



Irish Aid funds GOAL's Uganda's market-based approach to livelihoods development.  
Photo: GOAL

---

## UGANDA CLIMATE ACTION REPORT FOR 2016

---

Resilience and Economic Inclusion Team | Irish Aid | August, 2017

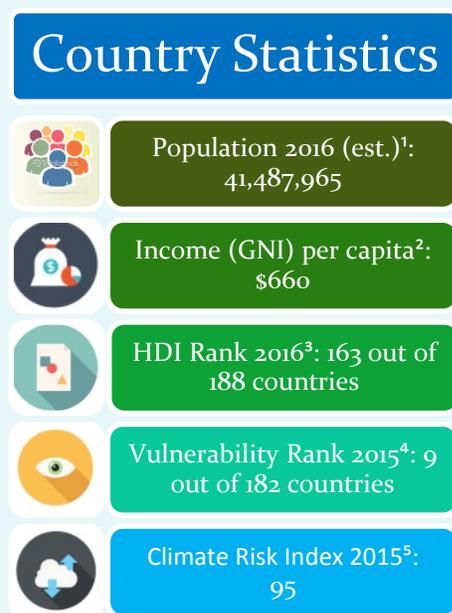
## TABLE OF CONTENTS

---

Country Context.....	2
Overview of Climate Finance in Uganda in 2016 .....	3
Climate Change Trends and Policy Framework.....	4
Recent Climate Trends in Uganda.....	4
Projections of Future Climate .....	4
Greenhouse Gas (GHG) Emissions in Uganda.....	5
Climate change Impacts and Vulnerability.....	6
UGANDA’S CLIMATE CHANGE POLICY FRAMEWORK .....	8
NDC implementation progress.....	8
Progress on National Adaptation Plan (NAP) .....	9
Bilateral Projects and Programmes funded in Uganda in 2016 .....	10
Provision of Water, Sanitation and Hygiene Services to South Sudanese Refugees in West Nile Region of Uganda (UNHCR).....	10
Provision of food, shelter, site planning/preparation, water and sanitation in new refugee settlements (UNHCR).....	10
Food Assistance to Vulnerable Households (World Food Programme) .....	11
Borehole Repair Project Northern Uganda (Wagwoke Wunu).....	11
Support to Skilling Uganda Project - Karamoja Component (Belgian Development Agency – BTC) .....	11
Climate Friendly/ Carbon Neutral Service (Uganda Carbon Bureau).....	11
Case Study: Carbon Footprint Offset: Eradicating Poverty: One ton of CO <sub>2</sub> at a time .....	13
UGANDA MAPPING OF BILATERAL EXPENDITURE 2016 .....	16
Irish Aid Funding to Civil society Partners in Uganda in 2016 .....	18
Annex – OECD Rio Marker methodology.....	21

## COUNTRY CONTEXT

Uganda is a landlocked country in east Africa, approximately 236,040 square kilometres in size. The population is approximately 41 million which is expected to grow to over 93 million in the 2040s. Agriculture is the main economic sector, accounting for 25% of its Gross Domestic Product (GDP) and employing 70% of the labour force. The economy of Uganda is highly dependent on natural resources, making the country vulnerable to the impacts of climate change. Uganda is experiencing significant impacts of climate change, which include changing weather patterns, drop in water levels, and increased frequency of extreme weather events like floods, as well as drought, whose social economic impacts make communities very vulnerable. The Notre Dame Global Adaptation Initiative (ND-GAIN) Index ranks Uganda as the 9<sup>th</sup> most vulnerable and 27<sup>th</sup> least ready to adapt to climate change, of the countries it covered for 2015. Irish Aid programming in Uganda focuses on education, social protection, governance and accountability and HIV AIDS, with gender, humanitarian response and environment as cross cutting issues. Ireland supports climate response in Uganda through livelihood, micro-finance, and agricultural programmes.



Map of Uganda, Irish Aid, 2015

1

<http://data.worldbank.org/indicator/SP.POP.TOTL?locations=UG>

2 <http://data.worldbank.org/indicator/NY.GNP.PCAP.CD?locations=UG>

3 <http://hdr.undp.org/en/countries/profiles/UGA>

4 <http://index.gain.org/country/uganda>

5 The CRI indicates a level of exposure & vulnerability to extreme events, which countries should understand as warnings in order to be prepared for more frequent and/or more severe events in the future

<https://germanwatch.org/en/download/16411.pdf>

## Overview of Climate Finance in Uganda in 2016

	<b>Bilateral €</b>	<b>Civil Society €</b>
<b>Climate Finance Adaptation (UNFCCC)</b>	458,250	1,513,245
<b>Climate Finance Mitigation (UNFCCC)</b>	0	0
<b>Climate Finance Cross-cutting (UNFCCC)</b>	679,733	50,202
<b>Biodiversity (UNCBD)</b>	579,733	510,885
<b>Desertification (UNCDD)</b>	1,032,000	424,356
<b>Disaster Risk Reduction (DRR)</b>	1,557,000	N/A
<b>Total Climate Finance</b>	1,137,983	1,563,447

***Note:** Climate Finance, Biodiversity, Desertification and DRR amounts should not be aggregated as some disbursements have multiple co-benefits. A fuller explanation of the marking for climate adaptation, climate mitigation, cross-cutting and co-benefits is set out in the Annex on Methodology.*

In 2016, Ireland provided a total of €1,137,983 to Uganda in climate finance through its bilateral aid programme. In addition, Ireland provided €1,563,447 in 2016 in climate finance to projects in Uganda through its civil society programme. Climate relevant expenditure provided by Irish Aid to civil society organizations in 2016 was Rio marked and accounted for systematically for the first time, in cooperation with the project partners themselves. Projects funded directly by Irish Aid under the bilateral aid programme include the provision of water, sanitation and hygiene services to South Sudanese refugees, as well as the provision food, shelter and site planning for refugees, and a skills development programme in the Karamoja region in response to market needs. Civil Society partners GOAL, Self Help Africa, Misesan Cara, Aidlink, Childfund and Help Age are helping to build resilience to climate change through a wide range of projects including increasing community access to water, sanitation and improved hygiene practices, increasing smallholder skills and knowledge to benefit from diversified agricultural production, and engaging smallholders in networks and relevant policy processes to improve their livelihoods. More detail is provided on these projects on pages 10 to 21, with data and methodology behind these figures available in the Annex to this report.

## CLIMATE CHANGE TRENDS AND POLICY FRAMEWORK

---

### RECENT CLIMATE TRENDS IN UGANDA

---

Observed annual rainfall totals for Uganda vary from 500 mm to 2800 mm, with an average of 1180 mm. Observed seasonal rainfall totals for Uganda are characterised by a bimodal cycle (two rainy seasons) in the south with higher rainfall during the rainy seasons (March–April–May) and (September–October–November). In the north a unimodal cycle (one rainy season) becomes more obvious with a longer single rainy season that extends across the seasons. The far north-east of Uganda, including Karamoja, the main programming area for Irish Aid in Uganda, receives little rain during all months of the year. Observed averages in annual near-surface temperatures for Uganda are around 21°C. Monthly temperatures range from a minimum of 15°C in July, to a maximum of 30°C in February. The highest temperatures are observed in the north, especially in the north-east, while lower temperatures occur in the south<sup>1</sup>.

### PROJECTIONS OF FUTURE CLIMATE

---

Climate projections developed for the country using the models used in the IPCC Fifth Assessment Report (IPCC AR5) indicate an increase in near-surface temperature for the country in the order of +2°C in the next 50 years, and in the order of +2.5°C in the next 80 years under Representative Concentration Pathway (RCP) 4.5; and in the order of +2.5°C in the next 50 years, and in the order of +4.5°C in the next 80 years under RCP 8.5. They also predict a slight decrease in total annual rainfall in most of the country, with slightly wetter conditions over the west and north-west under both RCP 4.5 and RCP 8.5. Rainfall totals might drop significantly over Lake Victoria (-20% from present)<sup>2</sup>.

The decrease in rainfall in most parts of Uganda, combined with a significantly wetter seasons, will result in significantly drier conditions for the rest of the year (longer wet season that extends from September, October, November towards December January February). This is combined with significant temperature increases, especially during the March April May and June July August seasons. Overall, those changes will require a number of adaptation strategies to combat the resultant impacts including drought, floods, pests and diseases and loss of assets and livelihoods. It is already widely accepted that extreme weather events have been increasing and have been more severe in recent years. It is estimated that the risks are likely to increase in the future in large parts of Uganda. The National Environment Management Authority

---

<sup>1</sup> CDKN, 2015. Economic Assessment of the Impacts of Climate Change in Uganda

<sup>2</sup> [http://sedac.ipcc-data.org/ddc/ar5\\_scenario\\_process/RCPs.html](http://sedac.ipcc-data.org/ddc/ar5_scenario_process/RCPs.html) for an overview of the four RCPs.

(NEMA) State of Environment Report (NEMA, 2012) estimates losses and damage to the tune of US\$47 million to crops, which is equal to about 3 per cent of the value of all cash and food crops in that year. Other extreme events have resulted in even bigger losses, possibly as much as 30% of the sector's normal output.

## GREENHOUSE GAS (GHG) EMISSIONS IN UGANDA

---

According to the WRI CAIT climate data explorer for Uganda for the years 1990-2013, latest emission values excluding Land Use Change and Forestry (LUCF) were 33.35 with per capita GHG emissions of 0.91tCO<sub>2</sub> presenting 134.25% absolute Change from earliest to latest value.<sup>3</sup> Total emissions values including LUCF were at 60.66 with per capita emissions of 1.66tCO<sub>2</sub> and 73.7% as absolute change from earliest to latest value. The highest emission contributions are from industrial processes, waste, agriculture, LUCF respectively. Emissions from energy are mainly through other fuel combustions whose latest values are 4.89 with per capita emission of 0.13 tCO<sub>2</sub> and 4,501.5% as absolute change from earliest (1990) to latest value. (2013)<sup>4</sup>

In terms of energy approximately 93% of Uganda's energy needs are met by biomass, which is used by households and small-scale industries. With 12% of the population connected to the power grid, electricity consumption accounts for only 1% of energy use, and the remaining 6% of energy needs are met by oil. The second national communication in 2010 projected that transportation would be the largest driver of growth in energy sector emissions through 2035, followed by residential, then manufacturing and construction.

Uganda's GHG emissions grew 50% from 1990-2012<sup>5</sup>. The average annual change was 2%, with sector-specific annual change as follows: agriculture (4%), LUCF (0%), industrial processes (23%), and waste (4%).

In its Second National Communication (SNC) to the UNFCCC, which includes a national GHG inventory for the year 2000, Uganda describes the business-as-usual (BAU) scenarios of each sector, projected future emissions for 2035, and key emitting activities.

***Agriculture:*** According to the SNC, activities that drive agriculture sector emissions are livestock production, inefficient animal waste management systems under pasture range and paddock, and the cultivation of organic soils. Paddy rice production and use of nitrogen fertilizers are also included in the BAU. Activities that would reduce agriculture emissions are intensive livestock management systems using improved breed quality and improved feed,

---

<sup>3</sup> CAIT data explorer 2015

<sup>4</sup> ©OECD/IEA, 2014.

<sup>5</sup> World Resources Institute Climate Analysis Indicators Tool (WRI CAIT) 2.0, 2015.

fodder and pasture quality that is more digestible; adoption of manure management practices including biogas production and utilization; adoption of minimum tillage practices on cultivated land (including organic soils); and increased use of fertilizer accompanied by precision planting techniques to enhance efficiency.

**LUCF:** The LUCF sector is expected to remain a net emitter through the 2030s, although the SNC notes that with interventions, the sector could become a major sink as early as 2025. Its 2010 analysis of land use trends showed forested land to be decreasing while crop land and bush increasing. Forest degradation was highest outside of protected areas and in areas where agriculture expanded. Fires were also a major source of degradation of land cover, with fires commonly seen in central and northern Uganda. Direct drivers of deforestation and forest degradation are subsistence agriculture and biomass extraction for timber, charcoal, and commercial fuel wood. More recently, commercial farms, infrastructure, urban development, and mining are increasingly reducing forest cover in some areas.

**Energy:** Approximately 93% of Uganda's energy needs are met by biomass, which is used by households and small-scale industries<sup>6</sup>. With 12% of the population connected to the power grid, electricity consumption accounts for only 1% of energy use, and the remaining 6% of energy needs are met by oil. The SNC in 2010 projected that transportation would be the largest driver of growth in energy sector emissions through 2035, followed by residential, then manufacturing and construction.

---

## CLIMATE CHANGE IMPACTS AND VULNERABILITY

---

Climate change is affecting a wide variety of sectors; agriculture, water, health and human settlements have been particularly affected. Environment and natural resources are under threat from both natural and manmade drivers of change including; poverty, rapid population growth, unplanned urbanization, expansion of informal settlements, industrialization and the impacts of climate change and variability among others. Fragile ecosystems including hilly and mountainous areas, forests, riverbanks, lakeshores and rangelands are facing encroachment and degradation. Pollution levels are also on the increase and the country is contending with new and emerging environmental issues arising from e-waste, unsound use of chemicals, oil and gas development and the impacts of climate change such as droughts, floods, storms, heat waves and landslides that have had serious effects on agricultural production, food security, nutrition, incomes, health status and the livelihoods.

Climate change potentially poses one of the greatest challenges for Uganda to realize its full development potential. For instance, climate change has brought about more and longer

---

<sup>6</sup> Grantham Research Institute on Climate Change and the Environment, 2015. The 2015 Global Climate Legislation Study – Uganda

drought periods which impact differently on men and women farmers. In farming communities, the men go further away to look for pastures, while women walk longer distances for water and firewood, limiting the time for agricultural and food production. There are also cases of cross border migration especially the districts neighbouring other countries, where men cross in search for work and women remain home to fend for the children. Uganda needs to respond to the challenges posed by climate change through both adaptation and mitigation options to build resilience, which is crucial to ensuring sustainable development. Though climate change is a global challenge to which global solutions must be found, the effects of climate change are local and local solutions are necessary while taking into consideration regional and national contexts.

To support the Government of Uganda in implementing the National Climate Policy (NCCP), CDKN supported a study on the Economic Assessment of the Impacts of Climate Change<sup>7</sup>, which provides information about the current adaptation deficit present in Uganda and the extent of the negative consequences that climate variability has on the Ugandan economy. Climate change damage estimates in the agriculture, water, infrastructure and energy sectors collectively amount to 2-4% of the GDP between 2010 and 2050. The national-level studies show that if no adaptive action is taken, annual costs could be in the range of US\$3.2 - 5.9 billion within a decade, with the biggest impacts being on water, followed by energy, agriculture, and infrastructure. Over the 40 years from 2010-2050, the costs of inaction are estimated at between US\$273 - 437 billion. Even if there were no further increases in climate impacts, the cost of inaction would rise over time because of an increase in population.

The cost of adaptation is high, but the cost of inaction is 24-46 times greater. Total spending on adaptation is estimated in 5 year intervals, from 2015 to 2030, based on Uganda's existing Costed Implementation Strategy and selected adaptation options from this study. During the next five years (short term) the cost is estimated at about US\$406 million. On an annual basis this amounts to about 5% of net official assistance received by the country and 3.2% of total government revenues (excluding grants).

The UN's Food and Agriculture Organization (FAO) determined that the drop in the growth of the Ugandan economy from 6.6% in 2004-05 to 5.3% in 2005-06 was largely due to the variability of the weather, specifically, its impact on agriculture. In Uganda, the key production sectors that tend to be most affected by climate and weather variability are agriculture, water, energy and transport.

---

<sup>7</sup> CDKN – economic impacts of climate change

## UGANDA'S CLIMATE CHANGE POLICY FRAMEWORK

---

Uganda signed and ratified both the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (KP) and signed and ratified the Paris Agreement thus committing itself to the adoption and implementation of policies and measures designed to mitigate climate change and adapt to its impacts. Uganda's Second National Communication was submitted to the UNFCCC in December 2015.

Uganda is also a party to the implementation of the East African Community (EAC) Climate Change Policy, which requires member states to initiate and develop consistent and harmonized, policies and plans to address climate change. Uganda also intends to implement strategies, plans and actions for low greenhouse gas emission development in the context of its development goals. These mitigation and adaptation intentions are based on the country's National Climate Change Policy (NCCP) 2015, which is derived from the Constitution of the Republic of Uganda (1995, as amended in 2005 and 2015) and reflects Uganda Vision 2040 (2012). The priorities in the National Climate Change Policy have been integrated in the Second National Development Plan (NDP II) 2015/16 - 2019/2020 (2015). In the long term, Uganda intends to follow a climate-resilient and low-carbon development path linked to green growth and broader sustainable development goals.

Uganda's National Adaptation Programme of Action (NAPA) was submitted to the Secretariat of the United Nations Framework Convention on Climate Change in 2007. The Government approved a national policy for Disaster Preparedness and Management in 2010 and developed a National Climate Change Policy and costed Implementation Strategy in 2012/13. The Government has also taken steps to integrate climate change into the National Development Plan, as well as in sectoral policies, plans and programmes and has produced climate change mainstreaming guidelines. Some efforts have also been made in research, systematic observation, education, training, public awareness and institutional strengthening. Specific activities have been developed on the ground to increase resilience, regarding, among others, agriculture, water and urban planning and the Ministry of Agriculture has developed a 10-year Climate Smart Agriculture Program (2015-2025).

## NDC IMPLEMENTATION PROGRESS

---

Uganda's Ministry of Water and Environment submitted the country's INDC in October 2015 and ratified the Paris Agreement in September 2016. The INDC was not revised but converted into the NDC, with more focus on developing actions plans for implementation. The INDC presents a 22% decrease in carbon emissions target by 2030 covering key energy, forestry and wetlands sectors. It outlines funding needs of USD 2.4 billion for adaptation priority sectors, but is not certain about its mitigation requirements.

The INDC is built on NAMAs, which involved a variety of stakeholders to put in place. Besides government Committees, technical teams and the private sector were encouraged to participate in the process. Uganda undertook a comprehensive process to identify and prioritize its NAMAs, which underpin the INDC. The INDC is based on the Second National Development Plan, the 2015 National Climate Change Policy (NCCP) and its costed Implementation Strategy that builds on the Constitution of the Republic of Uganda and its Vision 2014. Renewable energy targets are derived from the Ministry of Energy and Mineral Development's national energy sector investment plans. Uganda's conditional target is to reduce emissions by 22% until 2030 compared to "business as usual." The target is conditional on the support of the international community coming from both climate finance instruments and international market mechanisms

CDKN and its partners Ricardo and Africa Development and Investment (ADI) are providing technical support to enable the country to move towards implementation. The NDC Quick-Start Guide has therefore been used to guide the development of an NDC Implementation Plan to support implementation of the Paris Agreement. The NDC Quick-Start Guide has three steps: Preparatory Work; Developing the NDC implementation plan; and Delivering the NDC implementation plan. These steps are supported by five modules: Mitigation, Adaptation, Governance, Finance and MRV. The guide emphasises the synergies between these modules, as well as the links between NDC implementation and the Sustainable Development Goals (SDGs).

Uganda has conducted a desk-research, face-to-face interviews and focused group discussions with representatives from the GoU, members of the Development Partners Thematic Group on Climate Change and Environment, and other key national stakeholders to review the NDC based on the quick start guide thematic areas. The process also involved the process of identifying whether the NDC proposes any additional adaptation activities compared to existing adaptation strategies or plans (e.g. National Adaptation Plans, additional climate change action plans and review of the existing adaptation policy landscape. At the end of the process, prioritised actions for the NDC will be laid out for implementation.

---

#### PROGRESS ON NATIONAL ADAPTATION PLAN (NAP)

---

The Uganda National Adaptation Plan NAP has not been developed though the road map for the development of the NAP was submitted to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) in 2015. Plans are under way to launch the NAP process during 2017 with support from UNDP under the DRR programme and an application for accessing funds for the NAP process is in advanced stages through UNEP on behalf of government.

The Agricultural Sectoral NAP supported by FAO under the Global Climate Change Alliance (GCCA) has been finalised. The Agriculture NAP (2016) aims at supporting the in-country process on integrating agricultural sector priorities and concerns into the overall Uganda NAP. The Agriculture NAP focuses on crops, livestock, fisheries and the related sub-sectors of water, forestry and environment. Apart from the fisheries activities, the NAP for Agriculture has been informed by the NDC actions under agriculture sector, but more so the National Climate Change Policy and its costed implementation strategy under the Agriculture sector.

## BILATERAL PROJECTS AND PROGRAMMES FUNDED IN UGANDA IN 2016

---

---

The following sections of this report set out the detail of the projects and programmes supported by Ireland in Uganda in 2016 through the bilateral and civil society programmes. Irish Aid works with a wide range of partners to help build resilience of local communities with a practical focus on agriculture and nutrition.

### PROVISION OF WATER, SANITATION AND HYGIENE SERVICES TO SOUTH SUDANESE REFUGEES IN WEST NILE REGION OF UGANDA (UNHCR)

---

The project focused on expansion of WASH networks through motorisation of boreholes and installation of communal latrines, while ensuring low environmental footprint by using solar power and storage tanks to maximise gravity flows. ***Climate relevant funding provided by Irish Aid in 2016: €100,000.***

### PROVISION OF FOOD, SHELTER, SITE PLANNING/PREPARATION, WATER AND SANITATION IN NEW REFUGEE SETTLEMENTS (UNHCR)

---

As security in South Sudan continues to deteriorate and close to four million people—one-third of the total population—are displaced. The majority of South Sudanese refugees have sought safety in Uganda. By the end of March 2017, the country was hosting 852,300 South Sudanese refugees and is struggling to cope with the ever-increasing needs. The project provided food, shelter, site planning/preparation, water and sanitation in new refugee settlements. Overall, the programme addresses the needs of displaced vulnerable communities by promoting sustainable livelihoods and peaceful co-existence with host communities. ***Climate relevant funding provided by Irish Aid in 2016: €457,000.***

## FOOD ASSISTANCE TO VULNERABLE HOUSEHOLDS (WORLD FOOD PROGRAMME)

---

The project provided cash transfers to refugees based on cost for purchase of food baskets nutritionally equivalent to WFP in-kind rations. The programme addresses food insecurity and malnutrition and helps to enhance the Government's emergency preparedness through capacity development and enhances local communities' resilience and response to seasonal shocks and stresses.

## BOREHOLE REPAIR PROJECT NORTHERN UGANDA (WAGWOKE WUNU)

---

Unreliable rains and long dry seasons have led to reduced water availability and small harvests, putting vulnerable households at risk of malnutrition. The project provided pipes and rods to repair boreholes relied on by schools, health centres and vulnerable communities in Agago North County, Northern Uganda. The restored boreholes provide greater access to clean water and provide the means for improved health and sanitation for vulnerable communities. ***Climate relevant funding provided by Irish Aid in 2016: €1,250.***

## SUPPORT TO SKILLING UGANDA PROJECT - KARAMOJA COMPONENT (BELGIAN DEVELOPMENT AGENCY – BTC)

---

The project objective is to enhance quality and responsiveness of skills development to labour market needs. One of the eight guiding principles is focus on innovation, green skills and employment niches, which among others, is expected to mitigate climate change - through training opportunities in: production of low environment impact bricks and energy efficient stoves, alternative construction techniques to lower the impact on deforestation, Solar panel maintenance, installation and repair, water pump maintenance and solid waste management and treatment. ***Climate relevant funding provided by Irish Aid in 2016: €575,000.***

## CLIMATE FRIENDLY/ CARBON NEUTRAL SERVICE (UGANDA CARBON BUREAU)

---

The project supported the Post-Paris COP Climate Friendly/Carbon Neutral Service to measure and offset the carbon footprint of Embassy operations. Over the two years, the Embassy of Ireland paid ECOTRUST \$4,305 for 615 tonnes of carbon credits at \$7 per tonne to offset the carbon footprint of its activities. UCB brokered the purchase of carbon credits from Environmental Conservation Trust of Uganda (Ecotrust), implementer of "Trees for

Global Benefit” Project. Ecotrust works with smallholder farmers in Bunyoro,, Bushenyi, Kasese and in Mt. Elgon. *Climate relevant funding provided by Irish Aid in 2016: €4,733.*



*Irish Aid staff receive energy efficient cook stoves as part of the carbon neutral initiative*



## CASE STUDY: CARBON FOOTPRINT OFFSET: ERADICATING POVERTY: ONE TON OF CO<sub>2</sub> AT A TIME

---

In December 2016, Irish Aid signed a two-year MoU 'Support for Post-Paris COP Climate Friendly/Carbon Neutral Initiative', with the Uganda Carbon Bureau (UCB), to measure the carbon footprint of its operations and identify a source of off-setting carbon credits. Following the assessment, the Embassy paid €2,067.3 for 215 tonnes of carbon, and has been certified carbon neutral for the period October 2016 – September 2017.

UCB brokered the purchase of carbon credits from Environmental Conservation Trust of Uganda (Ecotrust), implementer of "Trees for Global Benefit" Project. Ecotrust works with smallholder farmers in Bunyoro (Hoima and Masindi districts), Bushenyi (Rubirizi and Mitooma districts), Kasese and in Mt. Elgon (Mbale, Manafwa, Bududa, Bulambuli and Sironko districts). The farmers are paid to keep the trees as carbon sinks. To participate, a farmer's application, endorsed by the Local Council Chairman, confirms land ownership and consent of family members to use a portion of their land for trees, which is also verified by Ecotrust's Area Supervisor. Farmers with disputed ownership or with insufficient land to hold a minimum of 400 trees (equivalent to an acre under woodlot planting system), are not admitted on the programme.

*The sale of carbon credit has improved community livelihoods and promoted diversification from routine farming. The Ndangara-Nyakijanja Tutunguke Group has established 680 bee hives (412 colonized) yielding 2,472 Kgs of honey annually. A kilogram of unprocessed honey is sold at Shs 5,000 (€1.30) and at Shs 27,000 (€7.03) for processed honey. With Shs 18 million (€4,687.5) in savings from their CCF, the group started a SACCO and a revolving loan fund for members. The SACCO has been able to procure a honey processor and 10 manual coffee hullers.*

Successful farmers sign an 11-year agreement with Ecotrust and are then trained on the regulations, benefits and challenges of the scheme, as well as the planting systems and tree management. The total amount paid over 11 years is determined by the estimated amount of tons of carbon that will be stored, which is determined by the planting system employed.

Monitoring and verification is conducted twice a year, to establish that the trees exist, are growing well and are of indigenous species. During the verification exercise, the diameter of the tree trunk is measured at breast height. The price per ton of carbon is determined by market conditions. Payments are effected from time of planting, over an 11 year period (but not every year); i.e. - in year 0 (planting), year 1, year 3, year 5 and year 10. Payments are remitted directly into farmers' accounts in Savings and Credit Cooperative Associations (SACCOs) or in banks, where they exist. 10% is taken off each tonne of carbon sold as a contribution to a carbon community fund (CCF). The farmers decide a community project for their CCF savings.

There has been social, economic and environmental benefits out of the project, which has improved the livelihoods of the farmers. Carbon finance payments have supplemented their incomes enabling them to pay school fees, health care bills, build houses, and to carry out other investments. In addition, some of the tree species are medicinal, while others provide sources of food – e.g. avocados, and others are used in decoration. When trees are fully grown, farmers are free to harvest them, providing timber for own use and additional income from sale of excess timber.

Improving household income has been one of the key benefits. Carbon credit finance has helped in capitalising additional income generating or socially beneficial projects. They can also use their agreements with Ecotrust as collateral for loans. Reduced environmental degradation and pressure on forest reserves (for wood fuel and building materials)

has reduced. Some groups of carbon farmers have entered into collaborative forest management (CFM) agreements with the National Forestry Authority for

*Jovanis Kisegyensi keeps two cross bred cows and seven goats in her tree farm, and has received all payments specified in her agreement with Ecotrust. In addition to firewood and fees for her children's education, she is now due to start harvesting some of her trees for timber.*

*From his woodlot of medicinal plants, Cyril Bagyenzire earns at least €5.20 every week, from selling semi-processed medicinal tree products in the local market.*

*Bikorwomuhangi Zinori the chairman of the Ndangara-Nyakiyanja Tutunguke Group of carbon farmers, has built a permanent house using timber from his trees and income from carbon finance.*

*Mukyiga Wilson, a Parish Coordinator, was able to renovate and expand his house, connect power to it and acquire 2 commercial motorcycles (boda boda), as supplementary income sources.*

community restoration and management of central forest reserves and in turn are benefiting through livelihood options like apiary projects.



*A section of Kalinzu central forest reserve in western Uganda to be re-afforested (as started in the middle foreground) by Ndangara-Nyakiyanja Tutunguke group of carbon farmers under collaborative forestry management with the National Forestry Authority. Photo credit; Peter M Oumo, Climate Focal Point – Uganda*

## UGANDA MAPPING OF BILATERAL EXPENDITURE 2016

Project/Programme	Recipient	Disbursed	Rio Marker - Mitig	Rio Marker - Adapt	Rio Marker - Biodiv	Rio Marker - Desert	Agric	Disaster Risk Reduction	Cap Build	Tech Trans	Fore & Agroforestry	Total Climate Accounting Weight	Total Climate Finance Amount	Mit Total	Adapt Total	Cross-cutting
Provide Water, Sanitation and Hygiene Services to South Sudanese Refugees in West Nile Region of Uganda.	UNHCR	200,000	1	1	0	0	0	0	0	1	0	50%	100,000	100,000	100,000	
Provide food, shelter, site planning/preparation, water and sanitation in new refugee settlements.	UNHCR	914,000	0	1	0	1	0	1	0	0	0	50%	457,000	0	457,000	
Food Assistance to Vulnerable Households. Project	World Food Programme	2,200,000	0	0	0	0	0	1	0	0	0	0%	0	0	0	
Repair boreholes relied on for vulnerable communities in Agago North County, Northern Uganda	Wagwoke Wunu	2,500	0	1	0	0	0	0	0	0	0	50%	1,250	0	1,250	

<b>Climate Friendly/Carbon Neutral Service.</b>	Uganda Carbon Bureau	4,733	2	2	2	0	0	0	0	0	2	100%	4,733	4,733	4,733	
<b>Support to Skilling Uganda Project - Karamoja Component.</b>	Belgian Development Agency (BTC)	1,150,000	1	1	1	1	0	0	1	1	0	50%	575,000	575,000	575,000	

IRISH AID FUNDING TO CIVIL SOCIETY PARTNERS IN UGANDA IN 2016

Civil Society partners GOAL, Self Help Africa, Misesan Cara, Aidlink, Childfund and Help Age are helping to build resilience to climate change through a wide range of projects including increasing community access to water, sanitation and improved hygiene practices, increasing smallholder skills and knowledge to benefit from diversified agricultural production, and engaging smallholders in networks and relevant policy processes to improve their livelihoods. More detail is provided in the table below:

Project/ Programme	Irish Aid Funding in 2016 €	Climate Relevant €	Adaptation €	Mitigation €	Cross cutting	Biodiversity €	Desertification €
<b>GOAL:</b> Increase community access to and quality of water, sanitation and improved hygiene practises in targeted communities in Abim, Agago and Bugiri	915,808	€457,904	€457,904	0	0	0	0
<b>GOAL:</b> Improve access, availability and utilisation of food and reduced vulnerability to disasters for communities in Abim and Agago	167,164	€83,582	€83,582	0	0	0	0
<b>GOAL:</b> Improve availability of and access to diversified income sources In targeted communities in Abim and Agago	610,007	€305,004	€305,004	0	0	0	0
<b>GOAL:</b> Strengthen programming through the effective mainstreaming of Gender/HIV/ Environment/Child Protection	10,204	5,102		0	5,102		
<b>Self Help Africa:</b> Increase smallholder skills and knowledge to benefit nutritionally and economically from intensified and diversified agricultural production.	189,898	€189,898	189,898	0	0	94,949	189,898
<b>Self Help Africa:</b> Scalable proven good practice approaches for integrating farmers in value chains documented and disseminated and demonstrably used to inform policies.	71,212	€71,212	71,212	0	0	35,606	71,212

<b>Self Help Africa:</b> Engagement of smallholders and networks with relevant corporate, national, regional and global policy processes leading to more favourable environment for smallholder farmers	71,212	€71,212	71,212	0	0	35,606	71,212
<b>Misean Cara:</b> Franciscan Missionary Sisters for Africa - Twezimbe Centre Integrated Development Programme	21,796	10,898	10,898	0	0	10,898	0
<b>Misean Cara:</b> Franciscan Borthers - Development Of Adraa Agriculture College	108,981	108,981	108,981	0	0	108,981	54,490
<b>Misean Cara -</b> Sisters of Sacred Heart of Jesus and Mary (Chigwell): Empowerment of Vulnerable Women, Unemployed Youth, Parents of Special Needs Children and their Children & Youth with Disabilities	145,244	72,621	72,621	0	0	72,621	0
<b>Misean Cara -</b> Sisters of Sacred Heart of Jesus and Mary (Chigwell): WACFO (Women and Children First Organisation) Environmentally friendly Livelihood projects for the marginalised in remote areas of Pabo Sub-county	114,775	57,387	57,387	0	0	57,387	0
<b>World Vision:</b> Community groups promoting locally appropriate and sustainable approaches to improved nutrition	26,738	€13,369	13,369	0	0	27,237	13,369
<b>Aidlink:</b> Improve access to community-managed safer and clean water in target communities	€119,150	€59,575	59,575	0	0		0
<b>Aidlink:</b> Enhance community awareness of the right to improved water and sanitation	€5,050	€2,525	2,525	0	0		0
<b>Aidlink:</b> Improved average household food production in targetted rural communities	€15,600	€7,800	0	0	7,800	15,600	0
<b>Aidlink:</b> Improve income from livelihoods amongst targeted farmers	€26,250	€13,125	0	0	13,125	26,250	0
<b>Aidlink:</b> Influence partners effectively engaged in targeted lobbying and advocacy	€3,150	€1,575	1,575	0	0	1,575	0
<b>Childfund:</b> Develop & implement knowledge management strategy supporting ECD	9,974	€4,987	0	0	4,987	4,987	4,987

<b>Childfund:</b> Improve intra & cross country learning & KM for better ECD & child protection services	38,377	€19,188	0	0	19,188	19,188	19,188
<b>Help Age:</b> Improve capacity of Govt to deliver accessible social protection programmes for older people	15,005	€7,502	7,502	0	0	0	0

## ANNEX – OECD RIO MARKER METHODOLOGY

---

The Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) Rio Marker methodology underpins the UNFCCC climate finance figures totals quoted on page three and in the tables above. The Rio Marker definitions were employed to identify and score disbursements as climate mitigation, adaptation or cross-cutting relevant. The Rio Markers and the anticipated Disaster Risk Management Marker<sup>8</sup> work on a three-score system. Activities can be identified with;

- Principal marker of 2
- Significant marker of 1
- Or not targeted; 0.

The choice of principle, significant or not-targeted relates to hierarchy of objectives, goals and intended outcomes in the programme or project design. A principle marker is applied if the marker policy is one of the principle objectives of the activity and has a profound impact on the design of the activity. A significant marker is applied if the marker policy is a secondary objective, or a planned co-benefit, in the programme or project design. The zero marker is applied to show that the marker policy was not targeted in the programme or project design. If this is unknown, the marker is left blank.

The mapped climate finance in this report includes financial support both for activities scored as ‘principal’ (2) and for activities scored as ‘significant’ (1). This report categorises disbursements as adaptation where the scoring against the adaptation marker exceeds the scoring against the mitigation marker and vice versa. Where scoring is equal (and >0) under both adaptation and mitigation markers, the disbursement is counted as cross-cutting. In reporting bilateral climate finance we place a different weight on support for principal and significant activities. In aggregating finance for principal and significant activities, ‘principal’ activities are weighted with a coefficient of 100% and ‘significant’ activities are weighted with a coefficient of 50%. Where an activity has both adaptation and mitigation benefits, or is cross-cutting, it is weighted according to its highest score i.e. weights in mitigation and adaptation are not aggregated.

Under OECD DAC reporting guidelines, disbursements can be marked for multiple Rio Markers and policy markers. This is critical as it reflects and recognises the importance of

---

<sup>8</sup> An OECD DRR marker definition is nearing completion but not yet agreed. Therefore we employed a simple approach by only marking or counting those projects or programmes where objectives and/or plans explicitly included and specified disaster risk management or disaster risk reduction components. Projects or programmes where early warning systems, or risk mitigation for natural hazards were specified in the activity documentation were also considered to be relevant to DRM.

achieving as much as possible with limited resources. Many of the Irish climate relevant disbursements have multiple co-benefits and therefore are scored under more than one Rio Marker and in particular may be marked for both mitigation and adaptation. However, in reporting climate finance to the UNFCCC and the EU both formats only one column in which to identify if the activity supported is climate change mitigation, adaptation or cross-cutting. A large share of Irish disbursements are marked for both mitigation and adaptation and could thus be considered as cross-cutting. However in most of these cases, one objective supersedes the other. Therefore in calculating total finance for adaptation and total finance for mitigation respectively, this report categorises all disbursements as adaptation where the scoring against the adaptation marker exceeds the scoring against the mitigation marker and vice versa. Where scoring is equal (and >0) under both adaptation and mitigation markers, the disbursement is counted as cross-cutting. This methodology means that amounts for mitigation, adaptation and crosscutting climate may be aggregated together for total climate finance. However, it is still *not* appropriate to aggregate climate with biodiversity or desertification finance as these categories contain overlaps.

