agroforestry is practised in Thulamela municipality but on a relative small scale. Various agroforestry technologies are known among the farmers but few of the technologies like fruit orchards are practised extensively. Farmers practising agroforestry produce a lot of maize and other cereals thus improving food security and livelihood. Adoption of agroforestry is likely to increase with education, household size, and ownership of land and labour as the key effective variables. Furthermore about 65% of the smallholders are aware that

agroforestry can alleviate poverty and about 35% do not know that despite the fact that some of them are practising agroforestry. Also the community is experiencing poverty which they alleviate through selling of fruits, firewood and manure from agroforestry trees. The results of this research will contribute to making well informed decisions in planning for agroforestry development and poverty alleviation in Thulamela Municipality and elsewhere.