# CRAterre INTERNATIONAL CENTER FOR EARTH CONSTRUCTION 2024 ACTIVITY REPORT

#### October 2025

Since 1979 <u>CRAterre, International Center for Earth Construction,</u> has been working to promote recognition of earth as a material in order to address challenges related to the environment, cultural diversity and the fight against poverty.

The global objective of the CRAterre Centre is to contribute responding to

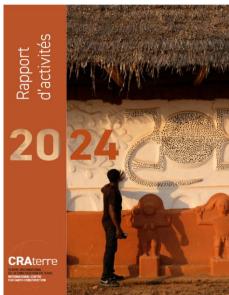
societal needs and the Sustainable Development Goals (SDGs). Their three unifying goals are to make better use of local human and natural resources, to improve housing and living conditions and to enhance cultural diversity.

Born at the Grenoble School of Architecture, in France, the association maintains a strong historical connection to the school and embraces a reflective approach aimed at responding to social needs and real-world challenges. This mindset influences both the perspective of its members and the way its projects are carried out.

The 2024 Activity Report published in 2025 provides an overview of the projects and commitments undertaken by CRAterre during the year. In 2024, their team carried out 30 projects in the following 28 countries: Saudi Arabia, Argentina, Benin, Burkina Faso, Cameroon, Egypt, El Salvador, France, Ghana, Guinea Bissau, Haiti, Honduras, Kenya, Madagascar, Malawi, Mali, Morocco, Mauritania, Mexico, Nepal, Niger, Nigeria, Uzbekistan, Sao Tome, Senegal, Somalia, Sudan and Tunisia.

These actions were made possible by a collective dynamic rooted in the field, at the crossroads of technical expertise, social commitment and international cooperation. This report describes all the projects carried out for the fundamental components of CRAterre's activity, by the Habitat Unit, the Heritage Unit and the Material Unit. For each of the ongoing projects in the various activities and countries, the Report presents a factsheet describing the objectives, results achieved, stakeholders involved, and resources deployed. Reading these factsheets provides an overview of the important contribution CRAterre makes to the implementation of projects that enhance earthen constructions worldwide.







The Report also highlights the significant results achieved in training activities carried out by CRAterre in many countries and in the publication of information and training materials.

The CRAterre Center is an important international reference point for earthen construction. The section of the website that tells the Center's history highlights the evolution of this important association and the awards it has received in various international contexts.

In the website CRAterre highlights that "For eleven millennia, humanity has demonstrated an astonishing ability to build with raw earth, whether simple dwellings, palaces, or entire cities. Today, in a wide variety of contexts and territories, this building material remains widely used, present in 150 countries. Earthen architecture reflects a quality of daily life and technical innovation that closely combines know-how and ingenuity".

The website also presents the social and environmental advantages of earth:

### Qualities of Earth

- Abundant, local, and infinitely renewable resources.
- Promotes constructive intelligence thanks to its diversity of techniques.
- Adapts to modern construction innovations (prefabrication, 3D printing).
- Provides good acoustic insulation due to its mass.
- Non-combustible, it constitutes a natural barrier against fire. Flexible Implementation
- Reduces construction site disturbances (limited noise pollution, low mechanization).
- Generates little construction site waste.
- Compatible with manual techniques and participatory construction sites.
- Encourages the transmission of artisanal knowledge and local practices.
- Suitable for projects of all sizes, from individual housing to public facilities and urban developments.

### Comfort and Well-Being

- Naturally regulates humidity and indoor temperature (thermal inertia, hygrothermal comfort).
- Healthy material for both builders and users.
- Contributes to the reduction of urban heat islands by naturally regulating thermal exchanges with the environment.

### Architectural Qualities

- Allows the creation of organic forms and unique architectural styles.
- Easily combines with other complementary local materials (wood, stone, bamboo, etc.).
- Facilitates extensions and renovations thanks to its modifiable structure.

## Energy Performance

Low embodied energy (extraction, transformation, transportation).







The CRAterre Center operates through the following three areas of expertise:

- <u>HABITAT</u>. Building today for tomorrow. Improving access to high-quality environmental and cultural housing. Three themes: Precarious urban housing / housing for the most disadvantaged; Crisis preparedness and response; Facilities and common goods.
- MATERIALS. Making raw earth construction possible in contemporary regulatory contexts. Three themes: Characterization of raw materials and materials; Construction systems, production methods, and innovation; Evolution of the regulatory framework.
- HERITAGE. Promoting cultural diversity by promoting architectural heritage. Four themes: Heritage conservation; Archaeology and conservation; World Heritage; Heritage and development.

The UNESCO Chair Earthen Architectures, Constructive Cultures and Sustainable Development, was inaugurated in October 1998 at the Grenoble School of Architecture, on the initiative of the CRAterre-ENSAG laboratory, in collaboration with UNESCO's Higher Education Division. It is managed by the laboratory as a center of excellence. The essential vocation of this UNESCO Chair, which works with 40 partners in 23 countries, is to accelerate the dissemination, within the international community, of scientific and technical knowledge on earthen architecture in two areas: environment and world heritage; environment, human settlements-habitat.

The aim of this Chair is to facilitate the implementation of teaching, research, experimentation and communication activities within partner institutions of higher education, scientific research and professional training, on an international scale. It aims to expand the training of trainers, define curricula for the bachelor's, master's, and post-master's cycles, and facilitate the development of doctoral research (theses, PhDs).

#### To know more

**CRAterre website** 

**CRAterre Activity Report 2024** 

CRAterre Activity Report 2024 pdf

**CRAterre Projects** 

Materials division presentation brochure

the Habitat Division presentation brochure

Heritage division presentation brochure

ELMENTERRE-Mallette Pédagogique

**CRAterre Newsletter 2024** 







CRAterre Newsletter 2024

CRAterre Downloadable Books

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Terra Award 2016

Terra Fibra Award 2021 in UNESCO website

UNESCO chair earthen architecture

