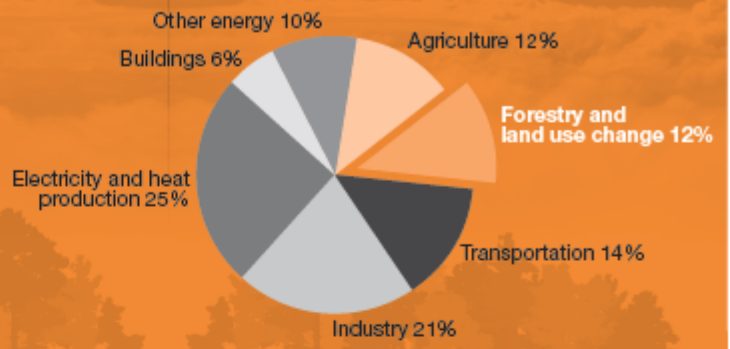
FORESTS SLOW CLIMATE CHANGE AND INCREASE RESILIENCE

Forests provide a critical carbon sink. It is eroded however by deforestation and forest degradation.

2.9 BILLION lost to deforestation and degradation

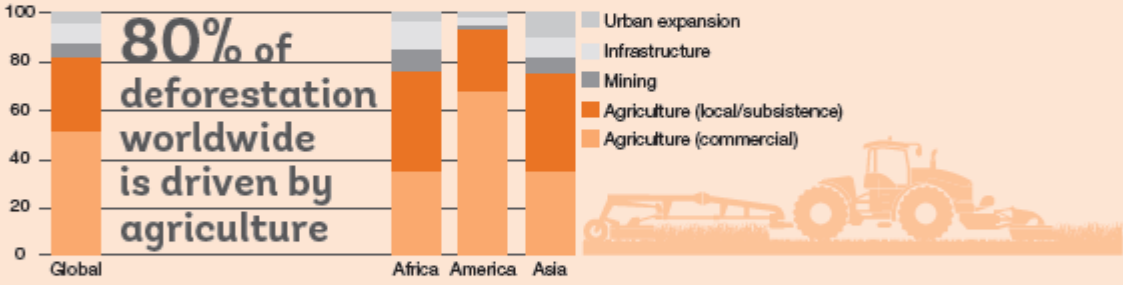
4 BILLION tons of CO_2 sequestered in forests

Making the net forest carbon sink **1.1 BILLION tons**



Greenhouse gas emissions by sector

Sustainable management of rural landscapes can reduce pressure on forests.



About 2 billion hectares of degraded forest land could be restored to functional, productive ecosystems that help fight climate change.

In Niger, planting nitrogen-fixing trees among crops increased sorghum yields by 20–85 % and millet yields by 15–50%, while enhancing people's resilience in times of drought.

By integrating trees on their farms, cattle ranchers in Colombia, Costa Rica and Nicaragua increased average milk productivity by 18%, decreased soil erosion by 88%, and increased their net income per hectare by 55%.

Restoring just 350 million hectares of forest could produce an estimated $170 billion of yearly benefits in watershed protection, agricultural productivity, and forest products.

In Ethiopia, the restoration of native forest in Humbo will absorb about 880,000 metric tons of CO_2 over the next 30 years, generating carbon payments and income from forest products.

Sources: Pan, Y. et al. (2011). *A large and Persistent Carbon Sink in the World's Forests;* IPCC (2014). *Summary for Policymakers, Climate Change 2014: Mitigation of Climate Change;* Hosonuma N. et al. (2012). *An assessment of deforestation and forest degradation drivers in developing countries.* Environmental Research Letters; Global Partnership on Forest Landscape Restoration (2011); World Bank (2011). *Climate-smart Agriculture: a call to action;* World Bank (2008). Colombia, Costa Rica, and Nicaragua—Integrated Silvopastoral Approaches to Ecosystem Management Project—Implementation Completion Report; New Climate Economy (2014). *Better Growth, Better Climate: The New Climate Economy Report;* World Bank (2013) Ethiopia Humbo Community Based Natural Regeneration Project—Implementation Status Result Report.