

# Egypt:

## Careful restoration and collaboration strengthens climate-resilient heritage

At Bayt al-Razzaz in Historic Cairo, the Egyptian Heritage Rescue Foundation (EHRF) led a meticulous programme of restoration and reconstruction in response to climate-related damage and structural instability. After years of neglect—and further deterioration following storms and a nearby building collapse—the site required careful rebuilding grounded in documentation, traditional techniques and close partnership with government authorities. This has made for a successful methodology, with potential for replicating on other heritage sites. EHRF's approach combined

detailed architectural and structural assessments, 3-D documentation and extensive photographic recording. This allowed teams to dismantle and reassemble damaged elements with precision rather than replace them entirely. Weekly site meetings with the Supreme Council of Antiquities ensured technical alignment and strong cooperation throughout the works.

Material reuse was central to the methodology. Original wooden beams were recovered and re-integrated, and traditional masonry techniques were

prioritised using limestone, lime-based mortars and natural materials that reduced the project's carbon footprint and keeps the building cool. Concrete use was kept to a minimum.

A key driver of success was the consultative approach between government authorities, EHRF and contractors. This not only resulted in new technical approaches to restoration, but also significantly deepened collective understanding of climate change and its effects on heritage buildings. The collaboration contributed to higher quality standards for



heritage inspection, and the project's careful documentation process has now become a benchmark with clear potential for replication across other historical sites. The strength of this partnership model has also led to EHRF being recognised by government as a credible and trusted implementer for future restoration and rehabilitation work. According to Heba Abdel Maqsood, Inspector General at the

Department of Islamic, Coptic and Jewish Antiquities within the Supreme Council of Antiquities, the work at Bayt al-Razzaz now provides an important reference for the reuse of old materials and for understanding the impacts of climate change on historic buildings. EHRF's Board Chair echoed this, noting: "By engaging with research and applied technologies, the project refined our approach to heritage site

conservation and rehabilitation. This project has (also) laid a firm foundation for good working relations between EHRF and the State."

Bayt al-Razzaz now stands as a model for climate-aware restoration rooted in rigorous documentation, collaborative governance and respect for traditional materials.

## KEY TAKEAWAYS

### Prioritise detailed documentation before intervention

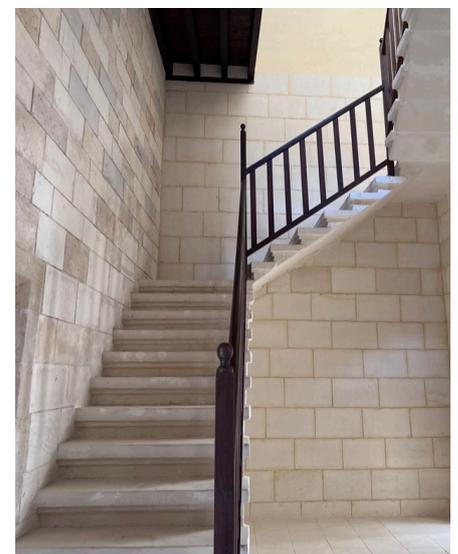
Comprehensive assessments, mapping and 3-D recording support careful dismantling, precise reconstruction and high technical standards.

### Strengthen restoration through collaborative governance

Regular on-site coordination with government authorities builds trust, ensures compliance with technical requirements and improves overall quality. Working with governance can improve policies and procedures and make them more culturally and environmentally aware.

### Reuse materials and apply traditional techniques

Recycling historic elements and using natural, locally sourced materials reduces environmental impact and preserves the site's authenticity.



# Ethiopia:

## Youth-led climate action through heritage gardening

In Addis Ababa, Ethiopia, Heritage Watch Ethiopia (HWE) transformed two historic gardens, the Tsegereda and Terrace Gardens, next to the ex-residence of Crown Prince Asfa Wossen within the University of Addis Ababa campus. These gardens demonstrate how climate resilience measures can be introduced in horticulture while reflecting heritage practices and promoting indigenous plants and values.

Further to this work, HWE's ambition is to involve youth in this work and to replicate the approach in secondary schools. The team partnered with St Joseph's Catholic School to empower students to redesign a disused, rubbish-filled corner of their campus into a vibrant heritage garden. Over nine days of hands-on training, 24 members of the school's Environmental Club learned about indigenous, drought-tolerant plants and the links between culture and environmental protection. A visit to the university gardens, and other partner school gardens broadened their ideas and ambitions.

The students chose "peaceful conflict resolution" as their garden theme. This was incorporated in the garden design: an old container on the site was painted to illustrate the traditional gesture of peaceful reconciliation (two fingers intertwined) and a neem tree was planted, under which, in time, the youth will be able to sit and resolve any disputes – blending cultural symbolism with environmental learning.

As club president Darik shared, "Our initiative is really unique: turning a trash area into a garden... it has taught so many of us about the effects of climate change." Students take pride in

the transformation: "Our project has transformed the landscape, and it has become a beautiful spot that inspires students to learn about indigenous plants. It provides us with a sense of wellbeing and pride – it's our heritage - no other school has done this!"

Can this experience be sustained? Both the school administration and the club members believe so. And there is hope to earn some income: "We propagate plants in the nursery attached to the garden and this will make money in time". Further, two students have started initiatives at home or in their community: "In my neighbourhood, I led people to





collect trash; I gave them free seedlings of medicinal plants to develop new gardens in their compounds”.

Interest has spread quickly: five more schools visited within a week, and the St Joseph’s garden now serves as a model of how youth-led heritage projects can strengthen climate awareness, community pride and practical environmental skills across Addis Ababa.

## KEY TAKEAWAYS

### Empower youth through practical, heritage-based climate learning

Engage students directly in hands-on activities that link cultural heritage with climate awareness. Practical tasks help young people understand climate impacts while reconnecting with cultural identity.

### Transform under-used spaces into educational assets

Repurpose neglected areas into gardens or learning spaces. This creates a visible demonstration site for climate-resilient horticulture and heritage-based environmental education.

### Build climate and heritage skills through structured training

Offer focused training over several days to equip young participants with practical knowledge of indigenous plants, sustainable gardening, and the cultural significance of environmental stewardship.

### Use cultural themes to deepen engagement and ownership

Encourage participants to shape the purpose and narrative of their garden. In Ethiopia, students chose “peaceful conflict resolution” as a core theme, integrating cultural symbolism and shared values into their design, fostering pride and emotional connection.

### Support replication and wider community impact

Successful demonstration sites inspire visitors from other schools and neighbourhoods, encouraging further adoption. Students may carry their learning into homes and communities beyond the school compound.

### Create pathways for long-term sustainability

Integrate income-generating elements, such as plant nurseries, and encourage local institutions to request similar support. Building visibility and demonstrating practical outcomes increases demand and contributes to long-term programme sustainability.

# Jordan:

## Community ownership at the heart of climate-resilient restoration



In As Salt, Jordan, the Petra National Trust (PNT) partnered with the Al Khader Centre to transform Bayt alJaghbeer - a historic family home - into a cultural hub supporting community development and climate-aware heritage protection.

The Centre, founded in 2021 by local shop owners Saif alJaghbeer and Yazid Kloub, brought strong community credibility and a clear vision for a shared training and cultural space. As they explained, "Through continuous support and guidance, we aim to prepare a new generation capable of facing current and future challenges."

Early discussions between PNT, the Centre and the municipality aligned ambitions: restore the building, create spaces for women and young people, and revive traditional skills while

enhancing community pride. PNT recognised the Centre's deep local roots as essential to ensuring ownership and long-term sustainability. As PNT reflected, "Al Khader brought credibility within the community... and helped ensure local ownership, continuity, and long-term sustainability beyond the project period."

Throughout the restoration, the Centre became a hands-on partner – supporting conservation works, managing community activities, coordinating training sessions and gradually taking on project management responsibilities. This included monitoring contractors, organising community events and leading a successful bazaar that brought visibility to local artisans. By the

end of the programme, the Centre was confidently managing key activities and acting as a bridge between residents, PNT and the municipality.

The practical learning was transformative. Through restoration tasks and climate-adaptation training, the founders reported new understanding of climate pressures on heritage buildings, noting: "We gained a deeper understanding of how climate change is affecting heritage buildings... This experience has helped us build practical knowledge to better protect our architectural heritage in the face of growing climate challenges."

Their organisational capacity also grew significantly. The founders shared: "Yes, we learned a lot... The



training strengthened our skills in proposal writing, training delivery and basic project management.” This growth opened further opportunities, including Saif’s nomination for a specialised restoration course in Italy.

The project’s impact extended into the wider neighbourhood. The bazaar attracted more than 800 visitors, strengthened community awareness of Bayt al-Jaghbeer, and increased income

for participating craftswomen. Training in product design and packaging helped artisans improve market readiness. The Centre’s active role also strengthened its relationship with the municipality and reinforced its commitment to serving local communities.

This collaboration demonstrated how local leadership, targeted support and shared responsibility can turn a vulnerable heritage

site into a vibrant cultural asset. The partnership model – combining technical guidance, community ownership and climate-aware restoration – has increased the Centre’s credibility and strengthened PNT’s own relationships locally. As the founders reflected: “The project has had a great impact on us... We hope that the knowledge and skills we gain will have a long-term impact to enhance the sustainability of our project.”

## KEY TAKEAWAYS

### Empower locally rooted partners

Work with community-based organisations that already have trust and visibility in the area. Invite them into leadership roles early, share decision-making, and allow them to shape priorities.

### Align heritage work with community aspirations

Engage local communities early to understand their priorities, such as livelihoods, youth spaces, cultural pride or skills development. Use this input to shape the purpose and design of your project.

### Strengthen partner capacity through joint delivery

Invite local partners to co-deliver core project activities and share responsibilities rather than outsourcing them. This practical involvement builds long-term skills, strengthens confidence and helps partners grow into effective custodians of the site.



### Build practical climate awareness through hands-on work

Integrate climate-focused training directly into on-site activities. Use real conservation challenges as learning opportunities. This approach helps teams quickly understand climate impacts on heritage and equips them with practical strategies they can apply across other sites.

### Create economic and visibility opportunities for sustainability

Identify activities that generate income and raise local awareness of the heritage site. This might include markets, craft showcases, or community events that feature local producers.

# Syria:

## Resilience and re-building community cohesion through climate heritage action



Before Syria's civil war, Homs, the third largest city in the country, was known as a city of diversity where communities from different religious and social backgrounds lived side by side. However, now deeply scarred by conflict, Homs has been transformed from a diverse cultural hub into a devastated landscape. As Syria starts to rebuild, rebuilding Homs requires more than physical reconstruction; it demands healing social wounds and fostering unity.

As part of the programme, the Turathuna Foundation ran a 12-day "Heritage Project Management for Women" course,

bringing together 28 women from diverse backgrounds across Homs reflected diversity in age, educational attainment, ethnic and religious background, and cultural and artistic interests. The training explored cultural heritage, climate change, entrepreneurship, environmental awareness and peacebuilding, creating a rare space for connection after years of division.

The course covered a wide range of topics, including cultural heritage and the history of Homs, agriculture and the environment, climate change, entrepreneurship and financial management, in addition to a focus on peace building. The sessions revealed powerful personal stories of loss, resilience and rebuilding. One participant described losing her home, having her husband and son kidnapped, and later transforming the rubble outside her house into a small plant nursery – a symbol of survival and renewal. Another shared the emotional weight of caring for her ill husband while trying to create stability for herself.

These exchanges broke down social barriers and fostered unexpected solidarity.

In addition, the restoration of the 'Withstanding Change' site in Homs, the Ghassania theatre, inspired everyone to recognise that rising from under the rubble could happen. Guided 'Heritage walk' activities helped participants rediscover the rich diversity of Homs – churches, mosques, historic houses and traditional crafts – emphasising shared heritage as a tool for rebuilding trust. As Turathuna noted, "By knowing our heritage and recovering it, we recover ourselves." Heritage was becoming a bridge linking participants and enhancing their sense of belonging and collective strength. This illustrated how using cultural heritage in community activities can strengthen social bonds, transforming differences into a unifying force within a tapestry of diversity and harmony

The course thus provided women with the opportunity to discover that they are not alone in facing challenges, and that society can rebuild itself despite conflicts through communication, cooperation, and learning from each other's experiences. Activities based on



sharing personal stories, utilising cultural heritage, and engaging in a supportive environment can play a pivotal role in fostering community understanding and personal recovery, especially post-conflict. Further, awareness of the importance of heritage and factors related to climate change serve as unifying factors that can bring different segments of society together despite their differences.

## KEY TAKEAWAYS

### Heritage can be a bridge for social cohesion

Shared cultural heritage creates safe spaces for dialogue, helping communities reconnect across divisions and rebuild trust after conflict.

### Integrate climate awareness into community recovery

Linking climate impacts with heritage helps participants understand risks while strengthening their sense of agency in shaping a more resilient future.

### Create supported spaces for storytelling and healing

Structured activities that encourage sharing lived experiences help transform isolation into solidarity and support psychological recovery.



### Empower women as leaders in heritage and climate action

Training programmes equip women with skills in project management, environmental awareness and entrepreneurship, strengthening their role in community recovery.

### Use restored heritage sites as symbols of renewal

Visible progress at places like the Ghassania Theatre reinforces hope, demonstrating that reconstruction is possible both physically and socially.

# Uganda:

## Reviving an environmental legacy through community-led heritage action

In Eastern Uganda, the Cross-Cultural Foundation of Uganda (CCFU) partnered with the Kakungulu family to revitalise the residence of Semei Kakungulu, an influential early 20th-century leader, known both for his political role and his environmental stewardship. The house, overlooking Mbale, had deteriorated due to years of neglect and climate-related damage, prompting CCFU to explore whether the site could be restored and re-imagined as a community space linking culture and climate resilience.

The Kakungulu family shared this ambition to preserve and promote the legacy of their ancestor, and ultimately offered the residence and its 3.5 acres of land for restoration and

community benefit. Following a series of regular meetings, a partnership agreement between CCFU and the Kakungulu family was signed. Renovation works started in earnest and much research undertaken to uncover Semei Kakungulu's life and to gather artefacts that would be suitable for display in the museum. Many of these were donated by the family and the local community.

It was also agreed that the land on which the museum is located would be used to demonstrate how farmers in this mountainous region could protect their land against landslides and floods, which regularly result in the loss of lives and property. The site was zoned into different sections illustrating the use of drought

resistant plants, terracing to prevent landslides and the excavation of trenches to prevent soil erosion.

By November 2024, the museum and surrounding gardens opened to the public. More than 2,400 visitors have since come to the site, including students from 26 schools. Access to water and electricity, introduced through the project, now benefits both the museum and the local community. The renewed site has become a source of civic pride: as the Mbale City Tourism Officer remarked, "This is a first museum here. It puts our city on the map."

The Kakungulu family also feels that their important heritage has now been given the recognition it deserves. One of Semei Kakungulu's grand-daughters, Rachel Kakungulu says: "This has been such a positive experience for us. We could not believe that an organisation would come to our rescue and develop the site for conservation's sake!" In the process, the family have established and registered the Semei Kakungulu Family Foundation. This enhances the



sustainability of the museum and of the wider site, as Rachel further remarks: “This entire experience has brought unity to our family and we have decided to establish a foundation so that the land is held in trust for the future, not individually.”

For CCFU too, the impact has been considerable; it has put the organisation on the map as a professional and dedicated heritage organisation, and provided an opportunity for CCFU to make a significant

contribution to the discourse on environmental and heritage values, both nationally and beyond. Four staff have also been employed, and gate receipts already cover about half of the museum running costs. The site now stands as a unique learning centre on heritage and climate change, demonstrating how a historic home, and the story of an early environmentalist, can inspire climate awareness, community engagement and local pride.



## KEY TAKEAWAYS

### Use heritage stories to inspire climate action

Linking local heritage with contemporary environmental challenges can help communities connect cultural identity with climate resilience.

### Transform heritage sites into demonstration landscapes

Designing outdoor spaces to showcase practical adaptation measures—such as resilient planting, land management or erosion control—can turn heritage settings into effective learning environments.

### Promote access, visibility and community pride

Restored heritage places can increase local engagement, enhance public services and strengthen a community’s sense of identity.

### Build institutional capacity and long-term sustainability

Well-designed heritage initiatives can strengthen organisational skills, expand teams and generate income that supports long-term operational stability.

### Strengthen ownership through partnership and shared responsibility

Collaborative decision-making between families, communities and heritage organisations builds trust and supports long-term stewardship of sites.



# Zanzibar:

## Revitalising traditional skills for climate-smart heritage conservation

Throughout the 'Withstanding Change' project period, the Tanzanian partner, the Zanzibar Stone Town Heritage Society, has placed emphasis on training artisans – young and old – to enhance their knowledge and skills, as applied to heritage structures that are threatened by the effects of climate change. In Zanzibar, these effects mainly stem from rising water levels, salt ingress into the walls of buildings, and from heavy, sudden and unpredictable rains.

The project blended traditional knowledge with climate-adaptation techniques. Trainees experimented with poultices made from lateritic clay and coconut fibre to extract salt from walls, lime-based plasters using coral-stone dust, and redesigned rainwater hoppers inspired by the programme's UK twin, National Trust Penrhyn Castle. The Old Customs House was therefore not only the site for 'Withstanding Change' capital works in Tanzania, but it was also a site for learning, mainly on appropriate masonry and woodworking skills.

Making the link between heritage assets and climate change was a pioneering step, and participants noted that this made the training truly unique in the country. The programme was developed at a time when traditional skills needed to manage climate-related damage were rapidly disappearing, prompting the team to bring in rare, highly experienced craftsmen to teach masonry, plastering and woodworking techniques. Hoshil Dhanji, the architectural conservation consultant leading the climate-adaptation work, explained that although construction materials have changed over time, traditional craftsmanship—especially techniques used on windows, doors and other timber elements—remains essential and must not be lost.

The training reshaped participants' understanding of climate impacts. As one group explained, "For the first time, we understood the impact of climate change... the increased salt in the atmosphere erodes our building materials and the fabric of our buildings."



The programme also strengthened career pathways and revived confidence in traditional skills. As woodworking coach Juma shared, "This training led to more opportunities... I have recently returned from the Comoros where I trained carpenters for four weeks." Accepting to blend new and traditional techniques is however not always a given: thus, senior architects at times do not appreciate traditional conservation methods and the younger ex-trainees find it difficult to influence work on the sites they are working on. Nevertheless, the project has led to a core group of artisans



emerging who are motivated to continue the craft and pass on knowledge to younger generations.

To ensure sustainability, ZSTHS has launched a month-long course for 24 woodworkers in collaboration with state vocational institutions. The aim is to embed historic timber conservation in formal curricula—securing a future pipeline of skilled artisans equipped to confront climate threats.

## KEY TAKEAWAYS

### Blend traditional skills with climate-resilient techniques

Combine heritage craft knowledge with practical adaptations to help address local environmental challenges.

### Strengthen livelihoods through skills development

Training opens access to new work locally and abroad, providing artisans with income opportunities and raising the profile of heritage trades.

### Use heritage sites as practical training grounds

Deliver hands-on learning directly within restoration projects. This builds technical confidence quickly and helps trainees understand the climate-related decay affecting real structures.

### Create long-term pathways through formal training partnerships

Embedding heritage-focused climate adaptation into vocational curricula ensures a new generation of craftspeople can conserve buildings affected by climate change.

