



Aga Khan Agency for Habitat  
*India*

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# QUARTERLY NEWSLETTER



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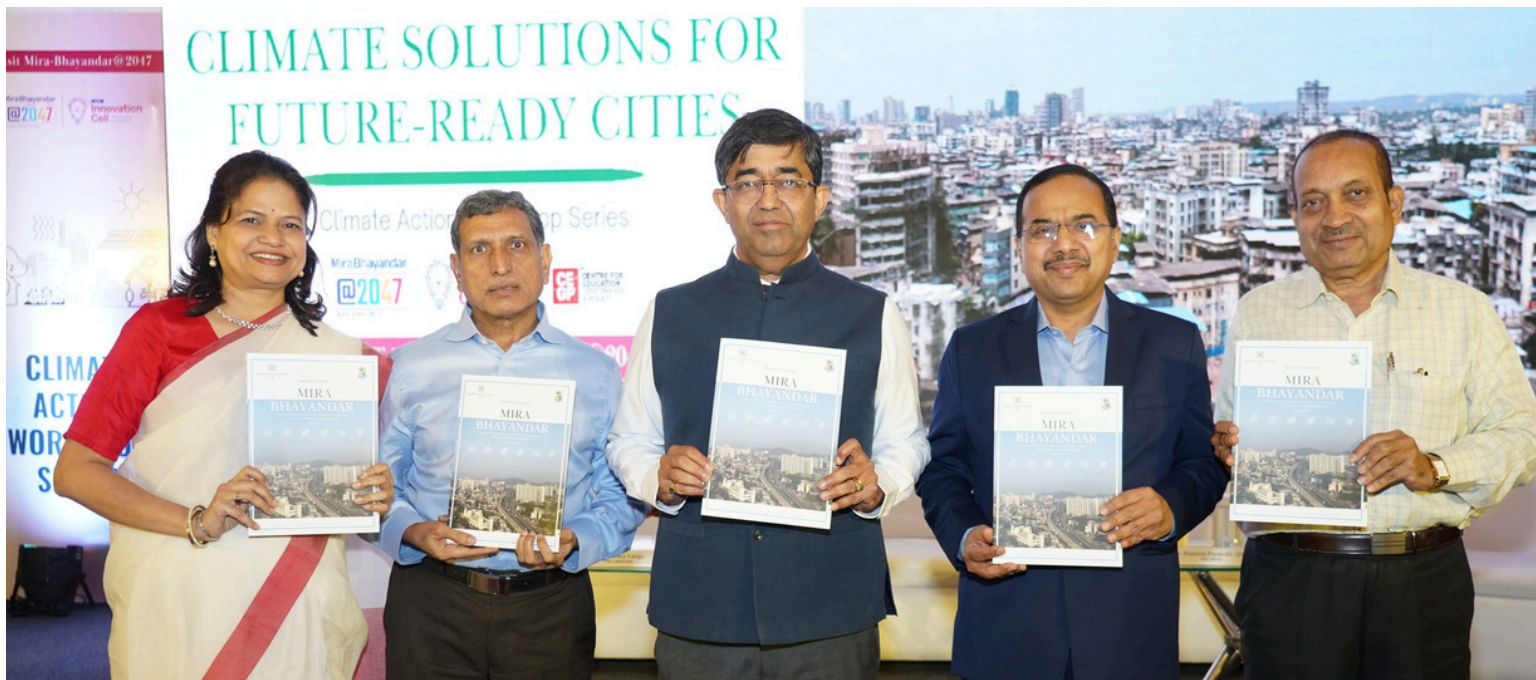
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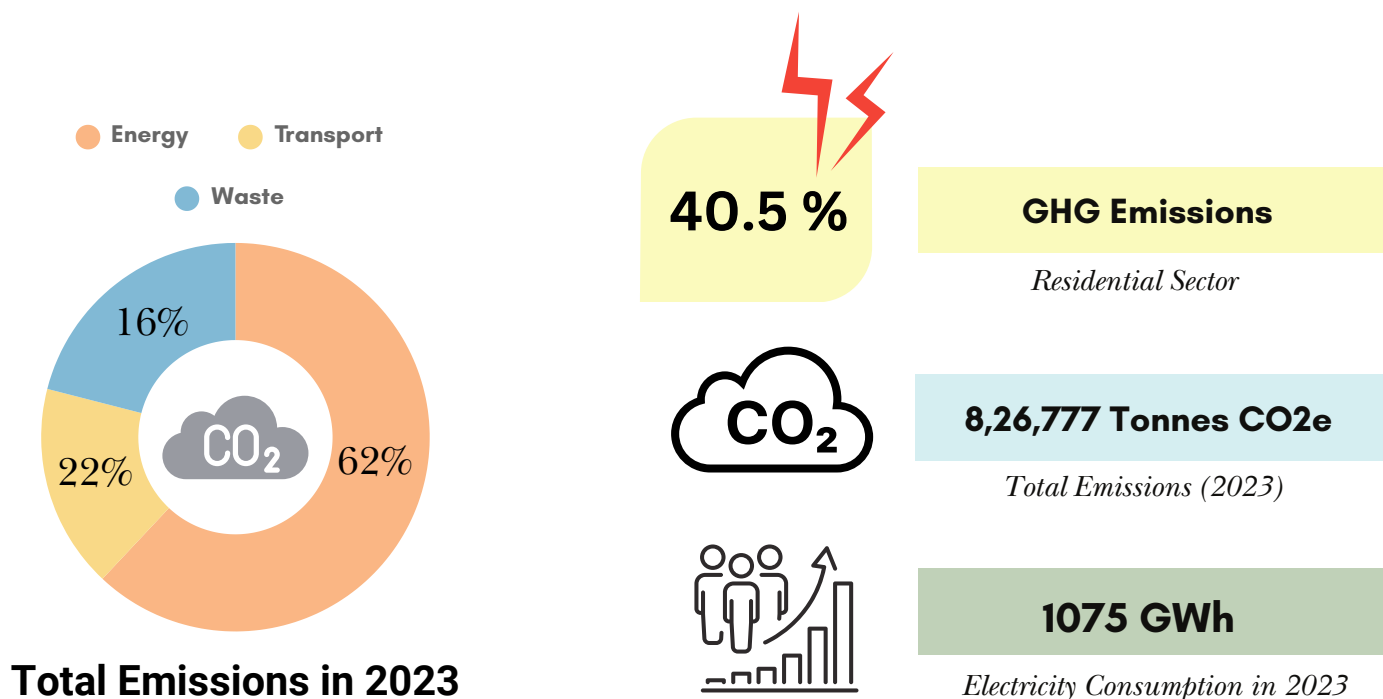
## LAUNCHED MIRA BHAYANDAR CLIMATE ACTION PLAN



Climate Action Plan unveiled by (L-R) Ms. Prerana Langa, Mr. Bipin Shrimali (IAS), Mr. Praveen Pardeshi (IAS), Mr. Sanjay Shripatrao Katkar (IAS) and Mr. Vijay Kalam Patil

Launched Mira Bhayandar Climate Action Plan - a roadmap (2024-2047) for buildings urban resilience. Aga Khan Agency for Habitat provided technical support to Mira Bhayandar Municipal Corporation to reduce greenhouse gas (GHG) emissions and advance the city's journey toward achieving net-zero emissions by 2047.





### What makes this plan unique?

- ✓ A scalable model for housing societies to boost energy efficiency by over 41% and reducing reliance on the grid electricity
- ✓ Cooling solutions demonstrated for informal settlements to reduce indoor room temperature by 3-5-degree Celsius
- ✓ Aligned with Maharashtra's net-zero vision and the National Action Plan on Climate Change
- ✓ Scaling Urban Heat Mitigation initiatives in Mira Bhayandar and Chandrapur with support from Tata Trusts



*Local solutions such as rooftop solar in buildings, recycling rainwater, in-situ waste decomposition can strengthen urban resilience. Integrating technology while shifting citizens' mindsets is crucial for a balanced growth.*

- Mr. Praveen Pardeshi (IAS)  
CEO, Maharashtra Institution for Transformation  
(MITRA)



# CLIMATE SOLUTIONS FOR FUTURE-READY CITIES

## Climate Action Workshop Series

Hosted an impactful workshop in collaboration with the Mira Bhayandar Municipal Corporation. The workshop featured expert-led panel discussions on urban heat mitigation, sustainable urban planning approaches, and air quality improvement strategies. Panelists from leading organizations, such as Maharashtra Climate Cell, Leap Cities, Environmental Management Center, UN-Habitat, MAHAPREIT and C40 Cities shared their expertise, offering actionable insights to drive urban resilience.



### Panel 1

Breathe Easy: Paving the Path to Eco-Cities



### Panel 2

Resilient Cities: Strategies for Urban Climate Risk Mitigation

## Panel Discussion - Highlights



**Driving Urban Energy Efficiency:** Accelerate clean energy use and decarbonize buildings with sustainable materials to help achieve Maharashtra's 2050 carbon neutrality goal.



**Planning Cities for Heat Resilience:** Local Governments should integrate heat mitigation into city planning. Development Control Regulations (DCRs) can be adapted to embed cool roofs, green cover, and climate-adaptive urban design.



**Financing an Inclusive Green Transition:** Promote a just climate transition through dedicated funding, capacity building, and community-led planning. By creating green jobs—such as training women in construction trades or upskilling residents in sustainable practices—climate action can drive both environmental impact and social equity.



# IMPROVING ENERGY-EFFICIENCY IN HOUSING SOCIETIES

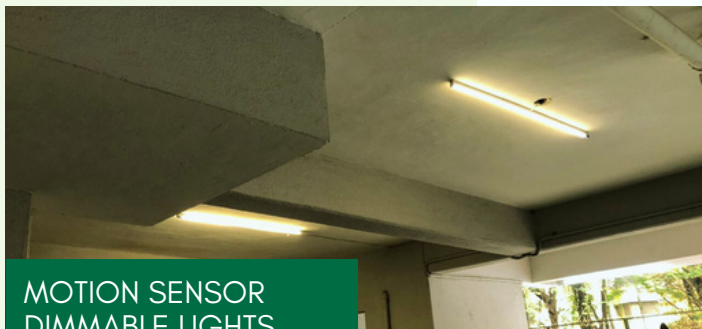
NavYuwan Housing Society

## Impact



BLDC FANS

1000 fans installed in 280 housing units to reduce energy consumption and cut down electricity bills for residents.



MOTION SENSOR  
DIMMABLE LIGHTS

Upgraded the traditional incandescent bulbs across all units, significantly lowering energy demand for lighting.



ROOFTOP SOLAR  
PANELS

Installed a 44 kWp solar PV system to power common areas, reducing grid electricity reliance.



## 41% Energy Savings

*By installing energy-efficient appliances at household and society level, reduced electricity consumption*



## 35% Water Savings

*Through low-flow fixtures and encouraging residents to take bucket baths*



## 59% Material Savings

*By using low Embodied Carbon Materials that produces less carbon during its entire life cycle.*



Kitchen Gardening to promote  
Waste Management & Urban  
Green Spaces

Training sessions on soil and water management conducted for senior citizens residents to encourage community ownership and build knowledge.



# ENHANCING THERMAL COMFORT IN INFORMAL SETTLEMENTS



## LISTENING WORKSHOP WITH ASHA WORKERS - OUR 'CLIMATE SAKHIS'

ASHA Workers supported AKAH in surveying slum households and organizing listening workshop with Mahila Samiti women group. The sessions highlighted the everyday challenges low-income families face during peak summer months.

With strong community mobilization and outreach led by the Mahila Samiti, the workshops not only encouraged active participation but also raised awareness about heat stress and possible mitigation measures. This collaborative effort enabled AKAH to pilot four climate-smart cooling solutions across 126 households in three slum settlements, creating a model for community-led resilience.



*In the peak of summer, sometimes I have to cancel or delay tuition classes because it becomes too hot to concentrate on work. My students also find it difficult to focus, and overall productivity drops.*

- Ashwini Khamkar, Resident Informal Settlements, Mira Bhayandar



This reel showcases implementing climate-smart upgrades to curb heat stress.



## SOLAR REFLECTIVE INDEX PAINT

Applied on the rooftops of 43 households, reduced heat absorption, decreasing rooftop temperature by approx. 20°C. and indoor temperature by 3-5°C, providing relief to children, women and elderly who spend most time indoors.

## ALUMINIUM FOIL

Installed under the roofs of 80 housing units, this heat insulation layer significantly enhances thermal comfort for residents by reducing indoor heat buildup.

## WOOD WOOL

Installed in 8 units, the solution helps trap heat and acts as an effective barrier, reducing heat transfer inside.



*We are learning about new solutions – cooling strategies, green technologies. These small interventions give us hope. It is the start of something bigger*

Women Rising: Strength. Leadership.  
Climate Resilience

- Rita Sharma,  
Resident of informal settlements,  
Mira Bhayandar



Heat reduction measures—like ventilation cores in 40 housing units, along with, wood wool panels, and aluminum foil layers—are helping improve airflow and enhance thermal comfort for residents.



## ENHANCING SCHOOL RESILIENCE TO HEAT

**50 Million** students were affected by heatwave in 2024



*The heat here is unbearable—we often have to close the school early or adjust timings, affecting children's education.*

-Principal, Mira Bhayandar Municipal School

### 3 Municipal Schools

**160** BLDC fans

**42** Motion sensor dimmable lights

**37** Dual Flush Cisterns



Solar Reflective Index paint on the walls and roof

To advance our commitment to building institutional resilience against climate change, Aga Khan Agency for Habitat has implemented climate-smart upgrades across three municipal schools located in heat-stressed zones. These retrofits are designed to enhance thermal comfort for students while improving water and energy efficiency.

Key measures implemented is the use of BLDC fans, installation of dual flush cisterns, sensor lights will potentially reduce energy, water consumption and material efficiency by around 20%. The solar reflective index (SRI) paint used on the walls and roof of the school reduced heat absorption and lower cooling energy demands during summer season that will lead to significant energy savings.



## CASE STUDY

## SECURING BOTHALI'S FUTURE WITH RAINWATER HARVESTING



Roof rainwater system has ensured a reliable water supply for our students. This initiative has given us hope at a time when water availability is so unpredictable in our village.

-Bhanudas Ajhankar, Headmaster,  
PM Shree Zila Parishad Primary  
School

## STRENGTHENING SCHOOL INFRASTRUCTURE WITH RELIABLE ACCESS TO POTABLE WATER

Depleting groundwater and school disruptions have long challenged Bothali (Heti), a village 23 km from Arvi Block in Wardha district. With groundwater levels dropping, local schools and the Gavli community faced increasing water scarcity, leading to disrupted classes, and poor hygiene conditions—directly affecting children's education and health.

In collaboration with local leaders, including the headmaster of PM Shree Zila Parishad Primary School, Aga Khan Agency for Habitat implemented Roof Rainwater Harvesting System in a Cattle Health Center. This initiative enabled **23,731 liters of rainwater to percolate into the ground, recharging unconfined aquifers and stabilizing local water sources.**

The increased groundwater levels ensured a reliable water supply for the school, supporting drinking water, hygiene, and gardening. Hand pumps and wells now provide consistent access to water, reducing the migration pressures on the Gavli community and enhancing overall water security.



## BUILDING A CULTURE OF RESILIENCE



In a world increasingly vulnerable to the effects of climate change and disasters, resilience is key to survival. **Building a Culture of Resilience** documentary captures the stories of individuals who discover their untapped potential and grow into confident first responders. From basic first aid and fire safety to tackling large-scale disasters like cyclones, these programs equip trainees with life-saving skills that ripple through their communities.

The film delves into the deeply personal and inspiring narratives of participants as they recount their experiences during the training process. By training one individual capable of saving ten or even a hundred lives, AKAH's efforts create a multiplier effect, fostering a culture of preparedness and action.

## NAVI MUMBAI'S FIRST MEDICINAL PLANT GARDEN

As part of 'Creation of Green Assets in Urban Areas' initiative, Aga Khan Agency for Habitat supported the development of Navi Mumbai's first-ever medicinal plant garden at the SRPF Camp in Balegaon. This garden hosts 1,000 plants across 52 varieties, including over 800 medicinal species like Tulsi, Peppermint, Neem, and Desi Gulab.

These plants absorb harmful pollutants, improve air quality, and enhance urban resilience, while also offering therapeutic benefits. By integrating nature-based solutions into city landscapes, this initiative strengthens environmental sustainability and promotes a healthier urban ecosystem.





## TRAINING NSS STUDENTS FOR EMERGENCY RESPONSE



Partnered with the **National Service Scheme (NSS)** students in Navi Mumbai to amplify disaster risk reduction (DRR) efforts and champion wetland conservation.

388 NSS volunteers from seven colleges have been trained in First Aid, CPR, Fire Drills, and Emergency Preparedness and Response. Equipped with these skills, these young volunteers are better prepared and actively engaged in conserving freshwater wetlands, supporting plantation activities, mitigating landslide risks, and restoring ecological balance in Navi Mumbai.

These NSS students are not just participants—they are future trainers, ready to pass on their knowledge and lead communities in times of need. This initiative aims to nurture a generation that safeguards both people and the planet.

## AWARDS



### India Water Foundation's – Water Transversality Global Award 2024

Awarded the **Best NGO - Rainwater Harvesting and Water Management** category, reaffirming our commitment to tackling water challenges through community-driven solutions.

Solutions include constructing check dams, farm ponds, and canal deepening which has strengthened water security and driven systemic change.



### Water Sustainability Awards 2024-2025

Received the **"Runner- Up"** Award under the **"Water for All"** category, for facilitating the expansion of access to clean and safe water towards the achievement of Sustainable Development Goals.

Honoured jointly by TERI, UNDP and Ministry of Jal Shakti, Govt. of India at the 4th Water Sustainability Awards 2024-25.