YANTRA: Infrastructures of the Sacred and Profane
The catalyst of our sustainability and design philosophies
REBEL BASE GROUP
Who we are and what we’re doing

REBEL BASE CONSTRUCTION
Bespoke construction company focused on skills development, building technology innovation and craft

REBEL BASE COLLECTIVE
Multidisciplinary collaborative design studio

REBEL Atelier
Furniture design and fabrication workshop

Change Design, Design Change
Project 1: Gender Sensitive Bathhouse, Varanasi India
Lessons from Yantra: Sustainable and safe access to sanitation for women and children

- Indigenous planted roof
- Laundry wash trough (lavoir) area
- Sandalwood Tree
- UV Filter treated bathing area
- Toilet Block
- Security area
- Multi-layered breezeblock walls
- Perimeter planted with Vachellia nilotica (Babul) Thorn Tree
- Steps connecting to the Ghat
"Sanitation, hygiene services almost nil in India"

NGO Dasra finds the scenario quite gloomy and is looking for donors to pitch in with money.

As many as 4,861 of 5,161 cities across the country do not have even a partial sewer-thropic organisations and the corporates to ensure this gap is overcome," says Neera Nundy, founder and partner of organisations and the corporates to ensure this gap is overcome," says Neera Nundy, founder and partner of organisations and the corporates to ensure this gap is overcome," says Neera Nundy, founder and partner of organisations and the corporates to ensure this gap is overcome," says Neera Nundy, founder and partner of organisations and the corporates to ensure this gap is overcome," says Neera Nundy, founder and partner of organisations and the corporates to ensure this gap is overcome," says Neera Nundy, founder and partner.
Project 2: e-Khaya Self-build Housing App South Africa

Lessons from Yantra: Embracing technological advancement, utilising human resilience and creating access to information

Open Source Plans + Easy to follow “How to” Details + Material Guides and tutorials + Quantity and cost calculator = e-Khaya Housing App
The app will have 9 different versions according to each climatic zone. These will be available in 12 languages, the 11 official languages and French for immigrants from other African countries.
Project 3: Incremental Rural Schools, Limpopo and East London, South Africa
Lessons from Yantra: Engaging with local communities and context, skills development and phased sustainability

Weak results from rural areas contradict national pass rate - Nehawu

DO YOU KNOW MICHAEL?

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Schools of shame

The school that doesn’t exist

Studying here is no carnival

Permaculture Gardens

Community Hall

Library and Computer center

Science Facilities

Increased permaculture learning & gardens

High School classrooms

Art and music facilities

Primary School classrooms

Formalised sports fields

Sports and recreation centre

Line of incremental development +24 months
PROJECT OUTCOMES & OBJECTIVES

Varanasi Bathhouse
- Research documentation for sustainable sanitation
- Research documentation on community and governmental engagement
- Funding and approval dependent construction of the researched and designed proposal

e-Khaya Housing App
- Community built and documented prototype housing projects
- Research documentation on built projects
- A completed app and AI system
- Print format document of app content for distribution

Rural Schools
- Community and government engagement research documentation
- A framework for how to build schools in rural and developing areas
- At least one built incremental school prototype, funding dependent

Vedhant Maharaj REBEL BASE COLLECTIVE
LafargeHolcim Research in Practice Grant Presentation 2018 Mexico City