



A Wholesome Day

Where the roof slopes down to meet the earth, where light dances through roots, and where learning begins with curiosity.

The nursery school design in Kolda, Senegal demonstrates an in-depth assessment of the area's environmental, cultural, and social issues while emphasizing sustainable and community-based solutions. The semi-arid zone of southern Senegal contains Kolda which experiences intense heat together with long dry seasons and poor infrastructure accessibility resulting in major effects on child health and educational development. The project selected this location for the nursery school to combat extreme heat through the implementation of passive cooling methods. Thick earthen walls and an expansive thatched roof system provide natural insulation, while perforated walls and shaded verandas facilitate air circulation, ensuring that indoor environments remain comfortable throughout the day without dependency on electrical systems.

The protection of cultural traditions stands as the key purpose behind the development of this project. The school's design elements use round huts together with pyramid-shaped roofs in order to promote local heritage while building community identity. The school's architecture incorporates Senegalese patterns into fabric panels which transform the cultural heritage into a physical form that exists throughout daily student life. Through its cultural framework, the school establishes strong ties between children and their heritage despite their education within a contemporary supportive environment.

One of the most pressing concerns in Kolda is the lack of available clean water sources. The design constructed its roof with meticulous attention to details that enable rainwater collection through its wide surface area before storing it underground for irrigation and daily sanitation purposes. The system allows children and community members to learn about water conservation through first-hand experiences while making the most of the season's limited rainfall.

The project introduces new methods to handle waste management which sustain the environment. The school developed a strategic placement of toilets in three school corners to create easy access for students while integrating composting systems that process human waste into fertilizer for the school gardens. The school utilizes the nutrient-rich compost from human waste to grow trees and vegetables thus completing a sustainable reuse process. The implementation of ecological sanitation not only promotes hygiene but also instructs the next generation about the significance of natural resources.

* The school model is designed to be replicable in any village, utilizing existing huts where available, and may need additional to make up the numbers where falling short.

