



**POPULATION
COUNCIL**

Ideas. Evidence. Impact.

BUILDING AWARENESS ACROSS SECTORS ABOUT POPULATION AND CLIMATE COMPATIBLE DEVELOPMENT

Karen Hardee, Senior Associate

Bridging the Gap: A Conversation about FP and Climate
Change, Woodrow Wilson Center

October 28, 2014

Actions

- Population already identified as a challenge to CCD
- Linking Pop, RH/FP and climate change for local governments
- Raise awareness of Pop trends and unintended pregnancy/unmet need for FP among environment and climate sectors
- Improve understanding of the current treatment of Pop in the SSPs and emissions scenarios
- Use of Pop data in measurements of resilience, risk, and climate policies and programs

Actions

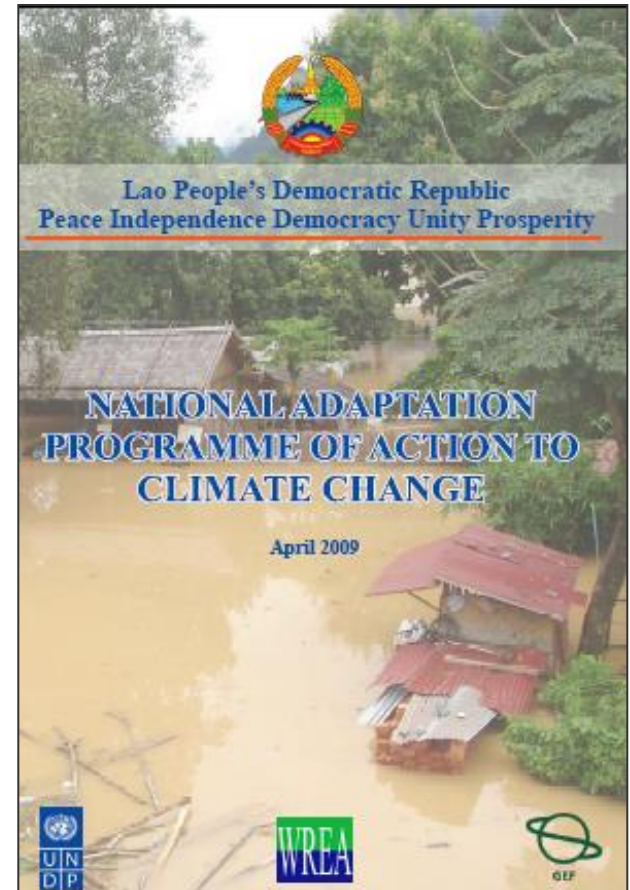
- Population already identified as a challenge to CCD
- Ensure that reps from social sectors, including health, are participating in national CCD planning
- Linking Pop, RH/FP and climate change for local governments
- Raise awareness of Pop trends and unintended pregnancy/unmet need for FP among environment and climate sectors
- Improve understanding of the current treatment of Pop in the SSPs and emissions scenarios
- Use of Pop data in measurements of resilience, risk, and climate policies and programs

Is Population addressed in NAPAs?

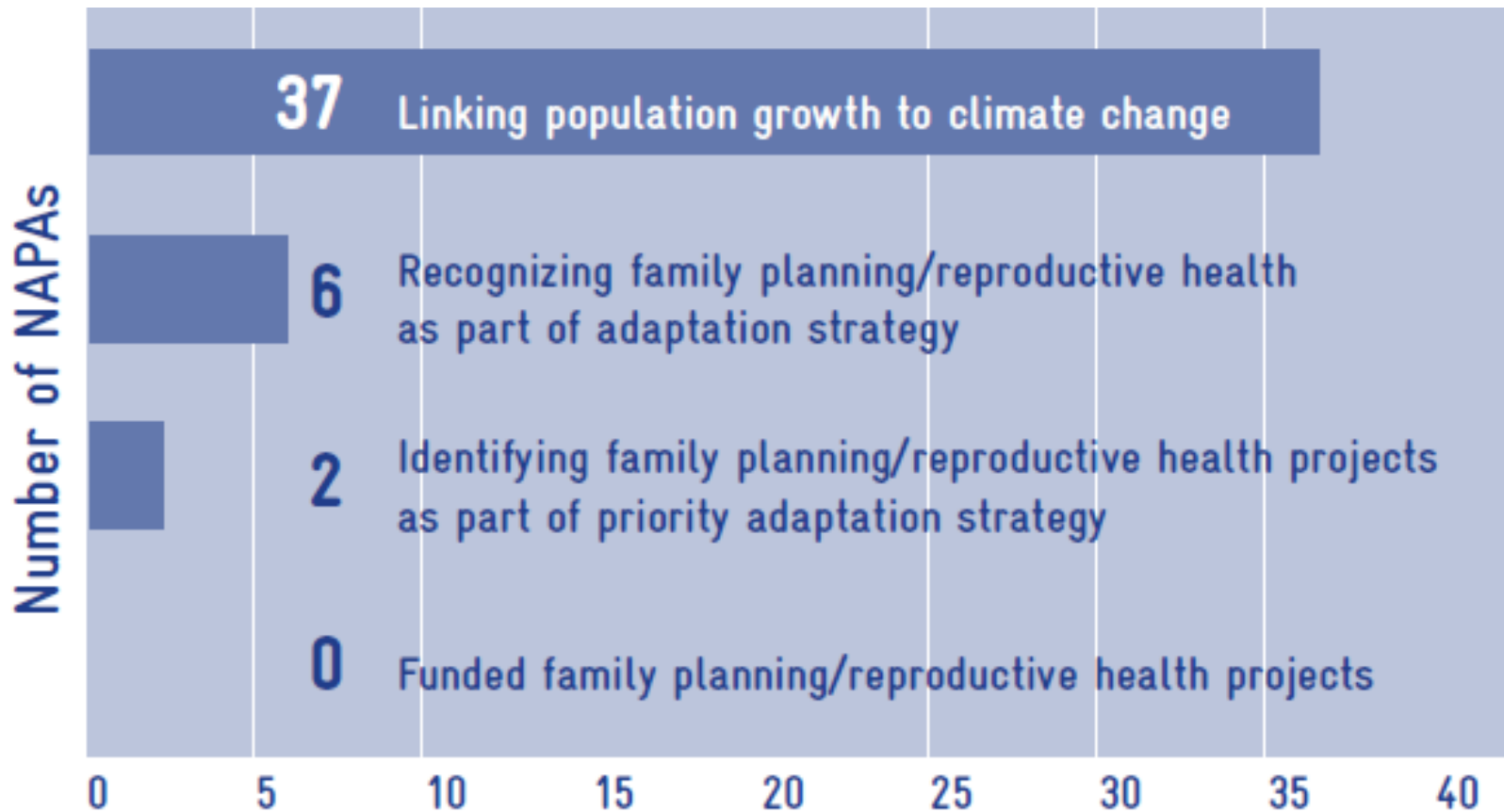
37/41 NAPAs address population growth

Acting in tandem with other factors, rapid population growth causes or increases:

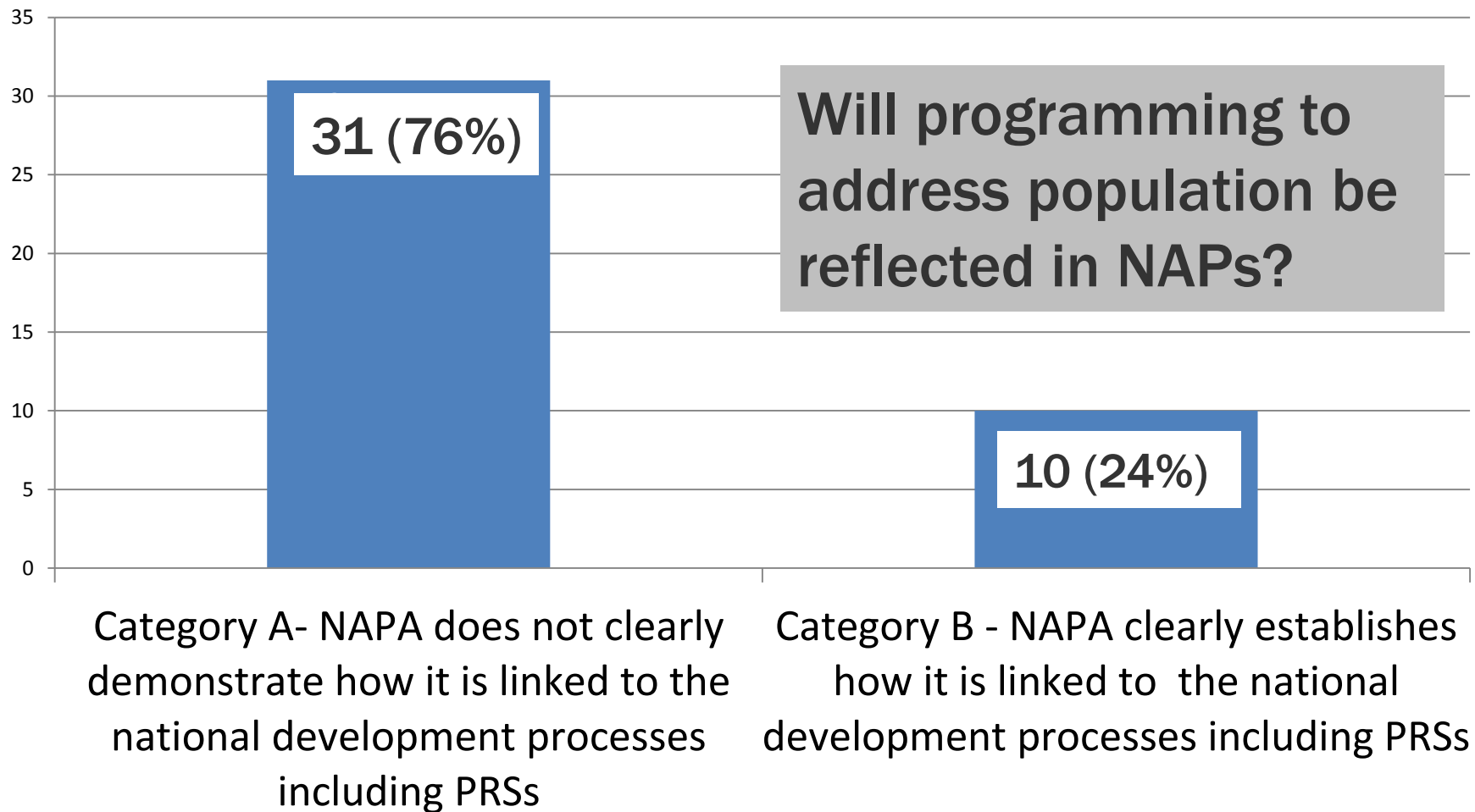
- Vulnerability to food insecurity
- Water resources scarcity
- Natural resource degradation or depletion
- Poor human health
- Migration



Population, Reproductive Health/Family Planning and Adaptation Strategies in 41/49 NAPAs



Alignment of NAPAs with National Development Planning Process and PRS



Climate Change and Development: Botswana



Presidential directive on climate change places responsibility for preparing a long-term mitigation and adaptation strategy in the **Ministry of Environment, Wildlife and Tourism**

“Botswana is only beginning to acknowledge that climate change solutions lie not with environmental ministries but with those dealing with **economics** and **development** issues including the **private sector**” Dube, 2010

Actions

- Population already identified as a challenge to CCD
- Ensure that reps from social sectors, including health, are participating in national CCD planning
- Linking Pop, RH/FP and climate change for local governments
- Raise awareness of Pop trends and unintended pregnancy/unmet need for FP among environment and climate sectors
- Improve understanding of the current treatment of Pop in the SSPs and emissions scenarios
- Use of Pop data in measurements of resilience, risk, and climate policies and programs

POPULATION DYNAMICS, ENVIRONMENT, AND SUSTAINABLE DEVELOPMENT IN KISUMU COUNTY



Kisumu County is characterized by a rapidly growing population, high population density, water scarcity, falling food production, and low resilience to climate change. The combined effects of climate change and rapid population growth are increasing food insecurity, environmental degradation, and poverty levels in the county.

The Kisumu County Integrated Development Plan (CIDP) identifies environmental degradation and climate change as key development challenges, but fails to link them to population dynamics. These issues need to be linked in county policies and programs to ensure that projects that address them are implemented jointly. Addressing population growth, environmental degradation, and climate change together should be a top priority if Kisumu County is to achieve sustainable development. The county government, donors, and program implementers should develop policies and implement programs that integrate population dynamics, environment/climate change, and development.

Population Dynamics

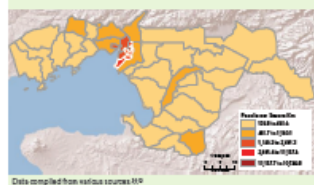
located along the shores of Lake Victoria in western Kenya, Kisumu County is home to 952,645 people. The population is projected to grow to 1,145,749 by 2017.

This growth is largely a result of high fertility, which is currently 4.8 children per woman, compared to a national average of 4.6 children per woman. This number has declined from 5.6 children per woman in 1996, mostly because of increasing demand for smaller families and use of modern contraception. Addressing barriers to access and use of family planning would further reduce fertility. In 2011, about one in four married women who wanted to postpone their next birth or stop childbearing altogether were not using any method of contraception.

TABLE 1:	KISUMU	KENYA
Current Population	952,645	37,919,447
Current Population Density	474.1	45.3
Projected Population (2017)	1,145,749	No Data
Projected Population Density (2017)	570.2	No Data
Total Fertility Rate	4.8	4.6
Contraceptive Prevalence Rate	30.0%	39.4%
Unmet Need for Family Planning	22.4	25.6

Data compiled from various sources.^{1,2,3,4,5,6,7}

FIGURE 1. POPULATION DENSITY BY WARD



Data compiled from various sources.^{1,2,3,4,5,6,7}

Currently the county's population is dominated by young people who need to be supported by those in the workforce. Three quarters of the population is under 30 years old and 43.5 percent is under 15 years. The CIDP identifies the young population and high unemployment as threats to development. This young age structure also means that the population will continue to grow for several generations. However, if birth rates were to decline rapidly, the age structure of the population would shift and there would be more working-age adults relative to children. Consequently the county could benefit from what is called the "demographic dividend"—economic growth resulting from increased productivity and greater savings due to a lower number of dependents. Benefits of the demographic dividend are optimized when accompanied by investments in health and education, and pro-growth, job-creating economic reforms.

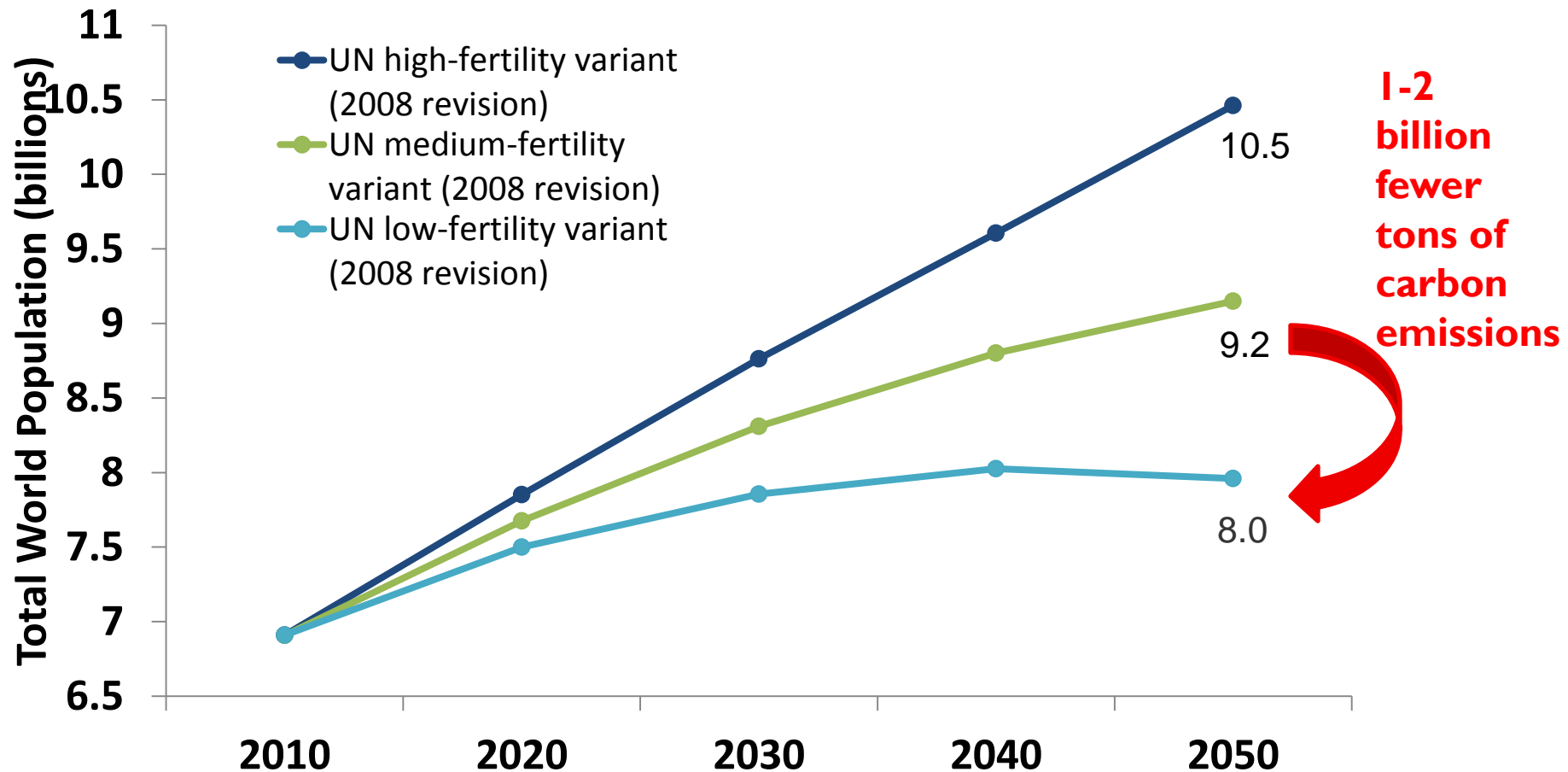
“The Kisumu County Integrated Development Plan (CIDP) identifies environmental degradation and climate change as key development challenges, but fails to link them to population dynamics.”

“Addressing population growth, environmental degradation, and climate change together should be a top priority if Kisumu County is to achieve sustainable development.”

Actions

- Population already identified as a challenge to CCD
- Ensure that reps from social sectors, including health, are participating in national CCD planning
- Linking Pop, RH/FP and climate change for local governments
- **Raise awareness of Pop trends and unintended pregnancy/unmet need for FP among environment and climate sectors**
- Improve understanding of the current treatment of Pop in the SSPs and emissions scenarios
- Use of Pop data in measurements of resilience, risk, and climate policies and programs

World Population Projections



United Nations, 2009

O'Neill, 2009

Carbon Emissions from Fossil Fuel Use According to Rate of Population Growth, World, India and USA

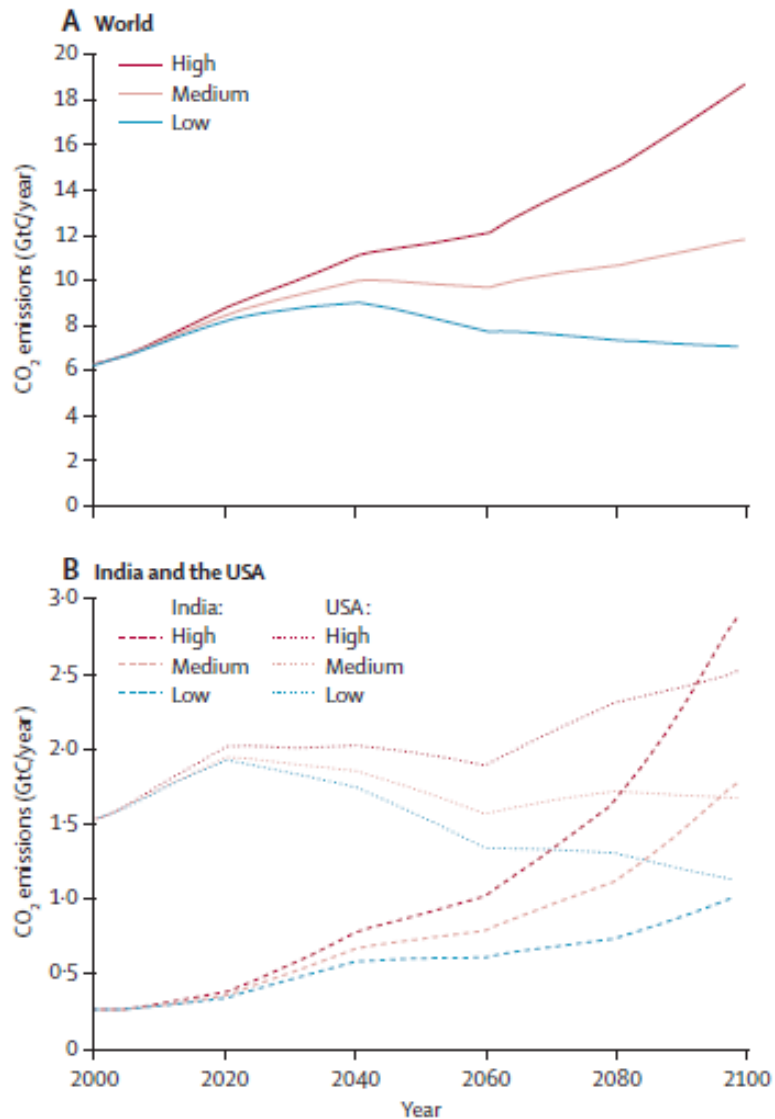


Figure 1: CO₂ emissions from fossil fuel use according to rate of population growth
Projections of CO₂ emissions for 2000–2100 for (A) the world and (B) India and

O'Neill, B., B Liddle, L Jiang, KR Smith, S Pachauri, M Dalton and R Fuchs. 2012. "Demographic Change and Carbon Dioxide Emissions." *Lancet*. Published online July 10, 2012. : 5

Population, Food Security and Climate Change in Ethiopia

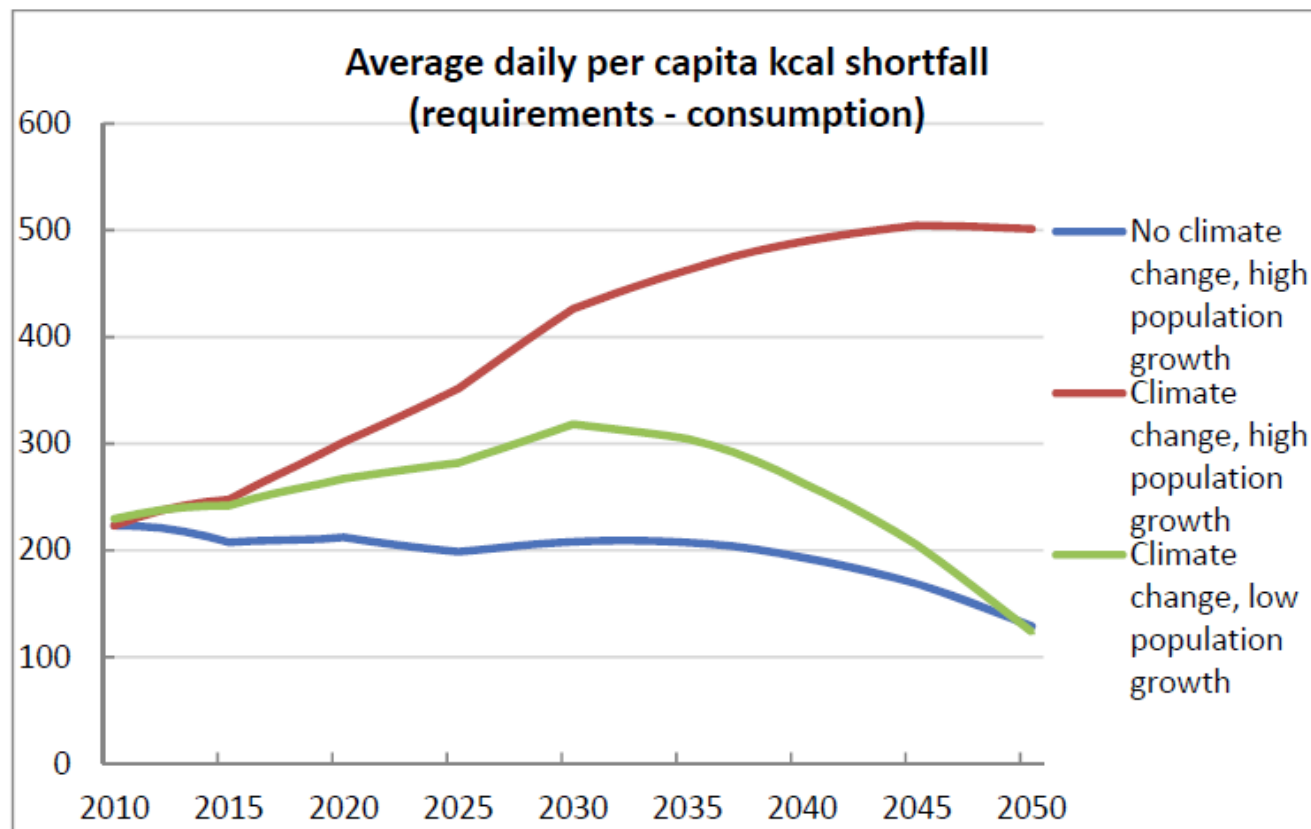
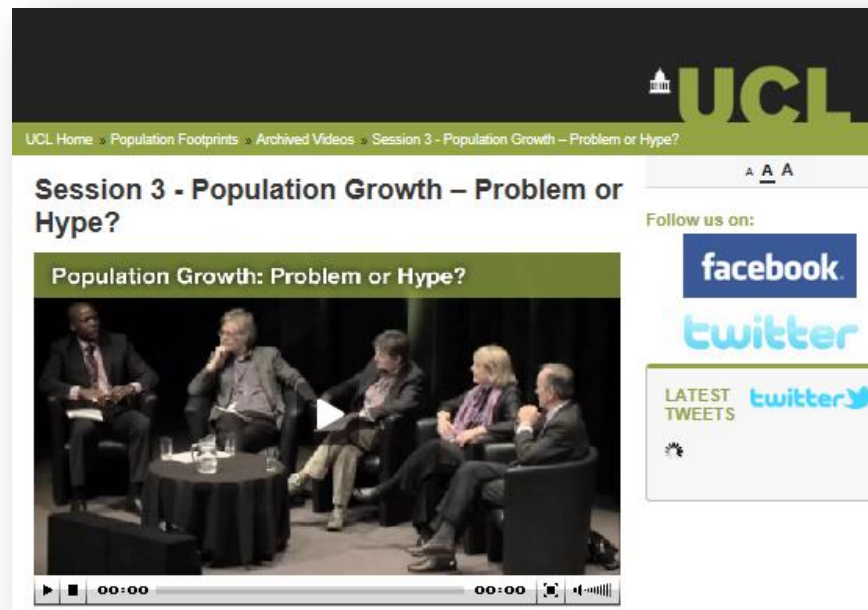


Figure 13. Food gap in Ethiopia, 2010-2050 (average daily kcal per capita).

Source: Authors' calculations.

Eliya Zulu, ED of African Institute for Development Policy (AFIDEP) at Population Footprints Conference, 2011

- “African women are saying for themselves that they want to have fewer children.”
- “We must therefore challenge the notion that family planning programmes are ‘top down’ and imposed on developing countries by the global North”
- There is increasing political support for FP by political leadership in the South



Los Angeles Times

Beyond 7 Billion

Ken Weiss and Rick Loomis, 2012

A Times Series



JUL. 22, 2012

Fertility rates fall, but global population explosion goes on

Global birthrates are falling. But with many in their fertile years and political and cultural forces against contraception, the population explosion is far from over.



JUL. 22, 2012

Runaway population growth often fuels youth-driven uprisings

In fast-growing countries, many young men are unable to find employment or pay dowries. Frustrated ambitions can be an explosive force — and a reason for joining the Taliban.



JUL. 22, 2012

As the world's population grows, hunger persists on a massive scale

Nearly 1 billion people are malnourished, and a child dies of hunger every 11 seconds. By 2050, farmers would have to double crop production to meet the demand.



JUL. 22, 2012

China's population and economy are a double whammy for the world

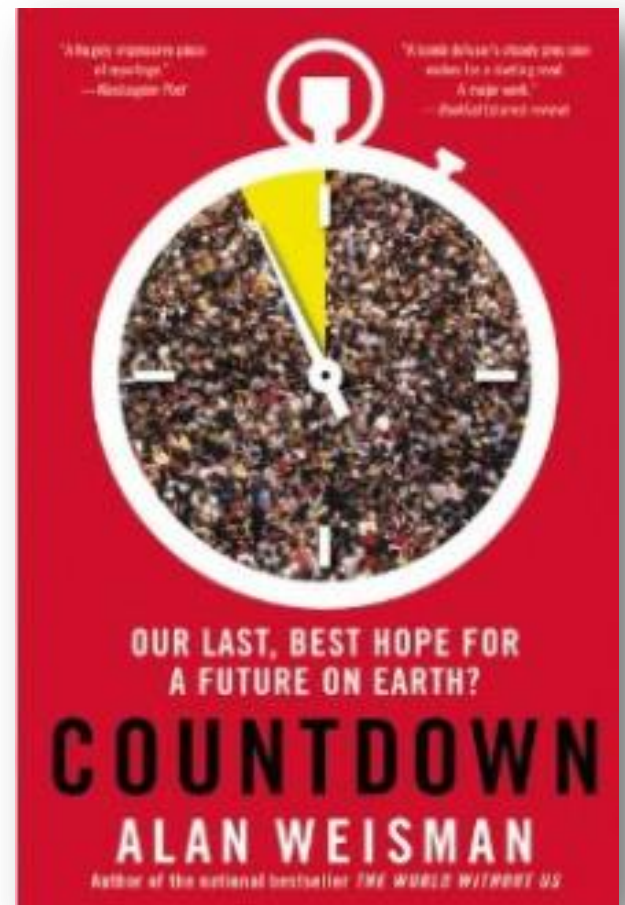
China's 'one-child' policy has slowed population growth and brought prosperity — but it couldn't avert massive damage to the environment.



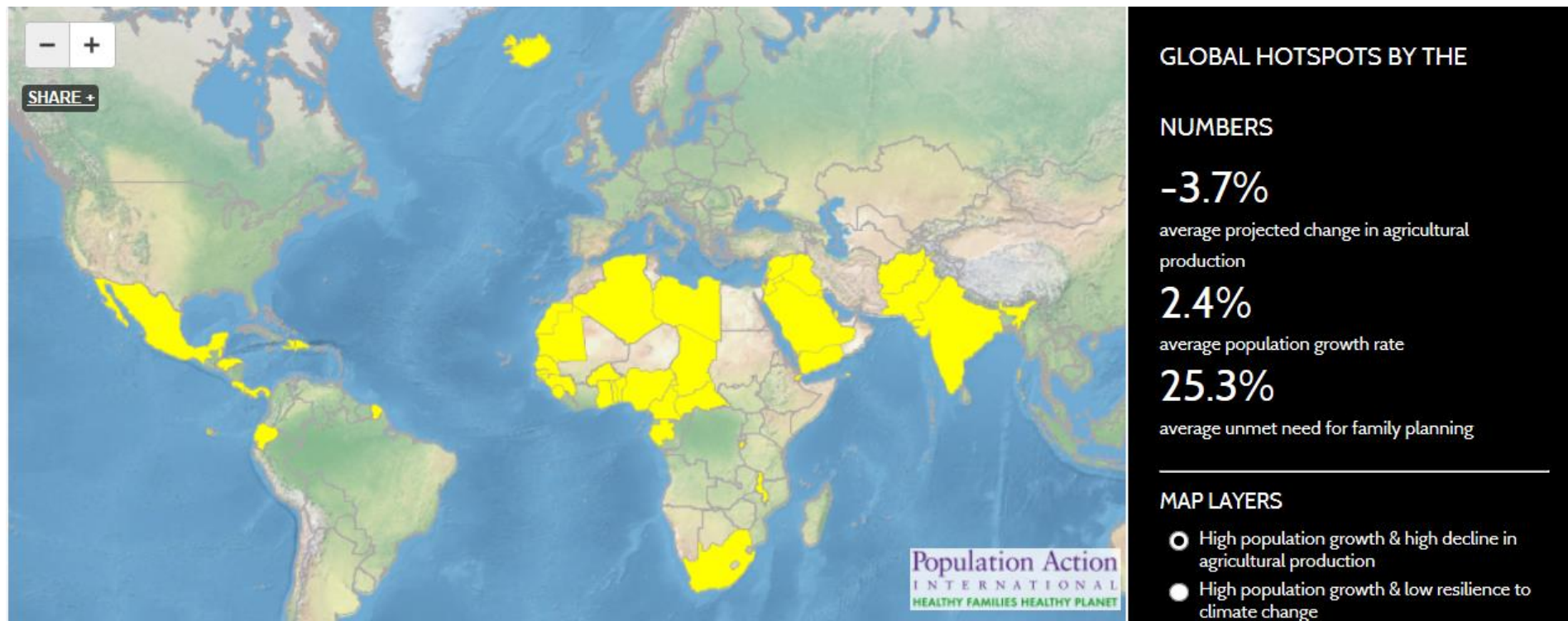
JUL. 22, 2012

Philippines birth control: Filipinos want it, priests don't

In the Philippines, access to contraceptives is limited for the most part to those with the means to pay. The Catholic Church has fought a "reproductive health bill" in the legislature that would change that.



Climate Change and Population Hotspots

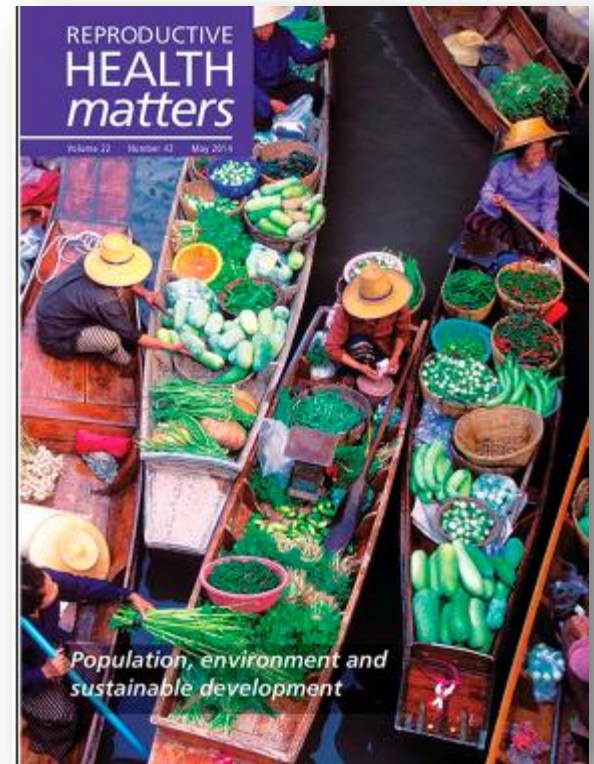


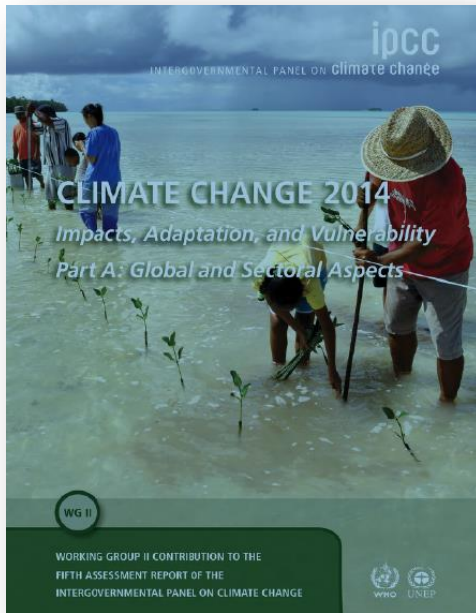
Countries with projected reductions in agricultural production, rapid population growth, and unmet need for family planning

Special Issues of RHM on Population, Environment and Sustainable Development (May 2014)

Selected articles:

- Population, SRHR and Sustainable Development: forging a common agenda
- Sustainable development, demography and SRH: inseparable linkages and their policy implications
- Resilience, integrated development and FP: building long term solutions
- Country articles: Madagascar, Ethiopia, Lake Victoria Region





AR5 WG II: Impacts, Adaptation and Vulnerability: Opportunities to achieve co-benefits of emissions reduction and improving health:

Among others, these include:

- Reducing local emissions of health-damaging and climate-altering air pollutants from energy systems, through improved energy efficiency, and a shift to cleaner energy sources (*very high confidence*) {11.9}
- Providing access to reproductive health services (including modern family planning) to improve child and maternal health through birth spacing and reduce population growth, energy use, and consequent CAP emissions over time (*medium confidence*) {11.9}
- Shifting consumption away from animal products, especially from ruminant sources, in high-meat-consumption societies toward less CAP intensive healthy diets (*medium confidence*) {11.9}
- Designing transport systems that promote active transport and reduce use of motorized vehicles, leading to lower emissions of CAPs and better health through improved air quality and greater physical activity (*high confidence*). {11.9}

• Providing access to reproductive health services (including modern family planning)

NEW IPCC REPORT RECOGNIZES FAMILY PLANNING AMONG SOCIAL DIMENSIONS OF CLIMATE CHANGE ADAPTATION

What's New in the IPCC Report?

- For the first time ever, the Intergovernmental Panel on Climate Change (IPCC) recognized the social dimensions of climate change adaptation. Working Group II's contribution to the fifth assessment (AR5) Report, "Climate Change 2014: Impacts, Adaptation, and Vulnerability" highlights population dynamics and the important role that family planning can play in reducing climate change vulnerability and as a potential adaptation strategy.

Why Does it Matter?

- The IPCC is the scientific body which reviews existing climate science and informs the United Nations Framework Convention on Climate Change (UNFCCC), including these social dimensions. In its latest report will mean that the UNFCCC decisions and policies on adaptation planning are more likely to recommend the inclusion of the social dimensions outlined in the report, and to take strong action on these issues moving forward.

Key Excerpts

On the Role of Gender

- Females are more strongly affected than males by high temperature and ozone air pollution. [Chapter 11, pp.18, Item 1-4](#)
- The effect of food insecurity on growth and development in childhood may be more damaging for girls than boys. [Chapter 11, pp.18, Item 1-4](#)
- Pregnancy makes women vulnerable to a wide range of environmental hazards, including extreme heat and infectious diseases such as malaria, foodborne infections and influenza. [Chapter 11, pp. 18, Item 1-8](#)

On the Role of Family Planning

- Providing access to family planning saves women's lives by reducing the total number of births and reducing births in high-risk groups. [Chapter 11, pp. 36, Item 40-44](#)
- When women have access to family planning, it is the highest risk age groups (youngest and oldest women) who reduce their fertility most. [Chapter 11, pp. 36, Item 40-44](#)
- Meeting the need for family planning services in areas with both high fertility and high vulnerability to climate change (such as the Sahel region of Africa) can reduce human suffering and help people adapt to climate change. This is also important in rich countries like the U.S., where there is unmet need for services as well as high CO2 emissions per capita. [Chapter 11, pp. 35-36, Item 30-34](#)

Talk to Our Experts

Deepa Pullanikkattil

Program Manager
LEAD Southern and
Eastern Africa
Email: d.pullani@yahoo.com
Mobile: +265 (0)99385 8798
Tel: +265 (0)1524251

Gina Sarfaty

GIS Specialist and Research
Associate
Population Action
International
Email: gsarfaty@popaction.org

- Increasing access to family planning improves maternal and child health through increased birth spacing and reducing births by very young and old mothers. [Chapter 11, pp. 35-36, Item 30-34](#)

On Linking Population, Family Planning, and Adaptation Planning

- Many countries recognize "population pressure" as an issue for adapting to climate change, but few incorporate family planning into national adaptation planning or poverty reduction strategies. [Chapter 2, pp. 34, Item 25-33](#)

Why the Issue Matters for a Country Like Malawi

- Malawi is one of 15 population and climate change hotspots in sub-Saharan Africa characterized by a high population growth rate, a high projected decline in agricultural production, and low resilience to climate change.
- Malawi's population is projected to reach 50 million by 2050 and more than 120 million by 2100. At the same time there is a high unmet need for family planning. Twenty-six percent of married women who want to postpone their next birth or stop childbearing are not using contraception.
- Malawi's economy depends on rain-fed agricultural production, which is dominated by smallholder farming. Agriculture contributes 30 percent of Malawi's gross national product, and supports livelihoods for over 80 percent of the population.
- Between 1990 and 2010, Malawi lost about 17 percent of its forest cover.
- A 1-in-10-year drought event would reduce Malawi's annual GDP by an estimated 4 percent.

Media kit from
PAI: highlighting
the inclusion of FP
and its
contribution to
climate change
adaptation in AR5

Actions

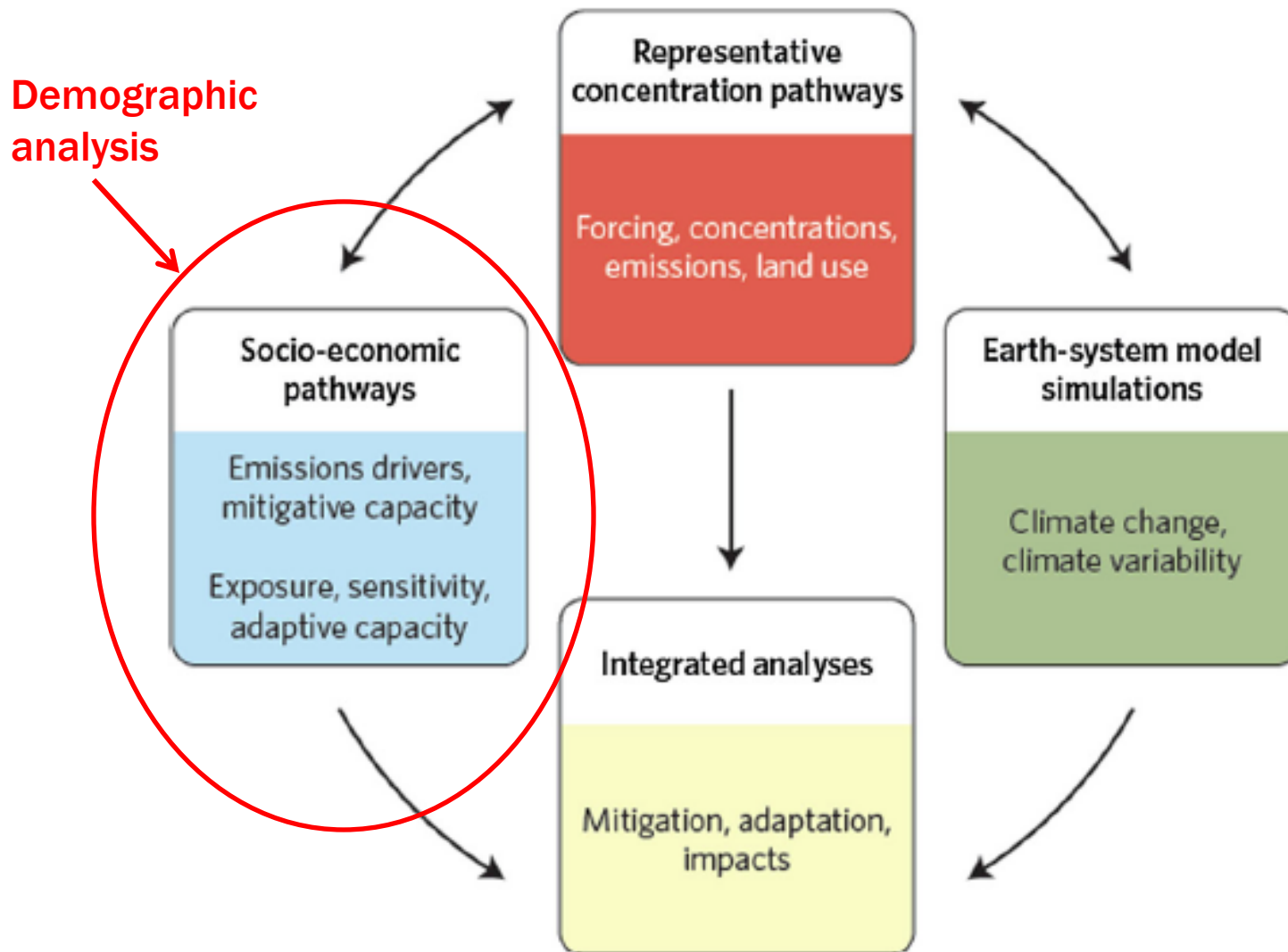
- Population already identified as a challenge to CCD
- Ensure that reps from social sectors, including health, are participating in national CCD planning
- Linking Pop, RH/FP and climate change for local governments
- Raise awareness of Pop trends and unintended pregnancy/unmet need for FP among environment and climate sectors
- **Improve understanding of the current treatment of Pop in the SSPs and emissions scenarios**
- Use of Pop data in measurements of resilience, risk, and climate policies and programs



Highlights from IUSSP Scientific Panel on Climate Change – first seminar Nov 2012

- Major window of opportunity for population research on climate change vis a vis the new generation of climate scenarios
- Outlines a new research agenda for pop-envt specialists
- Generate synergies/collaboration between population scientists and other social scientists working on climate change
- Could increase visibility of demographic research among climate scientists

The parallel process conceptual diagram for the development of new, integrated scenarios of climate change



Moving Beyond Population Size and Growth

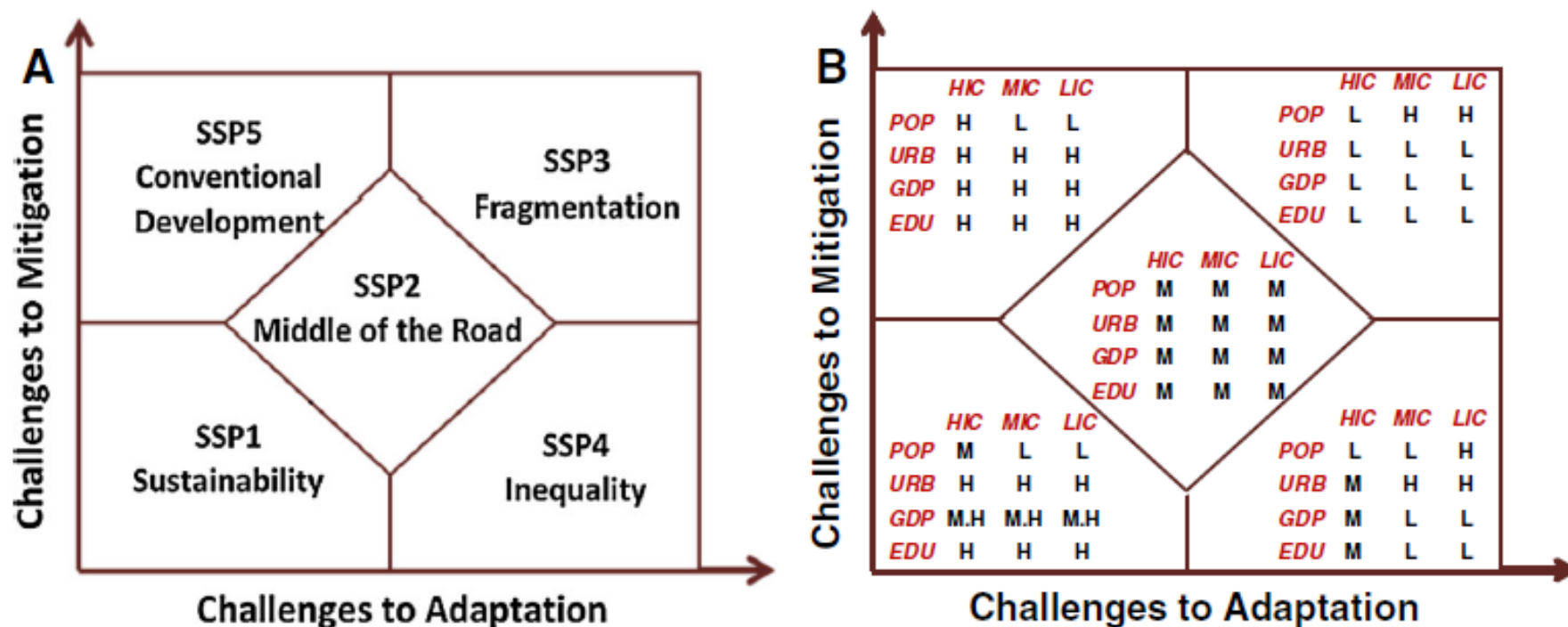


Fig. 1 Qualitative narratives (a, on the *left*) and the assumptions (b, on the *right*) on central elements for countries by income under SSPs. *Note* the central elements are *POP* population, *URB* urbanization, *GDP*, *EDU* education, the income groups are *HIC* high income, *MIC* medium income, *LIC* low income; assumptions on future changes are *H* high scenario, *M.H* medium high scenario, *M* medium scenario, *L* low scenario

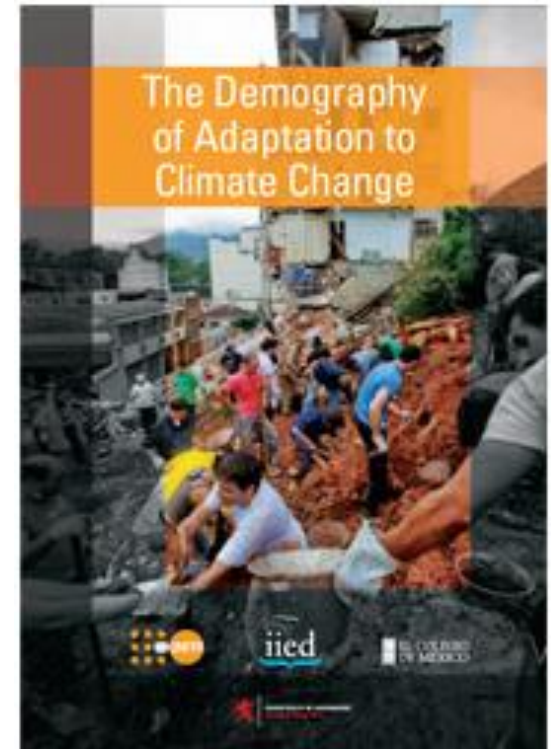
Actions

- Population already identified as a challenge to CCD
- Ensure that reps from social sectors, including health, are participating in national CCD planning
- Linking Pop, RH/FP and climate change for local governments
- Raise awareness of Pop trends and unintended pregnancy/unmet need for FP among environment and climate sectors
- Improve understanding of the current treatment of Pop in the SSPs and emissions scenarios
- Use of Pop data in measurements of resilience, risk, and climate policies and programs

The Demography of Adaption to Climate Change, Martine and Schensul, 2013

Including population dynamics in adaptation programming is important for three reasons:

1. Population projections provide important information of the size and composition of the population into the future, which is important for policy and planning.
2. Link between population dynamics and socio-economic development, which is important for adaptation.
3. Links between adaptation and demographic dynamics such as age structure, urbanization, migration (and fertility).



Challenges

- Getting more population scientists involved in climate change research
- Funding for research – especially for RH/FP and adaptation
- Demonstrating the effects of voluntary, rights-based FP/RH programming on adaptation
- Continuing to address the sensitivity of population – expanded focus beyond size and growth will help
- Getting social sectors, including health, a seat at the policy table

Ideas. Evidence. Impact.



The Population Council conducts research and delivers solutions that improve lives around the world. Big ideas supported by evidence: It's our model for global change.