Preparation Phase (duration: 6 months)

During this phase a solid project consortium will be put together which will make specific plans how to cooperate and how to develop adapted solutions to promote sustainable buildings and sustainable urbanization in Cambodia in partnership with an adequate set of local communal and academic partners.

The most important event of this phase will be a stakeholder workshop in Phnom Penh hosted by the Cambodian Institute of Urban Studies (CIUS).

Definition Phase (18 months)

This phase shall research the regional conditions and will mainly produce status reports on the various topics of urban sustainability. We also envisage to organize an exhibition showing good-practice examples of green buildings & energy-efficient neighbourhoods from Germany.

A full proposal for the main phase will be submitted 12 months after the project has started. The definition phase will be so designed that it already produces exploitable results even if no further funding is provided.

Research & Development Phase (2 x 24 months)

During the four-year R&D phase we will produce information reference tools and resources to disseminate our research results to the municipal authorities, the local industry and for use by the general public. The tools and resources for intelligent implementation developed in close cooperation with local stakeholders include handbooks for green housing for various target groups, an index of urban quality of life, several demonstration projects, e.g. together with a local school, as well as capacity buildings measures at universities and among practitioners.

Furthermore, feasibility studies will be conducted to prepare the inclusion of companies and of international donor organisations into the subsequent implementation phase.

Implementation Phase (24 months)

This phase aims to encourage the practical implementation by involving partners such as GIZ, KFW, TUEV Rheinland or other donor organisations, and to extend the results of our project to other cities in Cambodia.

Overview of the Project Consortium

We have gathered a multi-disciplinary team with a proven record of academic excellence, extensive regional expertise and solid project experience.

Main Cambodian Research Partner Cambodian Institute of Urban Studies Director: Dr. Tep Makathy Project Coordinator: Tep Kuntheara



Work Package 1: Behaviour Change

Responsibles: Dr. Anke Blöbaum / Prof. Dr. Ellen Matthies



FACULTY OF NATURAL SCIENCES

Work Package 2: Sustainable Buildings Responsible: Dr. Dirk Schwede



University of Stuttgart Germany

Work Package 3: Sustainable Neighbourhoods Responsible: Dipl.-Ing. Rolf Messerschmidt

EBLE MESSERSCHMIDT PARTNER

Architects and Urban Designers PartGmbB

Work Package 4: Urban Green

Responsible: Prof. Dr. Jan-Peter Mund



Work Package 5: Urban Climate

Responsibles: Prof. Dr. Lutz Katzschner / Sebastian Kupski



Work Package 6: Sustainable Urban Transformation Responsible: Dr. Michael Waibel





University of Hamburg - Department of Earth Sciences Institute of Geography - Division of Human Geography Project Leader & Coordination: Dr. Michael Waibel Bundesstraße 55, 20146 Hamburg, Federal Republic of Germany Email: info@buildpeople.de / michael.waibel@uni-hamburg.de

Local Project Coordination Support: Dr. Susanne Bodach Email: susanne@ecothinking.de / Mobile: +855-12-856-174

BuildPeople Project

Sustainable Buildings for People – Enhancing Urban Quality of Life in Cambodia



"The battle for a more sustainable future

will be won or lost in cities"

2012 Manifesto for Cities, Global Mayors' Forum

PROJECT LEADER

SPONSORED BY THE





Architecture

Metereology

WP7: Coordination,

Urban Planning

Civil Engineering

Remote Sensing and

GENERAL RESEARCH GUIDING PRINCIPLES

balanced mix of bottom-up & top-down

inclusive

locally adapted solutions

adapted solutions

advocacy

multi-stakeholder coalitions

convincing people demand-driven

impact management

EXPECTED FINAL RESULTS / SELECT IMPACTS

eco town development

innovative governance forms

capacity building

adapted policies and standards

integrated urban planning

pro-environmental behaviour

mass effects through replication

lowered GHG emissions

healthier urban climate

more Urban Green

promoting ownership

solution-based research

Green School

dissemination

DGNB certification

sustainable buildings

Urban Quality of Life City Index

market entry of German SME

Rationale & Background

Despite Cambodia's long tradition of *vernacular architecture* where initial building practices took climate conditions into account with, currently there is only limited knowledge and awareness about the subject of sustainable buildings.

WP5

WP4

WP3

WP2

Behaviour Change

Sustainable

Building_

Urban Green

Urban Climate

The development towards a *modern consumer society*, giving rise to more *resource-intensive life-styles*, strongly effects the way buildings are designed, built and operated. Consequently, electricity consumption per capita has risen sharply within recent years.

Investing in energy efficiency promises a very good return on investment because electricity prices in Cambodia are among the highest in the region. Improvements to energy efficiency will save hundreds of millions of dollars each year. Another advantage will be to decrease energy import dependencies thus increasing the competitiveness of Cambodia's economy.

Originality of the Project

Sustainability is a *transversal issue*. To achieve a viable implementation with a sustained impact we pursue a *trans-disciplinary* and *holistic approach* incorporating innovative methods and expertise from various fields (see above).

The work package teams will cooperate together, share their findings and develop *joint deliverables*. Tools and products will systematically build upon each other. *Learning curves* and *feedback loops* will be incorporated into the project design.

The promotion of sustainable buildings cannot only happen in the top-down manner of simply issuing regulations. Therefore, to *kick-start change* and *advocate implementation* we will follow an inclusive approach of *engagement*, *encouragement*, *enablement* and *exemplification*. In this context our methodology is to *convince people* rather than to force them.

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Overall Objectives of the Project

The objectives for the Sustainable Buildings for People - Enhancing Urban Quality of Life in Cambodia project are to promote *sustainable buildings* and *sustainable urban development*.

With this project our multi-disciplinary team focuses on people's needs and aspirations, and aligning those with tools to benefit and enhance their living. We believe this will lead to major effects on urban sustainability through more energy- and resource-efficient buildings. The results we seek are no less than significantly lowered greenhouse gas and pollutant emissions, a better indoor environment, an increase of urban green, a healthier urban climate, raised awareness among decision makers, modified behaviour among the urban population and an overall better quality of urban life.

Our Advisory Board will ensure that our measures are demand-driven and adapted to the local context.