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Enabling poor rural people
to overcome poverty

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

Note to Executive Board representatives

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For: **Approval**

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Abbreviations and acronyms

AHI	African Highlands Initiative
CCAP	Climate Change Adaptation Plan
CGIAR	Consultative Group on International Agricultural Research
COSOP	country strategic opportunities programme
CURE	Consortium for Unfavorable Rice Environments
ICARDA	International Center for Agricultural Research in Dry Areas
ICRAF	World Agroforestry Centre
IRRI	International Rice Research Institute
NARES	national agricultural research and extension systems
NARS	national agricultural research systems
NRM	natural resource management
SLM	sustainable land management

Recommendation for approval

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

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

I submit the following report and recommendation on four proposed grants for agricultural research and training to Consultative Group on International Agricultural Research (CGIAR)-supported international centres in the amount of US\$5.2 million.

Part I – Introduction

1. This report recommends the provision of IFAD support to the research and training programmes of the following CGIAR-supported international centres: World Agroforestry Centre (ICRAF); International Center for Agricultural Research in the Dry Areas (ICARDA); and the International Rice Research Institute (IRRI).
2. The documents of the grants for approval by the Executive Board are contained in the annexes to this report:
 - (i) ICRAF: Parkland Trees and Livelihoods: Adapting to Climate Change in the West African Sahel
 - (ii) ICARDA: Improved Water Management for Sustainable Mountain Agriculture: Jordan, Lebanon and Morocco
 - (iii) IRRI: Programme for Improving Livelihoods and Overcoming Poverty in the Drought-Prone Lowlands of South-East Asia
 - (iv) ICRAF: Enabling Rural Transformation and Grassroots Institution Building for Sustainable Land Management and Increased Incomes and Food Security
3. The objectives and content of these applied research programmes are in line with the evolving strategic objectives of IFAD and the Fund's Policy for Grant Financing.
4. The overarching strategic goal that drives the Revised IFAD Policy for Grant Financing, which was 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 ICRAF-led programme (annex I) aims to reduce the threats to rural livelihoods posed by climate change by promoting the diversification of trees in the parklands of Western and Central Africa through community-based research and capacity development. The programme will help rural communities adapt to the increasingly dry climate and secure new sources of food and income. Rural poor people and their organizations will be better placed to manage their natural resources and market a broader range of high-value products from native trees. The capacity and pro-poor orientation of national partner institutions will be enhanced in the process.
- (b) The ICARDA-led programme (annex II) will promote sustainable agricultural production, higher incomes, and improved livelihoods for rural communities in mountain agro-ecosystems of Jordan, Lebanon and Morocco through better management of scarce water resources – including small-scale water harvesting and conservation techniques. The programme will support the adoption of optimal and integrated technologies for water, land, crop and livestock management to sustainably increase agricultural productivity and profitability; halt land degradation; and develop replicable options.
- (c) The IRRI-led programme (annex III) targets poor rice farmers in the drought-prone lowlands of South-East Asia, particularly ethnic minority groups and rural women. The programme will identify, adapt, and validate improved drought-resilient rice technologies for target groups of IFAD-funded investment projects to sustainably increase their productivity. It will also enhance the capacity of national agricultural research and extension systems, local communities, NGOs, extension agents and IFAD-funded investment projects to effectively plan development initiatives; access information; and package education and communication material and deliver it to IFAD's target group.
- (d) The ICRAF-led programme (annex IV) will help grass-roots organizations participate meaningfully in governance processes, particularly those related to sustainable land management (SLM). It will support collective action for rural service delivery; promote environmentally sustainable enterprise development and community-level asset accumulation. The programme will promote the development of promising technologies and facilitate a regional institutional platform for knowledge sharing, scaling-up and representation/participation in SLM policymaking in East Africa.

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, Parkland Trees and Livelihoods: Adapting to Climate Change in the West African Sahel, shall make a grant not exceeding one million five hundred thousand United States dollars (US\$1,500,000) to the World Agroforestry Centre (ICRAF) 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, the Programme for Improved Water Management for Sustainable Mountain Agriculture: Jordan, Lebanon and Morocco, shall make a grant not exceeding one million United States dollars (US\$1,000,000) to the International Center for Agricultural Research in the Dry Areas (ICARDA) 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.

FURTHER RESOLVED: that the Fund, in order to finance, in part, Improving Livelihoods and Overcoming Poverty in the Drought-Prone Lowlands of South-East Asia, shall make a grant not exceeding 1.2 million United States dollars (US\$1,200,000) to the International Rice Research Institute (IRRI) for a four-year programme (2010–2014) 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, Enabling Rural Transformation and Grass-roots Institution Building for Sustainable Land Management and Increased Incomes and Food Security, shall make a grant not exceeding one and a half million United States dollars (US\$1,500,000) to the World Agroforestry Centre (ICRAF) 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

Parkland Trees and Livelihoods: Adapting to Climate Change in the West African Sahel

I. Background

1. Rural poor communities in the West African Sahel depend on a relatively small number of native tree species in parkland agroforests for essential products and environmental services. Many of these species are disappearing locally because of inappropriate management and the hotter, drier climate, severely threatening livelihoods.
2. The programme builds upon the IFAD-supported Programme for Strengthening Livelihood Strategies in the West African Sahel through Improved Management and Utilization of Parkland Agroforests (grant number ICRAF-799), which was implemented in five IFAD investment project sites in Burkina Faso, Mali, Niger and Senegal. It is specifically informed by the following lessons:
 - As tree species disappear as a result of hotter, drier conditions, products, services and revenue decrease. Adapting and diversifying parkland trees, and increasing the diversity and quality of tree products are key strategies to minimize risks to livelihoods.
 - Rural communities in dry regions depend upon a greater variety of tree species than communities in more humid regions. Maintaining these species and introducing others that provide similar products/services requires the development and implementation of local climate change adaptation plans (CCAPs). Rural communities recognize the importance of such plans but need technical assistance in developing them.
 - Rural communities have initiated tree domestication projects and market analysis and development (MA&D) for tree species primarily valued for food products. They wish to continue using these species and develop others for a broader range of tree products, but they need technical assistance to do so.
 - Rural communities are adapting parkland trees to drought by introducing germplasm from drier zones. This germplasm will, over time, increase drought adaptation through natural regeneration in parklands as a result of gene flow to local trees. Rural communities are committed to this strategy.
 - Current policies on natural resource, land and tree tenure often prevent rural communities from sustainably managing parklands. Platforms for stakeholder dialogue can lead to local policy reforms that facilitate proper management. Such platforms should be institutionalized and scaled up in order to involve rural communities in negotiating local policies, and keep local, national and regional stakeholders informed on natural resource policy and land/tree tenure reform. Additional mechanisms are needed to ensure: (i) greater investment in natural resource management (NRM) of parklands; (ii) secure natural resource tenure for sharecroppers; (iii) socially equitable, and institutionally and environmentally sustainable decentralization of NRM to local communities based on a partnership involving rural communities, extension agents, government authorities and development projects; and (iv) clear accountability by decentralized governmental units to rural communities.

II. Rationale and relevance to IFAD

3. IFAD's previous grant support helped empower rural poor people and created a conducive environment for critical analysis and participatory research. This will broaden the understanding of the causes of parkland degradation; the potential

impact of climate change on parklands; and the collective action, practices and participatory research needed to diversify, adapt and conserve parklands and help identify new revenue sources from tree products to lower vulnerability to climate change.

4. The programme will strengthen the linkages among rural communities participating in IFAD investment projects and national institutions for agricultural research, development, extension and education. Stronger links between the proposed programme and IFAD projects will allow the innovative techniques used by some projects to be adapted for use by others.
5. The programme is consistent with the strategic objectives of IFAD's grant policy, and supports IFAD's strategy for poverty reduction in West and Central Africa by:
 - strengthening the capacity of rural poor people and their organizations to manage and conserve natural resources and to market a broader range of high-value tree products;
 - increasing the pro-poor focus of national institutions;
 - raising the productivity of native parkland trees;
 - improving access in rural poor communities to selected and adapted germplasm of native trees;
 - reducing the threats to rural livelihoods posed by climate change by diversifying native parkland trees, and adapting them to hotter, drier climates, thereby diversifying and securing sources of food, medicines and incomes;
 - focusing on parklands – the principal agricultural system in the region – which have undergone severe degradation.
6. In addition, the proposed programme will promote the planting of acacias and other trees that can increase annual food crop production in parklands, conserve resources such as soil and water and provide more fodder for livestock.

III. The proposed programme

7. The overall goal is to improve rural poor people's livelihoods by adapting, diversifying and conserving parklands, and increasing revenue-generating options relating to parkland trees to reduce the impact of climate change. The programme's objectives are to:
 - Facilitate participatory research, knowledge exchange and adaptation to climate change;
 - Diversify, improve and conserve native tree species in parkland agroforests;
 - Diversify and increase the value of tree products marketed through community-based enterprises;
 - Disseminate knowledge, innovations and strategies at the national, regional and international levels.
8. This programme will assist rural communities in Burkina Faso, Mali and Niger to develop and implement climate change adaptation plans (CCAPs) to mitigate the risks to their livelihoods. The programme will also generate valuable international public goods. For example, the local adaptation plans will be used to inform other stakeholders developing CCAPs at the local, national and regional levels.
9. The target group is composed of poor farming and pastoralist communities in the implementation areas of four IFAD investment projects in Burkina Faso, Mali and Niger that collaborated in the previous grant-supported programme (ICRAF TAG 799).
10. The programme will be implemented over three years and comprise five components:
 - planning, coordination, monitoring and evaluation, and economic analysis;

- Participatory research, knowledge exchange and climate change adaptation;
- Diversification, improvement and conservation of native tree species in parkland agroforests;
- Diversification and increasing the value of marketed tree products;
- Dissemination of knowledge, innovations and strategies.

IV. Expected outputs and benefits

11. The following outputs and benefits are foreseen:

Human capital

- Reasons for environmental degradation and risks to livelihoods posed by climate change better understood by all partners.
- More innovative environment created for participatory research, learning, knowledge exchange and technology improvement in participating villages.
- Local solutions identified and used by participating villages to adapt to climate change.
- Greater technical capacity of national teams and at least 2,400 people in participating villages.

Social capital

- Networks created to disseminate knowledge, innovations and strategies about climate change adaptation in the programme sites.

Economic capital

- Local solutions identified and used by participating villages to reduce poverty.
- Broader range of high-quality tree products produced and marketed in participating villages.

Political capital

- Local stakeholders in the programme sites reach consensus about natural resource policies vis-à-vis tree management in parklands and about local CCAPs.

Natural capital

- Diversification, better management and conservation of parklands by participating villages.
- Participatory research expanded on adaptation of parkland trees in participating villages.

V. Implementation arrangements

12. ICRAF, operating from its Sahel office in Bamako, Mali, will be responsible for overall programme management, coordination and reporting. The programme's regional coordinator will work closely with national coordinators, the field coordinators of IFAD investment projects, and other partners in Burkina Faso, Mali and Niger. The ICRAF financial services units in Bamako and Nairobi will be responsible for financial reports and external audits.
13. A regional team will facilitate coordination among countries. The regional team includes six ICRAF scientists based in West Africa and Nairobi with expertise in participatory tree domestication, community-based conservation of genetic resources, analysis of wood quality for different wood products and energy, tree physiology and drought tolerance mechanisms, soil fertility improvement and conservation techniques, climate change adaptation and mitigation, market analysis and development, community-based enterprises, natural resource policy analysis,

participatory monitoring and evaluation, impact assessment and statistics. Three ICRAF staff will deal with database management, experimental design and statistical analysis, information technology and geographical information systems.

14. A national team will facilitate programme implementation in each country. Each national team includes three scientists from the national agricultural research institutes, foresters from the national forestry extension institute, professors from a national university (listed in paragraph 16) active in participatory research for development, and staff from the collaborating IFAD investment project(s) in that country. Their combined expertise includes participatory tree domestication, tree management and natural regeneration techniques, soil and water conservation techniques, parkland and forest ecology, market analysis and development, agricultural economics, diversity field fairs, seed fairs and participatory communication for development. The IFAD investment projects will also support some supervision activities, such as scaling up promising technologies and approaches used under the previous IFAD grant (ICRAF-799) and in the new programme.
15. ICRAF will be responsible for programme implementation, however partner institutions will cooperate by using their expertise and comparative advantage, as appropriate. ICRAF has worked with all the partner institutions previously.
16. The principal partners working with ICRAF include:

IFAD investment projects

- Burkina Faso: Sustainable Rural Development Programme, and Community Investment Programme for Agricultural Fertility which supports an applied research consortium
- Mali: Sahelian Areas Development Fund Programme
- Niger: Project for the Promotion of Local Initiative for Development in Aguié

National agricultural research institutes

- Burkina Faso: Institut National de l'Environnement et des Recherches Agricoles
- Mali: Institut d'Économie Rurale
- Niger: Institut National de Recherche Agronomique du Niger

National forestry extension institutes:

- Burkina Faso: Direction des Eaux et Forêt, Ministère de l'Environnement et du Cadre de Vie
- Mali: Direction Nationale de la Conservation de la Nature, Ministère de l'Environnement et de l'Assainissement
- Niger: Direction Nationale de l'Environnement, Ministère de l'Hydraulique, de l'Environnement et de la Lutte Contre la Désertification

National universities within the African Network for Agroforestry Education:

- Burkina Faso: Université de Ouagadougou
- Mali: Institut Polytechnique Rural, Université du Mali, Katibougou
- Niger: Centre Régional d'Enseignement Spécialisé en Agriculture, Faculté des Sciences Agronomiques de l'Université Abdou Moumouni, Niamey

National and regional centres for climate change

- National centres for climate change research/planning in the ministries of agriculture
 - Centre Régional AGRHYMET in Niger
17. The 36 villages targeted by the previous grant support (ICRAF-799) will be centres for knowledge exchange, participatory research and scaling up, known as village training centres. There are nine such centres in each site, and they are grouped in

clusters with three geographically proximate villages in each cluster. The clusters extend from the more humid to the drier parts of the IFAD loan project sites. These clusters of villages were chosen in order to sample rainfall gradients and other major classification variables such as ethnic composition, socio-economic status and parkland diversity. Three villages were chosen in each cluster in order to facilitate inter-village planning and implementation. The programme will be scaled up to at least three additional villages in each IFAD loan project site. Villages will be selected in close consultation with the IFAD loan projects based on the villages' interest and willingness to collaborate. In the case of Mali, the additional villages will be selected in the Mopti region where the IFAD investment project currently operates.

18. Committees will plan and coordinate the programme at the regional, national and local levels. The committees include a regional steering committee (RSC), national committees (NCs), inter-village committees (IVCs) and village committees (VCs). ICRAF-799 organized the RSC, NCs, IVCs and VCs in the 36 village training centres. IVCs and VCs will be set up in the new villages.

VI. Indicative programme costs and financing

19. The current cofinancing plan is given in the table below. Additional cofinancing is anticipated from ICRAF as complementary programmes currently in the pipeline are approved and from the other IFAD loan-financed investment projects.

Summary of budget and financing plan

(in thousands of United States dollars)

<i>Number</i>	<i>Type of expenditure</i>	<i>IFAD</i>	<i>Cofinancing^a</i>
1	Staff	450	670
2	Travel and planning meetings	255	30
3	Training workshops	216	90
4	Capital equipment	108	20
5	Supplies/services	300	105
6	Overhead	171	148
	Total	1 500	1 063

¹ Where applicable.

Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
Goal	Improve rural poor livelihoods	<ul style="list-style-type: none"> • Tangible improvement in 48 villages 	<ul style="list-style-type: none"> • M&E reports 	
Objectives	<ol style="list-style-type: none"> 1. Improve research, knowledge, CCAPs 2. Diversify, improve, conserve parkland trees 3. Diversify, increase value of tree products 4. Widely disseminate knowledge, etc. 	<ul style="list-style-type: none"> • 48 village chiefs/councils promote CCAPs; improved NRM practices; parkland diversification, improvement, conservation plans; Community-based enterprises (CBEs) 	<ul style="list-style-type: none"> • M&E, external evaluation reports • Project database 	<ul style="list-style-type: none"> • Adequate human resources available
Outputs	<ol style="list-style-type: none"> 1. Environmental, CC risks better understood 2. CCAPs, PRPs implemented 3. Local stakeholders agree on NRPs, CCAPs 4. More innovative environments create 5. Better technical capacity in villages 6. Knowledge, etc. shared about CCAPs, etc. 7. More tree products produced, marketed 8. Parklands diversified, better managed 9. Tree adaptation research implemented 	<ol style="list-style-type: none"> 1. 2,400 villagers understand environmental/CC risks, CCAPs 2. 48 village CCAPs, PRPs included in local government plans 3. Local NRPs for parkland management revised in 48 villages 4. 48 villages adopting/testing one recommended NRM technique 5. 4800 ha improved through soil/water conservation methods 6. 48 CBEs created and marketing four tree products 7. Five per cent increase in household revenue in 48 villages 8. Diversity of four species increased in 48 villages 9. Data available from adaptation tests of 4 species in 48 villages 	<ul style="list-style-type: none"> • M&E, external evaluation, annual and final reports • Project database 	<ul style="list-style-type: none"> • Adequate human resources available • Stakeholders willing to negotiate and revise NRPs and CCAPs
Key Activities	<ol style="list-style-type: none"> 1. Planning, coordination, M&E <ol style="list-style-type: none"> a. Planning/coordination meetings b. M&E, economic analysis 2. Processes for better research, etc. <ol style="list-style-type: none"> a. Train village trainers b. Strengthen participatory skills c. Risk vulnerability and CCAPs d. Natural resource policy negotiation support system e. Platforms for CC adaptation planning f. DFF, SF training 3. Diversify, improve, conserve parkland trees <ol style="list-style-type: none"> a. Analyze/improve NRM practices b. Introduce better adapted tree germplasm c. Design, implement conservation plans 4. Diversify/increase value of tree products <ol style="list-style-type: none"> a. Market analysis training/research b. Develop, implement business plans c. Test, improve processing techniques 5. Disseminate knowledge, innovations, etc. <ol style="list-style-type: none"> a. Printed and electronic documents b. Village, inter-village, inter-site networks 	<ol style="list-style-type: none"> 1a. Annual RSC, semi-annual NC, VC, IVC 1b. M&E, economic data collected semi-annually 2a. 144 villagers trained as trainers 2b. 25 technical staff and 144 villagers trained 2c. CCAPs initiated in 48 villages 2d. Stakeholders discussing policies and CC 2f. 180 villagers in 18 villages trained in DFF, SF 3a. 2400 villagers trained in improved practices 3b. 48 villages plant germplasm of four species 3c. 48 villages initiate conservation plans 4a. 48 villages trained in MA&D and analyze tree product markets 4b. 48 villages implement business plans 4c. Processing of four tree products improved 5a. 15 publications; website operational 5b. Networks operational in four IFAD-loan project sites 	<ul style="list-style-type: none"> • Village activity reports • M&E report • Report on economic analysis of project • Project database 	<ul style="list-style-type: none"> • Adequate human resources available • No significant staff turnover • Effective communication systems in place • Partners willing to collaborate

Improved Water Management for Sustainable Mountain Agriculture: Jordan, Lebanon and Morocco

I. Background

1. Most countries in West Asia and North Africa have a semi-arid climate with unpredictable rainfall and recurrent droughts. These marginal environments have large rural populations that depend on rainfed farming. Rural areas throughout Jordan, Lebanon and Morocco have seen changes in hydrology in recent years. Villagers complain that groundwater levels have fallen, springs and wetlands have dried up, and rivers no longer flow in the dry season. Moreover, reduced vegetation cover due to deforestation and overgrazing, and poor surface management of cultivated lands has led to reduced infiltration, increased run-off, evaporation and soil erosion, and a decline in groundwater recharge.
2. Water conservation and collection measures can significantly improve local farming systems. However, water harvesting in large lakes is hampered by various obstacles: high investments, private land ownership and high evaporation losses. A more effective alternative suggested by local communities and governments is water harvesting through small water reservoirs (of less than 10,000 m³) which can be filled by diverting rainfall run-off and snow-melt. Construction of small lakes, combined with the introduction of (and farmer training on) water-efficient irrigation methods could help communities use scarce water more efficiently. These structures not only collect run-off water but also reduce water erosion – a severe problem in steep Mediterranean landscapes. They also reduce flood intensity, and improve soil water storage and aquifer recharge.
3. Small farm reservoirs enable farmers in mountain areas to irrigate small plots downstream. In Lebanon, a number of hill lakes and farm reservoirs for agricultural use were constructed during the post-war period (1994-2000) at the Beka'a Valley. In Jordan, various small and medium-sized water storage structures, such as stone walls and terraces, contour furrows and cisterns for on-farm irrigation, are being built in the highlands of Karak and Tafilah Governorates. In Morocco, in the Tafilalet and Haouz regions, traditional water delivery systems (*khetaras*) were constructed near a water source often at the point where the alluvial soils meet the foothills of mountains to increase water availability for agricultural use. In these countries, the construction of hill lakes and small farm reservoirs has stimulated increased investments in local small irrigation plots. However, it is important to quantify these benefits more accurately by studying the efficiency of different structures and their impacts on farming systems and rural livelihoods.

II. Rationale and relevance to IFAD

4. Food security is a growing concern, especially given the likely impacts of climate change in West Asia and North Africa on agricultural production and natural resources. Recently, simulations of climate change were used to evaluate the effects on water resources in Lebanon. The studies showed that climate change is expected to further exacerbate existing water shortages. Temperature increases of 0.6-2.1 degrees Celsius would affect the water balance and decrease it by up to 15 per cent while agricultural demand will rise by 6 per cent by the year 2020. Growth in rainfall intensity is also foreseen, which will increase rainfall erosivity and structural stress on dams and hydraulic structures.
5. For decades, public investments in irrigation were oriented towards the plain areas and the development of large-scale irrigation schemes in countries of West Asia and North Africa. The mountainous zones – which suffer more from poverty and natural resource degradation – were neglected. More recently, considerable interest in developing these agrosystems has been observed.

6. IFAD's gradual evolution away from large-scale irrigation projects towards the promotion of small-scale water control and water-harvesting activities stems from lessons learned from previous interventions. These lessons show that poor farmers are better able to manage, maintain and benefit from water schemes that suit their local organizations. Such schemes, when backed with proven modern technologies, can be far more effective than traditional large-scale, top-down approaches.
7. The ongoing IFAD-financed Hilly Areas Sustainable Agricultural Development Project in Lebanon focuses on sustainable water harvesting and efficient use of excess winter surface run-off and springs, modern irrigation water-saving systems and soil conservation measures. The project develops the most appropriate technologies and techniques for conserving scarce water and soil while stimulating agricultural and socio-economic development in the mountain areas.
8. Hilly areas, characterized by severe erosion and low productivity, occupy a significant part of Morocco, particularly along the Atlas and Rif mountains. These areas represent both a challenge and an opportunity, given their potential as a source of run-off water. The Government of Morocco recognizes that improved hill lakes, springs and diversions (intake) from the river can complement large-scale irrigation systems and provide greater benefits in marginal mountainous areas.
9. Being the only CGIAR centre in the region, ICARDA, with its focus on dryland agriculture, is an important regional partner for IFAD. Building on their long successful experience together, IFAD and ICARDA are presently developing a strategic partnership framework. It is thought that future joint activities will be undertaken within an integrated programme rather than through several stand-alone projects. However, the proposed support (expected to become effective by 2011) is part of the project-by-project process already under way. It is fully in line with the thematic priorities set by the partnership framework, namely climate change and natural resource management.
10. The programme was designed and the locations selected to complement and support ongoing IFAD-financed projects in Jordan, Lebanon and Morocco. In addition, the programme builds on the results of other IFAD grant programmes. ICARDA has a long history of collaboration with national agricultural research systems (NARS) development projects and farming communities in all three countries.

III. The proposed programme

11. The overall goal of the programme is to promote sustainable agricultural production, higher incomes and improved livelihoods for rural communities in mountain agroecosystems through better management of scarce water resources. The programme's objectives are to introduce and promote adoption of optimal and integrated water, land, crop and livestock management technologies to sustainably increase agricultural productivity and profitability and halt land degradation in mountainous areas of Jordan, Lebanon and Morocco.
12. The target groups are (i) smallholder farmers whose livelihoods depend on rainfed agriculture, (ii) individual and collective irrigators, (iii) rural communities in areas with scarce water resources and (iv) national agricultural research and extension agencies in Jordan, Lebanon and Morocco.
13. The programme will follow an integrated approach based on community participation. At each site, the local community will be fully involved in planning, implementation, monitoring and evaluation. Farmers are seen as partners rather than passive recipients of research products. They will work with scientists and extension staff to test a wide range of "best-bet" technologies and select those that best meet their needs, often adapting the technologies to suit local conditions. This will create a sense of ownership, leading to rapid adoption of those technologies found to be effective and relevant.

14. The programme will make use of the existing infrastructure and water structures, such as hill lakes and water diversions for the planned research.
15. The programme will be implemented over four years and will comprise four components:

Component 1: Development and validation of an assessment model and design guidelines for mountain water harvesting

- Selection and characterization of a representative watershed/hydro-system from among those already identified by IFAD-supported projects
- Identification of potential water-harvesting and soil conservation systems in the watershed
- Identification, selection and assessment of the performance of water-harvesting structures (small hill lakes, spring rehabilitation and river diversion schemes or other local systems)
- Evaluation of the environmental and socio-economic impacts of the structures and their use
- Development of guidelines for water-harvesting site selection and technical feasibility

Component 2: Improved water management for sustainable mountain agriculture

- Plantation of fodder shrubs and fruit trees to fully use trapped run-off and increase agricultural production and farm incomes
- Introduction of supplemental irrigation techniques using appropriate irrigation techniques (drip and sprinkler irrigation)
- Testing of improved crop management packages
- Suitability analysis of large-scale technologies and development of corresponding technical bulletins

Component 3: Assessment of institutional and policy frameworks in mountainous areas

- Identification and description of the existing policies, institutional set-ups and farmers' associations related to land and water management in mountainous areas
- Recommendation of alternative policies and models for the implementation of the developed technologies and structures

Component 4: Capacity-building in improved water management for mountain agriculture

- Training for farmers, farmer-led water users' associations, IFAD project staff, NARS researchers and extension specialists on the design and use of management systems for water, land and high-value crops.

IV. Expected outputs and benefits

16. The following outputs and benefits are foreseen:
 - Increased water availability (by at least 50 per cent for farmers) for agriculture and promotion of indigenous and improved techniques for soil-water storage and micro-catchment water harvesting.
 - Best-bet technological packages that boost agricultural productivity (35 per cent increase), generate higher incomes (30 per cent increase in farmers' incomes) and improve economic returns and livelihoods for small-scale farmers in mountain watersheds. Enhanced irrigation

technologies are expected to achieve huge savings in scarce water resources.

- Institutional and policy options developed.
- Capacity-building and knowledge management products: farmers in target communities, as well as national research and extension staff will be trained and will use the knowledge generated to plan, implement, and manage integrated water and land conservation systems.

V. Implementation arrangements

17. ICARDA will be responsible for overall programme management and for financial and technical reporting to IFAD and will coordinate programme activities through its country offices in Jordan, Lebanon and Morocco. Designated national coordinators will be responsible for implementing the programme.
18. The main programme partners are the IFAD-financed projects and the national agricultural research and agricultural development organizations in the three countries. These are:
 - Jordan: The IFAD-financed Agricultural Resource Management Project - Phase II; National Centre for Agricultural Research and Extension (NCARE); Ministry of Agriculture
 - Lebanon: The IFAD-financed Hilly Areas Sustainable Agricultural Development Project; Micro-Schemes of Sustainable Water Management in the Hilly Areas: A Pilot Programme; the Green Plan – Ministry of Agriculture
 - Morocco: The IFAD-financed Rural Development Project in the Eastern Middle Atlas Mountains and Rural Development Project in the Mountain Zones of Errachidia Province; the Institut national de la recherche agronomique (national institute of agronomical research) (INRA); Ministry of Agriculture
19. A regional inception workshop will be held at the start of the programme to establish implementation arrangements and agree on the first year's workplan. Thereafter, annual coordination and planning meetings will be convened where all programme partners will review the previous year's results and finalize workplans. A steering committee will be established comprising the national coordinators, IFAD and ICARDA representatives, and ICARDA in-country coordinators in the three countries. The steering committee will be responsible for oversight of the programme and the review and approval of the annual workplans and budgets.
20. The programme's results will be disseminated in other countries such as Algeria and Tunisia. Inter-country cooperation and synthesis of results will be facilitated by regional networks already established by ICARDA within the region through its regional programmes, and through KARIANET, exchange visits and workshops.

VI. Indicative programme costs and financing

Summary of budget and financing plan^a (in thousands of United States dollars)

<i>Number</i>	<i>Type of expenditure</i>	<i>IFAD</i>	<i>Cofinancing</i>
1	Personnel	200	300
2	Operations ^b	310	200
3	Equipment ^c	240	0
4	Meetings and workshops	40	0
5	Training and dissemination	60	0
6	Indirect Costs	150	
	Total	1 000	500

^a NARS contribution is in-kind, for example personnel, vehicles and equipment use, offices.

^b Field trials, consumables, transportation, labour, materials for fieldwork, etc.

^c Equipment, irrigation systems, pumps, weather stations, etc.

Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
Goal	Sustainable agricultural production and improved livelihoods of rural communities in mountainous areas through better management of scarce water resources.	i. Improved awareness of water resource management ii. Increased agricultural production iii. Improved household incomes	National and international statistics; Development programme reports	
Objectives	Introduce, promote adoption of optimal & integrated water, land, crop & livestock management technologies for sustainable increases in agricultural productivity and profitability for halting land degradation in mountainous areas of Jordan, Lebanon, and Morocco.	i. Adoption and practice of new farm management practices and water management techniques ii. Incomes of farm households using improved technologies iii. Productivity of agricultural systems increased	Programme reports, Supervision reviews; Impact assessment reports; National program plans	i. Enable national development strategies & policy environment ii. Stable political situation iii. Continued national commitment iv. Farming communities participate
Outputs	i. Increased water availability for agriculture (at least 50% in benchmark sites) ii. Best-bet technologies to increase farm productivity at least 35% & farmer's income 30%. iii. Institutional & policy options (TIPOs), at least one community institution created to handle collective NRM issues, develop one technology policy analysis per country iv. Capacity building & KM products. 80 professionals (NARS, MoA, NGOs etc) & 300 farmers participate in training per country	i. Selection & characterization of representative watershed/hydro-systems ii. Identification & assessment of water harvesting systems iii. Improved crop management practices tested iv. NARS researchers and extension specialists trained on water, land, and crop management systems/techniques	Programme reports and documents; Workshop proceedings; Database and field records; GIS Maps and surveys; Policy options reports and workshops proceedings; Programme website; National program plans and annual reports	i. Political situation remains stable and climate changes on the government's agenda ii. Computer capabilities of some national programs to have relevant websites
Key Activities	i. Development and validation of mountain water harvesting assessment model and design guidelines (representative watershed selection per country; Identification of potential water harvesting & soil conservation systems; Assessment of water harvesting structures performance and environmental and socio- economic impacts) ii. Improved water management for sustainable mountain agriculture (Introduction of supplemental irrigation techniques; Test improved crop management packages; Suitability analysis & mapping of verified upscaling technologies) iii. Assessing institutional and policy frameworks in mountainous areas (Similarity analysis, mapping of WANA countries major outscaling practices; Identification of existing policies, institutional set-ups and farmers associations; Recommend alternative policies and farmers' organization for implementation of developed technologies & structures) iv. Capacity building in improved water management for mountain agriculture (NARS researchers & extension specialists water, land and crop management training)	i. identified No. of technologies tested and suitable for dissemination ii. No of farmers adopting introduced technologies iii. No. of users participating in activities iv. Constraints to adoption identified and portfolio of enabling options developed v. Recommendations available. vi. Maps and scientific papers published vii. Programmes reports published viii. Training courses held and materials published ix. Annual and final reports	Programme reports and documents; Benchmark study and socioeconomic surveys; Published success stories; Field records, cost-benefit analysis, evaluation reports; Adoption and impact assessment reports.	Farming communities and other stakeholders participate in the programme activities.

Programme for Improving Livelihoods and Overcoming Poverty in the Drought-Prone Lowlands of South-East Asia

I. Background

1. Extensive poverty and food insecurity prevail among the more than 25 million farm households in Asia that depend on rice grown in drought-prone lowlands. The rice area regularly affected by drought is estimated to be at least 23 million ha or half of the total rainfed lowland rice area in South and South-East Asia. Average production losses during drought years are as high as 40 per cent but complete crop loss is common for individual farmers. The incidence and severity of poverty in these areas are high as farmers suffer from various economic, social and political disadvantages.
2. The economic costs of drought can be immense and are responsible for major famines in Asia. In 2004, a severe drought hit South-East Asia, resulting in major losses of crops and farm revenues and causing hardship for millions of people. Poverty increases during drought years as people fall back into poverty and those already living below the poverty line sink deeper.
3. Rice is a staple for farmers in the drought-prone lowlands but yields are generally low, mainly due to drought, adverse soil conditions, and scarce use of inputs. Given these constraints, it is anticipated that a high proportion of poverty is likely to remain in the drought-prone lowlands, and the recent increase in the number of people affected by hunger as a result of the economic crisis shows their continuing vulnerability despite all efforts to reduce poverty in line with the Millennium Development Goals for 2015.
4. Given the importance of rice in ensuring household food security, interventions that increase rice productivity can serve as a critical entry point in initiating and reinforcing the process of agricultural growth and income generation. Technologies that reduce production risks caused by drought favour input use and can have a major impact on system productivity.

II. Rationale and relevance to IFAD

5. In line with the IFAD Strategic Framework (2007-2010), the proposed programme aims to raise productivity and improve the livelihoods of millions of farmers reliant on rice production in the drought-prone lowlands of South-East Asia through participatory development, validation, and delivery of suitable improved technologies. Activities will be undertaken by the working group for the drought-prone environments of the Consortium for Unfavorable Rice Environments (CURE). This consortium is a regional platform led by national agricultural research and extension systems (NARES) and composed of institutions from Asian countries, together with IRRI as the coordinating hub. The proposed support will contribute to the overall CURE programme and extend the activities therein. The ongoing IFAD grant to IRRI (Programme on Enabling Poor Rice Farmers to Improve Livelihoods and Overcome Poverty in South and South-East Asia through the CURE [grant 1108]), which includes a component for drought, provides an important platform for the new programme. The new programme also provides an opportunity for IFAD to enhance supervision and knowledge management by focusing on larger projects, as indicated in IFAD's Asia and the Pacific regional grant strategy. As a "network of national networks," CURE facilitates the sharing of scientific knowledge, technology products and information among the network members.

III. The proposed programme

6. The overall **goal** of the programme is to enable poor rice farmers in the drought-prone lowlands of South-East Asia to improve their household food security and reduce poverty through the adoption of enhanced technologies validated and disseminated by the CURE working group for drought-prone lowlands. The primary focus will be on the rural poor who grow rice in these areas, particularly ethnic minority groups and rural women.
7. The programme's **objectives** will be to (i) identify, adapt, and validate improved rice technologies for drought-prone lowlands in South-East Asia; (ii) enable farmers in drought-prone lowlands, including those reached by IFAD-funded investment projects, to access rice technologies that sustainably improve productivity; (iii) enhance the capacity of the NARES, local communities, NGOs, extension agents, and IFAD-funded investment projects to effectively plan development initiatives, access information, and package education and communication material and deliver it to their partners.
8. The primary focus of the programme will be on rural poor people living in the target areas. Many of these people are women belonging to minority ethnic groups. The inclusion of these groups in project activities and evaluations will be monitored. NARES, local authorities, and IFAD-supported investment projects in the drought-prone lowlands will be the direct beneficiaries, as the programme is aimed at building local capacity to create effective development options for rural poor people.
9. The programme will be implemented over four years and will comprise three **components**:
 - Development and validation of improved technologies for the drought-prone lowlands of South-East Asia.
 - Scaling-up of innovations, and provision of technical innovation services (TIS) to NARES and IFAD-funded investment projects.
 - Capacity-building to create a critical mass of NARES and partners for generating future innovations and knowledge management.
10. **Development and validation of improved technologies** will address the key constraints on achieving greater and more stable rice productivity in drought-prone environments. To ensure that the technologies are relevant and acceptable to farmers, testing and validation will mostly be conducted on-farm using participatory approaches. Productivity growth will be achieved by combining the best available drought-tolerant germplasm with improved management practices. Where such varieties are not yet available (e.g. Indonesia and Cambodia), the programme will evaluate the best local germplasm together with the best available stress-tolerant lines from other countries. General crop management issues will be addressed in studies across sites, while some technologies more suited to conditions and opportunities found in specific sites (e.g. water-saving technologies or community seed bank management) will be dealt with separately.
11. **Scaling-up of innovations and technical innovation services** will develop effective communication pathways to facilitate the flow of information to national extension systems, IFAD-funded investment projects, and other local pro-poor partnerships. A review of past IFAD-funded initiatives in unfavourable rice environments will be undertaken to identify and distil lessons on approaches that facilitate adoption and uptake. The role of women and disadvantaged groups and the benefits that accrue through technology adoption will be closely examined. In addition, policy interventions that encourage interest from local and national partners to invest in technology sharing and adoption will form part of the studies. The programme will provide partners with the following technical innovation services: participatory approaches for adaptive research; technology generation and dissemination; and technological components covering integrated germplasm plus crop management solutions for drought-prone environments. The technical

innovation services will target IFAD-funded investment projects and, where appropriate, NGOs will be included in dissemination and adaptive research activities.

12. **Capacity-building and knowledge management** will aim at developing a critical mass of scientists, staff and partners to address the challenges of the drought-prone rice environments and to provide a platform for knowledge and technology exchange. NARES in drought-prone regions will benefit at the strategic level with regard to priority setting and research planning, the establishment and implementation of drought research, and the identification and development of technical options for agricultural extension activities in drought-prone regions. The programme will provide opportunities for broad-based capacity-building through exchange visits, informal and formal training, collaborative activities, cross-country information exchange, and mutual learning among the various stakeholders involved. The availability of "rice-and-drought specialists" within NARES will be an important resource for IFAD's initiatives in the region. Information will be made widely available in local languages and in a range of formats catering to a wide audience (e.g. e-learning and training modules, print and non-print media). Web-based resources will be further developed through IRRI's Rice Knowledge Bank and in-country knowledge banks and community-based information exchange systems.

IV. Expected outputs and benefits

13. The following outputs are expected:
 - Validated improved technologies for the drought-prone lowlands of South-East Asia such as improved germplasm and integrated management approaches.
 - Effective strategies for scaling up innovations among NARES and other partners, including IFAD-funded investment projects.
 - Technical innovation services to strengthen the capacity of NARES and local communities – also within IFAD-funded investment projects – to effectively plan and implement development initiatives.
 - Enhanced capacity of NARES and partners to support and generate future innovations for the drought-prone lowlands, including a cadre of rice-and-drought specialists.
 - Relevant knowledge and information on rice production technologies for the drought-prone lowlands in a form accessible to NARES and local communities.

V. Implementation arrangements

14. IRRI will be the main implementing agency for this programme. The activities will be conducted with the CURE working group for drought-prone environments and, as such, the activities will be guided by a steering committee of CURE. The steering committee – composed of senior NARES staff members – will provide oversight, appraise research progress, approve workplans, and make strategic decisions regarding the operations.
15. The diversity of environmental conditions and farmers' livelihood strategies make participatory approaches essential as a basis for technology development and validation. In these activities, farmers will evaluate the new technologies through participatory trials implemented in their fields. Feedback will be gathered on farmer experimentation, on how farmers adapt technologies to their own circumstances, and on why farmers do or do not adopt given technologies.
16. A strong sense of ownership within CURE working groups, together with the in-kind contributions from NARES, augurs well for enduring partnerships and activities. Further, the positive approach members take to sharing expertise and cross-country learning contributes to the sustainability of efforts. Emphasis on knowledge

management and capacity-building will also make a substantial contribution to sustaining the gains made. Mutual benefits accruing from the partnerships are expected to serve as incentives to maintain such partnerships beyond the project.

17. Where IFAD-funded investment projects operate in areas relevant to the programme, close linkages will be developed following the model used by the IFAD grant to IRRI (Programme for Managing Rice Landscapes in the Marginal Uplands for Household Food Security and Environmental Sustainability (grant number 706). Collaborative arrangements with specific investment projects will be demand-led. Relevant products and information will be made available to investment projects, and representatives of these will be invited to join in the annual planning meetings and also to directly observe field activities.
18. Programme achievements will be evaluated through IRRI's internal annual review process and annual reports. A progress report will be sent to IFAD regularly. In addition to this formal monitoring, stakeholders will also directly monitor the achievements of the project through a participatory monitoring and evaluation process. The required indicators for monitoring and evaluation will be developed through a participatory process, and farmers and other stakeholders will assess project performance against these indicators. IFAD will carry out supervision missions using its own budget.

VI. Indicative programme costs and financing

19. The total cost of this four-year programme is US\$1.52 million, of which a total of US\$1.20 million is requested from IFAD. IRRI will provide a matching in-kind contribution of US\$0.22 million in the form of staff, supplies, services and travel and NARES will provide a matching in-kind contribution of US\$0.10 million in the form of staff, supplies, and services. IRRI's contribution includes cofinancing from sources such as the Australian Centre for International Agricultural Research and Development (ACIAR) and the Government of the Philippines.

Summary of budget and financing plan

(in thousands of United States dollars)

<i>Number</i>	<i>Type of expenditure</i>	<i>IFAD</i>	<i>Cofinancing^a</i>
1	Staff costs	247	151
2	Supply and services	129	121
3	Travel costs	76	28
4	Research, scaling-up and pilot activities ^b	420	
5	Training and information resources	144	
6	Meetings and workshops	75	
7	Overhead (10 per cent)	109	20
	Total	1 200	320

^a IRRI and NARES where applicable.

^b Consists of small grants to NARES to cover staff, travel, communication and operational costs of NARES.

Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
Goal	<p>Poor farmers in drought-prone lowlands of Southeast Asia are able to improve household food security and reduce poverty through the adoption of improved technologies.</p> <p>Recommendations developed applicable to 10 million ha and, within the life of the Programme, 100,000 farm households are expected to benefit.</p>	<p>% of men and women farmers in target areas with improved food security.</p> <p>% of households in target areas below poverty line is reduced.</p>	Field and household survey, project and media reports.	Support of NARES collaborators and conducive national policies.
Objectives	Identify, adapt, and validate improved rice technologies for drought-prone lowlands in Southeast Asia. Enable farmers in drought-prone lowlands, including those reached by IFAD-funded investment projects, to access rice technologies that sustainably improve productivity. Enhance the capacity of the NARES, local communities, NGOs, extension agents, and IFAD-funded investment projects to effectively plan development initiatives, access information, and package and deliver information, education, and communication (IEC) materials to these partners.	<p>A number of validated technologies available to NARES for dissemination to farmers.</p> <p>% of farmers using improved technology options.</p> <p>Increased number of information and training materials being used within NARES.</p> <p>Increased number of NARES, NGOs, and local partners trained on technologies and approaches.</p> <p>Greater use within NARES of information, technical options, and development opportunities.</p>	Field visits, NARES reports, and Web sites, field and household survey, project reports. Information resources in hard and digital formats, annual and project completion reports, impact studies, research papers.	Support of NARES collaborators provided, conducive national policies, and project funding secured.
Outputs	Validated improved technologies for the drought-prone lowlands of Southeast Asia. Effective strategies for out- and upscaling of innovations, and provision of technical innovation services (TIS) to strengthen abilities of NARES and local communities—within and outside IFAD-funded investment projects—to access technologies and information adaptable under drought-prone lowlands. Enhanced capacity of partners and a critical mass of scientists and staff for generating future innovations, and information sources and training materials on technology options.	<p>A number of validated options for drought-prone lowlands available in the form of descriptions and materials.</p> <p>A number of approaches developed to make options available to farmers.</p> <p>A number of successful initiatives in the drought-prone lowlands being developed and undertaken, and rice technology options for this environment being evaluated and promoted by NARES. A number of information and training resources being used within NARES and local partnerships. A number of trained NARES, NGOs, and local partners on various technologies and approaches.</p>	Field visits, project reports, and research papers. Reports from IFAD investment projects. Reports and survey of training and information resources. Project completion reports, survey, impact studies.	Support of NARES collaborators provided. Policy of provision and use of information. Counterpart funding available.
Key Activities	<ul style="list-style-type: none"> Development and validation of improved technologies for the drought-prone lowlands of Southeast Asia. Out- and upscaling of innovations, and provision of technical innovation services (TIS) to NARES and IFAD-funded investment projects. Capacity building to create a critical mass of 	A number of improved germplasm and management recommendations available at each of the target sites. Lessons from past IFAD projects reported; communication pathways identified in each country; number of partnerships established, number of technologies demonstrated through TIS. Number of training courses, exchange visits, collaborative activities conducted; number of adapted training	Field visits, trial data, annual project reports, site-specific crop management guidelines, scientific papers; reports from IFAD investment projects. Promotion materials in hard copy and digital form.	Support of NARES collaborators provided, field experiments succeed; IFAD investment projects interested in collaboration. Effective communication pathways available. NARES invest in national rice knowledge

Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
NARES and partners for generating future innovations and knowledge management.	materials available at each target site. National/international/community-based rice knowledge banks or information exchange systems on drought-related technologies identified, established, and updated.		bank.

Enabling Rural Transformation and Grass-roots Institution Building for Sustainable Land Management and Increased Incomes and Food Security

I. Background

1. The low adoption rate of sustainable land management (SLM) practices is a major factor in declining agroecosystem productivity and increasing poverty levels in East Africa. Although numerous SLM technologies exist, weak grass-roots institutions characterized by poor capacity, failure to exploit collective capital and inadequate knowledge sharing have hampered SLM and the achievement of food security in the region. Inadequate natural resource management (NRM) policy processes and scant market integration have exacerbated the situation, pointing to the need for institutional and policy change. For farmers to benefit from technical innovations, and policy and market incentives, vibrant rural institutions are needed. When communities are well organized into groups and their knowledge tapped and incorporated during planning and implementation, they are more likely to own, participate in and remain committed to development projects.
2. The operational outcomes and local impact of IFAD's investments – increased incomes and enhanced food security – depend on strengthening in-country capacity for agricultural and rural development. This is best achieved by developing the requisite institutional infrastructure. The Landcare experience¹ of fostering collective action is an excellent example of how this can be achieved. Implemented in 17 countries, Landcare uses a social mobilization approach centred on community groups and multi-stakeholder partnerships that accesses support beyond the local level to enable the rapid adoption of land management innovations linked to livelihood and enterprise options. The approach provides a forum for linking biophysical, socio-economic and governance elements for wide-scale development of smallholder farmers.
3. The proposed programme will be implemented through the African Highlands Initiative (AHI) an eco-regional programme of the World Agroforestry Centre's Eastern Africa region. AHI is mandated to develop and institutionalize integrated natural resource management (INRM) methodologies. It is being implemented effectively through participatory action-research. It has been shown that the AHI methods developed and the adaptation of approaches to the local context have enabled stakeholders to understand the complex nature of INRM, thereby improving the learning process and leading to greater adoption of NRM technologies. The AHI pilot has proved successful and experience under the Landcare approach is growing. The proposed programme will add value to the ongoing efforts of enhancing local institutional capacity, by building upon IFAD's work in Kenya, Uganda and the United Republic of Tanzania.

II. Rationale and relevance to IFAD

4. Significant impact can be achieved through strong grass-roots institutions with the capacity to adapt governance mechanisms to local conditions. The challenge is to enable a rural transformation process that is locally owned and driven by grass-roots institutions that also participate in policy dialogue. Effective grass-roots institutions should demonstrate democratic governance, visionary leadership, equitable distribution of roles and benefits, a high degree of accountability, collective decision-making and inclusion, with special attention to women, poor people and other marginalized groups.

¹ Landcare is a grass-roots movement to foster improved livelihoods and protect the environment by working through the social engagement of individuals, communities and supporters. It provides a basis for autonomous farmer-led organizations concerned with the long-term health of the land. For more information, visit www.landcareinternational.net

5. IFAD's sourcebook *Institutional and organizational analysis for pro-poor change: meeting IFAD's millennium challenge* has outlined steps to achieve institutional change. However, the appropriate tools for mapping institutional change over time are lacking. In process-oriented projects, institutional analyses reveal when and where changes are needed. The proposed programme will examine and map institutional development processes and identify indicators to monitor institutional maturity. The results will form the basis of an institutional development practitioners' guide and institutional development training module. Both will add value to IFAD operations and will be useful tools for country programme managers and others during the programme design and implementation processes. A good practitioners' guide helps programme designers to carry out a comprehensive institutional analysis, define appropriate strengthening measures and map institutional change during implementation – elements that are critical for analysing scaling-up targets and sustainability. The guide will also be of value for IFAD's work in other regions (Asia and the Pacific, Western and Central Africa, North Africa and the Near East, Latin America and the Caribbean).
6. The programme will complement IFAD's grant-financed Support Programme to Strengthen the Capacity of the Network of Farmers' Organizations and Agricultural Producers in West Africa (ROPPA) by working closely with the East African Farmers' Federation (EAFF), which currently has 570,000 members from Kenya, the United Republic of Tanzania, Uganda, Burundi, the Democratic Republic of the Congo and Rwanda.
7. IFAD's country strategic opportunities programme (COSOP) for the United Republic of Tanzania notes that the rural poor, particularly women, are faced with an institutional environment that either is neutral or impedes them from moving out of poverty. This stems from the lack of plurality of agricultural service providers and inadequate emphasis on empowerment of farmers' organizations. The COSOP proposes enhancing productivity and building the capacity of smallholders' organizations within the framework of the Agricultural Sector Development Programme.
8. In Uganda, the IFAD-supported District Livelihoods Support Programme (DLSP) involves a hierarchy of community structures and careful sequencing of mobilization methods to ensure that poor people are reached as community participation grows. The proposed programme will provide useful tools for achieving the DLSP goals.
9. IFAD's national-level support in Kenya includes: (i) enhancing technical capacity for service provision such as collective marketing and input purchasing; and (ii) supporting the core functions of national farmers' organizations, such as the Kenyan National Federation of Agricultural Producers. The proposed programme will define an appropriate institutional environment and set-up, which will enable smallholders to escape from self-reinforcing poverty traps. It will also support smallholder institutions in their roles in the policy advocacy, supervision and community mobilization necessary for an open market value chain.
10. The Comprehensive Africa Agriculture Development Programme (CAADP) is implemented through the New Partnership for Africa's Development (NEPAD). It identifies farmers' empowerment as key to ensuring meaningful participation in setting sector priorities and designing policies and programmes on agricultural development.

III. The proposed programme

11. The overall goal of the programme is to foster support for grass-roots organizations to participate meaningfully in governance processes affecting their livelihoods and well-being, and the environment. As part of a dynamic model for strengthening grass-roots institutions, the programme will generate relevant policy reform recommendations critical for strengthening grass-roots institutions and will foster

formidable collective action for the wider adoption of SLM practices. The programme's objectives are to enhance the capacity of grass-roots institutions and support the harnessing of broader collective action for rural service delivery; promote environmentally sustainable enterprise development and community-level asset accumulation; and build a regional institutional change platform for knowledge sharing, scaling-up and representation or participation in SLM policymaking and development processes in East Africa linked to the IFAD Africa Knowledge Management Network.

12. The target group includes farmers' organizations at multiple levels (local, district, national and regional), which will benefit from greater capacity to engage in the development process.
13. The programme will be implemented over four years and will comprise three components:
 - Enhance the capacity of grass-roots institutions and support the harnessing of broader collective action for rural service delivery.
 - Promote environmentally sustainable enterprise development and community-level asset accumulation.
 - Build a regional institutional change platform for knowledge sharing, scaling up and participation in SLM policymaking and development processes in East Africa.

IV. Expected outputs and benefits

14. The following outputs are foreseen:
 - **A dynamic model for grass-roots institutional analysis and strengthening and a platform for rural service delivery and engagement in policy process developed and promoted.** This output will be achieved by analysing the typology of grass-roots institutions and their engagement in rural service delivery, policy dialogue; training farmers on various SLM technologies; supporting farming system improvement; and conducting small experiments on or testing promising technologies for enterprise development; and facilitating institutional development activities for socio-economic change.
 - **Enterprise development and community-level asset accumulation increased.** This output will be realized through the creation of district and national institutional change platforms with formalized rules of engagement in policy processes related to rural service delivery. The platforms will be enhanced by setting performance targets relating to transparency, accountability and participation.
 - **Institutional change platform for knowledge sharing, scaling up and public-policy participation established.** This output will include the development of knowledge products, a grass-roots institutional mobilization literacy programme, cross-site synthesis of grassroots institutions' engagement in policy processes related to rural service delivery and their participation strategy for regional development and policy processes.

V. Implementation arrangements

15. In programme implementation, the World Agroforestry Centre (the lead institution) will ensure transparency through a well-defined process that provides IFAD and partners with access to financial reports and enables them to participate in assessing progress in programme implementation. This will ensure quality outputs,

financial management and effective coordination among partners. The centre has collaborative programmes in all target countries and staff currently based in all of them.

16. The AHI will be the main programme implementer, in collaboration with the various partners. The local governments of participating districts will be the main conveners of the institutional change platforms. They will identify platform members, operationalize the platforms and ensure strong links between the different partners, including farmers' institutions. The district will identify a competent programme coordinator who will link the programme with the district administration and the AHI. A platform coordinator will access funds based on agreed workplans and budgetary requests as approved by the platform. The platform coordinator will ensure timely technical and financial reporting to the district administration and AHI. Technical backstopping for the platforms will be dealt with by AHI (regional and site teams). Logistical and administrative support will be provided by ICRAF headquarters in Nairobi. Oversight of impact assessment, marketing and linking knowledge to action will be carried out by ICRAF scientists. The programme will work closely with IFAD country programme managers in each country to ensure synergistic efforts in these sites. The sites are the Smallholder Horticulture Marketing Programme and Mount Kenya East Pilot Project for Natural Resource Management (both in Kenya), the Agriculture Sector Development Programme (United Republic of Tanzania) and the District Livelihoods Support Programme (Uganda).
17. The programme is multidisciplinary and will work with national research and development partners, including the private sector. It will be implemented through action-research and address the economics of sustainable production in farms, product development and market analyses, and also cost efficiency and rural household asset accumulation. There will be a capacity-building element to develop grass-roots institutional capacity to participate in policy dialogue and access to credits and markets. Support will be provided for the input supply process and policy analysis. With respect to knowledge management, participatory methodologies will be used to share results with smallholder farmers and other partners.
18. The programme will follow specific steps: (i) develop a dynamic model for grass-roots institutional analysis and strengthening and a platform for rural service delivery and engagement in policy processes; (ii) promote environmentally sustainable enterprise development and community-level asset accumulation; (iii) establish an institutional change platform for knowledge sharing, scaling up and public-policy participation at the regional level.

VI. Indicative programme costs and financing

Summary of budget and financing plan

(in thousands of United States dollars)

<i>Number</i>	<i>Type of expenditure</i>	<i>IFAD</i>	<i>Cofinancing</i>
1	Personnel and supervision	375	200
2	Equipment and supplies	142.5	10
3	Operational costs	442.5	24
4	Training and workshops	255	20
5	Research, publications and travel	225	25
6	Administrative costs	60	92
	Total	1 500	371

Results-based logical framework

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
Goal	To empower poor rural men and women in East Africa to achieve higher incomes and improved food security.	<ul style="list-style-type: none"> At least 50% increase of poor rural people in the programme sites above the poverty line by 2020 At least 80% increase of strong organizations of poor rural people by 2020 	<ul style="list-style-type: none"> Government reports/statistics IFAD/ICRAF reports External impact assessment reports 	Assumptions <ul style="list-style-type: none"> Support and participation of relevant government ministries Quality process documentation and iterative learning processes.
Objectives	<ol style="list-style-type: none"> Enhance capacity of variants of grassroots institutions and provide support to harness broader collective action for rural service delivery; Improve Enterprise development within the context of conservation, and community level asset accumulation. Build a regional institutional platform for knowledge sharing, scaling up, and participation in SLM policy making and development processes in East Africa. 	<ul style="list-style-type: none"> At least 50% of the fostered multi-stakeholder collective action leading to strong farmer institutions by end of the programme Up to 60 % farm-based enterprise development supported and private sector investment encouraged by the end of the programme. 	<ul style="list-style-type: none"> Improved existing farming systems, through integration of highly practical agroforestry and soil management techniques 	Risks <ul style="list-style-type: none"> Lack of buy-in from government and partners Poor external terms of trade Climate uncertainties for agriculture
Outputs	<ol style="list-style-type: none"> A dynamic model for grassroots institutional analysis and strengthening and a platform for rural service delivery and engagement in policy process developed and promoted. Enterprise development and community level asset accumulation increased. Institutional change platform for knowledge sharing, scaling up and public policy participation established. 	<ul style="list-style-type: none"> At least 6 functioning district level multi stakeholder platforms supporting existing groups capacitated and strengthened. Improved gender relations, equity, visibility and attention to voices of marginalized groups Models of improved farming systems, with small experiments of promising technologies and practices e.g., tree integration and farm enterprise development Institutional and social change process observed and documented Most significant change stories 	<ul style="list-style-type: none"> Institutional development practitioners' guide and training module Publication on institutional change/performance Expanded collaboration with district and or national level service providers, including external partners. Framework and indicators for monitoring institutional development 	<ul style="list-style-type: none"> Conducive institutional support for pro-poor initiatives, and private sector partnerships
Key Activities	<ol style="list-style-type: none"> Grassroots institutional analysis, technical and institutional capacity building. Develop, validate and promote farmers institutional development model Developing a 'Practitioners' Guide' and 'Training module for Institutional Development.' 	<ul style="list-style-type: none"> Models of improved farming systems, with small experiments of promising technologies and practices e.g., tree integration and small-farm enterprise development Institutional and social change process 	<ul style="list-style-type: none"> Training module for institutional development process Number of adopters, grassroots groups trained, facilitated and supported Publication on institutional 	Extensive awareness creation to relevant government agencies and grassroots communities

	Objectives-hierarchy	Objectively verifiable indicators	Means of verification	Assumptions
	<ul style="list-style-type: none"> a. Fostering linkages between grassroots institutions and other stakeholders for technology dissemination b. Facilitate development of viable farm enterprises, and monitor community level asset building c. Analyze power relations at multiple levels including elements of governance such as participation, transparency, and accountability 	<p>observed and documented</p> <ul style="list-style-type: none"> • 6 District level knowledge-sharing and technology dissemination and agro-based business models developed • Linkages between the grassroots institutions, meso -level platforms and macro level policy making identified and performance targets agreed • Partnership with private sector for product development, value addition and marketing 	<p>change/performance</p> <ul style="list-style-type: none"> • Number of engagement in the broader market place and integrated policy and development processes • Number of sustainable agro-based enterprise developed • Relevant District level policies passed 	<p>Strategic planning involving mitigation measures</p> <p>Active involvement of government agencies and policy makers in programme planning</p>
	<ul style="list-style-type: none"> a. Facilitating process documentation, knowledge sharing, and impact assessments b. Launching of a 'Grassroots Institutional Mobilisation Literacy program, which carries the message of 'land stewardship' as a true African ethic. c. Building capacity to manage a regional coalition for grassroots institutions; and seek representation in development and policy processes. 	<ul style="list-style-type: none"> • 5 policy briefs; 10 farming guides • 15 seconds television airtime on Land Stewardship • 3 regional policy workshops • 10 local and international volunteers, and interns recruited 	<ul style="list-style-type: none"> • Methods guide of strengthening grassroots institutions • Engagement of grassroots institutions in policy processes • Grassroots Institutional Mobilisation in land stewardship • Literacy and volunteer programs in place 	<p>Development of various communication methods to ensure inclusiveness in the knowledge sharing platform</p>