Rainwater-Harvesting Schools

→ PitchAfrica has developed a school building concept for disadvantaged communities in semi-arid regions that provides clean water year round and imparts sustainability lessons.

ENVIRONMENTAL

According to UNEP, there is 13 times the amount of rain falling in Africa than is needed by its population[1].

SOCIAL

According to WHO, 40 billion work hours are lost every year in Africa because of the need to collect water.

ECONOMIC

Waterbank schools can be built for the same cost as conventional schools, using locally available materials and local expertise.

Waterbank schools are low-cost **rainwater-harvesting school buildings** comprising a large roof, a central underground cistern, and an **integrated ceramic water filtration system** providing clean water and food year round. The school buildings integrate community spaces with a wide range of school needs: classrooms, offices, dormitories, canteens, and sport-courts. The first Waterbank school, built in Kenya, captures, stores, and filters **350,000 liters of water** a year. Since opening, attendance has risen by 25% to 95% and instances of waterborne disease have **dropped to zero** among pupils.

Why a Sustainia100 solution?

The majority of the 345 million people in Africa without access to clean water live in regions with inadequate rainfall. The World Bank estimates that 200,000 classrooms need to be built in sub-Saharan Africa each year. Waterbank schools place a sustainable supply of clean water at the heart of the school, improving children's health, while educating them about sustainable lifestyles and practices.

Developed in USA

Deployed in Kenya, Senegal, Malawi

"A WATERBANK SCHOOL ENLISTS THE RAIN TO TRANSFORM A CHILD'S HEALTH, EDUCATION AND THE FUTURE OF THEIR COMMUNITY."

JANE HARRISON,
EXECUTIVE DIRECTOR, PITCHAFRICA

A Waterbank school costs the same as a conventional school but provides triple the space and harvests 350,000 liters of clean water annually.

[1] ICRAF & UNEP, "Potential for Rainwater Harvesting in Africa: A GIS Overview."

Solution by PitchAfrica, The Zeitz Foundation, KimsKenya, and Guernsey Overseas Aid