



COVER IMAGE

Many agricultural systems in Africa are mixed crop-livestock systems in which livestock is used to help till the land — the picture on the cover is from the Simien Mountains of Ethiopia — and provide fertilizers. Crop residues are in turn used as animal feed.

IMAGE: © NICOLAS MARINO/NA/NOVARC/CORBIS

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Climate change and Africa

This year will see the ratification of two important United Nations policy processes. The first of these, set to conclude this September in New York, is the reframing of the Millennium Development Goals into a new set of Sustainable Development Goals. The second, the international climate talks in Paris in December, known as the 21st Conference of the Parties (COP21), is aiming to establish a new legal framework to tackle climate change. It is increasingly apparent that the underlying issues that these processes aim to address — climate change, sustainability and development — are not independent, and success in each is likely to be highly dependent on success in the others. This is perhaps particularly evident for Africa.

Africa is highly diverse, with parts of the continent experiencing rapid social and economic change, while others are not. At the same time, much of the continent is expected to be exposed to the impacts of climate change and increasingly likely to contribute to it. Perhaps most strikingly, population is projected to quadruple by the

end of the century. The objectives of raising millions out of poverty while adapting to the unavoidable impacts of climate change, mitigating greenhouse gas emissions and using resources in such a way as to provide for a much larger future population and protect wildlife — are challenging indeed. The general paucity of good data with which to inform planning in Africa accentuates the difficulties of policy development.

This Insight draws together material on the risks that climate change poses to African ecosystems and the biodiversity that they support. It looks at the adaptability of mixed agricultural systems, and the intersection of water, energy and food resources management with climate change. The impact of air pollution (associated with rapid development) on African climate and the uptake of climate information are also considered. Although these topics hardly scratch the surface of the trials ahead for Africa, we hope they bring to the fore some important issues at this critical time, and greater attention over the coming years as these policies are implemented.

Alastair Brown, Senior Editor

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