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REPUBLIC OF GHANA

**UPPER EAST REGION LAND CONSERVATION AND SMALLHOLDER
REHABILITATION PROJECT – PHASE II**

INTERIM EVALUATION

EXECUTIVE SUMMARY

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CURRENCY AND EXCHANGE RATES

Currency unit	cedi (GHC)
Exchange rate at time of appraisal (1998)	GHC 2 355 = 1 USD
Exchange rate at time of interim evaluation (2005)	GHC 9 100 = 1 USD

LIST OF ACRONYMS

AAGDS	Accelerated Agricultural Growth and Development Strategy
FASDEP	Food and Agricultural Sector Development Policy
GIDA	Ghana Irrigation Development Authority
LACOSREP	Upper East Region Land Conservation and Smallholder Rehabilitation Project
M&E	monitoring and evaluation
PCU	project coordination unit
UNOPS	United Nations Office for Project Services
UWADEP	Upper West Agricultural Development Project
WUA	water user association

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EXECUTIVE SUMMARY¹

I. INTRODUCTION

1. In accordance with the IFAD Evaluation Policy, and given the interest of both the Government of Ghana and IFAD's Western and Central Africa Division to proceed with further investment in the area, IFAD's Office of Evaluation (OE) conducted an interim evaluation of the Upper East Region Land Conservation and Smallholder Rehabilitation Project – Phase II (loan number 503-GH) in Ghana in May-June 2005. This evaluation follows the standardized IFAD methodological framework for project evaluations.

2. **Macroeconomic and poverty indicators.** Located in West Africa, Ghana has an estimated population of 20.5 million, of which 63% is rural. The structure of the economy is characterized by a large (in relative terms) services sector (42% of the total GDP), compared with 34% for agriculture and 24% for industry. It has an annual GDP per capita of USD 304, and GDP growth has averaged 1.8% over the past ten years (i.e. below population growth) although this has increased recently. Agriculture continues to be the mainstay of the economy, employing about 60% of the labour force. Ghana is classified 131st out of 175 countries on the United Nations Development Programme Human Development Index (2003). The percentage of households living on less than USD 1 per day has been estimated at 44.8%, and nearly 40% of all households are poor according to the national poverty line (World Bank, World Development Indicators, 2004).

3. Northern Ghana consists of three regions: the Upper East Region, the Upper West Region and the Northern Region. By many indicators, these regions are the poorest in Ghana and are indeed comparable in poverty to some of the poorest countries in the world. IFAD has had projects in each of these regions: the Upper East Region Land Conservation and Smallholder Rehabilitation Project (LACOSREP), the Upper West Agricultural Development Project (UWADEP) and the Northern Region Poverty Reduction Programme. The first phase of LACOSREP was designed in 1990, became effective in 1991 and was the subject of an interim evaluation in 1998. LACOSREP II was appraised

¹ The Office of Evaluation (OE) of IFAD conducted an evaluation mission of this project's second phase and of the Upper West Agricultural Development Project (UWADEP) between 23 May and 30 June 2005. Field visits in the Upper East Region took place between 26 May and 10 June. Sites of both the first and second phases of this project were visited, the former to better understand key sustainability issues. The mission members were: Mr Roger Blench (team leader), Mr David Andah (credit and microfinance), Ms Liz Kiff (agricultural extension) and Ms Gordana Kranjac (water resources and rural infrastructure). Preliminary quantitative and qualitative surveys were carried out by Mr Hippolite Bayor and Mr Edward Aboagye in early 2005. An ad hoc survey of non-participant households was conducted in concomitance with the mission, under the direction of the team leader. Mr Fabrizio Felloni (Lead Evaluator, IFAD-OE) designed the evaluation methodology, made a pre-evaluation visit in March 2005, accompanied the mission for its first and final days in Ghana and supervised the evaluation process throughout. An aide-mémoire and an associated PowerPoint presentation were circulated at a workshop in Bolgatanga on 10 June 2005 under the chairmanship of the Regional Minister. A final presentation of the initial findings from LACOSREP II and UWADEP was made in Accra on 30 June. The mission is grateful to national and regional authorities as well as to the project staff for their support.

in December 1998, became effective on 14 January 2000 and will close on 31 December 2006, after a fifteen-month extension.

4. The most recent agricultural policies in Ghana are reflected in the Accelerated Agricultural Growth and Development Strategy (AAGDS); the Food and Agricultural Sector Development Policy (FASDEP), and the Ghana Poverty Reduction Strategy (GPRS) 2002-2004, currently under revision. The AAGDS broadly aims at the intensification and modernization of agriculture, while the FASDEP further emphasizes the importance of food security. The GPRS recognizes that rural farmers and fishers are particularly at risk, and specifically mentions northern Ghana as a locus of perennial food deficits. Women are identified as particularly disadvantaged in this context and instruments to promote gender equality are emphasized. Although the document notes the importance of environmental factors in increasing vulnerability, it does not propose concrete measures to reduce risk in agriculture. As from 2003, some donors – in addition to their conventional “project approach” – have also been testing multi-donor budget support as an additional instrument in sectors such as health and education.² The agriculture and water sectors have not seen any major shifts towards budget support.

5. **The project area: serious environmental degradation.** LACOSREP II is located in the Upper East Region, which is Ghana’s smallest region (slightly over 3% of the total land area); and has an estimated population of 920 000 (80% employed in agriculture) and the country’s highest population density (104 persons/km²). Access to markets and off-farm opportunities is constrained by poorly maintained feeder roads and lack of transportation services. According to the Ghana Living Standards Survey (2003), 88% of the region’s population lives in poverty.³ This is reflected inter alia in the stunting rate among children under 5, which – at 31.7% – is higher than the national average (25%), although infant mortality rates are lower (33 per 1 000 as compared with 68 per 1 000). The Upper East Region is noted for its high levels of environmental degradation, deforestation and loss of soil cover, largely as a result of extremely high population density and little agricultural intensification.

6. The **rationale** for LACOSREP II was summarized in the appraisal report as: (i) strong existing demand for dam rehabilitation in rural communities; (ii) the potential for water user associations (WUA) to be sustained and assure food security in the region; and (iii) the need to build on existing credit experience to establish effective mechanisms for rural financial institutions.

7. **Basic project data.** The total project cost was USD 13.9 million, of which IFAD provided approximately USD 11.5 million. As of mid-August 2005, 73.5% of the total loan amount had been disbursed. IFAD was the only international financier of the project, supervised by the United Nations Office for Project Services (UNOPS). The Ministry of Food and Agriculture was the agency responsible for implementation at the national level, with day-to-day management entrusted to the Ministry’s regular regional staff.

8. The **objectives** of LACOSREP II, as defined during appraisal, were to: (i) further develop irrigation in the Upper East Region; (ii) increase productivity through farmer training and demonstrations of new technologies for increasing productivity of crops, livestock and fisheries; (iii) build the capacity of Government institutions that provide technical and social services at the district and subdistrict levels; and (iv) construct rural infrastructure to reduce the female labour burden and take measures to mitigate possible adverse health and environmental impacts. The **components** of LACOSREP II were as follows; (i) agricultural development (applied research,

² The ten donors involved in multi-donor budget support in Ghana are: the African Development Bank, Canada, Denmark, the European Union, France, Germany, the Netherlands, Switzerland, the United Kingdom of Great Britain and Northern Ireland and the World Bank. Japan, the United States of America and the United Nations are observers.

³ Consumption-based estimates, GPRS, 2003. The usual caveats on monetary-based estimates for rural areas apply also to this case.

extension, livestock development, 15% of total base costs); (ii) water resources development (rehabilitation and construction of dams, environmental and human health protection, 32%); (iii) rural infrastructure (road improvement, dug wells and latrines, 19%) (iv) income-generating activities (rural credit, 18%); and (v) project management and organization (14%).

9. Project interventions were to be implemented by: (i) district and regional staff of the Ministry; (ii) research specialists; (iii) NGOs and agencies specialized in group formation; (iv) the private sector; (v) consultants; and (vi) community-based organizations. The Ghana Irrigation Development Authority was specified as the sole responsible agency for ensuring that the dams were built to high technical standards. Project interventions would be managed either at the district or regional level according to their scope and financing levels. The project coordination unit (set up within the Ministry's regional office) would be responsible for all interventions that cut across districts, such as research.

II. IMPLEMENTATION STATUS

10. **Agricultural development: extension, farmer training and demonstrations.** Since project start-up in 2000, 197 of the 300 farmer training demonstrations (FTDs) had been conducted. A total of 6 444 farmers had participated (some 70% of the target): 3 898 were men and 2 546 women. However, it is important to note that the introduced technologies had spread well beyond the initial participating farmers. An estimated 8 756 farmers had adopted FTD technologies, clearly exceeding the original target of 6 000. Some progress had been made in marketing and processing: improved storage structures for onions had reduced losses from over 50% to 25%-40% after three to five months, when onions can be sold for as much as GHC 300 000, compared with GHC 80 000 per 73 kg bag at harvest. Much remained to be done with regard to more perishable crops such as tomatoes.

11. **Water resources development.** This component experienced serious implementation delays. Of the 32 dams to be constructed or rehabilitated, contracts for 24 dams had been awarded as of June 2005. The rehabilitation of six dams and the construction of one dam had been completed, while the others were at various stages of construction. As a result, only 80 ha of the planned 372 ha were available for farmers (22% of planned irrigable area). Health and environmental interventions under LACOSREP II related principally to water-borne diseases, catchment protection, and the maintenance of soil fertility and agrobiodiversity. The introduction and development of composting had clearly been successful and the idea was apparently spreading even outside the project area. The Environmental Protection Agency issued environmental permits for all LACOSREP II dam rehabilitation and construction works, although they were not renewed when construction began to be delayed. Catchment protection activities (e.g. planting trees and creating bunds) were carried out at LACOSREP I sites, and targets were largely achieved. The results of water quality analyses carried out for dams and hand-dug wells had not yet been made available and were urgently needed.

12. **Rural infrastructure.** Spot improvements to roads (75 km) in all designated areas were performed, although re-gravelling was not carried out. Appraisal targets were generally met for hand-dug wells and latrines, although many had not yet been fitted with pumps (60%).

13. **Income-generating activities.** Under this component, training in loan management had been provided to 12 243 individuals (about 20% of the original target) and group loans had been extended without collateral, relying on group pressure to guarantee repayment, to 10 251 individuals. No medium-term loans had been granted for asset acquisition by any of the participating banks, apparently because they were uncomfortable with managing them. The provision of financial services by the Agricultural Development Bank enabled savings to be mobilized and credit accessed from all six districts.

III. PERFORMANCE OF THE PROJECT

Relevance

14. The Upper East Region is the second poorest region of Ghana and overall living standards have hardly improved over the past ten years. The components of LACOSREP II were designed to add value to rural production and were, in general, valuable to poor farmers. Clearly the funding available under LACOSREP I and II allowed only partial geographical coverage. Ghana is a partner in various international undertakings to reduce poverty, which was the direct focus of LACOSREP II. The project was also in line with the agricultural goals mentioned in such policies and strategies as the Accelerated Agricultural Growth and Development Strategy (AAGDS) and the Food and Agricultural Sector Development Policy (FASDEP). Its value added consisted of clearer geographical targeting and a set of concrete measures to reduce poverty and help reduce or reverse environmental degradation. With the benefit of hindsight, two elements were not adequately addressed. First, the project provided for more dams to be rehabilitated (23) than constructed *ex novo* (9). Communities without dams lack crucial production infrastructure (particularly in low rainfall areas) and needed to be better targeted. Second, the experience from the sister project UWADEP in the adjacent region shows that it is possible to target specific irrigation interventions to discrete categories such as the blind or physically impaired. This experience deserves consideration in any further intervention.⁴

Effectiveness

15. Despite the delays in the water resources (irrigation) component and the limited coverage of the income-generating activities (credit) component, LACOSREP has moved in the right direction in tackling the basic problems of the poor in the Upper East Region. The improved irrigation infrastructure and agricultural practices resulting from farmer training and demonstrations have benefited households by enhancing income sources, assets and food security. The livestock development subcomponent, with its emphasis on small ruminants and guinea fowl, seemed well placed, given these species' importance in the project area. However, national policies dictating a switch to cost-recovery veterinary services create serious problems. Expenses of GHC 1 000 to 2 000 per animal are enough to discourage very poor farmers from vaccinating their livestock, with the risk that disease may wipe out years of investment.

16. Multi-component projects entail a risk of poor coordination among the various interventions, and this was the case with LACOSREP II. For example, some farmer training and demonstration activities can be very successful in and of themselves (such as the introduction of improved varieties and certified seeds), but their effectiveness may be limited when inputs from other components are not provided in a timely way (such as credit or seed at the district and regional levels) or are not provided at all at the same sites. As different agencies are normally responsible for different components, the issue of synergy and integration between interventions needs to be carefully considered as of the design stage.

17. One of the objectives at appraisal was to build infrastructure to alleviate women's work and provide mitigating measures for water-related diseases and negative environmental impact. Concerning environmental impact, measures for catchment area protection and soil conservation proved successful in preventing erosion. Hand-dug wells were sunk to reduce women's workload in fetching water but they were not all functional, and very little was done in the way of protection against water-borne diseases.

⁴ UWADEP has at least one dam site (Karni), where assistance for the blind, disabled and single mothers is a major element, showing that this can be made to work.

18. Finally, with regard to the objective of building the capacity of formal and informal institutions to provide demand-driven social services, the picture is mixed. There are positive and important project achievements such as active and dynamic water user associations and functional literacy groups. On the other hand, there are two important limitations that need to be considered. First, there is a tendency for Government field staff to spend a disproportionate amount of time “sensitizing” communities to the benefits of certain interventions when people are already perfectly aware of their usefulness. An example is found in the irrigation component: although some communities had already filed an application for dam construction or rehabilitation before the start-up of LACOSREP II, it was still decided to conduct a number of field workshops to explain how irrigation was important for them. Time and money would have been better invested in starting studies for infrastructure works and involving community representatives in this preparatory work. Second, the project contracted out a number of services to research institutions and NGOs but did not seize the opportunity to build a real “partnership” with them; it did not actively involve them in assessing community needs and testing new technologies that were directly responsive to expressed needs. Some NGOs had broad experience in this sense that could have been built upon.

Efficiency

19. Efficiency is assessed here mainly for the irrigation and the rural finance components. In the case of irrigation, unit costs of construction (per ha) are compared with benchmarks in the country. In the case of the rural finance component, the administrative cost of providing a dollar of credit is compared with a peer group of microfinance institutions in the region.

20. The unit cost of dam construction for LACOSREP II dams varied from USD 477 to USD 1 338.7 per hectare.⁵ A study prepared by the Food and Agriculture Organization of the United Nations (1998) showed costs per ha ranging from USD 400 to USD 5 000 per ha in Ghana. This suggests that LACOSREP II construction costs were relatively inexpensive compared with typical benchmarks. With regard to water conservation, new technology based on piped systems has been introduced in northern Ghana by international NGOs and should be considered carefully in future interventions as it would improve efficiency in water conveyance and distribution.

21. As for rural finance, the administrative costs of lending for participating banks were about one third of the average of a group of rural finance institutions in the region (MicroBanking Bulletin 2004⁶).

22. From a cost-effectiveness standpoint, the project appears to perform well, although water delivery efficiency can be improved, the quality of water infrastructure needs to be monitored because many dams have not been completed, and the rural finance component exhibits problems in credit discipline (low repayment rates, as explained further below).

IV. RURAL POVERTY IMPACT

23. **Methods.** In assessing the project’s rural poverty impact, the evaluation drew on various sources: (i) available monitoring and evaluation (M&E) data, (ii) a quantitative survey of beneficiaries and non-beneficiaries; (iii) a qualitative survey of five dam sites; (iv) an ad hoc survey of non-beneficiaries; and (v) participants’ observations as recorded by mission members. In line with the IFAD Evaluation Policy, the project conducted a self-assessment exercise that was also considered by the evaluation team. Detailed results are presented in the main report.

⁵ There are no precise data for maintenance costs.

⁶ Microfinance Information eXchange (MIX).

24. **Significant impact on physical and financial assets.** The evaluation surveys compare LACOSREP-assisted households with households not having benefited from such assistance (control group). The data suggest that project user assets (both household and agricultural assets) have increased significantly in recent years, while increases for the control group were less evident (see Table 1 in the appendix). Qualitative interviews during the field visits confirmed this to be the case. Households receiving financial services from participating banks have reported benefits in terms of better opportunities for investment in trading and farming, as well as activities that do not directly generate income but contribute to household welfare, such as health and schooling (as further explained below).

25. **Strong impact on farming practices and literacy; limited progress in human health issues.** The evaluation surveys provided quantitative evidence of increased adoption of improved farming practices, including composting and improved seeds (see Table 2 in the appendix). The predominant approach for enhancing farmers' knowledge was that of the field school, which focused on practical cases and problems. Improved small ruminant management, including housing, nutrition and health care, has been taken up by farmers and communities involved in the livestock components. The promotion of functional literacy groups was an element not foreseen in the original design, but it was strongly appreciated by the communities and also helped to strengthen social capital (as explained below). On the other hand, limited progress was made in the area of human health (risk of water-borne diseases, such as schistosomiasis and malaria), which had been flagged as a key issue towards the end of LACOSREP I. In the course of its visits to WUAs, the evaluation team found no evidence of training or advice for communities.

26. **Social capital and empowerment.** Training programmes and activities were carried out during LACOSREP II for the new WUAs established under LACOSREP II as well as for those created under LACOSREP I. There is every sign that many WUAs are vibrant organizations capable of managing their own affairs, although some require further training in irrigation practices such as irrigation scheduling and methods of field water application. The introduction of the functional literacy groups helped to galvanize the WUAs. One weakness of the WUAs is the limited amount of financial resources they can raise vis-à-vis their sizeable maintenance needs. This is not a surprising observation but should be taken into consideration by the Ministry and donors when budgeting for project maintenance costs.

27. **Enhanced food security.** In the absence of a baseline anthropometric survey, the evaluation had to rely on qualitative perceptions elicited during interviews and on indirect evidence, such as increased yields from improved varieties or cropping rates in the dry season. All the beneficiaries interviewed acknowledged that the project had enhanced their food security, mainly through access to credit (consumption-smoothing effect), cash earned during the dry season, and better marketing skills. Some used their profits or part of their loans to stock food for the "hungry period" between harvests. While some reported having adequate food during this period, others had to cope with food scarcity.

28. **Environmental impact.** The serious environmental degradation problems in the Upper East Region required LACOSREP II to emphasize soil and water conservation. The project has had a considerable positive impact by directly increasing soil productivity and improving participant and neighbouring communities' awareness about soil conservation. Catchment protection activities such as planting trees and creating bunds were carried out at LACOSREP I sites, and the targets were largely achieved.

29. **Limited impact on institutions and policies.** Village institutions such as WUAs and functional literacy groups are clearly viable, but it is more difficult to see any major shift in the attitudes of Government staff. For example, the time taken at the inception of LACOSREP II to "sensitize" communities to the need for dams, when many had filed applications with the Regional Assembly as early as 1998, suggests that much remains to be done in this area. NGOs were used

principally to provide services under LACOSREP II (e.g. RuralAid for hand-dug wells and ActionAid for the literacy strategy): they were not generally involved in testing new technologies or assessing community well-being, despite their broad experience in this area. Change in mentality takes time, but IFAD could help by facilitating communication and the sharing of experiences from the field. The project did not promote the strengthening of rural finance institutions: banks were seen more as conduits for credit rather than institutions that need to become financially sustainable. Finally, an area yet to be addressed relates to policy dialogue on cost-recovery requirements for livestock vaccination. As previously noted, such requirements exclude many farmers from access to animal health services.

30. **Gender.** LACOSREP II employed a gender officer on a contract basis to ensure that the appraisal objectives were met, and this was an effective strategy. Women were not traditionally landowners in this region, but the WUA system has given them direct access to irrigated land. The functional literacy groups have also provided an arena for women to cooperate and organize collective forms of income generation.

31. **Sustainability.** Three key areas are of concern: (i) maintenance of dams; (ii) environmental sustainability; and (iii) financial sustainability of rural finance operations. Responsibility for maintenance of dams has not been clearly spelled out: some maintenance operations lie beyond the operational and financial capacity of WUAs and sometimes even local government budget availability. In terms of environmental sustainability, some of the technical innovations in agriculture can be continued after project closing, such as composting and vegetable production. Bearing in mind that irrigation increases cropping rates and the extraction of soil nutrients, this phenomenon could be countered by adequate agroforestry packages and the integration of leguminous crops into rainfed cropping cycles; greater emphasis should be placed on this. Concerning the rural finance component, financial sustainability hinges on two risks: first, repayment rates are low because of high transaction costs (bank offices are far away from their clients, bank staff lack proper training, and products are not suited to the poor); and second, banks are forced to lend at interest rates that do not allow them to cover their costs.

32. **Innovations, scaling-up and replicability.** The most successful innovations promoted by the project are those that can spread from farmer to farmer with little capital investment. The raising of guinea fowl, composting, the use of neem for crop protection and the formation of literacy groups were not widespread in the Upper East Region before LACOSREP II but are now being increasingly adopted. These innovations have all been replicated by the farmers themselves, with little or no external assistance, and they have even extended outside the project area. Several other interventions (e.g. improved livestock care, effective response to plant pathogens) are within the technical and financial capacity of the Ministry and, in the future, can be replicated without additional donor funding. Such funding will be necessary, however, for the building and rehabilitation of dams.

33. The **overall impact** of LACOSREP II on beneficiary communities has been considerable in the areas of food security, income generation, cohesion, literacy and the promotion of gender issues, despite the implementation constraints and delays. The achievements of both phases of LACOSREP need to be viewed against the trend of increasing poverty and environmental degradation in the Upper East Region.

V. PERFORMANCE OF PARTNERS

34. **IFAD** has rightly continued to pursue the LACOSREP approach, which holds important potential for poverty reduction in the Upper East Region. There are, however, certain flaws in the original project design which merit further reflection: first, the rural finance component's failure to enhance the financial sustainability of participating banks; second, the limited degree of integration between components (which was partly dealt with during the implementation phase); and third, the overreliance on the Ghana Irrigation Development Authority (GIDA) to screen private contractors for

the irrigation component (this created delays in execution and did not ensure a high quality of works). The lack of an IFAD field presence in Ghana constrains implementation support as well as policy dialogue and coordination with other donors. Problems such as the inadequate performance of GIDA in the irrigation component are difficult to address through a two-week UNOPS mission once a year. On the other hand, experiences such as that of LACOSREP I and II should be more systematically brought to the attention of other donors and of local research institutions and NGOs active in the country.

35. **The Government.** In general, the project coordination unit (PCU)/Ministry performed creditably, and problems with day-to-day operation were resolved successfully in many cases. All types of training and sensitization were carried out in a timely manner and displayed a certain degree of adaptation and flexibility in their implementation. In the area of irrigation infrastructure, the problems of managing contractors and the overreliance on GIDA should have been resolved much earlier. With regard to monitoring and evaluation (M&E) activities, monitoring was quite accurate, while the evaluation of socio-economic impact weak. The contribution of GIDA as the sole consultant for the irrigation infrastructure on the project was weak, causing many problems in project execution and delays in implementation. National policies such as cost-recovery for livestock vaccination do not provide a conducive environment for projects such as LACOSREP II. They are among the root causes of low vaccination coverage and expose farmers to the risk of livestock losses from epidemics.

36. **UNOPS** was responsible for the supervision of LACOSREP, conducting yearly visits of about ten days each. These missions are reported to have been carried out conscientiously and the detailed reports were critical but fair. However, there was a perception in recent years that it was more difficult to engage in dialogue with the UNOPS team and that the missions were more adversarial, perhaps due to a sense of frustration with delayed implementation.

37. **Research and extension.** The project collaborated with a number of research organizations on small ruminant husbandry, guinea fowl husbandry, improved crop and pest management in rice, and an improved method of parboiling rice. The performance of all four research institutes involved – the Animal Research Institute, Tamale; the University of Ghana, Accra; the Crops Research Institute, Kumasi; and the Food Research Institute, Accra – was considered satisfactory to good by the project. In most cases, however, the tendency was for the project to contract out individual survey assignments rather than establish a partnership, which would involve needs assessment, follow-up and modification/direction for future applied research. The performance of the major research partner as envisaged at project appraisal – the Savannah Agricultural Research Institute, Tamale – was weak. Despite the considerable infrastructure support given to the institute during the previous phase, it was not able to provide effective advice to counter the serious problem of the tomato disease complex.

38. **Banks.** The role of the Central Bank of Ghana was to set up and manage disbursements and the replenishment of the revolving credit fund for the participating banks. Although it was required that the clearing accounts of the participating banks be debited on specific due dates, as at March 2005 all the participating banks had balances overdue since December 2004. As explained above, the performance of the participating banks was weak because of low repayment rates, and this resulted in poor portfolio quality. The lowest rate of 27% for portfolio at risk (>30 days) achieved by Naara Rural Bank is weak by any standard. Building sustainable financial institutions was not a major ingredient in the project design.

39. **Private contractors.** Timeliness and quality of work by local contractors was a major problem throughout LACOSREP II. Procurement procedures for contractual services had been adopted that conformed with the World Bank standards and sought to ensure transparency and objective choice, but results were weak.

40. **NGOs.** RuralAid, the main NGO involved in excavation of the hand-dug wells and household latrines, generally performed satisfactorily. ActionAid, whose methodology was used in the formation of the functional literacy groups, was evidently successful. However, the three NGOs that worked in partnership with the rural banks had limited experience in rural finance and failed to provide continued assistance.

VI. OVERALL ASSESSMENT

41. The most important conclusion is that, overall and in spite of implementation delays in the second phase, both phases of LACOSREP have benefited poor communities in the Upper East Region, have increased levels of food security, enhanced capacity for collective action, improved material well-being and effectively heightened gender awareness. However, the delays in the construction and completion of dams and the likelihood that many will be unfinished after project closure are a serious problem. An oft-cited statement in Accra is that development investments in northern Ghana have not been effective. Even so, this evaluation is of the opinion that the relative success of LACOSREP II shows instead that there are experiences which deserve further support, clearly within an improved framework. The evaluation ratings are presented below in the table.

LACOSREP II Ratings

Project Performance		Overarching Factors	
Relevance	5	Gender	6
Effectiveness	4	Sustainability	3
Efficiency	4	Innovation and replicability	4
Impact on Rural Poverty		Performance of Partners	
Physical and financial assets	5	IFAD	4
Human assets	4	Government ^a	3
Social capital	6	UNOPS	4
Food security	4	Research partners	3
Environment	5	Contractors	2
Institutions and policies	2	Banks	2
		NGOs	3
		Community-based organizations	5

^a The rating for the Government takes into account the performance of the PCU, the Ministry and GIDA.

Scale: (6) highly successful; (5) successful; (4) partly successful; (3) partly unsuccessful; (2) unsuccessful; (1) highly unsuccessful. Details are provided in the main report.

VII. INSIGHTS AND RECOMMENDATIONS

Insights

42. **Integration and sequencing of components.** If IFAD is to consider further investment in the Upper East Region, the LACOSREP II evaluation suggests the need to rethink some of the elements of the project design. A key problem is that projects with many components but no strong integrative strategy are open to activities being carried out in a disjointed fashion without any kind of linkage; and this results in high management costs. Project design should consider sequencing more carefully.

43. **Equity considerations.** LACOSREP II and comparable projects (such as UWADEP) also raise some broader concerns. Focusing on the rehabilitation of existing infrastructure does little for communities that have not benefited from outside assistance in the past. Similarly, although assistance for special categories such as the blind or the physically impaired was not part of the LACOSREP II

design, experience gained under UWADEP shows that this can be made to work and, accordingly, it should be included in future project design.

44. **What type of intervention?** In Ghana, donors have started to fund multi-donor budget support initiatives for national strategies in some sectors, such as health and education. Although the pressure is not yet strong in the agriculture and water sectors, the question arises whether area development interventions should receive further funding. Experience with LACOSREP illustrates that there is a very significant need on the ground for projects and programmes that clearly focus on a well-defined geographical area and deliver services and inputs to impoverished farmers. While the area development focus can be retained, IFAD should – as previously noted – promote a stronger integrative strategy, not only through more careful consultation at the design phase but also by promoting better discussion and dissemination of lessons from the ground. Moreover, rural finance interventions will not be effective unless they aim at strengthening rural finance institutions. One option would be a dedicated programme for rural finance, in which case the dovetailing and synchronizing of rural finance with other interventions would clearly be a crucial issue.

45. Despite the problems noted, the contention that development interventions in the Upper East Region have not resulted in improved well-being is not supported by the empirical data gathered by the evaluation. Moreover, equity considerations, the contribution of the region's efforts to national development, and the Government's ratification of various poverty agendas all argue for continuing and indeed expanding the investment, albeit within an improved framework. In future investments, the priority of improving the design should be matched by the search for strategic partners, inasmuch as available IFAD resources allow only limited coverage.

Recommendations

46. **Immediate tasks: completion of irrigation infrastructure and health issues.** LACOSREP II will close on 31 December 2006 but a significant part of the dam infrastructure is as yet unfinished. The completion of existing works should be a high priority, but will only be a useful exercise if closer supervision of works is introduced, preferably using alternative arrangements (as elaborated upon). Health issues (especially the risk of water-borne diseases) need to be addressed to ensure that beneficiaries' health conditions do not deteriorate after project closure.

47. **Communicating and discussing project experience as a contribution to policy dialogue.** The two phases of LACOSREP offer important lessons that are grounded in the reality of the field. These experiences should be documented and widely discussed not just at the district and regional levels but at the national level as well, through such forums as the donors' coordination group in the agricultural sector. This report has highlighted areas of weak institutional impact, given the scant evidence of interactive approaches allowing ideas and concepts from the village to make their way to project design. The same can be said in the case of livestock vaccination: donor-driven policies of cost-recovery were clearly not working because of widespread cash shortages with consequent economic losses due to animal deaths. On the other hand, a number of good practices (e.g. strong commitment by WUAs, soil and water management) have emerged from the two phases of LACOSREP and more can be learned from other experiences. A first step in policy dialogue would be to facilitate discussion of the lessons stemming from the project experience at the local (district, region) and national levels.

48. **M&E and supervision.** The collection of quantitative data on project delivery was relatively accurate. Missing, however, was an assessment of impact on household welfare, food security and health. Supervision was conscientiously carried out within the constraints of the arrangements between UNOPS and IFAD, which allowed for only one two-week mission each year. Both these findings reflect the discrete and short-term nature of implementation support arrangements within

IFAD projects. For effective M&E and project implementation, project staff would rather develop a more responsive relationship with adviser(s)/facilitator(s) who are available on a more regular basis.

Irrigation

49. **Quality control and phased contracting of consultancy services.** Irrigation infrastructure should be opened to a wide range of professional consulting companies. Proposals should be sought from other qualified consultants to compete for assignments in downstream phases even where the consultant has performed satisfactorily. Consulting services should be divided into phases according to the project implementation schedule, and contracts signed separately, subject to satisfactory performance. In order to better understand bottlenecks, IFAD may wish to consider conducting an audit of contract awarding during project implementation.

50. **Dam construction technology.** New methods of dams construction are available that save a considerable amount of water. “Closed systems” are being introduced by international NGOs and this technology should be considered carefully in any future interventions.

51. **Pumping water** from the White Volta River for riverside horticulture was introduced in the final year of the project. Although not in the project design, it was introduced to allow cultivation of three crops per year. This method is simple and effective, but requires pumps and diesel fuel as inputs. The nutritional and income-generating benefits suggest that small-scale credit could rapidly extend the benefits to a wide range of farmers, as has been shown in other countries such as Nigeria.

Agricultural Support

52. **Action research and extension.** The present evaluation has highlighted the need for stronger partnerships between projects, research organizations and NGOs that would translate into support for the most needed technological packages. The Ministry and the PCU could also facilitate farmer-to-farmer communication through cross-visits and more extensive use of the already existing radio programming.

53. **Processing and marketing.** Crop diversification, dissemination of new marketing techniques and a variety of crop-processing strategies could rapidly increase incomes and reduce nutritional insecurity in the Upper East Region. The Ministry should review these issues and take action, bearing in mind that much knowledge already exists in neighbouring countries, notably Burkina Faso; in this connection, some type of farmer exchange is recommended.

Additional Area for Streamlining: Functional Literacy Groups

54. These groups, originally not included in the project design, have seen considerable success, both increasing numeracy and literacy and establishing solidarity among groups for other purposes, such as collective work and microfinance. Strategies to further develop such groups should be worked out with NGOs that have piloted them (e.g. ActionAid).

Rural Finance Issues

55. While credit was appreciated by the beneficiaries, coverage was limited and the project did not significantly contribute to promoting sustainable rural finance institutions. It is important that: (i) rural banks be allowed to apply interest rates that cover all costs and allow for profits; (ii) partners, including the Bank of Ghana, contribute to better coordination and regulation; (iii) training be provided to participating banks’ staff using regional rural finance hubs; (iv) discussions be held with participating banks on available techniques and products that can help reduce transaction costs in rural areas; and (v) the rural finance component be fine-tuned and well sequenced with other components.

APPENDIX

Table 1: Assets of Project Beneficiaries and Non-Beneficiaries (Control Group) Before and After the Interventions in the Upper East Region

	Number	Mean Before	Standard Deviation	Mean After	Standard Deviation	Test-Statistic
Beneficiaries						
Beds	159	1.64	0.77	1.96	0.85	6.16 ^a
Armchair	159	1.79	1.23	2.26	1.34	5.01 ^a
Bicycle	159	1.79	0.91	2.20	0.96	6.58 ^a
Table	159	1.99	0.92	2.38	0.91	6.37 ^a
Lantern	158	2.20	0.80	2.57	0.90	5.80 ^a
Radio/tape-player	159	1.60	0.68	2.12	0.84	6.59 ^a
Television	159	1.10	0.44	1.25	0.65	2.88 ^a
Hoe	158	3.16	0.95	3.49	0.85	4.22 ^a
Axe	157	1.59	0.84	1.85	0.94	3.99 ^a
Cutlass	158	2.20	0.94	2.49	1.07	3.76 ^a
Sickle	158	1.96	0.93	2.26	1.03	4.71 ^a
Sewing machine	158	1.19	0.45	1.46	0.73	5.27 ^a
Canoe/boat	158	1.01	0.11	1.13	0.53	2.76 ^a
Fishing net	158	1.09	0.42	1.14	0.46	1.54 ns
Bullock plough	158	1.36	0.64	1.46	0.74	2.68 ^a
Oxen	157	1.46	0.96	1.54	1.00	1.78 ns
Non-beneficiaries						
Beds	30	1.53	0.68	1.77	0.86	1.61 ns
Armchair	30	2.03	1.38	2.20	1.42	1.10 ns
Bicycle	30	1.53	0.57	1.83	0.95	1.64 ns
Table	29	1.93	1.03	2.03	1.02	0.60 ns
Lantern	30	2.10	0.61	2.27	0.78	1.67 ns
Radio/tape-player	30	1.53	0.57	1.87	0.90	2.31 ^a
Television	30	1.20	0.66	1.30	0.60	0.57 ns
Hoe	30	3.03	1.13	3.37	1.00	1.99 ^a
Axe	30	1.63	1.00	1.63	0.93	0.14 ns
Cutlass	30	1.93	0.94	2.14	1.06	1.51 ns
Sickle	30	1.47	0.82	1.86	1.06	2.48 ^a
Sewing machine	30	1.10	0.31	1.14	0.35	0.58 ns
Canoe/boat	30	1.00	0.00	1.00	0.00	0.58 ns
Fishing net	30	1.07	0.37	1.00	0.00	0.58 ns
Bullock plough	30	1.27	0.64	1.24	0.51	1.00 ns
Oxen	30	1.40	0.86	1.45	0.83	0.27 ns

^a Significant at $\alpha = 0.05$.

ns = non-significant.

Source: OE preliminary quantitative survey of beneficiaries and non-beneficiaries (2005).

Table 2: Proportion of Farmers Using a Particular Farming Practice Before and After Project

Practice	Before Project			After Project		Test-Statistic
	Adopted	Frequency	%	Frequency	%	
Manure	Yes	157	88	159	86	ns
	No	21	11	126	14	
Compost	Yes	65	37	114	62	31.1 ^a
	No	111	73	70	38	
Purchased seeds	Yes	65	37	91	50	8.82 ^a
	No	112	63	93	50	
Crop rotation	Yes	92	52	99	54	ns
	No	86	48	85	46	

(McNemar test of related samples)

^a Significant at $\alpha = 0.05$.

ns = non-significant.

Source: OE preliminary quantitative survey of beneficiaries and non-beneficiaries (2005).

