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Enabling poor rural people  
to overcome poverty

## **President's report on proposed grants under the global/regional grants window to non- CGIAR-supported international centres**

### **Note to Executive Board representatives**

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**For: Approval**

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## Abbreviations and acronyms

CGIAR	Consultative Group on International Agricultural Research
FTOC	fair trade and organic certification
ICIPE	International Centre of Insect Physiology and Ecology
NARS	national agricultural research systems
NENA	Near East and North Africa
SpN	Spate Irrigation Network
UNESCO-IHE	United Nations Educational, Scientific and Cultural Organization – Institute for Water Education

## **Recommendation for approval**

The Executive Board is invited to approve the recommendation for grants under the global/regional grants window to non-CGIAR-supported international centres as contained in paragraph 7.

## **President's report on proposed grants under the global/regional grants window to non-CGIAR-supported international centres**

I submit the following report and recommendation on proposed grants for agricultural research and training to non-Consultative Group on International Agricultural Research (CGIAR) international centres in the total amount of US\$2.4 million.

### **Part I – Introduction**

1. This report recommends the provision of IFAD support to the research and training programmes of the following non-CGIAR international centres: the International Centre of Insect Physiology and Ecology (ICIPE) and the Institute for Water Education of the United Nations Educational, Scientific and Cultural Organization (UNESCO-IHE).
2. The documents of the grants for approval by the Executive Board are contained in the annexes to this report:
  - (i) International Centre of Insect Physiology and Ecology (ICIPE): Scaling up Bee-keeping and other Livelihood Options to Strengthen Farming Systems in the Near East and North Africa (NENA), and East Africa
  - (ii) United Nations Educational, Scientific and Cultural Organization – Institute for Water Education (UNESCO-IHE): Spate Irrigation for Rural Growth and Poverty Alleviation
3. The objectives and content of these applied research and capacity-building programmes are in line with the evolving strategic objectives of IFAD and the policy for grant financing.
4. The overarching strategic goal that drives the Revised IFAD Policy for Grant Financing, approved by the Executive Board in December 2009, is to promote successful and/or innovative approaches and technologies, together with enabling policies and institutions, that will support agricultural and rural development, empowering poor rural women and men in developing countries to achieve higher incomes and improved food security.
5. The policy aims to achieve the following outputs: (a) innovative activities promoted and innovative technologies and approaches developed in support of IFAD's target group; (b) awareness, advocacy and policy dialogue on issues of importance to poor rural people promoted by, and on behalf of, this target group; (c) capacity of partner institutions strengthened to deliver a range of services in support of poor rural people; and (d) lesson learning, knowledge management and dissemination of information on issues related to rural poverty reduction promoted among stakeholders within and across regions.

6. The proposed programmes are in line with the goal and outputs of the revised IFAD grant policy:
- (a) The ICIPE-led programme on Scaling up Bee-keeping and other Livelihood Options to Strengthen Farming Systems in the Near East and North Africa (NENA), and East Africa will focus on the Fund's lending programme target groups and their household food-security strategies, with particular reference to groups in remote and marginalized agroecological areas. It will promote the evidence-based innovative technologies of IFAD's East and Southern Africa loan projects, replicating them in the NENA region.
  - (b) The UNESCO-IHE programme on spate irrigation involves the management of water scarcity under climate change through the development, validation and advocacy of practical new approaches to resource use in difficult areas (combining engineering, agronomy and institutional innovation). The grant will support the development of policies on spate irrigation in four countries, capacity development of local service providers in spate irrigation areas, and knowledge-sharing on good practice.

## **Part II – Recommendation**

7. 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 Scaling up of Bee-keeping and other Livelihood Options to Strengthen Farming Systems in the Near East and North Africa (NENA), and East Africa, shall make a grant not exceeding one million two hundred thousand United States dollars (US\$1,200,000) to the International Centre of Insect Physiology and Ecology (ICIPE) 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 herein.

FURTHER RESOLVED: that the Fund, in order to finance, in part, Spate Irrigation for Rural Growth and Poverty Alleviation, shall make a grant not exceeding one million two hundred thousand United States dollars (US\$1,200,000) to the United Nations Educational, Scientific and Cultural Organization – Institute for Water Education (UNESCO-IHE) 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 herein.

Kanayo F. Nwanze  
President

# **International Centre of Insect Physiology and Ecology (ICIPE): Scaling up Bee-keeping and other Livelihood Options to Strengthen Farming Systems in the Near East and North Africa (NENA), and East Africa**

## **I. Background**

1. The NENA and East Africa regions are potentially one of the most productive, but unexploited, honey-producing areas in Africa. Owing to harvesting and processing methods, coupled with storage problems, this honey is often of poor quality. Moreover, honeybee breeds are facing a new challenge in the region – Varroa mites and other honeybee pest infestations and diseases. The use of fire to clear agricultural land and flooding pose serious dangers to the pollinators' biodiversity – and bee-keeping in particular – through the destruction of habitats, honeybee colonies and flora and fauna of the fragile ecosystem. Improved bee-keeping will recover biodiversity and provide pollination for better crop yields. Moreover, organic certification and fair trade of beehive and other forest products and crops will enable poor rural people to access specialized global markets, thus enhancing their incomes, conserving agrobiodiversity and improving their livelihoods through cash income and additional crop productivity. Local governments have little money to devote to protecting the environment. The poorest states are characterized by repetitive droughts or flooding, civil wars or political unrest – and the resulting displacement of vast numbers of people. Such countries include Egypt, Ethiopia, Kenya, The Sudan and Yemen. ICIPE's strategy for drastically reducing poverty is to ensure that poor people receive a larger share of strategically placed development benefits, as well as meaningful access to natural resources. Through the development of sustainable natural products enterprises, communities have an incentive to manage the environment positively and move towards a low-carbon economy. Thus increased investment by IFAD in such activities can have a significant impact on poverty reduction in the region, as has been demonstrated by positive results from bee-keeping groups in Kenya, working with ICIPE through a small IFAD/United Nations Development Programme grant. The present grant will be used mainly to provide infrastructure support, training and business-focused capacity-building for bee-keepers participating in ongoing IFAD projects and the national apiculture programme in each of the five participating countries.

## **II. Rationale and relevance to IFAD**

2. The proposed programme serves the common objectives of IFAD and its cofinanciers and operating partners in the participating countries. It supports IFAD's strategy for poverty reduction by: (i) strengthening the capacity of poor rural people and their organizations; (ii) promoting equitable access to productive natural resources and technology; and (iii) increasing access to financial services and markets. The strategic objectives of the IFAD grant programme are to promote pro-poor research on innovative approaches and technological options to enhance field-level impact and to build pro-poor capacities of partner institutions (including community-based organizations and NGOs). The programme will exploit livelihood options involving hive and other natural products and pollination services to achieve poverty reduction and environmental conservation. Smallholder agricultural systems in the programme countries need to adapt to new income generation options to overcome the many challenges they face from periods of prolonged drought or intensive rains and the resulting rapid decline in soil fertility. The programme rationale is to assist rural and largely poor communities, and especially women, in improving their livelihoods and the welfare of the natural environment by increasing the productivity and resilience of their farming systems and natural

resources through the uptake of sustainable husbandry techniques and integrative management systems.

3. **The need for scaling up.** The ongoing IFAD grant activities have so far led to the development of a sound base in bee-keeping in all the participating countries. This is particularly impressive in Kenya, where communities in the Mwingi District, with initial support from an IFAD grant to ICIPE, have recently won an international award for organic honey production. The IFAD Kenya country programme has recognized the need to scale up this technology for wider application among poor communities in the rural areas where apiculture and sericulture production have potential. In Yemen, for instance, limited training and capacity-building have been offered on a pilot scale, and the Islamic Development Bank and ICIPE intervened during the flood-emergency operation in June 2009 and rehabilitated bee-keeping activities in Hedramaut and in IFAD project areas in Al Dhala. However, large-scale production is still lagging owing to lack of infrastructure, and further training in group organization and capacity-building of service providers is needed. This grant will enable communities to increase the scale of local bee-keeping activities, address income issues and increase their assets and capabilities. Improving the skills of rural communities in bee-keeping, and introducing new production techniques, will bring about additional value by increasing the quantity, quality and value of the honey, wax and other hive products (propolis, pollen, royal jelly, etc.), transforming production destined for subsistence and largely domestic use into highly marketable products. The programme will focus on local and regional markets for high-quality hive products, as well as international organic and fair trade niche markets. It will facilitate gender equity and the inclusion of marginalized groups in its approaches. It will require equipment to enable improved production, and will include research on and development of new value-added income derivatives. An adaptive value chain approach will be taken to establishing and building community-based bioenterprises. Expected outputs include: improved production and processing capacity and improved incomes from bee and silk products, mushrooms and traditional crops in a number of selected villages in programme operating areas. The programme plans to use a variety of mechanisms to empower communities to define priorities and take charge of their own development investments. It will be fully embedded in ongoing IFAD-funded projects in participating countries in order to enhance sustainability.
4. **Problem analysis.** The programme will analyse the type and extent of the problems in five NENA and East African countries and will develop long-term solutions to two specific challenges: increasing production constraints affecting rural livelihoods and the threat to species diversity.

### III. The proposed programme

5. The overall goal of the programme is to scale up successful bee-keeping and livelihood options for greater incomes through enhanced productivity, organic certification and crop pollination services for quality yield in NENA and East Africa.
6. The programme's objectives are to:
  - (a) Provide training and infrastructure support for farmers' groups in appropriate scaling-up technology for apiculture and other livelihood options, including crop pollination services;
  - (b) Assist programme communities in livelihood diversification, to improve their incomes from the sustainable use of natural resources through bee-keeping and other options;
  - (c) Monitor and evaluate programme activities.
7. These objectives will be accomplished through five field activities.

8. The target group consists of poor rural people in IFAD project areas and gazetted forest zones in Egypt, Ethiopia, Kenya, The Sudan and Yemen. Poor communities have been identified, with emphasis on increased participation by youth and women. The programme will focus on overcoming rural poverty through its outreach mechanisms. Kenya has well-developed markets for income-generation technologies and will act as a major training base for the other participating countries.
9. The programme will have a three-year implementation period and will comprise five main components:
  - (a) Registration of farmers' associations, plantations for bees and silkworms, and wild harvest for ecosystem management (ICPIPE/ national agricultural research systems [NARS] community associations);
  - (b) Capacity-building of communities and institutions in organic certification and fair trade, development of internal control systems and preparation for certification of land and processing centres;
  - (c) Equipment for scaling up honey and other hive products and sericulture, and for accessing global markets;
  - (d)
    - (i) Technical training at ICPIPE in bee-keeping and other income generation technologies, pollination services of crops/ecosystem, and honey/silk/wild harvest-based products;
    - (ii) Onsite training workshops;
  - (e)
    - (i) Socio-economic livelihood mappings at the end of the programme year to assess the impact of technology adoption; development of guidelines in vernaculars (ICPIPE/Ministry of Agriculture);
    - (ii) Programme administration, ICPIPE staff costs, consultancies:
      - Monitoring and evaluation of programme activities;
      - Outcome and output realization measures;
      - Impact analysis; and
      - Technical report writing (ICPIPE).

#### **IV. Expected outputs and benefits**

10. The expected outputs are:
  - Enhanced capacity of poor rural people through development of domestic enterprises, adoption of better and innovative scaling-up methodologies and best practices;
  - Household decision-making livelihood models and income-generating modules developed;
  - Ownership of agribusiness product enterprises, with involvement of youth and women;
  - A sound value chain system to promote high-value-added and labour-intensive commodities, and good governance to foster growth in the rural industry and market access;
11. The expected benefits are:
  - Training in scaling up and enterprise development of 1,500 rural participants from five countries, and improved income from conservation enterprises;
  - Sales returns from organic certified agribusinesses, and crop productivity enhanced through pollination services;

- Farmers' ownership of the enterprises with private-sector involvement at all levels of the global value chain;
- Forward and backward linkages between primary and secondary production and marketing systems in agribusinesses are strengthened through private-sector involvement and fair trade and organic certification (FTOC) of products;
- Methodologies and capacities developed through training in FTOC and scaled up to improve livelihoods based on the commercial use of insect resources and other agriproducts linked to various habitats;
- Poor communities are empowered to generate substantial income through FTOC training and to achieve a fair distribution of benefits through the sale of FTOC products in global markets.

## V. Implementation arrangements

12. ICIPE will be the lead institute in each country. IFAD loan project coordinators and national team leaders from NARS in each country will coordinate and facilitate overall programme management in collaboration with other community stakeholders. The programme will put into practice a rationalized and harmonized system of routine data collection at national and regional levels. Other cofinancing partners will coordinate programme implementation activities at the country level. The partner institution in each country will be the Ministry of Agriculture and Forestry. ICIPE and NARS will jointly disseminate quality development research findings and promote their use in practice and policy. Many of ICIPE's dissemination activities will involve training and capacity-building in agribusiness technologies and awareness-raising on innovations in research and development. The programme will enhance capacity development at government and IFAD project levels for data collection, analysis and application. At each regional, national and local level, it will constitute coordinating committees to oversee the progress of activities. It is proposed that the programme will contract a multimedia centre to prepare media materials or to finalize materials prepared by the programme. Given the nature and scope of the activities, another phase may be considered in due course – subject to an evaluation of outcomes and progress.

## VI. Indicative programme costs and financing

13. The current financing plan is shown in the table below. Additional cofinancing and baseline costs are confirmed by the respective participants (some are operational) and donors in writing. The IFAD contribution amounts to 18 per cent of total programme costs.

### Summary of budget and financing plan

(Thousands of United States dollars)

<i>Type of expenditure</i>	<i>IFAD</i>	<i>Cofinancing</i>
Personnel (including subcontractors)	260	700
Professional services	180	600
Travel costs	100	530
Equipment	240	1 680
Operational costs, reporting and publications	220	940
Training/capacity-building	200	930
<b>Total</b>	<b>1 200</b>	<b>5 380</b>



## Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
<b>Goal</b>	Scaling up bee-keeping and livelihood options for better income through enhanced productivity, organic certification and crop pollination services for quality yield in NENA and East Africa	Seven IFAD programme sites in five countries adopt scaling-up income generation guidelines, crop management and forest conservation	Capacity building of IFAD programme community in all sites, with increased income	No political or tribal disturbance delaying programme progress
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. Help programme communities develop coping mechanisms and diversify livelihoods, improve their incomes from sustainable use of natural resources through bee-keeping and other options</li> <li>2. Provide training and infrastructure support for farmers' groups in appropriate scaling-up technology for apiculture and other livelihood options, including crop pollination services</li> <li>3. Monitoring and evaluation of programme activities</li> </ol>	<ol style="list-style-type: none"> <li>i. Poor rural groups adopt income generation activities: business enterprises based on silk, honey and pollination, with marketplaces developed at all programme sites</li> <li>ii. Capacity-building of NARS and community, marketplaces, processing centres and apiaries established</li> <li>iii. Risk management tools defined</li> </ol>	<ol style="list-style-type: none"> <li>i. Programme annual report</li> <li>ii. Brochures in vernacular</li> <li>iii. Community-ownership-driven marketplaces</li> <li>iv. Guidelines for risk management and adoption of new technologies</li> </ol>	<p>No existing environmental risks</p> <p>Increase in pollinators</p> <p>Stable markets</p>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>• Training of 1,500 rural households from 6 countries in enterprise development and 20% improved income from conservation enterprises</li> <li>• Earnings from sales for organic certified agribusinesses and enhanced crop productivity through pollination services</li> <li>• Farmers' ownership of the enterprises, with private-sector involvement at all levels of the global value chain</li> <li>• Data assessment of impact on crops, forests and biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced number of beneficiaries, capacity and turnover in all linked IFAD/cofinancer programme groups</li> <li>• Off-farm enterprises and pollination services established and increase in product value through FTOC, branding and marketing</li> <li>• Ownership by community of agribusiness product enterprises</li> </ul>	<p>Through seminars, farmers' workshops, and media coverage</p> <p>Guidelines for internal control systems (ICS) for stakeholders</p> <p>Regular programme reports</p> <p>Mid-term and completion programme evaluation (impact assessment)</p> <p>New technologies functioning</p>	<p>Increase in pollinators</p> <p>Stable markets</p> <p>Weather patterns are not disruptive</p> <p>Poor rural people participate in capacity-building</p> <p>Successful adoption of developed tools</p>
<b>Key activities</b>	<ol style="list-style-type: none"> <li>1. i. Help communities build effective, strong value chains, including business structures, value addition and marketing strategies, for nature-based enterprises</li> <li>ii. Improve livelihoods of 1,500 poor households through scaling up of nature-based products and incentives to communities for managing their environment positively</li> <li>2. iii. Provide technical and business training to rural communities in new technologies and scaling-up methodologies to develop conservation enterprises that are environmentally, ecologically and financially sustainable</li> <li>iv. Develop a manual to guide the establishment and development of diversified, conservation-positive enterprises</li> <li>3. v. Devise a participatory M&amp;E framework for assessing the effectiveness of livelihood interventions</li> <li>vi. M&amp;E framework and data collection system available to assist in the design and implementation of other IFAD projects in the region</li> </ol>	<ol style="list-style-type: none"> <li>1. i. Registered community association in each country (50% women), trained in conservation enterprise development technology</li> <li>ii. Post-harvest processing equipment at each site for value addition and for training purposes. Marketplace building and collection centres in each IFAD programme site. Data developed on floral calendar and pollinator species for user groups</li> <li>2. iii. Feedback data from IFAD programme staff and communities trained in apiculture, sericulture, forestry and crop management</li> <li>iv. Maximum profit per hectare known</li> <li>v. Guide manuals available</li> <li>3. vi. M&amp;E framework implemented to record community behaviour</li> <li>vii. Other IFAD projects benefited in region</li> </ol>	<p>Programme sites, annual technical and financial progress reports, annual M&amp;E reports</p> <p>Programme sites, annual technical and financial progress reports, annual M&amp;E reports</p>	<ol style="list-style-type: none"> <li>1. Adoption of programme training by programme and partners' staff</li> <li>2. Adoption of programme tools by the community and NARS</li> <li>3. Programme sites, annual technical and financial progress reports, annual M&amp;E reports</li> </ol>

# **United Nations Educational, Scientific and Cultural Organization – Institute for Water Education (UNESCO-IHE): Spate Irrigation for Rural Growth and Poverty Alleviation**

## **I. Background**

1. Spate irrigation is a resource management system that can contribute significantly to local food production and livelihood security. In spate irrigation systems, short-duration floods in ephemeral rivers are diverted for irrigation, groundwater recharge, rangeland improvement or local forestry. The system occurs in some of the world's poorest and remotest areas.
2. The area under spate irrigation globally is approximately 2.6 million ha and the number of people dependent on this system is estimated at 9-13 million. Spate irrigation is found in West Asia (Afghanistan, the Islamic Republic of Iran and Pakistan), the Middle East (Saudi Arabia and Yemen), North Africa (Algeria, Morocco and Tunisia) and the Horn of Africa (Eritrea, Ethiopia, Kenya, Somalia and The Sudan). In North Africa the area under spate irrigation has been reduced in the last 20 years, as a result of reservoir construction on several of the ephemeral rivers. In contrast, however, in the Horn of Africa, the area under spate irrigation is expanding rapidly, especially in Eritrea and Ethiopia. Population pressure encourages settlement in the lowlands, which have become more habitable as malaria and trypanosomiasis are slowly being brought under control. The system is on the upsurge elsewhere in Africa as well. The largest areas under spate irrigation can be found in the Islamic Republic of Iran and Pakistan. In Pakistan spate irrigation is the main resource system on the 'dry' western side of the Indus River, covering at least 600,000 hectares. In addition to the areas on record, there are several 'unknown' areas: Central Asia (including Afghanistan), Western China and Latin America. It is testimony to the informal and forgotten nature of this system that, though the areas may be extensive, there is no recent, accessible reference on spate irrigation in these areas.
3. There is considerable scope in spate irrigation for economic growth led by well-targeted support and better governance. The improvements concern agricultural production, non-agricultural production and improvement of livelihoods in general.
4. The Comprehensive Assessment on Water for Agriculture (2007) estimated that food production in rainfed areas – including spate irrigated areas – will be expected to take care of 75 per cent of the required global increase in food production. The assessment also observed that, in all parts of the world, the area under rain-dependent agriculture has increased, but the yield per hectare for staple crops has hardly improved.
5. Thus increased attention is being focused on production systems. Spate irrigation areas are increasingly being discovered and targeted in improvement and rehabilitation programmes. The system can contribute significantly to poverty alleviation and rural growth, but the nature of spate irrigation is very different from other resource management systems. Interventions need to be tailored to the unique features of spate irrigation, such as the inherent uncertainty, resulting in unique forms of cooperation, the technical management of both very high (and potentially devastating) and low floods, management of sediments and sedimentation processes, the importance of soil moisture conservation and the specific agronomy.

## II. Rationale and relevance to IFAD

6. The scope for improved productivity and livelihoods in spate irrigation areas through applied research, knowledge management, network development and policy advocacy is considerable. The Spate Irrigation Network (SpN) – which has existed since 2002 and is convened by UNESCO-IHE and MetaMeta – currently has 380 members and 10 associated regional and international centres around the world, and is well placed to address the need for such activities in selected countries in NENA and West Africa, once these members are adequately equipped and their capacity is appropriately developed.
7. In the past few years, good practices have been documented and training material prepared – a process that continues. By documenting and sharing experiences within and between countries, a compendium of improved practices is being developed in a number of areas such as: organization and governance; water diversion and engineering; improving agronomy; and moisture management.
8. A large menu of options is now available to be promoted at country policy and operational levels. Improved spate irrigation system management can vastly increase economic productivity and livelihoods in areas that mostly comprise poverty pockets.
9. IFAD is one of the largest donors for spate irrigation. It has supported this activity in Eritrea, The Sudan, Tunisia and Yemen, among others – many of which are among the countries involved in the proposed programme and have generated results and lessons that promise to contribute to better policies and programmes on this theme.
10. The proposed grant will help UNESCO-IHE continue and build on its spate irrigation knowledge-base, and make it instrumental to a large number of implementing organizations (including IFAD field offices), educational institutes and local organizations associated with the SpN.

## III. The proposed programme

11. The overall goal of the programme is to develop spate irrigation policies and programmes. The specific objective is to document practical experiences that, based on concrete evidence, contribute to accelerated growth in marginal areas in four countries where there are significant opportunities for spate irrigation-led agricultural development.
12. This research and capacity-building programme will focus on spate irrigation as a resource management in which short duration floods are diverted for agriculture, drinking water supply, rangeland, forestry and groundwater recharge. Under the proposed programme, spate irrigation policies and practical programmes would be developed in four countries (Ethiopia, Pakistan, The Sudan and Yemen) based on action research and documented practical experiences.
13. The four-year programme will have four main components or 'work packages' (WPs):
  - WP 1: Strengthening the SpN;
  - WP 2: Innovative action research projects;
  - WP 3: Capacity-building, continuous knowledge development and dissemination;
  - WP 4: Expert-pool support to IFAD projects and country programmes.
14. The programme will strengthen activities of the SpN in target countries, including the development of policy documents to support implementing organizations (rural support programmes, poverty alleviation programmes, water resource development projects) in developing effective and appropriate interventions through advice on programme formulation and training (work package 1).

15. In addition to innovative action research, activities will be implemented in all four countries, introducing good practices that have worked elsewhere, through South-South exchanges. Practices may range from improved traditional diversion, better soil water management and introduction of plant and livestock breeds from elsewhere in national research programmes to business experiments with new crops or commercial local forestry. The action research activities are identified with help of local partner organization (work package 2).
16. Work package 3 involves capacity-building and continuous knowledge development and dissemination. This will include post-graduate training and the development of instructional material – including videos. In all countries, support activities will be organized to introduce spate irrigation in the curricula of universities and vocational training.
17. Finally, the programme will support IFAD projects and country programmes having relevance and prospects of using spate irrigation technologies for production and improved resource management (work package 4).
18. The target group comprises: smallholder farmers in spate-irrigated areas, farmers' organizations and current and potential support organizations in spate irrigation - in particular key implementing organizations, educational institutes and local organizations associated with country chapters of the SpN. Special care is taken to connect to relevant IFAD-funded investment projects and country programmes in the four targeted countries.

#### **IV. Expected outputs and benefits**

19. Outputs and benefits will consist of:
  - (a) **A strengthened SpN:** (i) country chapters of SpN operational in Ethiopia, Pakistan, The Sudan and Yemen, with at least 60 active members and a feasible country network plan; (ii) engagement with at least three key organizations in each country supporting spate irrigation components in their programmes through training and programme assistance; and (iii) country policy notes on spate irrigation prepared in each country.
  - (b) **Innovative action research activities implemented:** (i) in each country at least two innovative action research activities implemented – covering a wide range of possible good practices – with the help of South-South exchanges; and (ii) each action research activity evaluated and documented and pathways for scaling up identified, where appropriate, in a transboundary approach to integrated water resource management.
  - (c) **Capacity built and knowledge documented and disseminated:** (i) four Master of Science (MSc) studies completed (based on action research activities) and serving as major resources to country chapters of the network; (ii) 16 practical notes printed and translated; (iii) four instructional videos prepared; (iv) capacity-building material (four modules) updated; (v) in each country, at least one university/college ready to introduce spate irrigation in its curriculum; and (vi) spate irrigation practices documented in five countries (to be identified).
  - (d) **Support pool:** (i) spate irrigation support activities widely announced and basic source material distributed through IFAD programmes; and (ii) on-demand support provided to country programmes.

#### **V. Implementation arrangements**

20. The UNESCO-IHE, with over 50 years of experience, will execute the programme in conjunction with: four local partner organizations in Ethiopia, Pakistan, The Sudan and Yemen; MetaMeta, as a co-convenor of the SpN; and relevant IFAD offices and

development projects and programmes. As the grant holder, UNESCO-IHE is ultimately responsible for management and implementation of the programme.

21. All arrangements with regard to the organizational structure and management procedures of the programme will be documented in a consortium agreement to be signed by all partners at an inception workshop. Based on its experience, UNESCO-IHE will appoint a programme coordinator (PC) and a deputy programme coordinator (DPC), who will be responsible for overall programme management. Each of the local partners will appoint a team leader (TL), who will be in charge of the organization and management of the respective specific programme activities in each country.
22. UNESCO-IHE and MetaMeta will organize an annual programme steering committee (PSC) meeting to review results and review/approve annual workplans and budgets. The PSC will comprise the directors (or their representatives) of UNESCO-IHE, MetaMeta and IFAD, the PC, DPC, TLs and one key local staff member from each of the local partner organizations. Workplans will specify time-bound indicators to measure programme progress. Workplans, budgets and a comprehensive implementation progress report will be put before the PSC for interim approval prior to submission to IFAD for final approval. Annual reports will be prepared by the PC, DPC and TLs and will include contributions by the respective experts from relevant IFAD offices and investment projects. The annual progress report will be evaluated by all PSC members and approved in an annual meeting before its timely dispatch to IFAD. The PC will also submit informal half-year progress reports to IFAD to facilitate supervision of the programme. A final report will be submitted to IFAD three months after programme completion.
23. The PC and DPC, in collaboration with TLs and the monitoring and evaluation units of IFAD investment projects – and on the basis of IFAD standards and formats – will develop and implement a participatory and IFAD-compatible impact-oriented monitoring system, which incorporates feedback from programme staff and stakeholders.

## VI. Indicative programme costs and financing

24. Indicative costs are shown in the table below. Cofunding will be by the Spate Irrigation Network/UNESCO-IHE and MetaMeta in cash and in kind – the Internal Research Fund of UNESCO-IHE and the World Bank Trust Fund, particularly for country activities in Pakistan.

### Summary of budget and financing plan

(Thousands of United States dollars)

<i>Type of expenditure</i>	<i>IFAD</i>	<i>Cofinancing (SpN/UNESCO-IHE and MetaMeta)</i>
Salaries	317	49
Travel	149	160
Research and development	640	50
Training	-	129
Administrative costs (7.8 per cent)	94	-
<b>Total</b>	<b>1 200</b>	<b>388</b>

# Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
<b>Goal</b>	Spate irrigation significantly contributing to managing water scarcity under climate change conditions	When implemented, improved practices can result in 20% growth in agricultural returns – largely pro-poor	National records, special studies	
<b>Objectives</b>	Effective spatte irrigation policies and operational programmes using known good practices	Policies and programmes based on action research and practical experiences in four countries	Programme of work of key organizations involved in the programme – both implementing organization and educational institutes Results and Impact Management System (RIMS) (where applicable)	Current and future spatte operations consider programme findings
<b>Outputs</b>	<ol style="list-style-type: none"> <li>1. Strengthened Spate Irrigation Network (SpN)</li> <li>2. Innovative action research activities implemented in four target countries</li> <li>3. Capacity built and knowledge documented and disseminated</li> <li>4. Support pool for IFAD projects and country programmes</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Country chapters of the SpN, in Ethiopia, Pakistan, The Sudan and Yemen operational, with at least 60 active members and a country network plan in operation</li> <li>1.2 Engagement with at least three key organizations in each country supporting spatte irrigation components in their programmes through training and programme assistance</li> <li>1.3 Country spatte irrigation policy notes prepared in each country, officially endorsed and with priorities and budget set for support to spatte irrigation</li> <li>2.1 At least two innovative action research activities implemented In each country – covering a wide range of possible good practices – with the help of South-South exchanges</li> <li>2.2 Action research activities evaluated &amp; documented &amp; pathways for scaling up identified</li> <li>3.1 Four Master of Science (MSc) studies completed (using material from action research activities) and serving as major resources to country chapters of the network</li> <li>3.2 Practical notes printed and translated (16)</li> <li>3.3 Instructional videos prepared (4)</li> <li>3.4 Capacity-building material updated (four modules)</li> <li>3.5 In each country, at least one university/college ready to introduce spatte irrigation in its curriculum</li> <li>3.6 Spate irrigation practices in five countries documented (to be identified)</li> <li>4.1 Spate irrigation support activities widely announced and basic source material spread through IFAD projects and country programmes</li> <li>4.2 On-demand support provided to projects and country programmes as budget allows</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Membership records</li> <li>1.2 Reports and documentation on follow-up action with key organization</li> <li>1.3 Actual policy notes and documentation on endorsement by government</li> <li>2.1 Programme progress report and special reports on each pilot activity</li> <li>3.1 MSc student records and interviews</li> <li>3.2 Actual notes and videos and distribution record</li> <li>3.3 Programme progress report and reports on engagement with institutes of higher learning</li> <li>4.1 Programme progress report</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Members of each country chapter sufficiently interested and stimulated</li> <li>1.2 Key organizations in each country open for technical support and able and willing to adjust their programmes</li> <li>1.3 'Policy space' exists in which to formulate policy notes that are taken seriously</li> <li>1.4 Endorsement procedures exist and are applied</li> <li>2.1 Innovative action research activities successfully implemented and promoted for scaling up</li> <li>3.1 MSc students maintain attachment to country chapters of the SpN</li> <li>3.2 Universities and vocational schools willing to modify their curricula</li> <li>4.1 Interest among IFAD team leaders and country offices</li> </ol>