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ABSTRACT

Irrigated agriculture provides a very important part ofnational food security strategies as well as individuals' and communities livelihoods at thelocal level. Yet the performance of many irrigation and drainage systems in Nigeria isgenerally below potential due to a variety of shortcomings. The monopolistic nature of thesector and its social sensitivity has fostered extensive government intervention that has notalways been conducive to financial sustainability. Insufficient cost recovery andlack of direct linkages between revenue and expenditure, and between the client and theservice agency are the root of the problems resulting to lower performance. Globally, there isa consensus for irrigation sector reform to increase water productivity, bothering onthe institutional structure for irrigation management and the incentives for agencies andfarmers. These reforms suppose that irrigation water is to be priced and thatfarmers will have to pay for the cost of water supply and related services. While sucharrangements are important, some questions arise: would it work in situations where thephysical infrastructure is dilapidated; user ability to pay is severely constrained bymacro-economic factors; market concepts and institutions are absent or in their infancy;and capability in both management and regulation is limited.

These concerns informed the need for this study.

The broad objective of this study was to analyze thefinancing and sustainability of irrigated agriculture in the Lower Anambra(LAIP) and Lower Benue (LBIP) Irrigation Projects. The specific objectives ofthis study were to (i) describe the sources and volume of investment;(ii)determine levels of cost recovery achieved, (iii) analyze the institutional andmanagement patterns of irrigated farming in the two schemes; (iv)describegender participation in the schemes; (v)Describe gender division of farm decisionmaking and performance of activities; (vi) measure resource productivity andenterprise profitability in both schemes; (vii) determine farmers willingnessto pay for

irrigated agriculture ; and (viii) Identify thesocio-economic factors that influence their willingness to pay.Data for thisstudy was collected mainly through focus group discussion and administration ofstructured questionnaire to farmers randomly selected from the two projects. Inthe LAIP, a total of 143 farmers were randomly selected for the interview,while in the LBIP a total of 33 farmers were randomly selected and interviewed.

In both schemes key management and technical staff were alsointerviewed.

Information collected includes socio-economiccharacteristics of farmers like educational status, income, age, years of experience; institutional andmanagement patterns of irrigated farming; farmers' input costs and output pricedata, and amount they are willing to pay for improved water service. Data collected wasanalyzed using frequencies, percentages, gross margin, financial self-sufficiencyindicator, Cobb-Douglas Production function, and Tobit regression model.The LAIP scheme is notable to sustain itself for operation and maintenance as the financial self-sufficiencyindicator is 0.60. In both projects, the major interests identified by the farmersinclude water quality, quantity and

availability and also timely maintenance and repair ofirrigation infrastructure. Headship of household was indicated by 81.81% of the respondents in LAIPas a factor affecting access to land in the project. Another major factor iscommunity membership which was indicated by 79.29% respondents. Major farming decisionslike leasing land, fertilizer and pesticide use, were taken by male heads of households. TheCobb -Douglass production function analysis showed that for the LAIP rice enterprisethe variables that are significant are fertilizer, seed and land; with seed beingnegatively related to output. The overall F-Value of the regression was significant at 5%leading to a rejection of the null hypothesis that resources used in the production do notsignificantly influence the output. Seed, Land and fertilizer were significant in the analysisof potato production in LBIP

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