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**IFAD**  
**INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT**  
**Executive Board - Sixty-Third Session**  
Rome, 22-23 April 1998

**REPORT AND RECOMMENDATION OF THE PRESIDENT**

TO THE EXECUTIVE BOARD ON PROPOSED

**TECHNICAL ASSISTANCE GRANTS**

FOR

**AGRICULTURAL RESEARCH AND TRAINING**

BY

**CGIAR-SUPPORTED INTERNATIONAL CENTRES**



**TABLE OF CONTENTS**

<b>ABBREVIATIONS AND ACRONYMS</b>	<b>iii</b>
<b>PART I - INTRODUCTION</b>	<b>1</b>
<b>PART II - RECOMMENDATION</b>	<b>2</b>
<b>ANNEXES</b>	
I. International Livestock Research Institute (ILRI): Integrated Approach to the Assessment of Trypanosomiasis Control Technologies and Their Impacts on Agricultural Production, Human Welfare and Natural Resources in the Tsetse-Affected Areas of Africa - Phase II (1998-2000)	3
II. International Food Policy Research Institute (IFPRI): Development Opportunities in the Non-Farm Sector: A Review of Issues and Options in Asia	7



### ABBREVIATIONS AND ACRONYMS

CGIAR	Consultative Group for International Agricultural Research
CIRDES	Centre international de recherche-développement sur l'élevage en zone subhumide (International Centre for Research-Development on Livestock in the Sub-Humid Zones)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
ICIPE	International Centre of Insect Physiology and Ecology
IFPRI	International Food Policy Research Institute
ILRI	International Livestock Research Institute
NARS	National Agricultural Research Systems
NGO	Non-Governmental Organization
OUA-IBAR	Organization of African Unity - Inter-African Bureau for Animal Resources
RTTCP	Regional Tsetse and Trypanosomiasis Control Programme
TAG	Technical Assistance Grants
TTCB	Tsetse and Trypanosomiasis Control Branch



**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD  
TO THE EXECUTIVE BOARD ON PROPOSED TECHNICAL ASSISTANCE GRANTS  
FOR AGRICULTURAL RESEARCH AND TRAINING BY  
CGIAR-SUPPORTED INTERNATIONAL CENTRES**

I submit the following Report and Recommendation on two proposed technical assistance grants (TAGs) for agricultural research and training to CGIAR-supported international centres in the amount of USD 1 150 000.

**PART I - INTRODUCTION**

1. This report recommends the provision of IFAD support to the research and training programmes of two CGIAR-supported international centres: International Livestock Research Institute (ILRI) and International Food Policy Research Institute (IFPRI).
2. The documents of the technical assistance grant for approval by the Executive Board are contained in the annexes to this report:
  - I. International Livestock Research Institute (ILRI): Integrated Approach to the Assessment of Trypanosomiasis Control Technologies and Their Impact on Agricultural Production, Human Welfare and Natural Resources in the Tsetse-Affected Areas of Africa - Phase II (1998-2000).
  - II. International Food Policy Research Institute (IFPRI): Development Opportunities in the Non-Farm Sector: A Review of Issues and Options in Asia.
3. The objectives and content of these applied research programmes are in line with the evolving strategic objectives of IFAD, and with the policy and criteria of its TAG programme for agricultural research and training.
4. The strategic objectives of the Fund's support for technology development relate to:
  - (a) IFAD's target groups and their household food-security strategies, specifically in remote and marginalized agro-ecological areas;
  - (b) technologies that build on traditional knowledge systems, are gender-responsive, and enhance and diversify the productive potential of resource-poor farming systems by improving productivity and addressing production bottlenecks;
  - (c) access to productive assets (land and water, financial services, labour and technology, including indigenous technology) and sustainable and productive management of such resources;
  - (d) a policy framework that provides the rural poor with an incentive to reach higher levels of productivity, thereby reducing their dependence on transfers; and
  - (e) an institutional framework within which formal and informal, public and private-sector, local and national institutions provide services to the economically vulnerable, according to their comparative advantage. Within this framework, IFAD also intends to develop commodity-based approaches to rural poverty alleviation, specifically targeting items produced and consumed by the rural poor. Finally, the establishment of a consolidated network for knowledge-gathering and dissemination will enhance the Fund's capacity to establish long-term strategic linkages with its development partners and to multiply the effect of its agricultural research and training programme.



5. The TAGs proposed in this document respond to the foregoing strategic objectives. The ILRI programme specifically seeks to respond to strategic objectives (b), (d) and (e), in that it will test and validate a sustainable control strategy for addressing both the tsetse fly and the disease associated with it, trypanosomiasis. ILRI will enter into strategic alliances with partners in the research development community with a view to undertaking adaptive participatory research to assess innovative control strategies and develop sustainable options for removing a major livestock production constraint in Africa. While responding to all the above objectives, the IFPRI grant will respond specifically to strategic objectives (c), (d) and (e) as it seeks to identify opportunities for improving the income-generation potential of smallholders through off-farm employment and contribute to the Fund's regional lending strategy through strengthening project design in the non-farm sector.

## **PART II - RECOMMENDATION**

6. I recommend that the Executive Board approve the proposed Technical Assistance Grants in terms of the following resolutions:

RESOLVED: that the Fund, in order to finance, in part, the Integrated Approach to the Assessment of Trypanosomiasis Control Technologies and Their Impact on Agricultural Production, Human Welfare and Natural Resources in the Tsetse-Affected Areas of Africa - Phase II (1998-2000), shall make a grant not exceeding nine hundred thousand United States dollars (USD 900 000) to the International Livestock Research Institute (ILRI) upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

FURTHER RESOLVED: that the Fund, in order to finance, in part, the Development Opportunities in the Non-Farm Sector: A Review of Issues and Options in Asia, shall make a grant not exceeding two hundred and fifty thousand United States dollars (USD 250 000) to the International Food Policy Research Institute (IFPRI) upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Fawzi H. Al-Sultan  
President



**INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE (ILRI): INTEGRATED APPROACH TO THE ASSESSMENT OF TRYPANOSOMIASIS CONTROL TECHNOLOGIES AND THEIR IMPACTS ON AGRICULTURAL PRODUCTION, HUMAN WELFARE AND NATURAL RESOURCES IN THE TSETSE-AFFECTED AREAS OF AFRICA- PHASE II (1998-2000)**

**I. BACKGROUND**

1. Tsetse-transmitted trypanosomiasis is the major constraint to livestock development in the humid and sub-humid zones of sub-Saharan Africa. Sustainable control of trypanosomiasis requires strategies that integrate vector and parasite management. Furthermore, sustainable control strategies need to be based on a thorough assessment of critical aspects of control as they influence livestock production, the environment and the welfare of African farmers.

2. Phase I of the programme was initiated by ILRI and financed by IFAD between January 1995 and December 1997. The programme evaluated the adoption, use and impact of trypanosomiasis control technologies on IFAD's target groups in eastern, western and southern Africa. It assembled and deployed expertise on various trypanosomiasis control strategies, livestock production, and participatory techniques for monitoring socioeconomic and environmental impact. Interdisciplinary case studies undertaken in Burkina Faso, Ethiopia, Kenya and Zimbabwe, demonstrated, among other things, the capacity of rural communities to organize themselves to operate prototype tsetse traps and their willingness to pay for effective control and supplementary treatment options. The case studies have also demonstrated that vector control can generate benefits to farmers that exceed total costs by as much as ten times. Preliminary assessment of impact on natural resources shows low short-term costs, but there is a need for longer-term assessments to discern the sustainability of the control strategies in question. Phase II will build upon lessons from phase I. More attention will be paid to the access of farmers to control technologies and the sustainability of their use.

**II. THE PROPOSED PROGRAMME**

3. The overall objectives of the proposed three-year project are to evaluate the effectiveness, impact, and sustainability of alternative trypanosomiasis control strategies and to develop decision-support tools to improve control. The immediate objectives are to: (a) evaluate factors affecting the adoption, effectiveness, finance and management of disease management strategies; (b) identify factors affecting the structure and performance of delivery systems for inputs for vector and disease management; (c) extrapolate site-specific results to the national, regional and continental levels; and (d) develop decision-support tools to improve the design of trypanosomiasis control strategies.

4. The proposed research programme will contain the following components with associated activities:

**Participatory Testing and Validation of Sustainable Tsetse Control Technologies**

5. Based on promising results achieved in IFAD-supported multilocational research in East Africa, the proposed phase II will consolidate the information and analysis undertaken to date and endeavour to validate and provide a conclusive analysis of integrated control strategies developed so far. The research programme, coordinated by the International Centre of Insect Physiology and Ecology (ICIPE), will undertake a thorough investigation of community-based adoption of a comprehensive control technology package grounded mainly on the Nguruman trap technology and



associated complementary control strategies such as “push and pull” using repellents and odour baits. Emphasis will be placed on expansion of the applicability of promising field results, based on ICIPE research at Mbita Point, Kenya, on attractants, repellents and baits for different tsetse species and agro-ecologies. The adoptability and management with the farmers of trap technologies, including demonstrations of trap construction and maintenance; their capacity to purchase complementary treatments, including pour-ons and drugs; and other related technical and institutional issues of sustainable adoption will be assessed under this component. This adaptive field research will be undertaken with nomadic, transhumant and sedentary communities; and will include issues relating to sustainability and measures to minimize risk of poor follow-up as farmers become engaged in crop and livestock production activities as a result of reductions in the tsetse fly population.

6. The testing of tsetse trap technology in multilocal trials will include validation of complementary control measures. These measures have already proved successful in maintaining traps and achieving the long-term benefits of reducing tsetse population and controlling trypanosomiasis, resulting in the settlement of migrant populations and economic benefits for the rural poor. The research programme will include an assessment, undertaken with the rural communities, of the risk of reinfestation and the benefits of crop diversification and purchase of trypano-tolerant breeds. Special attention will be paid to prospects for sustaining the benefits of control beyond the life of the project. Lessons of experience will be used to draw up criteria for evaluating the adoption, finance and management of other trypanosomiasis control trials and programmes.

### **Improving Access of Farmers to Control Technologies and Sustainability of Use**

7. A constraint on several of the techniques for trypanosomiasis control is the availability of the knowledge and inputs necessary for the techniques to be used effectively. Thus a new field activity will evaluate constraints on the delivery of inputs for control options, including pour-ons, trypanocidal drugs and traps. The research is expected to provide concrete solutions to the constraints encountered by the farming communities, and to evaluate the structure of delivery systems and performance of the private and public agencies involved in the research sites. The impact of trypanosomiasis control on livestock productivity will be assessed, and estimates made of the economic benefits and costs associated with control.

8. As a new activity of phase II, project results on disease-control strategies and impact will be extrapolated to the national, regional and continental levels. This will start with a synthesis of the lessons learned on strategies and impact at research sites across Africa, including areas where IFAD has ongoing or planned operations in tsetse infested areas.

### **Development of Decision Support Tools**

9. Another new activity in phase II will be the development of decision-support tools to help decision-makers prioritize the use of public funds, improve the sustainability and finance of control, and anticipate where and when tsetse control, using the tsetse trapping technology and its complementary control measures, might have the desired impact.



### III. OUTPUTS

10. Ensuring adequate animal health in the region will safeguard the achievements of more than 50 IFAD-supported investment projects with a livestock focus in sub-Saharan Africa. In more specific terms, the following outputs are expected to be achieved by the end of the three-year project (to be monitored using a logistical framework developed with stakeholders):

:

- (a) successful control of trypanosomiasis by farmers in the case study sites (including IFAD project sites) and testing of promising prototypes in selected new IFAD project sites;
- (b) guidelines to improve the effectiveness, adoption, finance, management and delivery of disease-management strategies in tsetse-infested areas;
- (c) decision-support tools to improve the access of decision-makers to the best available knowledge on the socioeconomics and sustainability of trypanosomiasis control;
- (d) strengthened collaboration among ILRI, ICIPE, national agricultural research systems (NARS), and local institutions with capacity and direct interface with the farming community; and
- (e) a more systematic and holistic approach to trypanosomiasis control adopted by national and regional collaborators.

### IV. IMPLEMENTATION ARRANGEMENTS

7. As the implementing institution, ILRI has overall responsibility for all components; ICIPE is the main partner institution; and Ethiopia, Kenya, Mozambique, Uganda and Zimbabwe are participating countries. The project will be coordinated by the project leaders through a steering committee formed at the stakeholders' meeting in January 1998. Each representative will be a member of the steering committee and will help facilitate the legal, technical and organizational needs of the programme in the relevant country/site, in accordance with memoranda of understanding (satisfactory to IFAD) between ILRI and each entity. The International Centre for Research-Development on Livestock in the Sub-Humid Zones (CIRDES), a European Union (EU)-sponsored research organization, will play a key role in West Africa. Collaborating programmes and donors will include the Inter-African Bureau for Animal Resources of the Organization of African Unity (OAU-IBAR), EU, the Food and Agriculture Organization of the United Nations (FAO) and the Regional Tsetse and Trypanosomiasis Control Programme (RTTCP). OAU-IBAR and ILRI will work together to ensure that this programme and the Farming in Tsetse Control Areas of Eastern Africa Project (coordinated by the OAU-IBAR and financed by the EU) will complement and support each other.

### V. PROGRAMME COSTS AND FINANCING

8. Total programme costs over the three-year period amount to USD 1.3 million, of which USD 0.4 million (30%) will be contributed by the participating research institutions. IFAD's grant of USD 900 000 (representing 70% of the total) will finance salaries, equipment, research expenses, travel, steering committee meetings, workshops, and project coordination over the three-year period.



**Total Estimated Cost and Financing Plan for the Programme  
(USD)**

Description	IFAD contribution			Core contribution			Total
	ILRI	ICIPE	Subtotal	ILRI	ICIPE	Subtotal	
Scientific staff	273 000	109 800	382 800	218 000	30 000	248 000	630 800
Technical support staff	101 500	41 000	142 500	18 000	20 000	38 000	180 500
Equipment	6 500	-	6 500	5 000	-	5 000	11 500
Research expenses	92 500	23 000	115 500	15 000	10 000	25 000	140 500
Travel	39 600	15 500	55 100	7 000	3 000	10 000	65 100
Project coordination	45 000	-	45 000	4 000	-	4 000	49 000
Incremental administration and technical backstopping	111 300	41 300	152 600	60 000	15 750	75 750	228 350
<b>Total</b>	<b>679 400</b>	<b>230 600</b>	<b>900 000</b>	<b>327 000</b>	<b>78 750</b>	<b>405 750</b>	<b>1 305 750</b>





**INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI): DEVELOPMENT OPPORTUNITIES  
IN THE NON-FARM SECTOR: REVIEW OF ISSUES AND OPTIONS IN ASIA**

**I. BACKGROUND**

1. The non-farm sector in developing countries provides important opportunities to generate employment, livelihoods and incomes for a growing labour force in the rural areas, thus contributing to economic growth and general poverty alleviation. Recent studies have shown that some 23-50% of total incomes of rural households all over the world come from non-farm sources.

2. In the Asia and Pacific region, the non-farm sector is particularly critical in view of the region's high population growth, high poverty rate, increasing urban migration and declining farm productivity and size of landholdings. The non-farm sector can be expected to acquire even greater importance in the face of the ongoing financial crisis in the East Asian region and its repercussions for the rest of the region. With the relatively low growth prospects for most of the subregion in the near future, this situation in both the short and long term may lead to reduced government investment in social services, increased unemployment, decline in incomes, a possible reversal of rural-to-urban migration among the urban poor, a return of remittance workers from their host countries back to the urban areas, and a turnaround of previous successes in poverty alleviation.

**II. RATIONALE**

3. The current economic situation thus calls for a review and analysis of the implications of the Asian financial crisis on IFAD's strategies for poverty alleviation and assistance to the rural poor in the region, particularly on the non-farm sector. There is urgent need of an assessment of non-farm employment opportunities, particularly for those for whom on-farm production has ceased to be a viable form of livelihood, and within the context of gender inequity in wages. There is urgency for identifying and understanding the dimensions of the situation, including identification of the new sectors or groups, such as women and youth, that are most likely to be affected in the immediate future. The study, which will contribute to strengthening IFAD's future loan portfolio and its emerging thrust on identifying both on and off-farm sources of income for smallholders, becomes paramount. A study along the above lines is also particularly opportune as IFAD's projects are increasingly located in marginal agro-ecosystems and risky production environments and will need to generate capacity in rural sub-economies to absorb new entrants in the labour force; and, at the same time, identify opportunities to offset the decline in farm incomes due to production shortfalls and crop failures.

4. Further study is important on how effective IFAD's strategy on the non-farm sector has been in the past, particularly on microenterprise development and microfinance, and to ascertain whether new approaches are needed to reach out to the rural poor, particularly the poorest groups. Also called for is a review of the approach that has relied totally on self-employment. While it is acknowledged that microenterprise development is one concrete way of reaching the poor, little has been done to systematize concerns, such as whether this is the most appropriate intervention for a particular target group such as the landless. Since it is now clear that growth alone will not make a significant difference to the agricultural wages of the landless in many countries with an oligopsonistic labour market, there appears to be a case for special employment programmes along the lines of the Employment Guarantee Scheme in the Indian state of Maharashtra. There is, therefore, a need to examine whether or not there is scope for such programmes in the rural areas and what IFAD's role



might be in such initiatives. Other issues, such as the effectiveness and sustainability of non-farm microfinance interventions in a long-term poverty-alleviation strategy, likewise need to be addressed.

5. IFAD needs to gain a better understanding of the full context and dynamics of the non-farm sector, and of the how agricultural skills of landless workers can be enhanced. Thus, the importance of technical assistance and education and, not least, physical infrastructure, transport and communication development in the promotion of the non-farm sector needs to be examined more critically from the perspective of the poorest populations. All these issues need to be better understood by IFAD so that it may determine a new direction and thrust in its regional programmes.

6. Non-governmental organizations (NGOs) have acquired years of experience from their activities in the non-farm sector. In view of the increased role and importance that the non-farm sector is expected to have in the region, it would be important for IFAD to gain a better knowledge of practices involving the non-farm sector among the NGOs in the region, and draw lessons from them.

7. IFPRI, which has had frequently collaborated with IFAD in the past, has undertaken extensive research and empirical analysis on the non-farm sector. Thus, IFPRI is well placed to take a leading role in coordinating the study and preparing a comprehensive position paper for IFAD, in collaboration with other relevant institutions or scholars in the region with expertise on the subject.

### III. THE PROPOSED PROGRAMME

8. The research programme will analyse the potential for growth of the non-farm and wage-employment sectors, particularly given the changing economic scenarios in the region. It will present a range of investment options and modalities, based on concrete experience in the region, for poverty-alleviation strategies related to the non-farm sector. The purpose will be to reach the poorest groups in the rural areas, with special focus on women, and contribute to shaping IFAD's future strategies for this sector in the region.

9. In support of these broad objectives, the primary research programme activities are intended to:

- (a) identify international organizations, research institutions, NGOs and experts in the Asia and Pacific region involved in the non-farm and microenterprise sector, and describe innovative practices and developments in the countries where these exist;
- (b) assess lessons from experience of IFAD projects in the region and the conclusions derived regarding the successful promotion of microenterprises and wage employment through public works programmes. In this respect, research activities on subjects such as spatial distribution and human capital development should be carefully reviewed;
- (c) examine the link between trends in non-farm wage labour and implications for food security at the household level, particularly as it effects IFAD's target group, the poor and poorest rural households, and women specifically;
- (d) compile best practices for non-farm development strategies among the rural poor which have demonstrated innovative approaches and had a significant impact in a particular region or area of a country, and develop prototype modules for project design. The study will focus on five to six countries; and



- (e) prepare a regional analysis and framework to guide IFAD's lending in the future, including a range of options to reach the poorest, and seek ways to improve the design, implementation and impact assessment of projects in the non-farm sector.

#### IV. IMPLEMENTATION ARRANGEMENTS

10. The work will be coordinated by IFPRI, in close collaboration with other institutions based in the region that have demonstrated and appropriate experience in the non-farm sector in general and microenterprises in particular. It will enter into memoranda of understanding, satisfactory to the Fund, with the relevant institutions for this purpose. IFAD will assist in identifying and selecting the institutions participating in the study. A steering committee composed of representatives of the organizations involved and IFAD will monitor the research progress. The final research results will be presented at a workshop for IFAD staff.

#### V. PROGRAMME COSTS AND FINANCING

11. The following table illustrates the indicative costs of this one-year research programme. To the extent possible, the programme will rely on individuals and institutions based in the region. As the findings of the research will be of immediate interest to IFAD, financing for this programme will be provided entirely by IFAD.

##### Indicative Programme Costs (USD)

	USD
1. Regional workshop to discuss framework for research (six persons x USD 2 500 average/person)	15 000
2. Identify research institutions/NGOs in the region involved in non-farm sector and describe innovative, best practices within non-farm/micro-enterprise sector	140 000
3. Travel and per diem	5 000
4. Synthesis of analyses	10 000
5. Communications and coordination (12 person months)	50 000
6. Workshop presentation in Rome (10 persons x USD 2 500 average/person)	30 000
<b>Total</b>	<b>250 000</b>