

EvSum103

NORTH SUMATRA SPRINKLER IRRIGATION PROJECT

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The Project

The project provided 33 'Wright Rain' sprinkler irrigation units and associated equipment at a cost of about £0.75m to be used on a government owned estate near Medan specialising in cigar wrapper production. It was hoped that greater yields and higher unit prices due to improved quality could be obtained.

The Evaluation

The evaluation of the effectiveness and value of the project was undertaken by Mr G Allanson, a lecturer at the School of Agrarian Studies at Wye College. He studied the history of the project and visited Medan.

The Main Findings

- The project was technically most successful: it achieved the high yield level predicted (a 20% improvement) and quality also improved.
- The economic performance fell below the most pessimistic levels estimated at appraisal because of the fall in the world market price for cigar wrapper leaf and increased domestic production costs.
- The acreage of tobacco was reduced in an attempt to maintain prices and a diversified planting program was started. However, profits from tobacco continued to fall and failed to cover the full cost of diversification.
- Nevertheless, the higher production on the irrigated area made possible the release of more land for sugar cane, cocoa and oil palm planting.
- The work force benefited from the project most because the rate of decline in tobacco was slowed by efficient irrigation; "natural wastage" roughly equalled the fall in demand for labour with the slower adoption of less labour-intensive crops.

Lessons

- The evaluation underlined the risks associated with partial cost-benefit analyses when an excellent solution to one set of technical problems diverted attention from the economic context and status of the estate system as a whole. It also demonstrated that sensitivity tests are no substitute for proper market analysis.