Ireland's Bilateral Climate Finance Malawi - 2013 Report Malawi is a landlocked country in southeast Africa approximately 118,480 square kilometers with a population of about 16 million. Over 80% of the population depends on farming to survive. Annual temperature has increased by 0.9C degrees from 1960 to 2006 with a projected increase of between 1.1 to 3.0C degrees by the 2060s (McSweeney et al, 2010). The World Bank climate profile of Malawi states that Malawi is particularly prone to adverse climate hazards including dry spells, seasonal droughts, intense rainfall, riverine floods and flash floods. Furthermore, the World Bank refers to estimates that droughts on average cause GDP losses of almost 1% every year with much greater losses for extreme droughts (World Bank, 2014). Ireland has contributed approximately €5,102,794 in bilateral Climate Finance to Malawi in 2013.

Malawi

Country Statistics

Population ¹	16,362,567
Income per capita ²	\$715
HDI Rank ³	174 th
Vulnerability Rank ⁴	38 th
Extreme Events Rank ⁵	101 st



Map of Malawi, Irish Aid

Vulnerability Update 2013-2014

Due to drought and other factors and a limited harvest, in the 2013-2014 financial year the Multi-Vulnerability Assessment Committee identified a total of 1.55 million people who required food and cash support. Communities in 24 of the country's 28 districts were targeted in the Government led humanitarian response.

¹ Population in 2013: World Bank (2014) http://data.worldbank.org/indicator/SP.POP.TOTL Available at 18th July 2014.

² Gross National Income per capita in 2013, 2011\$ PPP; UNDP (2014) International Human Development Indicators; http://hdr.undp.org/en/countries Available at 25th July 2014.

³ ibid

⁴ ND GAIN (2013) http://index.gain.org/ranking Available at 20th June 2014. The rank quoted is an inversion of the ND GAIN vulnerability index which gives a higher rank to the least vulnerable. We have inverted so that 1st place is most vulnerable and 183rd place is least vulnerable.

⁵ Average over 1993-2012. Higher rank denotes greater losses from extreme events; Germanwatch (2014); Global Climate Risk Index 2014, http://germanwatch.org/en/download/8551.pdf Available at 20th June 2014

	Bilateral Programme 2013 EUR ⁶
Climate Finance; Adaptation ⁷ (UNFCCC)	€4,332,794
Climate Finance; Mitigation ⁸ (UNFCCC)	€3,620,000
UN Convention on Biological Diversity (UNCBD)	€2,860,000
UN Combat Desertification and Degradation (UNCCD)	€975,000
Disaster Risk Reduction (DRR) (UNISDR)	€3,761,745
Irish Aid Support for Irish Civil Society Programme Partners in Malawi	€1,878,044



Amon Chimera manager at Kakuya Farm, Irish Aid 2009

⁶ These figures should not be aggregated as some disbursements have multiple co-benefits and are therefore marked for multiple environmental impacts. Total climate finance in 2013 is €4,902,794.

⁷ Climate relevant disbursements where the principal climate marker is applied are counted at 100% whereas climate relevant activities to which the significant marker is applied are discounted by a coefficient factor of 50%. The principal marker indicates that the specified cross-cutting theme, in this case, climate adaptation, was a main objective of the activity. It implies that the activity may not have gone ahead if not for the climate dimension. The significant marker indicates that the activity had other principal objectives which were the focus of the activity but that co-benefits were planned or mainstreamed into the activity. The application of the 50% coefficient to significant expenditures is a proxy representation of this lesser role of the environmental dimension in the disbursed amount

⁸ As above.

Malawi, Climate Change and the UN Framework Convention on Climate Change (UNFCCC)

Malawi is a member of the Least Developed Countries' Group. Malawi has a seat in the LDC Expert Group (LEG) and a seat on the board of the Adaptation Fund.

Recent Climate Trends in Malawi

Average annual temperature has increased by 0.9°C from 1960 to 2006. Warming has been more rapid in summer. The frequency of hot days and hot nights in all seasons has increased significantly with the average number of hot days and nights per annum having increased by 30 and 41 respectively from 1960 to 2003. Year to year variability in rainfall is quite strong in Malawi and so there are no significantly discernible trends in rainfall patterns (McSweeney et al, 2010).

The World Bank climate profile of Malawi states that Malawi is particularly prone to adverse climate hazards including dry spells, seasonal droughts, intense rainfall, ravine floods and flash floods. Droughts and floods have increased in frequency, intensity and magnitude over the past twenty years. They identify floods and droughts as the leading cause of chronic food insecurity which is endemic in many parts of the country. The World Bank refers to estimates that droughts, on average, cause GDP losses of almost 1% every year with much greater losses for extreme droughts (World Bank, 2014). Malawi is among the countries most prone to adverse effects of climate change ranked among 16 countries of 'extreme risks' to climate change impacts in the world (Maplecroft, 2012). The Fifth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC) notes that climate change is beginning to impact freshwater ecosystems with elevated surface water temperatures evident in Lake Malawi.

Projections of Future Climate in Malawi

The average annual temperature is projected to increase by 1.1 to 3.0°C by the 2060s. All projections indicate substantial increases in the frequency of days and nights that are considered 'hot' in the current climate. Projections of rainfall are not consistent across models and thus do not indicate substantial changes in annual rainfall. Models consistently project increases in the proportion of rainfall that falls in heavy events. One study quoted by the World Bank's country profile suggests a possibility that rainy seasons will grow shorter which would lead to more frequent failures of the maize crop with significant implications for food security. Interventions for coping with recurring droughts will be necessary.

Adaptation

As a Least Developed Country, Malawi produced a National Adaptation Plan of Action (NAPA) in 2006. The NAPA documents national circumstances, vulnerabilities, and expected impacts from climate change in Malawi, as well as identifying and prioritising responsive actions. The NAPA also outlines the consultation, resources and information that were used to prioritise adaptation interventions for Malawi.

Malawi relies on rain-fed agriculture and has already experienced the impacts of climatic hazards such as drought and floods leading to poor yields or total crop failure, thus exacerbating problems of food security and malnutrition. Climate change is also expected to impact directly on human

health by increasing the incidence of disease such as malaria, cholera and diarrhea due to droughts, floods and increasing temperatures. Hydroelectric power has been negatively impacted by droughts and floods but also by siltation due to poor agricultural practices and deforestation. Floods and droughts have had negative impacts on fisheries leading to declining production and loss of biodiversity. Water supply and quality is negatively impacted by both drought and flood while forestry is negatively impacted by drought leading to loss of soil fertility and increased risk of forest fires. Climate change is expected to worsen these impacts in the coming years.

Through a process of consultation with public and private sector organisations including NGOs and civil societies as well as academics, 31 adaptation options were identified which were further prioritised and ranked using multi-criteria analysis. This led to a final list of 15 prioritised actions as follows;

- 1. Sustaining life and livelihoods for the most vulnerable communities,
- 2. Enhancing food security and developing community based storage systems for seed and food,
- 3. Improving crop production through the use of appropriate technologies,
- 4. Increasing resilience of food production systems to erratic rains by promoting sustainable dimba production of maize and vegetables in dambos, wetlands and along river valleys,
- 5. Targeting afforestation and re-afforestation programmes to control siltation and the provision of fuel wood, and for their benefits, such as sources of alternative cash income,
- 6. Improving energy access and security in rural areas (e.g., through extension of the rural electrification programme, energy-efficient stoves and development of ethanol-based stoves),
- 7. Improving nutrition among rural communities (e.g., through the promotion of fish farming, rearing of small ruminants and nutritional supplements for children and the sick),
- 8. Disseminating bed nets in high incidence malaria areas,
- 9. Developing food and water reserves for disaster preparedness and response,
- 10. Developing community based wildlife ranching and a breeding programme for Nyala,
- 11. Developing and implementing strategies for drought preparedness, flood zoning and mitigation works,
- 12. Developing technologies to mitigate climate change,
- 13. Providing standby power generation facilities,
- 14. Managing forest fires in collaboration with communities, and
- 15. Developing small dams, and other storage facilities, to mitigate flooding, to harvest water and to initiate community based fish farming and breeding.

The highest priority actions from the above list were then assessed for urgency and developed into urgent projects for Malawi. Each project contains a number of adaptation actions which could still be separately implemented depending on resources. The urgent adaptation projects for Malawi are as follows;

- (a) Improving community resilience to climate change through the development of sustainable rural livelihoods,
- (b) Restoring forests in the Upper and Lower Shire Valleys catchments to reduce siltation and associated water flow problems,
- (c) Improving agricultural production under erratic rains and changing climatic conditions,
- (d) Improving Malawi's preparedness to cope with droughts and floods, and
- (e) Improving climate monitoring to enhance Malawi's early warning capability and decision making and sustainable utilization of Lake Malawi and lakeshore areas resources.

More detail on these projects is available in the NAPA report.

Nationally Appropriate Mitigation Action by Malawi

Based on its Second National Communication to the UNFCCC, Malawi produced a Nationally Appropriate Mitigation Action (NAMA) which was submitted to the UNFCCC in March 2012. It describes the intention of Malawi to invest in the list of identified mitigation actions, subject to provision of financial, technological and capacity building support by developed countries and multilateral and international institutions to Malawi. The NAMA lists thirteen mitigation actions in agriculture, six in waste, seven in energy, land-use, two in land-use change and forestry (LULUCF), and nine in industry. The following is a sample selection of those activities;

- Build capacity for national carbon accounting
- Conservation agriculture
- Enhance participatory agricultural research
- Agricultural advisory service
- Promote Microfinance schemes,
- Develop/ enhance climate information systems and early warning mechanism
- Implementation of win-win adaptation and mitigation strategies and actions through appropriate incentives
- Build capacity to develop, implement and monitor agricultural NAMA
- Up-scaling best practices that enhance climate change adaptation and mitigation
- Construction of controlled and sanitary landfills

- Waste-to-energy and organic fertilizer from waste
- Promotion of renewable energy technologies such as biogas digesters and photo-voltaic (PV) lamps
- Efficient cooking stoves
- Afforestation and conservation of existing forests
- Build capacity for regulation and management of industrial emissions and market based instruments

Resources:

IPCC 5th Assessment Report (2014), Working Group II Impacts, Adaptation and Vulnerability: http://ipcc-wg2.gov/AR5/

Maplecroft (2013); Climate Change and Environmental Risk Atlas 2012; http://maplecroft.com/about/news/ccvi_2013.html

UNDP climate change profile for Malawi: http://www.geog.ox.ac.uk/research/climate/projects/undp-cp/index.html?country=Malawi&d1=Reports

World Bank Profile, Malawi Dashboard (2014);

 $\underline{http://sdwebx.worldbank.org/climateportalb/home.cfm?page=country_profile\&CCode=MWI\&ThisTab=Dashboard$

Malawi Ministry of Mines, Natural Resources & Environment (2006); National Adaptation Programme of Action (NAPA); http://unfccc.int/resource/docs/napa/mwi01.pdf

Malawi Ministry of Mines, Natural Resources & Environment (2012); Submission on Nationally Appropriate Mitigation Action; https://unfccc.int/files/bodies/awg-lca/application/pdf/malawi_submission_on_namas.pdf (available at 18 July 2014)

Malawi & the UN Convention on Biological Diversity (UNCBD)

Malawi submitted its fourth National Report to the UNCBD in 2010. Despite its small size, Malawi is one of the global centres of fish biodiversity having 14% of global freshwater fish. About 95% of fish species in Lake Malawi are endemic or native to Malawi. Malawi has two biosphere reserves, Mulanje Mountain and Lake Chilwa Wetland which is an internationally recognised Ramsar site. Most forests in Malawi are part of National Parks, Wildlife Reserves, protected hill slopes, and customary land. Forests are under severe threat of depletion and are estimated to be declining at a rate of 1 to 2.8% annually due to demand for fuelwood, charcoal and expanded settlement. Although there has been an increase in protected areas, there has been extensive encroachment into some forest reserves such as Thyolo, Ndilande, Kalwe, and Zomba-Malosa.

Many of the species native to Malawi are threatened or endangered. There are nine threatened bird species, one critically endangered mammal (the black rhino), two threatened mammal species (including the African Hunting Dog) and 128 threatened plant species 63 of which the Millennium Seedbank Project assessed as having high extinction threat or data deficient. The black rhino, previously extinct in Malawi, was re-introduced in

Liwonde and Majete National Parks and now numbers 15 in total. There is insufficient data on insects, amphibians and reptiles to determine their status. One insect species is known to be critically endangered.

Human activity is impacting negatively on the status of water bodies in Malawi. There is significant degradation in lakes Malawi, Malombe and Chilwa due to sediment load, nutrient input, pollutants and contaminants. Little is known about the aquatic biodiversity of Malawi excepting fish populations. Fish production is known to have fallen from approximately 70,000 metric tonnes in 1980 to 50,000 metric tonnes in 2000. Poverty is an important factor driving over-exploitation or over-harvesting of natural resources. According to the 4th National Report to the UNCBD, approximately 90% of the population of Malawi depend on natural resources of Malawi whether for fuel-wood for domestic and industrial energy, food, medicine, construction, craft, fodder, or as a source of raw materials e.g. resins, oils, dyes, or gum.

The National Biodiversity Strategy and Action plan group priority actions on biodiversity into five categories as follows;

- Infrastructure and human capacity enhancement that will contribute to substantial improvements in our knowledge and understanding of the biodiversity.
- Enhancement and maintenance of partnership and relationships between government departments and communities, government and the development partners and NGOs.
- Promoting sustainable use of genetic resources through promoting systematic protection and characterisation of agro-biodiversity and protection from bio-piracy, invasive species and pests.
- Enhancement of good governance by prioritising actions that encourage Malawi to continue taking a leading role in coordinating and monitoring implementation of natural resource programmes, and provision of funding for biodiversity programmes through the national budget.
- Enhancing protected areas management through community participation, research, information management and policy enforcement.

More detail is available in the NBSAP.

Resources:

UNCBD Country Profile: http://www.cbd.int/countries/?country=mw

4th National Report: http://www.cbd.int/doc/world/mw/mw-nr-04-en.pdf

Malawi & the UN Convention to Combat Desertification (UNCCD)

Malawi produced a National Action Programme under the UNCCD in 2001. It cited three main causes of land degradation in Malawi; poverty, population increase and heavy-reliance on natural resources. The National Action Programme is organised under eight categories of issue and associated response;

	<u>Theme</u>	Overall Objective
1)	Environment Management	The Government and communities should ensure that there is a suitable and safe environment for one to live in through government departments and community based management groups, i.e. Village Natural Resources Management Committees (VNRMC).
2)	Food Security	 To provide irrigation services to farm families or groups e.g. schemes, with improved/appropriate technology, crop diversification for increased crop production. To rehabilitate existing schemes so that they are brought back to their old productive status. To review policy affecting operations of schemes/institutions. To create pilot areas in upland areas emphasizing agro-forestry and natural resources management for high crop production.
3)	Water Resources Management and Development	To improve supply and sanitation of water
4)	Renewable Energy	To diversify energy sources
5)	Deforestation	 To improve land productivity To instill sense of ownership in the people through participatory management To restore powers of traditional authorities to manage forests.
6)	Indigenous Knowledge Systems and Technologies	To promote cultural values and heritage
7)	Institutional Arrangements	To empower local communities
8)	Funding Arrangements	To enable programme implementation

The National Action Programme identifies a number of interventions under each theme to advance the overall objective. It specifies that "the overall strategy of the national action programme shall:

- emphasize integrated local development programmes for affected areas, based on participatory mechanisms and on integration of strategies for poverty eradication into efforts to combat desertification and mitigate the effects of drought;
- aim at strengthening the capacity of local authorities and ensuring the active involvement of local populations, communities and groups, with emphasis on education and training, mobilization of non-governmental organisations".
- More detail on the interventions is available in the NAP.



Mary Zumbuza benifiting from the Nsembe irrigation scheme, Irish Aid, 2013

Resources:

Malawi Country Profile on UNCCD: http://www.unccd.int/en/regional-access/Pages/countries.aspx?place=148

Malawi National Action Program under the UNCCD (2002): http://www.unccd.int/ActionProgrammes/malawi-eng2001.pdf

Key Partner Country's Bilateral Projects and Programmes in 2013

1. Targeted Relief Food Assistance to Vulnerable Populations Affected by Natural Disasters, UN World Food Programme (WFP)

In response to the July 2013 Malawi Vulnerability Assessment Committee (MVAC) report, food assistance was directed towards households facing substantial shortfalls in food availability. Recognising the temporary nature of relief operations, resilience building assistance is integrated into the programme linking with ongoing UN and NGO disaster risk reduction (DRR) and climate change adaptation activities. As addressing food security is the key goal of this activity, this activity is marked as 'significant' for climate change adaptation and is counted at 50% towards climate finance.

2. Agro-forestry Food Security Programme (AFSP) Phase II, International Centre for Research in Agro-forestry

The AFSP II aims to contribute towards climate-smart agriculture, i.e. agriculture that sustainably increases productivity (food security), resilience (climate change adaptation) and reduces greenhouse gas emissions (mitigation), through the scaling up of agro-forestry innovations, namely; 1) fertiliser trees and conservation agriculture to build an evergreen agriculture that enhances accumulation of soil organic matter thus enhancing crop productivity and resilience to climate risks; 2) fruit trees to improve household nutrition, health and income; 3) Fodder trees to improve milk yields for smallholder dairy farmers to enhance nutrition, health and income; and 4) woodlots for firewood and timber production. This project was designed, with input from government departments, to be closely aligned with Malawi's National Adaptation Programme of Action (NAPA), Nationally Appropriate Mitigation Action (NAMA), and the Agriculture Sector Wide Approach Programme (ASWAP). By supporting planting of trees and conservation agriculture to support soil organic matter, this project contributes significantly to the enhancement of carbon sinks and thus is marked as 'principal' for climate change mitigation. By increasing and diversifying agricultural production, this project is also marked as 'significant' for climate change adaptation. As it is marked principal for mitigation and significant for adaptation, this activity is counted at 100% towards climate finance.

3. Development of TEG Stoves in Rural Off-Grid Malawi, Trinity College Dublin & Concern Universal

Irish Aid previously funded development by Trinity College Dublin (TCD) of a thermal electrical generator (TEG) based on a clay cooking stove. The technology was extensively field tested in a collaboration between TCD and Concern Universal. The field tests showed that the TEG cooking stoves met their objective in providing low cost energy access for the households in the field tests. This project, by TCD with Concern Universal,

is for the development of a prototype and medium-scale deployment in rural Malawi with the ultimate aim for the technology of national roll-out. By providing low cost energy access with low or zero carbon emissions, this project supports climate change mitigation. As the low carbon energy access is the key driver of the design of this project, it is marked as 'principal' for climate change mitigation and is counted at 100% towards climate finance.

4. Malawi Enhancing Community Resilience Programme (ECRP), DFID Malawi

The aim of the ECRP is to enable households to build resilient, sustainable and profitable livelihoods and give them a voice in decisions affecting them. The programme reduces existing and future risks caused by natural hazards and climate change and strengthens the capacity of vulnerable communities to cope with current risks and adapt to new ones. ECRP aims to reach 600,000 people in eleven vulnerable districts in central and southern Malawi to build their capacity to increase resilience to climatic risks. As building resilience to climatic risks is a defining objective of this programme, it is marked as 'principal' for climate change adaptation and is counted at 100% towards climate finance.

5. Local Development Support Programme, Concern Universal

The aim of this programme is to contribute to reduction of poverty and vulnerability. The programme focuses on the following sectors; local government; food and nutrition security; agribusiness; health; HIV and AIDS; water and sanitation; disaster risk reduction; and cross-cutting issues including gender, HIV and AIDS, environmental management, rights and participation, and capacity building. The programme aims to support priority activities identified in the district disaster preparedness and management plans for Dedza, Ntcheu, Balaka, and Phalombe, and to support implementation of priority activities identified in environmental outlook reports and plans. The programme supports inter alia Village Natural Resource Management Committees (VNRMCs) and supports the efficient use and management of natural resources, and the rehabilitation and management of essential ecosystems and ecological processes thus supporting the objectives of the UN Convention on Biological Diversity. Additionally, the programme implements key activities in Malawi's NAPA. The programme supports the objectives of the UN Convention to Combat Desertification by promoting soil and water conservation and management as well as sustainable agricultural practices. In supporting district disaster preparedness and implementing key activities in the NAPA, this programme is marked as 'significant' for climate change adaptation and is counted at 50% towards climate finance. It is also marked as significant for biodiversity and is counted at 50% towards biodiversity finance.

6. Community-Based Water Filters Promotion Project, Evangelical Association of Malawi

This project aimed at assessing the appropriateness and effectiveness of water filters in reducing the incidences of water borne diseases mainly during natural disasters such as flooding where cases of water borne disease are rampant. This project is targeted at the 'disaster prone' area Chikhwawa which is subject to frequent floods and droughts. Villages in the target areas have limited access to safe and clean water and this is further compounded with flooding leading to high incidence of water-borne disease. This project is linked with the project "Strengthening Community Disaster Resilience (SCDR)" (number 11 below) and is complementary to it.

7. Agricultural Sector Wide Approach (ASWAp), Multi Donor Trust Fund/World Bank

The objectives of this programme are to improve the effectiveness of investments aimed at food security and sustainable agricultural growth, and strengthen the natural resource base in agricultural lands, through a doubling of the area under sustainable land management as a basis for securing ecosystem services and sustainable agricultural productivity. The programme supports institutional capacity building in districts for planning, agricultural policy, land administration and financial management. The programme also supports capacity building of smallholder farmers in *inter alia* nutrient management and conservation agriculture techniques, diversified crops including agro-forestry and expansion of farmer advisory services. It also provides support to market based agricultural risk management strategies including payment of weather derivative contracts and insurance premiums to cover agricultural production and studies on macro and micro-weather insurance schemes. The programme also supports sustainable water management such as rainwater conservation. Early warning systems for droughts and floods are also supported. By supporting conservation agriculture and agro-forestry, this project protects and enhances sinks and thus contributes to climate change mitigation and combats land degradation. By supporting and researching agricultural weather-based risk management, early warning systems and sustainable water management this project also supports long term adaptation to climate change. Risk management and early warning systems also contribute to Disaster Risk Management. Ireland has placed particular emphasis on the integration of drought resistant legume seed, principally ground nuts, pigeon peas and beans, into the national agricultural systems, to improve soil fertility management and nutritious food production. As the main aim of this programme is food security and agricultural growth, it is marked as 'significant' for adaptation and mitigation and is thus counted at 50% towards climate finance.

8. Rooting out Hunger; Phase II, International Potato Centre (2014, not yet confirmed)

A second phase of the Rooting out Hunger project is planned to begin in 2014 but is not yet agreed. Current plans indicate a focus on climate resilient crops. A total of epsilon100,000 has been disbursed so far in 2014. This would be marked as significant in climate adaptation and counted at 50% towards climate finance numbers in 2014.

9. Malawi Social Cash Transfer Programme support, Ministry of Gender/UNICEF

The Government of Malawi planned scaling up the Social Cash Transfer Programme (SCTP) to the Balaka district as a response to chronic food insecurity and high poverty. The purpose of this activity is to scale up the use of social cash transfers to build evidence on the potential of SCTP to build resilience and reduce chronic recurrent food insecurity in vulnerable districts. A key component of the scale up will be identifying impacts that SCTP has on Balaka District to recurring disasters particularly from increasing more frequent droughts. It is proposed to assess the potential of SCTP to reduce vulnerability of the poorest 10% of the population in the District and to reduce the impact of climate induced disasters. The programme is primarily focussed on addressing chronic food insecurity and high poverty with climate resilience as a secondary component. Therefore this programme is marked as 'significant' for climate change adaptation and is counted at 50% towards climate finance.

10. Promoting Selected Conservation Agriculture Techniques and Sustainable Crop Production Practices in Smallholder Farming Systems, National Smallholder Farmers' Association of Malawi (NASFAM)

The overall objective of the project is to promote the principles and practices of conservation agriculture under smallholder farmer conditions in the context of climate change and escalating fertiliser prices in order to achieve sustainable agricultural production, thereby achieving sustainable food and cash crop production while reversing environmental degradation. This project specifically aims at; increasing awareness and adoption of conservation agriculture; building capacity to support adoption of conservation agriculture; documentation and adoption of best-practices; increased nitrogen fixation in soil; water conservation, agro-forestry, promotion of the use of organic matter as fertiliser; and increased policy influence for smallholder farmers. NASFAM describes conservation agriculture as an ecologically sound means of helping achieve food security and as resource-saving production that strives to achieve acceptable profits while simultaneously conserving the environment. Conservation agriculture contributes both to mitigation of, and adaptation to climate change. Through minimal soil disturbance and maintenance of soil cover, conservation agriculture also combats land degradation. Capacity building for conservation agriculture is an important dimension of this project with training of trainers (1500 NASFAM farmer trainers), training of 60 field officers, use of demonstration plots, development of conservation agriculture resource centres, and field days all planned. As the aims of conservation agriculture, in contrast to other modern agricultural methods, are to achieve mitigation and adaptation to climate change and preservation of soil, this project is marked as 'principal' for adaptation and mitigation and is counted at 100% towards climate finance. A total of €250,000 was disbursed towards Conservation Agriculture and €30,000 towards vertiver (essential oils) in 2013.

11. Strengthening Community Disaster Resilience, Evangelical Association of Malawi

This programme is aimed at strengthening community based disaster and climate change resilience through food security, livelihood diversification, environmental management, community awareness and education, preparedness and protection strategies and integration of disaster risk reduction and climate change adaptation into policies and developmental planning. The programme is purposely situated within the Hyogo Framework for Action and uses it as a means of aligning and organising diverse activities. The programme includes implementation of initiatives in food security and livelihood diversification. Specific activities include; small scale irrigation, conservation agriculture, seed production of drought tolerant and short-cycle crops, training in conservation agriculture, establishment of community grain and seed banks, improved storage, dietary diversification, community based natural resource management committees, afforestation, non-agriculture forest activities such as bee-keeping, fuel efficient stoves, early warning systems, the training of targeted groups in flood management, and training and capacity building of 'first responders' e.g. in first aid. As response to climate change risk and impacts is a key objective and driver for the design of this programme, it is marked as 'principal' for adaptation to climate change and 'significant' for mitigation due to its afforestation and conservation agriculture initiatives. It is thus counted at 100% towards climate finance.

12. Accelerated uptake of improved energy saving cook stove programme

A sum of €200,000 was transferred to Concern Universal from Irish Aid Headquarters for rolling out of the National Cookstoves Programme in 2013 with a further disbursement planned for 2014. The programme proposes to reach a target of 2 million energy efficient stoves by 2020. Because of the emissions saved from reduced burning of biomass in fuel efficient stoves and consequent reduced emissions from deforestation and degradation, this project is marked as 'principle' in mitigation and is counted at 100% towards climate finance. Due to the reduced pressures on woodland and forests for biomass harvesting this project is marked as 'significant' for biodiversity and is counted at 50% towards biodiversity finance.

Irish Aid funding to Irish Civil Society Programme Partners in Malawi

The following disbursements by Irish Aid were identified as relevant to climate change, environment and/or disaster risk reduction by the beneficiary CSOs but are not included in Ireland Climate finance reports;

- Irish Aid disbursed €424,830 to support Concern Worldwide improve resilience to shocks of the extreme poor and to build the capacity of institutions to mitigate against hazards. [significant]
- Irish Aid disbursed €637,684 to support Trócaire in increasing resilience to climate change and variability of 12,425 subsistence farming households in southern Malawi. [principal]
- Irish Aid disbursed €494,288 to support GOAL to improve access, availability and utilisation of food and reduce vulnerability to disasters in Nsanje and Balaka districts, and to strengthen institutions and influence policy in those districts to allow implementation of relevant programmes leading to improved access, availability and utilisation of food and diversification of income sources.
- Irish Aid disbursed €321,242 to support Self Help Africa to increase smallholder skills and knowledge to benefit nutritionally and economically from intensified and diversified agricultural production, and to engage smallholders with relevant local, regional, national and global policy processes.

Mapping of Bilateral Expenditure

	Project/Programme	2013	2014	ENV	CBD	CC	CC	CCD	Agri	DRM	CB	TT	REDD
		Actual	Planned			Mit	Ada						
1	2013 support to MVAC, UN World Food Programme	1,000,000	1,000,000	0	0	0	1	0	0	1	0	0	0
2	AFSP Phase II, International Centre for Research in Agroforestry	500,000	500,000 ⁹	1	1	2	1	1	1	0	1	0	1
3	Development of TEG Stoves, Trinity College Dublin,	120,000	120,000	1	1	2	0	0	0	0	1	1	1
4	Enhancing Community Resilience (ECRP), DFID Malawi	450,000	$400,000^{10}$	1	0	1	2	0	1	2	1	0	0
5	Local Development Support Programme (4 th year), Concern Universal	1,200,000	1,200,000	1	1	1	1	1	1	1	1	0	0
6	Community Based Water Filters Promotion Project, Evangelical Assoc. of Malawi	71,048	0	0	0	0	2	0	0	0	0	0	0
7	Agricultural Sector Wide Approach (ASWAp), World Bank	3,500,000	3,500,000 ¹¹	1	1	1	1	0	1	1	1	0	0
8	Rooting out Hunger Phase II, International Potato Centre		400,000	0	0	0	1	0	1	0	0	0	0
9	Social Cash Transfer, GoM/UNICEF Resident Representative	523,491	876,415 ¹²	0	0	0	1	0	0	1	0	0	0
10	Conservation Agriculture		250,000	1	0	1	2	1	2	0	1	0	0

^{9 500}k in 2015.

^{10 350}k in 2015, ends in 2016.

^{11 3.5}m in 2015, ends in 2016 with same amount.

¹² Project planned to end in 2016.

	Techniques, NASFAM	250,000											
11	Strengthening Community Disaster Resilience, Evangelical Assoc. of Malawi	200,000	270,000	1	1	1	2	0	0	2	0	0	1
12	Accelerated Uptake of improved energy saving stoves	200,000	200,000	1	1	2	0	0	0	0	1	1	1

Significant versus Principle Markers

The OECD DAC Rio Markers and the anticipated Disaster Risk Management Rio Markers 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 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.