

Rainwater for food security, setting an enabling environment

**GRANT RESULTS SHEET** 





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## **Goals and objectives**

Rainwater harvesting (RWH) is often overlooked as a source of water supply. Yet it holds great potential to address the ever-increasing shortages of water globally. The huge potential of RWH for multiple-use services, such as food production, soil and water conservation and water, sanitation and hygiene, has not been adequately recognized, and certainly not implemented, as a solution for water problems on a wider and larger scale. RWH initiatives are still too scattered and the lessons and results not shared. Policies, legal regulations and government budgets often do not include RWH in integrated water resource management and poverty reduction strategies.

The Rainwater for Food Security Programme aimed to set an enabling environment for RWH, in order to significantly increase food security. Its main objectives and activities were:

- 1) to bring together a diversity of rainwater harvesting actors;
- 2) to support global, regional and national exchange of knowledge about rainwater harvesting;
- 3) to provide tools and lessons learned from the field.

## **Beneficiaries**

As this programme was aimed at creating an enabling environment for RWH, the primary target groups were national and regional RWH networks, water-related (development) organizations, the public sector and professionals in the (rain)water sector. The secondary target groups were large implementation agencies and national governments. IFAD projects in the proposed countries formed an additional target group, especially those projects focusing on mainstreaming RWH tools and approaches. All of these actors can have a significant impact on the indirect target groups: local communities and their organizations.



## Facts at a glance

## Grant implementing agency

**RAIN Foundation** 

#### Theme

Rainwater harvesting

#### Benefiting countries

Burkina Faso, Ethiopia, Kenya, Mali, Nepal, Senegal and Uganda

## Total programme cost

US\$3,613,644

IFAD contribution: US\$1,500,000 Cofinancing (other donors):

US\$2,113,644

#### **Partners**

DGIS (Dutch Ministry of Foreign Affairs)

### Effectiveness and duration

2012-2016

# Linkages to IFAD investment projects

PASIDP and PCDP-II (Ethiopia), COSOP (Kenya), ASAP (Nepal), PRELNOR and COSOP (Uganda)

## **Main results**

#### Bringing together a variety of RWH actors

- A 2015 conference in Ethiopia led to participants (e.g. World Vision, the Food and Agriculture Organization of the United Nations, the International Water Management Institute and the Stockholm Environment Institute) signing a declaration on the importance of RWH.
- The Roads for Water Initiative was initiated based on demands from IFAD Uganda, and in close collaboration with strategic partners.
- A 2014 conference in Uganda led to the Ministry signing an agreement to replicate the (catchment management) methods that were already being used in two catchments in Uganda. A new programme based on this approach was implemented and funded by implementing partner GIZ (German Agency for International Cooperation)..
- Based on the architecture of this programme, in 2015 RAIN started a
  programme in Honduras that involves catchment-based recharge,
  retention and reuse (3R), knowledge management and RWH
  approaches, in close collaboration with International Development
  Enterprises and the International Union for the Conservation of Nature,
  funded by Swiss Development Cooperation.
- Large implementing organizations such as the Red Cross and CARE have embraced the 3R/water-buffering/RWH approach in their global Partners for Resilience programme.
- A solid network has been created among existing RHW networks, ambassadors and (international) organizations, which is reflected in a community of practice (CoP) of more than 800 members who exchange knowledge.

# Supporting global, regional and national exchange of RWH knowledge and experience

- The CoP is an important foundation for the continuation and future growth of a global RWH network, for which the webinar series proved very important.
- The rain4food knowledge platform incorporates a number of technical features (i.e. website including automated content update, in-page embedded entrances to Wiki and the RWH CoP) and is innovative in terms of combining various ways of connecting stakeholders and sharing information. This includes webinars, sharing documents and using different media (e.g. blogs, newsletters, videos from programme partners such as the Rural Water Supply Network (RWSN) and TheWaterChannel).
- Strategic partners such as RWSN have embraced RWH as a strategic theme within their organization; the topic was addressed separately during a forum in 2016.
- The uptake of RWH among implementing organizations has been promoted by disseminating modules on 3R/RWH, almost 200 publications, guidelines and other relevant documentation through social media and targeted marketing.
- Creating one interactive online platform which offers different sources of information has contributed significantly to knowledge transfer and networking. To date, a total of 64,348 RWH Wiki visitors and 94,461 RWH Wiki page views proves that this platform is very popular among the target groups.

#### Providing tools and lessons learned from the field

- Effective knowledge transfer particularly on-the-job training has capacitated hundreds of professionals, decision makers and students regarding RWH, especially in relation to climate change, food security and resilience.
- Educational institutes such as the UNESCO-IHE and CapNet have integrated the topic of RWH into their curricula.
- Existing documents have been translated into French and Spanish, thereby meeting demands of users, decision-makers and practitioners in western Africa and Latin America and the Caribbean.

In November 2014, RAIN visited several farmers and community groups in Ethiopia, Kenya and Uganda to learn how RWH and management have affected livelihoods over the years.

In Uganda, two farmers were visited, both of whom live in the Rwambu area. The first, David Rukyiloru (age 56), is a farmer in Rwesigire village, Kamwenge district. His garden, about 2.5 hectares, starts half-way up a hill and extends to the top. He has several 3R interventions in his garden – 500 trees including: five soil bunds (four built by the project, one by himself), with each soil bund 15 metres long; eight stone bunds (five built by the project, three by himself), with each stone bund 15 metres long; and three grass strips, each 15 metres, all built by himself.



Rukyiloru reported how bean yields have increased by nearly 60 per cent. "I used to plant 8 kg of beans on a tenth of a hectare and would harvest 40 kg before these interventions were applied to my field. Now I harvest about 100 kg from the same piece of land, yet I still plant about 8 kg of beans." He added, "Bananas growing close to the earth bunds (*fanya juu* and *fanya chini*) have bigger stems and give bigger bunches."

The second farmer, Pastor Boniface Bariyo (age 43), farms in Rwambu IV village, Ibanda district. He has nine earth bunds, six of them constructed by the project. The yields of his coffee plantation have increased by almost 50 per cent since the bunds were constructed. "I used to harvest six to seven bags of coffee (600-700 kg) from my plantation [before the soil bunds were constructed], but I harvested 13 bags (13,000 kg) last season, and I am sure to harvest even more this season."

Innovative pilots are being implemented that combine sustainable financing and RWH, as well as incorporating environmental sustainability

### Lessons learned

Considering that the programme was on a global level and time was relatively short (2.5 years), achieving the predicted outcomes was possibly too ambitious an objective. It would have been more effective to target a more specific geographical region and/or target group.

In hindsight, a theory of change should have been defined, with clearer outputs and outcomes per objective instead of a logframe. In some cases, it has been hard to verify whether the sub-objectives were attained because the baseline is weak. This was overcome by adopting an adaptive strategy: a phased geographical approach and a more general focus on RWH instead of on food security only. In addition, more emphasis on advocacy and lobbying for RWH was needed within the programme.

It was sometimes a challenge to find sufficient willingness, involvement and capacity in this relatively small subsector. The set-up, identification and subsequent cooperation of an RWH network or movement of active ambassadors, core partners, etc. were needed to continuously spread the message of the importance of RWH for food security and to achieve the intended impact.

The performance of the programme increased by having bimonthly meetings with core

partners and external mid-term and end-term evaluations that helped steer the programme towards achieving its envisaged results.

Finally, responsibility for the governance of the programme should have been shared more equitably among the core partners.

## **Way forward**

A number of innovative RWH pilots are being implemented that not only combine sustainable financing and RWH but also incorporate environmental sustainability. Additionally, AKVO Really Simple Reporting (RSR) will enable relevant projects from a large variety of organizations to be demonstrated online. A number of tools have been created that are geared toward practitioners, including an RWH decision tool, a GIS mapping tool and an environmental assessment tool.

In terms of sustainability, the RWH network or movement has reached a tipping point with regard to the number of people (800+) who have joined the CoP. The CoP provides an important foundation for the continuation and growth of a global RWH network. Although the CoP is no longer actively supported by a secretariat, new members and contributions continue to arrive, which is paving the way to sustainability. Also, programme partners have adopted RWH in their strategic agenda, and requests for RWH technical assistance are growing in number, as are requests from larger implementing organizations. Scaling-up opportunities – for example road-water harvesting (using the existing infrastructure of roads to harvest water for multiple purposes) – have proven inspirational for governments and international donors.

The next step is to ensure that initiatives like these are replicated on a local/regional level, and that capacity-building and promotional activities regarding RWH become an integral part of IFAD's regular programmes.

## Knowledge generated

In order to stimulate exchange and learning, the programme's knowledge management framework encompassed the following steps: knowledge gaps and demands identified; information gathered, organized, made readily available and accessible, and pro-actively distributed; and information continuously updated. Based on the lessons learned, improvements were made and new approaches piloted.

- The knowledge platform (http://www.rain4food.net/) was designed to bridge knowledge gaps, provide tools and help people to meet and exchange knowledge, information and experiences, online and offline.
- A large variety of tools were designed to support the knowledge platform, including a CoP, Wikis, video channels, an online library, demonstrations of innovative projects, and an RWH movement set in motion by identifying core partners and ambassadors.
- Webinars were offered, and the topics were selected based on the demands of the community, e.g. domestic rooftop water harvesting.
- Almost 200 publications, including promotional material and guidelines, were gathered in an online library.
- Offline events (field-based training and conferences) were organized to promote
  exchanges of experiences and knowledge, e.g. on RWH and multiple-use services in
  Senegal and on RWH and resilience in Ethiopia (see full proceedings:
  http://www.rainfoundation.org/wp-content/uploads/2015/07/Proceedings\_Final.pdf).

Reports of these activities were continuously shared through videos, newsletters, meetings and social media in order to influence the institutional and policy setting for mainstreaming RWH in a country/region.



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