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IFAD
INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
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REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON PROPOSED

GRANTS

UNDER THE

GLOBAL/REGIONAL GRANTS WINDOW

TO

NON-CGIAR-SUPPORTED INTERNATIONAL CENTRES

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ABBREVIATIONS AND ACRONYMS

CGIAR	Consultative Group on International Agricultural Research
GEF	Global Environment Facility
IAC/DLO	International Agricultural Centre of the DLO Foundation
ICIPE	International Centre of Insect Physiology and Ecology
IFDC	International Fertilizer Development Center
ISO	International Organization for Standardization
M&E	monitoring and evaluation
NARS	national agricultural research system
SSA	sub-Saharan Africa

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

I submit the following report and recommendation on three proposed grants for agricultural research and training to international centres not supported by the Consultative Group on International Agricultural Research (CGIAR) in the amount of USD 3.9 million.

PART I – INTRODUCTION

1. This report recommends the provision of IFAD support to the research and training programmes of the following non-CGIAR-supported international centres: the International Agricultural Centre of the DLO Foundation (IAC/DLO), the International Centre of Insect Physiology and Ecology (ICIPE) and the International Fertilizer Development Center (IFDC).

2. The documents of the grants for approval by the Executive Board are contained in the annexes to this paper:

(i) DLO Foundation: Regional Programme to Strengthen "Managing for Impact" in Eastern and Southern Africa

(ii) International Centre of Insect Physiology and Ecology: Programme for the Development of Sericulture and Apiculture Products for the Poor in Fragile Ecosystems, Using the Value Chain Approach

(iii) International

(iv) Fertilizer Development Center: Programme for Combating Soil Fertility Decline to Implement Smallholder Agricultural Intensification in Sub-Saharan Africa

3. The objectives and content of these applied research programmes are in line with the evolving strategic objectives of IFAD and the policy and criteria of its grant programme.

4. The overarching strategic objectives that drive IFAD's policy for grant financing, which was approved by the Executive Board in December 2003, are:

(a) promoting pro-poor research on innovative approaches and technological options to enhance field-level impact; and

(b) building the pro-poor capacities of partner institutions, including community-based organizations and NGOs.

5. Deriving from these core objectives, the specific aims of IFAD's grant support relate to: (a) IFAD's target groups and their household food-security strategies, specifically in remote and marginalized agroecological 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, and labour and technology, including indigenous

technology) and the 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 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.

6. The grants proposed in this document respond to the foregoing strategic objectives. The Regional Programme to Strengthen "Managing for Impact" in Eastern and Southern Africa responds to both of the strategic objectives of the grant policy. It aims at building the capacity of pro-poor institutions more effectively to plan, implement and monitor development interventions to enhance impact and at supporting the empowerment of the rural poor so that they can become effectively engaged in analysing their own circumstances and decision-making processes. The programme will support initiatives to test innovative approaches that would effectively facilitate putting into practice the management-for-impact approach (including, for example, participatory monitoring and evaluation (M&E), research with the aim to strengthen linkages among policy, the institutional framework and processes, and pro-poor interventions, as well as enhanced knowledge generation and management and networking based on experiences and lessons learned.

7. The Programme for the Development of Sericulture and Apiculture Products for the Poor in Fragile Ecosystems, Using the Value Chain Approach responds to strategic objective (a), given that one of the objectives of the programme is to improve productivity through biological research for apiculture and sericulture, and strategic objective (b), because it disseminates improved methodologies and insect resource-knowledge and conservation practices, while establishing market linkages. The programme also contributes directly to specific aims (b), (c) and (e) of IFAD's grant support.

8. The Programme for Combating Soil Fertility Decline to Implement Smallholder Agricultural Intensification in Sub-Saharan Africa to be implemented by IFDC contributes directly to the achievement of overarching strategic objective (a) and two of the specific aims of IFAD's grant support, namely, (b) and (e), by providing farmers and other stakeholders with sufficiently flexible technological options and institutional and organizational arrangements that can be fine-tuned to suit farmer conditions. This programme would build capacity among farmers and research and extension service providers so as to facilitate this process using participatory learning and research/extension approaches and improved understanding of key issues related to soil degradation and agricultural intensification. Lastly, the programme would contribute, through research in long-term trials, to the improvement of existing soil fertility management options and the development/improvement of decision support tools for soil management.

PART II – RECOMMENDATION

9. I recommend that the Executive Board approve the proposed grants in terms of the following resolutions.

RESOLVED: that the Fund, in order to finance, in part, the Regional Programme to Strengthen "Managing for Impact" in Eastern and Southern Africa, shall make a grant not exceeding one million one hundred thousand United States dollars (USD 1 100 000) to the DLO Foundation (IAC/DLO) for a three-year programme 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 Programme for the Development of Sericulture and Apiculture Products for the Poor in Fragile Ecosystems, Using the Value Chain Approach, shall make a grant not exceeding one million four hundred thousand United States dollars (USD 1 400 000) to the International Centre of Insect Physiology and Ecology (ICIPE) for a four-year programme 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 Programme for Combating Soil Fertility Decline to Implement Smallholder Agricultural Intensification in Sub-Saharan Africa, shall make a grant not exceeding one million four hundred thousand United States dollars (USD 1 400 000) to the International Fertilizer Development Center (IFDC) for a three-year programme 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.

Lennart Båge
President

ANNEX I

DLO FOUNDATION: REGIONAL PROGRAMME TO STRENGTHEN "MANAGING FOR IMPACT" IN EASTERN AND SOUTHERN AFRICA

I. BACKGROUND

1. Ensuring how to maximize the potential impact of interventions on poverty reduction has been a key concern to development partners. This concern has been growing in recent years. The increasing focus on results and impact is also manifested in a number of global fora, notably including the Paris Declaration on Aid Effectiveness in pursuit of the Millennium Development Goals.

2. Alongside the concern for maximizing impact is the recognition of the critical importance to development of participatory processes in which poor rural men and women are directly and effectively involved in the design, implementation and M&E of development programmes. There is also considerable change occurring in the nature and modalities of development aid. Projects and programmes are becoming more integrated within government frameworks and processes, while there has been a shift from stand-alone projects to a more holistic and programmatic approach that is oriented more towards concerted and harmonized multi-stakeholder efforts under an umbrella framework (e.g., sector-wide approaches). In many countries, decentralization is a major issue. In all situations, partners in development interventions must cope with rapidly changing and often unpredictable economic, social, political, governance and environmental factors. There is also recognition that much more needs to be done to improve knowledge management and innovation based on capturing and sharing lessons and experiences among practitioners, decision-makers and development partners.

3. All the above issues have significant implications for the leadership, management and M&E capacities of IFAD-supported programmes, associated government ministries and implementing partners, as well as service providers. In order to enhance the performance and impact of development interventions, there is a need to strengthen the capacity of diverse stakeholders to "manage for impact".

II. RATIONALE/RELEVANCE FOR IFAD

4. Concern for enhancing the impact of programmes assisted by IFAD has led to, among other initiatives, the production of "A Guide for Project M&E: Managing for Impact in Rural Development", as well as the introduction of the Results and Impact Management System. The importance of managing for results, of knowledge management and of enhancing leadership for development effectiveness are key themes within the IFAD management response to the recommendations of the recent Independent External Evaluation.

5. Past reviews and the assessment of project performance in the eastern and southern Africa region have indicated that, often, project M&E plans and strategies are not sufficiently comprehensive to guide the actual implementation of M&E. A commonly recurring problem is that much information is often collected that is not adequately analysed and, therefore, not effectively used for decision-making and other management functions. While much attention has been given to M&E in external accountability and operational management, many projects struggle to make M&E useful for the functions of: (a) supporting strategic management; (b) generating new knowledge and supporting innovations; and (c) empowering beneficiaries and other stakeholders in monitoring and managing development processes and results. Furthermore, measuring outcomes and impact in order to assess the extent to which goals and purposes of interventions are achieved remains a major challenge.

6. There is also a general lack of competent and skilled service providers who can support rural development initiatives in the design and implementation of appropriate participatory and impact oriented M&E systems and assist various stakeholders in building the management, leadership and M&E capacities to manage for impact, as well as to respond innovatively to changing conditions. Given the evolution of the concept and understanding of M&E, not all implementing partners or service providers are able effectively to put the principles and methodologies into a broad and relatively new context of "managing for impact". Furthermore, in the evolving development aid architecture, rural development interventions are increasingly operated within overall policy and institutional frameworks in broad partnerships (including civil society organizations and the private sector). Consequently, there is a growing need to promote policy and institutional environments conducive to critical reflection and results-based management and to enhance the "management for impact" of the diverse stakeholders involved in rural development initiatives.

7. The proposed programme is highly relevant to IFAD in that it will strengthen the capacity of regional, national and local stakeholders so that rural development interventions will be more effectively managed to enhance impact and will enable the rural poor to overcome their poverty. The programme will support innovative approaches that would effectively facilitate putting into practice the approach of "managing for impact" (for example, participatory M&E to empower the rural poor) as a means to generate knowledge and lessons, as well as to build upon the capacity of trained service providers and stakeholders. Knowledge management and networking among IFAD-assisted projects, governments and other development partners across countries will be an important aspect in this regional programme.

III. THE PROPOSED PROGRAMME

8. The overall goal of the three-year programme is to contribute to raising the impact of interventions aimed at rural poverty reduction in eastern and southern Africa. The purpose is to enable key stakeholders more effectively to manage rural development interventions to enhance impact.

9. The programme is designed to consist of the following three interlinked components.

(a) **Capacity-building among service providers and pro-poor institutions**. This component aims at strengthening the understanding and capacity of regional and national service providers (e.g., facilitators and trainers) to provide quality support to pro-poor institutions, which, in turn, would be able to enhance the management of development interventions to raise impact, as well as to become more well placed to empower the poor through participatory M&E systems. Capacity-building will be undertaken through training and workshops, mentoring and coaching services, and support for the implementation of innovative approaches with trained service providers.

(b) **Regional knowledge management and networking**. This component aims at improving the availability of and access to information, knowledge and innovations through documentation, enhanced regional networking between professionals and practitioners and the establishment of an electronic resource information and learning centre. Linkages with existing networks and resource bases, such as regional and national evaluation associations, will be promoted.

(c) **Fostering conducive policies and processes**. This component aims at developing a better understanding of national processes, policies and systems that influence pro-poor interventions in efforts to manage so as to enhance impact (e.g., aid harmonization) and at reinforcing linkages between overall development architecture

and the process of empowering the poor and promoting their participation. The studies and research to be undertaken under this component will be, to the extent possible, linked to the experience gained through the other components and IFAD-supported projects; the output will be shared and used for policy dialogue.

IV. EXPECTED OUTPUTS/EXPECTED BENEFITS

10. The expected impact and benefits of the programme will include:

- the enhanced capacity of regional and national service providers to extend effective support to pro-poor interventions in pursuing management to enhance impact;
- the enhanced capacity of pro-poor institutions to manage development processes for impact and thereby contribute to improving the livelihoods of the rural poor;
- increased awareness and understanding of and, hence, support for key policy- and decision-makers for results-based management and participatory development; and
- contributions to the empowerment of the beneficiaries of pro-poor interventions to participate meaningfully in the design, management, and the M&E of development initiatives.

V. IMPLEMENTATION ARRANGEMENTS

11. The implementation of the programme will be coordinated by IAC/DLO, part of Wageningen University and Research Centre, the Netherlands. The IAC has substantial experience in capacity-building in the sustainable agricultural and rural development sector and the natural resource management sector, and it has especially good core competency in participatory M&E. It also has a long-standing training programme in this area and offers technical assistance to guide the development and implementation of M&E systems. A staff member will be appointed as programme facilitator to be responsible for coordinating the implementation of approved activities and mobilizing and working with other experts and administrative units of the organization for the effective and smooth implementation of the programme.

12. IAC/DLO will develop partnership arrangements with two regional/subregional institutions (one in eastern Africa and the second in southern Africa) that will play major roles in the implementation and coordination of programme activities. A subregional programme coordinator will be appointed in each regional/subregional institution. One of the institutions would be expected to have competency in supporting francophone countries and stakeholders either through its own human resources, or in liaison with a francophone institution. During the first six months of programme implementation, a comprehensive selection process will take place to identify suitable regional/subregional institutions. The process will rely on predefined competency criteria such as relevant mandate and experience in capacity-building and technical assistance, in particular, relating to participatory planning, M&E in the context of rural development, facilitation skills, networks and working experiences with other, relevant organizations at the regional and subregional levels. IAC/DLO will enter into a cooperation/partnership agreement or memorandum of understanding with each of the two subregional institutions, stipulating the modalities of cooperation and the roles and responsibilities of the institutions.

13. Programme oversight and guidance will be provided by a steering committee comprised of representatives of IAC/DLO, regional/subregional institutions, IFAD and the United Nations Office for Project Services. The steering committee will meet annually to review the progress in implementation and approve workplans and budgets, as well as provide guidance on implementation

and management issues. In addition, broader and more inclusive stakeholder review and critical reflection meetings will be held biannually and include national/local service providers involved in the programme, selected IFAD field representatives, relevant government officials and the members of the steering committee. The review meetings will reflect on progress and performance, discuss key issues and constraints and share lessons.

14. The programme will be supervised by IFAD's Eastern and Southern Africa Division (Africa II), which will, on a continuous basis, maintain a link with the programme facilitator/IAC/DLO, review various technical and financial reports, and provide inputs and no-objection as necessary, as well as assess the performance of the implementing agency and partnering institutions.

VI. INDICATIVE PROGRAMME COSTS AND FINANCING

15. The total programme budget is estimated at USD 1.4 million over three years, of which USD 1.1 million would be contributed by IFAD, as indicated hereunder.

IFAD Grant Budget
(USD)

Category	Total
Personnel costs: programme facilitator and subregional programme coordinators	178 000
Operating costs: IAC/subregional institutions	144 000
Workshop, training and capacity-building	598 000
Research and consultancies	180 000
Total	**1 100 000**

16. The remainder of the programme budget is expected to be contributed by IAC/DLO, in kind (in terms of staff and operational costs for coordination and management, estimated at USD 92 000); partnering subregional institutions (covering staff and operational costs, USD 35 000), and participating national and local service providers and IFAD-supported projects in cash and in kind (estimated at about USD 47 000 and USD 169 000, respectively, and covering mainly the costs of participation in training events).

Narrative Summary	Key Indicators and Targets	Means of Verification	Assumptions and Risks
Goal To contribute to increasing the impact of interventions aimed at rural poverty reduction	(Long-term indicator beyond three-year programme period) ▪ Poverty indicators such as household assets and child malnutrition (depending on different contexts)	▪ Review/evaluation reports, participatory impact monitoring/assessment of relevant interventions/projects ▪ Perception of the stakeholders involved in the relevant interventions	▪ Intended impacts of target group interventions are not hindered by government policies, national economies, internal financial difficulties, or unexpected natural disasters
Purpose Key stakeholders in eastern and southern Africa more effectively manage pro-poor programmes to achieve impact	▪ Area of change in terms of managing for impact in participating development programmes: o Programme strategies adapted in collaboration with stakeholders and geared towards impact o Programme operations managed more effectively o M&E system set up and managed in collaboration with stakeholders, with a focus on accountability, strategic review, operational management, the creation of new knowledge, and empowerment o Learning environments created or improved	▪ Performance assessments of key stakeholders involved in the programme ▪ Supervision reports for participating IFAD-supported programmes ▪ Programme evaluation	▪ The policy and institutional framework is supportive of the application of the lessons learned in the managing-for-impact approach
Component Purposes	**Indicators**	**Means of Verification**	**Assumptions and Risks**
Component 1 Enhanced service delivery and the application of the managing-for-impact approach by regional/national service providers and key stakeholders in pro-poor development projects	▪ Partnering subregional institutions provide effective training and backstopping services to local service providers and rural development interventions ▪ At least 80% of the trained service providers and M&E officers are effectively undertaking training and are facilitating the managing-for-impact approach ▪ The number of "clients" who receive support and indicate satisfaction with the quality of the services delivered by the trained subregional institutions or national service providers (by type of service provider) ▪ Number/quantity, types and quality of the services delivered per service provider trained through the programme	▪ Follow-up reviews are conducted as part of ongoing training assessments ▪ Feedback reports by the recipients of services. ▪ Observations during mentoring/coaching processes ▪ Activity/annual report by service providers	▪ Trained service providers and M&E officers continue to be available to participate in programme activities (i.e., they are not, for example, transferred to non-participating organizations/countries)
Component 2 Increased availability of and access to innovations and new and existing knowledge for managing for impact in eastern and southern Africa	▪ The number of trainers/facilitators contributing to the network (sharing of resources, lessons learned, etc.) ▪ The types and quality of the information generated, documented and shared through electronic resources in libraries, workshops and exchange visits ▪ The levels of access (number of hits) among electronic resources in libraries and the consultancy database ▪ Key stakeholders perceptions on usefulness, the access to and availability of the information generated	▪ Information and knowledge assessment (start-up and end of programme) ▪ Satisfaction assessments, e.g., through annual questionnaires/surveys about the targeted audience perceptions of the information generated	▪ The targeted audiences have the necessary resources and capacity to access electronic resources in libraries (e.g., affordable internet access)

Component Purposes	Indicators	Means of Verification	Assumptions and Risks
Component 3 Advocacy aimed at making national and international policies, processes and systems more supportive of the efforts of pro-poor interventions to manage for impact	▪ The number and type of interactions between pro-poor interventions/institutions and policy-/decision-makers in discussing issues related to managing for impact ▪ The number and type of linkages/harmonization of project-level M&E systems with national/government systems and processes ▪ The number and type of development partners that have collaborated in policy research and advocacy	▪ Awareness surveys (baseline and end of programme) ▪ Performance assessments (baseline, end of programme) of participating programmes ▪ Case studies ▪ Programme progress reports	▪ Policy and legislative environment (policy framework, etc.) is supportive of and open to the managing-for-impact approach
Outputs	**Key Indicators and Targets**	**Means of Verification**	**Assumptions and Risks**
Output 1.1: Enhanced capacity among regional/national service providers	▪ The number and type of service providers trained in the managing-for-impact approach [target: at least 30 in each subregion] ▪ The number and type of training sessions conducted for subregional institutions and national service providers ▪ At least 80% of trained service providers have obtained improved knowledge and skills in the managing-for-impact approach as a result of programme activities	▪ Training assessments (which should include pre- and post-tests to enable assessments of changes in the levels of knowledge, attitudes and skills)	
Output 1.2: Enhanced capacity among implementers of pro-poor interventions	▪ The number and type of individual implementers of pro-poor interventions trained in the managing-for-impact approach [target: at least 60] ▪ At least 70% of participating pro-poor interventions have obtained increased awareness, skills and knowledge in the managing-for-impact approach as a result of programme activities ▪ The number and type of innovation initiatives undertaken in relation to pro-poor interventions, together with trained service providers [target: at least two in each subregion] ▪ The type of support provided to implementers in initiating and carrying out innovation initiatives	▪ Training assessments (which should include pre- and post-tests to enable assessments of the changes in the levels of skills and knowledge ▪ Workshop reports ▪ Case studies of the innovation initiatives undertaken (including beneficiary assessments)	
Output 2.1: Enhanced regional networking among professionals and practitioners	▪ The number and type of exchange visits carried out and the organizers of the visits [target: at least two regional and two national exchange visits conducted in each subregion, resulting in increased skills and knowledge among participants] ▪ Effective linkages have been established with at least two existing national or regional networks ▪ A network of M&E service providers has been established by the end of Year 1 ▪ The level of satisfaction (usefulness, quality) expressed by recipients with the networks	▪ Programme progress reports ▪ Satisfaction assessments, e.g., feedback from participants in exchange visits ▪ The participatory (bi-)annual review and critical reflection	▪ Collaborating networks maintain the levels of standards and quality required for effective collaboration with the programme

Outputs	Key Indicators and Targets	Means of Verification	Assumptions and Risks
Output 2.2: Documenting and sharing innovations, knowledge, tools and methodologies on managing for impact	▪ The number, type and quality of case studies/lessons/best practices/tools documented and disseminated [target: at least three case studies/lessons/best practices/tools] ▪ The number and type of users who indicate that they utilize the case studies/lessons/best practices/tools documented and disseminated through the programme [target: at least 65% of the targeted audience]	▪ Progress reports ▪ Information and knowledge assessment (mid-term and end of programme)	▪ Targeted audiences have the necessary resources and capacity to access electronic resources in libraries (e.g., affordable internet access)
Output 3.1: Implications of national policies, systems and processes for the effective use of the managing-for-impact approach are more well understood in pro-poor interventions participating in the programme	▪ The number, type, quality and usefulness of guidelines for the integration/alignment of project-based M&E systems and national/government processes that are produced and disseminated [target: at least two] ▪ The number and type of people/institutions that have received information disseminated through the programme and indicated that these have been useful and relevant	▪ Progress reports ▪ Feedback reports on policy/systems assessments gathered through information and knowledge assessment (mid-term and end of programme)	▪ Recipients of policy/systems assessment reports invest the time to read and internalize the implications of the findings
Output 3.2: Policy- and decision-makers are more aware of the importance of the managing-for-impact approach	▪ The number, type and usefulness of the policy briefs/materials produced ▪ The number and type of policy- and decision-makers who have received information produced through the programme and indicate that these are useful and relevant ▪ The number and type of policy fora/platforms facilitated through the programme	▪ Awareness surveys ▪ Progress reports	▪ Policy- and decision-makers willing to engage in dialogue on the managing-for-impact approach ▪ Like-minded partners in the region have the capacity and willingness to engage in advocacy activities

ANNEX II

INTERNATIONAL CENTRE OF INSECT PHYSIOLOGY AND ECOLOGY: PROGRAMME FOR THE DEVELOPMENT OF SERICULTURE AND APICULTURE PRODUCTS FOR THE POOR IN FRAGILE ECOSYSTEMS, USING THE VALUE CHAIN APPROACH

I. BACKGROUND

1. The development of viable alternative income sources from products that benefit from market demand and simultaneously exhibit a comparative advantage for people living in fragile and remote areas has posed a challenge for development practitioners for some time. Over the last nine years, IFAD has worked closely with ICIPE to develop a comprehensive programme (from production to marketing) for promoting off-the-shelf technologies to address this problem in Africa.

2. The first phase of the programme (initiated in 1996 under grant 458) successfully identified socio-economic constraints on the promotion of such technologies and addressed these through adaptive research in seri- and apiculture. These low-cost technologies have since been validated under field conditions in Kenya and Uganda under grant 491. The research undertaken in both grants covered all aspects, from the development of the technology to marketing, and the results have been promising. Approximately 10 000 farmers/beekeepers, 300 government extension workers, six Ph.D. and four M.Sc. students have benefited over the last nine years. Four marketing centres have been established. These centres work with traders on local marketing and are currently also making efforts to penetrate overseas markets.

3. ICIPE's continued involvement in these activities and the promotion of the sustainable use of natural resources have contributed to food security and improved livelihoods and directly relate to the rural poverty-reduction strategies pursued by IFAD. The IFAD evaluation report (May 2003 for Grant 491), inter alia, recommended that: (a) the results of the programme be extended to other poor communities of East, West and North Africa and (b), while the core original sites in which api- and sericulture technologies were proven during the previous phase, value chains be developed by piloting and testing market access and its impact on rural incomes.

II. RATIONALE/RELEVANCE TO IFAD

4. With the increasing emphasis on market-based reforms, the development of viable alternative sources of income is posing a challenge to development practitioners. As a result, many projects in marginal and remote areas are now seeking to identify smallholder products with wide demand in domestic and export markets. While broadbased agricultural products (cereals, livestock, etc.) have a wide demand, serious problems remain in intensifying production in these environments because of both: (a) poor natural resources and (b) the poor economics involved in undertaking production in these areas. Given the higher input costs and the fact that products are sold at a lower price, the resulting economics does not compare favourably with the economics of producers in more well endowed areas or those that are closer to markets.

5. These fragile environments are coming under greater pressure as the poor overexploit the environments to meet their own immediate needs. Production is decreasing as soil fertility declines, and there is some urgency required in the development of technologies and, related to this, marketing that will provide the poor living in these habitats with alternative and sustainable sources of income. The proposed programme responds to these goals and meets an important strategic objective of IFAD: to boost the access of the poor to markets by designing "integrated approaches along the full continuum of production, processing and marketing" of non-traditional crops so as to raise rural incomes and contribute to poverty reduction, while simultaneously conserving the natural resource base and the global environment.

6. These environmental benefits accrue from: (a) a reduction in deforestation, thereby providing alternative sources of income, through carbon sequestration; (b) a reduction in global warming; and (c) the conservation of fragile soils as the pressure is relieved to overexploit the land in order to meet needs of sustenance.

7. Because of the advantages offered by the programme, there is a growing interest of the private sector and of other international agencies and NGOs to extend the programme to additional areas in East, West and North Africa. Before these technologies can be extended, however, more research needs to be conducted to consolidate the gains acquired. The necessary steps include: (a) marketing to ensure that products meet consumer requirements in quantity and quality; (b) continuing improvements in and adaptation of technologies to provide a competitive edge to producers through gains in productivity; and (c) validation of the technologies in various agroecological zones so as to benefit a larger number of poor people.

8. IFAD's support at this critical stage will cement a unique partnership that draws on the synergies of international agencies, NGOs, the private sector and research organizations to enhance the income of the poor and simultaneously conserve the environment.

III. THE PROPOSED PROGRAMME

9. The main beneficiaries of this programme will be the rural poor living in remote and agroecologically fragile areas in East and West Africa and the Near East and North Africa region. This programme will be specifically linked to ongoing IFAD loan projects in Kenya, the Sudan, the United Republic of Tanzania, Uganda and Yemen. Beneficiaries that could benefit from the programme include people in Burkina Faso, Cameroon, Egypt, Nigeria, Rwanda and Senegal.

10. The goal of the programme is to develop value chains that can be used in diverse fragile agroecological conditions to enhance the income of the poor, especially women, the landless and marginal farmers in remote areas of East, West and North Africa.

11. The objectives of the programme are to improve:

(a) value added and marketing for sericulture and apiculture products and facilitate the access of the produce of the poor to the markets;

(b) productivity through biological research for apiculture and sericulture; and

(c) the technical and managerial capabilities of beekeepers and silk farmers through the adaptation and dissemination of technologies and best practices.

IV. EXPECTED OUTPUTS/EXPECTED BENEFITS

12. The following key activities will be undertaken to achieve the programme's goals and objectives**.**

13. To attain objective (a), ICIPE will undertake a **market study** to identify the market potential for apiculture and sericulture products. To this end, the study would identify the potential markets and players in the value chain, assess margins at each stage and formulate a strategy to maximize the returns to producers. This includes examination of the possibility of creating a common brand (preferably fair-trade certified) for the products developed and providing quality assurance (International Organization for Standardization (ISO) certified) and organic certification for apiculture enterprises in the focal areas. In order to ensure that a comprehensive market study is carried out,

ICIPE would also identify: (a) customer requirements and market standards; (b) the training needs of stakeholders; and (c) private sector companies willing to work with and train community groups on marketing and business aspects.

14. To attain objective (b), ICIPE would carry out **research** activities in molecular, hormonal and semi-chemical interventions at various levels of adaptive research to enhance the productivity of sericulture and apiculture. Other related activities to be carried out by ICIPE include the development of micro-satellite DNA markers to characterize the different breeds of honeybees and silkmoths bred for phenotypes in various ecosystems; the study of the switch on and off endocrine/hormonal mechanisms of the royal jelly production system in the potential breeds of honeybees and exploration of manipulations to maximize the jelly production for additional hive value; the screening of potential repellents and attractants for the insect parasitoids of wild silkmoth larvae; and the development of "pull and push'' techniques to control insects in the field and minimize silk cocoon losses.

15. To attain objective (c), ICIPE would compile a **manual of operations** to assist projects in developing comprehensive income-generating programmes in sericulture and apiculture products through a value chain approach. ICIPE would also provide continuous technical backstopping and support the implementation of training and capacity-building activities among beekeepers, silk farmers and rural entrepreneurs in IFAD projects and projects financed by other partners such as the Global Environment Facility (GEF). As a part of this activity, ICIPE will supplement all projects by: (a) conducting research, field testing and the production of species suitably adapted to agro-climatic conditions; (b) preparing and implementing capacity-building workshops and training courses to assist the poor in undertaking these income-generating activities; (c) disseminating improved methodologies and insect resource knowledge and conservation practices; and (d) establishing market linkages identified through the study.

16. Where appropriate, ICIPE staff would travel to countries covered by the programme in East and West Africa and the Near East and North Africa region and would organize the workshops as necessary to ensure that the objectives are achieved.

17. The programme is expected to improve the technical and managerial capabilities of 6 000 beekeepers and 3 000 silk farmers through the technologies promoted. The specific actions that would contribute to this end result are the:

(a) identification of the market potential for apiculture and sericulture products;

(b) development of a strategy to maximize the returns to producers of apiculture and sericulture products through quality assurance and organic certification for apiculture and sericulture enterprises;

(c) improvements in the production and productivity of apiculture and sericulture products;

(d) development of operational models in various ecosystems for apiculture and sericulture products; and

(e) preparation of a manual of operations that would assist in the development of programmes in other areas through a value chain approach. The manual would be presented to IFAD country programme managers as part of ICIPE's mandate to disseminate knowledge gained under the programme.

The details of the outputs by activity are summarized in the log frame in Annex II.

ANNEX II

V. IMPLEMENTATION ARRANGEMENTS

18. ICIPE's strength lies in the development of technology through research and capacity-building, and this has been demonstrated in the work undertaken by ICIPE so far. Building on its previous experience and its core capabilities, ICIPE would implement the programme and would work closely with and report to the IFAD task managers. The grant would be implemented over four years. Implementation of the programme would be managed by an existing ICIPE staff member, the programme coordinator (principal scientist level), who would liaise with the national agricultural research system (NARS) partners and other donors in the preparation of annual workplans and budgets and technical and financial reports. Where appropriate, NARS partners would receive training in implementing the programme.

19. A steering committee would be formed by ICIPE to supervise the programme. It would consist of the programme coordinator, IFAD task managers/country programme managers and one representative each from NARS and the financing partners. The travel and costs associated with supervision, the administration of the grant, or other participatory activity by IFAD task managers would not be financed from grant resources.

20. The steering committee would meet annually to discuss programme implementation, the problems encountered and various other issues. It would approve the annual workplans and budgets and the progress reports before these are forwarded to IFAD. The programme coordinator would have overall responsibility for implementing the programme agreed upon with the steering committee.

21. The marketing study would be contracted to a consulting company identified by ICIPE, following competitive bidding, after the terms of reference of the marketing study have been agreed with IFAD.

22. As in the previous IFAD grants, ICIPE would exercise due diligence, prudence and financial controls in managing the grant, following its internal control procedures. Annual audited accounts would be duly certified by independent external auditors.

23. **M&E**: ICIPE would develop an M&E system within three months after signing the grant agreement. Reporting to IFAD on the progress of the programme would be carried out semi-annually and would include technical and financial reports. IFAD would carry out an independent mid-term review after the second year of the programme, the findings of which would be discussed with ICIPE and other members of the steering committee.

VI. INDICATIVE PROGRAMME COSTS AND FINANCING

24. The total cost of the programme is estimated at USD 8.0 million, of which IFAD's grant will be USD 1.4 million, and ICIPE will contribute USD 0.6 million in kind. The remaining USD 6.0 million will be funded by the partners on a parallel financing basis. The contribution of each partner is summarized in the table below.

ANNEX II

PROGRAMME COSTS
(USD '000)

Item of Expenditure	IFAD	AFESD	KFAED	IsDB	UNDP GEF	Other a/	ICIPE	Total
Consultants and personnel	390	150	80	75	200	570	0	1 465
Subcontracts to NARS	50	50	50	50	150	75	0	425
Training and capacity-building	170	150	110	80	170	970	150	1 800
Marketing and market research	238	130	70	75	100	270	340	1 223
Equipment and supplies	262	295	135	110	162	600	100	1 664
Travel and workshops	85	80	35	20	70	150	10	450
M&E, administration costs, lessons learned	180	120	95	65	125	245	0	830
Technical review by ICIPE	25	25	25	25	23	50	0	173
TOTAL	**1 400**	**1 000**	**600**	**500**	**1 000**	**2 930**	**600**	**8 030**

AFESD = Arab Fund for Economic and Social Development
KFAED = Kuwait Fund for Arab Economic Development
IsDB = Islamic Development Bank

Narrative Summary	Measurable Indicators	Means of Verification	Important Assumptions
Goal Enhance the income of the poor, especially women, the landless and marginal farmers, in remote areas of East, West and North Africa by developing directly applicable value-chain systems for sericulture and apiculture products that can be used in diverse fragile and various agroecological conditions	• The number of households showing improvement in the household assets ownership index (results and impact management system) (% of which are woman-headed) • Forest coverage in participating countries or project areas	• Participatory impact monitoring surveys • GEF and IFAD project reports • National statistical sources	• Early benefits from the income-generating activities are a sufficient incentive for communities to improve their behaviour towards ecosystem conservation • No significant environmental catastrophe or interference • Outputs delivered in a timely manner to maximize impact
Objectives			
1. Improve value added through the marketing of sericulture and apiculture products	• An increase in the farmgate price per unit of apiculture and sericulture products in the countries covered by the programme	• Participatory impact monitoring reports	• The demands of the market are compatible with the projected quality and quantity of produce • The private sector does not dominate the market and does not capture the new market opportunities
2. Improve productivity through biological research for apiculture and sericulture	• Improved insect resources demonstrate increased productivity in field trials	• Internal progress reports (validated by the IFAD mission)	• Field trials correspond to socio-economic realities and the means of the target groups • The research results are applicable in diverse agroecological settings • There is effective extension and support and sufficient market demand
3. Improve the technical and managerial capabilities of beekeepers and silk farmers by adapting and disseminating technologies and best practices that are pro-poor, environmentally sustainable, gender sensitive and appropriate in diverse agroecological conditions	• The number of sites with improved insect resources • The number of sites with improved technologies • The number of members of community associations involved in apiculture and sericulture activities and receiving services (disaggregated by type/gender)	• Annual report of community and inter-community associations • Progress reports	• Effective coordination among field units and cooperating institutions
Outputs			
1.1 Conduct a study that will identify the market potential for apiculture and sericulture products, identify the markets and players in the value chain and the margins at each stage and formulate a strategy that maximizes the returns to producers	• Report published and distributed and publicly available through the websites/portals of ICIPE and other major organizations • Workshop organized to present the report to country programme managers, the project management unit and NARS staff	• Internet • Progress reports	• Strategy accepted and endorsed by practitioners and entrepreneurs • No changes/shocks in the international market for silk and apiculture products that would undermine the relevance of the findings or the strategy

Narrative Summary	Measurable Indicators	Means of Verification	Important Assumptions
1.2 Support the creation of a common (possibly fair-trade certified) brand for the apiculture products supported by the projects	• Registration of brand • Sales made of the brand	• Registered trademarks • Sales reports	• The coordination of the participating product sites and project units is effective • There is consistency in the quality and taste of the products • Labelling and trade regulations have been considered and the obstacles overcome
1.3 Provide quality (ISO) and organic certification for apiculture and sericulture enterprises in the focal areas	• The number of enterprises certified (ISO/organic) • The number of requests processed (ISO/organic)	• Progress reports • M&E reports	• The institutional capacity to handle certification requests in a timely and effective manner is in place • Certification can be meaningfully used with a brand so as to increase value
2.1 Carry out research activities in molecular, hormonal and semi-chemical interventions at various levels of adaptive research in order to enhance the commercial production of silk- and honey-based products (IFAD financed)	• Molecular markers for silkmoth and honeybees developed and used in the selection process • Juvenile hormone analogue has been characterized, screened and applied in royal jelly production in the apiaries in all sites • Potential attractants and repellents have been developed and applied in the field at all project sites to enhance wild silk cocoon production	• Annual/periodic work programme reports • Mid-Term Review and Evaluation report	
3.1 Develop a manual of operations that will assist the projects (mainly, but not exclusively IFAD and GEF projects) in developing comprehensive programmes through a value chain approach	• Report is published and distributed and publicly available through the websites/portals of ICIPE and other major organizations	• Internet	• The successful diagnosis of needs and the means of poor communities to adopt apiculture/sericulture feeds is incorporated in the manual to increase accurate targeting and impact
3.2 Provide continuous technical backstopping and support the implementation of training and capacity-building activities among beekeepers, silk farmers and rural entrepreneurs in East and West Africa and the Near East and North Africa region	• Quality control lab and training facilities have been established • The number of trainers of apiculture and sericulture trained by gender and type (results and impact management system) (indicative target: trainers from participating countries through workshops) • People trained by gender and type (results and impact management system) (indicative target: 6 000 beekeepers, 3 000 silk farmers in current IFAD and GEF projects) • The number of apiaries, silkmoth-rearing and farming sites and marketplaces established and operational in all project sites	• Annual/periodic work programme reports • Detailed M&E schedule prepared at the inception report • Mid-Term Review and Evaluation Reports • Rural community associations, committee meeting minutes, Ministry of Social Welfare	• Availability of trainers and inputs

ANNEX III

INTERNATIONAL FERTILIZER DEVELOPMENT CENTER : PROGRAMME FOR COMBATING SOIL FERTILITY DECLINE TO IMPLEMENT SMALLHOLDER AGRICULTURAL INTENSIFICATION IN SUB-SAHARAN AFRICA

I. BACKGROUND

1. Agriculture in sub-Saharan Africa (SSA) is widely seen as an engine for poverty reduction and economic growth and, not without reason, as about 70% of the population lives in rural areas and depends on agriculture for its livelihood. However, the loss of soil fertility and the associated stagnation or decline in crop productivity cuts across all farming systems and accounts for the fact that SSA has grown poorer in the past 35 years. HIV/AIDS, inappropriate national and regional agricultural policies, poor governance in general and a lack of agricultural inputs, credit and markets for the sale of surplus production seriously hamper the ability of farmers to halt soil degradation, leading to a downward spiral in poverty and ever-poorer soils. As a result, household food insecurity and acute poverty are widespread and severe in the region. These are expected to remain the main concerns in the coming decades, unless technological, economic and socio-political measures are taken to accelerate agricultural growth and curtail soil degradation. To sustain growing rural and urban populations and to maintain a strong agricultural sector, agricultural production must grow substantially. Annual agricultural growth rates of 6% are needed. Unfortunately, most of the technologies that have been developed often fail to offset nutrient depletion and do not increase crop production because of their blanket application, regardless of the complexity and diversity of the socio-economic and agroecological context in which smallholder farmers are operating. The challenge will be to provide farmers and other stakeholders with flexible technological options and institutional and organizational arrangements. Such prototype technologies and methodologies can then be fine-tuned to suit farmer conditions. This programme intends to build capacity among farmers and research and extension service providers so as to facilitate this process using participatory learning and research and extension approaches and improved understanding of key issues related to soil degradation and agricultural intensification. It will contribute, through research during long-term trials, to the improvement of existing soil fertility management options and the development and improvement of decision support tools for soil management. The tools will help policy-makers at the local and regional levels to plan and evaluate their programmes and will also help extension workers and farmers to address more effectively the diversity of farming conditions in SSA. Furthermore, the programme will promote knowledge exchanges between this grant area and other IFAD-funded activities in the Africa I and II regions and will also stimulate the use and dissemination of the knowledge gained so as to enhance the impact of investment programmes funded by IFAD and others.

II. RATIONALE/RELEVANCE TO IFAD

2. **Agricultural intensification, soil fertility and markets**: The potential for expansion of the area under agriculture is limited in SSA. Increasing the agricultural production per ha offers a more plausible option. However, soil fertility often limits crop yields, and intensification would place even more strain on nutrient reserves in the soil. During the last decade, there has been growing concern about the fertility of soils and, consequently, the sustainability of land use in Africa. Many studies suggest that soils are being rapidly degraded. Sanchez et al. (1997) state, for instance, that soil fertility depletion in smallholder farms is the fundamental biophysical cause for declining food production per capita in SSA. Hence, there is no way out of the poverty cycle for farmers unless strong emphasis is placed on reversing nutrient depletion and increasing the use efficiency of nutrients and water (both rainfall and irrigation) for each particular farming system. Agricultural intensification requires external nutrient inputs. On Africa's depleted soils, production cannot be increased without

bringing nutrients from outside. Organic inputs alone will not suffice as these are produced on the same soils and are therefore, in essence, recycling poverty. Although organic inputs, such as legumes, fix nitrogen and can solubilize phosphorus, they do not add to the net total phosphorus in the soil. Moreover, organic sources of nutrients have low nutrient content, and their manipulation requires much labour, which is often unavailable, especially in households affected by HIV/AIDS. Sustaining soil fertility and increasing productivity using organic resources alone are, therefore, a losing battle. However, poor road and market infrastructure, lack of timely access to credit and inputs at reasonable cost, lack of timely information and ineffective extension systems severely limit the use of mineral fertilizers in SSA. Given the difficulties of acquiring mineral fertilizers and the potential environmental risks related to their use without other inputs (e.g., soil acidification), IFDC and its partner in this programme, the Tropical Soil Biology and Fertility Institute of the International Center for Tropical Agriculture (TSBF-CIAT), promote the judicious use of mineral fertilizers wherever possible and in combination with locally available soil amendments. This strategy has been named integrated soil fertility management and refers to making the best use of inherent soil nutrient stocks, locally available soil amendments, mineral fertilizers and green-water technologies in order to increase land productivity, while maintaining or enhancing soil quality.

3. “Green-water technologies” enhance soil fertility, capture water in the soil and optimize the use of water for crop growth. This programme will focus on the development of green-water technologies, mainly through agropastoral systems in semi-arid zones. Care will be taken to ensure that innovations are sustainable and are based, when possible, on the improvement of traditional, local technologies and knowledge. This implies the promotion of practices that generate environmental benefits and that lead to substantial yield improvements and social equity. Conservation agriculture has shown promise in increasing farmer incomes, while conserving and enhancing the condition of natural resources. It involves reduced tillage and the improved management of biomass, generally increasing green-water availability for crops in semi-arid zones and usually increasing labour productivity and the efficiency of the use of inputs.

4. Agricultural intensification in SSA will require building bridges between scientific knowledge and indigenous knowledge in areas such as soil fertility, water management, integrated pest management, plant breeding and the fine tuning of innovations in farm fields according to farmer needs so as to ensure that technologies are appropriate and farmer owned. The entry point for agricultural intensification will generally be soil fertility as one of the main factors limiting crop yield in SSA. Agricultural intensification will require a strong market-and-commodity focus both at the input side and the output side. Improved soil, water and crop management will lead to increased production, but requires good access to agricultural inputs (especially mineral fertilizers) and a reliable market for the sale of surplus production. Another crucial step will therefore be to conduct research on market opportunities in order to create reliable input and output markets. To the extent possible, this type of research will also be farmer led so as to ensure that farmers are able to adapt quickly to changing market conditions. Moreover, the development of effective communication strategies to facilitate the exchange of information and knowledge is a prerequisite to sustainable agricultural development. By conducting farmer-led market research, this project will be able to recommend efficient approaches to link smallholder farmers to markets (input, output and financial markets) and build their capacity to identify and exploit market opportunities. This may, for example, be achieved through a combination of the appropriate, localized soil fertility improvement technologies, post-harvest credit and the storage of grain as collateral (“warrantage”), thereby enabling farmers to sell crops later in the season at higher prices and higher profits.

5. **Addressing the diversity and dynamics of the reality of farmers**: Soil fertility varies strongly in the African landscape due to natural processes and human intervention. Access to resources (land, inputs, financing) often differs among household members. The diversity and dynamics of the farmer reality make farmer-led research a necessity. Because farmers are given the lead in research, they become the owners of the results and are instrumental in training colleagues. To address spatial variability, diversity and complexity at the village level, the programme will use a combination of participatory and systems approaches to develop site-specific, agronomic recommendations and apply decision support tools to speed up the identification of promising soil management options across agroecological zones and farming systems. Farmers will be involved in the planning, implementation and evaluation of technologies. The programme will ensure that men and women are involved in the research processes as active partners and decision-makers and actually benefit from improved water, nutrient-use-efficient technologies and related market opportunities. Special attention will be paid to gender sensitivity in each of the planned activities, including the selection of participating farmers, training and the field evaluation of the technologies. This will contribute to empowering women and men farmers by strengthening their productive capacity, economic security and social status and by contributing to the well-being of their families.

6. **Promoting information and knowledge flow and use**: Much information on technological, institutional and policy innovations that enhance soil fertility and improve soil productivity is available in principle. However, it tends to be scattered and difficult to use. There is a clear need to find ways to improve the use of existing information so as to avoid the needless duplication of effort. This will require the development of an effective communication strategy that should use various media communication tools such as the Internet.

III. THE PROPOSED PROGRAMME

7. **Target group**: The target group includes smallholder farmers, farmer organizations, research and extension service providers in IFAD investment programmes (NARS and NGOs), and IFAD investment programme staff in west, eastern and southern Africa.

8. **Goal**: The overall goal is to empower smallholder-farmer communities and to contribute to poverty reduction (improved livelihoods) and the long-term sustainability of the natural resource base in SSA.

9. **Specific objectives**:

(a) implement farmer-led research on soil, water and crop management technologies that combat soil fertility decline and on institutional arrangements that improve market opportunities on both the input side and the output side;

(b) train farmers and research and extension service providers (national agricultural research and extension systems, NGOs and IFAD investment programme staff) to facilitate farmer-led research on agricultural intensification and to ensure continuity after the programme ends;

(c) provide technical backstopping to IFAD investment programmes in the Africa I and II regions in order to improve their effectiveness and impact; and

(d) promote the sharing of knowledge and success stories related to soil fertility management and agricultural intensification in SSA.

10. **Key programme activities**:

(a) **diagnosis and choice of pilot sites**: to choose representative pilot sites for selected farming systems that have a strong potential for agricultural intensification and poverty alleviation:

- diagnosis of agricultural production systems; and
- selection of pilot villages and teams of facilitators;

(b) **participatory experimentation on technological options and market access**: to develop and fine-tune packages of technological options, socio-economic measures and institutional arrangements that support smallholder agricultural intensification in key farming systems:

- inventory of existing technologies and market access;
- action research to test technologies to combat soil fertility decline and measures to improve market access; and
- strategic research on soil fertility decline;

(c) **capacity-building**:

- training of farmer trainers and input dealers; and
- training of research and extension service providers;

(d) **knowledge exchange**: to regroup activities aimed at the improved exchange of knowledge between the grant and the investment programme partners and beyond:

- promotional and public awareness activities to enable stakeholders, including policy- and decision-makers to become acquainted with the programme; and
- end-of-programme workshop resulting in the publication of programme results and state of the art papers on various subjects relating to the effort to combat soil degradation; and

(e) **the scaling-up and scaling-out** of results obtained from this grant through training and technical backstopping:

- facilitating farmer-to-farmer extension with the aim of reaching about five surrounding communities per knowledge centre created through activities under (b) and (c) above and
- technical backstopping of the scaling-out process and technical assistance, on request, for non-participating investment programmes on related issues within the Africa I and Africa II regions.

ANNEX III

IV. EXPECTED OUTPUTS/EXPECTED BENEFITS

11. Outputs

Output 1: Technological options in the effort to combat soil degradation and enhance soil fertility have been adapted to site-specific conditions using farmer participatory approaches and lead to increased productivity in cereal-, and root- and tuber-based production systems.

Output 2: Current market opportunities and information systems have been analysed; alternative approaches to link smallholder farmers effectively to financial and output markets have been tested, and efficient and appropriate ones are being used.

Output 3: Farmers, research and extension agents, and IFAD programme staff have been trained to ensure efficient interventions and the sustainability of programme approaches and results.

Output 4: Technical advisory notes, analytical papers, case studies, and extension and promotional materials have been developed, widely distributed and are accessible through the FIDAFRIQUE.[1] Regular knowledge exchanges have been established between IFAD investment programmes, this grant and stakeholders in agricultural intensification in SSA.

V. IMPLEMENTATION ARRANGEMENTS

12. IFDC and TSBF-CIAT will execute the programme and will work in conjunction with the local research and extension service providers that are active in each investment programme. IFDC will be the recipient of the grant that is responsible for the administrative and financial management of the programme. TSBF-CIAT will be a partner of IFDC operating within the current memorandum of understanding between IFDC and TSBF-CIAT. IFDC and TSBF-CIAT will each appoint programme staff, including the coordinator (operating out of the IFDC regional office in Lome, Togo) and a regional programme coordinator for eastern and southern Africa (operating out of the University of Harare, Zimbabwe). Programme staff will be extensively supported by IFDC and TSBF-CIAT staff based in the region. The field implementation of most activities will be conducted in collaboration with the members of the Network for Agricultural Intensification in Sub-Saharan Africa and the African Network for Soil Biology and Fertility (AfNET). IFDC and TSBF-CIAT will contact universities with a view to involving doctoral students in research activities (without contributing to their fees). IFDC will organize an annual steering committee to review results and review and approve annual workplans and budgets. The committee will consist of the directors (or their representatives) of IFDC and TSBF-CIAT, the project coordinator (who will be secretary to the committee) and the regional programme coordinator (eastern and southern Africa). IFAD representatives of the Technical Advisory Division, the Western and Central Africa Division and the Eastern and Southern Africa Division and the directors of relevant IFAD-funded investment programmes (in which field work is conducted) will also be invited. Attendance at such meetings by the above staff will be covered through the programme development financing facility and the administrative budget and not through grant funds.

13. **M&E**: The programme coordinators, in close collaboration with the M&E units within IFAD investment programmes, would develop and implement a participatory and impact-

[1] Internet-based network of organizations and projects dedicated to fighting rural poverty in Western and Central Africa

oriented monitoring system that would include the feedback of programme staff and stakeholders.

14. **Technical and financial reporting**: Annual workplans will be developed by the programme coordinators, in close collaboration with IFAD investment programme staff and stakeholders, and debated during annual workshops. Workplans will specify milestones and indicators for the measurement of programme progress. Workplans, budgets and an implementation progress report will have to be approved by the project steering committee prior to submission to IFAD. Coordinators will submit half-year progress reports to the Technical Advisory Division of IFAD to facilitate the supervision of the programme. A final report will be submitted to IFAD three months after programme completion. IFDC will have overall responsibility for reporting to IFAD and will therefore submit to IFAD annual audited financial statements on the use of the grant funds. IFDC will maintain internal controls and undertake the efforts necessary to ensure proper financial management. This includes control functions over procurement and timely reporting on all financial transactions generated through a fully automated accounting system. Independent auditors will be engaged to conduct audits on IFDC accounts annually to ensure compliance with, inter alia, laws, regulations, contracts and grants.

VI. INDICATIVE PROGRAMME COSTS AND FINANCING

15. The programme will be implemented during a period of three years and will require USD 1 400 000 from IFAD (see table below). IFDC and TSBF-CIAT will contribute additional cofinancing to the programme for a total of USD 2 936 000, which shall be in cash and in-kind.

Programme Costs
(USD)

Cost Category	IFAD	IFDC	TSBF-CIAT	Total
Project management	579 000	450 000	165 000	1 194 000
Travel	152 000	120 000	102 000	374 000
Equipment and supplies	125 000	45 000	171 000	341 000
Field experimentation	209 000	-	379 000	588 000
Capacity-building	133 000	384 000	296 000	813 000
Workshops	54 000	-	66 000	120 000
Scaling-up and -out	20 000	605 000	153 000	778 000
Administrative costs	128 000	-	-	128 000
Total	1 400 000	1 604 000	1 332 000	4 336 000

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
Overall objective	Empower smallholder-farmer communities and contribute to poverty reduction and the long-term sustainability of the natural resource base in SSA	- Improved economic and environmental sustainability of production systems (yield, natural resource quality indicators)	Independent project impact studies, project reports, interviews, websites of partners	An enabling political and institutional environment, political stability
Project purpose	Support smallholder farmers in agricultural intensification and in combating soil degradation by enhancing soil fertility	- Increased agricultural production - Improved farmer incomes - Improved market access - Improved economic and environmental sustainability of production systems	Independent project impact studies, project reports, interviews, websites of partners	Enabling political and institutional environment, political stability
Results	1. Typology and characteristics of farming systems 2. Market development constraints are defined 3. Technological options for combating soil degradation and enhancing soil fertility are adapted to site-specific conditions 4. Approaches to institutional arrangements to link smallholder farmers to input and output markets are tested 5. Trained farmers, research and extension agents and IFAD programme staff 6. IFAD investment programmes in the Africa I and II regions strengthened 7. Project output developed, is widely distributed and accessible 8. Efficient and effective project management 9. Efficient and effective monitoring, evaluation and impact assessment	- Number of farming systems analysed - Number of soil management options evaluated and adapted to specific farming systems - Sound institutional arrangements and socio-economic measures to improve market access and adoption of technology - Number of learning groups and action research groups - Number of training hours provided to research and extension service providers - Number of training hours to facilitate farmer-to-farmer extension - Average increase in yields obtained per ha in learning plots (kg/ha^{-1}) - Number of farmers who have obtained improved access to factor and output markets in pilot sites - Number of change agents trained - Number of meetings, training sessions, and field days held - Number of farmer representatives and input dealers trained - Number of decision- and policy-makers reached - Number of extension materials prepared - Number of decision support tools developed/improved	Project reports, scientific publications, reports on training courses and workshops, trip reports, websites, project steering committee meetings and minutes	Investment programme staff and research and development service providers are motivated to collaborate with this research grant

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
		- Number of radio/television broadcast documentaries produced - Number of manuals and technical advisory notes written - Number of backstopping missions (person days/yr^{-1}) - Number of times project staff participate in IFAD formulation missions for new investment programmes - Number of materials posted on websites: Fidafrique, the Network for Agricultural Intensification in Sub-Saharan Africa and AfNET - Number of project progress reports - Number of scientific articles - Consultant reports on impact of project		
Activities	1.1 Diagnosis of agricultural production systems 1.2 Selecting pilot villages and teams of facilitators 2.1 Inventory of existing technologies and market opportunities and constraints 2.2 Action research to test technologies to combat soil fertility decline and measures to improve market access 2.3 Strategic research on soil fertility decline 3.1 Training of farmer trainers and input dealers 3.2 Training of research and development service providers 4.1 Promotional and public awareness activities 4.2 End-of-project workshop 5.1 Facilitating farmer-to-farmer extension	**Means:** The assumption is that the project will work with four investment programmes in West Africa and four investment programmes in eastern and southern Africa Appointment of project coordinators (two) Recruitment of M.Sc. or Ph.D. students Regional travel (airfare, per diem for project coordinators and for participants in steering committee meetings) Equipment and supplies: (two cars, plus fuel and maintenance, two computers, two printers, two UPS, field supplies and miscellaneous project supplies) Field experimentation: subcontracts with	**Costs:** See budget	Investment programme staff and research and development service providers are motivated to collaborate with this research grant and to cofinance some activities

	Intervention Logic	Objectively Verifiable Indicators	Sources of Verification	Assumptions
	5.2 Technical backstopping	research and development service providers, soil and plant analyses Organizing yearly training of representatives of farmer organizations, research and development service providers, input dealers Organizing yearly PAC meetings and end-of-project workshop Promotional campaigns for scaling-up and -out Appointment of independent consultants to conduct impact assessment -> See also activity schedule		