

Economic Valuation of the Preferred Traits of Indigenous Cattle in Ethiopia

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This research employs recent data generation methods and econometric techniques to elicit cattle trait preferences and to estimate the relative economic values of the preferred traits within the context of a semi-subsistence livelihood system in Dano district of Central Ethiopia. Economic valuation of preferred cattle traits serves much more than estimating implicit prices or willingness to pay. It reveals the fact that the relative economic values consumers and producers attach to traits considered important inherently determine the types and composition of animals kept under their custody. The preferences elicited and the relative values of traits can, therefore, serve as basis for biological research and policy interventions for the sustainable use of the animal genetic resources. The results of this study show that the rural community has clear and consistent preferences for the different cattle attributes that manifest the suitability of the cattle for the different and interrelated functions they are expected to render. Bull trait preference analysis results illustrate that the farming community assigns high values for good plowing strength, big body size, disease resistance, calf vigor, and for places the cattle were brought from. Regarding cow attributes, the community attaches more importance to fertility (short calving interval), disease resistance and calf vigor than to milk. Hedonic price function estimations also show that phenotypic traits of cattle, particularly class of cattle - based on sex and function, body size and age, influence cattle price as well as marketing season and market location. Based on the empirical results, a framework for the community based management of cattle genetic resources is also developed envisioning locally managed sustainable use and conservation of the indigenous cattle resources. The results of this research would substantially justify the re-focusing of the strategies and programs Ethiopia has been implementing for the last four decades with the aim of improving only few commercially important traits. The results also call for the empowerment and motivation of the rural community for sustainable management of the cattle genetic resources against the top-down approach that has been the norm in Ethiopia.