Build4People – Project activities on site in Phnom Penh, Cambodia in September and October 2022

In September and October 2022, the Build4People team was on site in Phnom Penh for the second time in 2022 and carried out various activities with the local partners. This publication provides a detailed overview of the individual project activities and events that were the focus during this stay.

“Sustainable Building” Science Workshop at Institute of Technology of Cambodia (ITC):
“Sustainable Building Dimensions & Solutions for Phnom Penh and Cambodia”

On 29 September 2022, the 3rd Science Workshop of Build4People WP2 “Sustainable Building” took place at the Institute of Technology of Cambodia (ITC). The purpose of this workshop was to promote knowledge exchange between the German and the Cambodian side of the Build4People project and try to answer the question of what is a sustainable building in the Cambodian context and what are the most important environmental challenges that should be considered when such a definition is attempted.

Multiple Cambodian and international researchers presented their work, amongst them the WP2’s Cambodian research partners Dr. Virak Han, Ms. Taing Kimneng, Mr. Long Makara and Ms. Keth Kannary.

During the event the Build4People consortium leader Dr. Waibel handed over 15 copies of the Build4People special edition of the Architectural Guide of Phnom Penh in Khmer language (published by Moritz Henning and Walter Koditek).

The Build4People team would like to kindly thank ITC for supporting and co-organising this event and all of the presenters and participants for sharing their meaningful research and valuable insights from Cambodia.
Successful launching event of the Build4People Sustainable Building Incubator at Impact Hub Phnom Penh

On 01 October 2022, there was the launching event of the Build4People Sustainable Building Incubator (SBI), a 4-month entrepreneurial program for aspiring entrepreneurs who are looking for solutions to re-invent and innovate how we build, plan and live together by making our buildings more sustainable and liveable.

At the end of this process (with continuous support from Build4People team members and other local experts) the envisaged 7 different thematic working groups will pitch their ideas to potential investors. The program aims to catalyze the talents and support them in developing and strengthening their first innovations through a tailored and intense incubation program.
Build4People “Urban Green Infrastructures” Science Workshop at Royal University of Agriculture

On 03 October 2022, the Build4People WP#4 “Urban Green Infrastructures” Science Workshop took place at RUA, Phnom Penh.
During the event, the Build4People consortium leader Dr Michael Waibel together with the Build4People Work Package #4 “Urban Green Infrastructures” leader Prof Dr Jan-Peter Mund had the pleasure to hand over a state-of-the-art Thermal UAV Camera System to their research partner at the Faculty for Land Management and Land Administration (FLMLA) at the Royal University of Agriculture.

The Build4People team would like to express its sincere thanks to Dr Sanara Hor, Vice-Dean of Faculty of Land Management and Land Administration at RUA, for the great preparation of this successful event with a high number of participants. Your efforts are very much appreciated.

**Build4People roundtable meeting with the Housing Development Association of Cambodia**

On 03 October 2022, a roundtable meeting with the President of Housing Development Association of Cambodia, Oknha Ly Hour, and further representatives of this key institution took place. This first exchange served to discuss the promotion of sustainable neighbourhood development in the country and the potential role of Cambodian developer companies to contribute to this.

The introduction of the comprehensive Build4People approaches have been met with sincere interest and the team hopes that the exchange is the kick-off of a fruitful cooperation. Thanks go to Martin Saram, Phnom Penh Capital Hall, for having arranged this fruitful meeting.

**Meeting with the Ambassador of the Federal Republic of Germany to the Kingdom of Cambodia, Stefan Messerer, on the occasion of the 32nd Day of German Unity**

On 03 October 2022, Dr Michael Waibel, leader of the Build4People consortium, Prof Jan-Peter Mund, leader of Build4People Work Package “Urban Green”, Prof Dr Lutz Katzschner, leader of Build4People Work Package “Urban Climate”, and Rolf Messerschmidt, leader of Build4People Work Package “Sustainable Neighbourhoods”
had the great honor to get invited to the official reception on the occasion of the 32nd Day of German Unity at the residence of the German Ambassador Stefan Messerer in Phnom Penh.

This turned out to be the perfect opportunity to briefly introduce the key approaches of the Build4People project to the German Ambassador and to other invitees in the course of the reception. The Build4People team would like to express its sincere thanks for the invitation to join this memorable event.

Build4People roundtable workshop at the Ministry of Land Management, Urban Planning and Construction (MLMUPC)

On 04 October 2022, the Build4People team organised a roundtable workshop together with representatives of the Cambodian Ministry of Land Management, Urban Planning and Construction (MLMUPC).

The main purpose of this event was to introduce lessons learned of the Build4People Ecocity Transition Lab (ECTL) held at Phnom Penh Capital Hall in March 2022. Thereby, the team explained that the empirical findings of the ECTL series shall finally support the evidence-based collaborative design of strategies and early-stage planning criteria for sustainable neighbourhood development in Phnom Penh.
As the development of these planning criteria for sustainable neighbourhood development is regarded as of strategic importance for Cambodia’s Ministry of Land Management, Urban Planning and Construction (MLMUPC), as well, we discussed how these can been mainstreamed into policy making.

To achieve this, it was finally discussed which formal procedures are needed to enter a cooperation scheme between the Build4People team and the MLMUPC.

**Build4People team meets leading representatives of Paññāsāstra University of Cambodia to discuss support of the new master course “Sustainable Urban Transformation Planning”**

On 04 October 2022, there was an intense meeting at Faculty of Architecture and Urban Planning of Paññāsāstra University of Cambodia to discuss the development of a new innovative master course with the working title “Sustainable Urban Transformation Planning” which shall get supported by the Build4People project.

This new master course shall reflect the people-centred cross-cutting and integrated urban transformation approach of our multi-disciplinary team.

The meeting ended with a joyful ceremony during which representatives of Paññāsāstra University of Cambodia handed over traditional Khmer scarfs to the Build4People team members.
Build4People roundtable workshop at Phnom Penh City Hall

On 05 October 2022, a Build4People Roundtable Workshop took place together with representatives from Phnom Penh Capital Hall and from Chbar Ambov District.

The objective of this exchange was to discuss the results of the Build4People Ecocity Transition Lab held at Phnom Penh City Hall in March 2022 and to present proposals for follow-up activities. These include, among others, the more specific development of green design guidelines and of early-stage planning criteria for sustainable neighbourhoods. In addition, first ideas were presented about certification approaches to measure sustainability on neighbourhood level.

Furthermore, the government officials were requested to categorize thematic fields of sustainable neighbourhood development in regard of the achieved progress and future outlook.

This workshop was also attended by two representatives of the SURE Facilitation and Synthesis Project, Dr. Katharina Borgmann, HafenCity University Hamburg and Anika Slawski, Technical School of Applied Sciences Lübeck. Our team is grateful that Katharina provided a greeting word and introduced about the SURE funding initiative.
Exchange of Build4People team with representatives of the developer company Worldbridge Homes, Phnom Penh

On 05 October 2022, the Build4People team and two representatives of the SURE Facilitation and Synthesis Project met with Sothirith Yuk and further representatives of Worldbridge Homes Co Ltd.

WorldBridge Homes is a subsidiary of WorldBridge Group, whose major projects in Phnom Penh include The Bridge and The Peak buildings. In addition, it has recently invested $73 million into a 23ha affordable housing project in Kandal province’s Koh Kor village, in Sa’ang district. The price of the housing units in the project with dimensions 4mx7m range from $25,000 to nearly $30,000. During the meeting, the participants fruitfully discussed how the comprehensive cross-cutting people-led approach of Build4People can be incorporated into new projects of Worldbridge Homes.

“Sustainable Urban Transformation” Science Workshop at Royal University of Phnom Penh (RUPP)

On 06 October 2022, the Build4People Work Package #6 “Sustainable Urban Transformation” and their research partners from the Royal University of Phnom Penh (RUPP) held a productive Science Workshop at the Cambodia-Korea Cooperation Centre.

The aim of the workshop was to collaboratively advance the problem framings and visions for Phnom Penh by encouraging the participants to co-create innovations towards urban sustainability. Further, the workshop served to introduce the empirical research of WP#6.

The day began with an introduction to the agenda by Dr. Sothun Nop (RUPP), followed by greeting words from the Build4People consortium leader Dr Michael Waibel, Dr Katharina Borgmann (HafenCity University Hamburg, SURE Facilitation & Synthesis Research Project), and Dr Sok Vanny (Vice-President of RUPP).

The following parts of the workshop were focused on the research of WP#6, with Ravi Jayaweera (Research Associate WP#6) introducing the current research results concerning the characterization of the socio-technical system of the building sector in Phnom Penh and Dr. Sothun Nop presenting the concept and results of the Sustainable
Building Arena (SBA), which took place last spring. To the participants delight he held his presentation in Khmer language.

Finally, the participants got to work with the aforementioned SBA results. Together, they prioritized the presented visions and challenges for Phnom Penh and actively discussed ways to ‘bridge the gap’. This part of the workshop was kindly facilitated by Dr Sothun Nop, Dr Seak Sophat (RUPP), Nuria Roig (Research Associate WP#3 “Sustainable Neighbourhoods”), and Alina Hoeck (Student Assistant of Build4People at Hamburg University).

Our sincere thanks go to all of the presenters, to the very active participants and to the great organization team from RUPP who made this possible. Your efforts are very much appreciated.

**Link to YouTube video clip documentation of Build4People “Sustainable Urban Transformation” Science Workshop at Royal University of Phnom Penh**

**Build4People Master Course Curriculum Development Workshop with Royal University of Phnom Penh (RUPP)**

On 06 October 2022, there was an exchange between Build4People representatives and lecturers from RUPP about opportunities to feed in expertise from the comprehensive knowledge and multi-disciplinary expertise of Build4People team members into the current process of Master course curriculum development at RUPP. One focus of discussion was the upcoming Master course in Geography at RUPP.
The participants concluded that both sides may significantly benefit from this but that this requires a step-by-step approach, and patience, as well.

Meeting of informal group of sustainable city and building innovators discussing “Sustainable Neighbourhood Design Strategies”, facilitated by Future Forum Cambodia and Build4People

On 06 October 2022, the Build4People project co-organised the second session of an informal group of sustainable city and building innovators together with Future Forum Cambodia. This group firstly came together during the Build4People Sustainable Building Arena in March 2022 and now includes architects, researchers, real estate developers, urban planning students, young entrepreneurs, etc. in the field of sustainable building.

The very lively discussions were about how to implement sustainable neighbourhood development strategies in Phnom Penh. Participants discussed the first draft of strategies for sustainable urban development, developed by Build4People WP #3. Each table had one or two thematic sets and the focus was on evaluating the level of likelihood and the limitations of the proposed criteria.
Exchange of Build4People team with representatives of Borey Peng Huoth developer company at its headquarter in Chbar Ambov district, Phnom Penh

On 07 October 2022, there was a promising exchange of the Build4People team with leading representatives of Borey Peng Huoth to discuss potentials of cooperation to support the implementation of comprehensive sustainable neighbourhood development. This was a follow-up meeting of previous exchanges in March 2022 and in May 2022.

The ultimate goal of this exchange is to establish a firm cooperation between Build4People project and Borey Peng Huoth, e.g. based on a Memorandum of Understanding (MoU). The next step would be the joint conduct of an Build4People Ecocity Transition Lab located within the compound of Borey Peng Huoth at Chbar Ampov District in March 2023.

Link to YouTube video clip documentation of Build4People Roundtable Workshop with Borey Peng Huoth Developer Company
Build4People “Urban Climate” Science Workshop at Royal University of Phnom Penh (RUPP)

On 10 October 2022, the Build4People WP#5 “Urban Climate” Science Workshop at Royal University of Phnom Penh (RUPP) took place.

On this occasion Prof Dr Lutz Katzschner introduced about the first draft of the Urban Climate Map of Phnom Penh developed with dedicated support from Dr Nyda Chhinh, Bunleng Se and Dr Daniel Choi from RUPP. In the course of his presentation Prof Dr Lutz Katzschner explained that urban climatic analysis with the outcome of an urban climatic map is an essential tool for sustainable urban development, particularly to reduce the urban heat island effects. Therefore, a comprehensive study of the meteorological conditions in Phnom Penh was carried out by the Build4People Work Package “Urban Climate” with strong support from research colleagues at RUPP, Royal University of Phnom Penh.

The introduction of the first Phnom Penh Urban Climate Map is a major milestone of the Build4People project because it provides a complete picture of a city-wide structure of the urban heat island, hot spots but also areas which are needed for ventilation and nocturnal cooling. Moreover, it shows the important air corridors. The ventilation in Phnom Penh is characterised by dominating winds using these corridors but at the same time thermal induced circulations occur which are for advantage of thermal comfort and wellbeing. The calibration of the map is carried out with reference station of all meteorological parameters set-up by the local research partners from RUPP.
Overview of Activities of Build4People Team Stay in Phnom Penh, 2nd Stay in 2022

Schedule of Build4People Team Stay in Phnom Penh, Sept / Oct 2022

<table>
<thead>
<tr>
<th>Day</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
<tr>
<td>Thursday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
<tr>
<td>Friday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
<tr>
<td>Saturday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
<tr>
<td>Sunday</td>
<td>Build4People Team Welcome at the SUFC Vaccination Center (10:00 am)</td>
</tr>
</tbody>
</table>

Free time: Use your valuable time to pursue individual research activities of each Build4People Work Package.