

## COMMENTARY

# Big issues deserve bold responses: Population and climate change in the Sahel

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### The challenge

Parts of Africa have the most rapid population growth in the world. Recent studies by climatologists suggest that, in coming decades, ecologically vulnerable areas of Africa, including the Sahel will be exposed to the harshest adverse effects of global warming. The threat hanging over parts of sub-Saharan Africa is extreme. Fortunately, there are evidence-based achievable policies which can greatly ameliorate what would otherwise be a slowly unfolding catastrophe of stunning magnitude. But to succeed such measures must be taken immediately and on a large scale.

In 1950 there were 30 million people in the Sahel, as broadly defined from Senegal on the Atlantic to northern Ethiopia and Eritrea on the Red Sea. Today there are 100 million. UN demographic projections 2050 are for 300 million. Last year, 18 million people in the West African Sahel were chronically hungry and only about one-third of children were enrolled in secondary school<sup>1, 2</sup>. So examined on its own, this rapid population growth is cause for grave concern. It multiplies the number of individuals suffering from poverty and makes it more difficult for countries to develop<sup>3</sup>.

Now let's consider the effect of climate change in the Sahel. A rise of 3 to 5°C (7 to 10°F) is projected by 2050<sup>4</sup>. Today's extreme temperatures and weather events will become the norm. There may be an increase in precipitation but it is likely to come as flash floods or as rain that may evaporate even before it can reach the root roots of plants. On its own, climate change presents another serious problem in a drought-prone and vulnerable region.

Taken together, rapid population growth and climate change pose a serious threat to the livelihood of the majority of the one hundred million people now living in the Sahel region and about two hundred million more who will live there in a generation's time.

Traditionally, climatologists, physicians, those interested in food security or raising the status of women have worked in separate silos. And the Sahel region – with its landlocked countries and political instability – has been a low priority for major donors. The first meeting bringing together experts from Africa and from the United States to analyze population growth and the impact of climate change in the Sahel from the perspective of demography, family planning, agriculture, status of women and governance was put together as recently as September 2012. The University of California Berkeley and the African Institute for Development Policy hosted a meeting called Organizing to Advance Solutions in the Sahel (OASIS<sup>4</sup>) to share evidence and ideas for integrated approaches in the region.

### Perspectives from Ethiopia

Global warming is a global problem demanding a global solution. Steps must be taken both to mitigate greenhouse gas emissions in the global North and to enable vulnerable populations in Africa adapt to a level of warming that is already inevitable.

In the first ten days of each year the average British citizen put out as many greenhouse emissions as the average person in a less developed country does in one year. The United States (US), with 4% of the global population

produces over 20% of the world's greenhouse emission<sup>5</sup>. Half the pregnancies in the US are unintended<sup>6</sup>. Averting unintended pregnancies benefits women and strengthens society. It also happens to be the most cost-effective way of reducing the carbon footprint of the US and other industrialized nations<sup>5</sup>.

Just as family planning is key to mitigation of climate change in high carbon producing countries, it is also a key strategy for adaptation. In low resource settings with a high unmet need for family planning, like Ethiopia, voluntary family planning can help families and countries as a whole adapt to inevitable climate changes in the near term. This edition of the African Journal of Reproductive Health includes an article by Rovin, Hardee, and Kidanu which examines Ethiopian perspectives on population, fertility, family planning and adaptation to climate. Participants in focus group discussions, including agriculturalists and pastoralists, described links between population pressures and climate change. They suggested family planning as an important adaptation strategy. Indeed, ninety percent of the National Adaptation Programmes of Action (NAPA) mention population as a contributing factor. Yet only two NAPAs identify family planning as a priority strategy and neither of those projects has been funded<sup>7</sup>. Given that the unmet need for family planning is 25% in Ethiopia and that the country is considering a longer-term climate change adaptation strategy, national prioritization of family planning programming is recommended.

The publication of this edition coincides with an international meeting on family planning taking place in Addis Ababa. Ethiopia has a special role to play in relation to rapid population growth and climate change. The total fertility rate is 4.8 and the population grows by 2.4% per year. However, in Addis Ababa, unlike any other African capital city, the TFR is now below replacement level fertility at 1.5<sup>8</sup>. This dramatic change is thanks in no small part to Ethiopian leadership on two important fronts. First, Ethiopia revised its abortion law to improve access to safe abortion services, including special provisions for minors, who make up more than 45% of those seeking

abortion<sup>9</sup>. Second, Ethiopia has been a world pioneer in task shifting, with the health extension worker (HEW) initiative. Together, these approaches are making family planning and safe abortion more accessible and saving lives. A study in Tigray, for example, shows that HEWs can safely administer injectable contraceptives as well as provide medication abortion<sup>10, 11</sup>. People living in countries with high rates of unsafe abortion as well as those with clinical human resource shortages will benefit from Ethiopia's example.

### **The need for urgent, large scale action**

Ethiopia is right in taking these bold steps because the situation in the Sahel is dire. And with the spread of terrorism in the region, the window of opportunity for taking action has already begun to close. We propose three "pillars" for action: make voluntary family planning universally available and counter misinformation about contraceptive methods; invest in the well-being of girls and young women; and promote appropriate technologies and practices to help subsistence farmers and pastoralists adapt to climate change. Doing any one of these three things alone will not suffice. We must tackle all three on a regional scale and with urgency. It will certainly be expensive – but no doubt a fraction of the cost of inaction. Somali pirates, for example, cost the global economy a stunning \$18 billion per year<sup>12</sup>. The world cannot afford more failed states.

The London Summit on family planning in July 2012 represented a turning point in the willingness of governments and large philanthropic organizations to invest in family planning. The goal of the Summit was to meet 50% of the unmet need for family planning in developing countries. But we know from country-level data that when fertility falls, so does the desired family size. So we should aim to meet 100% of the current family planning need since unmet need will always prove a moving target – with demand for contraceptives growing as women have greater choices and realize they can be used safely.

Any response to the problems set out above must be on a large scale and immediate. Business as usual is not acceptable. Obstetricians,

physicians, development specialists, those committed to improving the status of women need to speak out in favor of universal, voluntary family planning. We have to help policymakers and other decision makers to understand the link between population and climate and remind them that demography is not destiny. We need to make the case that – while the cost of region-wide, integrated approaches are high – the cost of inaction is unacceptable. And we need to set much higher goals – because it is only when positive change happens on scale that societies can thrive.

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