# **Momentum for Change**

2012 LIGHTHOUSE ACTIVITIES – URBAN POOR PILLAR





2012 Lighthouse Activities

#### Foreword

## Let's all do our part to build Momentum for Change

It gives me great pleasure to present to you the 2012 Momentum for Change Lighthouse Activities. This year's activities fall under the Urban Poor pillar of Momentum for Change, which has been generously funded by the Bill & Melinda Gates Foundation. They consist of mitigation and adaptation activities that are a result of collaborative efforts between the public and private sectors and bring multiple benefits to the urban poor in developing countries.

In showcasing these activities we are providing a public platform to highlight broad-ranging climate change actions that are already achieving tangible results on the ground. By shining light on inspiring and transformational mitigation and

adaptation activities, Momentum for Change aims to strengthen motivation, spur innovation and catalyze further change towards a low-emission, high resilient future.

I hope these activities inspire you to commit to further action to address climate change. Let's all do our part to build Momentum for Change.

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Christiana Figueres
Executive Secretary, United Nations Framework
Convention on Climate Change



#### **Momentum for Change**

2012 Lighthouse Activities





Senegal: Adaptation to coastal erosion in vulnerable areas

## Protecting houses, infrastructure and tourism

Adaptation to Coastal Erosion in Vulnerable Areas, is a coastal protection activity implemented in Senegal by the Centre de Suivi Ecologique (CSE). The activity aims to protect the coastal areas of Rufisque, Saly and Joal – all just outside Senegal's capital Dakar – against further erosion brought on by sea level rise and storm surges.

The activity is one of the first of its type to receive funding from the Adaptation Fund, which finances projects and programmes that help developing countries to adapt to the negative effects of climate change.

Started in January 2011, the activity aims to reduce exposure to climate change impacts on the coast, by protecting houses and coastal infrastructure – such as fishing docks, fish processing plants and even tourism – that are threatened by erosion and salt-water intrusion. Some of the measures introduced by the activity include anti-salt dikes to mitigate salination of agricultural lands and sea defenses to prevent coastal erosion. The activity also incorporates development of coastal management policies and regulations.

2012 Lighthouse Activities

India: Ahmedabad Bus Rapid Transit system, Janmarg

## "Janmarg" means better mass transit for all

The Ahmedabad Bus Rapid Transport System (BRTS) is an affordable and climatefriendly way for the citizens of Ahmedabad to reach their destinations in the shortest time possible. Going by the name "Janmarg" or "the people's way", the BRTS began operation in October 2009, and has grown from 12 kilometres of route to 45 kilometres and growing.

Passenger numbers have also increased, from 18,000 to almost 130,000. Some of the climate-friendly and accessibility-friendly features of the system include specially designed buses with right hand side doors and a match between the bus floor and the platform height at each station, a complete revamp of the road right-of-way to include cycle tracks and pedestrian facilities, and a commercial speed of 25 km/h, enabling faster commuting. The activity has become the backbone of public transit in the city.



Uganda: Solar Sister: a women powered clean energy revolution

# A women powered clean energy revolution

Solar Sister is an innovative social enterprise with the mission to achieve sustainable, scalable impact at the nexus of women's empowerment, energy poverty and climate change. It empowers women with economic opportunity and clean energy. It combines the breakthrough potential of portable solar technology with a women-driven direct sales network to bring light, hope and opportunity to a range of communities without reliable electricity access.

Through a micro-consignment model, Solar Sister entrepreneurs get a 'business in a bag', a start-up kit of inventory, training and marketing support to bring solar energy lamps and phone chargers directly to their customers' doorsteps.





Kenya: Carbon for Water

## Providing clean water while fighting climate change

Access to clean drinking water is a problem in many parts of Africa, and its purification can also be a problem for the environment. Dirty water often must be boiled, requiring fuel from unsustainable and costly sources, like wood or kerosene. In Kenya, LifeStraw  $Carbon For Water^{TM}$ , has found a method to combat this.

LifeStraw® is an easy-to-set-up and maintain water purification system that uses no fuel. Each filter can produce at

least 18,000 liters of quality drinking water over a 10-year life span. The individuals who have received this family filter no longer need to treat water by boiling it using wood fuel – a traditional necessity that releases greenhouse gases.

Financing from carbon credits earned from the voluntary carbon market pay for the running of the activity. In this way, the activity also shows the viability of carbon market-financed projects in Africa.



China: Guangzhou Bus Rapid Transit system

## Safe and efficient bus and bicycle transport

The Guangzhou Bus Rapid Transit System (BRTS) is the first metro replacement-level transportation system outside of South America. It includes a range of innovative features such as the first high capacity BRTS worldwide to operate direct service routes; no bus terminals or interchanges; and usage of mainly 12-meter buses.

It is the first BRTS in China and has some of the highest bus flows, with one bus coming every ten seconds into the city during morning rush hours.

Guangzhou is also the first BRTS with a bike-sharing system along its corridor. The bike-sharing system has 5,000 bikes and 109 bike-share stations. More than two-thirds of the bike-share users previously made the same trip using motorized transport, showing a saving of CO<sup>2</sup> impact for the decrease in such journeys.

Nepal: Organic waste compost

# Turning green waste into black gold

Organic waste composting in Nepal aims to process organic waste and turn it into compost that can be used by the local community in Kathmandu. Developed by the private company Biocomp Nepal in cooperation with the non-profit foundation myclimate, this activity reduces, through composting, emissions otherwise caused by traditional landfills.

Organic waste accounts for almost 70 per cent of garbage collected in Kathmandu. The composting plant collects waste from vegetable markets to produce the compost over a four-month period. Through composting, landfill space is freed and the resulting product is sold to farmers in the valley as a soil improver.



Sri Lanka: Introduction of electric vehicles

# Public transport goes electric

This activity, spearheaded by the *Lanka Electric Vehicle Association (LEVA)* (with support from the United Nations Development Programme's Small Grants programme) has helped to demonstrate the viability of and paved the way for the commercial introduction of electric and hybrid vehicles on the streets of Sri Lanka's capital, Colombo.

Starting with advocacy work, where LEVA successfully lobbied for government support for electric vehicles (including lower tariffs for importing parts), the activity has helped to introduce electric rickshaws and hybrid buses into the city's transport mix. The activity also trains unemployed young people to operate and maintain these electric and hybrid vehicles, and has promoted a public awareness campaign on the benefits of going electric to reduce pollution.





Peru: Energy Efficiency in Artisanal Brick Kilns

## Energy efficiency for brick producers

In Latin America, artisanal brick makers use fuel that has a high environmental impact in kilns with low energy efficiency. Wood, tires and plastics all find their way for use as fuels in the brick-firing process, contributing to air pollution, deforestation and adversely affecting the health of people who live nearby.

Energy Efficiency in Artisanal Brick Kilns in Latin America (EELA) aims to reduce the carbon footprint of traditional brick making, while at the same time improving the businesses of local artisans. EELA teaches brick makers how to use energy efficient brick kilns, and how to use better, cleaner fuels to fire bricks, helping to create a better product for their market. The activity also works with the brick makers on business skills, training them in product improvement as well as better enterprise management.



Namibia: Holistic approaches to community adaptation to climate change

## Holistic community adaptation to climate change

The goal of this community-based adaptation activity is to pilot the implementation of six coping strategies to climate change vulnerability in several local communities. The activity, implemented by Creative Enterpreneurs Solutions, Ergonomidesign and the UN Development Programme among others, aims to show that these coping strategies can be duplicated on a large scale to communities in similar situations. The strategies include use of energy-efficient stoves, agro-forestry and vegetable production under micro drip. For example,

the use of EzyStove, a locally-produced energy-efficient wood-burning stove, provides a solution for the problem of cooking over an open fire. It reduces harmful smoke, decreases deforestation, creates local jobs and drastically reduces carbon dioxide emissions.

This holistic, community-based activity is a response to local concerns over alarmingly high rates of deforestation and increasing respiratory illnesses due to the widespread practice of cooking over open fires.

## **URBAN PILLAR**

#### SHOWCASE EVENT

High-level event to recognize public-private partnerships addressing climate change that benefit the urban poor.

**Date:** 4 December 2012 **Time:** 17:30 – 19:30 hrs

Location: Theatre Room, Qatar National Convention Centre

#### **Programme**

Welcome by Master of Ceremonies

Remarks by Christiana Figueres, Executive Secretary of UNFCCC

Video showcasing Lighthouse Activities

Remarks by Ban Ki-moon, United Nations Secretary General

Remarks by Kelly Rigg, Momentum for Change Advisory Panel Chair

Recognition ceremony

Musical performance by Ragheb Alama



# **MOMENTUM FOR CHANGE**



## 2012 LIGHTHOUSE ACTIVITIES URBAN POOR PILLAR

#### Side-events

#### 11:30 - 13:00 Sustainable Transport

Ahmedabad, Bus Rapid Transit System Janmarg Guangzhou Bus Rapid Transit System Introduction of electric vehicles to Sri Lanka

### 13:15 - 14:45 Building resilience against climate change

Adaptation to coastal erosion in vulnerable areas Carbon For Water Holistic approaches to community adaptation to climate change

#### 15:00 - 16:30 Mitigating climate change in urban communities

Energy efficiency for brick producers in Peru Organic waste compost in Nepal Solar Sister: A women powered clean energy revolution

Location: Qatar National Convention Centre



