

## **5. Study on Agricultural Water Development for Poverty Reduction in sub-Saharan Africa**

### **BACKGROUND AND JUSTIFICATION**

The present study is a continuation of the component ‘Agricultural Water Development for Poverty Reduction in Eastern and Southern Africa’, funded by IFAD. This component of the overall Collaborative Program: was largely implemented in 2003 and will be completed by beginning of 2004. The findings will also be discussed in an IFAD workshop in Tanzania 15-19 March 2004.

As already concluded during the preparations of both the IFAD-funded component and the overall study, there will be a need for similar and comparative case studies of effective and efficient investments for poverty reduction elsewhere in Africa, in particular in Francophone and Anglophone West Africa. Further, there is a need to also include case studies of other financing agencies than IFAD.

Two significant findings of the IFAD study of are, first, that the private-sector based dissemination of treadle pumps, facilitated by the enterprise Approtec, emerged as one of the most effective forms of economic growth and poverty reduction, at minimal costs to the taxpayer. Second, the poverty impact assessment methodology adopted was fruitful. Further development and testing of this methodology in a sufficiently large sample and in different contexts is expected to lead to a ‘rapid poverty reduction impact appraisal’, which can feed into the other components of the overall study and other investments in agricultural water development. These two results are proposed to be taken forward in the present project, among others.

### **OBJECTIVES AND SCOPE**

The present ADB-supported Poverty Study builds upon work already completed under the IFAD supported poverty study in East and Southern Africa. Its objectives are:

- To carry out two or three case studies of promising investments in agricultural water development elsewhere in Africa and which are supported by agencies other than IFAD, in particular in Francophone and Anglophone West Africa, for further comparative study using the same conceptual framework adopted by the IFAD-supported poverty study for the assessment of gendered poverty impacts; and
- To further apply, test, refine and generalize the gendered poverty impact assessment methodology adopted in the IFAD study, in order to develop a so-called generic ‘rapid poverty reduction appraisal’, applicable throughout sub-Saharan Africa.

The scope of work will also be guided by the outcomes, identified knowledge gaps, and recommendations for follow-up of the IFAD workshop 15-19 March 2004 in Tanzania.

### **METHODOLOGY**

#### **Conceptual Framework**

The conceptual framework adopted in the IFAD-supported poverty study (refer to Chapter 10 for detailed discussion) will be further refined. Updated literature on poverty processes, gender, and rural economic growth in sub-Saharan Africa will further corroborate the role of agriculture as an engine of economic growth, and especially highlight the role of smallholder agricultural growth. Further, linkages will be articulated between gender and poverty in the context of rural diversified livelihood strategies around farm and non-farm income, multiplier effects, private

sector technology supply chains, input provision, and marketing, and institutional and legal frameworks for land and water use, also in the context of Integrated Water Resources Management. This framework will not only guide the case studies but also provide the conceptual underpinnings of the rapid poverty reduction appraisal.

The case studies will be selected according to their relevance and potential efficiency and efficacy for rural poverty reduction in West Africa. Their comparability with the Eastern and Southern African case studies will further enhance generic understanding, while recognizing local specificity. By selecting Enterprise Works, the key player in treadle pump manufacturing and marketing in West Africa, as one of the case studies, better understanding will be generated on the pivotal question of “which successes in both Kenya and Tanzania (Approtec) and Niger and Burkina Faso (Enterprise Works) can be upscaled and under what conditions elsewhere?” A study of another type of agricultural investment aimed at poverty reduction concerning the *fadamas* in Nigeria may also be included as a case study.

## **ACTIVITIES**

### **Literature Review and Recommendations of the IFAD Poverty Study**

The study will start with the appreciation of the empirical results of the five case studies of the IFAD poverty study, in particular the treadle pumps by Approtec, and on the adopted poverty reduction impact assessment methodology. Gaps and still unanswered questions in the IFAD poverty study will be identified in collaboration with the various key stakeholders involved in that study, in particular during the workshop of 15-19 March 2004.

General literature will be reviewed to further corroborate the conceptualization of agricultural growth and gendered poverty reduction and the gender-differentiated methodologies adopted on the ground. The conceptual framework and methodologies will also be enriched by the results of various IWMI studies on poverty reduction impacts of investments in agricultural water development in Asia. Moreover, collaborative research between FAO, IWMI, and IUCN in Tanzania and Zambia on poverty- and gender-differentiated wetland use, benefits, and governance profiles will feed into the present study. The final selection of case studies will be made on the basis of the IFAD workshop and this literature review (see below). Then, desk studies will be done on the cases selected.

### **Case Selection**

The cases are most likely to include Enterprise Works; one or two other cases will be selected according to the criteria mentioned above, and in consultation with key stakeholders. As noted above, investment in *fadamas* in Nigeria is a strong candidate.

### **Empirical Research**

For the various case studies an in-depth empirical study will be conducted among the range of stakeholders involved. For the case study of the public-private-sector driven establishment of a supply chain for treadle pumps in West Africa, synergy will be forged with the earlier case study of Approtec and the private sector component of the Collaborative Program. For other cases to be selected, synergy will be sought with the appropriate component.

On top of that, though, and specific for the present study, is an in-depth impact assessment among the poor and ultra-poor, differentiating for women and men. For each case study, interviews and focus group discussions will be conducted among some 100 – 150 households in four – five communities affected by each project. This empirical approach not only allows to really listen to

the voices *of* the poor and ultra-poor, men and women, themselves unlike too common claims about poverty alleviation *about* the poor. Moreover, this empirical impact assessment allows developing and testing the generic ‘rapid poverty reduction appraisal’.

Further, raw monitoring data of Approtec’s own poverty impact assessments that Approtec has put at the project’s disposal, will be further analyzed in close collaboration with Approtec.

### **Analysis and Reporting**

Analysis and reporting in a first draft report will take be finalized by September 2004. Annexes 5.2 and 5.3 provide further details on the work plan.

### **SYNERGIES**

Poverty is a cross-cutting issue throughout the project. Hence, the conceptual framework developed and refined in this component feeds into all components and the synthesis, and insights developed in other components, in particular the private sector component support the analysis here. The specific contribution of this poverty component is to analyze selected case studies explicitly and in-depth with regard to their efficacy and efficiency in alleviating human deprivation in rural areas, and simultaneously develop a rigorous generic conceptual and methodological basis for rapid poverty impact assessments. This study component will also liaise with several IWMI research projects that are focused on highlighting poverty impacts, what worked and why, and how efforts maybe up-scaled to increase poverty reducing impacts. Together, this component and the other IWMI studies will provide extensive and intensive analyses on various types of investments and their respective poverty impacts.

### **OUTPUTS**

- Project reports on the poverty impact assessment of Enterprise Works in West Africa and one or two other case studies.
- Report on the ‘Efficiency and efficacy of treadle pump markets for gendered poverty alleviation in Sub-Saharan Africa: the cases of Approtec and Enterprise Works.’
- Report ‘Generic Rapid Poverty Reduction Appraisal for sub-Saharan Africa.
- Contribution to the poverty focus throughout all components of this project.
- Consolidated poverty component report integrating results of this study and those of IFAD.