

Resilience Action Plan City of Zomba 2016-2026







Resilience Action Plan

City of Zomba (2016-2026)

Executive Summary

The City of Zomba established a partnership with the United Nations Human Settlements Programme (UN-Habitat) and with the Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR) for the elaboration of **Zomba City's Resilience Action Plan (RAP)**. Zomba City's RAP creates a strategic framework identifying comprehensive and inter-sectoral **priority actions**. It also defines short, medium and long term **specific activities** to reinforce the city's resilience and adaptation capacity to the threats posed by climate change. The ultimate goal of the RAP is to serve as a guideline for the interventions of the city council, of communities and of other relevant partners.

City Profile of Zomba

Zomba City is located in the Southern Region of the Republic of Malawi. The city experiences a considerable process of social and economic development. According to the 2008 census, it had a population of 88,314 inhabitants, with an annual growth rate of 3%. However, disaster risks and climate change pose serious threats to its growth and its welfare provision capacities. Most of the risks occurring in Zomba are due to its geographic location, at the foot of the Zomba plateau, and is exposed to strong winds, flash floods, mudflows, landslides and debris flows; but the condition of vulnerability of the city is also directly linked to the urban development pattern and the socio-economical conditions of its residents. The vulnerability of Zomba is mainly due to its environmental degradation linked to a number of factors such as poor land use planning, lack of urban services, poor urban farming practices and deforestation. Rapid population growth is putting pressure on land and is one of the causes of deforestation.

The City Resilience Action Plan of Zomba

The CityRAP was conducted through a participatory and comprehensive process involving key stakeholders involved in Zomba urban governance and development including city councillors, management and technical staff, as well as local communities and civil society. Municipal technicians forming the CityRAP team were trained to conduct the process themselves, with UN-Habitat and DiMSUR providing support and strategic advice.

Overall, 142 participants contributed to the elaboration and the adoption of the plan. All municipal sectors were involved and 4 communities were consulted. The Resilience Action Plan should guide policy makers in order to improve Zomba City's resilience through the implementation of the priority actions selected, namely:

- 1. Reduce and Mitigate Floods
- 2. Improve the Drainage System
- 3. Strengthen Citizen Security
- 4. Promote Sustainable Forest Management
- 5. Foster Strategies to Cope with Rainstorms

The Resilience Action Plan also provides a comprehensive description of the pathway that the municipality should follow, presenting the stakeholders to work with, a calendar and a budget.

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1. Introduction

1.1. Background

Zomba City is located in the Southern Region of the Republic of Malawi and is the capital of the district of the same name. The city experiences a considerable process of social and economic development. It is the 4th major urban centre of Malawi, after Lilongwe, Blantyre and Mzuzu. Its major function is administrative, with a significant share of the population employed by the government and related sectors. The city is also an important learning centre, due to the presence of the University of Malawi. According to the 2008 census, it has a population of 88 314 inhabitants, with an annual growth rate of 3%. However, disaster risks and climate change pose serious threats to its growth and its welfare provision capacities. Zomba City is indeed located at the foot of the Zomba plateau, and is exposed to cyclones, flash floods, mudflows, landslides and debris flows.

Environmental degradations and climate change impacts are likely to aggravate Zomba's vulnerability to natural hazards. Deforestation is major issue, as it increases the likeliness of floods, mudflows and debris flows incidence. Bad sanitation and urban growth management also contribute to hinder Zomba's capability to face and to recover from such events. Climate change also poses a threat on the city's development. Based on the 5th report of the Intergovernmental Panel on Climate Change (IPCC) published in 2013, it may be inferred that average temperatures in inland areas such as Zomba will rise dramatically over the next decades, in case global mitigation efforts are not implemented. As a consequence, rain patterns will become less predictable, making floods and mudflows mitigation efforts more complex. Moreover, deforestation may also increase migrations to marginal land areas prone to landslides and floods and exacerbate urban sprawl. Presently, part of the population increase in Zomba is characterized by the informality and the bad quality of housing, very often constructed without considerations for hazards that frequently affect the city.

In this respect, the Municipality of Zomba established a partnership with the United Nations Human Settlements Programme (UN-Habitat) and with the Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR) for the elaboration of **Zomba's Resilience Action Plan** (RAP). Zomba City's RAP creates a strategic framework identifying comprehensive and inter-sectoral **priority actions**. It also defines short, medium and long term **specific activities** to reinforce the city's resilience and adaptation capacity to the threats posed by climate change. The ultimate goal of the RAP is to serve as a guideline for the interventions of the municipality, of communities and of other relevant partners of the field.

The RAP resorted to an innovative methodology based on the City Resilience Action Planning tool (CityRAP). Elaborated by UN-Habitat and DiMSUR, this tool enabled the municipality to implement methodologies using and valorising local knowledge in order to understand and plan activities that integrate risk reduction elements. Therefore, through several exercises and consultations with municipal technicians and authorities, and with communities and other relevant actors, **five priority actions were identified to reinforce Zomba City's resilience:** (1) Reduce and mitigate floods; (2) Improve the drainage system; (3) Strengthen Citizens Security; (4) Promote sustainable forest management and (5) Foster strategies to cope with rainstorms.

Mention should be made that the Resilience Action Plan also aligns itself to national and global efforts for resilience building, meeting Malawi's Environment Management Act as well as the international Sendai Framework for Disaster Risk Reduction 2015-2030, which sets as priorities the necessity of understanding risks and of investing in risk reduction for resilience building.

1.2. Elaboration of the RAP: the process

The CityRAP was successfully conducted throughout a participatory and comprehensive process involving key stakeholders of Malawi and Zomba urban governance, as well as local communities and civil society. Municipal technicians forming the CityRAP team were trained to conduct the process themselves, with UN-Habitat and DiMSUR providing support and strategic advices:

- First, municipal staff assessed their own services under the supervision of the CityRAP team, in order to identify and prioritise key issues to be addressed.
- In a second time, the CityRAP team conducted the community risk mapping exercise in four neighbourhoods, namely Chambo, Likangala, Mbedza and Mtiya. These communities were selected due to their high social and hazards vulnerability. The goal was to collect the knowledge and the opinion of communities about the risks that threaten and affect their neighbourhoods.
- Based on the compilation of the municipality's assessment results and the community risks maps, a list of priority actions for reducing risks, fostering resilience and enhancing adaptive capacities has been established and discussed.
- Finally, the city endowed itself with a Resilience Action Plan based on the five priority actions.
 Priority actions were further detailed with expected results, planned activities, budget and calendar. Responsible for the implementation of each action were identified, and activities were geographically localized.

Overall, 142 participants contributed to the elaboration and the adoption of the plan. All municipal sectors were involved and 4 communities were consulted. The Resilience Action Plan should guide policy makers in order to improve Zomba City's resilience through the identification of priority actions and specific activities to be implemented. It provides a comprehensive description of the pathway that the municipality should follow, presenting the stakeholders to work with, a precise calendar and an accurate budget.

Source: Zomba CityRAP participant feedback survey, 2016, UN-Habitat.

Participant's Background			
City Authority (Mayor, Chief of Department) and CityRAP Focal Points	24%		
National Government technician	12%		
Municipal technician	15%		
Community representative	26%		
Other: civil society and NGO (3); information department (1)	12%		
No answer	12%		

2. CITY PROFILE OF ZOMBA

2.1 General Framework

2.1.1 Geographic location

Zomba city is the fourth largest urban centre in Malawi after Blantyre, Lilongwe and Mzuzu. The City, divided into ten wards, is located at the Center of Zomba District in the Southern Region of the Country and covers an area of 39km² sharing all its boundaries with Zomba District Council.

Located at the foot of Zomba plateau, 2085m above sea level and the fourth highest plateau in Malawi, the city is situated in a mountainous and hilly area whose ground elevations vary between 790m and 1265m above sea level. The terrain is varied and undulating due to dissection made by numerous streams that's flow through the town. Diverse natural resources and landscapes of the Zomba Plateau make it one of the renowned tourist attractions of the country.

2.1.2 Demography

According the Population and Housing Census published by the National Statistical Office in 2008, Zomba had a population of 88,314 with an annual growth rate of 3.0%. Population is estimated at 138,583 inhabitants in 2015. Population density is 2,264 persons per square kilometre and it is the fourth city of the country in terms of population density. About 65 % of the population leaves in unplanned areas.

Zomba City has a heterogeneous population composed of different ethnic groups, cultures and languages. The Iowe, Yao, Mang'anja, Chewa, Ngoni, Tumbuka, and Indians are the dominant ethnic groups. The Europeans, Tongas and other Africans are in minority.

2.2 Socio-economic aspects

2.2.1 Economy

Zomba has a wide range of economic activities including trade, agriculture and industry. However the economy of Zomba is constituted largely of informal income generating activities, and few formal activities. The lacks of adequate regulation and support, infrastructure and basic urban services and the lacks of access to business capital for expansion are major obstacles to economic growth. In general, the absence of an economic development plan makes economic investments complicated. Concerning formal employment, 29 percent are dedicated to financial series, 26 percent to agriculture and mining, 25 percent to marketing, 9 percent to manufacturing and 4 percent to construction. Small-scale enterprises represent 93 percent of the economy; medium enterprises represent 6 percent and large-scale enterprises 1 percent¹. Finally, it is important to note that the majority of small and medium sized businesses are informal activities.

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¹ UN-Habitat, *Malawi, Zomba Urban Profile*

The largest part of the Zomba City Council revenue come from property rates but also from other kind of fees such as market fees, parking fees, etc. However, the city council needs to reinforce its capacity for providing the necessary improvement of infrastructure and basic service provision improving financial management and transparency in revenue collection.

2.2.2. Socio-economic context

The city is testifying of a high level of poverty resulting from different factors such as unemployment, rapid population growth and an economy largely dependent on small and medium enterprises. High interest rates on loans and collateral requirements make the access to adequate loan facilities for economic development almost inaccessible for the population. According the National Statistical Office², 66 percent of Zomba's population lives in informal settlements lacking of basic urban services and social infrastructure.

2.3 Political structure and public infrastructure

2.3.1 Local governance structure

Zomba City Council is mandated by the Local Government Act of 1998 and the Decentralization Policy of 1998. According section 6 of the Local Government Act number 42 of 1998, the city council makes policies and decisions on local governance and development of the city. The mayor heads the city council while the chief executive officer heads the secretariat which is divided into 11 departments, each headed by a director.

Zomba City shares all its boundaries with Zomba District Council, which forms an integral part of its sphere of influence. The city is headed by the Chief Executive officer and each of the 10 wards of the City is represented by a ward councilor who is elected every five years.

The Zomba City Council must work to secure additional resources to adequately meet resident's needs and make available suitable land for the delivery of low income housing. The lack of a comprehensive physical, economic or environmental plan affects the capacity of the city council to collect and generate revenue, to deliver the needed services and to maintain a dynamic environment allowing development and economic growth in the city. However, Zomba City Council developed a local Revenue Mobilization Strategy to improve local revenue collection, which overall objective is to maximise revenue collection and outlined new revenue sources.

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² National Statistical Office 2008, *Statistical Yearbook*

Table 1: Zomba city Council³

Department/ Section	Sector	
Mayoral	Local governance	
Chief Executive	Local governance and city management	
Administration Services	Local governance and city management	
Financial Services	City financial management and services	
Trade and Commerce	Local economic development	
Health and Social Services Department	Health and social services	
Engineering Services Department	Infrastructure provision and environmental	
	management services	
Agriculture and Public Health Services	Public and open spaces and environment	
Department	health services	
Planning and Development Services	Town planning, development control and	
Department	land administration services	
Education Services Department	Urban education services	
Internal audit Section	Internal auditing services	

2.3.2 Infrastructure and public services

The city council is mandated through the Local Government Act of 1998 to provide social infrastructure and basic urban services to all citizens, both in the formal and informal areas. But provision of infrastructure and public services benefits, for the most part, to planned areas while the high density and informal areas do not have appropriate access to these infrastructures. In general, the city council lacks adequate financial and technical capacity for expanding and providing basic urban services to all its citizens.

Considering the educational system, the city has 17 primary schools. Primary school in Zomba is free and the city counts a total of 21, 748 pupils, with a ration of almost 1.1 between boys and girls. There is a good teacher-pupil ration; however the quality of education in Zomba's schools has been suffering lately due to inadequate learning equipment, lack of instructional material and uneven distribution of teachers. The City has several colleges and technical schools, both public and private. But the number of secondary schools in Zomba is inadequate to cater all students. ⁴

The Central hospital, health centres and clinics run by the government and private organisations provide medical care services in Zomba. Tradition healers and traditional birth attendants are still very much solicited by the population for health services. Poor health facilities and lack of medical equipment and qualified staff prevent the proper and efficient functioning of the health care system. Also, Zomba faces major health challenges such as high rate of HIV/AIDS and malaria which strongly affect the development of the city.

³ UN-Habitat, *Malawi, Zomba Urban Profile*

⁴ UN-Habitat, Malawi, Zomba Urban Profile

According the National Statistical Office⁵, only 27 percent of Zomba's residents have access to piped water, supplied by the Southern Region Water Board. Formal areas have adequate access to water supply while the majority of informal settlements have little or no access to water supply. For their water needs, the population of informal areas mostly relies on communal water points. The same observation can be made concerning sanitation and waste removal services. Wastes are collected at regular intervals in the formal areas, but the city does not yet provide waste management services in the informal settlements.

Transport facilities are mainly provided by minibus and bicycles. Buses network offer long transportation services as well as taxis. Since footpath and bicycle paths have not been provided, the city faces a growing challenge of congestion and frequent conflicts between road users such as cyclists, pedestrians and drivers.

The majority of Zomba's residents use electricity, charcoal, firewood and petroleum as common sources of energy. The Electricity Supply Commission of Malawi provides the major source of energy for industrial development. However, the city suffers multiple power failure as a result of restricted availability at national level, resulting in a major challenge for the city development. In Addition, the city is now confronting a major issue of deforestation and environmental degradation due to the high use of wood fuel.

2.4 Risk Profile

The City of Zomba is facing a significant number of natural or human caused disasters. Disaster risks result from the interaction between the occurrence probabilities of hazards and the vulnerability of the territory and the affected population. Most of the risks in Zomba occurring in Zomba are due to its geographic location, but the condition of vulnerability of the city is directly linked to the urban development pattern and the socio-economical conditions of its residents.

2.4.1 Probability of natural hazard

Zomba lies on the southern part of the Malawi rift and is bisected by the Main Rift Fault on the west side. The Malawi rift is becoming seismically active and as a result earthquakes are occurring within 200-250 km away from Zomba City. The fact that some areas of the city are covered by sediments and that the city sits in close proximity to the main rift fault means the city is particularly exposed to moderate or strong ground shaking resulting from rupture on the fault or other seismic activities.

The city has two mains rivers flowing through, namely Likangala and Mulunguzi, having Zomba Plateau as their source. Soils in Zomba, mainly lithols and ferruginous, are generally well-drained. More rainfall tends to fall on the windward (eastern) side of Zomba Mountain. Areas to the west of Zomba Plateau experience little rainfall throughout the year, as they are located on the leeward side.

The natural vegetation described as open canopy plateau woodland has been greatly reduced and disturbed in recent years due to cultivation and urbanization. Only little remnants remain along river

⁵ National Statistical office, September 2009, Population and Housing Census 2008 Main Report

banks, grave yards and in inaccessible areas of the upper sloped of the plateau. Besides, bush fires continue destroying vegetation and animal life.

The city is facing several disaster risks including floods, wind storms, environmental degradation, high occurrence of road accidents and disease epidemics. Besides, illegal urban sprawl on inadequate lands and environmental degradation led to the multiplication of landslides.

2.4.2 The vulnerability of Zomba City

The vulnerability of Zomba is mainly due to its environmental degradation linked to a number of factors such as poor land use planning, lack of urban services, poor urban farming practices and deforestation. Rapid population growth is putting pressure on land and is one of the causes of deforestation. Population growth has also resulted in people migrating to marginal land areas which are prone to disasters such as landslides.

Due to a lack of specific regulations for the management of informal settlement, Zomba city has experienced a growing of permanent settlement at the foot of the plateau and illegal settlements along the main rivers. Construction of mad brick houses, mostly in unplanned areas, make such build environment particularly prone to disasters. It is also important to mention that social and economical activities of the city tend to increase threats of disaster, Timber Trading, for instance, is the most criticized activity. Other activities like firewood, moulding and burning of bricks, large scale sand mining and small scale Quarrying business are also criticized.

The lack of a proper sanitation and waste management system increases the vulnerability of the city. The limited coverage of the sewer system has led to high reliance on pit latrines, which has resulted in high levels of pollution of the water table. Liquid and solid waste disposal in rivers and along the roads has turned as a huge challenge, since many rivers are heavily polluted, which significantly increases the risk of epidemics.

Almost every year the city has experiences heavy rainfall causing floods and destroying houses, strong winds destroying roofs, earth tremors and unpredictable rock avalanche potentially occurring at any time, landslides in every rainy season, as well as dangerous tree falls, fire hazards and public disorder, mainly related to demonstrations and academic freedoms.

2.4.3 The impact of climate change

Zomba experiences a tropical climate with three main seasons — cold-dry, hot-dry and hot-wet, ranging respectively from April to July, August to October and November to March. The hottest months are September, October and November, with average temperatures ranging between 28 and 30 degrees Celsius. June and July are the coldest months, with minimum temperatures as low as 10°C. The annual rainfall varies between 600mm and 1500mm (1999-2005). On average, February is the wettest month.

Malawi is located in a region expected to experience significant impacts of climate change. It is also designated as one of the Least Developed Countries and "the Most Vulnerable Countries" regarding climate changes according the UN Framework Convention on Climate Changes (UNFCCC). There is insufficient detailed climatic information about changes in the past to make accurate conclusions, but the frequency of extreme weather events has been significantly increasing in recent decades.

Furthermore, Malawi has one of the highest rates of deforestation in Southern Africa and these environmental degradations are resulting in alterations in winds and rainfall patterns. Rapid adaptation measures are absolutely necessary for coping with climate change impacts. For example, reforestation can help preventing soil erosion, acting as wind breaks, shading and soil moisture and reducing flooding by reducing water flows.

In Zomba, deforestation appears as one of the biggest challenge and the city is already carrying out some afforestation and re-afforestation activities. There is an urgent need to expand and strengthen these activities, mostly in water catchment areas. Other priorities for the city should consist in conducting awareness campaigns on environmental conservation and adaptation practices for reducing the impacts of climate change.

2.4.4 Disaster Risk Reduction and Management in Zomba City

In terms of Disaster and Risk Management, responsibilities are distributed ranging from Central Government to local authorities. At national level, OPC/DODMA provides policy directions and resources mobilization while, at local level, the City Council provides coordination of disaster activities during disasters. At city level, the city civil protection committee is responsible for providing leading role in implementation of disaster activities at city level, while the civil protection committee group offers technical support in specific disaster response areas. Lastly, city ward protection committees ensure proper linkage between local communities and city council on disaster activities.

At national level, Malawi has made significant efforts and progresses to promote disaster risk management and climate change adaptation and mitigation through strong political commitment, policy and legal framework and institutional arrangement to tackle climate change effects. At local level, Zomba city has already launched a local strategy and integrated disaster management into its urban policy. In 2015, the Municipality has adopted the Disaster Risk Management Plan showing that Zomba City fully understands its role in disaster preparedness, mitigation and prevention demonstrating the concern and willingness of the city to take concrete action to build resilience and reduce disaster risks.

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⁶ Oxfam International, The winds of change:Climate change, poverty and environment in Malawi

3. Priority Areas to Build Resilience in Zomba City

3.1. Implementation Strategy

Priority Area 1: Reduce and Mitigate Floods

In Zomba City, floods occur almost yearly. The 2015 floods were the most devastating in terms of geographical coverage, severity of damage and extent of loss. There are several negative impacts that usually derive from flooding: interruption on water and electricity services; damages on roads and bridges disrupting business; loss of people and livelihoods; damage in infrastructure, crops and livestock; erosion due to the deforestation, which is one of the biggest hazards in Zomba and some other areas in Malawi. Despite the fact that many activities are being undertaken for reducing and mitigating risks (Risk management Plan; community awareness campaigns; etc), there is still a strong need to work on reducing and mitigating floods to reduce the City's vulnerability towards floods. Six activities have been prioritised and identified that will take the lead in the process of reducing and mitigating risks, targeting several actors in the process, from the City officials to the urban communities and stakeholders.

REDUCE AND MITIGATE FLOODS

Expected Result

Zomba City is committed to upholding and enhancing the regulatory framework related to flood mitigation at all levels of society.

Activities	Estimated budget	Responsible City Council Division	Other City Divisions/Stakeholders	Location
Short Term				
1.1 Establish Community by laws for mitigating floods (1.local risk assessment/ community maps 2.create awareness on local risks and need for bylaws 3. formulation of bylaws on ward level 4.submission 5.disseminate bylaws to city council, police, other communities and wards)	N/A	Department of Administration and Planning	Ward councilors; Ward chairmen; Ward committee;	All wards
education campaigns on effects of living in flood prone areas as well as disaster early warning signs	N/A	Responsible: Department of Planning	Other departments and stakeholders: Police, NICE, Red Cross, CADECOM	Location: Mtiya, Chambo, Sadze, Likangala, Mbedza

1.3 Identification of evacuation sites(undertake local risk assessment/ community maps)	N/A	Dept of Planning	Wards; Dept. of Lands: Red Cross; Dept. of Education and Engineering; MDF, DHO	Mtiya, Chambo, Sadze, Likangala, Mbedza
Medium Term				
1.4 Trainings on building back better approaches	N/A	Department of Planning, Dept. of Engineering	Water department, ESCOM, CCODE, Red Cross, CADECOM, NICE	Mtiya, Chambo, Sadze, Likangala, Mbedza
1.5 Plant fast growing trees	N/A	Parks and Recreation	Department of Planning, Dept. of Forestry, LEAD, FRIM	All wards
Long Term				
1.6 Community level by laws on flood mitigation established				

Priority Area 2: Improve the Drainage System

Zomba City lacks of a well-functioning drainage system, which, for instance plays a big role for floods occurrence. In some cases, the drainage ditches and natural channels are so obstructed that it impedes the water flowing. Garbage, domestic detritus and rock stones usually block the normal water flow. There are several community awareness campaigns in order to clean the drainage ditches but nevertheless the efforts, there are technical matters that also count such like: rehabilitation of some drainage channels; maintenance of the drainage system, etc. Given the fact that the drainage system is very important for mitigating floods, impacting on erosion, the City aims to improve the drainage system and specific activities are proposed in order to achieve the desired result. Moreover, improving the drainage system, will also improve the quality of life of the citizens and urban communities

Improve the Drainage System

Expected Result:

Zomba City has a well-functioning drainage system

Planned Activities	Estimated budget	Responsible City Council Division	Other City Divisions/Stakeholders	Location
Short Term	_			
2.1 Elaboration of a geotechnical study of the city's drainage system	N/A	Dept. of Planning;	Dept. of Engineering; Ministry of water (regional office), Chanco	Zomba City
2.2 Clear drainage channels	N/A	Dept. of Health	Dept. of Engineering, Ward committees	All wards

2.3 Conduct awareness and education campaigns on need to keep drainage clear	N/A	Dept. of Health	Ward Committees	All wards
Medium Term				
2.4 Construct drainage system	N/A	Dept. of Engineering;	Wards Committees; RA	Likangara, Chambo, Sadze
2.5 Rehabilitate drainage system	N/A	Dept. of Engineering;	Wards Committees; RA	Likangala, Chambo, Sadze, Mtiya, Mbeza
2.6 Establish community waste collection sites/refuse banks and skips	N/A	Dept. of Health	Ward Committes	All wards
Long Term				
2.7 Institutionalize the maintenance of drainage systems		Dept. of Engineering	Dept. of Health	

Priority Area 3: Strengthen Citizen Security

The informal settlements do not have adequate street lighting, further worsening insecurity in these areas. The city council needs to put up street lights in all areas and security floodlights in the informal settlements where electricity supply is minimal.

Zomba City Council is charged with the responsibility of protecting its residents from physical danger or harm, and ensuring a secure environment for living and doing business. The city council ensures that physical infrastructure such as public buildings and other private properties are safe and that proper building codes are followed in building construction. With the City RAP, specific activities are proposed to be implemented to strengthen the security of the Citizens, besides the efforts that have been undertaken so far.

The police are responsible for ensuring that people and property are secure at all times and that people can go about their day-to-day businesses without fear.⁷

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⁷ Zomba Urban Profile (...)

Strengthen Citizen Security

Expected Result:

Zomba City is providing adequate security for its inhabitants.

Planned Activities	Estimated budget	Responsible City Council Division	Other City Divisions/Stakeholders	Location
Short Term				
3.1 Improving community policing	N/A	Dept. of Administration	Dept. of Planning; City Ward Committees; Police services	Zomba central, Chambo, Mbedza,
based security by-laws (1.local crime assessment and community maps 2.create awareness on the need for security bylaws 3. formulation of bylaws on ward level 4.submission 5.disseminate bylaws to city council, police, other communities and wards)	N/A	Dept. of Administration	Dept. of Planning; City Ward Committees; Police services	Zomba central, Chambo, Mbedza,
3.3 Registration of inhabitants on ward level	N/A	Dept. of Planning	Councilor of the ward; Ward Committes; Police; National Registration Bureau; Dept. Of Health	All wards
Medium Term				
3.4 Introduce and enhance street lighting and area tower lighting	N/A	Dept. of Engineering	ESCOM	Mtiya, Mbedza, likangala, Chambo, Chilamuali, Chikanda
Long Term				
3.5 Community based security by-laws established				

Priority Area 4: Promote Sustainable Forest Management

Although lot of sensitisation has taken place on the dangers of encroaching, cultivation in the forest reserves and production of charcoal, the level of deforestation is still highly contributing to increased level of impact of the natural disasters. Large areas of the hillsides of Zomba have been cleared in recent years for construction, fuel and agricultural use. Zomba experiences flash floods due to trees being cut down on surrounding hills promoting deforestation process that has removed the natural barriers to flooding that once surrounded the city, as well as causing soil erosion and soil degradation. Usually, the deforestation on Zomba mountain, combined with the torrential rain, results in flash floods that causes destruction in nearby townships around the city of Zomba, in particular Matawale township. Clearly, floods and deforestation are directly correlated, where the deforestation promotes floods and floods in deforested area promotes soil erosion. This said, mitigating deforestation through a sustainable forest management, erosion and floods will have their impact reduced. It is hoped that Malawi's new National Disaster Risk Management Policy, will mean better regulations to protect forested areas, and where possible, areas stripped of trees will be reforested, and so protect surrounding areas from floods and landslides.

Nevertheless, through the Resilience Action Planning participatory approach, the Zomba City has defined a set of actions in short, medium and long term that will effectively promote a sustainable forest management, reducing the impact of the disasters caused by the high rates of deforestation in Zomba.

Promote Sustainable Forest Management

Expected Result

Zomba City is Committed to Preserving and Enriching its Forest Resources.

Planned Activities	Estimate d budget	Responsible City Council Division	Other City Divisions/Stakeholders	Location
Short Term				
 4.1 Establish area based forestry protecting bylaws (1.local forestry inventory and mapping 2.create awareness on the need for forestry bylaws 3. formulation of bylaws on ward level 4.submission 5.disseminate bylaws to city council, police, other communities and wards) 	N/A	Dep. Of Parks and Recreation	Dept. of Forestry; Forestry Research institute	All wards except central and Chilunga,
Establish environmental patrol units by the communities		Dept. of Parks and Recreation	Ward Committees	All wards except central and Chilunga wards,

Medium Term				
4.2 Ward committees assume	N/A	Dept. of	Ward Committees	All wards
responsibility of sourcing		Parks and		
and protecting seedlings		Recreation		
and nurseries				
Long Term				
4.3 Area based forestry				
protecting by-laws				
established				

Priority Area 5: Foster Strategies to Cope with Rainstorms

Rainstorms in Zomba City usually leave thousands of people houseless. It is being of regular occurrence during the rainy season. It also causes people death and crop loss, affecting negatively the City economy. Rainstorms are generally caused by a high pressure area in the Indian Ocean. In order to cope with this disaster, the Zomba City Council is keen to develop and implement strategies which can cope with rainstorms and reduce the vulnerability of its urban communities towards this hazard.

Foster Strategies to Cope with Rainstorms

Expected Results:

Zomba City is building on and enforcing its capacity to adapt to rainstorms.

Planned Activities	Estimated Budget	Responsible City Council Division	Other City Divisions/Stakeholders	Location
Short Term				
5.1 Plant wind resistant trees	N/A	Dept. of Parks and Recreation	Dept. of Forestry; FRIM; LEAD; Ward	All wards except
5.2 Awareness raising on building codes and dissemination	N/A	Dept. of Planning	CCODE; CRIS (Catholic Relief Service)	All wards
5.3 Awareness campaigns on early warning signs for rainstorms		Dept. of Planning;	Dept. of Meteorological Services	
5.4 Formation of search groups		Dept. of Engineering	Red Cross; Dept. of Planning; Ward Committe	
Medium Term				
5.5 Promote adaptive architecture		Dept. of Planning	Dept. of Lands, Housing and Urban Development; Ward Committees	All wards except central ward
5.6 Training of local artisans on improved safer building methods and materials		Dept. of Planning		

4. Coordination Mechanism

When planning for a coordination mechanism, it is critical to ensure there is sufficient staffing and that leadership of the coordination mechanism has authority and experience. This support will allow the coordination lead to focus on substantive issues related to building partnerships and capacity, conducting advocacy, ensuring the implementation of action plans, etc.

After the coordination mechanism is initiated, several key activities should be undertaken within the first month. When combined with appropriate leadership skills, these activities will help to ensure that coordination partners have the momentum to move forward.

The implementation of the Action Plan will be coordinated by a Specific Department which will meet with certain frequency, as will be determined. The selected Department will be considered the Executive entity, assumed as the focal Department for Urban Resilience and Risk Reduction Management. A Term of Reference (TOR) of the coordination mechanism should be created in a first sight. The TOR will help to ensure a common understanding about the coordination goals, leadership, membership and the nature and objectives of the coordination activities.

Relevant sectors, implementation actors and partners may be invited to contribute, as appropriate. Considering the agenda of its meetings, the Executive Department can invite key actors and donors in the implementation of certain activities and specialists to contribute in the technical aspects of the planned activities and their sequencing. In order to efficiently coordinate tasks, the Executive Department may decide to identify focal points to be responsible for issues such as coordination with donor partners, coordination of implementation mechanisms, monitoring and reporting on progress.

5. Evaluation and Monitoring mechanism

The Monitoring and Evaluation mechanism for the City RAP of Zomba will be developed by a specific Municipal Department in coordination with the Municipal Assembly. In some cases, an external consultant can be recruited to cooperate with, accordingly. The monitoring and evaluation mechanism should allow responding to concerns such as:

To what extent activities and funds are on the proper place?

To what extent is the implementation of activities is being carried out as planned?

To what extent the mobilisation of resources and support technical are effective?

To what extent the PARC goals were achieved?

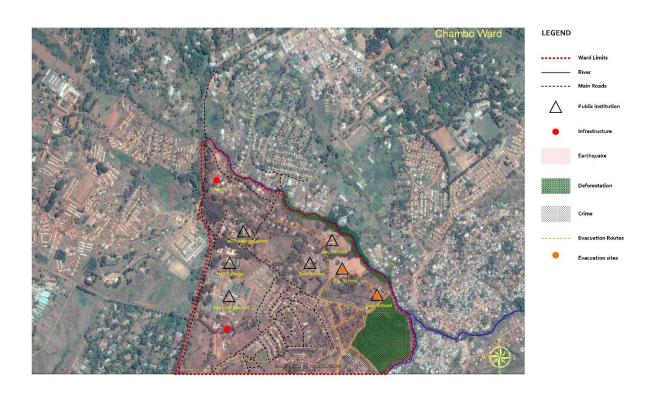
To what extent was some impact on the state of resilience of the City?

Important vehicles to perform the monitoring and evaluation activities are described below. These will be developed in more details by the Departments responsible for monitoring and evaluation:

- Objectives of the Monitoring and Evaluation process
- Scheduled activities for each priority areas
- Elaboration the monitoring action plan for the development of the activities
- Identification of the final users of the Monitoring and Evaluation Plan
- Monitoring and Evaluation time spam, where the monitoring will be done annually while the evaluation will be made of 2 in 2 years for short-term activities, 5 years for activities in the medium term and to 10 years for long-term activities.
- Establishment of a baseline for the formulation of indicators
- Development of methods and techniques of data collection and definition of indicators
- Institutional arrangement to understand the involvement of all actors within the City RAP.

Annexes

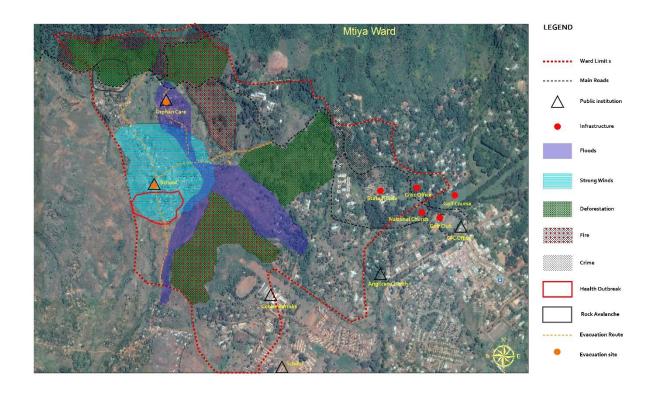
Annexe 1: Community Risk Assessment of the Chambo neighbourhood



Annexe 2: Community Risk Assessment of the Mbedza neighbourhood



Annexe 3: Community Risk Assessment of the Mtiya neighbourhood



Zomba City Resilience Action plan was realised thanks to the financing of the Disaster Preparedness programme of the European Commission's Humanitarian Aid and Civil Protection Department (DIPECHO) and through the technical support of the United Nations Human Settlements Programme (UN-Habitat) and of the Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR).





