

ADF Annual Summary Report 2016

Please find below the 2016 ADF annual summary report for both the archaeology and the development components.

ARCHAEOLOGY:

Maintenance and conservation program:

- Land mine & Uxo removal program: In order to secure our archaeological team and the local villagers, ADF has funded and coordinated the demining of the targeted area for the 2016 excavations. In total, one CMAC team demined 3.1 additional hectares from 15th of February until the 25th of March 2016. This is to be added to the 36 hectares previously secured in Phnom Kulen over the 8 past years.



CMAC Team member clearing vegetation, during the 2016 demining operation, coordinated by ADF in Phnom Kulen, 15th of March 2016.

- Assistance to APSARA National Authority for the heritage management in Phnom Kulen:
ADF is continuing the assistance to APSARA Authority for the conservation and the maintenance of the archaeological sites in Phnom Kulen. This concerns the ongoing maintenance of the monuments and their respective Archaeological Protected Areas (APA, 800 hectares).
Since 2010, ADF has been working on a complete sandstone artifacts inventory for the Phnom Kulen archaeological sites. This inventory was completed and finalized in

November 2015 and includes 460 entries using standard methodology. The report was submitted to APSARA Authority in March 2016.

The complete topographical surveys of the 1000 linga site and Kbal Spean, and the information signboards were finalized in 2016. These boards should be installed in 2017.

Finally, ADF has facilitated the relation between the villagers and the APSARA Authority for the restoration project of an Angkorian dike (Thnal Dac), requested by the villagers in 2014. The objective of this restoration undertaken by APSARA was to rehabilitate the adjacent reservoir supplying the water for the villagers. The modern breach was filled with soil coming from the vicinity of the dike and the ancient channel. Filled during the Khmer Rouge period, it was re-opened with a cement spillway. In the future, it could also offer alternative livelihood (fish raising, boat trip). This project was completed in June 2016. A limited topographical survey was also undertaken by ADF to document the inner structure of the dikes, at the modern breach location and before it was filled.

ADF team was also able to use a drone at Prasat O Paong to document the elevation of the tower, and particularly the upper part, in order to create a 3D model. It will be useful for the conservation by APSARA of this most emblematic temple on the plateau.

- Restoration of artifacts: No artifacts (sandstone, ceramic or metallic) were requiring restoration/conservation in 2016.
- Archaeological Protected areas (APA): Due to the lack of funds, no funds new APA were demarcated during the year 2016 in the Phnom Kulen National Park. However, ADF has initiated a test for collaboration with the rangers from the Ministry of Environment, to monitor these zones. The results show that this activity requires a proper framework, as the rangers need more training and ADF need more resources to manage them. The responsibility of their management is still under the APSARA Authority but it should be officially determined within the Phnom Kulen Management Plan in 2017.



Limit of Rong Chen Archaeological Protected Area. Villagers stopped their destructive agriculture practices just at the limit established by ADF & APSARA, 5th of April 2016.

Archaeological research, diffusion/communication and training:

- Field verification of features from the 2012 and 2015 Lidar campaign:
The Phnom Kulen 2012 Lidar Campaign was undertaken within the KALC project, covering Angkor, Koh Ker and 30 km² in Phnom Kulen, funded by ADF. The 2015 Lidar campaign was initiated by EFEO under the CALI project and is covering 5 major archaeological sites in Cambodia. The largest acquisition area is the entire range of the Phnom Kulen National Park, from Varin district to Beng Mealea temple.



APSARA and ADF team during the ground verification of the archaeological feature revealed by Lidar.

In close collaboration with the CALI/EFEO project, ADF has been associated with the field verifications, focusing on the top of the plateau. ADF team, in association with the APSARA Authority archaeologists, has continued the ground verification and the inventory of the archaeological features revealed by the Lidar campaigns from 2012 and 2015. The identification and the digitization of the features discovered have continued, the objective is to create a comprehensive archaeological map of Phnom Kulen. In 2016, the surveys allowed to identify more than 244 features from *Mahendraparvata*, the ancient capital of the IXth century, totalizing at the end of 2016 584 features inventoried. Additional surveys will continue in 2017.

A progress report in Khmer has been submitted in September 2015 to the APSARA National Authority. It was completed and delivered in February 2016. It will be updated and an article summarizing the results of the research will be published in 2017.

- Field survey on the hydraulic ancient features:
In close collaboration with the CALI/EFEO project and APSARA Authority, a field survey was undertaken in December 2016 to study specifically the main Angkorian hydraulic features in Phnom Kulen (Thnal Thom, Thnal Dac, Thnal Phleu Russey, Spean Pring, O Tuk Lik channel and its perpendicular dam). The objective was to better understand their functioning and to locate potential sluice gates in the channel of these features. A specific publication is planned in 2017 or 2018.
- Excavation campaign: 15th of March to the 8th of April 2016
The selected sites for the 2016 excavation campaign correspond to archaeological features discovered thanks to the Lidar campaigns in 2012 and 2015. After the 2013 and 2014 campaign focusing on earthen mounds, platform and one main axis, ADF has excavated other type of features: ponds located inside plots and their links with the dike of the main axis grid of the ancient city.
The ponds are particularly small and have captured artifact as well as successive layers of charcoal and soil, showing an intensive activity after their abandonment as ponds. Their link with the main axis of the ancient grid is also an indication of their early date.
In two other sites, the objective of the excavations was also to test the space between a pond and the dike from the grid of the ancient city, and a zone between a temple platform and the same grid. In the first case, the trench has revealed a significant and single layer of occupation; probably from the early 9th century. The fragments of pedestal from the Prasat Peam Kre were gathered on the platforms of each of the 2 towers and documented.



Excavation trench between Prasat Peam Kre and the dike of the ancient city,

The archaeological data and artifacts from the 2016 excavations were processed at ADF office in Siem Reap. Further studies (ceramic, radiocarbon) will be undertaken in 2017.



Graduated archaeologists recording the ceramic unearthed during the 2016 archaeological campaign, May 2016.

Two archaeologists from the APSARA Authority, as well as 2 graduated students from the Faculty of Archaeology, Royal University of Fine Arts, have participated to the excavations.

ADF has provided a summary report in Khmer of the different activities undertaken during these excavations to the APSARA Authority and to the Minister of Environment.

- Diffusion and communication:

ADF have participated in one documentary (TSVP) that will be broadcasted on ARTE channel in 2017. Other press media also mentioned the archaeological work of ADF such as Le monde, La Stampa, The Smithsonian Magazine, Archeologia, Sciences et Avenir and Geo Magazine.

Three scientific articles were published in the BEFEO and Aséanie. Further are expected in 2017, presenting the ancient urban network of *Mahendraparvata* and the hydraulic features.

ADF has participated in the SPAFA Conference in Bangkok (30th May-2nd of June 2016) with a presentation by Mr. Sakhoeun Sakada entitled "From education to protection, the management of the Phnom Kulen archaeological sites".

ADF has presented its work at the technical session of the ICC on the 22th of June 2016. Finally, the ADF team, along with the APSARA Authority, has co-organized the Phnom Kulen seminar, focusing on archaeology, environment and population in the



massif, on the 24th June 2016.

- Training:

The close collaboration between the APSARA Authority and the ADF archaeologists during the various activities has also provided a platform for field training to the APSARA local staff (archaeologist and local workers). ADF has offered training to 2 graduated students for 2 months, during and after the excavations, during which they were trained to field photography, recording data from the trenches, and field drawing. During the data treatment phase at the office, they have participated to the identification and the inventory of the ceramics, their drawings and the digitalization of the field drawings.

DEVELOPMENT:

- Income generation component: As for the previous 6 years, ADF is continuing the support to local villagers with the objective of replacing the existing environmentally destructive agricultural practices (e.g. slash & burn combined with cashew nut farming), by sustainable alternatives and environmentally friendly sources of incomes for the population of Khnong Phnom commune.

ADF propose technical assistance and materials to the families to undertake animal raising (chicken: 23 families; fish: 3 families), small-scale mushroom farming (2 families) and seasonal vegetable growing (10 families, 1 primary school at Sangke Lack village). In 2016, ADF was closely monitoring the incomes and expenses of each of these 39 beneficiaries. With the objective to transform these producers into independent local entrepreneurs, ADF is encouraging them to contribute with their incomes to the costs. This will allow taking ownership for their business, ensuring sustainable alternative income.

ADF plan to extend the number of beneficiaries in 2017.



**Training activity on curing chicken disease and prevention by ADF-
Income Generation coordinator, February 2016.**

- Since 2014, ADF is also managing a mushroom production center in Preah Ang Thom village, acting as a cooperative, a training center and a hub for other products and producers from remote villages, creating the link between the producers/farmers and the important market. The main constraint during the year 2016 was climate changes and an insect infestation, which has reduced the production. The center will be hand over to the local authorities in 2017.

- ADF continued to work closely with the private sector (Terre Cambodge travel agency) to ensure that incomes from the tourism in remote villages are benefiting the local villagers (home stay, guards, guides, shared activities...).
- The nutritional health & hygiene component continued over the year 2016. This nutrition and health component is targeting 4 villages (Popel, Phum Thmey, Sangke Lak and Khlah Khmum) and focusing on malnourished children from 0 to 5 year old and their mothers. ADF has also supported the salary of a mid wife for 2 months at the Anlong Thom Health centre. A particular focus was put on hygiene training sessions for the children at schools. ADF team also made a primary survey to determine the causes of malnutrition. A close collaboration with the Commune Health Centre is established to assist severe health cases and assistance is provided if transport to Siem Reap hospital is required. A second phase of this component is expected to be fund in 2016-2017.



ADF Nutrition and hygiene assistant training the 4 Villages Health Facilitators, June 2016.

- ADF continue to supervise the rice bank committee in Tmma Chruogn village (39 families) to alleviate food insecurity.
- The educational enhancement & support of primary schools in Khnong Phnom commune continued in 2016. The objective of this component is to motivate the children of the villages to attend school and to raise the educational standards for the population of Phnom Kulen. ADF has provided infrastructures according the teachers needs.
- In Ta Peng and Anlong Thom village, after the main school building were renovated, playgrounds and bins installed, tree nurseries were built, tree planted, other facilities were repaired and games and books disseminated. A library was set up in Ta Peng primary school thanks to Terre Cambodge donations and partners. These activities were continued in 2016 and developed in Khlah Khmum primary school.

- During the year 2016, ADF decided to focus this component toward one sole primary school, with a clear project responding to the needs of the most neglected school of the plateau: Sangke Lak primary school. The “Kurere” program was defined and approved by the teachers, the village chief and the commune, to enhance the school facilities and to encourage good hygiene and environmental practices. In partnership with Terre Cambodge and TDS Voyage, this project comprise training session about basic hygiene, the setting up of water system for the school, the construction of toilets, sinks, tree nursery and incinerator. The water system and the training session were initiated at the end of the year 2016. Finally, ADF has facilitated the Siem Reap Human Resource Club to disseminate its donations to the primary school of Sangke Lak and Anlong Thom.



Setting up of the water system for Sangke Lak water system, November 2016.

ENVIRONMENT:

- ADF continued to define and facilitate in 2016 the studies implemented by the School of Fields Studies, with a research collaboration program focusing on natural resource governance and management and livelihoods, and the environment Interface in the Phnom Kulen National Park.
- ADF is also involved in the environmental protection by combining data to the geo-database about the environmental threats, and by disseminating them to the relevant authorities (Ministry of Environment, APSARA Authority, District and commune authorities...). ADF continued in 2016 to integrated in our GIS system all illegal-logging points and recently burned plots of forest for cultivation purposes within the Phnom Kulen National Park and has reported them to the MoE.

- ADF team has continued to be one of the main actors to provide information from the field for the design of the Phnom Kulen Management Plan, under the supervision of the Ministry of Environment, with the assistance of UNDP experts. In this framework, ADF management team has met representatives from the Ministry in Phnom Penh and Siem Reap, including representatives of the REDD+ project and Initiative fund project.



Kulen working group meeting with H.E. Say Sam AI, minister of Environment, 27th October 2016

- Nevertheless during the year 2016, the traditional destructive agricultural practices (slash & burn combined with cashew nut farming) and the illegal logging were still largely used in Phnom Kulen National Park. Less than 20% of forest cover left will disappear in the next few months, if no other major alternative solutions are implemented on a large scale, and if the environmental laws are not enforced. Illegal logging and land encroachment, particularly around the Phnom Hop area, are still continuing.
- ADF has initiated a collaboration with the rangers for the survey the APA and CPA. It will be resumed it 2017.

In March 2016, the Ministry of Foreign Affair and International Cooperation of the Royal Government of Cambodia recognized ADF as an International NGO.

Thank you for your support and collaboration!
The ADF Team.