

Annual Report

2019



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Abbreviations

APAF: *L'association pour la promotion des arbres fertilisants, de l'agroforesterie et la foresterie.*
(Association for the promotion of soil-enriching leguminous trees, agroforestry and forestry)

AVC: Agroforestry Village Committee

DRR: Disaster Risk Reduction

EbA: Ecosystem-based Adaptation

GIS: Geographic Information Services

IRHA: International Rainwater Harvesting Alliance

IWRM: Integrated Water Resources Management

KN: Kanchan Nepal

RWH: Rainwater Harvesting

SDG: Sustainable Development Goal

TAC: Technical Agroforestry Consultant

WS: Watershed

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The IRHA team is delighted to share our Annual Report for 2019 with you.

We thank:

Our donor and our partner institutions for their support and confidence in our sustainable development initiatives that use rainwater harvesting.

Our local partners for their continued dedication in implementing our joint projects. Their creative responses to challenges in the field ensure that our projects continue to help communities to improve their health, wealth, and wellbeing.

We invite prospective rainwater harvesting supporters to join our movement by becoming:

- affiliated with the International Rainwater Harvesting Alliance (*free*)
- a member of the IRHA Association (*membership fee*)

A word from Committee President

A Word from Our Executive Director



This year World Water Day focuses on Water and Climate Change. Climate change causes uncertainties in water supply for many people. Too much rain falling in a single day or extended periods without rainfall constitute hazardous events. IRHA's projects work with local communities and activists to safeguard their water security.

This Annual Report describes some examples of our contribution to making communities and households more climate resilient through their own efforts, including the construction of water tanks and infiltration pits and the rehabilitation of small ponds in Nepal. These methods slow the flow of rainwater through catchments; the agroforestry activities we implement in Senegal also create more humid micro-climates.

IRHA promotes rainwater harvesting, working with its partners around the world, offering this tool for communities to become more water-resilient. Using a bottom-up, 'capillary action' model, we draw on our project experience to advocate for evidence-based RWH policy and good practice at regional and national levels.

I am pleased to share IRHA's Annual Report for 2019. It is a testament to the hard work and creative problem-solving of our Association and its partners; our donors' trust in our projects, and – above all – the engagement of the communities with whom we are privileged to work. I hope that in reading the following pages, you pause to contemplate your use of rainwater!

Han Heijnen, Committee President

Floods, droughts, soil loss, deforestation, migration and climate change are now daily news. The task of addressing such socio-environmental challenges is huge. But our NGO acts to create positive change and enable thriving communities:



- We ensure Senegalese and Nepali families' self-sufficiency with respect to their water needs;
- We prevent the spread of illnesses including diarrhea and Coronavirus-19 in Blue Schools, by instating hygiene practices and installing child-friendly sanitation facilities;
- We plant agroforestry oases to cultivate drought resilient farming methods and biodiversity in increasingly arid regions.
- We dialogue with rural communities, water committees and forest committees, helping them to improve their natural resource management at the catchment scale.
- We restore traditional water reservoirs, so rain soaks into watersheds, feeding local springs and wells, safeguarding people's livelihoods.

We hope that in reading our 2019 Annual Report you enjoy discovering IRHA's success stories.

My thanks to the public funding bodies and private donors that support our work and share our conviction that planting rain does a world of good.

Marc Sylvestre, Director



8%

of the world's population
use rainwater as a drinking
water source

(IRHA, JMP 2017)

The International Rainwater Harvesting Alliance

About Us

The International Rainwater Harvesting Alliance (IRHA) is a Geneva-based NGO. Since 2002, we have designed and implemented integrated, sustainable development projects that utilise rainwater to safeguard livelihoods, and improve the health and resilience of communities and ecosystems facing climate-change related hazards.

Our Values

We are committed to collaborative, intercultural projects that retain and utilise rainwater to make communities more resilient in regions where climate change jeopardises people's livelihoods.

We act in a far-sighted manner, enabling communities and ecosystems to grow, year-on-year, through sustainable development practices.

Our Impact

Rainwater is a high-quality drinking water resource. IRHA implements practical, rainwater management systems at a variety of scales (in public institutions, within urban and rural districts, and at the watershed scale). Then, drawing on within-project, community-level learning, we advocate for rainwater management best-practice and policy at regional and national levels.

In 18 years, collaborating with local NGOs in 14 countries, we have installed rainwater-fed WASH infrastructure in 70 public institutions.

Since 2017, our newly-defined, rainwater-focussed programmes deliver on 8 SDGs (1, 2, 5, 6, 11, 13, 15 & 17), aiming at 18 targets.

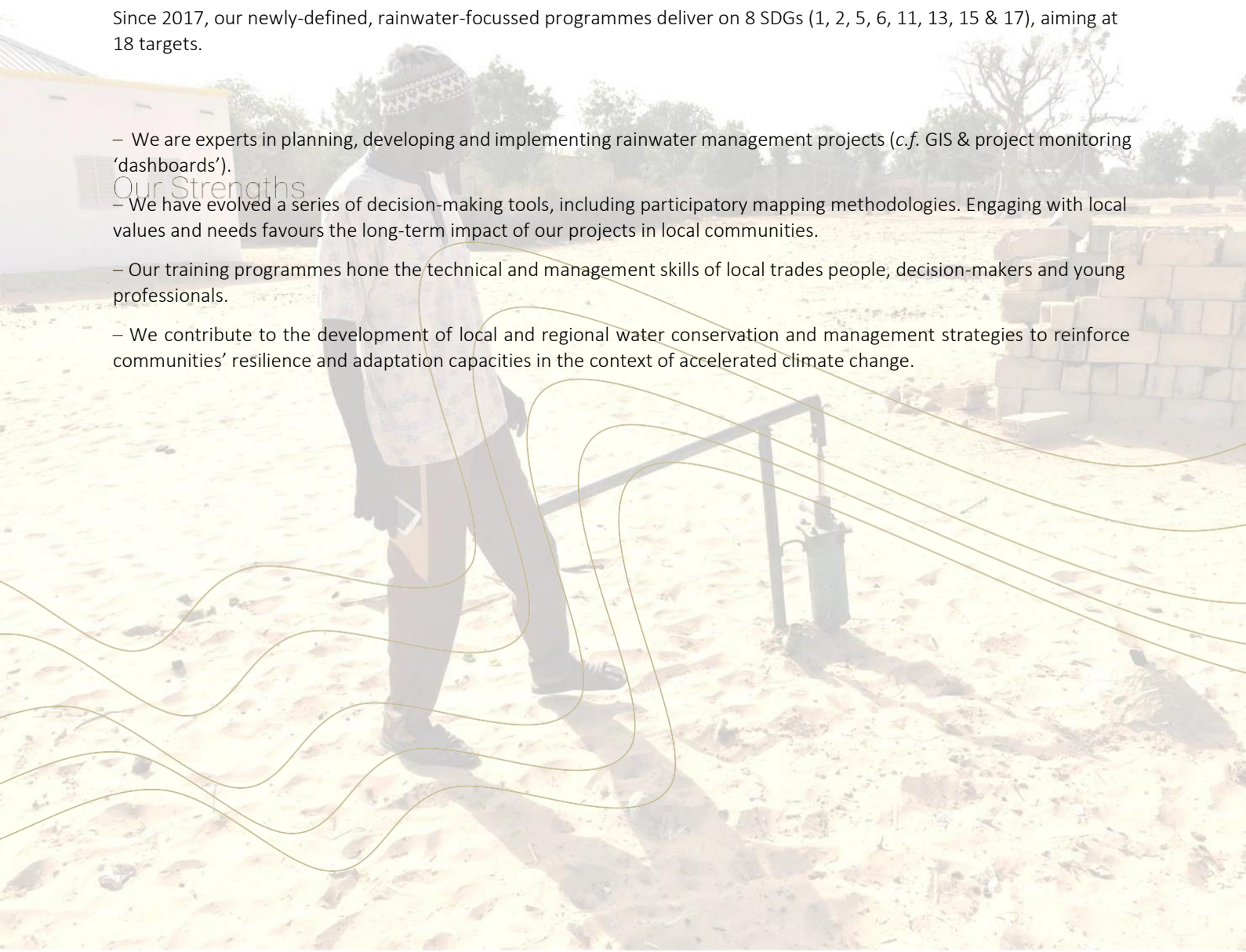
– We are experts in planning, developing and implementing rainwater management projects (*c.f.* GIS & project monitoring 'dashboards').

– We have evolved a series of decision-making tools, including participatory mapping methodologies. Engaging with local values and needs favours the long-term impact of our projects in local communities.

– Our training programmes hone the technical and management skills of local trades people, decision-makers and young professionals.

– We contribute to the development of local and regional water conservation and management strategies to reinforce communities' resilience and adaptation capacities in the context of accelerated climate change.

Our Strengths





Prog. 1: Rainwater for Drinking water, Sanitation and Hygiene

We reinforce communities' access to hygiene best-practice, drinking water and sanitation facilities, while facilitating their management of these amenities.

Prog. 2: Rainwater for Resilient Agriculture and Food Sovereignty

We bolster communities' food sovereignty by evolving integrated rainwater management practices and promoting locally appropriate, resilient agricultural techniques in collaboration with local NGOs.

Prog. 3: Rainwater, Disaster risk reduction & Ecosystems management

We cultivate communities' resilience to climate change, using rainwater retention techniques alongside other natural

Prog. 4: Urban Rainwater Management

Our innovative, urban rainwater management approaches foster the wellbeing of urban dwellers and ecosystems.

Prog. 5: Rainwater Advocacy as Capillary Action

Our bottom-up, evidence-based campaigns and advocacy promote rainwater management as a nexus approach to counter climate change related hazards, safeguard people's livelihoods, and foster biodiverse, resilient ecosystems.

The International Rainwater Harvesting Alliance

We pool & cultivate *pluvio-wisdom* to advocate for the common



843
Million

people cannot access a reliable
drinking water supply (JMP,
2017)

Rainwater Harvesting Projects, 2019





Prog. 1: Rainwater for Drinking water, Sanitation and Hygiene

We reinforce communities' access to hygiene best-practice, drinking water and sanitation facilities, while facilitating their management of these amenities.

Nepali Blue Schools

Partner NGO: Kanchan Nepal

Location: Kaski District, Pokhara Region, Nepal

Impact: Providing Nine Blue Schools with Drinking Water, Sanitation & Hygiene Facilities (WASH)

Kanchan Nepal has worked in the Kalika-Majhtana-Hansapur and Rupakot-Thumki regions, harvesting rainwater to improve drinking water supply in local schools.

Since 2013, Kanchan Nepal have implemented rainwater harvesting projects, collaborating with IRHA amongst other national and international partners. Their projects have provided rain-sourced drinking water and sanitation facilities and hygiene protocols (WASH) for rural communities in Nepal's Pokhara region.



In addition to providing nine schools with WASH facilities, these integrated rainwater-harvesting projects have planted trees to shade playgrounds, and introduced waste management protocols within these institutions.

Rainwater retention at the institutional scale helps these communities become more resilient to the natural hazards associated with climate change.



Our Blue School Monitoring

Partner NGO: Kanchan Nepal

Location: Kaski District, Pokhara Region, Nepal

Impact: 9 Blue Schools with WASH Facilities

Before our Blue School Programme was launched in the Mid-Hills of Nepal's Kaski District local schools suffered from severe water shortages. After six years working in the region, we wanted to evaluate the impact of our actions on the lives of the region's school children. Revisiting the Blue Schools and assessing their WASH facilities, recreational areas and school gardens using eight performance indicators shows the positive changes our programme has brought within these institutions and in the wider community that they serve.

In 2013, water carrying was a time-consuming activity for many children in this region, who had to collect their domestic water supply from springs. This gave them less time for learning. Additionally, they had poor quality sanitation facilities and lacked hygiene protocols at school. For instance, open defecation was common, and the schools' play spaces were degraded, with barely vegetated soils.

Improving Water, Sanitation and Hygiene provision in these schools has reduced the pressure on domestic water supply, and the time demand of water carrying for many of these children. After 6 years, the schools' WASH services are still well-maintained and much needed. The school environments have changed for the better, providing more favourable conditions for living and learning.

School communities are now more aware of the links between environmental problems and potential solutions. We have created and offered two short courses:

– an environmental science (water pollution) course for school children, focusing on feedbacks between waste management, natural resource quality, food production and health.

– an agricultural course for market gardeners and farmers, focusing on innovative, 'eco-friendly' techniques, including drip irrigation, that improve agricultural yields for whole communities.





Prog. 2: Rainwater for Resilient Agriculture and Food Sovereignty

We bolster communities' food sovereignty by evolving integrated rainwater management practices and promoting locally appropriate, resilient agricultural techniques in collaboration with local NGOs.

Planting Rain for Resilient Agriculture

– Our ‘Rain, Forests, People’ Project

Partners : APAF-Senegal (local NGO); De Gevulde Waterkruik (Dutch NGO), & *l'École Polytechnique Fédérale de Lausanne* (EPFL).

Location: 150 km South-East of Dakar, in the Fatick region of Senegal.

Impact: Improving the food sovereignty of 70 farming families (~ 600 people)

Context

In Senegal, diminishing rainfall, and deforestation linked to industrial farming methods have led to denuded soils, reduced agricultural yields and diminished revenues for farmers. Rural communities live in poverty. People are forced off their land, often migrating to urban peripheries.

The ‘Rain, Forests, People’ project is designed to reinforce farmers’ agricultural sovereignty by planting agroforestry oases on their lands. Including leguminous trees in these zones means that soils become enriched in bio-limiting nutrients, and rainwater retention increases locally.

Helping farmers labour in these challenging conditions, we train local masons, who build rainwater harvesting cisterns for their households. These supply high-quality drinking water, helping to reduce the incidence of illnesses, including diarrhoea. Additionally, in the current COVID-19 crisis, owning a domestic water cistern can ensure households have a water supply, which is vital for personal hygiene and health.

This 24-month pilot project is designed to improve farmers’ livelihoods, restore local soil-fertility, rehabilitate the regional acacia savannah ecosystem and increase niche biodiversity.





Prog. 3: Rainwater, Disaster Risk Reduction & Ecosystems management

We cultivate communities' resilience to climate change, using rainwater retention techniques alongside other natural resource management practices.

Our 'Rain Communities' Project

Context

Rainwater harvesting remains a vital source of potable water for many rural Nepali communities, including those near Pokhara, a gateway town for Himalayan trekkers.

Increasingly, heavy precipitation and a likely strengthening of monsoon systems is changing regional hydro-dynamics (IPPC Special Report Global Warming of 1.5° C, Section 3.3.3.2). Nepal's rural communities are particularly vulnerable to these climate-change related hazards. In Nepal's Kaski District, springs are drying up and monsoon rains are more frequent and violent, sometimes destroying annual harvests. The Mid-Hills communities, who depend on subsistence agriculture, are particularly vulnerable.

Reliable water supplies are vital to safeguard Nepali mountain villagers' health and wellbeing. Increasing local rainwater infiltration recharges springs. This ensures that villagers have an adequate supply of spring water, an essential drinking water resource for many.

Water and life are inextricably linked; so too are climate change and poverty.

Currently, in some Mid-Hills' villages, water is so scarce people can no longer wash their linen.

Impact

The 'Rain Communities' Project' offers villagers a healthier relationship with water. Harvesting rain to 'plant' it within catchments, or store it in cisterns, makes families more hydro-secure. Having drinking water, water for irrigating crops and vegetable gardens, and for rearing livestock safeguards livelihoods and increases resilience to floods and drought. This Integrated Water Resource Management (IWRM) approach helps communities ensure their hydro-security by:

- *facilitating dialogue between multiple actors (c.f. local communities, local authorities, forest services).*
- *reinforcing the technical capacity of farmers, farm cooperatives, and other land-based actors.*
- *reinforcing local values and validating local, sustainable land-management practices.*





Prog. 4: Urban Rainwater Management

Our innovative, urban rainwater management approaches foster the wellbeing of urban dwellers and ecosystems.

Rainwater Management for Resilient Urban Communities

Urban rainwater management has become increasingly common in wealthy cities such as New York or Lyon. However, the low-tech infrastructure involved in such initiatives, such as raingardens, remains much needed in urban centres where people are vulnerable to flood risk, and whose wellbeing would benefit from the cool & shade provided by such installations.

Making towns and cities 'water transparent', so urbanisation presents minimal perturbation to local & regional hydrodynamics, would be the ideal outcome of such projects. This is achievable by urban planning measures that:

- *Ensure the water volume infiltrating unconfined aquifers remains unchanged when agricultural land is developed (c.f. by incorporating features such as ditches, trenches or wells into urbanization projects).*
- *Maintain rates of evapotranspiration at pre-urbanization levels, by including 'green-zones' and an adequate rainwater supply for their irrigation in developments plans.*
- *Maintain surface water flow rates at pre-urbanization speeds, to avoid increasing surface runoff; for instance, by using landscaping structures including ditches and trenches.*
- *Decouple storm-water drainage from sewer systems, to reuse the former water resource; for instance, in the irrigation of raingardens and urban allotments.*





THE RAINWATER PARTNERS IN THE WORLD

Rainwater Harvesting and Development Promotion Partners

• Global Level

• Regional Level



Collaboration and Networking



Prog.5: Rainwater Advocacy as Capillary Action

Our bottom-up, evidence-based campaigns and advocacy promote rainwater management as a nexus approach to counter climate change related hazards, safeguard people's livelihoods, and foster biodiverse, resilient ecosystems.

We pool & cultivate *pluvio*-wisdom to advocate for rainwater management

Over 17 years, IRHA has established a network of organisations, who recognize the social and environmental value of rainwater harvesting, or/ and actively implement sustainable, rainwater harvesting projects.

These Friends of the Alliance include NGOs, local authorities, private sector companies and individuals affiliated with IRHA. They support our advocacy for rainwater harvesting as a nexus solution that reduces the risk of floods and drought, safeguards people's livelihoods, and fosters biodiverse, resilient ecosystems in the context of a changing climate. These actions advance SDGs, via multiple targets.

In 2019, our secretariat began to reinforce links with key actors that promote rainwater harvesting, signing Memorandums of Understanding (MOU) with Alliance Friends including: the American Rainwater Catchment System Association (ARCSA) and the 'Water Harvesting Lab' of Florence University. We will renew and initiate further links with Friends of the Alliance this decade, to better advocate for the role of rainwater harvesting in the 2030 Agenda for Sustainable Development. Our rainwater harvesting advocacy for 2019 led us to participate in approximately 30 events. Advocacy initiatives during and beyond 2020 include:

– *Statements to the UN's Economic and Social Council, as our NGO has Special Consultative Status with this body.*

– *Contributing to communications on Urban EbA and EbA for Disaster Risk Reduction made by the Friends of Ecosystem-based Adaptation (FEBA) network, convened by the International Union for Conservation of Nature (IUCN).*

– *Organizing conference panels, presentations and exhibition stands to promote the value of participatory approaches to rainwater harvesting, including at the International Water Association Conference, 2019.*

– *Organizing a 'Songlines' Symposium in Geneva, in November 2020 to foreground the value of local communities' knowledge, values and narratives in a nexus approach to rainwater harvesting.*



Annual Accounts
2019



Balance sheet

Until 31/12/19

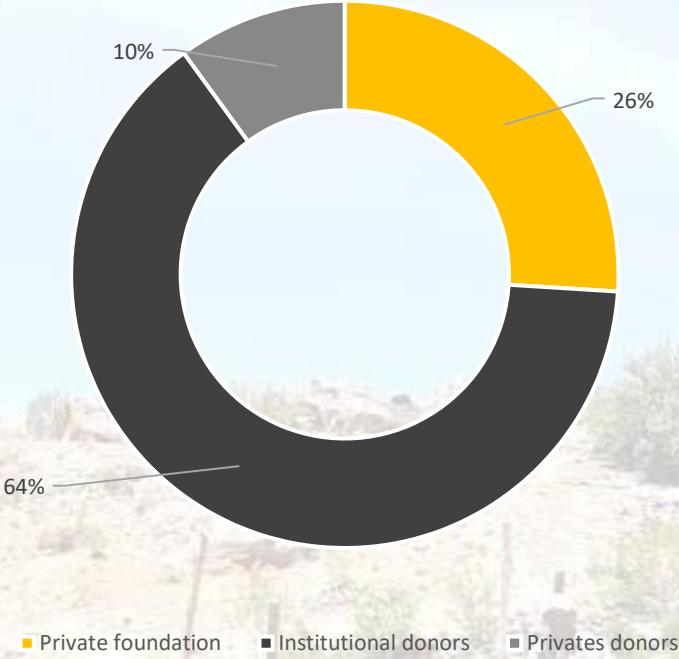
	2019	2018
<i>In CHF*</i>		
Active:		
Active Balance		
Cash	181 307	113 489
Donations to be received		5 000
Transitional assets	431	
Total Current Assets	181 737	118 489
Financial Assets	2 246	2 246
Total Assets	183 984	120 735
Passive:		
Short-term debt	2 524	3 142
Accrued Liabilities	2 150	2 150
Total Liabilities	4 674	5 292
Restricted Funds		
Accrued Liabilities (project funds)	176 314	100 634
Total Restricted Funds	176 314	100 634
Loans		
Third Party loans	0	12 000
Total Loans	0	12 000
Own Funds		
Cumulative Results	2 809	1 065
Profit for the year	187	1 744
Total Equity Capital	2 996	2 809
Total liabilities and equity	183 984	120 735

Statement of Operations

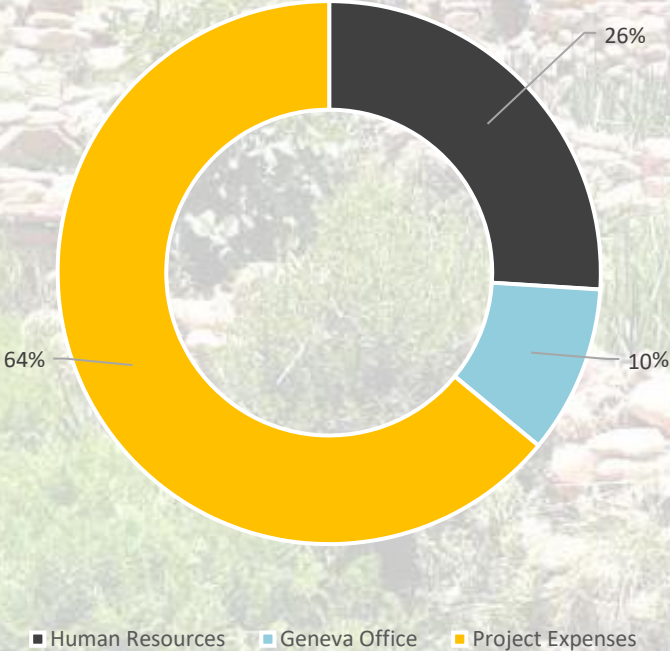
	2019	2018
INCOME		
Private Donations	26 823	23 307
Institutional Contributions	173 500	49 000
Private Foundations	72 000	72 000
Other operational income		1 197
Total income	272 323	145 504
EXPENDITURE		
Personnel Costs	9 352	2 888
Rent	7 689	10 627
Business Expenses	4 154	3 604
Geneva Office	5 196	5 255
Project Expenditure	169 820	135 663
Total expenditure	196 212	158 037
Intermediate result	76 111	-12 533
Financial result	-244	-386
Operational surplus/deficit (prior to allocation)	75 867	-12 919
CHANGES IN RESTRICTED FUNDS		
Allocation	-245 500	-121 000
Use	169 820	135 663
NET SURPLUS/DEFICIT FOR THE YEAR	187	1 744

(The accompanying notes are an integral part of the financial statements)

Source of funds



Use of funds





...Rain for
Sustainable
Development