# A Review of Agro Forestry Technologies Adoption among Small-Holder Farmers in Zimbabwe

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#### Abstract

A number of surveys to investigate the actual and potential adoption of agro forestry technologies have focused primarily on the influence of different household and farm characteristics on the adoption by farmers but the process of adoption is quite complicated, dynamic and the various factors are likely to influence each other – hence they should not be treated in isolation, ignoring their mutual interdependencies. This inevitable implication on measuring the influence of household and farm characteristics in itself may not provide sufficient explanations and necessitated the need for alternative approaches that address the inadequacies of household and farm-based traditional approaches. Therefore need to review qualitative research methodologies that would compliment quantitative research approaches and provide insights into farmers'

adoption patterns which can improve the understanding of the process of adoption of agro forestry technologies from the perspective of farmers. The qualitative methodologies may enable the comprehension of the process of adoption on the basis of diversity as found amongst informants and generating the relevant variables in the course of interviewing and observation.

Keywords: Adoption, Agro forestry, Technology, Farmers, Farm characteristics

### Introduction

Rogers, (1995), defined adoption as a process whereby one fully use an innovation as the only best options available. Therefore, adoption of agro forestry technologies can be defined as a process whereby farmers fully use the agro forestry technologies as the only best option available. Adoption is a process, which according to Van den Ban and Hawkins, (1998), follows a sequence of five stages, which are awareness, interest, evaluation, trial and adoption. However, it does not always follow this sequence in practice since interest may precede awareness as what happens when farmers are looking for a method to solve a problem. Adoption literature shows that a host of socio-economic, demographic, institutional and technical factors, farmers' perception about technology attributes and their attitude towards risk (Adesina and Zinnah, 1993; Nichola, 1994) affects the adoption of agro forestry technologies. Therefore, the level of adoption of agro forestry technologies varies from society to society, individual to individual and from household to household (Pannell, 1999).

A recent global review of the adoption of agro forestry show that the level of diffusion of agro forestry technologies has generally lagged behind scientific and technological advances attained in such technologies thereby, reducing their potential impacts (Mercer, 2004). The experience concerning the adoption of agro forestry technologies in Zimbabwe has not been too different from the global trend (Kuntashula, *et al*, 2002). Although agro forestry is financially profitable