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DEMAND ANALYSIS OF TRACTOR CONTRACT SERVICES
IN THE DISTRICT OF AMPARAI
SRI LANKA

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ABSTRACT

Ahamed Nazeer Ahamed, University of the Philippines at Los Banos, April, 1986. Demand Analysis of Tractor Contract Services in the District of Amparai, Sri-Lanka.

Major Professor: Dr. Corazon T. Aragon.

This study attempted to quantify the effects of various factors affecting demand for four-wheel tractor services among rice farms in the district of Amparai, Sri-Lanka and to test the differences in resource productivities between tractor-hiring and tractor-owning farms. Cross-sectional data obtained from 124 tractor-hirers and 50 tractor-owners from four (4) villages were used in this study. Two alternative approaches were employed to estimate the demand for tractor contract services. The first was the direct estimation of the demand for tractor services. The second approach was the indirect estimation of tractor services by estimating a Cobb-Douglas production function.

The results of the direct estimation approach indicated that tractor custom rate, man-labor wage, animal rental cost, land area, farming experience and extension are the most important factors affecting the demand for tractor services. Tractor contract services was found to be inversely related to tractor custom cost and was directly related to man-labor wage,

animal rental cost, land area and extension. Man-labor and animal power services were found to be substitutes for tractor contract services.

The results of the indirect estimation approach showed that the demand for tractor services was inelastic.

This study also showed that resource productivities of tractor-hirers and tractor-owners did not differ significantly, indicating that they have the same resource productivities.