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| 1. Project Data : | | | |
| OEDID: L3018 | | | |
| Project ID: P006448 | | | |
| Project Name: Land Management I Project - Parana | | | |
| Country: Brazil | | | |
| Sector: Agriculture Adjustment | | | |
| L/C Number: L3018 | | | |
| Partners involved : | | | |
| Prepared by: John C. English, OEDST | | | |
| Reviewed by: Jock Anderson | | | |
| Group Manager: Roger Slade | | | |
| Date Posted: 08/25/1998 | | | |

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| 2. Project Objectives, Financing, Costs and Components : | | | |
| The objectives of the project were to : | | | |
| <ol style="list-style-type: none">1. Increase agricultural production and farm incomes and, at the same time, to :2. safeguard the state's natural resources through increased adoption of sustainable, modern practices of land management and soil and water conservation . | | | |
| The project had the following components : | | | |
| <ol style="list-style-type: none">1. Adaptive research focussing on improving soil cover and structure (13% of costs);2. Public and private extension services to assist in micro-catchment planning and implementation (18% of costs);3. Financial assistance to micro-catchment farmers' associations to support implementation (18% of costs);4. Funding for erosion control measures for roads in these micro-catchments (26% of costs);5. Rail terminal facilities to reduce transport costs for lime (5% of costs);6. Protection of state parks and forest reserves (10% of costs);7. Land use monitoring and control (4% of costs);8. Project management (3% of costs); and9. Training (4% of costs). | | | |
| Total costs were US\$161.9 million. The Bank loan was US\$63.0 million, and the State of Parana financed the remainder. | | | |

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| 3. Achievement of Relevant Objectives : | | | |
| The major objectives of the project were achieved . Production of the major crops increased substantially and it is estimated that the net returns to participating farmers from these major crops approximately doubled and that the economic rate of return to the program is 29%. Sample tests indicate that turbidity of water from treated watersheds fell by 60%, which reduced water treatment costs by 50% or more. Road maintenance costs were also reduced in improved areas. | | | |

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| 4. Significant Achievements : | | | |
| The program directly covered about 3 million hectares (15% of the state) and involved about 215,000 farmers in over 2,400 micro-catchments. The results showed that, in this state, a promising approach, developed under a locally sponsored pilot program, could be scaled up state-wide. | | | |

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| 5. Significant Shortcomings : | | | |
| None | | | |

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| 6. Ratings : | ICR | OED Review | Reason for Disagreement /Comments |
| Outcome: | Highly Satisfactory | Highly Satisfactory | |

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| Institutional Dev .: | Substantial | Substantial | |
| Sustainability : | Likely | Likely | |
| Bank Performance : | Highly Satisfactory | Highly Satisfactory | |
| Borrower Perf .: | Highly Satisfactory | Highly Satisfactory | |
| Quality of ICR : | | Satisfactory | |

7. Lessons of Broad Applicability :

The project is a prime example of a successful program to improve land resource management . It illustrates the value of:

1. ensuring that the management practices being supported have a payoff for the economic goals of the land users; and of
2. the piloting of an approach by the appropriate governmental units to ensure that the technologies are technically and financially sound, and also that the approach is supported by local institutions, and can be managed by them.

It should also be noted that the project implemented here was complex . State level institutions in Parana may be above average in Brazil with high ability to interact with other elements of civil society to address complex problems. Consideration of the replicability of this approach will have to take the social and institutional environment into account.

8. Audit Recommended? ☒ Yes ☐ No

Why? The project should be audited together with the companion and ongoing project in Santa Caterina .

9. Comments on Quality of ICR :

The ICR is satisfactory. In particular it makes effective use of annexes to provide valuable detail on the economic results of the project and the outcomes of the road improvement and lime distribution components . However, more detail could have been provided on the follow -up program being subsumed under the ongoing Parana Rural Poverty Alleviation and Land Management Project .