



Press Release - 18 June 2013

On the discovery of Mahendraparvata, the “Lost City” of Phnom Kulen

Following the widespread media interest concerning the recent discovery of an ancient city on the plateau of Phnom Kulen, Cambodia, the Archaeology and Development Foundation (ADF), the primary actor in its discovery, would like to provide more information on this topic.

The Archaeology and Development Foundation (ADF) is a British charity created in 2008 to conduct archaeological research and cultural conservation on Phnom Kulen. Dr. Jean-Baptiste Chevance, a French archaeologist who had been working on Phnom Kulen since 2002, founded this charity to answer the needs for an institution solely dedicated to the region of Phnom Kulen. It is the main organisation conducting systematic archaeological work on Phnom Kulen, with the National APSARA Authority since all work was suspended on the plateau by the arrival of the Khmer Rouge in 1970. ADF's activities include archaeological survey, research and excavations to understand the ancient history of the plateau. One of ADF's goal is to confirm the existence of an ancient capital on the Phnom Kulen plateau, called Mahendraparvata, which is mentioned in ancient scriptures. Its existence, suspected since 1900 due to the presence of about 30 temples from the 8-9th Century, had never been confirmed. ADF archaeological excavation's since 2008 had given more and more evidences of the presence of this capital on the Kulen plateau.

ADF is working in collaboration with the APSARA National Authority, representing the Government of Cambodia, notably for the protection of the archaeological sites. Moreover, ADF conducts development work to ensure that the local population's livelihood is improved, with projects on education, nutrition, income generation and environment. It also coordinates the mine clearance of suspected hazardous area with the Cambodian Mine Action Center (CMAC).

In late 2011, a consortium of institutions working on archaeology in Cambodia was created to raise funds, plan and conduct an aerial survey using LiDAR technology. LIDAR is a new remote sensing technology using an airborne laser to create 3D topographic models of the ground even under dense forests. The consortium, created at the initiative of University of Sydney, under the supervision of Dr. Damian Evans, comprised eight institutions from seven countries:

- Authority for the Protection and Management of Angkor and the Region of Siem Reap (APSARA);
- École française d'Extrême-Orient, Siem Reap Centre (EFEO);
- University of Sydney, Robert Christie Research Centre (USYD);
- Société Concessionnaire d'Aéroport (SCA);
- Hungarian Indochina Company (HUNINCO);
- Archaeology & Development Foundation Phnom Kulen Program (ADF);
- Japan-APSARA Safeguarding Angkor (JASA);
- World Monuments Fund (WMF).

ADF was able to joint this consortium thanks to additional funding from the Mohamed S. Farsi Foundation. In April 2012, the aerial survey was coordinated by the University of Sydney and conducted by PT Mc Elhanney, a Canadian company specialised in LiDAR technology. The raw data collected during the survey was then processed for several months and provided to the



different partners of the KALC consortium in July 2012.

The results of the LiDAR acquisition on the Kulen, although they have been the focus of media attention so far, form only a part of a range of remarkable discoveries made possible by the LiDAR consortium, including previously unidentified urban networks at Angkor Wat and Koh Ker. These outcomes are to be published in an upcoming edition of the Proceeding of the National Academy of Sciences, following a thorough process of peer review by an eminent group of international scientists. Both Dr. Damian Evans and Dr. JB Chevance are co-authors of the paper, and are in full agreement about the nature and implications of the LiDAR results at Kulen and elsewhere.

In July 2012, Stéphane De Greef, cartographer for ADF, started the post-processing and analysis of the LiDAR data, comparing it to all the archaeological sites known on Phnom Kulen. After several months of data treatment, it was highlighted that hundreds of formerly unknown 'topographic anomalies', each potentially an ancient feature, had been identified. Considering the number and extent of these new features, a long ground verification process was required, which was conducted from September 2012 until today by Stéphane De Greef, Jean-Baptiste Chevance and Sakada Sakhoeun. This field check is an essential process to distinguish ancient man-made structures from natural features. At the same time, excavations were conducted by Dr. Jean-Baptiste Chevance and ADF team on newly discovered sites, confirming their ancient nature and historical importance.

As of June 2013, the ADF confirms the existence of a widespread urban network consistent with an ancient capital city from the beginning of the Angkorian period. What appear to be massive highways, oriented along cardinal points and extending straight over several kilometres, are linking the sacred sites together, including long-known temples and many new undocumented ones. A complex hydraulic system to collect, store and redistribute water on the plateau was highlighted. Moreover, others features identified through LiDAR are completely unheard of in the Khmer archaeological nomenclature and their function remains unsure. All these findings thanks to the LIDAR technology are leading to the confirmation of the existence of Mahendraparvata, the ancient capital on the Phnom Kulen plateau.

- This discovery represents a lifetime achievement for all the persons involved but it is only the beginning of a much wider work, which will require both time and funds.
 - The newly discovered urban network, which is located in the middle of Kulen National Park, is threatened by deforestation and will require urgent protection measures.
 - Further research, including for diagnostic, for studying the nature and function of ancient sites recently identified, and excavating the most important ones are required.
 - Besides, the population of Phnom Kulen, who has been living for centuries on the archaeological sites, will play a crucial role in their protection.
 - Finally, more funds will be required to conduct a much wider LiDAR acquisition, as the limits of the city extend beyond what has been identified over the last two years.
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PHNOM KULEN PROGRAM

- For more information about the above recent discoveries by ADF on Phnom Kulen, please contact:
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 - For more information about the ADF and its activities, please refer to www.adfkulen.org
 - For more information about the LIDAR mission in Angkor and Koh Ker region, as well as the KALC consortium, please contact:
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