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**REPORT AND RECOMMENDATION OF THE PRESIDENT**

TO THE EXECUTIVE BOARD ON PROPOSED

**TECHNICAL ASSISTANCE GRANTS**

FOR

**AGRICULTURAL RESEARCH AND TRAINING**

BY

**NON-CGIAR-SUPPORTED INTERNATIONAL CENTRES**



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## **ABBREVIATIONS AND ACRONYMS**

CGIAR	Consultative Group for International Agricultural Research
CIHEAM	International Centre for Advanced Mediterranean Agronomic Studies
ISFM	Integrated Soil Fertility Management
NARES	National Agricultural Research and Extension Systems
NENA	Near East and North Africa
NGO	Non-Governmental Organization
O&M	Operation and Maintenance
PIM	Participatory Irrigation Management
R&D	Research and Development
TA	Technical Assistance
TSBF	Tropical Soil Biology and Fertility
UZ	University of Zimbabwe
WUAs	Water Users' Associations



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

I submit the following Report and Recommendation on two proposed technical assistance (TA) grants for agricultural research and training to non-CGIAR-supported international centres in the amount of USD 3 035 000.

**PART I - INTRODUCTION**

1. The present report recommends the provision of IFAD support to the research and training programmes of two non-CGIAR-supported international centres: International Fertilizer Development Centre (IFDC) and International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM).

2. Descriptions of the technical assistance grants for approval by the Executive Board are contained in the annexes to this report:

I. International Fertilizer Development Centre (IFDC): Development of Sustainable Integrated Soil Fertility Management Strategies for Smallholder Farms in Sub-Saharan Africa

II. International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM): Action-Research Programme on the Identification and Testing of Methodologies and Approaches for Effective Introduction of Participatory Irrigation Management (PIM).

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 TA grant programme for agricultural research and training. The strategic objectives of IFAD'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.

4. The TAGs grants proposed in the present document respond to the foregoing strategic objectives. The programme for the Development of Sustainable Integrated Soil Fertility Management



Strategies for Smallholder Farms in Sub-Saharan Africa will contribute to objectives (b), (d) and (e) through promoting sustainable increases in small farmer productivity and incomes by developing and diffusing improved integrated soil fertility management (ISFM) strategies among smallholders in sub-Saharan Africa, following farmer-led action-research involving a broad number of strategic partners – the National Agricultural Research and Extension Systems (NARES), non-governmental organizations (NGOs), farmers’ organizations, agricultural suppliers and dealers – located in and within the environs of selected IFAD investment projects in the region. The Action-Research Programme on the Identification and Testing of Methodologies and Approaches for Effective Introduction of Participatory Irrigation Management (PIM) will specifically address objectives (b), (c) and (e) through developing, in four countries of the Near East and North Africa (NENA) region, actions to motivate water users to organize themselves into effective water users’ associations (WUAs) in partnership with public-sector agencies and to broaden the range for replication of its results, based on four types of irrigation systems prevalent in the region: surface water-based pressure irrigation, groundwater-based gravity or pressure irrigation, surface water-based open channel irrigation, and flood water-based spate irrigation.

## **PART II – RECOMMENDATION**

5. I recommend that the Executive Board approve the proposed TA grants in terms of the following resolutions:

**RESOLVED:** that the Fund, in order to finance, in part, the Development of Sustainable Integrated Soil Fertility Management Strategies for Smallholder Farms in Sub-Saharan Africa, shall make a grant not exceeding one million four hundred and thirty-five thousand United States dollars (USD 1 435 000) to the International Fertilizer Development Centre (IFDC) 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 Action-Research Programme on the Identification and Testing of Methodologies and Approaches for Effective Introduction of Participatory Irrigation Management (PIM), shall make a grant not exceeding one million six hundred thousand United States dollars (USD 1 600 000) to the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM) 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



**INTERNATIONAL FERTILIZER DEVELOPMENT CENTRE (IFDC):  
DEVELOPMENT OF SUSTAINABLE INTEGRATED SOIL FERTILITY  
MANAGEMENT STRATEGIES FOR SMALLHOLDER FARMS  
IN SUB-SAHARAN AFRICA**

**I. BACKGROUND**

1. Many African soils are weathered, fragile and of low inherent fertility. Increased exploitation by growing human and animal populations has depressed their already low productive potential. In most African countries, off-take of major plant nutrients now regularly exceeds replenishment, the organic matter content of soils has declined and burgeoning population pressure makes traditional fertility restoration by bush-fallowing (shifting cultivation) increasingly ineffective. This has both lowered the efficiency of any mineral fertilizer and contributed to degeneration of the soil structure and, in turn, increased drought-susceptibility due to the soil's diminished capacity to capture and retain water. In order to reverse soil impoverishment, improve food security and make agriculture more competitive, farmers must optimize the use of all available means of restoring and sustaining soil productivity. Both organic and inorganic fertilizer has a role to play, and there is abundant evidence that maximal, sustainable, crop responses are most likely when organic matter inputs (e.g. manure) and mineral fertilizers are combined.

2. The technical means to do this are well understood in principle. However, in practice, due to non-technical constraints, the use of mineral fertilizer for food crops is often beyond the reach of small-scale farmers and particularly the rural poor. These constraints may include lack of a fertilizer supply chain or physical access, distortion of prices, inadequate markets or infrastructure and issues relating to gender, land tenure or poverty. Similarly, suitable organic materials are often unavailable in sufficient quantity because they are used to meet other, shorter-term needs such as fuel for cooking fires. Where improvements in soil fertility management by the rural poor are practicable, approaches tend to be location-specific, reflecting the interplay of the above constraints combined with the natural diversity of African soils and socio-economic settings.

3. Work was recently completed on TA grant programme-supported research on the generation and dissemination of different approaches to ISFM in West and Southern Africa, the overall programme having been coordinated by the International Fertilizer Development Centre (IFDC) whose West African office (operating as the International Institute for Soil Fertility Management) implemented the West African research programme. The Tropical Soil Biology and Fertility (TSBF) Programme implemented the Southern African component (with staff seconded to the Zimbabwe-based African Centre for Fertilizer Development). As a result of the programme, farmer-participatory ISFM research and development (R&D) programmes were implemented successfully and the practicability of the combined 'organic-plus-inorganic' approach was demonstrated. Links with IFAD-funded development projects in a number of West and Southern African countries were established by the end of the programme, most of the field work being carried out in conjunction with beneficiary farmers on IFAD-projects. In this way, a number of potentially adoptable improved technologies were developed and the capacity of local institutions for demonstrating and extending such work was enhanced. However, various local constraints to wider adoption of the emerging SFM practices were identified during the programme, indicating the need for further R&D before it would be possible to demonstrate adoptable technologies appropriate to large areas.



## II. RATIONALE/RELEVANCE TO IFAD

4. The above-mentioned programme confirmed the value of participatory approaches to ISFM in Africa. The process of strengthening national institutional capacities for further work has been started. Constraints to the adoption of improved practices by the rural poor have been more clearly identified, especially those arising from problems relating to access to necessary mineral and organic materials. The time is now right to build on these achievements by widening the 'menu' of technical possibilities offered to farmers for their evaluation while further expanding capacities for location-specific research on, and extension of, new ISFM technology.

5. It should be borne in mind, however, that, by itself, such technical action will bring only limited benefits to the poorest of the poor unless some of the non-technical, and in particular policy and socio-economic, constraints to adoption are also tackled, as recognized at the December 1999 workshop held at IFAD's headquarters to discuss progress under the previous TA grant programme. At the workshop, Country Portfolio Managers of IFAD's two Africa Divisions generally agreed that ISFM research was a priority activity and that the programme should be expanded into new areas with additional technologies. It was also agreed that R&D work should be linked to the generation of policy advice for governments on soil fertility issues.

6. In the view of the above, a strategy is proposed that will:

- continue research aimed at expanding and testing the 'menu' of available ISFM practices;
- draw upon that menu to feed further participatory R&D, both to fine-tune existing candidate ISFM technologies and generate new ones;
- associate these actions with further assistance to boost the participatory research and extension capacities of NARES and NGOs, and assure greater awareness and involvement on the part of farmers' organizations, transporters, merchants, fertilizer formulators, etc., in ISFM initiatives;
- conduct economic and social studies aimed at arriving at a better understanding and quantification of the public goods benefits of ISFM, thus providing a more rational basis for dialogue with governments on policy decisions, incentives, cost sharing and targeting of ISFM management programmes for the rural poor; and
- in view of the breadth and long-term nature of some of these activities, build synergy with other donors and support continuity through coordination with national soil fertility initiatives.

To the extent possible, field activities will be planned and implemented as an integral part of IFAD's investment operations.

## III. THE PROPOSED PROGRAMME

7. The main goal of the grant is to contribute to sustainable increases in agricultural productivity and farmers' incomes through the development and dissemination of improved ISFM strategies. Success will contribute towards a reduction of environmental degradation, trigger rural development, alleviate poverty and contribute to economic growth.



8. Key activities will involve:

- action-research located in selected IFAD investment projects in Africa, to demonstrate an expanded ‘menu’ of available ISFM options and strategies;
- creation of advisory services and extension links with IFAD investment projects;
- fine-tuning and initial dissemination of ISFM practices already elaborated plus participatory evolution of further potential practices in the same investment project areas, drawing both on the above-mentioned ‘menu’ and on earlier experience;
- definition of extrapolation domains for the above ISFM practices, based on consideration of the constraints affecting IFAD target groups;
- participatory identification of bottlenecks to the adoption of promising ISFM practices by the rural poor;
- creation of awareness and promotion of activities to remove identified bottlenecks, working through farmers’ organizations, input suppliers, dealers, etc.;
- building further capacity for research, extension and introduction of ISFM practices with NARES, NGOs, farmers’ organizations, agricultural suppliers and dealers; and
- economic and social studies on the public goods benefits of ISFM practices for the rural poor in order to provide a more rational basis for government decisions on policies, incentives, cost sharing and targeting.

#### **IV. EXPECTED OUTPUTS/EXPECTED BENEFITS**

9. The grant is expected to generate the following outputs:

- prototype, and/or demonstrated and/or validated, sustainable ISFM practices for dissemination directly to farmers and via technical reports and Technical Advisory Notes/Knowledge Management Notes;
- proven methodologies to facilitate further refinement, dissemination and adoption of such practices;
- trained personnel in collaborating national and other partner organizations, capable of successfully applying the above methodologies;
- improved awareness among key stakeholders of actions needed to remove socio-economic constraints to adoption of ISFM practices; and
- economic data on the public goods benefits of selected ISFM practices.

#### **V. IMPLEMENTATION ARRANGEMENTS**

10. ISFM activities require support in the medium to long term if they are to obtain meaningful results. Therefore, the TA grant will support R&D activities over a period of three years. Depending on satisfactory outputs, a further period of financing will no doubt be required to promote the scaling up of promising results. Programme activities in West Africa will be coordinated by IFDC and those in East and Southern Africa by TSBF through a supplementary agreement between IFDC and TSBF, the latter being fully accountable to IFAD for the grant. To the extent possible, fieldwork will be



carried out at sites located on IFAD-financed investment projects in West and Southern Africa. In the latter region, technical investigations will be supervised by TSBF research staff (financed by the programme) operating out of the Department of Soil Science of the University of Zimbabwe (UZ) under the terms of a supplementary memorandum of understanding between TSBF and UZ. The Department contributed significantly as a research partner in the previous programme; its reputation in all aspects of soil management research is excellent; and it has a critical mass of researchers backed up by an analytical laboratory of international standing. Linkages already exist with other soil fertility research initiatives in the region, including the Soil Fertility Network managed by the International Centre for Maize and Wheat Improvement.

11. Economic and social research inputs will be provided by the Faculty of Agricultural Economics of UZ, which also collaborated in the earlier programme. This will be complemented by resource persons who will provide network-level inputs for the adoption of a sound, standard methodology and assist during its deployment in the case study sites. Activities here will serve to measure the impact of various ISFM options, both from a biophysical standpoint and in socio-economic terms, including gender disaggregated labour requirements. The research will thus generate entry points for gender-sensitive and technically robust ISFM options that can be promoted through IFAD-financed development projects.

12. The programme will be overseen by a steering committee comprising representatives of IFDC, TSBF, UZ and IFAD. Representatives of associated IFAD investment projects will also participate. Observers will be invited from the CGIAR Soil, Water and Nutrient Management Programme and the World Bank/FAO Soil Fertility Initiative (SFI)<sup>1</sup>. The steering committee will be responsible for reviewing and approving research reports, work plans and budgets, prior to their presentation to IFAD.

## VI. INDICATIVE PROGRAMME COSTS AND FINANCING

13. Over and above the proposed three-year programme, the Rockefeller Foundation will cofinance certain aspects of soil fertility research at UZ. Discussions are under way between TSBF and the Rockefeller Foundation with a view to arriving at a collaborative approach to developing synergies and avoiding duplication of work.

### INDICATIVE COSTS (USD)

Items	IFDC and Partners	IFAD
Incremental personnel costs	450 000	534 400
Action-research (field costs)		177 000
Capacity building/training		95 000
Extension and promotion	75 000	75 000
Equipment	45 000	100 000
Operating costs	65 000	322 000
Incremental administrative Costs	37 000	131 600
<b>Total</b>	<b>672 000</b>	<b>1 435 000</b>

<sup>1</sup> There was no involvement with the World Bank/FAO-SFI during the previous programme. The SFI became operational in some countries after the programme became effective, but neither side established links.



**INTERNATIONAL CENTRE FOR ADVANCED MEDITERRANEAN AGRONOMIC  
STUDIES (CIHEAM)  
ACTION-RESEARCH PROGRAMME ON THE IDENTIFICATION AND TESTING  
OF METHODOLOGIES AND APPROACHES FOR EFFECTIVE INTRODUCTION  
OF PARTICIPATORY IRRIGATION MANAGEMENT (PIM)**

**I. BACKGROUND**

1. In many countries, the development and management of irrigation infrastructure remains an almost exclusive responsibility of government agencies despite tacit recognition of the inability of the public sector to provide the requisite financial resources and institutional capability for government agencies to assume such responsibility. In contrast, experiments with farmer-managed irrigation systems have demonstrated the potential for substantial improvements in system efficiency through active participation of users in water distribution and in system operation and maintenance (O&M)-related decisions. More than ten years of international experimentation have demonstrated that PIM holds the key to:

- reducing the financial and institutional burden on governments in terms of the operation and regular maintenance of irrigation systems;
- promoting economic use of water, and associated increases in productivity, by giving water users the opportunity to: (i) appreciate first-hand the true scarcity and cost of delivering water to the farm gate; and (ii) develop a sense of ownership of and responsibility for the irrigation system supplying the scarce resource;
- promoting system sustainability by enabling water users to adapt system O&M practices to the requirements of their cropping patterns; and
- providing a basis for fair allocation of a scarce resource through the collective effort of a group with a common interest, operating on the basis of mutually agreed and binding rules.

2. While most Governments are now convinced of the need to shift to PIM and have taken important steps in that direction, many of them have yet to put in place the full package of conditions to enable water users to become true partners in the management of irrigation systems. Under PIM, farmers are expected to become the managers and government agencies to become service and support providers.

**II. RATIONALE/RELEVANCE TO IFAD**

3. In the Near East and North Africa (NENA) region, the 1960 per capita renewable water supply of about 3 500 m<sup>3</sup> is expected to decrease sixfold (to about 600 m<sup>3</sup>) by 2025. This declining per capita availability of water is likely to have an overall negative effect on irrigated agriculture, which in recent years has claimed over 85% of the water supply in the region. Under these circumstances, it has become evident that the long-term viability of most water-supply systems has become increasingly dependent on improved systems management and disciplined approaches to the allocation of this scarce resource among strongly competing demands. This evidence, coupled with the increasing share of public funds used for structural adjustment programmes (as opposed to investment programmes), along with a greater appreciation of the capability of the private sector, has motivated many governments to adopt policies, enact laws and initiate programmes aimed at improving the efficiency of their water-supply systems.



4. A common element of many such programmes has been their intended shift in emphasis from non-participatory systems (under which the government is the central or sole actor in developing and managing water-supply systems) to participatory systems (under which water users – as primary stakeholders – are expected to play an active role in the management of water resources). In practice, however, this intended empowerment of water users, through self-governing and viable WUAs, has often proved slow to materialize and, in most cases, its intended results have been more difficult to achieve than initially foreseen. International experience to date, including that under IFAD-supported projects, indicates that a piecemeal approach to the introduction and enforcement of requisite policies, laws, rules and regulations has been detrimental to timely acceptance of PIM on the part of water users and staff of the government agencies involved. With critical elements missing in the package of enabling conditions, water users have been hesitant to fully embrace the PIM approach and become responsible partners in the management of irrigation systems.

5. The justification for this TA grant derives from explicit needs identified in ongoing IFAD-supported projects, and from the necessity to help Member States take advantage of proven lessons of international experience. The proposed action-research programme was designed to help governments take necessary remedial action to motivate water users to organize themselves into effective WUAs that would join public-sector agencies into a true partnership, and for application in four countries. To broaden the range for replication of its results, the programme will cover all four types of irrigation systems prevalent in the NENA region: surface water-based open channel irrigation (Armenia); surface water-based pressure irrigation (Egypt); flood water-based spate irrigation (Morocco); and groundwater-based gravity or pressure irrigation (Tunisia).

6. The overall objective of the action-research programme, which will be demonstrative in nature, is to help develop methodologies and approaches for effective introduction of PIM as a basis for improving the effectiveness of IFAD-supported investments in irrigation. It will seek to convince all stakeholders of the remedial action needed as a prerequisite for effective management of irrigation systems. The demonstrations will benefit not only the participating countries but also other IFAD Member States with similar irrigation systems.

### III. THE PROPOSED PROGRAMME

#### Prerequisites for the Introduction of PIM

7. **The specific objective** here is to define the prerequisites for introducing improved water management practices that appear to be missing in the four types of irrigation systems under consideration. **The outputs** will consist in a refined institutional and legal framework and formal guidelines (defined and enforced) for effective partnership between government agencies and water users in the effective management of irrigation systems, including: (i) proposals for amendments to existing laws, if necessary; (ii) methodology for establishing self-governing and sustainable WUAs; (iii) clear allocation of responsibility and accountability between the WUAs and government agencies involved; and (iv) rules and regulations for enforcing the terms of the partnership between WUAs and government agencies.

8. **Key activities** will involve: (i) conducting information campaigns with the involvement of all potential stakeholders to seek the views of participants and explain the objectives and underlying principles of PIM and its potential impact on various categories of stakeholders; (ii) undertaking a detailed diagnostic analysis of the existing institutional and legal framework to determine specific adjustments expected to facilitate the adoption of the PIM approach; (iii) updating current rules and regulations governing the respective roles of the WUAs and government agencies concerned to make both parties conform to the requirements of the PIM approach; (iv) upgrading current contract documents to ensure a balanced representation of the interests of WUAs and government agencies in the partnership and develop mechanisms and channels for conflict resolution both within WUAs and



between WUAs and government agencies; and (v) based on the results of the action-research programme, preparing proposals for updating the policies, laws, regulations and procedures affecting irrigation systems management, as the basis for replicating the results of the action-research programme.

### **Capacity Building and Institutional Development**

9. **The specific objective** here is to develop the skills required for PIM to become operational both among water users and within the institutions involved in developing and managing irrigation infrastructure. The intention is to create a solid base in order for an effective partnership between government agencies and water users to emerge. Emphasis will be placed on the development of organizational, planning and management skills as well as technical skills related to irrigation system O&M. **The outputs** will consist in enhanced capabilities in the fields of mobilization and organization of water users, establishment of WUAs, on-farm water management, planning and implementation of O&M activities, financial management, water scheduling, cooperation and conflict resolution.

10. **Key activities** will consist in: (i) assessing the technical and institutional capabilities in the government agencies concerned and among water users in the action-research programme area, and defining the skills gaps; (ii) in consultation with participants, developing and implementing a training and institution-building programme, reflecting the outcome of the skills assessment, and including training courses, workshops, study tours in-country and abroad and on-the-job skills improvement; (iii) developing training manuals and technical booklets using lessons of experience in the four participating countries, for subsequent use in replicating the positive outcomes of the action-research programme in other ongoing and new IFAD-supported projects; (iv) identifying possibilities for private sector takeover of the O&M of services (electrical and mechanical) which, to date, have been performed by government agencies; (v) undertaking a diagnostic analysis of the costs of delivering water to WUAs and of distributing them among farmers so as to provide a basis for testing the possibility of lowering such costs; and (vi) testing the possibility of federating WUAs to arrive at a more transparent cost-sharing arrangement between interests at the regional and national levels, and as a potential source of institutional support.

### **Policy Dialogue**

11. Given the strong socio-political dimensions of water policy issues, governments tend to approach any water-related policy reform with extreme caution – even when decision-makers are convinced of its ultimate necessity and usefulness. This, to a degree, may explain why the policy/institutional components in many water management projects are often not implemented effectively. In the inflexible context of regular investment projects, decisions/changes may be perceived as final and irreversible with no room for mitigating any unforeseen negative outcome with unwanted socio-political consequences. The action-research programme will provide a flexible framework for government, water users and IFAD to participate in dialogue on alternative approaches for enhancing water-use efficiency by empowering WUAs to become responsible partners in the management of irrigation systems. That dialogue will seek to (i) extend lessons of international experience to stakeholders in the action-research programme area; (ii) use such lessons together with local knowledge to define the required policy/institutional reforms needed for each area; (iii) introduce such reforms in the research area to test their effectiveness and impact among beneficiaries; and (iv) define an approach and methodology for broadening the application of reforms that prove to be effective.

#### IV. IMPLEMENTATION ARRANGEMENTS

12. The programme will be coordinated by the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM) in Bari, Italy. Over recent years, CIHEAM's training programme concerned with capacity building for PIM has been imparted to technical staff in ongoing irrigation projects financed by the World Bank and IFAD (Loan No. 306-EG). In developing this training programme, CIHEAM drew on the wealth of Italian experience in PIM, using consortiums of WUAs. During the participatory design workshop for the programme, held at CIHEAM headquarters in June 2000 with representatives from Armenia, Egypt, Morocco and Tunisia, a compact version of the training programme was tested and found suitable. This training experience, considered as the key activity of the proposed TA grant, gives CIHEAM a strong comparative advantage as implementing institution. In addition, three of the four countries involved in the programme (Egypt, Tunisia and Morocco) are members of CIHEAM, which will contribute to the synergy required to implement location-specific adaptive research activities in translating programme-level objectives into country-specific work plans and in implementing activities locally.

13. A steering committee comprising a representative from each country and members of the IFAD oversight committee will meet every year to assess progress in the implementation of the research programme (as agreed by all stakeholders on an annual basis), draw cross-country lessons and reach consensus on how to address outstanding issues. The four countries will take turns in hosting the meetings.

#### V. COSTS AND FINANCING

14. The total cost of the four-year action-research programme is estimated at USD 3.2 million, of which IFAD will contribute USD 1.60 million (50%). The four benefiting countries will contribute USD 0.68 million (20%). Discussions are under way with potential cofinanciers to cover USD 0.92 million (30%) of the costs of the programme. Detailed cost estimates and financing arrangements are provided in the table below.

TOTAL PROGRAMME COST

Descriptions	Amount – USD '000					Financing (USD '000)		
	PY - 1	PY - 2	PY - 3	PY - 4	Total	IFAD	Others	Governments
<b>Investment costs</b>								
Construction and building rehabilitation	65	90	20	-	175	175		-
Technical assistance	213	139	78		430	230	200	-
Studies	102	-	-	20	122	122		-
Training	335	217	86	-	638	238	400	-
Vehicles and equipment	302	11	-	-	313	213	100	-
<b>Total investment costs</b>	<b>1 017</b>	<b>457</b>	<b>184</b>	<b>20</b>	<b>1 678</b>	<b>978</b>	<b>700</b>	-
<b>Recurrent costs</b>								
Salaries	267	264	261	91	883	273		610
Operation and maintenance	44	44	44	22	154	84		70
<b>Total recurrent costs</b>	<b>311</b>	<b>308</b>	<b>305</b>	<b>113</b>	<b>1 037</b>	<b>357</b>		<b>680</b>
<b>Subtotal</b>	<b>1 328</b>	<b>765</b>	<b>489</b>	<b>133</b>	<b>2 715</b>	<b>1 335</b>	<b>700</b>	<b>680</b>
<b>Grant administration and supervision</b>								
Completion report				100	100	50	50	
Supervision, grant administration, steering committee	95	95	95	100	385	215	170	
<b>Subtotal</b>	<b>95</b>	<b>95</b>	<b>95</b>	<b>200</b>	<b>485</b>	<b>265</b>	<b>220</b>	-
<b>Total costs</b>	<b>1 423</b>	<b>860</b>	<b>584</b>	<b>333</b>	<b>3 200</b>	<b>1 600</b>	<b>920</b>	<b>680</b>