

## Population Dynamics, Climate Change and Sustainable Development in Africa

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### **Presentation Outline**

- About the study
  - Objectives
  - Methodology
  - Outputs
- Study findings:
  - Population dynamics, climate change and development links in SSA, Malawi & Kenya
  - Policy assessments in Malawi and Kenya
  - Policy and program implications





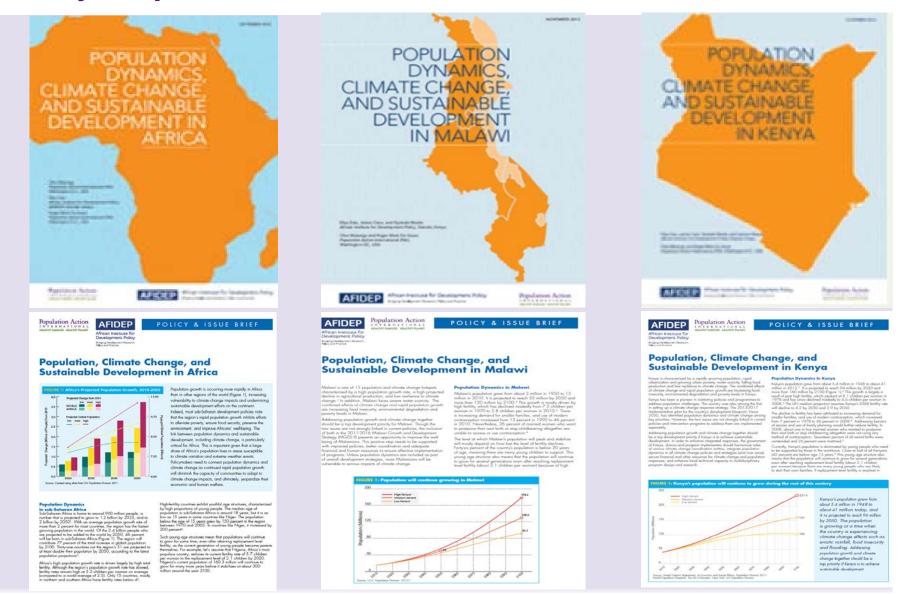
### **Study Objectives**

- Demonstrate how the relationships between climate change effects, demographic trends and reproductive health needs are likely to affect countries' abilities to adapt to climate change in Africa.
- Identify policy and program opportunities for incorporating population considerations into climate change and development strategies for climate compatible development in Kenya and Malawi.
- Promote use of research evidence on promoting linkages between population and climate in climate compatible development planning and programming at national and regional levels in Africa.

### **Study Methodology**

- Analysis of demographic, climate/environment, and development data
- Desk review of literature and policy documents
- In-depth interviews with key informants
  - Policy makers ,representatives of development organizations and CSOs

#### **Study outputs**



### Sustainable development

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"

United Nations (1987) – "Our Common Future"

# Population dynamics within sustainable development framework

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ENVIRONMENT

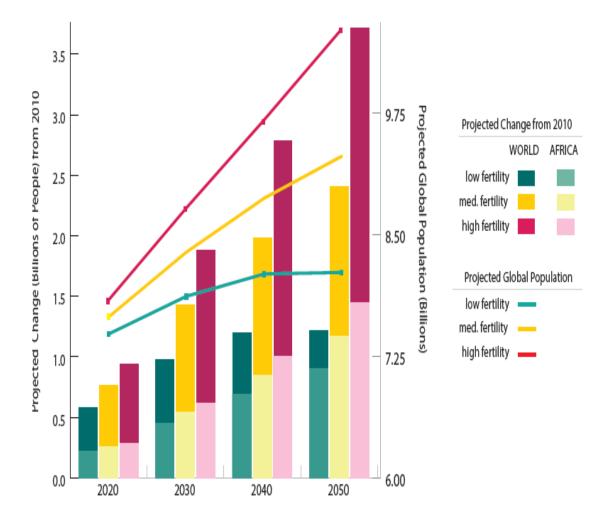
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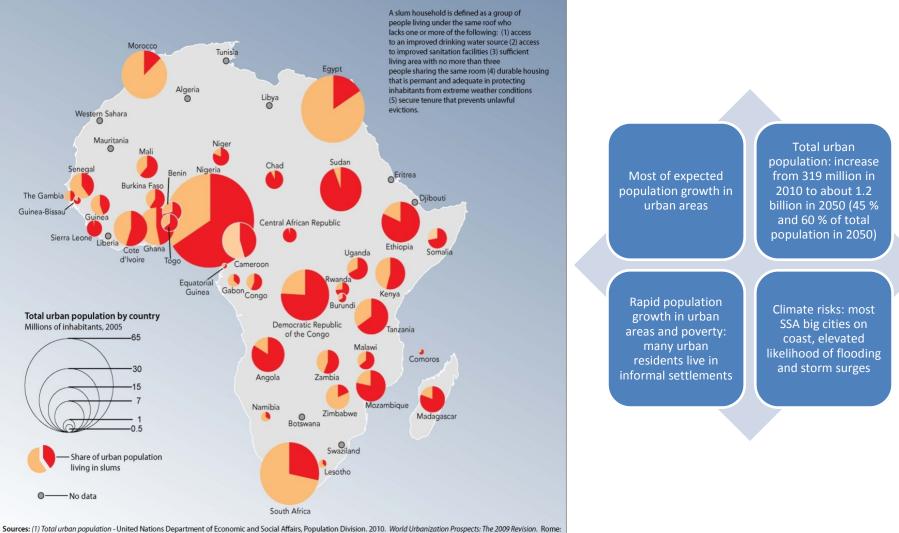
Population dynamics including population size, growth, distribution, density, age structure, migration and urbanization

# Population projections in SSA- Opportunities not destiny

- Rapid growth: from 1 billion in 2010 to 2.1 billion by 2050
- World dominance: 2.4 bill pop increase by 2050, ½ from SSA
- Doubling: 31 SSA countries will at least double by 2050
- High fertility: approx 5 children per woman
- Many youth: 43% of total population under 15 yrs
- High unmet need for FP



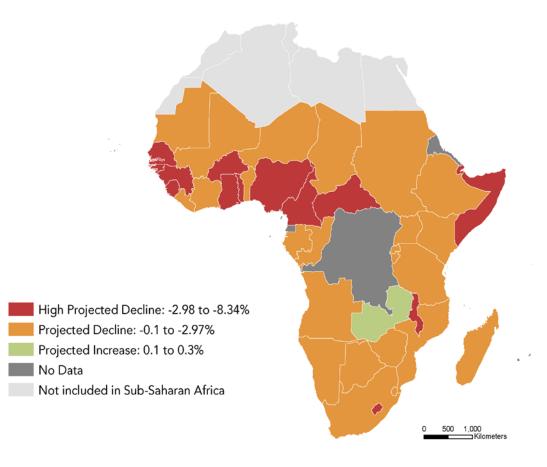
## **Urbanization in SSA**



Sources: (1) Total urban population - United Nations Department of Economic and Social Affairs, Population Division. 2010. World Urbanization Prospects: The 2009 Revision. Rome: United Nations. (2) Proportion of urban population living in slums - United Nations Department of Economic and Social Affairs, Statistics Division. Millenium Development Goals Indicators: 2011. New York: United Nations.

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## Pop growth, climate and agricultural production



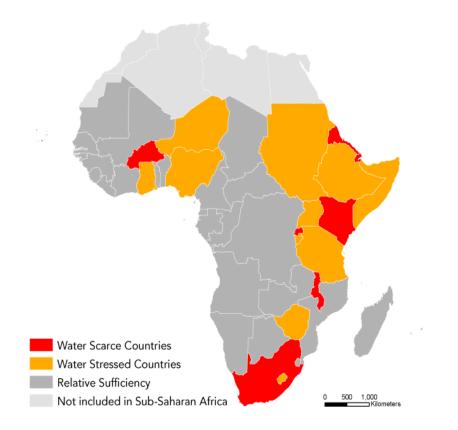
#### PROJECTED POPULATION BY CATEGORY

369.6 million - High Projected Decline 604.2 million - Projected Decline 17.9 million - Projected Increase

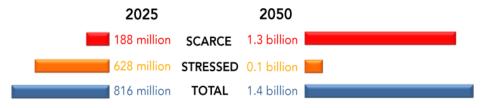
- SSA pops projected to grow as agricultural production declines
- SSA agric food production per capita stagnant during 1960-2005
- Pressure on agric crop land growing mostly due to population growth
- Most African countries projected to decrease agricultural production
- Dual challenges of population growth and climate change will compound food insecurity concerns



### Population growth and water stress and scarcity



#### PROJECTED POPULATION LIVING IN WATER STRESSED OR SCARCE COUNTRIES



SSA is projected to be severely impacted by water scarcity due to climate change effects .

15 countries in SSA (about 400 million people) suffer from water scarcity/stress

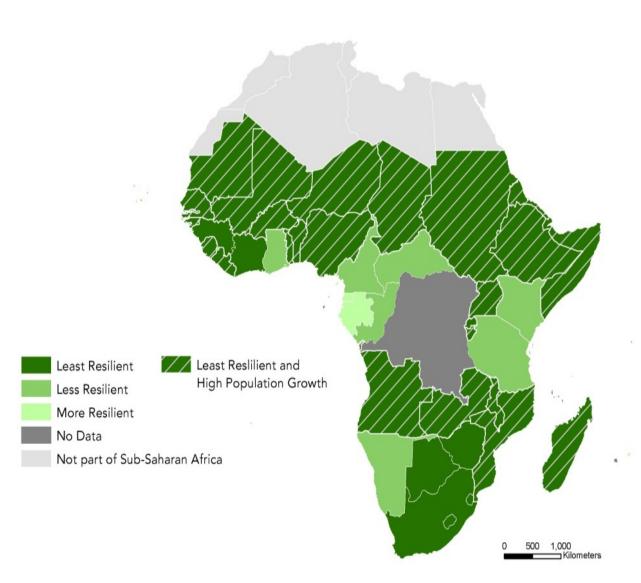
Water-stressed and scarce countries all have high population growth rates

Combined with anticipated changes in climate, water shortages in these areas are likely to become even more acute.

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HEALTHY FAMILIES HEALTHY PLANET

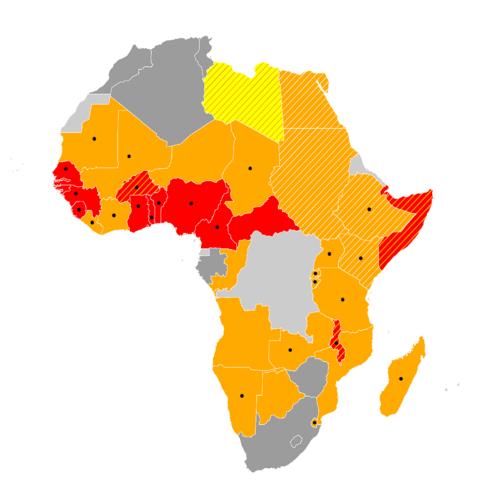
## Population growth and climate change resilience



- Most of the countries in Africa are rated as least resilient to climate change
- The countries that are least resilient to climate change are also experiencing rapid population growth
- The effects of climate change continues to pose a major threat

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### **Population and climate change hotspots**



- 15 hotspots countries in SSA: high rates of population growth, high projected declines in agricultural production and low resilience to climate change
- 4 of these countries (Burkina Faso, Djibouti, Malawi and Somalia) also experiencing water stress/scarcity
- Many hotspots already face widespread poverty, low education levels, limited health services, and high gender inequality
- Most hotspot countries have high levels of unmet need for family planning

High Population Growth Rates and Low Resilience to Climate Change

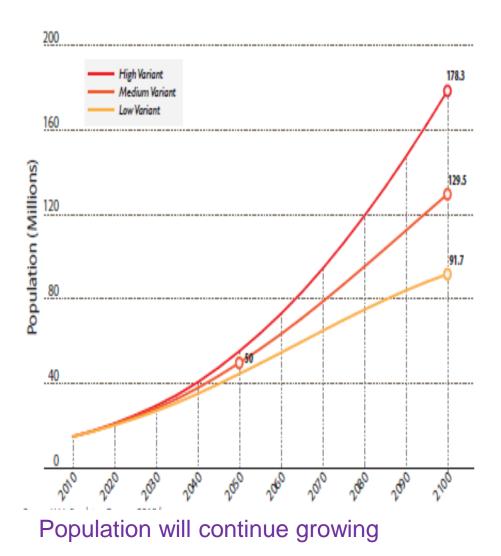
High Population Growth Rates and High Declines in Agricultural Production

- Countries Experiencing All Three Variables
- High Percentage of Women with Unmet Need for Family Planning

Plus Current Water Stress or Scarcity
 Plus Current Water Stress or Scarcity
 Plus Current Water Stress or Scarcity
 No Data for One or More Variables

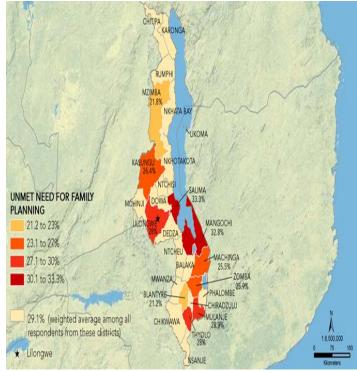
## Malawi:

- Malawi is one of 15 population and climate change hotspots.
  - characterized by a high population growth rate, a high projected decline in agricultural production, and low resilience to climate change
- In addition, Malawi faces severe water scarcity.
- This growth is mostly driven by high fertility, which has declined modestly from 7.2 children per woman in 1970 to 5.8 children per woman in 2010.
- Youthful population high child dependency - 45% of the population is below age 15.

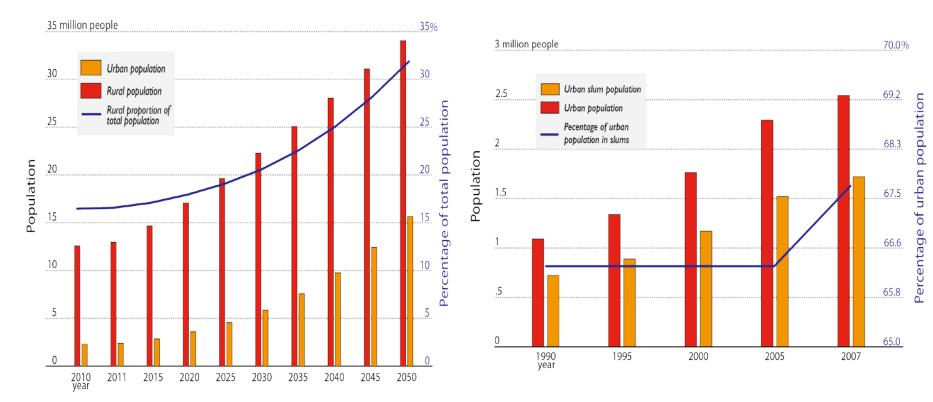


## Family size and contraceptive use

- There is increasing demand for smaller families. the desired family size among married women decreased from 5.3 children in 1992 to 4.2 children in 2010.
- The percentage of married women using family planning increased from 13 percent in 1992 to 46 percent in 2010.
- This progress is impressive considering that the Government of Malawi banned family planning between 1969 and 1984.
- Despite impressive increase in contraceptive use there is relatively slow decline in fertility.
- Unmet need for FP-26 %



### Malawi's urban population continues to grow, as does the proportion living in slums

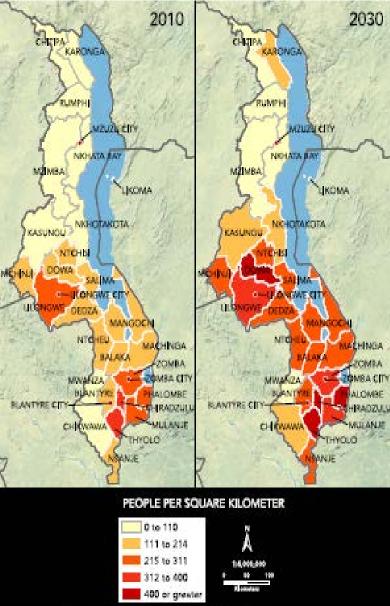


- More Malawians will live in urban areas, presenting new opportunities and challenges for sustainable development
- The number of people living in urban poverty is increasing rapidly as Malawi becomes more urban, creating new environmental challenges

# Population growth, climate change and agricultural production

- About 80 % of Malawi's people make their living through small-scale farming.
- Erratic rainfall and recurring droughts have resulted in poor crop yields or crop failure, leading to food shortages, hunger and malnutrition.
- Less than 3 percent of the country's arable land is under irrigation. Adverse climatic conditions caused major food crises in the past years.

 Malawi's current population density of 126 people per square kilometer is among the highest in Africa, and it will grow six-fold to 803 people per square kilometer by 2050.



## Population growth, climate change and water resources

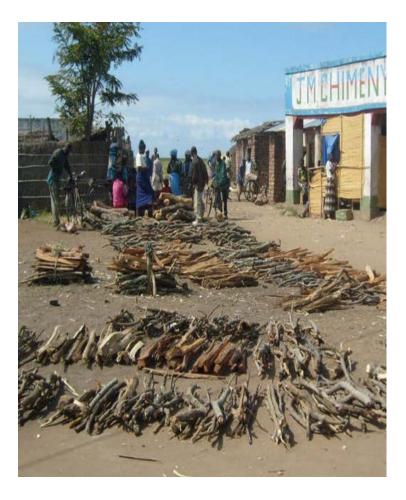
- Malawi is one of the most water-scarce countries in Africa.
- Limited access of water resources in many of the densely populated districts.
- Recurring droughts have hurt hydroelectric power generation and overall economic productivity.
- Frequent floods have led to displacement of large numbers of people.
- Fish production has hurt by droughts and floods .



Women often collect water for their families, but increasing water scarcity is adding to Malawi's vulnerability as a population and climate change hotspot.

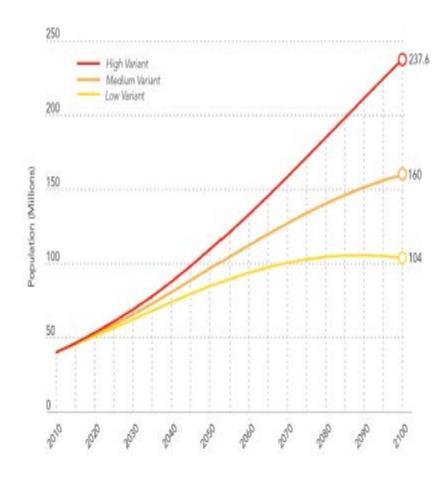
# Population growth, climate change and deforestation

- Forest cover decreased from 41 percent of land in 1990 to 35 percent in 2008.
- National deforestation rate is estimated to be 2.8 % but varies widely across the country's three regions.
- Agricultural expansion, growth of human settlements, over-dependence on wood for cooking, rapid population growth, and low levels of reforestation have contributed to forest decline.
- 95 % of households use wood fuel for cooking.
- Forest loss negatively affects Malawi's ability to withstand natural disasters, including flooding.



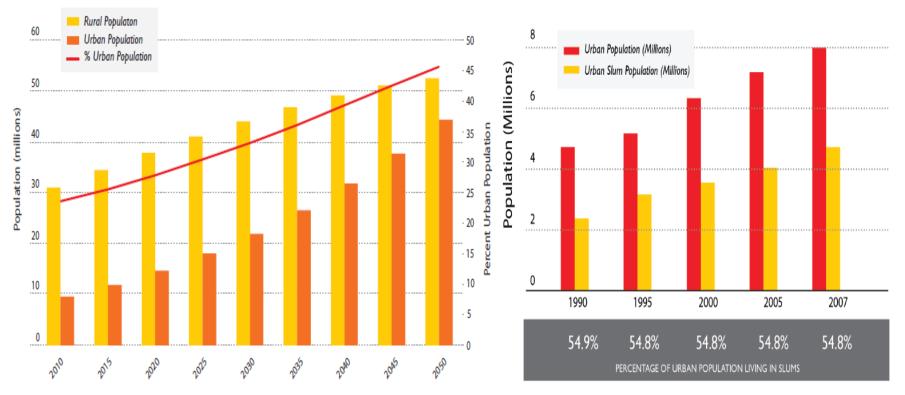
## Kenya:

- Kenya is characterized by a rapidly growing population, water scarcity, falling food production and low resilience to climate change.
- The population is projected to reach 94 million by 2050 and more than 160 million by 2100.
- This growth is largely due to past high fertility, which peaked at 8.1 children per woman and has since declined modestly to 4.6 in 2008.
- Young people dominate Kenya's population. 42% of the population is below age 15.



#### Population will continue growing

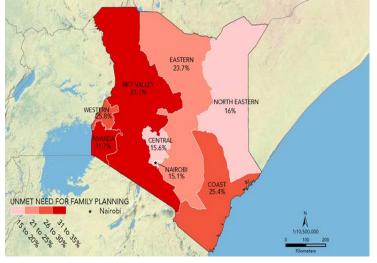
# Kenya's urban population continues to grow, as does the proportion living in slums



- Kenya is one of the most rapidly urbanizing countries in Africa
- More Kenyans will live in urban areas, presenting new opportunities and challenges for sustainable development
- More than half (55%) of Kenya's urban residents live in informal settlements.
- The number of people living in urban poverty is increasing, creating new economic, social and environmental challenges

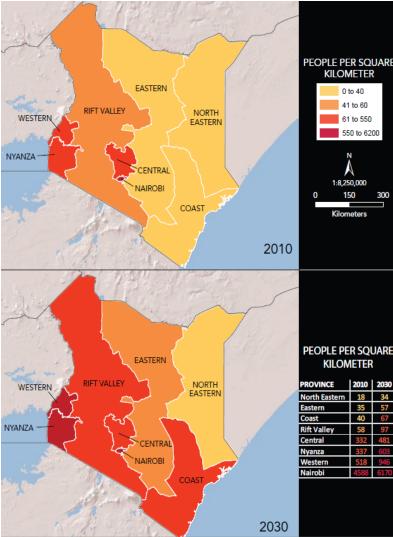
## Family size and contraceptive use

- In the 1980s and 1990s Kenya was a pioneer in increasing contraceptive use in sub-Saharan Africa.
- The percentage of married women using family planning in Kenya rose from 7 percent in 1978 to 27 percent in 1989, and further to 39 percent in 1998.
- However, fertility slightly increased between 1998 and 2003. The average number of births per woman declined by 2 children from 6.7 to 4.7 between 1989 and 1998, but hardly changed in the following decade, reaching 4.6 in 2008.
- Unmet need for family planning in Kenya is 26 %.
- Renewed interest in FP.



# Population growth, climate change and agricultural production

- The livelihoods of the majority of Kenyans depend on rainfed small-scale farming.
- Recent droughts decimated livestock populations and led to poor harvests, crop failure and food shortages in many areas.
- Rapid population growth has contributed to fragmentation of smallholder land holdings.
- Only about 20 % of land in Kenya is suitable for agricultural production.
- Most of the agriculturally productive areas are found in the densely populated Central, Rift Valley, Western and Nyanza provinces.



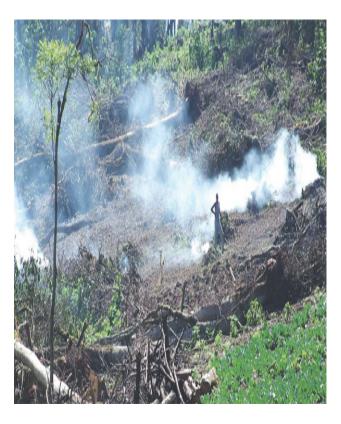
# Population growth, climate change and water resources

- Kenya is classified as a water-scarce country, with water demands exceeding freshwater sources.
- Recurring droughts have diminished water supply, rendering many rivers seasonal, or drying them up completely.
- High rates of deforestation have made the problem worse by severely reducing water catchment capacity.
- The proportion of Kenya's population using a safe source of drinking water has increased, but continues to lag behind the global average.



# Population growth, climate change and deforestation

- Population growth, agricultural expansion, growth of human settlements, overdependence on wood for cooking, and low levels of reforestation have accelerated deforestation in Kenya.
- Between 1990 and 2008, Kenya lost 6 % of its forest cover at an annual rate of 0.3 percent.
- At least 90 percent of rural households use firewood for cooking and heating, and about 80 percent of urban households use charcoal for cooking.



### **Summary of Key Points:**

- Population growth will continue to influence development challenges in Africa.
- Climate change is likely to compound the challenges, as it could potentially affect the availability of natural resources such as agricultural land and water.
- BUT how well is population and FP/RH integrated into national policies and programs to address climate change and sustainable development in SSA?





### Policy Assessments and Implications

- To what extent are population and climate change issues prioritized in development planning and resource allocation in Kenya and Malawi?
- How well are policies and programs integrating these linked challenges?
- What are the policy and programme implications of the study?

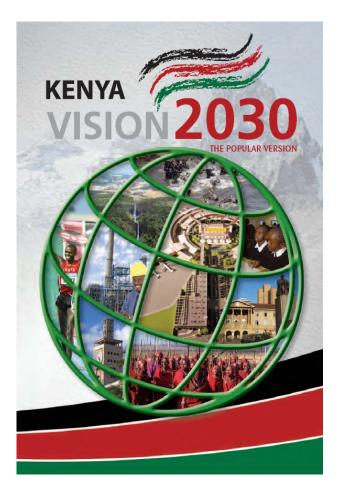
## **Policy Environment Assessments**

- Rapid population growth cited as one of the main barriers to economic development and environmental preservation in virtually all population policies, economic plans, and environmental policies in Kenya and Malawi
  - But limited political leadership and financial resources to family planning and other population programs
- Climate Change increasingly becoming a priority issue policies being developed, and Ministry of Environment and Climate Change Management set up in Malawi
  - Climate change sectors increasingly recognizing key role of population growth, but leave family planning promotion and provision to the ministry of health

### **Policy Environment Assessments**

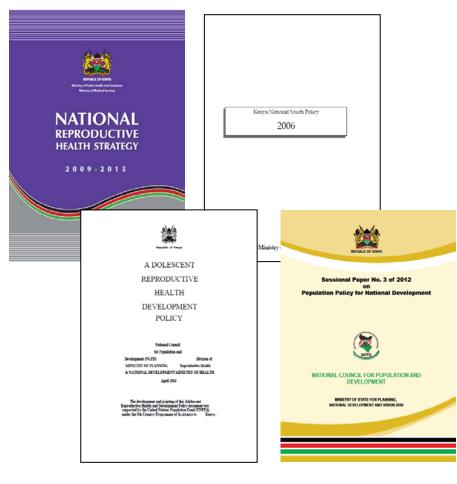
 There is limited integration of population dynamics and climate change issues at policy and programme levels, with activities in each area being implemented in silos

## Kenya's development blueprint highlights population growth, urbanisation and climate change



- Population issues highlighted in V2030 – urbanization, demographic dividend
- The Second Medium Term Plan (2013-2017) acknowledges the need to tackle climate change
- No guidance on multi-sectoral integration

## Population and related policies are more explicit than environment policies in linking the two issues



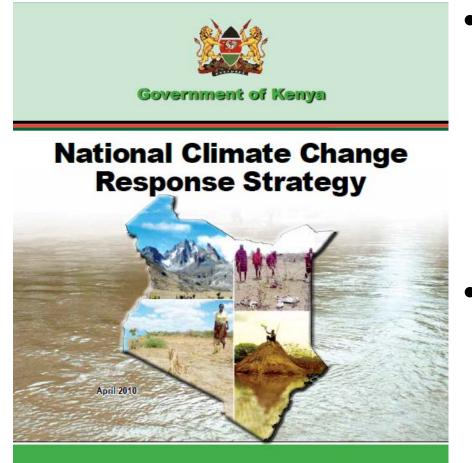
 The 2012 Population Policy refers to climate change

 But there is weak integration of population in other development sectors

## Multi-sectoral Coordination of Climate Change Activities in Kenya

- Ministry of Environment and Mineral Resources
  - Focal point for national environment matters
  - Hosts the Climate Change Secretariat
- National Environment Management Authority (NEMA)
  - Provides technical coordination via the Climate Change Unit
- The Prime Minister's Office
  - The Climate Change Coordination Unit manages the Inter-Ministerial National Climate Change Steering Committee
- Climate Change Desk Officer in various ministries
- **District Development Officers** (decentralisation)

## The National Climate Change Response Strategy (2010) guides implementation of activities



- The strategy is aligned with Vision 2030 and provides a framework for **adaptation and mitigation measures** to be integrated in government planning, budgeting, and development objectives.
- The strategy calls for a **joint action plan** highlighting a trans-sectoral role for tackling climate change.

# Climate Change issues are not harmonised across environment sector policies

• All recognize the impact of rapid population growth on environmental degradation

- They do not specifically indicate how they would contribute to addressing population issues
  - Family planning is not addressed as a multisectoral issue (NCPD and DRH)

## Kenya's Climate Change Action Plan makes casual reference to urbanization and population growth



GOVERNMENT OF KENYA

#### National Climate Change Action Plan 2013 -2017

#### Executive Summary



## Kenya's Climate Change Policy Framework is currently under development



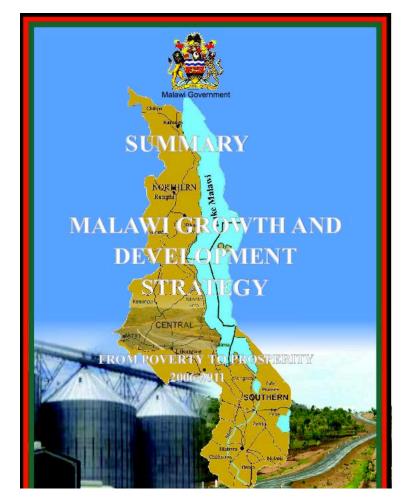
http://www.bfasta.net/academics/curriculum

Climate Change is not harmonised across development policies

 "Different ministries come up with the same policies, and sometimes you find that they are conflicting. Harmonization is key and that is why we talk of merging. It is important to come up with one policy." [GoK Official]

# Malawi Growth and Development Strategy (MGDS) II (2011-2016)

- MGDS II recognizes both climate change and population dynamics as priority areas for economic growth and development.
- MGDS II calls for including these issues in policies, plans, and programmes across sectors.
- No guidance on multisectoral integration



### Malawi population policies highlight climate change & environmental issues

 Population policies are more explicit than environment policies in linking the two issues

• 2013 Population policy belatedly included climate change, following our study

• There is weak integration of population in other development sectors

# Malawi Environment Policies highlight population issues

• All recognize the impact of rapid population growth on natural resource conservation

- They do not specifically indicate how they would contribute to addressing population issues.
  - Family planning not a multi-sectoral issues and mostly addressed by Ministry of health

# National Adaptation Programme of Action (NAPA)

- Malawi's NAPA highlights links between population and climate change
- NAPA identifies investments in reproductive health and family planning as a priority for adaptation
- It did not propose a specific project that included family planning among its priority adaptation interventions.

# Malawi Climate Change Policy Framework is currently under development



http://www.bfasta.net/academics/curriculum

Population dynamics

 highlighted in the draft policy
 following dissemination of
 findings from our study

 Ministry of Environment and Climate Change Management formed in 2012 Presenting the Malawi Report to the Vice President & the Minister of Environment and Climate Change Management





# Barriers of effective integration of population and climate change programmes

# Weak integration of sectoral programmes

- No policy framework to coordinate programmes
- Weak coordination of climate change programmes, as well as weak integration of climate change within other sectors like population
  - "There is multiplicity of policies and little integration, and integration has not been harmonized with devolution." [Donor Agency Official]

# Weak coordination of programs

- Climate change is a cross-cutting issue that requires effective coordination to mainstream it in various development sectors.
- Kenya: Population has strong semi-autonomous coordinating Council (NCPD) but entities are coordinating climate change activities
  - "We need to ensure that the secretariat is able to really monitor and support issues on climate change and guide the way forward." [GoK official]

#### Weak Coordination - Malawi

- NCCP is housed in Department of Planning vs.
   Department of Environmental Affairs & Climate Change
  - "The location of the climate change programme is controversial; there is no proper coordination"
- NCCP and Population Unit work in total isolation.
  - "The linkage between population and climate change in the Population Unit is understood but the climate change people are not considering population dynamics. People are working in silos.."

#### **Need** for Harmonization of policies

- There is a need to move to audit and standardize policy statements on various climate change issues that are addressed in other sectors including land, food and water insecurity.
  - "The policies we have are sector specific and sometimes conflicting, and there is need to harmonize them. Those in the Population Unit should link with the environment people. The Climate Change policy being developed should include population..."

# **Inadequate Funding**

- Allocation of resources to multisectoral responses remains a major challenge
- Over-dependence on donors for funding of climate change and population work
  - "When budgeting for climate change you hardly find money that the government has directly prioritized for it." [GoK Official]
  - "There is a problem of sustainability if this situation continues where all the risk reductions programmes are funded by development partners and NGOs." (GoM Official)

#### Increasing attention to population issues

- Kenya has increased resources to family planning and included in Vision 2030 funding of reproductive health programs
- Malawi committed to create budget line for family planning in 2013 and strong political will in President Joyce Banda helping to increase visibility of population and reproductive health issues

# Weak Technical Capacity

- Weak technical capacity in programme design, implementation, evaluation, research, knowledge translation and management
  - "Population pressure introduces what we call microclimates... We need a better data network for our observations, and a very good communication and dissemination system to create awareness in terms of what exactly people are supposed to do to minimize some of the impacts of climate change disasters." (Kenya Government Official)

## Weak Technical Capacity

 "There is heavy reliance on external expertise...to formulate good policies. Ultimately, a lot of this work will have to be done by local experts if the programmes are to be sustained and entrenched into the local systems." (NGO official – Malawi)

# RECOMMENDATIONS

1. Integrate policies and programs to address climate change and mainstream it across development sectors.

This should include setting up strong coordination and governance systems. Oversight is needed to make sure various sectors work together to avoid duplicating efforts and wasting resources.

# 2. Prioritize population in national climate change and development plans, with adequate resources for effective implementation of programs.

In particular, climate change plans and programs should include expanding access to family planning. This will boost resilience to climate change.

### 3. Prioritize meeting women and their partners' needs for family planning as it will yield a 'triple win' in the U.N. sustainable development framework.

Universal access to family planning would reduce fertility rates and slow population growth, which would help: (1) reduce poverty by improving and expanding health, schooling and economic opportunities; (2) protect and manage natural resources for economic and social development; and (3) reduce inequality and create greater opportunities for all through social development.

# 4.Improve technical capacity in program design, research and application of research to decisionmaking processes.

Decision makers engaged in climate change policy, planning, and implementation at all levels should have access to research on population trends, climate change and development.

It is important to strengthen technical capacity of local experts to design and carry out integrated programs, and to monitor and evaluate these programs. This includes supporting efforts to improve training of local climate change experts

5. Incorporate population, reproductive health and family planning into global and regional institutions and frameworks for sustainable development.

Such institutions include the African Union and the UN Economic Commission for Africa. The frameworks include the post-2015 MDG, the International Conference on Population and Development (ICPD), and the post-Rio +20 agendas.

- Ensure integrated approaches in existing and upcoming population and development paradigms
  - Infuse environmental issues in demographic dividend discourses
  - Ensure Population, Health and and Environment framework included D(evelopment) or E(conomics)
  - Include the environment and climate change voice in FP2020 discourses

# THANK YOU

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