

From Material Potential to Sector Capacity: Building the Ecosystem for Natural Construction in Türkiye



Burcu KINDIR

Association of Natural Building Materials and Methods
(DYMD), Urla, İzmir, Türkiye
burcukindir@dymd.org.tr

ABSTRACT

Türkiye has a remarkable foundation for natural construction: diverse geological and agricultural resources, a long tradition of earthen and bio-based building. The other components a sector requires are unevenly developed — research well established for historic structures, less so for contemporary applications; craft transmission interrupted, largely absent from vocational education; few producers, most products still at prototype stage; user interest shadowed by uncertainty about performance. The question is not only how natural materials can be produced at greater scale, but what conditions allow them to become part of contemporary construction.

This presentation treats earth-based materials as part of a wider ecosystem and asks how sector capacity forms. Türkiye lacks a current technical framework: the national standards for adobe blocks and buildings, published in 1985, were withdrawn and never replaced.

Sector formation elsewhere has followed a consistent sequence. Germany withdrew its earth building norms in 1971; a professional association founded in 1992 wrote the voluntary rulebook that replaced them, and today's DIN standards followed. But regulation was only one output. Around it grew a recognised craft qualification carrying the right to trade, a European certification scheme, and manufacturers who co-financed the work. France's guides came from a committee of eleven organisations; New Zealand's earth building association revised its standards and opened them freely. Morocco's 2011 seismic code for earthen construction was drafted with CRAtterre and the University of Lima on its committee, carrying Peru's seismic experience into the Moroccan text, and applies the design basis of conventional unreinforced masonry, not an exceptional regime. Institutions preceded regulation — and rarely one alone.

The Association of Natural Building Materials and Methods (DYMD), founded in 2021, is one attempt to build those connections. Its work is organised around a set of bridges: from fragmented actors to a network; scattered knowledge to shared technical infrastructure; craft knowledge to documented, transferable knowledge; research to professional practice; materials to recognised construction products; individual producers to a visible sector; public uncertainty to direct experience; Türkiye to international networks. Exhibitions, a competition, training, research and a materials library are the means, not the aim.

The future of natural construction in Türkiye depends on turning existing resources and experience into a visible, collaborative sector: standards are the output of an ecosystem rather than its starting point, and institutional capacity must scale alongside production volume, not after it — work no single organisation can carry alone.

KEY WORDS:

Sector formation; Institutional capacity; Standardisation; Knowledge infrastructure; Türkiye