

## Water Conservation and Management

### EVALUATION SYNTHESIS





**Water Conservation and Management  
Evaluation Synthesis**

**Front cover:** Beatrice Mambwe carries water from a source to water her plot of land for growing vegetables at the International Fund for Agricultural Development (IFAD) micro irrigation scheme based on a small dam funded project at the Nabuyani irrigation scheme near Kaolomo in southern Zambia. Beatrice said, "Since we have this water our lives have improved a lot as it is much easier to tend your field, to make your plants grow. This shows in our plots, in the way they are so green. Our incomes are now steadier because we can sell what we grow."

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## **Preface**

*The main objective of this evaluation synthesis was to capture how IFAD has responded to the emerging issues of rural water security and governance, whether IFAD's investments in water have met their intended objectives and are sustainable, and if it is possible to further enhance the effectiveness and sustainability of IFAD's investments in this sector. The synthesis reviewed not only the technical, environmental and financial aspects of investments made by IFAD, but also the social and institutional aspects where IFAD introduced the most interesting innovations. IFAD's policy work at national, regional and global levels on water-related issues was also reviewed.*

*Overall, IFAD's engagement in the water sector has improved, starting from its country strategies, as a result of enhanced synergy between different project components and a greater alignment of the different instruments that IFAD deploys to achieve its strategic objectives. The scenario emerging on the water front presents a set of issues, challenges and opportunities such as: (i) water is both a constraint to development and an opportunity for innovation; (ii) water productivity is a game changer, critical to enhancing development effectiveness; and (iii) rainfed farming, undertaken by the bulk of poor smallholder farmers, is now key to increasing food production and agricultural productivity. This is where IFAD, in partnership with local governments and other development agencies, can take the lead in developing a strategy that can bring about a "brown revolution" in rainfed agriculture akin to the "green revolution" of irrigated agriculture.*

*With IFAD's comparative advantage in smallholder agriculture, and the need to increase food production in a sustainable manner within the context of increasing water scarcity and climate variability, IFAD's engagement in the water sector can only be expected to deepen in the years ahead.*

*This evaluation synthesis was led by Mattia Prayer Galletti, former Senior Evaluation Officer, with contributions from Crispino Lobo, lead consultant, and Prashanth Kotturi, Evaluation Research Analyst. Miriam Irías, former Evaluation Assistant and Lucy Ariano, Evaluation Assistant, provided administrative support.*

*Appreciation is due to IFAD Management and staff who have given their feedback on the draft version of this document and to those who provided useful inputs throughout the process and during the learning workshop held in July 2013.*



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**Beneficiary of an IFAD-funded project pours water into a cistern on his land in Jordan. He has been given funds from IFAD through the Agricultural Resources Management Project for olive trees, conservation structures and cisterns. He also has sheep and goats, doves and pigeons.**

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## Abbreviations and acronyms

AWM	agricultural water management
COSOP	country strategic opportunities programme
CPE	country programme evaluation
CWRAS	Country Water Resources Assistance Strategies
GEF	Global Environment Facility
IFI	international financial institution
IMAWESA	Improved Management of Agricultural Water in Eastern and Southern Africa
IOE	Independent Office of Evaluation of IFAD
IWMI	International Water Management Institute
MDB	multilateral development bank
NRM	natural resources management
PTA	Policy and Technical Advisory Division
RIDE	Report on IFAD's Development Effectiveness
SO	strategic objective
WASH	Water, sanitation and hygiene
WUA	water users' association

## Executive summary

1. With water being increasingly considered both a constraint to development and an opportunity for investments that can reduce poverty, the Executive Board, when approving the 2013 evaluation work programme at its December 2012 session, requested the Independent Office of Evaluation of IFAD (IOE) to prepare an evaluation synthesis on water conservation and management. Since water is crucial to the natural environments, economies and livelihoods of IFAD-supported rural communities and target groups, ensuring access to water for all will be one of the main challenges to be met in the years ahead.
2. This evaluation synthesis covers the period that has elapsed since the last “water screening” was carried out by IOE in 2002. Its objective was to assess: (i) how IFAD has responded to the emerging issues of rural water security and governance; (ii) whether IFAD’s investments in water have met their intended objectives and are sustainable; and (iii) whether it is possible to further enhance the effectiveness and sustainability of IFAD’s investments in this sector. In this regard, the synthesis reviews not only the technical, environmental and financial aspects of investments made by IFAD, but also the social and institutional aspects. It also reviews IFAD’s policy work at the national, regional and global levels on water-related matters. The synthesis is intended to serve as an opportunity for learning and knowledge sharing rather than as an instrument of accountability.
3. IFAD considers water as a key entry point for improving the livelihoods and quality of life of the rural poor. It therefore adopts a holistic view that includes water for agriculture, domestic use and sanitation, industry and agroprocessing, and the environment. However, IFAD’s primary investments are in the area of agricultural water management. IFAD finances local water supplies and sanitation only where needed and where alternative financial sources are not available. IFAD is increasingly adopting a “multiple-use service” approach to water that looks at context specificity and prioritizes multisectoral infrastructure systems.
4. Water plays an important role (directly and indirectly) in IFAD’s current and previous (2007-2010) strategic frameworks and in the Eighth and Ninth Replenishments of IFAD's Resources.<sup>1</sup> While IFAD does not have a policy on water, four of its other policies make significant references to water. IFAD is intensively engaged in policy dialogue on water issues at the international, regional and national levels as it seeks to shape policies on food security and water resources management. The widespread adoption of participatory irrigation management practices and the establishment of water users’ associations (WUA) testify to IFAD’s singular success in policy shaping and institutional development related to the water sector in the countries it works in.
5. Results-based country strategic opportunities programmes (RB-COSOPs) are at the core of IFAD’s business model. All the RB-COSOPs highlight the fact that in many developing countries, water is key to economic growth and overall development. The COSOPs prior to 2006 present a mixed picture: while they sought to address water issues wherever required, water was not dealt with in a systematic and strategic manner. However, post-2006, water has been prominently profiled and its different delivery instruments (objectives, targeting strategy, policy approach and investment programming) are far better aligned to achieve the water outcomes identified in the strategic objectives.
6. It should be noted that there is no single “water project” in IFAD’s portfolio. Water is but one component, embedded in each of the 166 active water projects that have varying financial allocations depending on the nature of the project. A variety

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<sup>1</sup> Under the Ninth Replenishment, IFAD plans to allocate 22 per cent of loans and grants to finance projects that include land and water interventions.

of institutional arrangements have evolved to facilitate co-ownership of joint or complementary programmes by various stakeholders. A wide spectrum of interventions has been undertaken, covering, for example, flood control, watershed development and micro-irrigation schemes. To implement and manage these interventions, different institutional structures and arrangements have evolved, such as the establishment of representative institutions, technical assistance and extension support, capacity-building and training of stakeholders, and engagement at the country policy level.

7. All water-related projects include other components, such as institutional development and capacity-building, non-farm sector promotion and market development, which also determine the performance and sustainability of the water component. Water is an embedded component, even in irrigation-related projects, and therefore it is not possible to assess the performance of the water component separately. With this caveat in mind, using the IOE criteria, evaluation data reveal that performance of water-related projects is comparable to that of overall projects in terms of relevance, effectiveness and efficiency: high relevance, reasonable effectiveness, but only moderate efficiency. Irrigation projects, however, noticeably underperform in terms of overall project achievement, which underscores the interdependencies among other components of a given project. From the perspective of water, the IOE data reveal that significant progress has been made in the three crucial areas impacting water, previously considered problem areas: (i) natural resources and the environment, (ii) gender and women's empowerment, and (iii) institutions and policies.
8. Given the importance of ecosystems, watersheds and natural resources management (NRM) to water availability and quality as well as to agriculture, especially in dry land regions, IFAD will need to ensure that its engagement in the NRM sector continues to be a focus and a priority area, especially in water-scarce and water-stressed countries. However, IFAD would need to be mindful of possible adverse environmental and social impacts, given the enormity and complexity of environmental dynamics. IFAD is well aware of the adverse consequences of climate change on water supplies and projects are now including adaptive and ameliorative measures.
9. Women are effective managers of water at the farm and household levels, yet they are underrepresented in related governance institutions such as WUAs and often excluded from decision-making processes. Ways will have to be found to involve women more effectively in such bodies, because evidence indicates that women's active participation improves the performance and sustainability of WUAs. IFAD will have to champion the need to ensure secure land tenure rights for women because without this, access to water is not ensured. Throughout the world very few women own land in their own name, a fact that effectively disempowers them.
10. For many years IFAD has strongly and consistently promoted WUAs as an instrument of representative and participatory governance and can be justifiably proud of this successful and widely adopted institutional innovation. WUAs have served as training forums for building skills and capacities and the confidence needed for effective governance and management of group enterprises. However, IFAD's experience in this regard is mixed and it is necessary to take stock of lessons learned with a view to increasing the effectiveness and sustainability of these institutions.
11. With regard to sustainability, while there has been overall improvement, more needs to be done. IFAD is trying out various new approaches by partnering with a global community of practice that encourages multiple water-use systems and by piloting "payment for environmental services" projects. While innovation and scaling up have shown a downward trend recently in projects rated moderately satisfactory or better, performance is nevertheless improving, with the water

investments of several projects either being scaled up or showing promise of being replicated.

12. IFAD has learned that for a WUA to function effectively and sustainably, several key factors must come together, such as a reliable and adequate supply of water and energy that is fairly distributed; adequate social capital and good leadership; technically sound design with easily manageable technologies deployed; long-term security of land tenure and water rights; viable returns on agriculture; women actively participating in decision-making; value addition and efficient farm-to-market value chains; an enabling legal framework; and availability of sound technical and managerial skills.
13. Overall, the water sector is playing an increasingly effective role in reducing rural poverty. Synergistic relationships between complementary sectors are becoming more efficient and the institutional and regulatory conditions that promote sustainability and scaling up are improving.
14. Generally, in terms of overall goals and objectives, the water policies of multilateral development banks (MDBs) are largely consistent. All the MDBs except IFAD have a specific water policy. IFAD's target group is primarily the poor; in the other MDB projects, they may also be included. Differences exist among the MDBs in terms of what is financed, and which priorities and approaches are adopted. While MDB interventions in the water sector are multisectoral, including, for example, building large dams, and urban and industrial applications, IFAD restricts itself exclusively to rural areas with a focus on smallholder irrigation, rainfed farming systems and water for livelihoods purposes. Unlike the MDBs, IFAD does not engage in transboundary water issues. The World Bank is the only MDB that formulates country water resources assistance strategies.
15. The following key learnings arising from a recent World Bank evaluation of its engagement in the water sector are of relevance to IFAD: (i) effective management of water demand is becoming the critical challenge in managing water resources in the face of increasing water scarcity; (ii) demand management will require a great deal of robust data on water resources in order to better understand the linkages between water, economic development and project achievement, and this data should be treated as a public good and made freely available; (iii) watershed management projects that take a livelihood-focused approach perform better than those that do not; (iv) greater attention must be paid to water quality as the situation is becoming alarming in most developing countries; (v) tackling water crises will require active collaboration with many partners and stakeholders; and (vi) stakeholder participation in the entire project cycle is essential when designing hydrological and meteorological monitoring systems.
16. The scenario emerging on the water front presents IFAD with a set of issues, challenges and opportunities. For example: (i) water will be both a constraint for development and an opportunity for enterprise and innovation (technical, organizational and commercial), which can result in poverty reduction; (ii) water productivity will be a game changer – enhancing it and managing water demand will be critical to IFAD's development effectiveness; (iii) rainfed farming, undertaken by the bulk of poor smallholder farmers, now holds the key to increasing food production and agricultural productivity; and this is where IFAD has a comparative advantage and where, in partnerships, IFAD can take the lead in developing a strategy and pedagogy that can bring about a "brown revolution" in rainfed agriculture akin to the "green revolution" of irrigated agriculture; (iv) a holistic and systems approach to understanding and assessing how water is perceived, the role it plays in a community and the likely impact of water interventions must be adopted when designing projects; (v) IFAD must continue to strengthen its engagement with NRM and ecosystems management, undertake

climate-related risk analysis and include adaptive and ameliorative measures in project design; (vi) IFAD has taken the lead and should continue to champion secure land rights for the poor, especially women, in order to ensure reliable access to water; (vii) with water becoming an increasingly contested commodity, IFAD can play a role in helping create local water markets that are sustainable and result in “win-win” outcomes both for poor local communities and for bulk users; (viii) IFAD should build its capacities primarily by drawing upon local experienced experts, those with traditional knowledge and those who have local credibility; and (ix) the Water Unit of IFAD’s Policy and Technical Advisory Division should expand its role in knowledge management, capacity-building and advocacy.

17. Overall, IFAD’s engagement with the water sector has improved as a result of better performance by synergistic sectors and greater alignment of the different instruments that IFAD deploys to further strategic objectives. With IFAD’s comparative advantage in smallholder agriculture, and the need to increase food production and generate rural livelihoods in a context of increasing water scarcity and climate variability, IFAD’s engagement in the water sector can only be expected to deepen in the years ahead.

# Water Conservation and Management Evaluation Synthesis

## I. Introduction

1. Water is being increasingly seen as a key constraint to poverty reduction, food security and equitable growth. A study by International Water Management Institute (IWMI)<sup>1</sup> estimates that around 1.2 billion people live in areas with physical scarcity of water<sup>2</sup> while another 500 million people are approaching this situation. It also estimates that another 1.6 billion people live in areas facing economic water shortage.<sup>3</sup> Over 1.4 billion people currently live in river basins where the use of water exceeds minimum recharge levels – leading to the shrinking of rivers and a reduction of groundwater resources.<sup>4</sup>
2. The water availability across various regions of the world varies widely with some of the impoverished parts also being most water deficient. South Asia is home to some 1/4<sup>th</sup> of the world's population but contains only 4.5 per cent of its fresh water resources.<sup>5</sup> Even in this region water availability differs from a high of 39,000 cubic meters/capita/year in Bhutan to a low of 688 cubic meters/capita/year in Bangladesh.<sup>6</sup> Africa as a continent is relatively abundant in water<sup>7</sup> with an average availability of 4,521 cubic meters/capita/year.<sup>8</sup> Even here the differences among the countries are glaring with the Sahel & Northern parts of the continent being the most water deprived while Central African countries like Rwanda and Central African Republic (CAR) being water abundant. Latin America is one of the water rich regions of the world with around 31 per cent of the world's freshwater resources.
3. Water and shortages have a profound effect on the social and economic well-being of populations mostly in the developing parts of the worlds. It is estimated that 780 million people around the globe lack access to an improved source of water and 2.5 billion lack access to improved sanitation. About 2 million people die annually due to diarrhoeal diseases, most of them being children below 5 years of age.<sup>9</sup> The lack of water also has tremendous economic consequences, especially for the overwhelming majority of the rural population in developing which depends on agriculture. On an average, 70 per cent of the world's freshwater resources are used for agriculture<sup>10</sup> with some 15 to 35 per cent of agricultural water use considered unsustainable. Many poor rural people face severe constraints on accessing good quality and quantities of potable water for domestic and agricultural use.<sup>11</sup>
4. Food production, which will have to be significantly ramped up to meet the needs of a growing population expected to peak at 9 billion by 2050, will need copious additional water resources , which in most places, are dwindling and deteriorating in quality. The way forward, therefore, will be not so much to increase water impoundment, of which there is but modest scope, but to improve the efficiency of

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<sup>1</sup> Comprehensive Assessment of Water Management in Agriculture (2007).

<sup>2</sup> As defined by IWMI, "More than 75 per cent of the river flows are withdrawn for agriculture, industry or domestic use".

<sup>3</sup> As defined by IWMI, "a situation where countries lack infrastructure to bring water from rivers and aquifers to the population in need of it".

<sup>4</sup> UNDP, *Human Development Report 2006: Beyond scarcity – power, poverty and the global water crisis* (New York: United Nations Development Programme, 2006; quoted in IFAD's Environment and Natural Resources Management Policy 2011, p. 14.

<sup>5</sup> UNEP: *Freshwater under threat – South Asia* (2008).

<sup>6</sup> Ibid.

<sup>7</sup> Internally renewable water resource.

<sup>8</sup> Aquastat (2004): <http://www.fao.org/nr/water/aquastat/regions/africa/index.stm>

<sup>9</sup> World Health Organisation (WHO) : [http://who.int/water\\_sanitation\\_health/hygiene/en/](http://who.int/water_sanitation_health/hygiene/en/)

<sup>10</sup> Aquastat: [http://www.fao.org/nr/water/aquastat/water\\_use/index.stm](http://www.fao.org/nr/water/aquastat/water_use/index.stm)

<sup>11</sup> IFAD's Environment and Natural Resources Management Policy 2011, no. (b), p. 14.

water use and to manage demand to levels that can be sustainably replenished. With IFAD's mandate being the reduction of poverty, improving food security and incomes of the poor living in rural agrarian economies, water acquires strategic significance in fulfilling these objectives. The magnitude of the challenge can be gauged from the fact that about a billion of the world's 1.4 billion extremely poor people live in rural areas and depend on agriculture and related activities for their livelihoods.<sup>12</sup> An additional complexity is climate change which will profoundly impact the water cycle as well as water resources, thus further increasing the vulnerability of ecosystems, natural resources and poor communities depending on these, especially those living in fragile regions of the world. Ensuring access to water for all will be one of the main challenges that the world will be confronted with in the following years.

## II. Objectives, scope, methodology, limitations and structure

5. **Objectives.** As stated in the Concept Note prepared by the Independent Office of Evaluation (IOE) at the outset of the process, the objective of this synthesis report is to assess: (i) how IFAD has responded to the emerging issues of rural water security and governance; (ii) whether IFAD's investments on water have met their intended objectives and are sustainable; and (iii) whether it is possible to further enhance the effectiveness and sustainability of IFAD's investments in this sector. In this regard, the synthesis report attempts to review the investments made by IFAD not only in terms of technical, environmental and financial aspects but also in terms of social and institutional aspects. Finally, it will review IFAD's policy work at national, regional and global level on water-related.
6. **Scope.** The synthesis report covers the period since the last "water screening" carried out by IOE in 2002. It includes a review of how water interventions are reflected in Country Programme Evaluations (CPEs) carried out since 2002; selected Project Evaluations where significant investments on water have been made;<sup>13</sup> selected relevant quality enhancement/quality assurance reviews and portfolio review reports; Programme Management Department (PMD)/Policy and Technical Advisory Division (PTA) studies of IFAD's work on water, including those funded through grants; RB-COSOPs; IFAD's policies and governing documents and relevant studies from other institutions, including other International Financial Institutions (IFIs), Consultative Group on International Agricultural Research (CGIAR) centers, UN WATER, private sector and other research partners. The list of material consulted is indicated in annex 1.
7. **Methodology.** The preparation of the synthesis report is based on a triangulation between the findings generated by the desk review of the documents mentioned in Annex 1, and by telephonic interviews with staff from IFAD including IFAD senior and middle management and country programme managers (CPMs)/country programme officers (CPOs) responsible for major investments on water. No field visits were entailed and the synthesis report did not review every single investment. Throughout the Report, an effort is made to support evaluative evidence with concrete examples, described in boxes and/or footnotes.
8. The report benefited from the full cooperation extended by the Water desk of PTA throughout its preparation. The draft report was peer reviewed within IOE and it was submitted for further discussion and validation at an in-house learning workshop.

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<sup>12</sup> IFAD's Environment and Natural Resources Management Policy 2011, p. 13.

<sup>13</sup> It should be noted that neither PPMS nor LGS allow for the identification of these projects. IFAD-supported investments on water are "hidden" among project sub-components.

9. **Limitations.** The limitation of this study is that there is no single IFAD project focused exclusively on water, even in projects categorized as "irrigation". Water is embedded in a large number of IFAD projects and pertains to both water for productive uses – agriculture and livelihoods – and for domestic and social purposes (health, hygiene and sanitation). All IFAD projects include other components such as market development, non-farm enterprise promotion, capacity building for livelihoods and institutional strengthening, depending upon the purpose of the project. As such except in the case of projects categorized as "irrigation" or where water has a significant footprint, project evaluations/ project performance assessments and CPEs do not focus on water interventions; evaluative observations in these cases are more of a qualitative and anecdotal nature.
10. Moreover, there has not been a single evaluation undertaken specifically on water. Even more surprisingly, IFAD does not have a policy on water; whereas it has 18 other policies, including one on the private sector, even though water pre-dates this sector by at least 4 decades.
11. The sample set of projects classified as "irrigation" in the ARRI data base of completed projects rated by IOE are only nine out of 170; if one adds the 55 projects classified as "agriculture" where water does play a significant role, the total number of "water significant" projects goes up to 64 (or 38 per cent of the ARRI database). Given this restricted "water data set", the findings and observations in this synthesis report aim to primarily serve as an occasion for learning, reflection and knowledge sharing rather than as evaluative or accountability-oriented pronouncements.
12. **Structure.** Following the above, the synthesis report consists of 7 major sections. Section III, "IFAD and Water: The Strategic Level", attempts to study how IFAD has sought to respond to the emerging issues of rural water security and governance at the strategic level which includes policy work related to water at the national, regional and global levels. Section IV, "IFAD on the Ground: Water for People and Livelihoods", examines how water has been reflected in IFAD's strategic documents and how IFAD's engagement with water has changed over the years. It explores whether IFAD's investments on water have met their intended objectives and also looks at project performance using some of the criteria used by IOE to assess projects. Section V, "Water and the Multilateral Development Banks (MDBs)", examines how other IFIs approach water in their strategic documents and undertakes a comparative overview. Section VI offers an overview and draws a set of conclusions. The last section, Section VII, outlines emerging issues, Challenges and opportunities arising for IFAD in the water related sectors and offers suggestions for consideration oriented towards enhancing the effectiveness and sustainability of IFAD's investments in the water sector.

### **III. IFAD and water: the strategic and policy level**

#### **A. Water in IFAD's strategic positioning**

13. Water has always played an important role in IFAD's developmental initiatives. IFAD sees water as the key entry point for improving the livelihoods and quality of life of the rural poor which involves many facets and uses. It therefore adopts a holistic view looking at the multiple role water plays in the lives of communities rather than seeing water solely as an input factor in the production chain. Water resource management covers the full range of all aspects of the rural water sector, including institutional aspects. IFAD focuses on in-country sub-basinal or smaller watersheds going down to the field level and to a very limited extent, ground water aquifers; on the institutional side, IFAD engages with national and lower-level administrative units, through federated or associative group forms, down to the communal and household levels. IFAD's involvement is thus multi-faceted – it includes water for agriculture; water for domestic use and sanitation; water for industry and agro-processing; and water for the environment. It adopts a

"multiple-use service" approach, looks at land and water governance, gender and the challenges arising from the "new rurality".

14. Agriculture,<sup>14</sup> which is the backbone of rural economies in developing countries and provides livelihood and sustenance to the bulk of rural inhabitants, especially the poor, is a core thematic area of IFAD's interventions. Agriculture crucially depends upon water-access and efficiency of use - as well as natural resources to deliver sustained and growing outputs. And vast areas of these countries can be categorized as "water scarce" or "water stressed" regions making the task of reducing poverty even more challenging.
15. The economic vulnerability of the people living in these areas has increased in recent years due to stagnant or declining growth rates in the agricultural sector, degradation of natural resources, increasing demand for meat based foods (these have a relatively huge water footprint), high and volatile food prices, growing demand for bio-fuels, increasing commercial investments in agriculture and the impacts of climate change, all of which have severely impacted the farm sector, especially small holder farmers, and those whose livelihoods are nature-based. In fact, even though the incidence of global poverty declined from 61 per cent to 51 per cent in developing countries in the decade, 1998-2008, rural poverty still remains stubbornly at 61 per cent of the rural people in the developing world.<sup>15</sup>

Box 1

**Water provisioning depends upon the robustness of natural resources and ecosystems**

In Asia and Africa, growing depletion and degradation of water resources, increased water stress, soil salinisation and soil degradation due to wind and water erosion is today affecting an estimated 15.3 million hectares of cropland thus threatening the livelihoods of millions of poor people in both rural and urban areas.<sup>a</sup> The impacts of climate change, experienced as "reduced water availability, increased temperatures, uncertain or shorter growing seasons, less arable land and new pest and disease patterns"<sup>b</sup> will, it is anticipated, adversely affect most developing countries and result in declining crop and livestock production, biodiversity and food security. The intimate relationship between the health of ecosystems, hydrologic flows, water availability and agriculture is now being increasingly recognized with growing demands being made to move from the "green revolution" an "evergreen revolution" of agricultural development<sup>c</sup> with greater attention being paid to the "water footprint" of crops and efficiency of water use.

Source: See footnotes 16, 17 and 18.

<sup>a</sup> United Nations Economic and Social Commission for Western Asia (ESCWA) 2007. Land Degradation Assessment and Prevention. Selected case studies from the ESCWA region. New York. (Quoted in IFAD, Strategic Framework, 2011-2015, p. 14).

<sup>b</sup> IFAD, Strategic Framework, 2011-2015, p. 14.

<sup>c</sup> Ibid., p. 4. "Evergreen agriculture is also referred to as "sustainable " or "sustainable agricultural intensification".

16. IFAD's primary investments are in the area of agricultural water management (AWM) which runs the range from rainfed to fully irrigated farming systems and the varied combinations between them including diverse traditional or modern technologies for raising crops, aquaculture and livestock production.<sup>16</sup> While IFAD's interventions are usually public domain infrastructure development that mainly target communal or users groups of the poor, nevertheless, depending upon circumstances, a variety of tailor made arrangements and subsidies exist that allow for private domain asset-building asset building by targeted smaller groups or

<sup>14</sup> Agriculture is understood to include crop farming, livestock production, artisanal fishing and aquaculture, and forestry (IFAD, Strategic Framework, 2011-2015, p. 5).

<sup>15</sup> IFAD's Rural Poverty Report, 2011 – quoted from # 2, p. 1 of "IFAD's Medium Term Plan, 2011-2-13: <http://www.ifad.org/gbdocs/eb/102/e/EB-2011-102-R-32.pdf>).

<sup>16</sup> Investments include soil and water conservation, swamp rehabilitation, watershed management, rainwater harvesting, smallholder irrigation activities, water for livestock, and inland fisheries and aquaculture.

individual households. IFAD's infrastructure investments are always accompanied by institutional development aimed at improving rural people's human and institutional capacities to obtain, allocate, use and manage water sustainably and productively. Given the close links between land and water and the prevalence of weak national land and water governance systems in countries where IFAD invests most, IFAD also invests in building jointly building the capacity of state institutions and local institutions while encouraging the blending of modern and traditional knowledge and practices. Unlike most institutional investors, IFAD's approach to cost recovery is flexible, preferring to until performance reliability and sustainability of the systems is established.

17. IFAD also invests in water, sanitation and hygiene (WASH) depending upon the needs articulated by poor rural communities. This is because not only does it improve the quality of life of households, but such systems often create social capital (trust, organizational structures and shared interests) on which productive investments can build upon. It is observed that such mutually reinforcing investment combinations results in increased overall economic impacts and also contributes to "shock-proofing" beneficiaries' livelihoods. WASH investments<sup>17</sup> mainly focus on provisioning for communities (and where possible, households) and also include training of local beneficiaries in operation and maintenance and the formation of water user associations.
18. With growing awareness of the need to focus on markets and therefore the value chain to ensure better and more stable returns to agricultural livelihoods, specific water investments for agro processing are now being increasingly included in IFAD projects. This is accompanied with growing insistence on safeguards for environmental protection and safe effluent management and disposal being put in place.<sup>18</sup> IFAD recognizes the value of water as environmental flows which yield multiple benefits to ecosystems and communities, both upland and downstream. With globalization dislocating many rural livelihoods, IFAD is experimenting with "payment for environmental services" approaches where watershed dwellers get paid for protecting their watershed by downstream users (industries, municipalities, etc.) and other users.
19. IFAD has been increasingly recognizing the large heterogeneity of situations faced by rural people and therefore the need to adopt a comprehensive Multi-Use Service approach that looks at "context specificity" and prioritizes multi-sectoral infrastructure systems. These, supported by interventions in institutions and capacity building would offer the best return in poverty reduction as they would address people's needs better than sectoral water development programmes. IFAD sees access to land and water governance as crucial to sustainable land use and increased agricultural production and, as such, to reducing poverty and food insecurity. Similarly, in view of the primary role women play in managing water for livelihoods and domestic use, IFAD has been consistently championing for greater inclusion of women in water governance institutions and in prioritizing water investments that meet multiple uses as articulated by women.
20. With increased globalization resulting in new patterns of livelihoods emerging in rural areas; institutional; economic reforms that are changing governance institutions and relations; vast amounts of external capital purchasing/ leasing vast tracts of land for natural resources extraction or growing of commodities for export; and accelerating urbanization – the "new rurality"<sup>19</sup> – water is becoming an increasingly contested sector between rural dwellers and landscape users. This

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<sup>17</sup> This includes rehabilitation of old systems and/or construction of new water infrastructure (e.g. boreholes, shallow wells, water harvesting and ponds, pipes and tanks).

<sup>18</sup> For example, the washing of produce prior to packaging, treatment of dairy products, tanneries, and coffee bean processing.

<sup>19</sup> Theo Rauch, INNOWAT (2008).

situation is being further exacerbated by climate variability and increasing water scarcity especially in water deficit or stressed regions. In this situation, IFAD sees itself on the side of the poor advocating for pro-poor water management, empowering them through group formation and building their capacities to effectively articulate and safeguard their right to access and sustainable use of water-related resources.

#### Key points

- IFAD's adopts a multi-faceted approach that includes water for agriculture, domestic use and sanitation, industry and agro-processing and the environment.
- IFAD's primary investments are in the area of agricultural water management. IFAD finances local water supplies and sanitation only where needed and where alternative financial sources are not available.
- IFAD is increasingly adopting a "multiple-use service" approach to water that looks at context specificity and prioritizes multi-sectoral infrastructure systems.
- IFAD's infrastructure investments are always accompanied by institutional development and capacity building measures.

## B. IFAD's strategic framework

21. Recognising this context and the complex issues underlying these challenges, IFAD's 4<sup>th</sup> Strategic Framework, 2011-2015 sees IFAD's role as a partner to its member states, helping them achieve the Millennium Development Goal (MDG) 1 of "eradicating extreme poverty and hunger" by enabling "poor rural people improve their food security and nutrition, raise their incomes and strengthen their resilience".<sup>20</sup> It is interesting to note how important a role water plays (directly and indirectly) in the Strategic Framework. Access to and availability of water underpins: (i) two<sup>21</sup> of the five strategic objectives (SOs) while the rest are also indirectly affected by the performance of these two strategic objectives; (ii) three of 8 thematic areas of engagement<sup>22</sup> (and water is specifically mentioned in the "Natural Resources" thematic; (iii) three<sup>23</sup> of six programme and project level interventions and (iv) two<sup>24</sup> of the four expected Outcomes. In the thematic, "Natural Resources", IFAD specifically pledged to "promote secure and equitable access to land and water for poor rural women and men" and help them "to manage these resources more efficiently and sustainably, to make rural livelihoods more resilient to environmental changes, address resource degradation and adapt to growing resource scarcities".<sup>25</sup>
22. IFAD's 3<sup>rd</sup> Strategic Framework (2007-2010) also recognized the role water plays in poverty reduction and stated that secure access to land, water and improved natural resource management and conservation is necessary in order to empower people and enable them to secure the skills, capacities and organisation to further their development. It recognized that climate change will affect the poor, particularly, and human-made environmental degradation combined with climate

<sup>20</sup> IFAD, Strategic Framework, 2011-2015, p. 7.

<sup>21</sup> Strategic objective (SO)1: "A natural resource and economic asset base for poor rural women and men that is more resilient to climate change, environmental degradation and market transformation"; SO2: "Access for poor rural women and men to services to reduce poverty, improve nutrition, raise incomes and build resilience in a changing environment; (IFAD, Strategic Framework, 2011-2015, p. 28).

<sup>22</sup> IFAD, Strategic Framework, 2011-2015, p. 8.

<sup>23</sup> (i) Enhancing environmental sustainability and resilience in small-scale agriculture; (ii) Promoting win-win contractual arrangements to help small agricultural producers seize opportunities at lower risk in agricultural value chains; (iii) Supporting the development of technologies for sustainable intensification of small-scale agriculture; (IFAD, Strategic Framework, 2011-2015, p. 7).

<sup>24</sup> (i) Increased incomes and enhanced food security and nutrition for rural people served by IFAD-supported projects in a given locality or region; (ii) Strengthened in-country institutional capacities for pro-poor agricultural and rural development. (IFAD, Strategic Framework, 2011-2015, p. 35).

<sup>25</sup> IFAD, Strategic Framework, 2011-2015, p. 32.

change will increase vulnerability, especially for the poorest rural households.<sup>26</sup> Of six Strategic Objectives defined, one deals specifically with water and four of the others are indirectly connected; of two major outcomes, water is directly involved in the first and indirectly in three of five sub-outcomes of the second.<sup>27</sup> IFAD also declared that it would finance social service delivery – local water supplies- only in response to the defined needs of local communities, where the facilities are limited in scope and critical for the achievement of project objectives, and where other financing sources are not available. IFAD would restrict itself specifically to productive uses of water in rural areas.<sup>28</sup>

23. This commitment of IFAD has been reiterated and taken forward by the deliberations and commitments of the IFAD 9<sup>th</sup> Replenishment (IFAD9) which aim at lifting 80 million poor people out of poverty within the next 3 years with a fund commitment of US\$4.6 billion. It is now recognized that failure to meet the MDG 1 targets, including those of food security and nutrition, result from structural and market failures, amongst which are inequality and access to control of land and water and underinvestment in small holder agriculture. IFAD9 has emphasized the need to address environmental issues and climate change issues (ground water depletion, salinisation of irrigation, loss of biodiversity, soil health, deforestation, etc.) all of which directly impact agricultural productivity and water availability. IFAD has also planned to allocate 22 per cent of loans and DSF grants to finance projects that come under the thematic, “Natural Resources” which includes, majorly, land and water.<sup>29</sup> IFAD also tracks performance in regard to water under the Results Management Framework, Level 3 indicators as, “Area under constructed/ rehabilitated irrigation schemes (ha)”.<sup>30</sup>
24. Similarly, the 8<sup>th</sup> Replenishment documents also recognized that water was becoming increasingly scarce because of unsustainable rates of groundwater extraction and heightened competition from other users and observed that, “globally, the amount of water available for agriculture may have already peaked”. It also emphasized the need for natural resources protection not only from the perspective of environmental services provisioning but also in order to enable communities, especially the poor to adapt to climate change. It recognized that climate change would affect water availability due to increased variability in precipitation and rainfall and increased temperatures thus leading to more frequent and intense droughts, floods, and reduced availability of water for irrigation; this would in turn affect the predictability of food production in all countries. During the 8<sup>th</sup> Replenishment deliberations, IFAD pledged to raise 60 million people out of poverty and secured replenishment commitments of US\$1.2 billion. IFAD also tracked performance in regard to water under the Results Management.

### C. IFAD’s policies

25. Of IFAD’s 20 policy documents, 4 make significant references to water.
26. The **Policy on Improving Access to Land and Tenure Security** (2008) recognizes that interventions especially in regard to agricultural intensification such as irrigation, water resources development and watershed often result in appreciation of land values which increases the risk of powerful groups securing these assets, in the process displacing the poor and denying them access to these resources, for example, pastoralists being denied traditionally free access to water sources. Keeping this in mind, IFAD emphasises the “do-no-harm” principle<sup>31</sup> in its

<sup>26</sup> IFAD, Strategic Framework, 2007-2010, no. 4, p. 1 and no. 9, p. 2.

<sup>27</sup> Ibid., no. 6, p. v and no. 9, p. vi.

<sup>28</sup> Ibid., no. 9, p. vi.

<sup>29</sup> Andy Bullock, “Water Within IFAD’s Operating Model-baseline, analysis and recommendations, March 2012: Accompanying Notes, p. 34.

<sup>30</sup> Draft Report of the Consultation on the Ninth Replenishment of IFAD’s Resources, 2011.

<sup>31</sup> IFAD, “Improving Access to Land and Tenure Security, 2008, p. 15.

interventions and requires that governance and tenure arrangements concerning project developed or rehabilitated nature-based assets should not exacerbate conflicts nor adversely affect the tenure or access rights of the poor, but preferably, strengthen them.

Box 2

**Secure land tenure and effective governance mechanisms lead to overall development**

In the Maghama District of Mauritania, an IFAD supported project facilitated the signing of a government certified land pact between landowners and land users that provided landless families with long-term use rights to newly developed flood recession land. The agreement also established mechanisms to negotiate shared resource use to prevent and contain conflict. The success of this initiative led non-project villages to sign up and a second IFAD-supported Maghama flood recession works project brought in an additional 9,500 ha of flood farmlands under similar arrangements.\*

Source: IFAD, Improving Access to Land and Tenure Security, 2008, p. 10 and 15.

\* Ibid. p. 10.

27. The **Climate Change Strategy Policy** (2010) recognizes that climate change – changing weather patterns – affect rainfall, the hydrology cycle, glaciers, ecosystems and biodiversity, all of which sustain agriculture. Climate change will contribute overall to reduced water resources and an estimated decline in yield from rainfed agriculture by as much as 50 per cent in some countries.<sup>32</sup> Changes and reduced rainfall has already led to severe degradation of the Alfa grass ecosystem of the high plateau rangelands in eastern Morocco thus reducing carrying capacity in the face of growing pressures. Rising sea levels and glacier melt will further affect land, people and economies of coastal and riparian regions.<sup>33</sup>

Box 3

**Key changes in Mongolia arising from a changing climate**

The impacts of climate change on weather and rainfall patterns are already evident in Mongolia where due to an average temperature rise of 1.8 C over the last 60 years, glacial melt has increased and permafrost has started degrading. The ground water table is declining in arid regions and due to erratic and reducing precipitation water shortages are being experienced and land degradation and desertification increasing.

Source: IFAD, Climate Change Strategy, 2010, p. 11.

28. IFAD sees efficient irrigation systems, improved water management and harvesting, sustainable use of ground water and adoption of new technologies<sup>34</sup> as effective adaptation measures that will help build smallholder resilience, particularly in drylands.<sup>35</sup> IFAD is also increasingly looking to partner with the private sector in securing and increasing access to adequate quantity and quality of water, particularly for agricultural and livelihood purposes especially so since the adoption in 2012 of the Private Sector Development and Partnership Strategy.

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<sup>32</sup> Cline, W. R., Global warming and agriculture. Impact estimates by country (Washington D.C.: Centre for Global Development and the Peterson Institute for International Economics, 2007 as quoted in IFAD, Climate Change Strategy, 2010, p.10.

<sup>33</sup> IFAD, Climate Change Strategy, 2010, p.10.

<sup>34</sup> Such as special irrigation piping that enables waste water and salt water to be used for irrigation purposes

<sup>35</sup> IFAD, Climate Change Strategy, 2010, p.15.

#### Box 4

#### **Increasing water use efficiency is key to climate change adaptation**

Using a grant from a European consortium called Coopernic, IFAD was able to introduce micro-irrigation to 30,000 households in Guatemala, India and Madagascar. This not only helped address the issues of climate change, water scarcity and food security, but equally importantly, the beneficiary small farmers were linked to local service providers (for equipment and after-sale services) and to local output markets for vegetable sales. This in turn catalysed additional investments and benefits for smallholders and local private sector actors along the value chain.

Source: IFAD, Private Sector Strategy: Deepening IFAD's Engagement with the Private Sector, 2012, p. 19.

29. The Environment and Natural Resources Management policy (2011) recognizes that the poor "face a series of interconnected natural resources management challenges"<sup>36</sup> resulting from declining ecosystems, biodiversity and changes in the water cycle. Water and its proper use is being increasingly perceived by the poor as a limiting constraint to increasing agricultural productivity.<sup>37</sup>
30. The Gender Equality and Women's Empowerment policy (2012) recognizes that women will be the worst affected by climate change as they are primary providers of food, fodder, fuel and water for household and farm needs.<sup>38</sup> Moreover, despite being significant stakeholders in agriculture, food security, natural resource management and water provisioning, women have much less access than men to the assets and services that would enable them to increase their productivity in these areas. This lack of secure access and tenure to resources and property as well as the income and benefits that flow from their endeavours, de-motivates them from investing in assets with long term benefits such as soil and water conservation measures and water resources development. Moreover, despite the huge public and gender equity benefits that result from investments in sanitation and drinking water, these often are low down on the priority lists of national budgets and developmental assistance.<sup>39</sup> Lack of basic infrastructure and services such as water supply and sanitation negatively impact especially women and girls.

#### **D. IFAD's global, regional and national engagement in water issues**

31. Besides the country level, IFAD, by virtue of being a multilateral institution that has committed to achieving the MDGs, notably MDG 1 in which water plays an important role, has been an active participant at international and regional events involving water. Both the new Strategic Framework,<sup>40</sup> the MTP (mid-term plan) and The Report of the Consultation on the Ninth Replenishment of IFAD's Resources (February 2012) which explicitly links effective policy dialogue to IFAD's core objective of scaling up,<sup>41</sup> emphasize IFAD's role in policy dialogue at global, regional and national levels because responding to food and water security challenges requires a supportive policy environment at global, regional and national levels, as well as decisions on investment levels and priorities. IFAD also carries out policy

<sup>36</sup> IFAD, Environment and Natural Resources Policy, 2011, p. 7.

<sup>37</sup> IFAD, Rural Poverty Report 2011, "Summary of the voices of poor rural people", Rome: [www.ifad.org/rpr2011/index.htm](http://www.ifad.org/rpr2011/index.htm).

<sup>38</sup> IFAD, Climate Change Strategy, 2010, p. 11.

<sup>39</sup> United Nations Inter-Agency Network on Women and Gender Equality (2012). Rural Women and the Millennium Development Goals, Fact Sheet. New York, February 2012, quoted in IFAD, Gender and Women's Empowerment Policy, 2012, p.13.

<sup>40</sup> The IFAD Strategic Framework 2011-2015, states that "improved policy and regulatory frameworks at the local, national and international levels" and "strengthened in-country institutional capacities for pro-poor agricultural and rural development" are among the key outcomes it expects to achieve through "policy dialogue and advocacy initiatives involving governments, rural producers' organizations, other donors, or other partners" (p. 35).

<sup>41</sup> IFAD, ARRI 2012, p. 33.

dialogue within its mandate at country, regional and international forums, and through national, regional and global grants.<sup>42</sup>

32. Specific to water, in recent years, IFAD has given 34 regional/country specific grants, largely for technical support, ranging from US\$0.05–1.8 million for projects extending from 2-4 years.<sup>43</sup> A wide range of institutions like UN agencies, academic institutions, Consultative Group on International Agricultural Research (CGIAR) centers have benefitted from IFAD's grant funds. The absence of evaluations for grants constrains this synthesis report from carrying a comprehensive analysis of grants in water. A review of available documentation reveals that these grants have been given for a wide range of activities covering both hard and soft elements of water like improving regional level water policy and governance (Programme for enhancing Mekong Region water governance), construction of infrastructure for water management (Drought recovery and smallholder programme in Somalia & Djibouti), piloting of innovative activities (Disseminating CPWF innovations and adoption processes for water and food and piloting their mainstreaming in IFAD portfolio), etc.

### **Policy dialogue at the global level**

33. At the global level, IFAD has been engaged in the key processes in which the response to the food security and food price crisis is being hammered out.<sup>44</sup> This engagement has received a fillip since the sudden spike in food prices in 2008. Since then, there has been a resurgence of interest in the agriculture and water sector.
34. The food crisis drew attention to the need to develop, effectively manage and efficiently utilize water resources if agricultural production is to be increased, especially given the fact that in order to feed an estimated 9 billion people by 2050, food production will need to increase by 70 per cent by then and most of this increase is expected to come from small holder agriculture. Increased land area will be brought under cultivation and pressure on renewable water resources for irrigation will increase substantially (since at least 70 per cent of water in developing countries goes to agriculture), even if water use efficiency increases over time. The urgency of the situation was highlighted at the L'Aquila Summit which declared that, "many developing countries, particularly in Africa and Asia-Pacific, are still far from achieving sustainable access to water and sanitation and integrated water resource management, indispensable for sustainable development" and pledged themselves to supporting the G8 Evian Water Action Plan<sup>45</sup> and the Global Agriculture and Food Security Programme (GAFSP) by pledging US\$20 billion over three years<sup>46</sup> for this purpose.
35. IFAD is intensively engaged in policy dialogue at the international level as well is a member of several international mechanisms and fora that shape policies on food security and water resources management. It is important to recall here that without water security, food security is not possible to realize. A key breakthrough in terms of its international standing resulted from the publication of IFAD's Rural Poverty Report 2011 which was preceded by high-level bilateral and multilateral consultations, followed by a Conference on New Directions for Smallholder Agriculture and hosting of the highly successful, multi-agency Second Global Agri Knowledge Share Fair.<sup>47</sup>

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<sup>42</sup> IFAD, ARRI 2012, p. 33.

<sup>43</sup> Desk Review for Water synthesis report.

<sup>44</sup> IFAD, RIDE, no. 27, 29, p. 10.

<sup>45</sup> [http://www.g8italia2009.it/static/G8\\_Allegato/G8\\_Declaration\\_08\\_07\\_09\\_final%2c0.pdf](http://www.g8italia2009.it/static/G8_Allegato/G8_Declaration_08_07_09_final%2c0.pdf). Promoting sustainable access to Water and Sanitation. (no. 116-119).

<sup>46</sup> IFAD, RIDE 2011, no. 9, p. 4.

<sup>47</sup> IFAD, RIDE 2012, no. 29, p. 10.

36. Fulfilling the mandates of the following international institutions, of which IFAD is a member or active collaborator, also includes development and management of water resources: the Secretariat of the International Land Coalition; the Global Mechanism of the United Nations Convention to Combat Desertification; other UN Conventions (e.g. United Nations Framework Convention on Climate Change - UNFCCC); an Executing mechanism of the Global Environment Facility (GEF). IFAD has been heavily engaged in key policy dialogue platforms and multilateral processes such as the G-20 Initiatives on food security and price volatility; World Economic Forum, Secretary-General's High-Level Task Force on the Global Food Security Crisis (HLTF), etc. In addition, with IFAD funding MSc study programmes in AWM through the UNESCO IHE Delft, in the Netherlands, IFAD is contributing to the creation of a knowledge and skill pool that would be available globally as well as nationally.<sup>48</sup> It has also been involved in influencing global policy by working with its partners in developing instruments which inform the global policy in areas relevant to IFAD.

Box 5

**Using grants to identify water-related investment opportunities for poverty reduction**

IFAD provided a grant to the Food and Agriculture Organization of the United Nations (FAO) to enable the preparation of a report titled 'Water and the Rural Poor: Interventions for improving livelihoods in sub-Saharan Africa'. This report takes stock of past experiences and demonstrates that there are many opportunities to invest in water in support of rural livelihoods. It emphasizes the need for an approach where investments in infrastructure are matched with interventions in institutions, knowledge and finance in ways that yield optimal returns in terms of poverty reduction thus contributing directly to IFAD's global mandate.\* The report's inputs were utilized in the preparation of the United Nations World Water Development Report.

Source: Water and Rural Poor: Interventions for improving livelihoods in sub-Saharan Africa, FAO 2008.

\* FAO has confirmed that this is its biggest selling water publication and the one with the biggest number of website search/download hits. Furthermore, FAO's Water Development and Management Unit (NRLW) confirmed that thanks to IFAD, they have now mainstreamed 'poverty' into their normative and operational mandates.

37. In the investments plans of the Comprehensive African Agricultural Development Plan (CAADP) which are now being operationalized across Africa, water is well represented because agricultural water management is now prioritized in many African National Growth and Development strategies. This creates a niche opportunity for IFAD to champion the smallholders who generally do not benefit from large irrigation projects.

Box 6

**GEF-Investing in sustainable natural resources, biodiversity and ecosystems management**

In Mali, a GEF project component is contributing to sustainable natural resource management and biodiversity conservation in the key ecosystem of the Inner Niger delta. An IFAD-GEF regional grant is supporting the implementation of the Association of Southeast Asian Nations (ASEAN) Peatland Management Strategy, which is focused on one of the most critical ecosystems in South-East Asia, and one of the most important deposits of soil carbon.

Source: RIDE 2011, no. 61, p. 18.

**Policy dialogue at the regional level**

38. In the five regions that IFAD works in, its engagement with policy matters is largely through participation/membership in regional level bodies, through grants that seek to address issues that are common to multiple countries as well as through supporting regional knowledge networks. A successful example of this,

<sup>48</sup> Personal communications from Rudolf Cleveringa.

where water comes in indirectly through its connection with family managed small holder agriculture, is IFAD's participation in and support to MERCOSUR. In the NEN region, a series of regional grants (co financed by the Arab Fund for Economic and Social Development) from 1989 to 2009 to the International Center for Agricultural Research in Dry Areas (ICARDA), the International Food Policy Research Institute (IFPRI) and the National Center for Agricultural Research and Extension (Jordan) helped develop technological, institutional and policy options for better crops-rangelands-livestock integration in low-rainfall areas. In Nepal, IFAD gained a seat at the table through a grant conferred to support the formulation of the new agricultural and rural development strategy.<sup>49</sup>

39. In order to increase awareness as well as improve portfolio performance, IFAD has undertaken several initiatives such as promoting electronic networks for operational and thematic knowledge exchange at the corporate level (the poverty portal) and regional levels (such as ENRAP in Asia and the Pacific, FIDAMERICA in Latin America and the Caribbean, FIDAFRIQUE in West and Central Africa, IFAD Africa in East and Southern Africa and KARIANET in the Near East and North Africa, and in South Asia) and well as organizing knowledge events and fairs with other partner organizations.<sup>50</sup>
40. A successful example of a water-specific regional grant which had multi-country country impacts is the Improved Management of Agricultural Water in East and Southern Africa (IMAWESA). IMAWESA is an IFAD supported Thematic Network for Knowledge sharing in Agriculture Water Management through awareness and advocacy, policy support and round table meetings, applied research, capacity development and the development of database for AWM interventions. An evaluation for this grant is underway led by the IWMI.

#### Box 7

#### **Improved management of agricultural water in east and southern Africa**

The basis for IFAD involvement in IMAWESA was the recognition that water resources in the ESA region are considerable and that, if managed more effectively, could make a substantial contribution to reducing rural poverty especially in rain-fed systems. In Kenya, for instance, it has led to expansion of the area under managed agricultural water; increased efficiency of AWM systems; improved scientific and application skills; AWM projects that are targeted to the poor; priority given to food staples and well as high value crops; better integration of AWM with livestock and fisheries and fast tracking policy formulation and ratification. IMAWESA has demonstrated that through improved AWM, increased yields ranging 20 per cent to > 500 per cent (five-fold) above purely rain fed cropping can be achieved and net incomes could improve by factors of 50 per cent to ten-fold.

Source: IFAD, CPE, Kenya, 2011, p. 52, MTR of RB-COSOP, 2010 (draft), p. 16.

#### **Policy dialogue at the national level**

41. Even though this area continues to remain a challenge for IFAD,<sup>51</sup> policy dialogue has improved – in contrast, in 2006-2008, only 33 per cent of CPEs had assessed performance in policy dialogue to be in the satisfactory zone.<sup>52</sup> Nevertheless, successes are by and large episodic and not based on a systematic approach. This is largely due to a mismatch between the scale of IFAD's policy ambitions and the

<sup>49</sup> The Policy Issues Paper (2012), p. 3 (v), p. 7 (ix).

<sup>50</sup> IFAD, synthesis report-COSOP, 2012.

<sup>51</sup> ARRI 2012, notes that "IFAD has had only limited success in conducting effective policy dialogue at the country level, as concluded by most CPEs" (IFAD, ARRI 2012, p. 33).

<sup>52</sup> IFAD, RIDE 2012, no. 28, p.10.

challenges of achieving pro-poor policy change on the one hand, and IFAD's capacity, resources and management incentives to deliver that change.<sup>53</sup>

42. A notable success in regard to the water sector is the concept and practice of participatory irrigation management and irrigation management transfer (IMT) through establishment of water users' associations (WUAs) and similar institutions (there are several of these as mentioned later in the paper) and changes in the legal and institutional framework which has resulted in greater engagement of beneficiaries in the management of irrigation systems. Today, in all irrigation-specific projects, WUAs (variously called Water User Unions, Water User Councils, Water User Cooperatives, etc.) have been set up and in projects where water is not a dominant component, project established CBOs also specifically look after the water interventions along the lines of participation, accountability and costs recovery (at least for operations, through user fees).
43. Notable successes in this regard are in Haiti, Swaziland, Sudan and Azerbaijan. In Azerbaijan, (i) IFAD facilitated delegation of responsibility for on-farm irrigation management to WUAs, and allowed them to generate revenues through the collection of water charges and (ii) the IFAD supported PMU has been charged with managing all IFAD-financed interventions in the country - a remarkable institutional building achievement in terms of enhancing the national capacity to deliver irrigation services.<sup>54</sup> Similarly, in Sudan, the South Kordofan programme promoted reforms in water governance leading to a new water law that gives management rights to rural communities including the collection of user fees that contribute to the funding of assets.<sup>55</sup>
44. There are examples of certain grants being used for piloting innovative initiatives and using the results to conduct policy dialogue with the government and scale up at the national level. In 2005, IFAD supported the International Soil Reference and Information Centre (ISRIC) through a grant to conduct a Proof of Concept study on Green Water Credits (GWC). This concept envisaged that farmers upstream in a catchment area be compensated for practising soil and water conservation by the farmers downstream. The proof of concept was then supported by another grant to conduct proof of concept assessments in select river basins in Kenya and Morocco. The outcomes of these scenario studies pointed to the viability of the initiative and partly contributed to the setting up of a US\$40 million fund by IFAD and Kenyan electricity and water supply companies to assist around 400,000 small farmers in Tana River basin.<sup>56</sup> A grant on similar lines towards 'Programme for pro-poor rewards for environmental services in Africa' was given to World Agroforestry Centre (ICRAF) to conduct action research in the field of payment for environmental services.<sup>57</sup> Similarly, the Spate Irrigation Network grant continues to render valuable services to IFAD loans.<sup>58</sup>

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<sup>53</sup> IFAD, ARRI 2012, pp. 43-44.

<sup>54</sup> A provision in the Amended Water User Association Law.

<sup>55</sup> ARRI 2009, p. 25.

<sup>56</sup> Green water credits website: <http://www.greenwatercredits.net/content/about-gwc>

<sup>57</sup> ICRAF website: <http://presa.worldagroforestry.org/>

<sup>58</sup> Personal communication from Rudolph Cleveringa.

**Effective deployment of grants for sensitisation and policy advocacy**

In Mozambique, IFAD's work on artisanal fisheries led to important policy changes that promoted better coastal fisheries and environmental management by restricting fishing nets to specific mesh sizes and creating a no-trawler zone up to three miles from shore. Similarly, in Kenya,<sup>a</sup> following a series of droughts, the Kenya Government formulated a new National Irrigation Policy which seeks to intensify and expanding irrigation, rainwater harvesting and storage for agriculture; rehabilitate and protect water catchments; and implement the irrigation flagship projects identified in Vision 2030. IFAD supported this policy development by providing grants to sensitize parliamentarians and others to the main provisions contained therein.<sup>b</sup>

Source: See footnotes no. 79 and 80.

<sup>a</sup> IFAD, ARRI 2012, p. 34.

<sup>b</sup> IFAD, CPE, Kenya, 2011, no. 49, p. 16.

**Key points**

- IFAD's 3rd and 4th Strategic Framework clearly recognize the important role access to water plays in reducing poverty reduction. Under the 9 Replenishment, IFAD plans to allocate 22 per cent of loans and grants to finance projects that include land and water.
- Of the 20 policies that IFAD has, four make significant references to water.
- IFAD is intensively engaged in policy dialogue on water issues at the international level as well is a member of several international mechanisms and fora that shape policies on food security and water resources management.
- In the five regions that IFAD works in, its engagement with policy matters is largely through membership participation in regional bodies, through grants that seek to address issues common to multiple countries and by supporting regional knowledge networks.
- While IFAD has had only limited success in conducting effective policy dialogue at the country level, as noted by ARRI 2012, in the water sector there have been notable.

**IV. IFAD on the ground: water for people and livelihoods****A. Results-based country strategic opportunities programme and water: 2006-2012<sup>59</sup>**

45. COSOPs are core to IFAD's business model. They set out the strategic framework and agreement governing IFAD's engagement in a partner country's development programme. Introduced in 2006, RB-COSOPs have emphasized results delivery, country ownership, policy dialogue, innovation and up-scaling, knowledge management, policy engagement and partnership with other developmental and financial agencies, including, in recent times, the private sector. COSOPs now include a pipeline of projects to be implemented in the partner country in accordance with the latter's developmental priorities and the realisation of these investments is critical to IFAD achieving its corporate commitments by 2015.
46. Up to 2012, a total of 49 RB-COSOPs have been formulated. An analysis of these from the perspective of water would seem to indicate 2 discernible periods: 2006-2008, 2009-2012.

<sup>59</sup> This section draws extensively upon and builds on the following 2 papers of Andy Bullock, (i) "Learning from IFAD's Experiences: Stock-taking of water within 26 RB-COSOPs (2006-2008)", 14<sup>th</sup> March 2009 and (ii) "Responding to the new strategic profile of water within COSOPs: Recommendations for IFAD's Operation Model and for Scaling Up", June 2011.

47. What distinguishes the two periods is that the post 2008 RB-COSOPs have gone beyond recognising water as a constraint and opportunity and converted this understanding into systematic and strategic interventions by programming focussed water interventions and bringing greater alignment between the various delivery instruments to achieve strategic objectives in relation to water. The COSOPs prior to 2006 present a mixed picture; while water issues were sought to be addressed wherever required, water was not dealt with in a systematic and strategic manner. In some COSOPs there was no reference to water (Vietnam, 2003; Yemen, 1997 where water is an issue) and where it was mentioned it was either in the nature of a localized issue to be addressed (e.g. Rwanda, 2002 where provision for potable water only was considered for a resettled community in Umutara province) or to address a specific sector problem (Kenya, 2002, where water was a constraint for agriculture). Water was not prioritized in the other delivery instruments like policy dialogue, partnership and knowledge management – water was largely not included as a strategic objective, specific programming was not included in the COSOP and performance in this regard was not systematically tracked.

#### **Water: COSOPs 2006-2008**

48. During this period, a total of 26 COSOPs were formulated. Unlike previous COSOPs, these RB-COSOPs have highlighted the key role water plays in the lives of rural communities and the profound impacts (positive and otherwise) that it can have especially in regard to the poverty situation they experience. They represent states across the water continuum, from water scarce like Mauritania on the one side, to water abundance on the other, like Brazil for instance.
49. The following **key findings** emerge regarding the prominence given to water in terms of positioning, approach and alignment with the different components of these COSOPs.
50. All 26 COSOPs identify water as a constraint to agricultural production. In Jordan, for instance, a chronically water stressed country with rapidly increasing demand for water; water scarcity is now recognized as the limiting factor for development, including agricultural development.<sup>60</sup> Even in water abundant countries such as Brazil, Cameroon and Rwanda, water does emerge as a constraint affecting particular livelihood groups, farming systems or specific geographies.
51. Rehabilitating existing water infrastructure and developing new water assets for productive, domestic or public health purposes is specifically mentioned as a strategic objective (SO) in 13 of 26 COSOPs.<sup>61</sup> Indonesia's COSOP's SO1 seeks to increase access of the rural poor to productive assets including improving on-farm water management.<sup>62</sup> Vietnam's SO3 talks of promoting sustainable forestry in the highlands for securing a wide range of environmental services, one of which is the regulation of water flows, and provision of clean water downstream.<sup>63</sup>
52. In several countries, however,<sup>64</sup> water tends to be clubbed as part of a wider basket of interventions rather than as a separate intervention. In others, even where water is indicated in the strategic objectives of the RB-COSOP, it is not considered in investment programming. In Indonesia, for instance, even though SO1 of the RB-COSOP specifically focuses on increasing productive assets, "including on-farm water management, conservation and rehabilitation of rivers, water resources and catchment areas", the Smallholder Agriculture Productivity

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<sup>60</sup> IFAD, RB-COSOP, Jordan, 2007, p. 2.

<sup>61</sup> Afghanistan, Burkina Faso, Cambodia, Cameroon, Ethiopia, Guatemala, Indonesia, Jordan, Morocco, Rwanda, Tanzania, Viet Nam and Yemen.

<sup>62</sup> IFAD, COSOP, Indonesia, 2008, pp. 9 and 30.

<sup>63</sup> IFAD, RB-COSOP, Viet Nam, 2008, no. 27, p. 7 and no. 28, p. 8.

<sup>64</sup> Burundi, Guinea, Kenya, Madagascar, Mali, Mauritania, Indonesia and Nepal.

Improvement Programme in Eastern Indonesia (SAPIP) does not include any specific programming on water.<sup>65</sup>

53. Over half the COSOPs refer to and draw upon national policies and strategies for positioning and determining project interventions in regard to water assets and water resources development. Nepal's poverty reduction strategy (PRS) which is embedded in the Tenth Plan (2002-2007), has two "pillars" which include water: Pillar one on "high and broad based economic "focuses on agriculture and rural development and promotes irrigation; Pillar two focus on social sector development and gives priority to drinking water and sanitation in rural areas.<sup>66</sup>

Box 9

**Water, a limitation to poverty reduction**

In 2007, the government of Guinea adopted The National Strategy for Food Security (2007) that indicates that food insecurity in Guinea is mainly due to limited water-management capabilities during the off-season and the lack of infrastructure for storage and conservation. The RB-COSOP (2008) recognizes that developing agriculture quickly will critically depend upon improving water management (developing river bottoms and flood plains, small-scale irrigation).

Source: IFAD, RB-COSOP, Guinea, 2008, no. 7, p. 2 and no. 16, p. 4.

54. The fact that only three RB-COSOPs out of 26 make explicit, IFAD's comparative advantage in water (Burkina Faso, Ethiopia and Mali) would suggest, counter-intuitively, that IFAD has no particular comparative advantage in intervening through water despite IFAD's extensive involvement in rural development over decades in most of these countries. This is of course, not true. The COSOP for Ethiopia (2008) perceives water as an area where IFAD has developed a lead position, especially in the area of small-scale irrigation development.<sup>67</sup>
55. In six COSOPs,<sup>68</sup> the need to engage in policy dialogue on water to remove obstacles either prior to project initiation or during implementation has been indicated. Thus the Burkina Faso COSOP envisaged IFAD negotiating more secure access to land, pasture and water for marginalized groups (young people, pastoralists) and women in general as well as facilitating the participation of women's, farmers' and pastoralist organizations in the consultative processes seeking legal changes in tenure regimes.<sup>69</sup>

**Water: COSOPs 2009-2012**

56. During the period 2009-2012, RB- COSOPs of 23 countries were prepared.<sup>70</sup> The following key findings emerged.
57. At the Strategic Objective level, water is referred to in 21 of the 23 COSOPs (93 per cent). In twelve countries, water is an explicit strategic objective. The Chad SO1 seeks to "improve access to and sustainable management of water by the rural poor".<sup>71</sup> Similarly, SO2 of Haiti seeks to "improve small farmer's access to water resources and production services".<sup>72</sup> In the others, water is embedded and

<sup>65</sup> IFAD, RB-COSOP, Indonesia, 2007, appendix 5, p. 11.

<sup>66</sup> IFAD, RB-COSOP, Nepal, 2007, no. 18, p. 5.

<sup>67</sup> IFAD, RB-COSOP, Ethiopia, 2008, no. 26, p. 7.

<sup>68</sup> Burkina Faso, Cambodia, Indonesia, Rwanda, Tanzania.

<sup>69</sup> IFAD, RB-COSOP, Burkina Faso, 2007, no. 28, p. 10.

<sup>70</sup> Chad, Congo, Haiti, Malawi, Pakistan, Peru, Philippines, Sudan, Syria, Azerbaijan, Cote d'Ivoire, Dominican Republic, Nigeria, Senegal, Sierra Leone, Bangladesh, China, Congo DRC, India, Lao PDR, Mozambique, Viet Nam and Zambia.

<sup>71</sup> IFAD, RB-COSOP, Chad, 2009, no. 44, p. 9.

<sup>72</sup> IFAD, RB-COSOP, Haiti, 2009, no. 41, p. 8.

implied in the SOs but not explicitly mentioned. Sierra Leone's SO1 talks of the need to "support agriculture" through increased access to irrigation.<sup>73</sup>

58. All the COSOPs draw upon and build on the national policies and strategy papers. The analysis demonstrates a much more mature understanding of water as a constraint for economic development, social development protection and poverty reduction than in the previous COSOPs. Poor water management is underlined as the key reason for low yields, uneconomic use of water and depletion of resources. In Syria, the benefits of subsidized diesel and electricity are not only captured by the better off households, but distorts the economics of pumping leading farmers to mine water, irrigate wastefully (and harmfully) leading to low yields and resist adopting water saving irrigation technologies.<sup>74</sup>
59. The COSOPs, especially those in 2011-2012, recognize the threat that climate change and extreme climatic event pose to water and propose adaptive and mitigative measures. The India COSOP, for instance, seeks to mitigate climatic risks through proper management of natural resources, conservation of biodiversity, promotion of Low External Input Sustainable Agriculture (LEISA) and adoption of other adaptive responses.<sup>75</sup>
60. Water has been strongly programmed in investment projects, with several countries having one (or more) actual or pipeline investment projects (25 in all) with a significant water component. The Azerbaijan Integrated Rural Development Project costing US\$93 million seeks to assist small farmers achieve better productivity from both rainfed and irrigated crops; effective and sustainable use of water and existing irrigation infrastructure and strengthen water governance through empowered WAUs.<sup>76</sup>
61. IFAD has recognized that it has a comparative advantage in the area of small holder agriculture and agriculture water management involving poor farmers. In Malawi, IFAD is recognized as having particular knowledge in the small- and medium-scale irrigation sector including support for WUAs (Irrigation, Rural Livelihoods and Agricultural Development Project and Smallholder Flood Plains Development Programme).<sup>77</sup> In Haiti, IFAD has acquired significant experience in the transfer and management of small-scale irrigation schemes by water users' associations and created an expert network on access to water and its management in agriculture to develop support strategies and mechanisms for the rural poor.<sup>78</sup>

Box 10

#### **Successes pave the way to scaling up and replication**

In Azerbaijan, with the sound experience in the rehabilitation of irrigation systems, gained both at the technical and institutional level as well as the successful pioneering of WUAs for irrigation system management, IFAD is now well placed to propose initiatives that continue the process towards the development of a robust and sustainable model for irrigation operation and management across the country.

Source: IFAD, RB- COSOP, Azerbaijan, 2010, no. 36, p. 8.

62. There is increasing emphasis on using water-related innovations of a technical, financial and institutional nature: Chad – use of spate irrigation, dams, filtering dykes, ponds and cesspools; Haiti -combination of micro-and small-scale irrigation

<sup>73</sup> IFAD, RB-COSOP, Sierra Leone, 2010, no. 39, p. 7.

<sup>74</sup> IFAD, RB-COSOP, Syria, 2009, no. 7, p. 2.

<sup>75</sup> IFAD, RB-COSOP, India, 2012, no. 62, p. 13.

<sup>76</sup> IFAD, RB-COSOP, Azerbaijan, 2010, appendix 4, p. 8.

<sup>77</sup> IFAD, RB-COSOP, Malawi, 2009, no. 38, p. 8.

<sup>78</sup> IFAD, RB-COSOP, Haiti, 2009, no. 35-36, p. 7.

approach with that of preserving catchment areas; and Peru - payment for environmental services.

63. Water-specific partnerships, often with several multilateral and bilateral development partners as well as with Government and representatives of civil and private sector, are being pursued in most countries. In Pakistan, IFAD is in discussion with the World Bank IFAD for the financing of a minor irrigation project in Baluchistan.<sup>79</sup>
64. Water focused policy dialogue, which includes issues such as passage of relevant legislation and practices related to water (Peru, Sudan); irrigation policy and WUAs (Azerbaijan); participatory natural resources management and elimination of fuel subsidies (Syria); and conservation agriculture, together with its links to national social and environmental policy (Malawi) is receiving increasing attention in several countries, especially those facing water challenges. The trend of bringing about greater alignment between IFAD's different delivery mechanisms continues as they are now much more geared to supporting performance and realizing the SOs.
65. Risk analysis in the COSOPs has also recognized water scarcity as a potential external shock with high impact and mitigation strategies are now being included. In Malawi which is vulnerable to climatic disaster which could result in poor harvests leading to food insecurity and immiserization, sustainable water management and locale specific index-based weather insurance systems are proposed.<sup>80</sup>

#### **Comparative analysis**

66. An interesting aspect is that most COSOPs have captured the nuanced and varied water situations faced by the poor, different livelihood groups and across geographies. This allows for the adoption of a differentiated and tailored response rather than the general tendency that sees intensified irrigation schemes as the only solution to agricultural water woes; such as, for instance, greater emphasis on in-situ water conservation, rain water harvesting, watershed development, etc.,.
67. In the cohort of RB-COSOPs undertaken between 2006-2008, this differentiated understanding of water and its criticality in the context of specific target groups has not been adequately reflected in the strategic response (objectives, targeting strategy, policy approach and investment programming) in most COSOPs relative to the many poverty-reducing opportunities identified.<sup>81</sup> While in some cases the RB-COSOPs display close alignment amongst different instruments in regard to water, Rwanda being a notable case, almost all of them suffer from misalignments at one or some stages in the COSOP flow from justification for action, through the strategic objectives into investment programmes.
68. The 2009-2012 cohort of RB-COSOPs, on the other hand, demonstrates much better alignment of its different delivery instruments with its strategic objectives as compared with the 2006-2008 COSOPs. Innovation, policy dialogue, investment programming, partnerships and risk mitigation are all now much more strongly oriented to support delivery at the strategic objective level. This cohort of COSOPs gives increasing prominence to climate change, its relationship with water and its impact on poor rural communities.
69. Overall, there has been a major shift in the prominence given to water between pre-2008 COSOPs and 2009-2012 COSOPs. While the pre-2008 COSOPs displayed a systemic weakness in converting water from a prominent challenge and opportunity into widespread and systematic strategic interventions, the 2009-2012

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<sup>79</sup> IFAD, RB-COSOP, Pakistan, 2009, p. 25, Key File 3.

<sup>80</sup> IFAD, RB-COSOP, Malawi, 2009, no. 63, p. 12.

<sup>81</sup> Andy Bullock, "Learning from IFAD's Experiences: Stock taking of water within 26 RB-COSOPs (2006-2008)", Final Report, 2009, no. 2, 5, 8, pp. 4-5.

COSOPs on the other hand, have successfully made this transition by programming strong responses to water issues and bringing about greater and more effective alignment in most of the different delivery instruments to support water as a Strategic Objective and track its performance through the Results-based Framework.

70. Thus, IFAD's ability and capacity to deliver on water outcomes will be an important determinant of IFAD's capacity to realize its Strategic Goals and commitments and will also undergird its developmental effectiveness.

#### Key points

- During the period 2006-2012, a total of 49 RB-COSOPs have been formulated. From the perspective of water there seems to be 2 discernible periods: 2006-2008, 2009-2012.
- The key distinguishing element is the importance given to water and the degree of alignment between the various delivery instruments to achieve water-related strategic objectives.
- The 2006-2008 COSOPs displayed a systemic weakness in converting water from a prominent challenge and opportunity into widespread and systematic strategic interventions (objectives, targeting strategy, policy approach and investment programming) relative to the many poverty-reducing opportunities identified.
- The 2009-2012 cohort of RB-COSOPs, on the other hand, demonstrates much better alignment of its different delivery instruments with its strategic objectives as compared with the 2006-2008 COSOPs and gives increasing prominence to climate change, its relationship with water and its impact on poor rural communities
- Water has come to occupy an important role in IFAD's engagement with poverty reduction in rural areas. In fact, 34 of 49 RB-COSOPs (nearly 70%) approved between 2006-2012 include water in their strategic objectives.
- In several countries, water tends to be clubbed as part of a wider basket of interventions rather than as a separate intervention.
- All COSOPs, especially post 2006, refer to and draw upon national policies and strategies for positioning and determining project interventions in regard to water assets and water resources development.
- Water has been strongly programmed in investment projects, with COSOPs of 18 countries (2006-12) having 25 actual or pipeline investment projects with a significant water component.
- The threat climate change and extreme climatic event pose to water is recognized and adaptive and mitigative measures proposed in almost all RB-COSOPs.
- IFAD has recognized that it has a comparative advantage in the area of small holder agriculture and agriculture water management involving poor farmers.
- IFAD's performance on water outcomes will be an important determinant in realizing its Strategic Goals and determining its developmental effectiveness.

## B. Water in IFAD's active project portfolio<sup>82</sup>

71. **IFAD's active portfolio:**<sup>83</sup> At the time of writing, IFAD's active portfolio consists of 272 projects (inclusive of water related components) in 92 countries involving an outlay of US\$13 billion and impacting approximately 26.2 million beneficiary households. Of the total number of beneficiary households, 40 per cent (10.4 million) are from 3 countries, all from the ESA region (Ethiopia, Tanzania and

<sup>82</sup> This section draws upon the paper, Preliminary observations on IFAD's active water portfolio, 2012, by Andy Bullock.

<sup>83</sup> Andy Bullock, "Preliminary Observations on IFAD's active water portfolio, Nov. 2012", pp. 1-4.

Uganda) which absorb 15 per cent of total portfolio costs (approx. US\$2 billion) making an average expenditure of US\$280/household (HH); whereas the other 60 per cent of beneficiaries (US\$15.8 billion) from the other regions absorb 85 per cent of total portfolio costs (US\$11 billion) making an average expenditure of US\$1,107/HH. On average, overall across regions, expenditure incurred per beneficiary is about US\$500 of which IFAD's contribution is US\$200. Of the total amount of US\$13 billion, IFAD contributes on average about 40 per cent of total costs (US\$5.3 billion) with partner governments contributing an equivalent amount and international funders the balance 20 per cent (US\$2.75 billion), of which, five institutions – the World Bank, OPEC, AfDB, Spanish Fund and ABD – collectively contribute 63 per cent (US\$1.72 billion) of the amount.<sup>84</sup>

72. **Water in IFAD's active portfolio:** About 61 per cent of IFAD projects have a water component to them (166 of 272), absorb about the same proportion of funds (US\$8.83 billion) and cover over 50 per cent of the target HHs (14 million). The projects without water absorb about the same proportion of funds (US\$4 billion) and cover almost half of the target HHs (12 million). This makes a cost of US\$630/HH under "with water" projects and US\$344/HH in the "without water" projects. However, it should be noted that these costs cannot be ascribed to the water component only as other infrastructure (rural roads, rural market infrastructure, etc.) is also included.
73. The following table 1 gives an overview of the Active Portfolio Breakdown by Region, with and without water.

Table 1  
Portfolio breakdown by region

IFAD region	All projects( with and without water)				Projects with water			
	No. of projects	Total cost (US\$ - Millions)	Total N° of beneficiaries (HHs-millions)	Avg total Cost/HH (US\$/HH)	No. of water projects	Total cost (US\$ - millions)	Total N° of beneficiaries (HHs-millions)	Avg total Cost/HH (US\$)
Asia and Pacific	63	3 635	7.30	498	40	2 502	5.34	468
Latin America and the Caribbean	47	1 680	0.88	1918	26	1 055	0.59	1 797
East and Southern Africa	60	3 647	13.00	280	34	2 237	5.39	415
West and Central Africa	57	2 402	3.80	632	40	1 792	1.81	987
Near East and North Africa	45	1 620	1.17	1 378	26	1 242	0.94	1 319
<b>Total</b>	<b>272</b>	<b>12 984</b>	<b>26.15</b>	<b>497</b>	<b>166</b>	<b>8 828</b>	<b>14.07</b>	<b>630</b>

Source: Adapted from Andy Bullock, "Preliminary observations on IFAD's active water portfolio, Nov. 2012", tables 3 and 8, pp. 2 and 5.

74. All regions have at least 55 per cent of projects that have some water intervention, with the West and Central Africa region having around 70 per cent of them. It is observed that there is a rising trend of projects having a water component in them – from a high of all projects started in 2003 (100 per cent) having water, the trend progressively declined to reach a low of 54 per cent in 2008 but has since then picked up to now 74 per cent of projects starting in 2012.<sup>85</sup> While this could reflect IFAD's commitment to increasing food production and agricultural productivity,

<sup>84</sup> Andy Bullock, "Preliminary Observations on IFAD's active water portfolio", Nov. 2012, table 1, p. 1.

<sup>85</sup> Ibid., C1, p. 5; table 10, p. 6.

especially of the small holder farmer, it also reflects the observation of several CPEs that IFAD does not have a comparative advantage in the non- farm water sector. It should be noted that only in a few projects is water mentioned specifically in the project title – in most cases it is “hidden” or embedded within projects which outwardly have no explicit connection with water.

75. As mentioned above, IFAD’s investments in water are usually in line with and in response to government priorities and policies reflected in the PRSP, Agricultural Strategy, a specific Sector Policy Plan or a Water Policy/ Plan (see Table 2 below). In Ethiopia, the Pastoral Community Development Project (PCDP) II is fully aligned with the main objectives of the second PRSP (2005/06-2009/10), namely, the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) which envisages investments are to promote irrigation development, ensure land tenure security and better manage the natural resource base and protect the environment.<sup>86</sup> The Rehabilitation and Community Based Poverty Reduction Project (RCPRP) in Sierra Leone focuses on community development, agricultural development and rural infrastructure rehabilitation which is in line with the National Sustainable Agriculture Development Plan 2010–2030 (NSADP).<sup>87</sup>

Table 2  
IFAD’s water interventions and government policies/programmes

	<i>PRSP</i>	<i>Agricultural strategy</i>	<i>Specific sector policy plan</i>	<i>Water policy/plan/(action)</i>
Bangladesh			Haor Development Plan	
Chad			Food Security Project in the Northern Guéra Region (PSANG)	
Djibouti				
Dominican Republic	Dominican Republic Development Plan 2008-2012			
Ethiopia	Ethiopia’s second-generation Poverty Reduction Strategy Paper (2006-2010), the Plan for Accelerated and Sustained Development to End Poverty			
Malawi	Growth prong of PRSP	Malawi Agricultural Sector Investment Programme (MASIP)		
Mali		Government’s strategy for reducing hunger and malnutrition		Priority national programmes of Ministry of Environment and Sanitation
Mexico		Sustainable Modernization of Traditional Agriculture Programme (MasAgro),		
Niger	Accelerated Development and Poverty Reduction Strategy	Rural Development Strategy (RDS) CAADP National Agriculture Investment Plan Politique agricole commune de la CEDEAO (ECOWAP)		
Philippines			2009-2013 Rice Self-Sufficiency Plan Rapid Food Production Enhancement Programme (RaFPEP)	
Sudan	National Poverty Eradication Strategy			
Timor-Leste		Agriculture Strategic Plan		

Source: Adapted from Andy Bullock, “Preliminary observations on IFAD’s active portfolio, 2012”, page 10.

<sup>86</sup> IFAD, COSOP, Ethiopia, 2008, no. 20, p. 5, p. 11, appendix v.

<sup>87</sup> IFAD, COSOP, Sierra Leone, 2010, no. 22, p. 4; appendix v, p. 10.

**Alignment with national priorities**

Azerbaijan Integrated Rural Development Project is aligned with targets in the State Programme on Poverty Reduction and Sustainable Development (SPPRSD) specifically that of improving the environmental situation and ensuring sustainable management of the environment as well as with the State Programme on Reliable Food Supply to the Population (SPRFSP) which seeks to reduce local food-market dependence on food imports. In Chad, the Pastoral Water and Resource Management Project in Sahelian Areas (PROHYPA) which will secure transhumance systems by establishing water points and marking transhumance corridors in the central and western parts of Chad is in alignment with three of the five sub-sectors of the Master Plan on Water and Sanitation.

Source: IFAD, COSOP, Azerbaijan, 2010, App. IV, no. 6, p. 5; no. 27, p. 6; IFAD, RB-COSOP, Chad, 2009, no. 23, p. 5; no. 52, p. 10.

76. As mentioned above, about 20 per cent of IFAD projects are co-funded by other developmental institutions. There are a number of institutional arrangements that have evolved/been adopted to facilitate co-ownership, coordination and harmonization between the various stakeholders in general as well as in relation to water, such as:
- (i) Consultations with other development partners already working in the programme area or participation in an agriculture sector-wide approach programme (ASWAp) as in the case of Malawi. Here, due to the large number of donors supporting the agricultural sector,<sup>88</sup> a Donor Committee on Agriculture and Food Security (DCAFS), has been set up of which IFAD is a member. Moreover, the Agricultural Sector Wide Approach Program (ASWAP), 2008-2012, adopted by the government envisages a single comprehensive programme and budget framework to which donors are expected to contribute.<sup>89</sup>
  - (ii) "Joint programmes" or as "complementary" to other projects/ interventions as in the case of IFAD's participation in the Global Food Crisis Response Programme (GFRP) or the Comprehensive African Agricultural Development Plan (CAADP), in case of the former. "Complementarity" can mean building on the activities of other donors (such as WUAs in Kenya which were formed under a World Bank Project); or leveraging on-going projects (e.g., IFAD's partnership with the then GTZ regarding agricultural development in Ghana);<sup>90</sup> or by a "division of labour" with IFAD focussing on its area of comparative advantage such a small scale irrigation leaving larger sized irrigation programmes to other donors (as in Azerbaijan);<sup>91</sup> and
  - (iii) Cofinancing of the water component within IFAD projects as in the case of the Convergence of Agricultural Initiatives in Maharashtra (CAIM) project in India where government funds are used to undertake watershed based natural resources management (NRM) activities and private investments are sought for water activities in the value chain.
77. The rationale for water interventions in projects is to either improve a pre-project situation (e.g. mismanaged water resources, flood control, under-developed or degraded water assets, etc.) or to realize desired outcomes (increased incomes and food security, rural employment generation, etc.). There are a variety of circumstances when water as a specific component is factored in a project, such as,

<sup>88</sup> The European Union, the World Bank, the African Development Bank, the Norwegian Agency for Development Cooperation (Norad), the Department for International Development (DFID) of the United Kingdom, the Japan International Cooperation Agency (JICA), the United States Agency for International Development (USAID) and a number of NGOs.

<sup>89</sup> IFAD, RB-COSOP, Malawi, 2009, no. 27, p. 6; and no. 34, p. 7.

<sup>90</sup> IFAD, RB-COSOP, Ghana, 2006, annex v, no. 11-14, p. 12.

<sup>91</sup> IFAD, RB-COSOP, Azerbaijan, 2010, annex, Key File 3, p. 13.

when agriculture is not possible without irrigation (the oases in Chad); to capitalize on previous irrigation investments and institutional development at farm level; to improve public assets in vulnerable and disadvantaged areas; where there is potential for local irrigation development; to augment rainfed farming systems, etc.

78. The nature and number of water interventions undertaken cover a wide spectrum such as flood control and drainage in Bangladesh, rain water harvesting, soil and water conservation and watershed development (India), micro-irrigation schemes using a diversion weir and gravity fed canals in Laos, etc. In regard to WASH interventions undertaken include construction of toilets, tube well spudding and establishment of drinking water supply systems in Bangladesh, reticulated potable water systems in Burundi and provisioning of safe drinking water in Mexico.

Box 12

**Building adaptive capacities through better water resources management**

In Al-Haouz province of Morocco, which is amongst the driest regions in North Africa, the rehabilitation of small-scale irrigation infrastructure has brought a 36 per cent increase in irrigated land and reduced water loss by a quarter. With yields of basic crops increasing as a result, 85 per cent of farmers have been motivated to adopt improved technologies. This has not only resulted in increased water, food security and incomes, but equally importantly, increased resilience to climate variability in a region that is highly vulnerable to climate change.

Source: IFAD, Annual Report, 2010, p. 35.

79. To implement and manage these water-based interventions, a variety of institutional structures and facilitating arrangements have evolved such as:
- (i) **Establishment of representative institutions.** Village Watershed Committees (VWCs) in India; Village Committees for water maintenance in the Congo; WUAs in Azerbaijan, Egypt, Yemen, etc.
  - (ii) **Capacity building and training** of community institutions, government agencies and related stakeholders in regard to planning, implementation maintenance of assets, governance and management of resources, leveraging existing resources to secure greater yields, returns and value addition, sustainable management of land and water resources and eco-systems management (Chad, China, Dominican Republic, Sri Lanka);
  - (iii) **Contributing to national policy reform and establishment of regulatory bodies or legislative instruments.** In Swaziland, IFAD is supporting the Government's on-going efforts to put an appropriate legal framework in place for water users' associations (WUAs), an irrigation district and a catchment authority; and to assist in policy and legal reforms for land and resettlement and with existing legislation for companies and cooperatives;<sup>92</sup> and
  - (iv) **Provisioning of technical assistance and extension support.** In Mali, the Northern Regions Investment and Rural Development Programme (PIDRN) assists the populations of Gao and Timbuktu in developing the hydro-agricultural potential in their area.<sup>93</sup>

**Beneficiary engagement:**

- (i) All IFAD projects seek to involve beneficiaries either throughout the project life cycle – from planning, implementation, operations and maintenance – or at some stages in the project. In all cases, beneficiaries are organized into representative local bodies, user groups or common interest groups for purposes of governance, need identification, ownership-building, targeting

<sup>92</sup> IFAD, RB-COSOP, Swaziland, 2006.

<sup>93</sup> IFAD, RB-COSOP, Mali, 2007, no. 21, p. 4.

and equitable resource access. In many projects women, their needs and participation in decision making are particularly sought through separate meetings with them as well as through reservation in decision making bodies. In Ethiopia, during programme design and implementation, special care is taken to ensure that the needs and priorities of vulnerable groups such as women headed households, landless youth and agro-pastoral and pastoral communities living in the lowlands are articulated and taken into account. Women's empowerment is promoted through mandatorily increased representation in land administration and land use committees, watershed management committees, water users' associations, community grazing associations as well pre-determining that at least 25 per cent of beneficiaries of IFAD projects will be woman-headed households;<sup>94</sup> and

- (ii) In terms of contributions, depending upon the circumstances, beneficiaries are expected to contribute towards costs either through labour, in kind or cash, either paid up-front or during the course of project implementation. Often, the amount of contribution is determined on the basis of "ability to pay" existing during the pre-project implementation period. In Armenia, beneficiaries of small irrigation projects contribute 10 per cent of costs; unlike in Egypt where in a particular irrigation plot, beneficiaries repay the full cost of tertiary canals and on-farm drainage over a 20 year period. In regard to operations and maintenance, various kinds of arrangements are made depending upon the nature and size of the project. Thus in Armenia, WUAs charge user fees to cover the cost of water provisioning and maintenance of the tertiary distribution network. In Yemen, ownership of water harvesting structures vests in the beneficiaries who are expected to manage, operate and maintain the infrastructure.

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<sup>94</sup> IFAD, RB-COSOP, Ethiopia, 2008, no. 39-40, p. 9.

### Key points

- Of the 178 active water projects (68% of active IFAD projects for which information is available) 65 per cent relate only to AWM (agricultural water management), 11 per cent to WASH (safe water, basic sanitation services, improved hygiene) and 25 per cent relate to both AWM and WASH.
- All regions have at least 60 per cent of projects that have some water intervention, with the Near East and North Africa region having around 80 per cent of them
- In only a few projects is water mentioned specifically in the project title – in most cases it is “hidden” or embedded within projects which outwardly have no explicit connection with water.
- Of the total amount spent on water projects, IFAD contributes on average about 40 per cent of total costs; partner governments an equivalent amount and international funders the balance 20 per cent
- There are a number of institutional arrangements that have evolved to facilitate co-ownership, coordination and harmonisation between the various stakeholders such as consultations with other development partners already working in the programme area, participation in a agriculture sector-wide approach programme (ASWAp), “joint programmes” or as “complementary” to other projects and cofinancing of the water component within IFAD projects
- The rationale for water interventions in projects is to either improve a pre-project situation (e.g. mismanaged water resources) or to realize desired outcomes such as increased incomes and food security.
- The nature and number of water interventions undertaken cover a wide spectrum such as flood control and drainage, rain water harvesting, watershed development, micro-irrigation schemes, etc.
- To implement and manage these interventions, a variety of institutional structures and arrangements have evolved such as establishment of representative Institutions, provisioning of technical assistance and extension support, capacity building and training of stakeholders and contributing to national policy reform, establishment of regulatory bodies or legislative instruments.

## C. An assessment: water in IFAD projects

80. As mentioned, 178 projects in IFAD’s portfolio have water as a component in project implementation used either for agricultural (including livestock), domestic and livelihood purposes. In all these projects, even where the largest share of financial resources is allocated to water resources development or water provisioning, there are other components also included such as institutional development and capacity building, non-farm sector promotion, market development depending upon the specific context and objectives of the project, which also determine the effectiveness of the water component. Water is thus an “embedded” component with fund allocations, even in irrigation-related projects ranging from 68 per cent, as in the case of the North East Development Project in Azerbaijan) to –as low as 18 per cent in the case of the West Noubaria Rural Development Project in Egypt.
81. As such, it is not possible to assess the performance of the water component separately using the criteria used by the IOE,<sup>95</sup> since except for thematic studies in this sector,<sup>96</sup> some publications on technologies for soil and water conservation and rainwater harvesting and wetlands management,<sup>97</sup> and case studies of best

<sup>95</sup> Relevance, effectiveness, efficiency, poverty impact - household income and assets, human and social capital and empowerment, food security and agricultural productivity, natural resources and environment, institutions and policies; sustainability, innovation and scaling up, gender and performance of partners (IFAD + Government).

<sup>96</sup> Such as “Water and Poverty”, “Water and Gender”, “Water in Arab Countries”, etc.

<sup>97</sup> Such as that done for Latin America and Guidelines for Sustainable Wetlands in Africa.

practices (India, Laos, Philippines, Vietnam) and a technical background report on rural water, sanitation and hygiene (RWSH),<sup>98</sup> no water-specific evaluation has been conducted. IOE rating of project performance takes into consideration the overall impact and outcomes of all the components of a project together and not their individual contribution.

82. In order to keep matters in perspective, it is worth bearing in mind, that the investments that have gone into the water sector (which includes irrigation, fisheries, drinking water and sanitation and soil and water conservation works) from July 2000 to June 2012 amounts to only 7.4 per cent of total IFAD investments of US\$5.65 billion (excluding management costs) – below that invested in Rural Financial Services (19 per cent), Policy and Institutional support (11 per cent), Research, Extension and Training (9 per cent) and Community-driven Development (9 per cent), but slightly above that spent on Natural Resources Management and Protection (6 per cent).<sup>99</sup> This also indicates that while IFAD recognizes the important role water can play in helping communities out of poverty as reflected in the high rating given to relevance of IFAD projects, it may be either under-providing for water interventions (see box 13 below) or realizes that water can deliver results only in synergistic conjunction with other related sectors such as financial services, value addition and market development. Performance of these “non-water” sectors determines impact and sustainability of outcomes from water investments, as exemplified in the case of Azerbaijan (see box 14 below).

Box 13

**Under provisioning for water jeopardizes project success**

The lack of planned interventions to address human and animal water needs was considered a design flaw in the North Kordofan Rural Development Project in Sudan. The Upper Mandrare project in Madagascar underprovided for drinking water, despite the importance of these being highlighted in an earlier interim evaluation by IOE, underscoring the need for IFAD to further strengthen the learning loop from evaluation to design.

Source: ARRI 2009, p. 18.

Box 14

**Non-water components hold the key to economic viability**

In the NED (Azerbaijan) project, irrigation was clearly the dominant activity; but given the importance of agricultural production and marketing to smallholder farmers, it is a moot point whether the design accorded adequate resources and attention to the non-irrigation activities. Improved markets, storage and processing to cope with an increased volume of perishable crops are important for the success of the project. And although appraisal design had included a significant marketing and SME development component, its scope was downsized during the course of implementation and its impact was limited in the field.

Source: Azerbaijan, PPA, no. 56, p. 9.

83. This above observation is further confirmed by a year-wise comparative analysis of IOE evaluation data of (i) all IFAD projects (170 of them) from the period 2002-2004 to 2009-2011 undertaken by ARRI 2012<sup>100</sup> using IOE criteria<sup>101</sup> and (ii) a

<sup>98</sup> Jeanette Cooke, 2008, Technical Background Report on Rural Water, Sanitation and Hygiene in the New Rurality

<sup>99</sup> ARPP, 2011-2012, annex IV, p. 51.

<sup>100</sup> IFAD, ARRI 2012, p. 9 and annex 5, p. 54 ff: eight project performance, assessments (PPA); 11 project completion report validations (PCRVs); one evaluation synthesis; two CPEs (a total of 24 projects) and one CLE; new ratings from 24 projects evaluated in 2011 (additional- only one project, Morocco overlaps), and also uses all the 170 independent evaluation ratings available in total to provide an overview of the evolution of performance since 2002. It should be noted that the set of projects evaluated are mixed – agricultural (most of which include water), rural development, financial mediation, market development.

subset of 64 water- related projects<sup>102</sup> (55 of them classified as “agricultural” and 9 as “irrigation”) from amongst 170 independently evaluated project.<sup>103</sup> It is observed that these 64 projects are broadly similarly rated as those included in the ARRI study in regard to relevance, effectiveness, efficiency, project performance, and sustainability (see Table 3 below), despite having a specifically indicated water component. As the following Table 3 shows, there is no statistically significant difference even when we compare the “irrigation” only projects with the overall set of 170 projects as well as with the sub-set of 55 “water related projects”; in fact, these “irrigation” projects trail behind in regard to poverty impact, innovation and “overall project achievement” when compared with both the overall projects (170 of them) and the “agricultural projects”. Only between 56–57 per cent of “irrigation” projects are considered “moderately satisfactorily and better” against these criteria as compared to between 69-79 per cent in the case of the overall projects (170) and 74-81 per cent in the case of “agricultural” projects. This only underscores that the ability of the water component to deliver significant and lasting impacts depends critically upon the proper design, adequate provisioning, effective and efficient project management, the institutional environment and the other interlinked components of a given project.

Table 3  
**Proportion (per cent) of projects rated moderately satisfactory of better: 2002-2011**

<i>Description</i>	<i>ARRI database (170 projects)</i>	<i>Subset of 55 water related projects (agriculture projects - ARRI database)</i>	<i>Subset of 9 irrigation projects (ARRI database)</i>
Relevance	96	91	100
Effectiveness	76	72	66
Efficiency	61	54	56
Project performance	84	82	78
Poverty impact	69	74	56
Innovation	77	69	57
Sustainability	56	55	56
Overall project achievement	79	81	56

Source: Evaluation data sets on these 170 projects is available at: <http://www.ifad.org/evaluation/arri/database.htm>.

84. From the perspective of water, the Review referred to above found that in the three crucial areas determining availability, access and impact of water, namely, (i) natural resources and the environment, (ii) gender and women’s empowerment and (iii) institutions and policies, significant progress had been made, which in this context can be considered major achievements. All these three domains were previously generally considered “problem areas”.
85. In this context and perspective, we shall now assess water interventions using some of the indicators of the IOE, given the caveat that (i) there is not a single project that is exclusively water focussed – it is embedded and varies in investment volume between projects – and (ii) outcomes assessed are the composite result of all the components that make up a project, including water. It is not possible to attribute specific results to water provisioning only.

<sup>101</sup> Such as in the key criteria like relevance, effectiveness, efficiency, project performance, poverty impact, innovation, sustainability, gender and overall project achievement.

<sup>102</sup> Of the 170 projects in the ARRI Data base, there are 64 water-related projects of which 55 are classified as “Agriculture” and 9 as “Irrigation”.

<sup>103</sup> Evaluation data sets on these 170 projects is available at: <http://www.ifad.org/evaluation/arri/database.htm>.

### **Relevance, effectiveness and efficiency**

86. In regard to projects (all projects including those having a water component) during 2009-2011, moderately satisfactory or better ratings were given to 92 per cent of projects for relevance; 72 per cent for effectiveness and 55 per cent for efficiency. An identical pattern of high relevance, reasonable effectiveness, but only moderate efficiency was observed in 2002-2004.<sup>104</sup> Moderately satisfactory performance remains predominant. The picture is similar for overall project achievement, which is a composite of all evaluation criteria. During 2009-2011, 27 per cent of projects were rated satisfactory or highly satisfactory. This percentage has changed little since 2002-2004, when the equivalent figure was 24 per cent.<sup>105</sup> Overall, there has been an improvement in project achievement from 66 per cent projects rated moderately satisfactory and better in 2002-2004 to 81 per cent in 2009-2011.<sup>106</sup>
87. In the case of water projects there is a similar pattern of high relevance, reasonable effectiveness, but only moderate efficiency as observed in Table 3.
88. **Relevance.**<sup>107</sup> In terms of relevance of water interventions, the design of the Azerbaijan North East Development project was not only responsive to the main objectives of the State Programme for Poverty Reduction and Economic Development, namely, rehabilitating irrigation systems and introducing participatory irrigation management systems, but also largely responded to the needs and priorities of beneficiary households: 97 per cent of respondents rated the participatory irrigation interventions as satisfactory. Relevance would have been enhanced, however, if synergies with other irrigation programmes in the country had been established. Nevertheless, the PPA of this project rated overall relevance only moderately, because sufficient attention was not given to the other components of the project (extension, post-harvest processing and marketing) which would have resulted in greater and assured returns accruing to the irrigation investments undertaken thus underlining the fact that water activities alone are not sufficient to deliver desired developmental outcomes.<sup>108</sup>
89. In the Gash Sustainable Livelihoods Regeneration Project (GSLRP) (Sudan), PCR (draft), 2013, even when it conformed with national priorities as well as the needs of the local communities, the relevance of its design has been adjudged as unsatisfactory because an enabling institutional environment was not created. Land reform which was one of the key objectives of the project was premised on Government's political commitment to implement the same - an unrealistic expectation given the feudal structure of the political economy of the region - instead of it being made a pre-condition for undertaking irrigation rehabilitation, something that the region as well as the landed elite, greatly needed and wanted. The risk had been foreseen at the time of project design but appropriate steps and conditionalities were not defined to achieve this key project objective. Studies have revealed that the structure of landholding remained largely the same as in the pre-project period - 60 per cent of the land area owned being controlled by only 27 per cent of landowners and only 1.7 per cent of those who did not own land before rehabilitation, namely the poorest, were allotted land titles (rabts) after rehabilitation.<sup>109</sup>

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<sup>104</sup> IFAD, ARRI 2012, p.16.

<sup>105</sup> Ibid., pp.16-17.

<sup>106</sup> Ibid., annex 5, p. 58.

<sup>107</sup> IFAD defines Relevance as, "The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, institutional priorities and partner and donor policies. It also entails an assessment of project design in achieving its objectives.

<sup>108</sup> Azerbaijan: North East Dev. Project: PPA, 2012, no. 50,53, p. 9; no. 58, p. 10.

<sup>109</sup> Gash Sustainable Livelihoods Regeneration Project (GSLRP), PCR (draft), 2013, no. 23, p.12; no. 30, p. 13 and no. 50, p. 16. Communication with Rudolf Cleveringa and also Mohammed and Khakleda.

90. **Effectiveness.**<sup>110</sup> Albania's MADP's effectiveness has been rated as "moderately unsatisfactory" largely because it underserved the poorer northern mountain regions allocating only around 27 per cent of investment funds to them while concentrating the bulk of resources to the relatively substantial richer southern mountain areas – this despite there being a clear intent and direction in favour of the former. While most of the activities that were initiated after the 2003 MTR have demonstrated significant impact, the effectiveness of the irrigation related SIPs which have accounted for a significant amount of investments, has still to be established as the income most generate is not sufficient to cover the full cost of irrigation schemes, including depreciations.<sup>111</sup>
91. The Niassa Agricultural Development Project (NADP), Mozambique, financed construction/rehabilitation of water points is assessed as "highly successful" – it has benefited around 43,000 people by providing easy access to safe drinking water, significantly reducing women's workload, distance walked and time spent in water collection – previously they would walk up to three kilometres to a traditional water source and wait in queue for over an hour or more – thus leaving more time for rest, child rearing and other activities. The incidence of water borne diseases has reportedly come down. This facility was complemented by an educational programme whereby user groups or committees have been established consisting of a minimum two men and two women. The group is trained in operation and maintenance of water pumps which ensures that also women can perform minor repairs on the pumps. This has resulted in women feeling self-reliant and empowered.<sup>112</sup>
92. Despite a delay in the loan closing date of more than two years, the Tafilalet and Dades Rural Development Project (PDRT), in which two-thirds of investments have gone into the water component, has met the water components targets – fully in Tafilalet and close to doing so in Dades.<sup>113</sup> The effectiveness of the water component of the PDTR can be gauged from the fact that it has installed and rehabilitated hydraulic and irrigation structures on a large scale in a region which seriously lacked such infrastructure, which are critical to support human and economic activities in this pre-Saharan, cyclical drought prone region. These hydraulic structures have helped divert floodwater and revive mountain oases (4 000 ha), stabilized drain water volumes, improved access to drinking water through household connections in certain communes and increased crop yields, thus contributing in a significant way to reducing poverty in a region where over 50 per cent of the population was considered as living in poverty.<sup>114</sup>
93. **Efficiency.**<sup>115</sup> Generally, the efficiency of projects from IFAD's perspective is determined by (i) comparing unit cost per beneficiary/ item as against either what was assumed at the time of project appraisal or what is currently the costs incurred for similar activities locally; (ii) time taken to complete the project as against originally planned; (iii) the rate of disbursements; and (iv) the return on investment.

<sup>110</sup> IFAD defines Effectiveness as, "The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance".

<sup>111</sup> IFAD, Mountain Areas Development Programme (MADP), Albania, Completion Evaluation, 2008, no. 12-13, p. xii; no. 17-18, p. xiii.

<sup>112</sup> IFAD, PPA, Mozambique, 2007, no. 100, p. 25; no.104, p. 26; no. 116, p. 28.

<sup>113</sup> In Tafilalet, seven floodwater perimeters were rehabilitated (9.170 ha), 72 pumping stations were built or rehabilitated, and approximately 55 km of *khetaras* [traditional underground drains] were treated. In Dades, 16 water supply systems have been completed (of 17), 12 km of dikes to protect waterways has been constructed and rehabilitation of *séguías* [irrigation canals] is on-going scheduled for completion within the year beyond official project completion.

<sup>114</sup> IFAD, The Tafilalet and Dades Rural Development Project (PDRT), Completion Evaluation, 2006, no. 2-3, pp. xiii-xiv; no. 7, p. xxxii.

<sup>115</sup> IFAD defines Efficiency as, "A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into results".

94. Two projects which are considered exemplars of efficiency are the Upper Mandrare Basin Development Project in Madagascar and Qinling Mountain Area Poverty Alleviation Project (QMAPAP) in China. The Madagascar project not only rehabilitated and installed irrigation schemes at lower unit costs but also surpassed physical targets by an estimated 120 per cent. Embedding project management within existing local government structures and using local procurement and decision making processes contributed to increasing the implementation efficiency of the China Qinling project.<sup>116</sup>

Box 15

**Beneficiary ownership unlocks efficiencies and increases benefits**

The Northern Mindanao Community Initiatives and Resource Management Project in the Philippines realized significant efficiencies because local communities controlled planning, implementation, monitoring and maintenance of investments. Similarly, the Oudomxai Community Initiatives Support Project In Laos, achieved high effectiveness against its costs, as the actual investment per person or household benefitting from project activities such as irrigation, water supply or road access was less than budgeted at the appraisal stage.

Source: IFAD, ARPP, 2010-11, no. 21, p. 5.

95. In Rwanda, the CPE found that while unit costs of the investments did not significantly deviate from averages in Rwanda for similar measures, performance by contractors generally has been poor in terms of quality and delays, especially in the water component of the PDRCIU, though the fault is not always theirs.<sup>117</sup> In the Gash project, when the Gash River Training Unit (GRTU) was provided with earth moving equipment from IFAD funds to reduce dependence on private contractors, costs fell by 40 per cent. The extent of efficiency gains can be gauged from the fact that the GRTU was able to execute rehabilitation works in the Degain Block, using the same equipment at 20 per cent of the costs originally estimated by the Ministry of Irrigation. The Raymah Area Development Project in Yemen (RADP)-despite significant difficulties, the evaluation found that the cost per beneficiary and per cubic meter of water of spring catchments and water reservoir infrastructure constructed by the RADP to be lower than the one of comparable investments financed by other development programmes in Yemen, primarily due to employment of local contractors, even though it resulted in increased management costs as the PMU had to extend significant technical oversight efforts to compensate for the inexperience of local contractors.<sup>118</sup>

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<sup>116</sup> ARRI 2009, p. 20.

<sup>117</sup> IFAD, Rwanda CPE, 2012, no. 142, p. 40.

<sup>118</sup> Raymah Area Development Project, Yemen, Completion Evaluation, 2010, no.102, p. 31; no. 104-105, p. 32; and no.138, p. 41.

### Key points

- In all water projects, even where the largest share of financial resources is allocated to water resources development, there are other components also included such as institutional development and capacity building, non-farm sector promotion, market development, etc., which also determine the effectiveness of the water component. Water is thus an “embedded” component, even in irrigation-related projects.
- This means that the water component can deliver results only in synergistic conjunction with other related sectors such as financial services, value addition and market development. Performance of these “non-water” sectors determines impact and sustainability of outcomes from water investments.
- IOE evaluation data reveals that water related projects perform similarly comparably with overall projects in regard to relevance, effectiveness and efficiency - high relevance, reasonable effectiveness, but only moderate efficiency. Irrigation projects, however, noticeably underperform in regard to overall project achievement thus underscoring the fact that the ability of the water component to deliver significant and lasting impacts depends critically upon the other interlinked components of a given project.
- However, from the perspective of water, the IOE data reveals that in the three crucial areas impacting water, previously considered “problem areas”, namely, (i) natural resources and the environment, (ii) gender and women’s empowerment and (iii) institutions and policies, significant progress had been made.

## D. Some selected criteria and cross-cutting issues

### Natural resources and climate change

96. Water is a natural resource and is an environmental service. The terrestrial life of the hydrological cycle plays itself out in watershed and the ecosystems that emerge in them. Protecting and regenerating these watersheds and their ecosystems is vital to ensuring adequate water for communities, agriculture, livelihoods and river flows. Healthy ecosystems capture rain water, facilitate infiltration into the soil, recharge of ground water aquifers and lengthen basal flows which recharge springs and water courses. Equally important, they reduce the impacts of extreme weather events by helping regulate floods as well as mitigate the effects of deficient rainfall or droughts.
97. Agriculture, especially in dryland regions is dependent upon a suite of watershed-derived environmental services.<sup>119</sup> While IFAD has long been engaged in NRM (with as much as US\$344 million or 6 per cent of the total amount it has invested from 2000-2012), it would need to ensure that as long as it is engaged in the agricultural sector, NRM will need to continue to be a focus and priority area, especially in water scarce and stressed countries. This has happened in Rwanda where IFAD has focused on soil and water conservation activities adopting an integrated watershed management approach. This is because landscapes, soils and water are under stress due to overpopulation leading to over utilization of hills thus resulting in soil erosion, loss of fertility, lower production and increased poverty.<sup>120</sup> It is pertinent to note that around 70 per cent of the projects IFAD supports are located in ecologically fragile, marginal environments and when these are under threat, so are their inhabitants.<sup>121</sup>
98. The importance of protection and rehabilitation of the natural resource base for water augmentation has been repeatedly confirmed by projects that factored these in project design and implementation. In the Philippines, increased forest cover and

<sup>119</sup> Such as nutrient provisioning, waste re-cycling, soil-moisture, pollination, pest regulation, ground water recharge, etc.

<sup>120</sup> IFAD, Rwanda, CPE, 2012, no. 95, p. 27; under the PDRCIU as well as in PAPSTA and KWAMP.

<sup>121</sup> IFAD, Rural Development Report, 2011, p. 9.

flood control measures saw drastic reduction in soil erosion. As a result, water in streams, rivers and reservoirs is cleaner even after heavy rains. In the same project, marine resources have also been protected (by declaring it as a Marine Sanctuary and by the dissemination of environmental friendly technologies to fishing households) and enhanced through mangroves rehabilitation and the installation of artificial coral reefs. This has had a positive effect on the marine environment and on the fish population.<sup>122</sup>

99. However, given the enormity and complexity of environmental dynamics, IFAD needs to be alert to project design and supervision weaknesses in environmental assessments that have in the past and can in the present and future contribute to negative impacts, for example, groundwater depletion, soil salinization and diminishing fish stocks. Governments play a key role and their commitment is crucial to ensuring that NRE issues are addressed appropriately and in time.<sup>123</sup> In Uganda, the Area Based Agricultural Modernisation Programme raised concerns that agricultural intensification would likely cause environmental damage because of increased use of agricultural chemicals and their potential percolation to the water table.<sup>124</sup> In Cambodia, the Community based Rural Development Project in Kampong Thom and Kampot (CDRDP) undertook a ground water survey prior to any construction of water points in compliance with the Ministry of Rural Development's guidelines so as to prevent any adverse and irreversible impact on the environment.<sup>125</sup>
100. Climate change is underway and its major impact is on the temperature regime and water cycle. IFAD has been mindful of the adverse consequence of climate change on water supplies and has developed a specific Climate Change Strategy (2010) to shape its response. It has established an Environment and Climate Division and expanded it in 2011 and launched the Adaptation for Smallholder Agriculture Programme (ASAP), a multi-donor grant cofinancing programme integrated into IFAD-supported investments. A core goal of the ASAP is to increase the availability of water and its efficient use for smallholder agricultural production and processing.<sup>126</sup> IFAD also partners with other development agencies (GEF, World Bank, UNEP, etc.) to build the resilience of rural communities.

Box 16

**Mainstreaming climate adaptive measures for poverty reduction**

Eritrea, which is largely drought and desertification prone, is now also subject to climate variability: unpredictability of rainfall, which can range from erratic to torrential. When heavy rain falls after a period of drought or a long dry spell, the water cannot penetrate the hard-caked soil and causes floods; the irony is that after this deluge, local communities are again confronted, almost immediately, with a situation of water scarcity. An IFAD-funded programme has introduced simple soil and water conservation technologies, such as earth or brushwood embankments and terracing, micro-catchment systems to reduce rainwater run-off and increase soil infiltration and two medium-scale spate irrigation schemes covering about 1,100 hectares and benefiting 1,000 farmers.

Source: IFAD Annual Report, 2011, p. 24, The Post-Crisis Rural Recovery and Development Programme

101. ARRI 2012, found that the performance of natural resources, environment and climate change criteria has improved from only 39 per cent of projects moderately satisfactory or better during 2002-2004 to 79 per cent during 2009-2011 and is now similar in performance to the other rural poverty impact domains. However,

<sup>122</sup> IFAD, Western Mindanao Community Initiatives Project (WMCIP), Interim Evaluation, 2009, no. 136, p. 34; no. 120, p. 29.

<sup>123</sup> ARRI 2010, p. 29.

<sup>124</sup> IFAD, Uganda project performance assessment, 2012, no. 80, p.17.

<sup>125</sup> IFAD, Cambodia project performance assessment, 2012, no. 87, p. 16.

<sup>126</sup> IFAD Annual Report, 2011, p. 11.

there is no room for complacency, as a significant proportion of projects (53 per cent) are only moderately satisfactory and none are highly satisfactory.<sup>127</sup>

#### **Key points**

- Water is a natural resource and is an environmental service. Protecting and regenerating these watersheds and their eco-systems is vital to ensuring adequate water for communities, agriculture, livelihoods and river flows.
- Agriculture, especially in dryland regions is dependent upon a suite of environmental services and IFAD would need to ensure that as long as it is engaged in the agricultural sector, NRM will need to continue to be a focus and priority area, especially in water scarce and stressed countries.
- Given the enormity and complexity of environmental dynamics, IFAD needs to be alert to project design and supervision weaknesses in environmental assessments that contribute to negative impacts as has been in the past
- Mindful of the adverse consequence of climate change on water supplies, projects are now including adaptive measures and IFAD has launched the Adaptation for Smallholder Agriculture Programme (ASAP) whose core goal is to increase efficiency of water use in smallholder agricultural production and processing.

#### **Gender and women's empowerment**

102. Women are managers of water both at the farm level as well as the household. Securing domestic water, sanitation and hygiene are their responsibility, and they often walk several hours daily, in many developing countries, in search of water. They also play an active role in the construction, preventive maintenance and repair of sanitation facilities. Women are multiple-use managers of water – they use water for agriculture, livelihoods, domestic tasks, health and sanitation, while men's water use priorities mainly revolve around agriculture or livestock.<sup>128</sup> Yet, despite the significant role women play in managing water, they are under-represented in related governance institutions and often excluded from decision making processes. In Cambodia, while women participated in various groups, and benefited from improved water supply, in terms of decision-making, their role remained limited.<sup>129</sup>
103. One of the causes for lower participation of women in WUAs is because the issue of multiple uses of water is not adequately addressed by these bodies. Women, for instance, have clear preferences about how an irrigation system should be operated – irrigation operations and scheduling of water deliveries – constrained as they are by home workload, child care responsibilities and security reasons. Not addressing these concerns effectively disincentivizes them from actively participating in WUA functioning even when representation is statutorily mandated.
104. One of the important challenges in the organizational design of the WUAs is the identification of ways to involve women and landless people. Greater participation by women in WUAs has been achieved in cases where membership is open to multiple users of water (not only irrigators, but also livestock owners and fishers). This is the case, for example, in the IFAD-supported Participatory Irrigation Development Programme in Tanzania which has not only reduced the time spent in fetching water, but increased their involvement in WUAs and improved household food security among the most impoverished as a result of increased crop yields.<sup>130</sup> The incorporation of appropriate gender strategies and their implementation do not

<sup>127</sup> IFAD, ARRI 2012, p. 13.

<sup>128</sup> IFAD, Gender and Water: Securing water for improved rural livelihoods - The multiple-uses system approach, 2012, pp. 5,6,8.

<sup>129</sup> IFAD, Community Based Rural Development Project in Kampong Thom and Kampot, PPA, 2012, no. 10.

<sup>130</sup> IFAD, Gender and Water: Securing water for improved rural livelihoods - The multiple-uses system approach, 2012, p.13.

lead only to women's access to water and the equitable distribution of productive resources, but also improves the performance and sustainability of WUAs itself as in the Upper East Region Land Conservation and Smallholder Rehabilitation Project in Ghana (LACOSREP - II).<sup>131</sup>

105. In most developing countries, secure access to land is necessary to obtain water rights for productive use in general, and irrigation in particular.<sup>132</sup> Without secure land access or tenure, women cannot obtain access to other resources such as membership in WUAs, credit, financial services and farm investments thus greatly limiting their abilities to improve livelihoods and incomes. And world over, very few women really own land in their names, a fact reflected in their very low share in loans disbursed as financial institutions usually do not consider women creditworthy since they do not have collateral to pledge - primarily land in agrarian economies.

Box 17

**Productivizing water through giving women secure tenure**

In order to increase rice production in a region in Gambia where fertile land with access to fresh water was scarce, provide livelihoods to landless women and make use of privately owned uncultivated tidal swamp lands with perennial access to freshwater, the IFAD-supported Lowlands Agricultural Development Projects (LADEP) brokered a community-enforceable sharecropping arrangement with traditional landowners and landless women, who are traditional rice growers in Gambia. While the owners of the swamp land lacked the labour to undertake reclamation activities, women and other landless farmers needed incentives to provide labour for land reclamation. This "land-for-labour lease" improved women's access to fertile swamp land for rice production. About 22,216 landless women farmers, who comprised 90 per cent of the total beneficiaries, became farmers; farmland increased and yields rose. Secure tenure ensured access to water that was then used for productive purposes. The project enabled communities to become food secure and resulted in an additional three months per year of rice self-sufficiency at country level.

Source: Gender and Water: Securing water for improved rural livelihoods - The multiple-uses system approach, 2012, p.11.

106. ARRI 2012 found that in the area of gender equality and women's empowerment performance is generally good - some 80 per cent of projects evaluated in 2010-2011 were rated within the satisfactory zone - even though this is based on data for two years only (2010-2011).<sup>133</sup> This improvement is a welcome change. However, there are further opportunities for improvement, as nearly half the projects evaluated were rated as moderately satisfactory and very few were highly satisfactory. In Yemen, while the Raymah Area Development Project helped increase availability of water for women, it nevertheless hardly made any headway in empowering them - women had no voice in the committees - largely because of the local circumstances that were not favourable to participatory approaches and did not value women's role in public spaces.<sup>134</sup>
107. Care must be taken to design interventions appropriate to the circumstances the poor find themselves, lest benefits resulting from increased access to water and agricultural productivity lead to increased work burdens on women and benefits capture by the better-off.<sup>135</sup> In Uganda, the development of water infrastructure

<sup>131</sup> IFAD, Gender and Water: Securing water for improved rural livelihoods - The multiple-uses system approach, 2012, pp. 9, 12, 14, 19.

<sup>132</sup> See <http://www.ruralpovertyportal.org/english/topics/water/ifad/index.htm>. and IFAD, Land and Water Governance, p. 1.

<sup>133</sup> IFAD, ARRI 2012, p.14. This is because gender issues were previously covered under the rural poverty impact domain on human and social capital and empowerment.

<sup>134</sup> ARRI 2010, p. 24.

<sup>135</sup> IFAD, ARRI 2010, pp. 26-27.

led to reduction in time required for collection of water.<sup>136</sup> Similarly, in the villages where the Oudomxay Community Initiatives Support Project (Laos) constructed water supply systems, the maximum time taken to reach the water source reduced to 20 minutes compared with 50 minutes previously. Water borne diseases have reduced as a result of the improved water supply - 68 per cent of the villages where the project constructed gravity fed systems reported that diarrhoea was now a less important problem.<sup>137</sup>

#### Key points

- Despite being managers of water both at on the farm and household level, women are under-represented in related governance institutions and often excluded from decision making processes.
- One of the causes for lower participation of women in WUAs is because the issue of multiple uses of water is not adequately addressed by these bodies.
- One of the important challenges in the organizational design of the WUAs is the identification of ways to involve women and landless people. Evidence points to the fact that ensuring women's active participation improves the performance and sustainability of WUAs itself.
- In most developing countries, secure access to land is necessary to obtain water rights for productive use in general, and irrigation in particular. And world over, very few women really own land in their names, a fact that effectively dis-empowers them.
- Care must be taken to design appropriate interventions lest benefits resulting from increased access to water and agricultural productivity do not lead to increased work burdens for women as well as to higher frequency of water borne diseases.

108. **Poverty impact domain.** When one considers this domain, there have been overall improvements. In the 2002-2004 cohort of projects, impact on rural poverty has gone from 48 per cent of projects in the moderately satisfactory and better zone to 80 per cent in 2009-2011.<sup>138</sup> When one looks at the individual components of this impact domain, apart from the significant improvement in "Natural resources, the environment and climate change" and "Institutions and policies" mentioned above, while 85 per cent of projects have a moderately satisfactory and better rating in "Household income and assets" in 2002-2004 and likewise in 2009-2011, human and social capital and empowerment has gone from 68 per cent to 85 per cent during the same period and food security and agricultural productivity from 67 per cent to 80 per cent.<sup>139</sup>
109. Since water is an embedded component in all IFAD projects, and favourable poverty impacts are the result of the synergistic engagement of all components in project, while it is appropriate to state that water does contribute significantly in improving health and quality of life outcomes in the area of domestic and social use, especially in the water challenged regions, its impact in regard to income generation, livelihoods and economic development is crucially determined by other factors such as access to credit, market access and market conditions, value processing, , the value chain, communications and wider macro conditions. This is especially so, for instance, in the case of irrigated horticultural and commercial plantations which have a relatively long gestation period before their full potential is realized, during which investments must continue to be made and unexpected changes in the environment can jeopardize prospects.

<sup>136</sup> IFAD, Area Based Agricultural Modernisation Program, PPA, 2012, no. 10.

<sup>137</sup> IFAD, PPA, 2011, no.171, p. 24.

<sup>138</sup> IFAD, ARRI 2012, p.14 and annex 5, p. 54.

<sup>139</sup> Ibid., p.14 and annex 5, p. 59.

110. In the Quinling Mountain Area Poverty Alleviation Project, it has been observed that potable drinking water systems have improved quality of life as well as health by substantially reducing time spent on fetching water. This meant that more time was available for other productive and social activities. Improved availability of water also led to an increase in livestock **production** activities.<sup>140</sup>
111. However, water interventions also have their down side if mitigative measures are not undertaken. In Tanzania's Participatory Irrigation Development Programme (PIDP), as a result of increased areas under irrigation and standing water bodies, higher frequency of water borne diseases, malaria and bilharzias was reported; health-related training especially with regard to protection against water borne diseases was not undertaken.<sup>141</sup> Such was also the case in the Upper West Agricultural Development Project in Northern Ghana where there is evidence of high levels of soil-transmitted helminths associated with standing water.<sup>142</sup>

Box 18

**Reducing hunger, generating surpluses**

The Burundi Rural Recovery and Development Programme by including irrigation and agriculture development helped 42 per cent of households increase their agricultural production by 30 per cent-50 per cent. This resulted in 69 per cent of households having two meals a day in 2009 as against only 13 per cent in 2000. Similarly, water interventions and improved agricultural productivity in the Vietnam Rural Income Diversification Project in Tuyen Quang Province, greatly impacted food security reducing "hunger months" for most families and even generating surplus which enabled some families to sell paddy for the first time ever.

Source: ARPP, 2011, no. 34, p. 8.

112. **Institutions and policies.** There has been a steady and significant improvement in this area. In 2002-2004, only 40 per cent of projects were rated in the moderately satisfactory and better zone respectively; this rose dramatically to 94 per cent in 2008-2010 but declined to 79 per cent during 2009-2011.<sup>143</sup>
113. Water User Associations (WUAs) as an instrument of representative and participatory governance is something that IFAD has strongly and consistently promoted since many years now and can be justifiably proud of this successful and widely adopted institutional innovation. While WUAs are the preferred institutional arrangement for management of group or canal based irrigation projects, other forms of community level organisations are the preferred choice especially where water for domestic uses is concerned or where water for agriculture and livelihoods is not a dominant investment component. Examples of such organisations are Water Management Organisations, Tube Well User Groups, Beel User Groups in Bangladesh; Swamp User Associations in Burundi and Sierra Leone; Water Management Committees in Cameroon; and Water Resources User Associations in Kenya.
114. IFAD's experience in regard to WUAs is mixed. A study conducted by IWMI of 24 projects in East, South East and South Asia (Mongolia, China, Laos, Vietnam, Cambodia, Indonesia, Philippines, Bangladesh, India, Sri Lanka, Nepal and Pakistan), found that 17 of 24 projects studied were successful. South-east Asian projects were the worst performers with five failed cases (out of 12), however here poor performance was concentrated in only two countries, Cambodia and Laos,

<sup>140</sup> IFAD, Interim Evaluation, 2010, no. 9, p. 10; no. 45, p. 11.

<sup>141</sup> IFAD, PPA, 2007, no. 122, p. 25.

<sup>142</sup> IFAD, Interim Evaluation, 2006, no. 11, p. 11.

<sup>143</sup> IFAD, ARRI 2012, annex 5, p. 59.

whereas all others performed well.<sup>144</sup> Another study also conducted by IWMI in the NEN region found that of 12 projects studied in 7 countries (Egypt, Tunisia, Morocco, Sudan, Jordan, Yemen and Azerbaijan) found the overall performance of WUAs disappointing.<sup>145</sup> Of 25 WU's studied in Egypt's West Nubaria Rural development Project, it was found that only 7 (24 per cent) of these could be considered as successful WUUs, whereas 56 per cent of them existed only on paper.<sup>146</sup>

115. IFAD has learnt that for WUAs to function effectively and sustainably:

- (i) Reliable and adequate supply of water that is fairly distributed is essential;
- (ii) Traditional practices must be built upon and beneficiaries must be involved in all aspects of the establishment of the WUA including determining priorities of water distribution and use;
- (iii) In the case of non-canal water sources such as wells and diversion systems, sites chosen should have adequate supplies of water;
- (iv) Security of land tenure and water rights should be assured over the long term;
- (v) Group mechanisms will only work if irrigated agriculture is profitable and is the main livelihood source,<sup>147</sup> there exists proactive local leadership and some degree of collaborative ethos in the community;<sup>148</sup>
- (vi) Women should be effectively represented, actively participate in decision making processes and supported to assume leadership positions;<sup>149</sup>
- (vii) The institutional framework must be supportive (having clearly defined and understood rules and regulations, is enforceable and be trusted by the people;<sup>150</sup>
- (viii) In the case of canal systems, WUAs may have to be federated at the branch level in order to be able to influence reliable, timely and adequate supply of water and electricity;
- (ix) Members should be willing to contribute in a timely fashion to operational and maintenance costs;
- (x) Substantive efforts and investments need to be invested in capacity building, skills enhancement and knowledge enhancement for WUA's to function successfully;
- (xi) Irrigation should be viewed as only one input in increasing production and incomes with complementary components such as improved agricultural inputs and farm management practices, post-harvest handling and processing, logistics, access to credit and favourable market conditions being equally important, if not more so;
- (xii) Technologies that are tested , simple , easily and affordably maintainable locally should be adopted;<sup>151</sup> these should include those that increase water efficiencies ("more output per drop"), reduce losses (from evaporation, seepages and wasteful practices such as flood irrigation), and accelerate recharge of ground water sources must be adopted;

<sup>144</sup> IWMI, Water User Associations in the Context of Small Holder Agriculture, 2011, 26, 27.

<sup>145</sup> IWMI, Water User Associations in the NEN Region: IFAD Interventions and Overall Dynamics, (Draft), 2012, p. 60.

<sup>146</sup> IWMI, Water User Associations in the Context of Small Holder Agriculture, 2011, Section F, p. 88.

<sup>147</sup> Ibid., no. 7, p. 90.

<sup>148</sup> In Albania, WUA did not succeed because the community's preference was for individual rather than group initiative.

<sup>149</sup> An IFAD-IWMI study of Water Users Unions in the area of the West Nubaria Rural Development Project (WNRDP), 2012, found that of 25 case studies surveyed, six WUUs could be considered as successful and 50 per cent of them have a woman as head (2 cases) or secretary (1 case), p. 87.

<sup>150</sup> In Ethiopia, the WUAs were difficult to sustain because people distrusted the government promoted cooperative societies preferring instead their traditional arrangements.

<sup>151</sup> IWMI, Water User Associations in the Context of Small Holder Agriculture, 2011, pp. 31-33.

- (xiii) WUAs should, as quickly as possible, become “integrated business promotion centres” which supply required inputs, services and remunerative markets to its members while supplying markets with reliable, high quality, aggregated products,<sup>152</sup> on the other, while at the same time actively pursuing other business opportunities as part of a risk diversification strategy;
- (xiv) WUAs must seek out public-private-civil society partnerships in both product and input markets to better leverage the market; the technical knowledge of processors, wholesalers, retailers and exporters, the financial and institutional resources of the public sector and the facilitation, organisational and networking skills of NGOs;<sup>153</sup> and
- (xv) Ways must be found to ensure that WUA are provided with technical and financial support for some years after project completion to ensure consolidation of good practices and to facilitate their transformation into business enterprises; furthermore, in cases where large scale maintenance works, such as the main canals or pipelines from dam to farmlands will have to be undertaken, arrangements to have these funded by government will have to be secured.

Box 19

**Traditional and customary practices shape the functioning of WUAs in Morocco**

In the Taourirt-Taforalt Rural Development Project, the governance and management of the formal WUAs have been shaped according to the ancestral rules defining water rights and distribution, e.g. in Farcia and Taghsrout. Every farmer in each village knows his water right and when his turn is due and elders mediate conflicts. Maintenance of main canals known as *séguías* and weirs are done collectively and those who cannot take part in the works have to pay a worker to replace them. The only change is that irrigation turns come now more frequently than previously (e.g. in Aharrach a turn that used to irrigate 10 olive trees, now irrigate 30) due to primarily due to the improvement of the irrigation infrastructure (lining of *séguías*).

Source: IWMI, Water User Associations in the NEN Region: IFAD Interventions and Overall Dynamics, (Draft), 2012, p. 48.

- 116. **Sustainability.** There has been a marked improvement in this regard with only 41 per cent projects in 2002-2004 rated in the moderately satisfactory and better zone respectively; this has gone up to 60 per cent of projects during 2009-2011.<sup>154</sup> The water related projects (table 3) have a sustainability rating similar to overall projects (170).
- 117. IFAD has been trying out various new approaches to ensure sustainability of its projects. In order to promote more sustainable and equitable water management practices, IFAD has joined forces with a global community of practice that encourages multiple water use systems. These systems work to secure synergies in water use for different purposes, from different sources, by different people, at different times throughout the year. Land and water management interventions especially involving common property resources are most at risk of decline in the post project period. IFAD is pilot testing a “payment for environmental services” approach in Africa for watershed restoration and maintenance whereby downstream water users and communities pay upland dwellers for improved management of their natural resources through negotiated environmental service contracts. Similar IFAD-funded work is also going on in Asia, where RUPES-II

<sup>152</sup> IFAD, Regional Report-WCA/ 2011, no. 6, p. 2.

<sup>153</sup> An example is the use of smart information and communication technologies for water and weather forecasting piloted by Egyptian farmers’ and water users’ associations (IFAD, Annual Report, 2011, p. 10).

<sup>154</sup> IFAD, ARRI 2012, annex 5, p. 56.

(Rewarding Upland Poor for the Environmental Services They Provide) is currently active in 15 sites in China, Indonesia, Nepal, the Philippines and Viet Nam.<sup>155</sup>

118. **Innovation, replicability and scaling up.** There has been a decline in recent years from a peak of 95 per cent of projects rated moderately satisfactory or better in 2007-2009 in regard to this domain, to 78 per cent in 2009-2011, though this is still higher than the 57 per cent of projects rated under this domain in 2002-2004. However, for the first time ever during this period, 4 per cent of projects were rated as "highly satisfactory", indicating that the increased focus IFAD is devoting to this area is now beginning to show results.<sup>156</sup>
119. There are several projects where water sector related investments are either being scaled up or showing promise of being replicated. The Rural Livelihoods Improvement Programme in Attapeu and Sayabouri (RLIP) of the Lao PDR has been path-breaking in mainstreaming participatory community development planning approaches in district planning and government systems and shows promise of further replication by new IFAD programmes and other donor initiatives. In Senegal, under PRODAM-2, the introduction of relatively large-scale drip irrigation, siphon delivery of water (instead of ditches) to farmlands and land consolidation and redistribution, consensually and participatorily arrived at are innovations that have not only increased agricultural production, reduced the laborious process of irrigation but has also prevented conflicts and given women and young people access to the benefits of the project.
120. A notable success of water related up- scaling is the Rehabilitation and Community-based Poverty Reduction Project (RCPRP) in Sierra Leone, which ran from 2006 to 2011. Perennial Inland Valley Swamps (IVSs), which cover nearly 700,000 ha play an important role in Sierra Leone's agriculture. However, due to issues of planning, selection, design and maintenance, exacerbated by the civil war, many of these systems were neglected or abandoned. The PTA Water Unit of IFAD provided technical assistance and devised innovative implementation, organisational and management arrangements that not only helped rehabilitate 550 ha of perennial swamp areas that nearly doubled rice production, but equally importantly, led to the creation of local employment opportunities (especially for the young) and also a favourable business environment for small technical agencies providing a suite of services to farmers to establish themselves and thrive. The success of this program has resulted in a second phase that includes rehabilitation of a further 3,000 ha of swampland in the eastern part of the country as well as another 4,000 ha which IFAD has been asked to manage by the Global Agriculture and Food Security Programme (GAFSP), making an additional upscaling of 7,000 ha. Recognising the potential of the approach developed by IFAD, the Government of Sierra Leone has decided to adopt and apply the rehabilitation and development of IVS as part of their national rural development policy.<sup>157</sup>

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<sup>155</sup> IFAD Annual Report, 2010, pp. 8-9: The Pro-poor Rewards for Environmental Services in Africa (PRESA) in collaboration with the World Agroforestry Centre (ICRAF).

<sup>156</sup> IFAD, ARRI 2012, annex 5, p. 57.

<sup>157</sup> IFAD, "Supporting perennial inland valley swamps - PTA Water Support to implementation for improved scaling-up", Draft by Sarah Morgan.

**Public competitions facilitate efficient resource allocations and creative solutions**

In the Sierra Sur project in Peru, local entrepreneurs/ communities present their business plans or natural resource management projects to a panel of judges – community members, local government officials and project representatives – who award funds to the best entries. In a project area which is a massive 77,700 sq.kms, one of the poorest regions in Peru, and where agro-businesses are challenging due to lack of water and difficult growing conditions, this approach has resulted in impressive results on the ground where communities and entrepreneurs put in a minimum of 20 per cent own contribution, negotiate competitive rates with suppliers and service providers and hire technical advisors when required.

Source: IFAD Annual Report, 2010, pp. 30-31.

121. **An overview.** From the above, given the overall improvement in portfolio performance and the fact that water resources development is undertaken in around 68% per cent of IFAD projects, one can infer that the water sector is playing an increasingly effective role in reducing rural poverty. Synergistic relationships between complementary sectors (processing, market development, etc.) are becoming more efficient and the institutional, regulatory conditions that promote sustainability and up scaling are improving. With IFAD's comparative advantage in small holder farming systems and governments increasingly seeing IFAD as a partner in their development programmes for rural poverty reduction, IFAD's experience in the water sector is not only relevant, but its engagement can be expected to grow in the decades ahead, especially in view of climate variability.

**Key points**

- Water User Association (WUAs) is something that IFAD has strongly and consistently promoted since long and can be justifiably proud of this widely adopted innovation.
- WUA's have served as training fora for building skill and capacities and the confidence needed for effective governance and management of group enterprises.
- IFAD's experience in regard to WUAs is mixed. WUAs in East, South East and South Asia showed a greater overall success rate than those in the NEN region, which was generally disappointing.
- Sustainability: There has been a marked improvement in this regard with only 41 per cent projects in 2002-2004 rated in the moderately satisfactory and better zone respectively; this has gone up to 60 per cent of projects during 2009-2011.
- IFAD has been trying out various new approaches to ensure sustainability of its projects by joining forces with a global community of practice that encourages multiple water use systems and by piloting "payment for environmental services" projects.
- While innovations and upscaling has shown a downward trend in regard to projects rated moderately satisfactory or better, there are, nevertheless, several projects where water sector related investments are either being scaled up or showing promise of being replicated.
- Overall, the water sector is playing an increasingly effective role in reducing rural poverty. Synergistic relationships between complementary sectors are becoming more efficient and the institutional, regulatory conditions that promote sustainability and up-scaling are improving.

**V. Water and the multilateral development banks**

122. **The World Bank.** The World Bank is heavily invested in the water sector with over a third of its projects between 1997-2007 containing water related investments. During this period, water loan commitments grew 55 per cent across 1,864

projects worth US\$118.4 billion.<sup>158</sup> Except for hydropower, dam building, surface irrigation and drainage projects which are largely “stand-alone water ” projects, most water related investments are embedded in wider developmental projects, such as urban renewal which also includes water infrastructure or drafting water policy within a larger environmental policy framework. Funding in the water sector encompasses water supply (for domestic, industrial and environmental purposes) and sanitation, irrigation and drainage, hydropower and water resources management. Wastewater treatment and irrigation projects are in the majority; however, the largest amounts of money are committed to projects that involve irrigation and hydropower or dam activities.<sup>159</sup>

123. The first comprehensive water policy of the World Bank which was formulated in 1993<sup>160</sup> moved the Bank away from an infrastructure focus to a multi-sectoral, integrated water resources management (IWRM) approach as opposed to discrete investments, as previously. The current policy framework was initiated in 2003 when the Bank adopted a new water resources strategy that reintroduced infrastructure as an investment focus and looked at water management and the connections between resource use and service delivery.<sup>161</sup>
124. Supporting the World Bank’s engagement in the water sector is an initiative called the Water Partnership Programme (WPP)<sup>162</sup> which is anchored in the World Bank’s Water Unit in the Sustainable Development Network. WPP funds activities that strengthen World Bank water projects through innovative analytical work, capacity building, innovation and knowledge management. The WPP also funds the Global Water Expert Team (WET), a technical support service<sup>163</sup> that identifies and mobilizes expertise that provides support across all water subsectors.
125. At the country level, the World Bank undertakes country water resources assistance strategies (CWRAS) that respond to country-specific challenges and priorities. These CWRAS are related to the Country Assistance Strategies (CASs) and Poverty Reduction Strategy Papers (PRSPs) and shape water related investments, thus bringing about alignments with other sectoral interventions while complementing and contributing to shaping the CASs and PRSPs.<sup>164</sup>
126. **Asian Development Bank.** The Asian Development Bank’s (ADB) Water Policy released in 2001, titled, “Water for All” has seven main elements which seek to promote national water sector reforms, integrated water resources management, improving and expanding delivery of water services, encouraging water conservation and system efficiencies, regional cooperation in water use, facilitating the exchange of water sector information and experience and improving governance in the water sector. Under these seven elements, 40 objectives or approaches are defined which oblige the ADB to adopt a cautious approach to large water resources projects, extend support for viable hydropower projects, increase its understanding of the effects of periodic El Niño and La Niña events on climate, develop modalities for public-private partnerships, develop monitoring and benchmarking exercises for irrigation, prioritize optimization of existing water systems and incorporate gender approaches in its water sector operations.<sup>165</sup>

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<sup>158</sup> Water and Development, p. 8.

<sup>159</sup> Ibid., p. 11.

<sup>160</sup> Water Resources Management Policy Paper.

<sup>161</sup> Water and Development, p. xi.

<sup>162</sup> The Water Partnership Program (WPP) is a multi-donor trust fund established in 2009 supported by the governments of the Netherlands, Denmark, and the United Kingdom.

<sup>163</sup> WET was created in January 2011 by merging the existing Expert Support Teams (ESTs) in the Water Anchor – the Groundwater Management Advisory Team (GW-MATE), the Hydrology Expert Facility (HEF), and the Sanitation, Hygiene and Wastewater Support Service (SWAT).

<sup>164</sup> <http://water.worldbank.org/about-us/strategy/cwrass>.

<sup>165</sup> ADB, Water Policy and Related Operations: An Evaluation, 2010, no. 1, 2, 3, p. 56.

127. In the ADB, the water sector is anchored in the Regional and Sustainable Development Department (RSDD) which is mandated to ensure that projects are in accordance with the ADB water policy; provide technical assistance to project preparation and implementation; support regional departments in their consultations with client countries as well as national water policy formulation; ensure a poverty focus in water projects and promote partnerships at project, river basin, national, and regional levels to optimize investments.
128. Following the launch of the Water Policy in 2001, the ADB established the Cooperation Fund for the Water Sector, (CFWS) a multi-donor facility to catalyze the implementation of the water policy.<sup>166</sup> In 2006, The Water Financing Programme Fund (WFPF) was launched in March 2006 as a successor fund to the CFWS to carry forward the implementation of the water policy.
129. **The African Development Bank (AfDB).** The AfDB's engagement with the water sector is guided by the Policy for Integrated Water Resources Management released in 2000. The Bank Policy revolves on two basic principles, namely, (i) that water should be treated as an economic, social and environmental good; and (ii) policies and options that guide water resources management should be situated within an integrated framework. Its central objective is to promote efficient, equitable, and sustainable development through integrated water resources management. With only 5 per cent of available water resources developed and inadequate water and sanitation infrastructure costing Africa the equivalent of 5 per cent of GDP, Africa needs massive investments in integrated water development and management to achieve sustainable water, food and energy security for poverty reduction, green and inclusive growth.<sup>167</sup> This IWRM Policy has guided the formulation of the Bank's three Strategic Plans where the goal in the water and sanitation sector is to increase its financing mainly for rural interventions where the poorest 65 per cent of the population live, while maintaining support for peri-urban and urban areas, irrigation, hydropower and transboundary water resources management.
130. The African Development Bank's Strategy for 2013–2022 focuses on two objectives, namely promoting inclusive growth and transitioning to green growth, the latter in which water plays an important role.<sup>168</sup> Furthermore, the Bank sees Africa's 80 trans-boundary water basins as providing a unique opportunity to facilitate regional integration and therefore affirms its commitment to supporting trans-boundary basins and basin organizations to foster cooperation, develop large infrastructure, promoting peace and development.<sup>169</sup>
47. The Water and Sanitation Department, established in 2006, supports and coordinates the water sector activities and promotes IWRM across all water interventions in the Bank. Supporting the Bank's water efforts are four complementary water initiatives - Rural Water Supply and Sanitation Initiative (RWSSI), the African Water Facility, the Water Partnership Programme and the NEPAD Infrastructure Project Preparation Facility (NEPAD-IPPF).<sup>170</sup>
131. **Inter-American Development Bank (IDB).** Adopted in 1998, the Strategy for Integrated Water Resources Management serves as the guiding framework for all water interventions funded by the IDB. The goals of the Bank's strategy are to support water resources conservation through engineering a shift from development to management and from a sectoral to an integrated approach. The objective is to include critical aspects of integrated water resources management related to each country's water resources sector, in general, in the Bank's water-

<sup>166</sup> The Fund was closed in May 2010.

<sup>167</sup> AfDB, "At the Center of Africa's Transformation Strategy for 2013–2022, 2013, pp. 7, 13.

<sup>168</sup> Ibid., p. 1.

<sup>169</sup> Ibid., pp. 13, 15.

<sup>170</sup> Ibid., p. 24.

related operations. The strategy emphasizes flexibility in application suited to the specific needs of member countries and stresses the need to work within the existing socio-cultural, legal and economic institutional framework of the country while proposing legal and institutional changes in the water sector where necessary.<sup>171</sup>

132. In 2007, the IDB launched the Water and Sanitation Initiative with the objective to help the countries of Latin America and the Caribbean achieve universal access to sustainable, reliable, quality water and sanitation service, taking into account the population's ability to pay. The initiative has developed strategic guidelines, specific targets and special financial products to support solutions tailored to each country's needs.
133. **A comparative assessment.** Generally, in terms of overall goal, objectives and approaches, the water policies of all the IFIs are largely consistent. It should be noted that IFAD, unlike the other IFIs does not have a specific Water Policy, though the same has been addressed in several of its sectoral policies such as on Gender, Environment, Land Tenure, etc. There are differences however, in terms of what is financed, priorities and approaches adopted. While the MDBs' interventions in the water sector are multi-sectoral including building dams for large-scale irrigation and power generation, urban and industrial applications, IFAD restricts itself exclusively to rural areas with a focus on small holder irrigation and water for livelihoods purposes (e.g. artisanal fisheries, dairy, etc.). While water supply for domestic and sanitation purposes is also included in some IFAD projects, this is largely out of situational necessity and IFAD does not see its comparative advantage in this sector. IFAD's target group is largely the poor; in the MDB projects, they are also included.
134. In terms of similarities, all adopt an IWRM approach including at the basin level, capacity development, autonomy and accountability of service providers, involvement of the private sector at least in managing infrastructure, user participation to ensure accountability, appropriate design, cost recovery, and sustainability of investments, tariff reforms and promotion of cost recovery principles, establishment of regulatory systems, inclusion of the poor and stakeholder participation in water resource management. All have adopted stakeholder participatory processes for ownership building though IFAD is strongest in these followed by the World Bank. Moreover, like the MDBs, IFAD also has a "Water Anchor" tasked with a similar, albeit restricted mandate (it doesn't for instance, engage in trans-boundary water issues); in comparison though, it is highly under-resourced. In terms of performance of the water portfolio, in all IFIs, it is seen as performing well in relation to the objectives set out. Like the World Bank, IFAD is also concerned with the impact of climate change on water supplies as evidence from the setting up of an Environment and Climate Division and the launching of a specific programme for this purpose, the Adaptation for Smallholder Agriculture Programme (ASAP), a multi-donor grant cofinancing programme integrated into IFAD-supported investments.
135. In terms of differences, (i) while the other MDBs<sup>172</sup> support targeted and means-related subsidies, ADB's calls for elimination of subsidies, albeit gradually; (ii) ADB has taken a conservative approach to large infrastructure projects, unlike the World Bank, which has aggressively re-engaged since 2003 and the AfDB and IDB; (iii) the ADB has no explicit policy for small water supply providers whereas the World Bank, AfDB and IFAD do; and (iv) a relatively small proportion of ADB assistance has gone to rural water supply and sanitation as compared to that of

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<sup>171</sup> IDB, Strategy for Integrated Water Resources Management, 1998, p. 7.

<sup>172</sup> World Bank, IFAD, the African Development Bank and Inter-American Development Bank

IFAD's (the largest of all) and the other IFIs;<sup>173</sup> (v) IFAD does not engage in transboundary water issues, whereas the other three do; and (vi) the World Bank is the only one of the MDBs that formulate CWRAS that respond to country-specific challenges and priorities while the ADB has signalled its intention to do so.

136. **Key learnings.** The World Bank's Evaluation of its water portfolio highlighted several learnings and made recommendations as follows:<sup>174</sup>

- (i) Effective management of water demand is a critical challenge worldwide in the face of increasing water scarcity. Demand management approaches must be monitored to identify what works and doesn't and these lessons of experience must be built upon;
- (ii) IWRM has largely been successful where shocks and calamities have occurred necessitating concerted community action, not as a result of a conscious effort. This call for identifying new ways of heightening stakeholder concern by making data and status information freely available to the citizenry;
- (iii) Watershed management projects that take a livelihood focused approach perform better than those that do not;
- (iv) While projects may contain funding for water quality management, in fact, few countries measure water quality. The situation is alarming as water quality in the top five borrowing countries is declining; the situation is comparable in most, if not all, water stressed countries;
- (v) Sanitation needs greater attention due to population growth, rapid urbanization, and expansion of piped water services and increased household water use which in turn will accelerate demand for adequate sanitation. Within sanitation projects, more emphasis is needed on household connections;
- (vi) For water projects operating in a decentralized environment to succeed, responsibility assigned to lower levels of government must be matched with the required budget and authority;
- (vii) With some 75 per cent of the world's population soon to be living near the coast, making them more vulnerable to the impacts of climate change, increased attention will need to be given to coastal management;
- (viii) Support for institutional reform and capacity building has had limited success in the water sector largely due to weak institutions;
- (ix) Tackling the water crises confronting water stressed countries will require active collaboration with many partners and stakeholders;
- (x) Successful addressing of the Bank's Water Resources Sector Strategy ( as also that of the other MDBs and IFAD's too) will require a great deal of robust data (social, economic, hydro-meteorological) on water resources in order to promote better understanding of the linkages between water, economic development, and project achievement .Data gathering must become a higher priority;
- (xi) Countries must treat such data as a public good and make it freely available so that stakeholders are informed, are able to monitor developments and mobilize the political will necessary to confront entrenched water problems; and
- (xii) When designing water resource related hydrological and meteorological monitoring systems, close attention must be paid to stakeholder participation, maintenance, and the appropriate choice of monitoring equipment and facilities.

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<sup>173</sup> ADB, Water Policy and Related Operations: An Evaluation, 2010, no. 31, p. 7; no. 166-169, 171; p. 39.

<sup>174</sup> World Bank, An Evaluation of World Bank Support, 1997–2007: Water and Development; World Bank, 2010, pp. xii – xiv; pp. 81-82.

### Key points

- Generally, in terms of overall goal, objectives and approaches, the water policies of all the IFIs are largely consistent.
- All the MDBs have a specific Water Policy except IFAD, though the same has been addressed in several of its sectoral policies.
- All adopt an IWRM approach including at the basin level, amongst others, human and institutional capacity development, cost recovery, inclusion of the poor and stakeholder participation in water resource management.
- IFAD's target group is largely the poor; in the MDB projects, they are also included.
- The differences are in terms of what is financed, priorities and approaches adopted. While the MDBs' interventions in the water sector are multi-sectoral including building large dams, urban and industrial applications, IFAD restricts itself exclusively to rural areas with a focus on small holder irrigation and water for livelihoods purposes.
- IFAD does not engage in transboundary water issues, whereas the other three do.
- The World Bank is the only MDB that formulates Country Water Resources Assistance Strategies (CWRAS) that respond to country-specific challenges and priorities.

## VI. Overview and conclusions

137. Water has always played a crucial role in IFAD's developmental initiatives given its focus on rural poverty. Its interventions in the water sector have been embedded in 68% of developmental projects with agricultural water management securing the largest amount of funds. While WASH has traditionally been a part of IFAD's projects, this aspect is now reducing significantly in IFAD's portfolio as IFAD does not see itself having a comparative advantage in this sector.
138. IFAD's engagement in the water sector is supported and endorsed by various strategic, policy and operational documents - the 3<sup>rd</sup> and 4<sup>th</sup> SF, the 8<sup>th</sup> and 9<sup>th</sup> Replenishment documents, various Policy Statements of which 4 make significant references to water, the RB-COSOPs and various operational statements by the Management from time to time. IFAD is also engaged in policy dialogue at various levels- national, regional and international either on its own or in partnership with other developmental institutions.
139. The RB-COSOPs which set the framework for IFAD's strategic and operational engagement at the country level have progressively reflected a growing awareness of the importance of water as both a constraint and an opportunity for poverty reduction, and therefore a determinant of IFAD's developmental effectiveness. The various delivery instruments - innovation, policy dialogue, knowledge management, investment programming and partnerships - are now much better aligned in support of effective delivery of its water-related strategic objectives. Recent RB-COSOPs also give increasing prominence to climate change, its relationship with water and the consequent impact on the poor.
140. IFAD's engagement in water at the project level reflects a variety of purposes such as to improve a pre-project situation (flood control, mismanaged water resources, etc.) or realize better outcomes (greater productivity and revenues); cover a wide range of interventions such as rain water harvesting, rehabilitation of small irrigation systems, drinking water schemes, etc.; involve a variety of institutional structures and facilitating arrangements such as WUAs, support to legislative enablements, capacity building of state and non-state water related agencies, technical provisioning; and seek to actively involve beneficiaries in project design and implementation (including insisting on own contribution towards costs) in order to secure ownership and sustainability.

141. IFAD recognizes that, depending upon a project's specific context and objectives, investments in water need to be complemented by progress in related areas such as institutional development and capacity building, non-farm sector promotion, market development, etc., in order to be effective. Performance of these "non-water" sectors determines impact and sustainability of outcomes from water investments.
142. With water being an "embedded" component in IFAD projects<sup>175</sup> and outcomes the composite result of all the "non-water" components that make up a project. When compared against the performance of 170 assessed projects in the ARRI data base, "water-heavy" projects not only do not show any statistically significant improvements in any of the key evaluation criteria, but in fact lag in some of them, thus confirming this dependence.
143. While IFAD insists on beneficiary contribution and participation, there is no rigorous study conducted to assess whether this has actually occurred as intended or if this has made any difference to improving performance or sustainability of the intervention. However, in the 3 crucial areas affecting water, namely, (i) natural resources and the environment, (ii) gender and women's empowerment and (iii) institutions and policies, significant progress had been made.
144. IFAD has played a major role in developing the concept and practice of WUAs. However, IFAD's experience in this regard is mixed and it is necessary to take stock of lessons learnt with a view to increasing the effectiveness and sustainability of these institutions.
145. While IFAD has been actively contributing to international and regional policy dialogue, it has been less active and successful at the national level. Sustainability, up-scaling of innovations and replication continue to be a challenge. IFAD will need to proactively seek out partnerships with similarly aligned institutions in order to engage with national authorities to effect an enabling policy framework. A facilitating policy environment is key to progress in these areas.
146. While IFAD does not have a specific Water Policy, unlike the other MDBs, it compares well in regard to its chosen area of AWM, in which, it can be said to have a distinct comparative advantage. All the other IFIs cover the entire spectrum of water investments such as big dam building, hydro-electric power and water in extractive industries. Moreover, IFAD's insistence on beneficiary participation, inclusion of the poorest and preferred choice of working in the most backward and remote regions, sets it apart from other IFIs. These strengths of IFAD will serve it well as it seeks to upscale its experiences in the water sector in partnership with other IFIs.
147. Overall, IFAD's engagement with the water sector has been improving due to better performance of synergistic sectors as well as greater alignment between the different instruments that IFAD deploys to further strategic objectives. With IFAD's comparative advantage in small holder agriculture, coupled with the need to increase food production and generate rural livelihoods in a context of increasing water scarcity and climate variability, IFAD's engagement in the water sector can only be expected to deepen in the years ahead.

## **VII. Emerging issues, challenges and opportunities**

148. **Water - IFAD's "Big Bet"** for lifting people out of poverty: In the coming decades, water will increasingly be viewed as both a constraint for development as well as an opportunity for enterprise and innovations- technical, organisational and

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<sup>175</sup> Even in irrigation-related projects, water investments range from 68% as in the case of the North East Development Project (Azerbaijan) and as low as 18 per cent as in the West Noubaria Rural Development Project (Egypt).

commercial. This offers an opportunity to IFAD to explore new ways of helping the poor to increase access to water by (i) adoption of efficient ways of water harvesting, recycling and re-using waste water; (ii) adopting technologies to increase efficiency and productivity of water thus creating opportunities for business and new markets as in Ghana where street vendors are selling a simple, low-cost device for turning wastewater into water safe enough for food use.<sup>176</sup> Large scale promotion of decentralized, low tech irrigation systems (such as drips, sprinklers, etc.) can create a business ecosystem for small entrepreneurs (manufacturing and distribution) and create demand from farmers for higher value services (advisories, etc.), technologies and products, thus catalysing a “virtuous cycle” of development. This is an area where IFAD can make a difference. It can begin by specifically declaring water as one of its “big bets” areas and define specific water-related areas that offer opportunities for innovative solutions and creative partnerships.

149. **Water productivity as a “game changer”.** Managing water demand and enhancing water productivity is critical to IFAD’s developmental effectiveness. Most international development agencies, such as UN-Water, the Global Water Partnership and the World Water Council, agree that better governance of existing water resources, rather than increasing availability, is the key to resolving the growing water crisis. This would require putting in place the political, technological, financial, policy, legislative and administrative systems needed to develop, integrate and manage conventional and non-conventional water resources (brackish water and recycled grey water), ensure equitable delivery of water-related services and increase water use efficiencies so as to obtain more output per drop of water. IFAD may want to consider making this a thematic (increasing water productivity) area – as it has done in the case of climate adaptation – and set up a Study Group to consider IFAD’s engagement in this area.
150. **Focus on Rainfed agriculture.** This is an area where IFAD has a comparative advantage, namely, small holder farming involving user managed small scale irrigation systems and rainfed farming systems. It is now generally accepted that rainfed farming holds the key to increasing food production and agricultural productivity. And rainfed regions are where the bulk of poor smallholder farmers live, the natural target group of IFAD. However, promoting viable and sustainable agricultural intensification in dryland areas will require an integrated (which includes value chains and markets) and systems approach in order to achieve sustainable outcomes. IFAD has developed sectoral competencies in this regard – NRM, watershed management, irrigation, crop intensification, CBOs, etc. – it will need to bring these together in a synergistic arrangement that can be adapted to local conditions and the absorption ability of small farmers. IFAD may wish to consider partnering with related agencies to identify/ develop a strategy and pedagogy that can work a “brown revolution” in rainfed agriculture akin to the “green revolution” of irrigated agriculture.
151. **Adopt a holistic and systems approach** when implementing water-related projects in order to understand and assess how water is perceived, the role it plays in a community and the likely impacts of water interventions: Water is not merely an environmental service, but also a cultural and economic resources with multiple and complex backward and forward inter-linkages. When these relationships are affected, the consequences can be long term, some of which can be unintended and adverse. In regions where land holding is severely skewed in favour of the few, improving irrigation systems in the absence of land reforms, can lead to even greater marginalisation of the poor as economic and dominance relationships get further consolidated (Gash Scheme, Sudan). Hence, a comprehensive assessment of the socio-techno-economic-cultural milieu should be conducted when planning

<sup>176</sup> IFAD Annual Report, 2010, p. 10; for the device, see <http://www.sharefair.net>.

for major water-related interventions to ensure desired outcomes are achieved and risks minimized.

Box 21

**Responding to needs.....setting people free**

In the semi-arid north eastern part of Brazil, water was socio-political instrument used by former landlords to control the rural poor and keep them dependent – the former controlled access to water. By leveraging public investment programmes, the Dom Helder Câmara Programme (DHCP) provided a large number of families with water tanks to catch and store rainwater, built reservoirs, artesian wells and underground dams, thus reducing their on the landlords.

Source: IFAD, Sustainable Development Project for Agrarian Reforms Settlement in the Semi-Arid North East (Dom Helder Câmara Project), PPA, 2011, 83, p. 20; no. 95, p. 22.

Box 22

**Unintended consequences of desirable investments can be disastrous**

In Asia, excessive irrigation has resulted in nearly 40 per cent of irrigated land in dry areas being affected by salinization, leading to millions of hectares losing their ability to support productive agriculture. Excessive water extraction has also resulted in water scarcity in major river basins and declining levels of groundwater. Waterways and aquifers are becoming increasingly polluted by overuse of fertilizers and pesticides leading to adverse consequences for human and other life forms.

Source: IFAD, Poverty Report, 2011, pp. 153-154.

152. **Continue to engage in natural resources and ecosystems management.** IFAD must continue and strengthen its engagement with NRM and ecosystems management in order to ensure water provisioning, sustainable agricultural intensification and adaptation to climate change. Not all IFAD-funded projects can address NRM issues since some are too large, long term and complex for IFAD to deal with on its own. IFAD would need to establish partnerships at the country level with other agencies that have a comparative advantage on NRM and consistently engage with borrowing governments to facilitate timely release of resources and secure policy enablements.<sup>177</sup>
153. **Risk analysis and mitigation must be part of project design.** With water resources particularly vulnerable to drought, climate change or extreme meteorological events, it is necessary that project design in countries prone to such shocks must include risk analysis and mitigation provisions, especially in respect to how the poor are impacted. In Yemen, for instance, prolonged drought hindered the use of improved technology, limited farmer investment and reduced off-take of irrigation loans, which, in any case, because of the large amount required effectively shut out accessibility to the poor.<sup>178</sup>
154. **Champion the cause of secure land rights for the poor.** Only when farmers have secure access to land and water will they invest in new technologies, new skills and social organisations that utilize resources productively. Given that, especially at the international level, land and water issues are treated separately and are increasingly being decoupled,<sup>179</sup> IFAD should champion the cause of secure land tenure for the poor and continue with efforts to sensitize decision makers of the intricate links between water accessibility and land tenure.<sup>180</sup>
155. **Promote gender in water and women’s empowerment.** In IFAD water projects, water systems that provide services for *multiple uses of water* should be promoted as they best address women’s needs. Gender-sensitive project design

<sup>177</sup> IFAD, ARRI 2011, p. 74.

<sup>178</sup> IFAD, ARRI 2010, p. 27.

<sup>179</sup> IFAD, Fighting water scarcity in the Arab countries, 2009, p. 4.

<sup>180</sup> IFAD/CFS has recently adopted the Voluntary Guidelines on Land Tenure (personal communication from Rudolph Cleveringa).

that facilitate inclusion and effective participation of women in decision making processes, build capacities and reduce work loads of women are needed to enable rural women to benefit fully from water related project activities. Ways should be devised that incentivize men to become partners in empowering their womenfolk, for without their active support it is difficult, if not unlikely, to sustain gains that women might achieve.

156. **Develop a fresh approach to water and build institutional capacities.** As economic growth accelerates in most developing countries creating additional demands for water,<sup>181</sup> water is increasingly becoming a “contested commodity”. This is often the case in industries that are water intensive—mining, steel, electronics, beverages, etc. This is an area where IFAD can play a role in helping water abundant communities transform water, a public good, into an economic commodity with a price and value accruing to the community – in other words, creating local water markets that are sustainable in favour of local communities.<sup>182</sup> It can also help negotiate “win-win” outcomes for upstream and downstream users. In fact, IFAD has already forayed in this new area through a grant financed project in Peru which seeks to bring poor communities in the northern highlands of Peru and extractive industries together to broker favourable outcomes to both parties.<sup>183</sup> For such an initiative to succeed, it is essential to establish good water and land governance systems, an area of weakness in many countries IFAD is working in, at all levels. The need to build institutional capacities at all level, from local communities upwards to the national level is urgent and is an area where IFAD, in partnership with other agencies, can make a significant contribution.
157. **Build IFAD’s capacities and access to expertise.** With water growing in importance on the development agenda, the issue of IFAD’s capacity to meet the additional demand for expert guidance to projects has been raised. At present, the unit handling water in the PTA consists of two persons. The general consensus<sup>184</sup> seems to be that instead of adding additional personnel to this unit, Country and Regional units should identify and empanel local experts, especially those with successful practical experience, to provide technical and capacity building support to country projects. Emphasis should be given to engaging those with traditional knowledge and those who have local credibility. This is particularly important if IFAD is to venture into the emerging area of collaborative water markets development involving communities and bulk users of water. In addition, the initiative IFAD has with the UNESCO-IHE Delft to train water professionals, needs to be widened to include similar trainings in developing country institutions, even perhaps, in collaboration with Delft or other international institutions of repute with developing country experience. This would help widen the pool of expertise locally available as well as establish a channel for professional recruitment to IFAD. The discussions now underway in IFAD to formulate an “IFAD Operational Plan on Water” is a needed step in the direction of equipping country programme managers to better identify and assess water projects.<sup>185</sup>
158. **The PTA Water Unit should play an expanded knowledge management and advocacy role:** The Unit in PTA plays the role of knowledge provider and capacity builder which is appreciated. PTA is evolving from KM on ‘what is smart’ to also

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<sup>181</sup> From industries (mining, electronics, industrial farming, beverage manufacturers, etc.), urbanisation, rising affluence and aspirational lifestyles, etc.

<sup>182</sup> This would require trust building with local communities; deployment of reliable technologies to assess and quantify water stocks, the current and projected needs of the community and sustainable water surpluses, if any; helping sustainable water surplus communities calculate the opportunity costs of alternate uses of sustainable surplus water stocks and helping them to negotiate favourable prices the water they may supply to industries and new users.

<sup>183</sup> IFAD, Grant Proposal, “Neighbours after all: Joining Rural Communities and Extractive Industries for Sustainable Water Management”, 2012.

<sup>184</sup> Amongst IFAD persons interviewed.

<sup>185</sup> IFAD, Post PDMT Note-to-File : ‘IFAD Operational Plan on water’, 2012.

include the 'how to' and growingly include the 'who knows'.<sup>186</sup> It has, in partnership with the FAO, developed an approach that has resulted in the development of interactive tools based on livelihood mapping for planning AWM-related investments; tools that can be used at the national and regional levels.<sup>187</sup> It has also developed Learning Notes as well as a strategy for internal communication (roll-out beginning September 2013) which includes a series of thematic workshops, in order to bring about a common understanding in IFAD on water issues. An IT-platform is also to be launched that seeks to create a "community of practice" of water professionals and practitioners worldwide for knowledge and expertise sharing. The consensus is that such a role should be continued and further strengthened.

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<sup>186</sup> Communication from Rudolph Cleveringa.

<sup>187</sup> Sarah Morgan, "Using livelihoods to map water best investment.

PTA Water" (draft), 2012. See also: [http://www.fao.org/nr/water/projects\\_rural.html](http://www.fao.org/nr/water/projects_rural.html);

<ftp://ftp.fao.org/docrep/fao/010/i0132e/i0132e.pdf>

<http://www.fao.org/docrep/016/i3056e/i3056e.pdf>

[http://www.fao.org/nr/water/projects\\_agwatermanagement.html](http://www.fao.org/nr/water/projects_agwatermanagement.html)

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ARRI 2008  
ARRI 2009  
ARRI 2010  
ARRI 2011  
ARRI 2012

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Azerbaijan, 2010  
Bangladesh, 2012  
Brazil, 2008  
Burkina Faso, 2007  
Chad, 2009  
Congo, 2009  
Dominican Republic, 2010  
Ethiopia, 2008  
Ghana, 2006  
Guatemala, 2008  
Guinea, 2008  
Haiti, 2009  
India, 2012  
Indonesia, 2008  
Jordan, 2007  
Malawi, 2009  
Mali, 2007  
Mauritania, 2007  
Nepal, 2012  
Pakistan, 2009  
Peru, 2009  
Rwanda, 2007  
Sierra Leone, 2010  
Sudan, 2009  
Swaziland, 2006  
Syria, 2009  
Vietnam, 2006  
Yemen, 2007  
Zambia, 2011

## Country programme and project evaluations reviewed

<i>Country programme evaluations</i>	<i>Reviewed for water synthesis report</i>
<b>2013</b>	
<i>Mali</i>	-
<i>Nepal</i>	-
<i>Uganda</i>	-
<b>2012</b>	
<i>Ecuador</i>	-
<i>Ghana</i>	✓
<i>Rwanda</i>	✓
<i>Viet Nam</i>	-
<i>Yemen</i>	✓
<b>2011</b>	
<i>Kenya</i>	✓
<i>Niger</i>	✓
<b>2010</b>	
<i>Argentina</i>	-
<i>India</i>	✓
<i>Mozambique</i>	✓
<b>2009</b>	
<i>Ethiopia</i>	✓
<i>Nigeria</i>	-
<i>Sudan</i>	✓
<b>2008</b>	
<i>Brazil</i>	✓
<i>Morocco</i>	✓
<i>Pakistan</i>	✓
<b>2007</b>	
<i>Mali</i>	-
<b>2006</b>	
<i>Bangladesh</i>	✓
<i>Mexico</i>	
<i>Rwanda</i>	✓
<b>2005</b>	
<i>Benin</i>	-
<i>Bolivia</i>	-
<i>Egypt</i>	✓

<i>Country programme evaluations</i>	<i>Reviewed for water synthesis report</i>
<b>2004</b>	
<i>Indonesia</i>	✓
<i>Senegal</i>	-
<b>2003</b>	
<i>Tanzania</i>	-
<i>Tunisia</i>	-
<b>Total CPEs: 30</b>	<b>Total reviewed:16</b>

<i>Project evaluations</i>	<i>Reviewed for water synthesis report</i>
<b>2013</b>	
<i>Azerbaijan</i>	✓
North East Development Project	
<b>2012</b>	
<i>Armenia</i>	✓
Rural Areas Economic Development Programme	
<i>Bangladesh</i>	✓
Microfinance and Technical Support	
<i>Burundi</i>	-
Rural Recovery and Development	
<i>Cambodia</i>	✓
Community-Based Rural Development Project in Kampong Thom and Kampot	
<i>Ghana</i>	-
Rural Financial Services Project	
<i>Jordan</i>	✓
National Programme for Rangeland Rehabilitation and Development	
<i>Moldova</i>	-
Rural Business Development Programme	
<i>Philippines</i>	✓
Northern Mindanao Community Initiatives and Resource Management Project	
<i>Uganda</i>	✓
Area-Based Agricultural Modernization Programme	
<i>Zambia</i>	-
Forest Resource Management Project	

<i>Project evaluations</i>	<i>Reviewed for water synthesis report</i>
<b>2011</b>	
<i>Brazil</i> Sustainable Development Project for Agrarian Reform Settlements in the Semi-Arid North-East (Dom Hélder Câmara Project)	✓
<i>Dominican Republic</i> South Western Region Small Farmers Project - Phase II	-
<i>Jordan</i> Yarmouk Agricultural Resources Development Project	✓
<i>Mauritania</i> Poverty Reduction Project in Aftout South and Karakoro	✓
<i>Uganda</i> Uganda Vegetable Oil Development Project	-
<i>Tanzania</i> Rural Financial Services Programme and Agricultural Marketing Systems Development Programme	-
<i>Viet Nam</i> Rural Income Diversification Project in Tuyen Quang Province	✓
<i>Ethiopia</i> Rural Financial Intermediation Programme	-
<i>Ghana</i> Republic of Ghana: Rural Enterprises Project – Phase II*	-
<i>Lao</i> Oudomxay Community Initiatives Support Project	✓
<i>Rwanda</i> Smallholder Cash and Export Crops Development Project	✓
<b>2010</b>	
<i>Benin</i> Roots and Tubers Development Programme	-
<i>China</i> West Guangxi Poverty-Alleviation Project	✓
Qinling mountain Area Poverty-Alleviation Project	✓
<i>Yemen</i> Raymah Area Development Project	✓
<b>2009</b>	
<i>Argentina</i> Rural Development Project for the North-eastern Provinces	-
<i>Guatemala</i> Rural Development Programme for Las Verapaces	-

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<i>Project evaluations</i>	<i>Reviewed for water synthesis report</i>
<i>Korea</i>	-
Uplands Food Security Project (UFSP)	
<i>Madagascar</i>	-
Upper Mandraré Basin Development Project – phase 2	
<i>Philippines</i>	✓
Republic of the Philippines: Western Mindanao Community Initiatives Project (WMCIP)	
<b>2008</b>	
<i>Albania</i>	✓
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<i>Belize</i>	-
Community-initiated Agriculture and Resource Management Project (CARD)	
<i>Burkina Faso</i>	✓
Community-based Rural Development Project	
<i>Ethiopia</i>	✓
Southern Region Cooperatives	
<i>Pakistan</i>	✓
Dir Area Support Project	
<i>Romania</i>	-
Romania: Apuseni development project	
<b>2007</b>	
<i>Colombia</i>	-
Rural Microenterprise Development Programme (PADEMÉR)	
<i>Georgia</i>	-
Agricultural Development Project (ADP)	
<i>Mongolia</i>	-
Arhangai Rural Poverty Alleviation Project	
<i>Mozambique</i>	✓
Niassa Agricultural Development Project (NADP)	
<i>Niger</i>	✓
Special Country Programme – Phase II	
<i>Peru</i>	-
Development of the Puno-Cusco Corridor Project	
<i>Philippines</i>	-
Republic of the Philippines: Cordillera Highland Agricultural Resource Management Project - (CHARM)	
<i>Tanzania</i>	✓
Participatory Irrigation Development Programme (PIDP)	
<b>2006</b>	
<i>China</i>	✓
Southwest Anhui Integrated Agricultural Project	

<i>Project evaluations</i>	<i>Reviewed for water synthesis report</i>
<i>Ghana</i> Upper West Agricultural Development Project	✓
<i>Guinea</i> Fouta Djallon Agricultural Rehabilitation and Local Development Programme (PRAADEL)	-
<i>India</i> North Eastern Region Community Resource Management Project for Upland Areas	✓
<i>Mexico</i> Rural Development Project of the Mayan Communities in the Yucatan Peninsula	-
<i>Morocco</i> Tafilalet and Dades Rural Development Project (PDRT)	✓
<i>Venezuela</i> Economic Development of Poor Rural Communities Project (PRODECOP)	-
<b>2005</b>	
<i>Benin</i> Income - Generating Activities Project	-
<i>Ethiopia</i> Special Country Programme, Phase II (SCP II)	✓
<i>Gambia</i> Rural Finance and Community Initiatives Project (RFCIP)	-
<i>Ghana</i> Upper East Region Land Conservation and Smallholder Rehabilitation Project (LACOSREP) - Phase II	✓
<i>Paraguay</i> Peasant Development Fund Credit Project	-
<i>Tunisia</i> Integrated Agricultural and Rural Development Project in the Governorate of Siliana (PDARI)	-
<i>Uganda</i> District Development Support Programme	✓
<b>2004</b>	
<i>Burkina Faso</i> Special Programme Soil and Water Conservation and Agro-forestry in the Central Plateau	✓
<i>Ecuador</i> Development Project for Indigenous and Afro-Ecuadorian Peoples (PRODEPINE)	-
<i>Eritrea</i> Eastern Lowlands Wadi Development Project	✓
<i>Ghana</i> Root and Tuber Improvement Programme (RTIP)	-

<i>Project evaluations</i>	<i>Reviewed for water synthesis report</i>
<i>Lebanon</i>	-
Smallholder Livestock Rehabilitation Project	
<i>Jordan</i>	✓
Agricultural Resources Management Project	
<i>Lao PDR</i>	-
Northern Sayabouri Rural Development Project	
<i>Senegal</i>	✓
Projet de développement agricole dans le département de Matam (PRODAM)	
Projet de promotion des micro-entreprises rurales (PROMER)	-
<i>Viet Nam</i>	✓
Ha Giang Development Project for Ethnic Minorities	
Agricultural Resources Conservation and Development Project in Quang Binh Province	✓
<b>2003</b>	
<i>Bangladesh</i>	✓
Netrakona Integrated Agricultural Production and Water Management Project	
<i>Brazil</i>	-
Community Development Project for the Rio Gavião Region (PROGAVIÃO)	
<i>Chad</i>	-
Quadis of Kamen Agricultural Development Project	
<i>Guinea</i>	-
Smallholder Development Project in North Lower	
<i>Haiti</i>	✓
Small-Scale Irrigation Schemes Rehabilitation Project	
<i>Mauritania</i>	-
Oasis Development Project	
<i>Nepal</i>	-
Hills Leasehold Forestry and Forage Development Project	
<i>Philippines</i>	-
Rural Micro-Enterprise Finance Project	
<i>Turkey</i>	-
Ordu-Ginesuran Rural Development Project	
<i>Tanzania</i>	-
Kagera Agricultural and Environmental Management Project	
<i>Venezuela</i>	✓
Support Project for Small Producers in the Semi-Arid Zones of Falcón and Lara States (PROSALFA)	
<i>Yemen</i>	-
Tihama Environment Protection Project	
<b>Total project evaluations: 82</b>	<b>Total reviewed: 40</b>

## List of key persons met

### IFAD

#### Persons met

Mr Ashwani Muthoo, Deputy Director, Independent Office of Evaluation (IOE)

Mr Rudolf Cleveringa, Senior Technical Advisor, Rural Development, Water Management and Infrastructure, Policy and Technical Advisory Division

Ms Audrey Nepveu, Technical Advisor, Water Management, Policy and Technical Advisory Division

#### Persons interviewed through conference call

Ms Khalida Bouzar, Director, Near East, North Africa and Europe Division

Mr Mohamed Abdelgadir, Country Programme Manager, Near East, North Africa and Europe Division

Mr Nigel Brett, Country Programme Manager, Asia and the Pacific Division

Mr Roberto Haudry, Country Programme Manager, Latin America and the Caribbean Division

Ms Helen Gillman, Knowledge Management Coordinator, Strategy and Knowledge Management Department

Mr Omer Zafar, Country Programme Manager, Near East, North Africa and Europe Division

### The learning event participants

#### IFAD Programme Management Department

Kevin Cleaver

#### East and Southern Africa Division

Abla Benhammouche

Louise McDonald

Miriam Okongo

Eric Rwabidadi

Blen Shewaye

#### Near East, North Africa and Europe Division

Abdelhaq Hanafai

#### West and Central Africa Division

Moses Abukari

#### Policy and Technical Advisory Division

Joy Afenyo

Clare Bishop

Adolfo Brizzi

Rudolph Cleveringa

Audrey Nepveu

**Environment and Climate Division**

Irshad Khan

**International Land Coalition**

Jan Cherlet

**Strategic Planning Division**

Gary Howe

**Food and Agriculture Organization of the United Nations (FAO)/Land and Water Division (NRL)**

Jean-Marc Faurés

Domitille Vallée

**FAO Investment Centre (TCI)**

Klaus Urban

## **Evaluation syntheses by the Independent Office of Evaluation**

Rural Differentiation and Smallholder Development – September 2013

Result-based Country Strategic Opportunities Programme - June 2013

IFAD's Engagement with Cooperatives – March 2013

Gender Equality and Development Evaluation Units – December 2012

(Led by IOE and published as an Evaluation Cooperation Group paper)

IFAD's Direct Supervision and Implementation Support – July 2012



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 [ifad-un.blogspot.com](http://ifad-un.blogspot.com)

 [www.facebook.com/ifad](http://www.facebook.com/ifad)

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