

CREATING MODELS OF CLIMATE CHANGE ADAPTATION & MITIGATION THROUGH MULTI-STAKEHOLDER PARTNERSHIPS & SMARTLY DESIGNED PROJECTS

CENTRE FOR ENVIRONMENTAL RESEARCH AND EDUCATION

Presented by

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Overview

The **Centre for Environmental Research & Education (CERE**) a Mumbai-based not-for-profit organization established in 2002 that works to promote environmental sustainability through formal education, government collaborations, corporate partnerships and public awareness campaigns. CERE has successfully completed many rural and urban, national-level research and development projects.

A Few Key Projects …

- Urban Afforestation Project (UAP)
- Schools on Solar (SoS)
- Rainwater Harvesting (RwH)

Urban Afforestation Project

Identifying Landowners
Commitment of growing and maintenance of the trees

Site Visits
Space characteristics, Soil quality, Water supply, Human encroachments

Signing MOU
Agreement to plant and conserve trees for a minimum period of 15 years

Native Tree Plantation
Large well-rooted saplings 4-6 ft tall with the local community & employees volunteering

Geotagging
Recording geographical coordinates of the saplings and plantation sites

Carbon Sequestration Potential
Calculating C02 Sequestration and issuing Certificates

UAP - Our Impact

Trees Grown

1,77,183

Native Species

130

Sequestered
($MTCO_2$)

41,933

Locations

102

Schools on Solar (SoS)

Identifying Schools

Provide solar panels to low-income schools to adopt renewable energy and meet their energy needs

Education

A streamlined educational component teaches the school community about sustainability and empowers students to catalyze social change for sustainability

Energy Efficiency

School uses the savings from solar to reinvest in energy efficient appliances such as LED lights, which leads to a domino effect in cost saving

Resource Reinvestment

Schools use additional saved income to provide resources and improve educational standards or infrastructure, ensuring that their students are the greatest beneficiaries

SoS - Our Impact

Electricity Units

1.68 crores

Financial Savings

17.46 crores

Sequestered

($MTCO_2$)

13,776

Institutions

21

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Rainwater Harvesting (RwH)

Identifying RwH Potential

Based on the natural resources, topography of the site and purpose of implementing RwH, a detailed technical plan is developed with interventions such as percolation trenches, bunding, desiltation of existing water bodies, construction of new wells, etc

Savings

Reduced dependency on municipal water supply as well as monetary savings in terms of reduced water bills

Education and Awareness

Workshops and talks held for residents / local communities on water conservation and the benefits of rainwater harvesting to create a sense of participation and ownership

Replenished Aquifers

Apart from meeting usage demands, rainwater channelled into the ground recharges the water table, thus providing increased water to the neighbouring communities and greatly reduced flooding during heavy downpours.

RwH - Our Impact

Locations

3

Mumbai & Nashik

Financial Savings

123.5 crores

Litres of Water

138.8 million annually

Innovative Approaches to Sustainability

USP of CERE Projects …

- **Inclusive** : benefits multiple stakeholders and promotes ownership
- **Multi-layered & Smartly Designed**: comprises of multiple dimensions
    - ✓ environmental
    - ✓ educational
    - ✓ societal
    - ✓ financial
- **Scalability** : projects can be easily scaled up because they are easy to replicate across different geographies

Innovative Approaches to Sustainability

USP of CERE Projects …

- **Replicability** : models smartly designed for easy adoption and emulation
- **Evaluation Tools** : impact assessment of all aspects in terms of
    - ✓ carbon offsets
    - ✓ increase in biodiversity
    - ✓ educational outreach
    - ✓ financial savings
- **Turnkey** : seamless execution from site identification to completion report

Enhancing Public Participation

Indian Navy

INDIAN ARMY

पश्चिम रेलवे
Western Railway

महाराष्ट्र पोलीस

wipro

TATA
TATA CAPITAL

एमएमआरडीए
MMRDA

एन सी ई आर टी
NCERT

महाराष्ट्र वन विभाग

Ambuja Cement

TOYOTA

apollo
go the distance™

CRISIL
re

Bharat Petroleum

NATIONAL GEOGRAPHIC

SONY PICTURES NETWORKS

सत्यमेव जयते
Department of Science and Technology
Government of India

Shapoorji Pallonji

PROVOCANS AD VOLANDUM

THE °CLIMATE GROUP

ROTARY INTERNATIONAL

BOMBAY CHAMBER

ate

AARTI INDUSTRIES LIMITED

Aseema

cmca

HDFC

JSW

Hindustan Unilever Limited

VASANT J. SHETH MEMORIAL FOUNDATION



THANK YOU

- Dr. Rashneh N. Pardiwala