ARCHIVE'S MISSION

Operating in the spaces of development, health, and architecture, we prioritize housing design as a key strategy in combating disease around the world.
Health and Inadequate Housing

- Walls and roofs
- Windows, doors, and eaves
- Dirt floors
- Pollution and lack of ventilation
- Sanitation
- Unsanitary food storage
- Unsanitary water conditions

archive
architecture for health
# Health and Design Interventions

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*Note: The table highlights the interventions related to Diarrheal Disease, Malaria, and Dengue.*
BUILDING MALARIA PREVENTION
Cameroon, 2013 - 2016

PROJECT DESCRIPTION
+ 12% of the total deaths in Cameroon, and 23% of the total deaths in children under the age of 5 were caused by malaria in 2012
+ Project Location: Minkoameyos and Bonamoussadi communities in Yaoundé, Cameroon
+ Partners: Cameroon Coalition Against Malaria (CCAM), and the University of Yaounde
+ Community Randomized Controlled Study:
  - Baseline survey
  - Community participation
  - Conduct pilot Random Clinical Trials (RCT):
    - Intervention group - Improved housing
    - Control group - Conventional prevention strategy
  - Data collection and analysis
BUILDING MALARIA PREVENTION
Cameroon, 2013 - 2016

PROJECT OUTCOME
+ 264 households improved (1,314 beneficiaries)
+ 5202 people trained in home improvements for disease prevention
+ Malaria prevention awareness provided to 100,800 people
+ Decrease of malaria-carrying mosquitoes by 50% in homes
+ 20% reduction in malaria incidence
MALARIA PROOFING HOMES
Namibia 2016-Present
MALARIA PROOFING HOMES
Namibia, 2015 - 2017

PROJECT DESCRIPTION
+ Namibian government aims to **eliminate Malaria in Namibia by 2020.**
+ In 2016, **2,900** people had confirmed cases of malaria
+ Seeking **innovative, affordable, and effective** interventions
+ **Project Location:** 6 villages in Northern Namibia: Mashosho, Simanya, Onoonga, Oupale, Onandjamba A, Omatako (Communities prioritized based on risk and focus group/survey results)
+ **Partners:** Clinton Health Access Initiative, DXA Studio, Malaria No More, Ministry of Health and Social Services
+ **Training manuals** were developed for community members and carpenters
+ Materials sourced from **local suppliers**, making the implementations **easily replicable**
MALARIA PROOFING HOMES
Namibia, 2015 - 2017

PROJECT OUTCOME
+ 989 structures were improved (929 structures are sleeping structures)
+ 89% of household members were sleeping in improved structures 3 months after intervention
+ 933 windows screened, 502 eaves screened, 1,121 doors screened
+ Homeowners gave an average satisfaction rating of 4.12 out of 5
Before Intervention

- Overhang of metal roof causes standing water during the rainy season that attracts mosquitoes.
- Open eaves allow for mosquitoes to enter.
- Open eaves allow for mosquitoes to enter.
- Gap between wall and wood frame allows mosquito entry.

After Intervention

- By bending the metal and creating a drip edge, the rainwater deflects away from the walls, dispersing the water.
- By applying spray foam to the open eaves, the mosquito’s entry is blocked.
- By applying spray foam to the open eaves, the mosquito’s entry is blocked.
- By filling gaps between the wall and wood frame, mosquitoes are not able to enter the home easily.

Tools: Suggested number of workers:

- MUD
- MUD BLOCK / ROCK WALL: PATCHING
- MUD BLOCK DOOR FRAME: FILL
- METAL ROOF
- METAL ROOF + METAL WALL: CLOSE EAVE
- METAL ROOF

Materials: Required tools + materials:

- MUD
- MUD BLOCK / ROCK WALL: PATCHING
- MUD BLOCK DOOR FRAME: FILL
- METAL ROOF
- METAL ROOF + METAL WALL: CLOSE EAVE
- METAL ROOF

SKILL LEVEL METER

Applications:

- BUILDING APPLICATIONS
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INTERVENTIONS FOR MALARIA PREVENTION
Swaziland 2017
PROJECT DESCRIPTION
+ **625 cases of Malaria** in 2016 - government aims to eliminate entirely by 2020
+ Elimination methods must be **strategic** and **sustainable**
+ National Malaria Control Program identified **high risk communities** which also had **low-quality housing**
+ **Partners**: Clinton Health Access Initiative, Swaziland National Malaria Control Program (NMCP), Article 25
INTERVENTIONS FOR MALARIA PREVENTION
Swaziland, 2017

PROJECT OUTCOMES
+ **Four villages** provided with interventions
+ Community members **trained** on the **relationship between health and housing**
+ **1,600 structures** received interventions
+ **Increased beneficiary knowledge** of mosquito habits and screen maintenance through training.
Where We Work

Cochabamba, Bolivia
Building Out Chagas

Namibia
Malaria Proofing Home

Addis Ababa, Ethiopia
Healthy Air, Healthy Living

London, United Kingdom
Happy Healthy Households

New York, United States
ARCHIVE GLOBAL, NYC
Walking Tours

Camden, United States
Breathe Easy Camden

St. Marc, Haiti
Health & Housing in Haiti

Delhi, India
Sanitation For Health

Dhaka, Bangladesh
Health, Hygiene and Housing
Health From the Ground Up

Yaounde, Cameroon
Building Malaria Prevention

Lomahasha, Swaziland
Interventions for Malaria Elimination

Tanzania

Past Project
Current Project
Future Project
Lessons Learned / Scaling Up

+ Communicating the cost effectiveness of health and housing as a paired approach
+ Exploring the potential for sustainable microfinancing
+ Government agency buy-in
+ Building trust through long-lasting partnerships
+ The value of a research study
+ The importance of a comprehensive housing survey
+ Resources to provide realistic budgets for materials and labor
+ Importance of being engaged in project development from the beginning

+ Holistic engagement model
  - Needs assessment
  - Design Services
  - Monitoring and Evaluation
  - Impact Assessment
Sustainable Microfinancing

An online community of micro-investors who fund, monitor, and review investments in health and housing on a distributed ledger. The platform will transform public perceptions of the power of direct giving to positively impact health and housing in the world’s most rapidly growing cities.

+ Radical Transparency
  - Trace donations to see what has been spent and where.

+ Disintermediation
  - No banks, lawyers, government agencies, fx costs, or card fees.

+ Automation
  - Smart contracts trigger actions- if certain conditions occur, then things get built.

+ Micro Donations
  - Nano/pico donations.

+ Convergence
  - Physical & digital world (internet of things).
Thank you to the UBS Optimus Foundation for its generous support in advancing our mission.

Thank you to our additional partners for helping us further our mission.