



„AFRICAN SUSTAINABLE HOUSE“

The first low cost ClimateHouse of the world



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Showhouse at KLIMAHOUSE 07 Fair, Bozen. certified as Climatehouse „Class C“



Still from 3D-Animation for the KLIMAHOUSE 07, Variante A



Pre-Visual Showhouse

„Gruppe für Tagespflege“,
Kindergarten Hildesheim

Millennium Goals

1. Eradicate extreme poverty and hunger
Reduce by half the proportion of people living on less than a dollar a day
Reduce by half the proportion of people who suffer from hunger
2. Achieve universal primary education
Ensure that all boys and girls complete a full course of primary schooling
3. Promote gender equality and empower women
Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015
4. Reduce child mortality
Reduce by two thirds the mortality rate among children under five
5. Improve maternal health
Reduce by three quarters the maternal mortality ratio
6. Combat HIV/AIDS, malaria and other diseases
Halt and begin to reverse the spread of HIV/AIDS
Halt and begin to reverse the incidence of malaria and other major diseases
7. Ensure environmental sustainability
Integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources. Reduce by half the proportion of people without sustainable access to safe drinking water. Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020
8. Develop a global partnership for development
Develop further an open trading and financial system that is rule-based, predictable and non-discriminatory. Address the least developed countries' special needs. This includes tariff- and quota-free access for their exports; enhanced debt relief for heavily indebted poor countries; cancellation of official bilateral debt; and more generous official development assistance for countries committed to poverty reduction.. Deal comprehensively with developing countries' debt problems to make debt sustainable in the long term. In cooperation with the developing countries, develop decent and productive work for youth.

Poverty and population growth are global questions. A series of considerations are globally adopted:

Women empowerment through education and micro-credit systems help to better family conditions and to break the cycle of poverty and hunger. Muhammad Yunus (peace nobel price 2006) his banking system by now involves 6.000.000 beneficiaries, 96 % of them are women.

Main goals of ASH

- ▶ human-ecological intercultural dialogue
- ▶ gender-specific sanitary needs
- ▶ health: HIV/AIDS - respiratory diseases
- ▶ low consumption of energy and water
- ▶ educational and skill-training offers
- ▶ initiatives for income-creation
- ▶ low cost

Gender-specific sanitary needs

- ▶ Basic sanitary services are fundamental for womens participation in social life, equal opportunities and education.
- ▶ A specific toilet-system has been conceived, based on low water-consumption, separation of urine and feces and complete local recycling.
- ▶ Worldwide experiences and specific local aspects will have to be combined to foster real acceptancy by users and community.

Health: respiratory diseases

- ▶ The houses in disadvantaged areas have to be aquipped with solar water-heating, isolated ceilings and roofs and low-energy lamps.
- ▶ This reduces co2-emissions and energy-costs. Further advantages is reduced dust through isolated ceilings and better room temperature.
- ▶ Research has to find alternatives to paraffin stoves and other heating tools who lead to danger of fire and to respiratory diseases (open fire is also causing smoke poisoning).
- ▶ The long-term coaching through social and economic techniques insures sustainability in early recognition of emerging problems and fulfilment of requirements for participation in global programs.

Low consumption of energy and water

- ▶ Better energy efficiency and use of solar energy for hot water reduce energy consumption and thus housing expenses for inhabitants.
- ▶ Solar collectors makes available electricity and hot water in regions without infrastructure for energy supply.
- ▶ Renewable energy resources are alternatives to traditional fossil resources: they lead up to cooking without fuelwood and free women and children from the need of collecting firewood.

ASH - an ecological sustainable certified Product

- ▶ The „African Sustainable House" is targeted at the specific region and certified as "Climate House C".
- ▶ It connects technical functionality, considering sanitary and health conditions, with economic capabilities to cover expenses for house and connected services.
- ▶ Regarding energy and water the preferred solutions allow simple, cost-efficient and demand-based extensions of the supply and disposal systems.
- ▶ ASH is easily transportable, cost-efficient, with a very short setup-time (6 hrs) and longterm usability.

Implementing ASH

- ▶ In cooperation with the present southafrican partners deriving from the "people-to-people dialogue Loccum-Oudtshoorn" possible target groups for the first stage have to be determined and socio-cultural background information has to be collected. Where do future inhabitants come from? Their individual, cultural, educational background and skills in entering the process? Qualifications and skill to be acquired? Their interests in the project?
- ▶ In this stage an open dialogical process involving all participants is essential for success.
- ▶ Ten houses are envisaged for this stage of the project. The houses are (pre-)financed with public fundings and - through education and coaching by experts - build by the future inhabitants themselves. .

- ▶ The inhabitants should be educated to become future promoters, to be enabled in governing the setting up and technologies of the house, and in sharing their knowledge with others. Furthermore they should contribute with their life-experience in developing socio-economic and socio-cultural standards, who may become groundwork for conceiving future ASH-villages.
- ▶ Skills and competences thus acquired may be also the starting point for income-creation.
- ▶ In this stage contacts with University of Cape Town, UCT, School of Social Development and/or University of Witwatersrand, Johannesburg, School of Social Science, and the educational and skill-training programme of the Government of Lower-Saxony for Eastern Cape will be important to develop and implement ASH-concept of "council/public housing". (Topics: education and skill-training for children and youth; HIV/Aids care networks; assistance for HIV/Aids orphans; job-creation etc.).
- ▶ Questions regarding financing of future acquisition of property by inhabitants have to be dealt with during this initial stage of the project.

At present we are working with the following partners:

- ▶ Autonome Provinz Bozen, Italy
Herr Dr. Walter Huber
- ▶ Niedersächsische Landesregierung
(Staatskanzlei und Kultusministerium)
- ▶ Carl von Ossietzky Universität Oldenburg
- ▶ Evang. Akademie Loccum
Herr Dr. Anhelm
- ▶ Klimahaus Agentur Bozen, Italien
- ▶ Salzgitter Bauelemente GmbH, Salzgitter
- ▶ Technische Universität Hamburg-Harburg
Herr Prof. Ralf Otterpohl