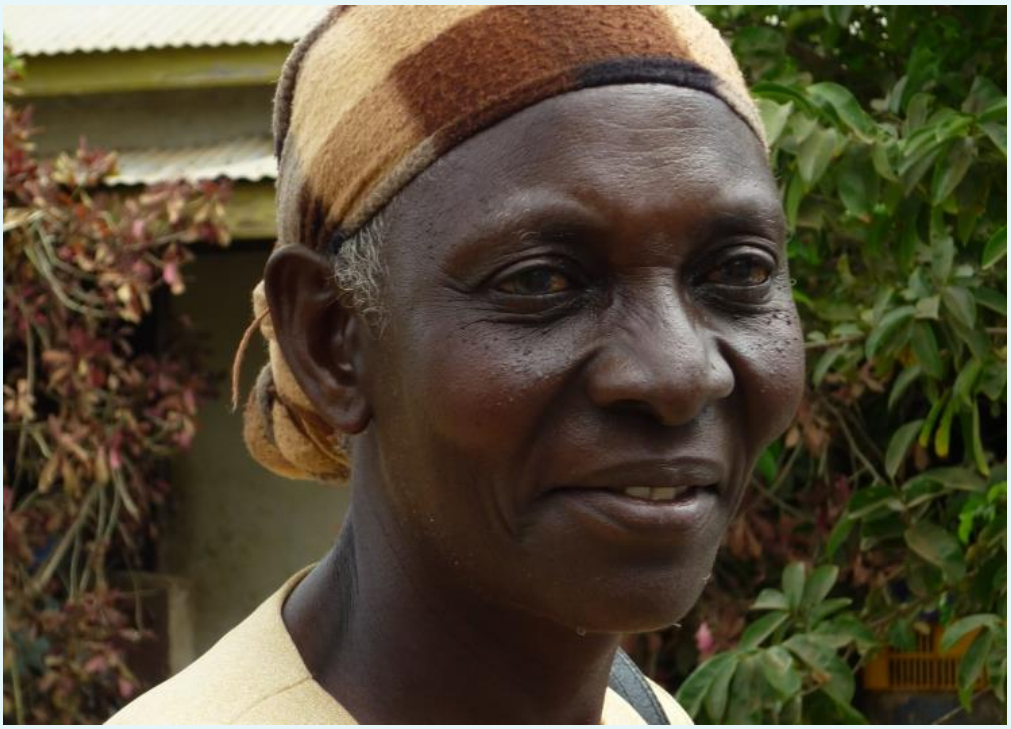

Irish Aid is supporting Help Age to deliver accessible social protection programmes for older people. Photo: Help Age

# TANZANIA CLIMATE ACTION REPORT FOR 2016

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

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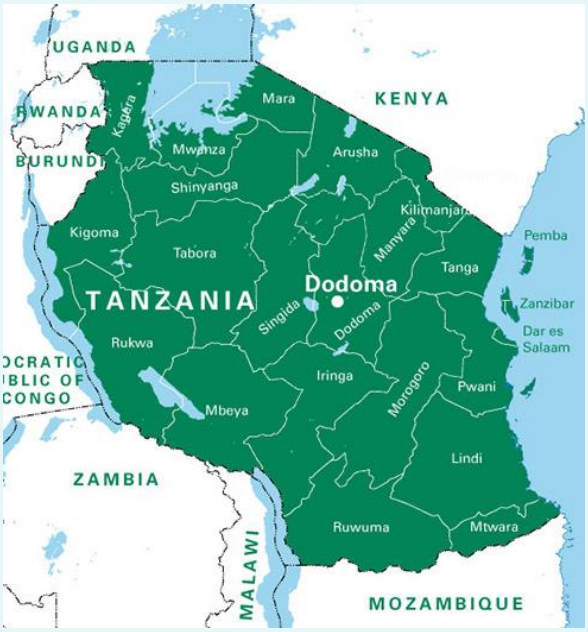
# COUNTRY CONTEXT

The United Republic of Tanzania, which comprises of Tanzania Mainland and Zanzibar, has a total area of 945,087 square kilometres and an estimated population of over 55 million, making Tanzania one of the largest countries in East Africa. Agriculture is the mainstay of the Tanzanian economy contributing about 24% of GDP in the year 2011, 31% of export earnings and employing about 75% of the total labour force.

In the last 40 years Tanzania has experienced severe and recurring droughts with devastating effects to agriculture, water and energy sectors. The Notre Dame Global Adaptation Initiative (ND-GAIN) Index ranks Tanzania as the 34th most vulnerable and 54th least ready to adapt to climate change, of the countries it covered for 2015. Currently more than 70% of all natural disasters in Tanzania are climate change related and are linked to recurrent droughts and floods. Tanzania published its National Climate Change Strategy in 2012, to address both adaptation and mitigation in line with the country's vision for sustainable development.

**Country Statistics**

- Population 2016 (est)[1]: 55,572,200
- Income (GNI) per capita 2016[2]: $900
- HDI Rank 2016[3]: 151 out of 188 countries
- Vulnerability Rank 2015[4]: 34 out of 182 countries
- Climate Risk Index 2015[5]: 116 out of 187 countries




Map of Tanzania: Irish Aid

1 http://data.worldbank.org/indicator/SP.POP.TOTL?locations=TZ

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

3 http://hdr.undp.org/en/countries/profiles/TZA

4 http://index.gain.org/country/tanzania

5 https://germanwatch.org/en/download/16411.pdfThe 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.

## Overview of Climate Finance in Tanzania in 2016

| | Bilateral € | Civil Society |
|---|---|---|
| **Climate Finance Adaptation (UNFCCC)** | 1,875,000 | 263,982 |
| **Climate Finance Mitigation (UNFCCC)** | 0 | 0 |
| **Climate Finance Cross-cutting (UNFCCC)** | 1,000,000 | 0 |
| **Biodiversity (UNCBD** | 450,000 | 17,605 |
| **Desertification (UNCDD)** | 1,350,000 | 68,647 |
| **Disaster Risk Reduction (DRR)** | 1,400,000 | N/A |
| **Total Climate Finance** | 2,875,000 | 263,982 |

**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 €2,875,000 to Tanzania in climate finance through its bilateral aid programme. In addition, Ireland provided €263,982 in 2016 in climate finance to projects in Tanzania 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 and programmes funded by Irish Aid have a strong agricultural focus. Projects funded directly by Irish Aid under the bilateral aid programme include improving cocoa and oil seed value chains, improving milk production and marketing, strengthening farmers networks, and fostering more equitable land governance. Civil Society partners Oxfam, World Vision, and Help Age are helping to build resilience to climate change by promoting economic empowerment of marginalized communities, strengthening coping mechanisms of pastoralist communities, promoting sustainable approaches to improved nutrition, and targeted actions that deliver social protection to older people. More detail is provided on these projects on

pages 9 to 16, with data and methodology behind these figures available in the Annex to this report.

# CLIMATE CHANGE TRENDS AND POLICY FRAMEWORK

## RECENT CLIMATE TRENDS

According to a study by the climate systems analysis group of the University of Cape Town[1], Tanzania experiences bimodal and unimodal conditions in different parts of the country. The ocean coastline is warm and generally wet with Dar es Salaam experiencing a mean of over 1000mm/year of rainfall and daily maximum temperatures ranging between 29°C and 32°C. This is in contrast to Tabora in the centre which experiences a mean annual rainfall of less than 500mm/year and average daily maximum temperatures slightly cooler, ranging from 27°C and 31°C. Mwanza, on the coast of Lake Victoria experiences around 700mm/year which is higher than Tabora, most likely a result of the moisture supplied by Lake Victoria, however mean daily maximum temperatures are lower hovering between 27°C and 28°C. Most locations have a fairly small seasonal temperature variation of around 3°C to 4°C which is not uncommon in tropical areas. Kilimanjaro International Airport shows the strongest cycle which is most likely related to its altitude.

The average annual temperature in Tanzania has increased by 1.0ºC since 1960. The increase in night-time temperatures has been much more pronounced than daytime temperatures. While the number of cold nights has decreased significantly, there is no discernable decrease in the number of cold days. Decreases in observed rainfall have been significant with observations showing annual rainfall decreasing by 2.8mm per month per decade since 1960. The greatest annual decrease has occurred in the southern-most parts of Tanzania

## PROJECTIONS OF FUTURE CLIMATE IN TANZANIA

Average annual temperature is projected to increase by 1.0 to 2.7°C by the 2060s and by 1.5 to 4.5°C by the 2090s. Hot days and nights will become increasingly frequent. It is projected that average annual rainfall will increase, but this will be more likely to fall in 'heavy' events than in the current climate and so may not contribute to year round water availability. Most parts of the country, particularly the Central and Northern Zones, which are semi-arid are very vulnerable to climate variability and they will be more vulnerable to the projected increase in

[1] Chris, J. Climate Projections for United Republic of Tanzania; Climate Systems Analysis Group, University of Cape Town

frequency and amplitude of extreme climate events[2]. There is a high degree of uncertainty about El Niño's impact on Tanzania's weather in conjunction with climate change[3] impacts

## GREENHOUSE GAS EMISSIONS

According to Tanzania's Intended Nationally Determined Contribution (INDC) 2015, the country has negligible emissions of greenhouse gases (total and per capita), whereby per capita emissions are estimated at 0.2 tCO2e1. On the other hand, the country has a total of 88 million hectares of land areas, of which 48.1 million are forested land and under different management regimes, with a current estimated total of 9.032 Trillion tons of carbon stock. The estimates are based on the present stocks from limited studies. This implies that Tanzania is a net sink.

However, according to the WRI CAIT climate data explorer for Tanzania for the years 1990-2013, latest emission values excluding Land Use Change and Forestry (LUCF) were 77.95% with per capita GHG emissions of 1.55tCO presenting a 86.84% absolute Change from earliest to latest value. Total emissions values including LUCF were at 287.12 with per capita emissions of 5.72t$CO_2$ e and 3.48% as absolute change from earliest to latest value. The highest emission contributions are from LUCF, agriculture, Energy and other fuel combustion respectively[4].

Tanzania plans to reduce greenhouse gas emissions economy wide between 10-20% by 2030 relative to the BAU scenario of 138 - 153 million tons of carbon dioxide equivalent (MtCO2e) gross emissions, depending on the baseline efficiency improvements, consistent with its sustainable development agenda[5]. The BAU emissions represent projected future emissions in the absence of further climate policies or other measures reflecting relevant assumptions on population growth, economic development and technology deployment. The emissions reduction is subject to review after the first Biennial Update Report (BUR).

## CLIMATE CHANGE IMPACTS AND VULNERABILITY

In Tanzania, more than 90 % of the population is dependent on agriculture or agricultural related activities. Agriculture in the country largely depends on rainfall which is increasingly becoming unpredictable and unreliable with worsening climate change impacts. Tanzania's National Climate Change Strategy (2012) outlines findings from the Tanzania Meteorological Agency that some of the previously highly productive areas of Tanzania such as the southern and northern highlands will continue to be affected by declining rainfall, frequent droughts

[2] Tanzania National Climate Change Strategy (2012)
[3] McSweeney et al (2010)
[4] http://cait.wri.org/profile/Tanzania
[5] Tanzania Intended National Contribution (2015)

and significant increases in spatial and temporal variability of rainfall. This will have long-term implications in the agricultural sector including in planning and resource allocation, such as seeds and pesticides which may result in shifts in types of agricultural produce.

The agriculture sector will also experience shifting in agro-ecological zones, where particular crops will no longer be suitable as a result of climate change. Prolonged dry episodes, unpredictability in rainfall, uncertainty in cropping patterns, increased weed competition with crops for (moisture, nutrients and light) and ecological changes for pests and diseases will all affect agricultural productivity[6]. Malnutrition from food shortage, which is already seen as a direct consequence of climate change in the country, decreases immunity and exposes the affected population to opportunistic diseases that would otherwise be resisted.

The National Climate Change Strategy also notes that while models predict a future expansion in the geographical range of diseases such as malaria. In Tanzania, there are already reported incidences of malaria in highland areas that were traditionally free from mosquitoes and malaria.

A recent study on the economic impacts of climate change[7] estimates that the cost of building adaptive capacity and enhancing resilience against future climate change in Tanzania is US$ 100 to 150 million per year. The Stockholm Environment Institute report projects that an additional US$ 500 million per year (but probably more) is required to address current climate risks, in reducing future impacts and building resilience to future climate change. The report further states that aggregate models indicate that net economic costs could be equivalent to a further 1 to 2% decline of GDP per year by 2030[8].

## TANZANIA'S CLIMATE CHANGE POLICY FRAMEWORK

The Government of Tanzania, recognizes the adverse impacts of natural disasters and climate change and has put in place relevant legislation to address the challenges. The key policy documents reviewed include:

- National Adaptation Programme of Action (NAPA 2007),
- Tanzania National Development Plan (2016/17- 2020/21),
- National Climate Change Strategy 2012,

[6] Shemsanga, C, et al. The Cost of Climate Change in Tanzania: Impacts and Adaptations. Journal of American Science (2010)
[7] SEI 2010: The Economics of Climate Change in the United Republic of Tanzania
[8] Republic of Tanzania,2012: National Climate Change Strategy

- Intended Nationally Determined Contribution (INDC), 2015.

In addition, there are climate relevant sector specific strategies which include:

- National Guidelines for Mainstreaming Gender into Climate Change Related Policies, Plans, Strategies
- Tanzania Climate Change Gender Action Plan
- Tanzania Agriculture Climate Resilience Plan, 2014–2019
- The National Climate Change Communication Strategy
- Guidelines for Integrating Climate Change into National Sector Policies, Plans and Guidelines, 2013
- The Disaster Management Act 1990.

While the policies on climate change are in place, challenges remains on commitment to implement actions with the necessary institutional coordination and inter-sectoral co-operation.

## NDC IMPLEMENTATION PROGRESS

Tanzania has not yet signed or ratified the Paris Agreement, but they submitted their INDC to the UNFCCC in 2015. Ratification of the Paris Agreement is expected to be completed by the end of 2017. Under its INDC, Tanzania will reduce greenhouse gas emissions economy wide between 10-20% by 2030 relative to the BAU scenario of 138 - 153 Million tons of carbon dioxide equivalent ($MtCO_2e$) gross emissions, depending on the baseline efficiency improvements, consistent with its sustainable development agenda. The BAU emissions represent projected future emissions in the absence of further climate policies or other measures. There has been no progress on the NDC but the German Agency for International Cooperation (GIZ) is exploring possible support with the Government.

## PROGRESS ON NATIONAL ADAPTATION PLAN (NAP)

The Government of Tanzania is being supported by GIZ to undertake a comprehensive stocktake at all local councils in mainland and Zanzibar as well as with ministries and government agencies. NAP stock taking workshops have been taking place and the NAP stocktaking report will be ready by end of 2017. Tanzania has also applied for GCF NAP readiness funds with support from UNDP, but the application has not yet been approved.

# KEY PARTNER COUNTRY'S BILATERAL PROJECTS AND PROGRAMMES

## DEVELOPING A HIGH QUALITY COCOA VALUE CHAIN IMPROVING PRODUCTION AND MARKET ACCESS

This programme aims to increase the incomes of 5,000 smallholder farmers by improving the quality of their crop and linking farmers to markets in two regions, Mbeya and Morogoro. This project will introduce technologies and practices to reduce environmental impact and adapt to climate change. The primary climatic risk for farmers in Tanzania is drought. The project aims to improve access to affordable irrigation equipment, such as small-scale irrigation pumps, through access to microfinance. In Mbeya, the programme supports introduction of organic methods for increasing soil fertility. In Morogoro where farming is not organic, they will aim to reduce the amount of chemical inputs used on-farm. ***Climate relevant funding provided by Irish Aid in 2016: €450,000.***

## MORE MILK PROJECT: IMPROVING MILK PRODUCTION AND MARKETING THROUGH DAIRY MARKET HUBS

The project aims to reduce poverty and vulnerability among dairy-dependent livelihoods in selected rural areas in Tanzania with the Irish Aid funding provided through the International Livestock Research Institute (ILRI) Dairying offers many pro-poor benefits from small-scale production and marketing, including opportunities for intensification and enhanced productivity and incomes, employment in services and marketing, and nutrition for the smallholder household and the poor in towns and cities served by informal markets. ***Climate relevant funding provided by Irish Aid in 2016: €200,000.***

## MVIWATA: STRENGTHEN LOBBYING AND FARMERS NETWORKS, CAPACITY OF FARMERS

This programme supports the Network of Small-Scale Farmers' Groups in Tanzania. The focus of this programme is the strengthening of farmer groups and networks at all levels including through capacity building, economic empowerment and advocacy. Climate change has caused increasing concern and exacerbates existing problems. These are manifested in increasing food insecurity, conflicts over land use and struggle for land between investors and small, native producers. This programme builds the knowledge and training of farmers in

climate change and mainstreams climate change and environmental concerns in MVIVATA strategy and policy. Weak natural resource management is also addressed. ***Climate relevant funding provided by Irish Aid in 2016: €150,000.***

## ANSAF: TRAINING FOR LOCAL LEVEL LEADERS ON CLIMATE CHANGE

The aim of the project is to provide training for local level leaders and to sensitise citizens on climate change adaptation and mitigation measures with major emphasis placed on conservation agricultural practises and growing climate resilient crops. ***Climate relevant funding provided by Irish Aid in 2016: €100,000.***

## SNV: OIL SEEDS VALUE CHAIN PROJECT: IMPROVING PRODUCER ASSOCIATION AND OIL SEED VALUE CHAIN AND MARKETS

The programme promotes edible oilseeds such as sunflower and sesame seeds to support improved household nutrition and food security in poor communities. Sunflower and sesame seeds were chosen for this project for their potential for increased processing capacity, income and employment, and for being climate smart crops. ***Climate relevant funding provided by Irish Aid in 2016: €150,000***

## FOSTERING GENDER EQUITABLE LAND GOVERNANCE FOR INCLUSIVE AGRICULTURAL DEVELOPMENT INCLUDING PASTORALISM

The programme aims to promote a people centred approach to land governance for inclusive agricultural development including pastoralism, with collaboration from partners including International Fund for Agricultural Development (IFAD) and the International Land Coalition (ILC). It not only supports individual village land use planning, but more importantly joint village land use planning in order to secure resources such as grazing areas shared across village boundaries. ***Climate relevant funding provided by Irish Aid in 2016: €150,000.***

## AGRICULTURE VALUE CHAIN DEVELOPMENT PROGRAMME

Working through the Agricultural Markets Development Trust (AMDT), the programme focuses on sunflower, maize and pulses and helps smallholder farmers to compete and prosper in selected agricultural markets. It aims to improve the enabling environment in agricultural

value chains (i.e., rules, regulations, policy, information/knowledge, coordination, etc). ***Climate relevant funding provided by Irish Aid in 2016: €250,000.***

## HARNESSING AGRICULTURE FOR NUTRITION OUTCOMES (HANO)

The project is implemented by Save the Children and covers 33 villages in 10 wards in Lindi Rural and Ruangwa districts. The goal of the project is to reduce rates of chronic malnutrition of children under two years by 10% in the selected communities through improved diets. ***Climate relevant funding provided by Irish Aid in 2016: €125,000***.

## LISHE RUVUMA: SCALING UP INNOVATIVE EVIDENCE BASED ESSENTIAL NUTRITION ACTIONS

The project is being implemented by the Centre for Counselling, Nutrition and Health care (COUNSENUTH). The aim of the program is to improve the nutritional status of children; and pregnant and lactating women through emphasis on the first 1,000 days. ***Climate relevant funding provided by Irish Aid in 2016: €200,000***.

## BRINGING NUTRITION ACTIONS TO SCALE

The project is being implemented by UNICEF in Iringa, Njombe and Mbeya Regions. The project objective is to reduce the prevalence of chronic under nutrition among young children in the three regions. ***Climate relevant funding provided by Irish Aid in 2016: €1,100,000***.

***Case Study*: Diversifying Crop Varieties Based on Climate Conditions Earns Pastoralist Communities More Income**

Irish Aid (IA) has been supporting pastoralists through a Pastoralist Basket Fund Programme since September 2007. The programme to date has had two formal phases. Phase 1 started in September 2007 with forty-six Civil Society Organisations in ten regions funded. Phase 2 started in 2011 and closed in June 2017. From 2011 to 2014, twenty-five local CSOs were supported to carry out different projects at local level. Essentially the programme aimed to reduce poverty and vulnerability of pastoralist communities in Tanzania through advancement of pastoralist men and women's rights to a sustainable livelihood.

The expected outcomes for the project included; influencing policies that respond to the needs of pastoralists, having Government Agencies and Local Government Authorities (LGAs) deliver quality veterinary and extension services to pastoralists, Increasing adoption of climate adaptation and mitigation strategies and/or practices among pastoralists, and increasing participation of pastoral women in decision-making processes, ownership and control of land and cattle in the programme area.

Through this programme, crop diversification techniques are assisting pastoralist communities in Tanzania to adapt to the impacts of climate change. Aisha Hussein traditionally used to grow maize and beans but experienced poor harvests as these crops were not drought resistant and vulnerable to unreliable rainfall. However, she has now diversified to growing crops such as tomatoes, sweet peppers and water melon. These high-value crops are providing an alternative source of income for Aisha and her family, as well as making them more food secure. She pointed out that unlike maize and beans horticultural crops are high value crops which apart from being grown in two cycles per year, also result in more yield and income per acre. Citing specific examples Aisha said; "this year I have grown water melon twice and tomato once in a hired 1¼ acre and I am expecting to grow tomato and sweet pepper in November".

*Image displays Aisha Hussein, Meru District, Arusha. Phot credit: CARE Tanzania.*

***"It is 3½ years now since I shifted from growing maize and beans to horticultural crops mainly tomatoes, sweet pepper and water melon as a strategy for climate change adaptation. I am now able to grow food all year round and earn more income".***

| Project/Programme | Recipient | Disbursed | Rio Marker - Mit | Rio Marker Adapt | Rio Marker - Biod | Rio Marker - Desert | Agri | Disaster Risk Reduc | Capacity Build | Tech Trans | Forestry & Agroforestry | Total Climate Accounting Weight | Total Accounted Climate Amount | Mitigation Total | Adaptation Total | Cross-cutting Climate Change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | |
| Cocoa value chain; developing a high quality cocoa value chain improving production and market access | Technoserve | 900,000 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 2 | 50% | 450,000 | 0 | 0 | 450,000 |
| More Milk Project: Improving milk production and marketing through Dairy Market Hubs (DMH) | International Livestock Research Institute | 400,000 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | | 0 | 50% | 200,000 | 0 | 200,000 | 0 |
| MVIWATA; strengthen lobbying and farmers networks, capacity of farmers | MVIWATA; small holder farmers and farmer's networks | 300,000 | 1 | 1 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 50% | 150,000 | 0 | 0 | 150,000 |
| Training for local level leaders to sensitise citizens on climate change adaptation and mitigation | ANSAF members organisations and small- | 200,000 | 1 | 1 | | | 1 | 0 | 1 | 0 | 0 | 50% | 100,000 | 0 | 0 | 100,000 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | holder farmers | | | | | | | | | | | | | | | |
| SNV: oil seeds value chain project; improving producer association and oil seed value chain and markets | SNV: Tanzania | 300,000 | 1 | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 0 | 50% | 150,000 | 0 | 0 | 150,000 |
| Fostering Gender Equitable Land Governance for Inclusive Agricultural Development Including Pastoralism in Tanzania | IFAD/International Land coalition | 300,000 | 1 | 1 | 0 | 2 | 2 | 1 | 1 | 1 | 1 | 50% | 150,000 | 0 | 0 | 150,000 |
| Agricultural value chain development programme focusing on sunflower, Maize and pulses | Agricultural Markets Development Trust (AMDT) | 500,000 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 50% | 250,000 | 0 | 250,000 | 0 |
| Reduce rates of chronic malnutrition of children under-2 by 10% in the selected communities in the Lindi and Ruangwa districts | Save the Children HANO | 250,00 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 50% | 125,000 | 0 | 125,000 | 0 |
| Lishe Ruvuma: Scaling Up Innovative Evidence Based Essential Nutrition Actions to reduce Childhood Stunting | Counsenuth | 400,000 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 50% | 200,000 | 0 | 200,000 | 0 |
| Bringing Nutrition Actions to Scale in six districts in Iringa, Njombe and Mbeya Regions | UNICEF | 2,200,000 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 50% | 1,100,000 | 0 | 1,100,000 | 0 |

Civil Society partners Oxfam, World Vision, and Help Age are helping to build resilience to climate change by promoting economic empowerment of marginalized communities, strengthening coping mechanisms of pastoralist communities, promoting sustainable approaches to improved nutrition, and targeted actions that deliver social protection to older people. More detail is set out in the table below:

| ***Project/ Programme*** | ***Total Irish Aid fundin g*** | ***Climate relevant (€)*** | ***Adaptati on (€)*** | ***Mitigatio n (€)*** | ***Biodiversity (€)*** | ***Desertification (€)*** |
|---|---|---|---|---|---|---|
| **Oxfam**: To promote the economic empowerment of marginalised women and men through secure access to land and other productive and/or natural resources | 318,596 | 159,298 | 159,298 | 0 | 0 | 0 |
| **Oxfam:** To strengthen coping mechanisms in targeted pastoralist communities through support for the development of early warning systems and drought cycle management plans | 60,000 | 60,000 | 60,000 | 0 | 0 | 60,000 |
| **World Vision**: Community groups promoting locally appropriate and sustainable approaches to improved nutrition; and improved water and sanitation access | 35,211 | 8,647 | 8,647 | 0 | 17,605 | 8,647 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Help Age**: Older People holding their Govt to account at local and national level for the delivery of the social protection programmes | 47,002 | €23,501 | 23,501 | 0 | 0 | 0 |
| **Help Age:** Increasing capacity of Govts to deliver accessible social protection programmes for Older people | 25,072 | €12,536 | 12,536 | 0 | 0 | 0 |

## 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 five 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[9] 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 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-

[9] 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.

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 supercedes 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.