



# FACTSHEET

## PLANTING FORESTS IN AFRICA USING THE GLOBAL CARBON MARKET

Carbon trading is promoted to encourage the planting of forests in Africa. But the continent still lags far behind other regions in using its large wealth in land and potential carbon stocks to the best advantage. Why is this, and how can more rapid progress be made?

### Key messages

- ▶ Afforestation/reforestation projects under the Clean Development Mechanism (CDM) are pivotal to Africa's contribution to global climate change mitigation.
- ▶ There is huge potential in using Certified Emission Reductions (CERs) in CDM projects to promote the establishment of more plantations and forests in Africa.
- ▶ There is significant comparative advantage to investing in reforestation in Africa due to relatively low tree establishment costs, and rapid tree growth and carbon sequestration.
- ▶ Reforestation/afforestation projects should be seen as essential complements to REDD+ projects, not as alternatives.

Africa has enormous potential in mitigating global climate change, particularly in the land use sector of carbon trading. There were significant increases in carbon trading in 2011, but African countries should prepare for even more active participation in this rapidly growing market, especially where they have clear comparative advantages.

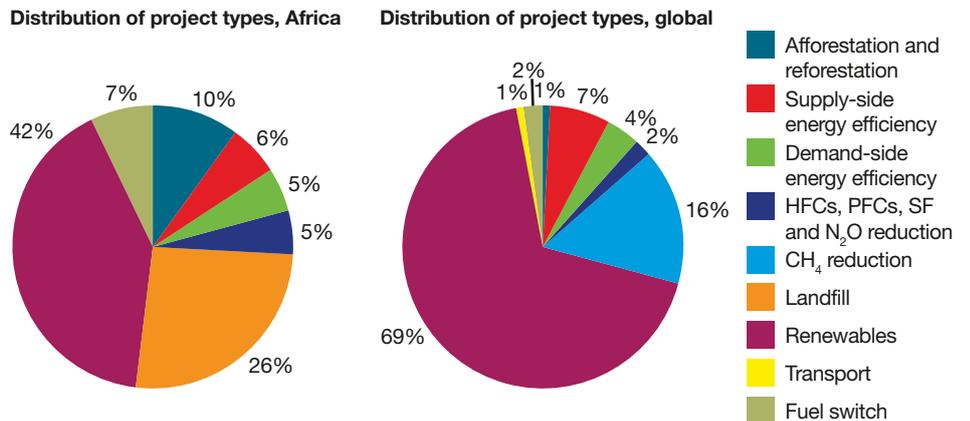
### Background to the Clean Development Mechanism

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) was signed in 1997. Developed and transition (Annex I) countries made binding commitments to reduce emissions, and developing countries agreed to assist them, while also pursuing sustainable development. One means to achieve this is the Clean Development Mechanism (CDM) which includes trading in carbon emission reductions under a variety of schemes.

### The role of the Clean Development Mechanism

CDM projects are dominated by initiatives in renewable energy, increased energy efficiency, landfill and methane capture. Globally, afforestation/reforestation accounts for less than 1 per cent of all CDM projects, but 10 per cent of projects in Africa. This indicates the carbon sequestration potential of forestry in Africa compared to emission reduction from fossil fuels and industry.

Figure 1. Sectoral distribution of Clean Development Mechanism (CDM) projects in Africa, compared to global averages.



Source: Risoe CDM/JI Project Pipeline and Analysis (<http://cdmpipeline.org/>).



Reducing emissions through avoiding deforestation is another carbon trading option, promoted through the Reducing Emissions from Deforestation and forest Degradation (REDD+) initiative. Africa loses some 3.4 million hectares of forest each year. If prevented under REDD+, millions of tonnes of carbon emissions will be avoided, translating into billions of dollars of potential income for host countries. However, for African countries under the current global carbon trade regime, the CDM could still provide the best opportunities for participation in carbon trading and increasing forest cover.

## Forestry mitigation projects in Africa: facts and figures

- ▶ Africa has only 8.5 million hectares of short and long rotation plantations, compared to India with 40 million hectares and China with 60 million hectares.
- ▶ Africa has more than 200 million hectares available for planting, in the form of deforested land and grasslands not being used for grazing or wildlife management.
- ▶ The rate of afforestation/reforestation in Africa is less than 200,000 hectares per year, whereas India adds 650,000 hectares annually, and China 1.4 million hectares.
- ▶ African forests and trees could sequester 123 million tonnes of carbon dioxide per year as CERs, out of a global total of 630 million tonnes.
- ▶ By 2009, however, total CERs from Africa were only 21 million tonnes; although increasing every year, this highlights the potential for future sequestration.
- ▶ As of mid-2009, there were 102 CDM projects in Africa with total CERs valued at USD 1 billion.
- ▶ The contribution of African forests to global emission reductions was only 0.4 per cent of the global total.
- ▶ In addition to sequestration through CERs, Africa could also reduce emissions by about 228 million tonnes of carbon dioxide per year from avoided deforestation and land degradation through REDD+ projects.

## Why is Africa lagging behind?

Africa can contribute to future climate change mitigation through significant carbon market opportunities. However, this potential partly results from Africa's poor performance in carbon markets up to 2010 compared to the rest of world.

Underlying this situation is a historical suspicion surrounding the evolution of the climate change debate. Many African countries harbour concerns that they are being asked to shoulder responsibilities for cleaning up a global environment soiled by developed and industrial countries, instead of the real perpetrators. Low levels of industrial emissions on the continent also contribute to the slow response, along with reluctance by some environmental groups to involve the land use sector in emission reduction efforts.

Other explanations for the poor performance of African countries in carbon projects include high transaction costs, the complexity of rules and requirements, weak human and institutional capacity, poor governance and perceived high risks of long term investments in Africa. Although the cost per project is declining, this element still remains the most commonly cited impediment to the participation of African players in the market.

### Source

Makundi, W., 2011. African forests and trees in the global carbon market. In Chidumayo, E., Okali, D., Kowero, G., Larwanou, M., eds. *Climate Change and African Forest and Wildlife Resources*. Nairobi: African Forest Forum, 192–213.

## Priorities for establishing forests through carbon trading

- ▶ Increase the human capacity required for effective participation in the carbon market, particularly for developing project proposals and implementation.
- ▶ Use a comprehensive approach to effective forest governance, coupled with the development of democratic institutions in the forest sector.
- ▶ Reduce risks and improve marketing of opportunities in Africa, as the undeserved perception of risk decreases attractiveness to buyers.
- ▶ Develop carbon policies, strategies and guidelines within the framework of national and international climate change policies.



*Pinus patula* plantation, buffer zone in valley bottom, Mufindi, Tanzania (Courtesy Yonika Nganga)

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## Contact us

The Executive Secretary, African Forest Forum (AFF), United Nations Avenue, Gigiri, P.O. Box 30677-00100, Nairobi, Kenya  
Phone: +254 20 722 4203 | Fax: +254 20 722 4001 | Email: [exec.sec@afforum.org](mailto:exec.sec@afforum.org) | Web: [www.afforum.org](http://www.afforum.org)