

HABITAT RESEARCH AND DEVELOPMENT CENTER

NINA MARITZ, 2004

KATUTURA, NAMIBIA, AFRICA

BUILDING SIZE: 23, 640 SQUARED FEET

CLIMATE: MAX: 32 TO 34° C (90 TO 93° F)

MIN: 4 TO 6° C (39 TO 43° F)

DAILY TEMPERATURE SWINGS 20° C (68° F)

HUMIDITY AVERAGE 10 TO 20%

MEDIAN RAINFALL 12 TO 14 IN

VISION

TO BE THE CENTRE OF EXCELLENCE IN HOUSING RESEARCH AND DEVELOPMENT BY APPLYING NEW METHODS AND IDEAS OF SCIENCE AND TECHNOLOGY FOR THE SUSTAINABLE DEVELOPMENT OF THE NAMIBIAN HOUSING SECTOR. -NAMIBIAN ENVIRONMENTAL DIRECTORY

MISSION

TO PROMOTE THE USE OF LOCAL, INDIGENOUS BUILDING MATERIALS AND DESIGNS, TO ENGAGE MULTI-DISCIPLINARY TEAMS IN BASIC RESEARCH, AND TO ADAPT EXISTING KNOWLEDGE AND APPLIED RESEARCH TO ACHIEVE A HOLISTIC APPROACH TO PROBLEM SOLVING IN THE FIELD OF HOUSING AND RELATED ISSUES. -NAMIBIAN ENVIRONMENTAL DIRECTORY



■ SITE
■ SCHOOLS



DRY SELF-COMPOSTING TOILETS



SHADING DEVICES BUILT FROM INVASIVE TREES



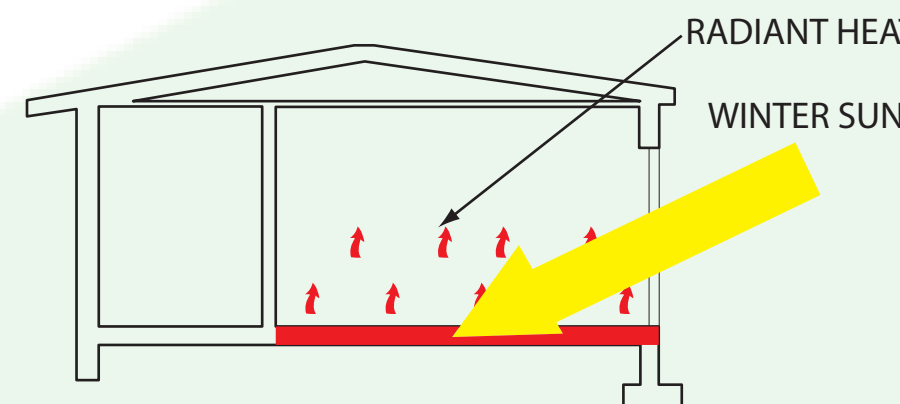
HYDRAFORM SYSTEM (NAMIBIAN-INVENTED), USES SOIL IN THE SURROUNDING AREA AND ONLY 6-8% CEMENT. ALSO USED AS THERMAL MASS.



PROSOPIS TREE (INVADING SPECIES)

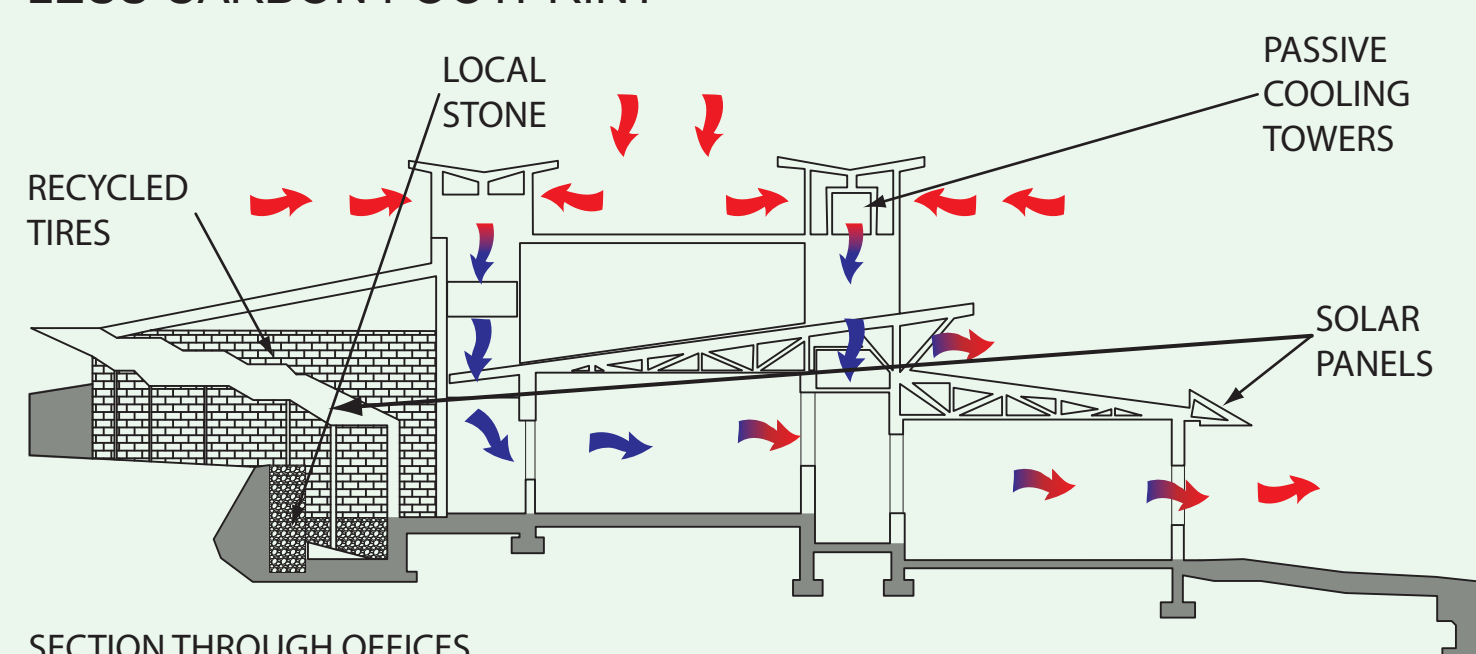


INDIGENOUS VEGETATION



ENVIRONMENTAL

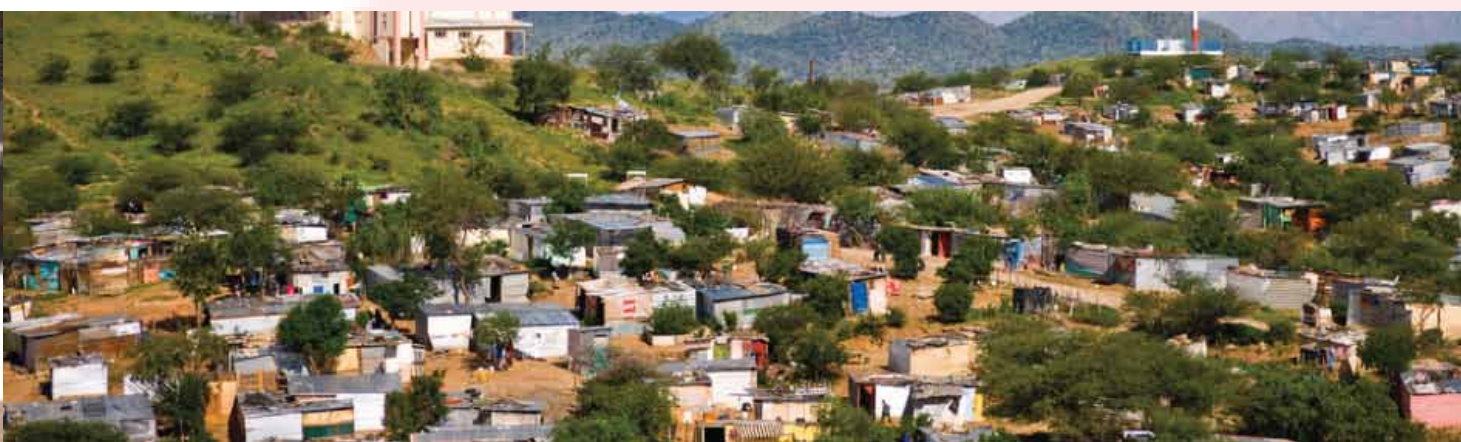
LESS CARBON FOOTPRINT



SECTION THROUGH OFFICES

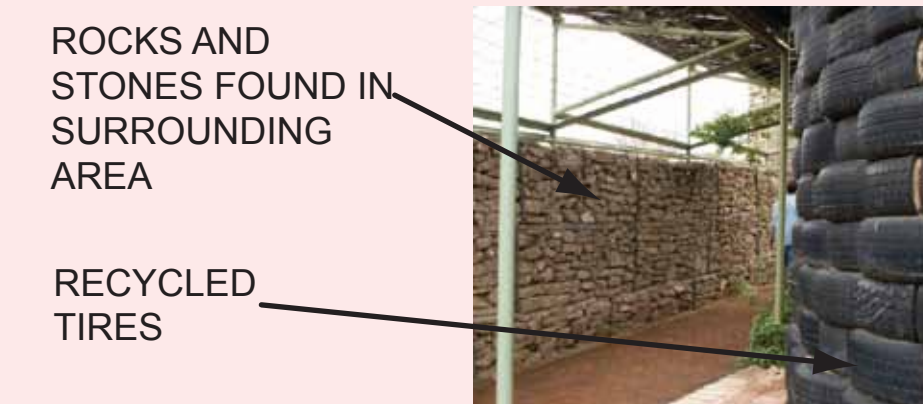


Aim of centre - research into sustainable housing focusing on environmental appropriateness

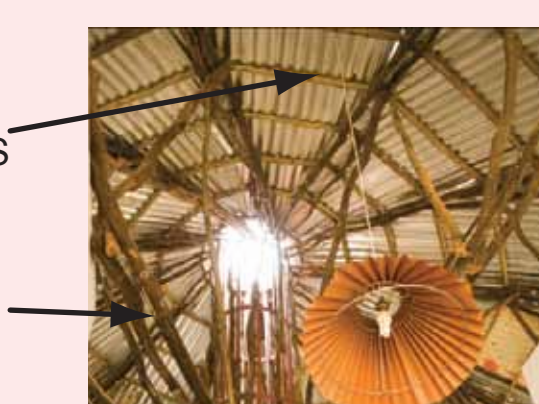


SOCIAL

CENTER LOCATED NEAR SCHOOLS AND IN A POOR AREA OF THE CITY.



ROCKS AND STONES FOUND IN SURROUNDING AREA



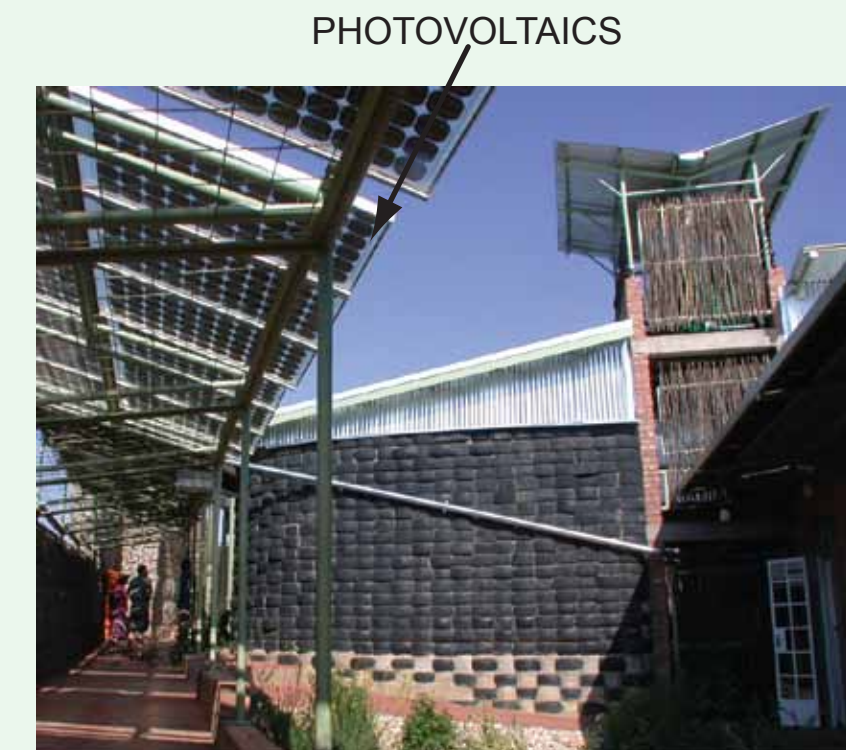
CORRUGATED METAL SHEETS



BRANCHES FROM PROSOPIS TREES (AN INVADING SPECIES)

ECONOMIC

COMFORT AT A LOW PRICE



PHOTOVOLTAICS

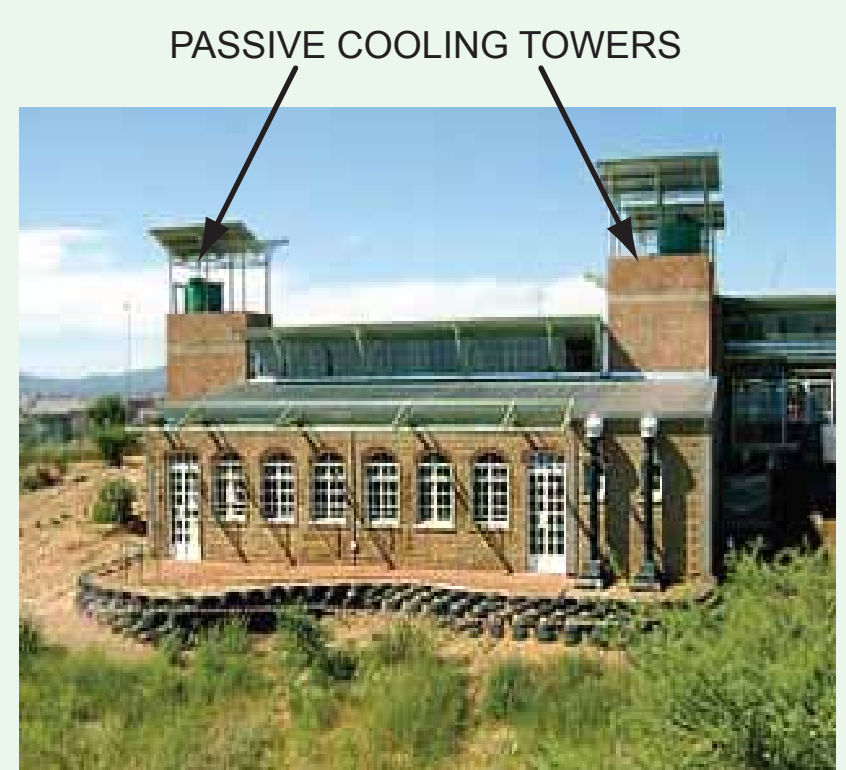
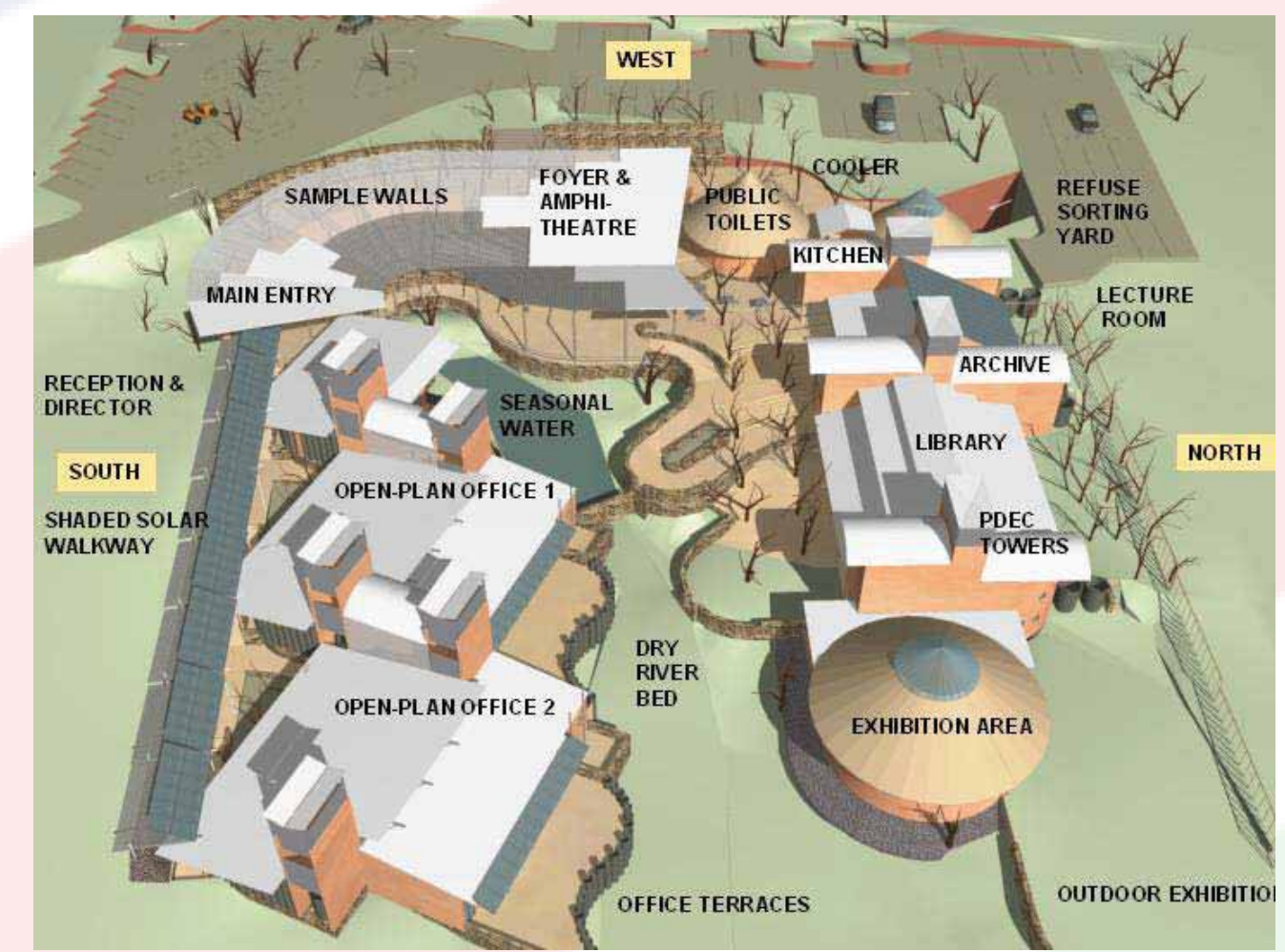


WALLING

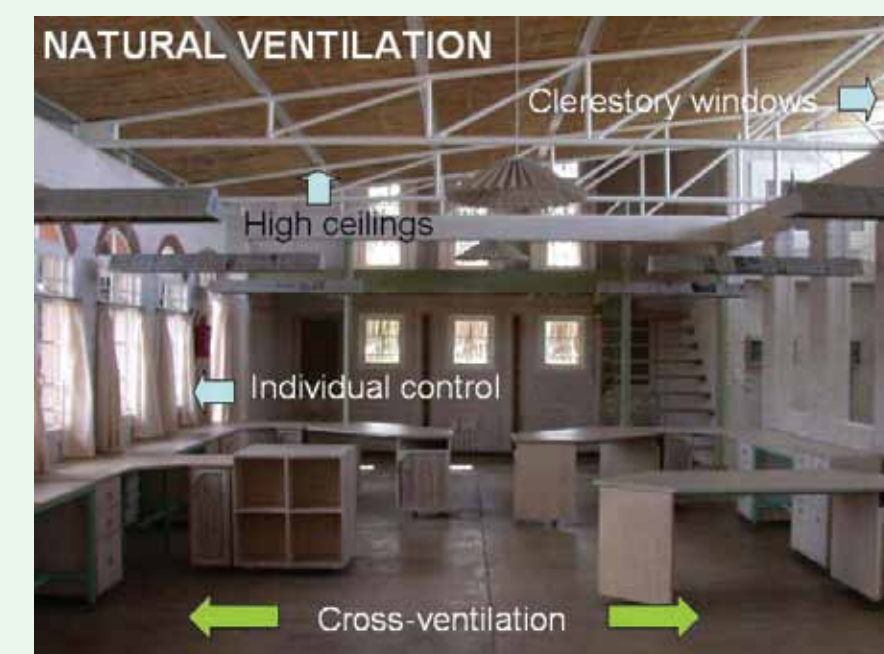
RECLAIMED CEMENT BRICKS AND PAVERS COST 40-60 CENTS EACH, COMPARED TO 1.20 FOR NEW ONES



UNSKILLED LABOR USED IN CONSTRUCTION WITH MATERIALS THAT CAN BE OBTAINED FOR FREE OR REALLY CHEAP



PASSIVE COOLING TOWERS



NATURAL VENTILATION

Clerestory windows
High ceilings
Individual control
Cross-ventilation