WORLD BANK GROUP
Climate Change

NIGERIA: EARTHCARE SOLID WASTE COMPOSTING PROJECT

UMBRELLA CARBON FACILITY TRANCHE II

Description

The Nigeria Earthcare Solid Waste Composting Project aims to reduce greenhouse gas emissions by diverting solid waste, which would normally go to landfills in the city of Lagos, to a state-of-the-art composting facility. This reduces the amount of waste disposed in Lagos' landfills by 10-20%.

Waste is collected at three food markets and treated to produce organic compost; this avoids the methane emissions that would otherwise be released into the atmosphere and contribute to climate change. The high-quality compost is then given to Nigerian farmers to use in agriculture and horticulture.

The project is earning carbon credits. It is the first composting project in Nigeria to be registered as a Clean Development Mechanism (CDM) project under the UNFCCC, and it is estimated that it will reduce greenhouse gas emissions by 253,800 metric tons of carbon dioxide per year over 10 years. Some of these carbon credits will be sold to the World Bank's Umbrella Carbon Facility Tranche II.

Context

In Nigeria it is common to dump unsorted waste in poorly managed landfills; one result of this is methane emissions. As the population expands, the landfill problem (and methane emissions) will too. Lagos City is Nigeria's industrial and commercial hub, and its urban population of about 17 million makes it one of the most populous cities in Africa. Furthermore, the city's metropolitan population is expected to grow to over 21 million by the end of 2015. This population growth is expected to put further strain on the city's municipal solid waste management infrastructure.

Results and Achievements

The project is the first composting activity in Nigeria to be registered with the CDM.

The project is undertaking its first verification and it is expected to have about 30,000 carbon credits issued by the end of 2015.

At its maximum capacity, the compost facility can process 1,500 metric tons of mainly organic waste per day. This reduces emissions, on average, by approximately 253,800 metric tons of carbon dioxide per year.

The project employs about 90 workers.

The project helps mitigate the waste disposal problem in Lagos City by turning solid waste into high-quality, organic compost, thereby reducing the burden on landfills and providing farmers with a natural and cost-effective alternative to chemical fertilizers.

Increased organic farming helps improve soil quality and crop yields; strengthens food security; and, more generally, contributes to the region's sustainable development.