



COMITE INTERNATIONAL DE COORDINATION POUR LA SAUVEGARDE ET LE DEVELOPPEMENT DU SITE HISTORIQUE D'ANGKOR  
INTERNATIONAL CO-ORDINATING COMMITTEE FOR THE SAFEGUARDING AND DEVELOPMENT OF THE HISTORIC SITE OF ANGKOR

**PLENARY SESSION**

# Twentieth Plenary Session

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**Siem Reap — 4 December 2013 — Sokha Angkor Hotel**

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**NOTICE:** The languages used during the sessions of the ICC are English, French and Khmer. In the English language record of the discussions, all material spoken originally in French or Khmer is therefore a translation. Presentations and comments made originally in English are indicated by <sup>[OrigE]</sup> at the beginning of the contribution. The insertion <sup>[OrigK]</sup> shows that the original statement was in Khmer.

## RECORD OF THE DISCUSSIONS

### I - OPENING SESSION

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*Comment from the Co-chairman for Japan:* "Let's start our meeting of the Plenary Session of the ICC. My name is Kumamaru; I am one of the Cochairs and the Ambassador of Japan to the Kingdom of Cambodia. On behalf of my colleague, the other Co-chair, H. E. Mr. Serge Mostura, Ambassador of France to Cambodia and myself, I would like to welcome you all to the meeting. First of all, I would like to give the floor to my colleague, the other Co-chair, the Ambassador, Serge, please."

#### **I.1 Statement by the French Co-chair, His Excellency Mr. Serge Mostura Ambassador of France to Cambodia**

"Your Excellency Deputy Prime Minister,  
Excellencies,  
Ladies and Gentlemen,

In 1991, following twenty years of conflict, King Norodom Sihanouk launched an appeal to UNESCO for the safeguarding of the Angkor site. The international community mobilised and urgently inscribed it as a World Heritage of Humanity site in 1992. It was followed by the first intergovernmental conference, held in 1993 and co-chaired by France and Japan, during which the framework and the spirit of the international aid was drafted and adopted: the Tokyo Declaration.

An International Co-ordinating Committee was established to develop, monitor and assess international assistance. During its first decade, that same Committee prioritised the safeguarding of the site. This joint action from the royal government of Cambodia and associated countries aimed at framing the preservation effort in Angkor within a cross-disciplinary approach including legal measures, institutional management framework and the training of Cambodian staff at all levels. Most of the objectives were met and especially the establishment in 1995 of the APSARA National Authority, a public body entrusted with the management of the site.

A new Declaration was endorsed at the second conference, held in Paris in 2003. The ICC's assignment was renewed and the work veered towards sustainable development and better integration of the locals within any given project through the promotion of ethical and sustainable tourism. This approach led to the establishment of a specific Technical Committee on Sustainable Development to increase the APSARA National Authority's competences.

At the same time the field of archaeology was particularly successful. As representative of France I cannot omit mentioning the work of the EFEO with the restoration of the Baphuon, completed in 2011, that ongoing at the West Mebon or the INRAP preventive archaeology excavation sites.

The last decade was one of more collaborative work and development of the site—achievements that the ICC can be proud of. The Angkor site is no longer in danger and the ICC is seen as a model of international cooperation. Associated countries should be credited for this, but the Kingdom of Cambodia is the main stakeholder deserving of honours.

It is the commitment of the countries engaged and the involvement of academics and managers of these same countries that through their consistency, conscientiousness and variety of expertise have managed this achievement.

Today, 14 countries representing 37 projects are working on the Angkor site. Twenty years since the appeal launched by Norodom Sihanouk this figure acknowledges the continuous response.

The new decade brings new challenges for the ICC. It will have to support the increasing visitation of a site hosting four million visitors per year. The site must develop within a sustainable development approach and work on new research topics that modern technologies have enabled. It should also reap benefits from the increase in abilities of the Cambodian technicians and experts of the APSARA National Authority which professionalism has been considerably bolstered.

Your Excellency Deputy Prime Minister, Excellencies, Ladies and Gentlemen,

The past two decades have been marked by the success of the International Coordinating Committee of Angkor. On behalf of the co-chairs I would like to congratulate and thank you, members of the Committee, whose dedication and competence have allowed for the gradual restoration of Angkor and its development to such an extent that it has become an emblematic and exemplary site in terms of management of a World Heritage of Humanity site. The eminent role played by the dedicated royal government of Cambodia and the APSARA National Authority deserves particular high praise.

What does the future hold? We are the day before the third intergovernmental conference and at the onset of a new decade. I think that the way has been paved for the Committee to be optimistic and confident in its collective ability, as in that of Cambodia, to face with the best available tools any new challenges ahead.

Thank you."

*Comment from the Co-chairman for France:* "I now hand over the floor to His Excellency Sok An, Deputy Prime Minister and chairman of the APSARA National Authority. You have the floor Your Excellency."

## **1.2 Statement by the representative of the royal government of Cambodia, His Excellency Dr. Sok An, Deputy Prime Minister, president of the APSARA National Authority**

"Ladies and Gentlemen Ambassadors and Chargé d'affaires,  
Ladies and Gentlemen Professors and Heads of heritage missions,  
Excellencies,  
Dear colleagues,

This Plenary Session of the ICC is marking the fortunate completion of a dual process. On the one hand, that of the first decade which was implemented according to the recommendations of the Tokyo Founding Conference held on 12-13 October 1993. This decade was sometimes a rollercoaster, but the cohesion between ICC members and the unanimous willingness to remove Angkor from the In Danger Listing allowed for the making of huge progress.

On the other hand, the highly valuable process of the second decade strived to meet in optimum conditions the recommendations of the Paris Conference held on 14-15 No-

vember 2003. With legitimate pride we are celebrating today a largely positive outcome of twenty years of continuous activity of the international community, achievements that have been celebrated in the heritage field throughout the world under the *aegis* of the ICC-Angkor, brilliantly co-chaired by France and Japan within a fruitful partnership with the APSARA National Authority.

I would like to immediately greet both co-chairs, H.E. Serge Motzura, Ambassador of France, and H.E. Yuji Kumamaru, the Ambassador of Japan. On behalf of the royal government and of the APSARA National Authority that I am honoured to preside over, I would like to express my great gratitude and warmest congratulations to France and Japan.

Co-chairs, for the past twenty years, the co-chairmanship has been moderated by your respective predecessors with appreciated wisdom and relevant dynamism. All of this in complete harmony between themselves and with colleagues, Ambassadors and heads of scientific missions to Angkor. This is a rare feat that should be acknowledged, adding to the value of the international campaign for conservation and sustainable development of Angkor.

It is understandable that the unanimous aspiration was for the continuity of this endeavour with France and Japan at the helm of the ICC co-chairmanship. Excellencies, your countries have met our wishes positively, to the satisfaction of all. Thus, the next decade of the ICC, 2014-2024, is in good hands.

Excellencies, Ladies and Gentlemen,

I would also like to extend my gratitude and congratulations to the ICC Standing Secretariat. They are the guardians of our memory and they relentlessly see to the smooth organisation of our proceedings. I here turn towards our Scientific Secretary, Professor Azedine Beschaouch, who for the past twenty years has supported the ICC with consistency, dedication and efficiency. May he be congratulated.

Excellencies, Dear colleagues,

Twenty years on after the inscription of Angkor on the UNESCO List of the World Heritage of Humanity, the historical and cultural monuments and the archaeological and eco-historical sites are not only a national symbol in the Kingdom of Cambodia and its people, but also a universally famous heritage benchmark. We, all members of the ICC, are well aware of the positive outcomes of the international effort for the conservation and development of Angkor. This should be continued in order to disseminate general culture to the public, or rather to the diversified publics, and knowledge of the considerable achievements stemming from the archaeological researches and major consolidations and restoration works.

Simply looking at pictures taken twenty years ago highlights the scope of the progress made. The Angkorian landscape has changed; the jungle is now a secured forest where leisurely walks can be enjoyed. The approach areas of the main temples are easily accessed and cleanliness is no longer talked about, but has become a reality.

Better dissemination of the culture and in the media has become necessary. I said earlier that this endeavour must reach out to different publics, first in schools then universities, just as tourists should also be targeted beyond marketing techniques, with a view to making them aware of the new data on the huge territory of Angkor (its extended chronology and the cultural and artistic diversity of the remnants).

The work ahead is a mammoth task and the impact on the Cambodian economy will be subsequent, as it will enable young people to train in audiovisual and cultural communication promotional techniques. I call upon our ICC and countries and institutions. I invite

your experts to look into this field and to convey their skills to our youth. This type of co-operation would enrich the role and competences of the ICC-Angkor for the next decade.

Co-chairs, Excellencies, Ladies and Gentlemen,

I would like to renew the focus on the royal government-set priorities for the APSARA National Authority.

1. The hydraulic work: As was expounded during the 22<sup>nd</sup> technical session, it is imperative to continue the fight against potential flooding in the areas of the monuments, the airport and Siem Reap town centre. Thanks to special financing granted by H.E. the Prime Minister Samdech Techo Hun Sen, the APSARA National Authority, under the leadership of Dr Hang Peou, has managed to reduce the threat, but action must continue.

The hydraulic system of the Khmer Empire must be completely secured (canals, waterways, moats and barays). This hydraulic engineering study and the necessary consolidation works require massive financial support and relentless care. In addition to our own resources we will appeal for international cooperation. This programme is critical. I cannot omit to mention the recent signing between the APSARA National Authority, the Association des Amis d'Angkor and two sister associations on the cooperation to tackle the water issue related with heritage. I believe it is a very important step forward for the APSARA National Authority in the field of hydrological works related to heritage.

2. The second key item is cultural tourism: You all know that the Tourism Management Plan (TMP) for Angkor and its region has been endorsed. This plan is part of the Heritage Management Framework (HMF) devised by a team of Australian consultants, GML, in collaboration with UNESCO and the APSARA National Authority, with support from the Australian government and the royal government of Cambodia.

The Ministry of Tourism, experts of the APSARA National Authority and the Siem Reap Angkor private sector have closely cooperated with the design of this plan. I am delighted to inform you that within the APSARA National Authority, I have established a young team of experts who will be entrusted with the implementation of this plan from January 2014 onwards. Also of relevance is the interest manifested by the United-Nations affiliated World Tourism Organisation (WTO). The Secretary General of the organisation, H.E. Taleb Rifai, chaired with us on 1 December 2013 in Siem Reap the opening session of the regional conference on tourism.

He is determined to bolster the WTO cooperation with the Ministry of Tourism for Angkor and Cambodia. Obviously, the APSARA National Authority is included in this partnership. I am saying this because we do already have a TMP and a HMF but what matters is the implementation of these plans. We discussed at length with the WTO heads to closely cooperate for the implementation of the HMF and TMP.

3. The third priority focuses on the HMF project I just mentioned. I have talked about the cooperation between UNESCO and Australia. The day before yesterday, on the 2<sup>nd</sup> of December, we officially adopted texts related to this excellent project. In 2014, the APSARA National Authority will do its utmost in fieldwork and operational activities to achieve this management framework. Once again we will look for international partners and financing in order to implement what must be a genuine management plan for Angkor and the Siem Reap region.

4. The fourth item is on the environment; to safeguard the vegetal canopy of Phnom Kulen and the conditions to protect and develop cultural heritage. I have invited H.E. the newly appointed Minister of Environment to share his views on this protection and on the planned activities for the Phnom Kulen. Immediate action is needed against deforestation and threats to heritage.



There again I am turning to the regional authority and especially the Siem Reap Governor, H.E. Khim Bun Song—who should have been attending but might be delayed as he was returning from Phnom Penh this morning after a mandatory meeting at the Ministry of Interior. He tried to manage to arrive on time, but it seems that he is late. I would like to ask him to take the necessary preventive measures in collaboration with the Ministry of Environment and the APSARA National Authority and according to information given to me, he already has taken some steps. I believe that the governor may be able to comment on the first measures taken with regard to Phnom Kulen.

Distinguished Co-chairmen, Excellencies, Ladies and Gentlemen,

Before concluding I would like to express our great satisfaction on behalf of all ICC members. After twenty years our ICC remains a lively, active and prosperous institution. New projects are planned: Preah Pithou managed by the Republic of Korea; the Angkor Wat causeway project will be re-launched by Japan; the Preah Khan from Kampong Svay temple managed by India; the implementation of the TMP by the APSARA National Authority and the Strategic Study on Water Management in Angkor, a cooperative work between the APSARA National Authority, and the SIVAB, SIAAP and AAA. There are also renewed commitments continuing the financial support of major projects such as the Green Belt from the Federal Republic of Germany, the Community Heritage and Economic Growth Project from New Zealand, which recently confirmed a five-year extension of the project. H.E. Khun-Neay this morning presented activities for the local communities carried out within the Angkor Park.

There is no hesitation in saying that our ICC may be twenty years old and still a lively institution compared to other similar bodies in the world entrusted with the safeguarding, preservation and restoration of heritage. We can be proud of the long life of our ICC which is not only still operating but is also developing new projects engaging cooperation with the APSARA National Authority within the ICC framework. There is pride in the continuity and progress of the ICC. All these activities have evidenced the usefulness of the ICC for Angkor. It is an institution where thinking, monitoring, dialogue and joint decisions bring us together and we all cherish its healthy permanence.

Long live our ICC.

I thank you for your attention."

*Comment from the Co-chairman for France:* "Thank you, Your Excellency Deputy Prime Minister for outlining the future. Another thank you for your kind words to the Co-chairs and members of the Committee and the Standing Secretariat. I think that they have touched us.

The floor is now to the representative of the UNESCO Director General, Mr. Kishore Rao, Director of the World Heritage Centre."

### **I.3 Statement by the representative of the UNESCO Director-General, Mr. Kishore Rao, Director of the World Heritage Center**

[*OrigE*] "Your Excellency Deputy Prime Minister of the Kingdom of Cambodia, Dr Sok An, Your Excellency Mr. Serge Mostura, Ambassador of France to Cambodia, Your Excellency Mr. Yuji Kumamaru, Ambassador of Japan to Cambodia,

I just wanted to start off by saying how delighted I am to be present here today. This is my second visit to Cambodia in the last six months, having spent more than two weeks in June working very closely with H. E. the Deputy Prime Minister as chairman of the 37<sup>th</sup> session of the World Heritage Committee. And it is also a privilege now to participate in this 20<sup>th</sup> anniversary of the International Co-ordinating Committee, which is truly an exceptional mechanism, which has proven so successful in establishing the state of conservation of one of the most iconic World Heritage sites. We are really grateful to all the partners and all the donors and technical people who have contributed to the success of the ICC and to the success of the Angkor World Heritage site.

Ten years ago, in 2004, we were celebrating the removal of Angkor from the World Heritage in Danger List, and although the site faces many of the challenges that most of the World Heritage sites face around the world, it has truly become one of the models of best practice because of the contribution of the technical and financial support that has been made possible through the mechanism of the ICC.

I know that we have a very short session today, so I will not take up much time. I just want to highlight a few aspects. Angkor has always been noted as a kind of pioneer in the field of heritage conservation, and more specifically, whenever we talk about site conservation in the framework of the World Heritage Convention. Today, we have an opportunity to confirm this and establish a vision for Angkor that will break new ground by addressing some of the fundamental issues that define heritage conservation.

The World Heritage Convention completed its 40<sup>th</sup> year last year, and the theme for that year's celebration was *World Heritage and Sustainable Development, the Role of Local Communities*. I think no other site exemplifies that relationship between conservation, sustainable development, and the sustainable management of local communities as does Angkor.

This was also the vision that was articulated in the Kyoto Vision, which concluded the 40<sup>th</sup> anniversary of the World Heritage Convention, graciously hosted by the Government of Japan in Kyoto, last year.

We have been trying to mainstream these messages of sustainable development in the conservation of World Heritage sites in all regions of the world, and I think Cambodia has a lot to share with the global community in this respect. The World Heritage Committee, which is the intergovernmental body that oversees the implementation of the Convention, had requested Cambodia to prepare a comprehensive management framework and I am very pleased, as the Deputy Prime Minister has confirmed, that the Heritage Management Framework, with the support and funding from Australia, is now close to completion and that we will very soon launch its implementation from next year onwards. I can commit the full support of our UNESCO Office in Phnom Penh as well as of the UNESCO Headquarters at the World Heritage Centre in making sure that this implementation of the management framework is successful.

I am also very pleased to note that there have been several other examples of recent development in the theme of sustainable development at Angkor. I have been told that in an event that took place yesterday, Panasonic, which is one of our long-standing private sector partners for the World Heritage Convention, donated some 1,500 solar panels for 43 villages in Angkor park, and this I believe is really an outstanding contribution to the theme of sustainable development.

When we articulate the heritage conservation contribution to sustainable development, we have to present evidence-based studies and detailed information to prove that yes, indeed, heritage conservation makes a contribution to development. For that purpose I think there is a very good opportunity now with the recent setting up of a World Heritage UNESCO category II Centre in Italy, which specialises in the economics of heritage conser-

vation. I believe that they have offered to carry out detailed economic analysis of the work that is ongoing in Angkor to be able to produce that kind of research detail. And I think that it will be a very good opportunity to partner with that institution.

There is also a lot of work that is ongoing in the field of heritage education, especially of young people on the schools in this region. I think creating a body of young professionals as well as sensitising the youth and children to the need for heritage conservation, to be able to relate to one's history and identity, is a very important aspect of the whole heritage conservation effort. We may certainly focus on the technical aspects of conservation, but at the same time, we have to look at the bigger picture and ensure that the future generations are also equally committed to this noble task.

With those words, Messrs. Co-chair persons, I would like to conclude and wish you all a very good meeting. Thank you."

*Comment from the Co-chairman for France:* "Thank you very much Director for your encouraging words. As the Committee has proven that it can take on new technologies and issues, I can now confidently hand over the floor to Professor Azedine Beschouch, the ICC Scientific Secretary. We used to say that all roads lead to Rome, now Professor Beschouch will explain to us that they all end in Angkor. Mr. Beschouch the floor is yours."

## II - REPORTS

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### II.1 Roads in Angkor Park, by Professor Azedine Beschouch, ICC-Angkor Scientific Secretary

"Your Excellency Deputy Prime Minister,  
Excellencies,  
Dear colleagues,  
Ladies and Gentlemen,

At the time of the Angkor Conservancy, traffic was fluid on two itineraries. Twenty years ago when this conservation endeavour was launched, we were mentioning the small and great circuit that the founding fathers of Khmer archaeology had left us and, my goodness, we are still using these words without nostalgia. Nevertheless, conditions have changed, as fifty years ago the endogenous people that lived on site numbered 30 to 40,000 according to H.E. Khuon Khun-Neay, who specialises in local people. They now number more than 100,000, scattered in 112 villages and are the first users of these two roads.

At the time, the number of domestic and international visitors averaged 30 to 70,000 a year at the most. I studied the statistics at the time, 40 years ago, and this was already considered, in the words of a conservator, as 'strong visitor pressure'. There were no more than 70,000, so imagine the stress.

Today, visitors represent more than three million individuals. This means that there are cars and lorries supplying the locals for their daily life needs and tuk tuks, bicycles and mopeds. I am one of these individuals that are so fascinated by this that I almost start counting the motorcycles. And I can assure you that they have multiplied by 100 in 20 years, almost a boom. This, to illustrate the traffic issue in the Angkor site and that we have been asked by the ICC repeatedly to study this matter. The APSARA National Authority has consulted some specialists and we have studied with them and often with the

presence of H.E. the Director General in person, Mr. Bun Narith, who, furthermore, has reported to H.E. Dr. Sok An, the president of the APSARA National Authority.

[slide] What we are developing is critical because this is the traffic plan that in the future will preserve the site. We would like to completely bypass the site. [slide] Here you have this option with a road in good condition which bypasses the site and leads to national Road 6 without driving through the archaeological site inscribed on the World heritage List. What is missing is this section here. This road here is not in good condition although it exists, and it needs to connect with National Road 6 without driving through the archaeological area, knowing that it is not in contact with the archaeological soil layers, apart from one section here.

What we would like to achieve is the connection of these two roads from east to west and with the help of the APSARA National Authority we could say that the bypass would be completed. Which road axes are left?

[slide] There is this large road, which is a sensitive issue. Heavy vehicles do not drive along this road anymore. This large road, here left on the map, passes between two of the main monuments, the West Baray and the city of Angkor Thom. This road will only be for tourism-related transportation and one day we hope non-polluting means of transportation. This will be implemented with approval from the APSARA National Authority and the provincial authorities.

[slide] Final proposal: There are two roads crossing the now dried up East Baray. A while ago, our main water specialist, Dr. Hang Peou, said that he will reflow the North Baray and everyone looked at him as if he was weird. I have always been fond of his research and I have followed his work and I said he would succeed and he did. There is water flowing in the North Baray and his work continues. [slide] Now he is telling us that the East Baray will be reflooded and to this matter this village located here and these roads passing exactly through the middle and close to the East Baray must be rerouted.

[slide] This is our proposal: To terminate this road up to this point after it forks and crosses. To stop it from crossing there is this possibility, which is to extend this road so that it routes towards Banteay Srei. It has three pros: First it will stop crossing the Baray; secondly it will pass close to Banteay Samre which would allow for smoother access to this temple, which is presently hardly visited. Thirdly, it will stop that road from crossing Pre Rup. Currently, part of the temple's grounds are almost on the road, so with this bypass it will be possible to build a visitor centre or something similar to enhance Pre Rup visitors' experience.

As said, the problem has shifted, as we now have important stress from traffic but we will do our best in the next two to three years to have the APSARA National Authority in agreement with the royal government of Cambodia and implementing this. We will then be able to say that there are no more heavy vehicles within the site, and therefore less pressure, and, this is a personal dream, electric cars.

I do not do any advertising, but I saw an electric car outside and this has stirred some nostalgia in me. I never learnt to drive and this has given me the will to drive and I have wondered why I never learnt to drive. This gave me the desire to drive through the site without polluting it. I hope this will be the case in the future.

Thank you."

Comment from the Co-chairman for France: "Thank you Professor for your paper. The floor is now to Mr. M. Jean-Baptiste Chevance, from the Archeology and Development Foundation and to Mrs. Suwanna Gauntlett from the Wildlife Alliance."

## **II.2 Threats to the heritage and environment at Phnom Kulen, by Mr. Jean Baptiste Chevance, Archaeology and Development Foundation and Ms. Suwanna Gauntlett, Wildlife Alliance**

### **Mr. Jean-Baptiste Chevance:**

"Your Excellency Deputy Prime Minister,  
Excellencies,  
Ladies and Gentlemen,

This is our third presentation on the dangers threatening the archaeological and environmental heritage of Phnom Kulen. The Archaeology and Development Foundation, in partnership with the APSARA National Authority, has been carrying out on this mountain range research, conservation and development activities and is well informed on the issues at hand.

Following the alarm signalled by ADF in 2012 at the technical and plenary sessions of the ICC, UNESCO recognised that the massif is the 'Symbolic source of Angkor' and 'recommends to extend the World Heritage boundary of Angkor to integrate Phnom Kulen'. Please also refer to the tenth specific recommendation of that same ICC. I would like to take this opportunity to express my gratitude to H.E. the Deputy Prime Minister who, on this occasion, set up a committee on Phnom Kulen. I will update you on the situation.

[slide] A quick background: Phnom Kulen is located 40 kilometres from Angkor and is the most important mountain range of the region and the source of three watersheds for Angkor and Siem Reap, giving all its outstanding value to this site.

[slide] The Ministry of the Environment is in charge of the National Park which is located in the Siem Reap Province. It covers three districts over an area of 37,500 hectares. The APSARA National Authority has jurisdiction over the province where the numerous sites and archaeological areas of the plateau are placed under its responsibility. [slide] A population of 4,000 lives on the Phnom Kulen plateau, spread over ten villages. A concessionary company manages the entrance for tourists.

[slide] There are still six major threats that we have identified on Phnom Kulen. I have already presented on the main one, deforestation. [slide] The first reason for it is the practise of slash and burn agriculture by three quarters of the population of the massif. With the demographic boom this phenomenon has extended to cover almost the whole plateau where only a few areas are still forested. This practise has also developed in areas that are supposed to have been protected.

[slide] To assess the problem I suggest we look at a bird's eye view of the plateau. You then realise that there is a perfect smokescreen as a curtain of trees on the sides of the massif and along the main road is concealing deforestation. You would think that the forest is preserved when traveling to the most visited site of Preah Ang Thom or looking from the foot of the Phnom, but once you are in the air you understand the opposite. [slide] This is another, higher view from the south area of the massif.

[slide] Adding to the slash and burn agriculture is cashew nut tree farming which is widely spread and although illegal in a National Park has gradually been replacing areas dedicated to rice paddies.

[slide] Another cause of deforestation is the encroachment of the agriculture fields and villages right at the foot of the National Park. [slide] These are some pictures that show you the evolution throughout the years from the same perspective since the 1960s, then 2001, 2004, 2007, 2009 and early this year.

[slide] Last item: The illegal logging of large trees which has generated deforestation. This is a widespread practise inside the whole of the National Park. [slide] It has continued and even gained momentum between the last ICC and today as you can see in these dated pictures.

All of these practices are mainly due to the lack of enforcement of the laws. They exist but the resources to implement them are not sufficient.

The environmental impact is huge, although I would rather insist on that of economics. [slide] If there were one picture to take away from this paper it would be this one. We know that hydraulic works have been implemented, yet the disappearance of the forest has a direct impact on the economy of the Siem Reap region.

As for the large archaeological heritage of the massif, the APSARA National Authority efforts have recently picked up in pace; nevertheless, less-guarded sites or those polluted, damaged or threatened by regular rock slides are still in danger.

[slide] Finally the last major threat is at Preah Ang Thom, the most visited site which is submitted to tourism pressure, which is both badly managed and overcrowded.

Proposals: [slide] We entirely support the establishment of this Committee which for us should include all stakeholders that I will not mention but that you can read on screen. The roles and responsibilities of each should be clearly defined. A special legislation for the National Park could be drafted, and moreover, resources earmarked for each of the stakeholders so that they can implement the measures. Finally local people should be involved.

[slide] The second aspect is on the strengthening of the law and the enforcement of the Environmental Law, also for the management of the Preah Ang-Thom site. [slide] Here are some pictures illustrating what we also recommend regarding bolstering the resources of the APSARA National Authority and recently started restoration sites.

[slide] The demarcation of the boundaries of the protected areas has also started to be carried out with the APSARA National Authority with support from the US Embassy.

[slide] Alternative income generation should also be developed so that villagers halt practices which damage the environment.

[slide] Finally, the LiDAR tool is perfectly adapted to Phnom Kulen to get better knowledge of the site. It can bring a lot of data to enrich our knowledge of the archaeological remains. Here are the structures revealed by the 2012 LiDAR operation, covering 30 square kilometres. In green are the structures previously known, in red those that are new. We hope to be able to extend this tool over the whole of the massif within the framework of a second KALC consortium, pending financing. There could also be a cooperative work with our Chinese colleagues, who recently signed a Memorandum of Understanding with the APSARA National Authority.

[slide] As you have realised the Committee is one of the last resorts to try to save what is left of the environmental heritage of Phnom Kulen. In two years it will be too late. Besides, the inscription of the massif as an extension of the Angkor site onto the World Heritage List would be questioned.

The threats have all been identified, the studies conducted, so we hope that time for action has come. There are solutions, they need to be undertaken and adapted to the specificities of Phnom Kulen.

With your permission, I am launching a new appeal to the royal government of Cambodia and to international institutions and potential donors so that the Committee is established and that its members are allocated relevant resources and conduct in urgency safeguarding activities of the archaeological heritage and more especially the protection of Phnom Kulen forest. It is one of the most sacred massifs in Cambodia and acts as the lungs and water tower of Angkor and its region.

[slide] We would obviously be honoured to bring our input to this Committee.

I thank you for your attention and now hand over the floor to Mrs. Suwanna Gauntlett from Wildlife Alliance."

**Mrs. Suwanna Gauntlett:**

[OrigE] "Your Excellency Dr. Sok An, Deputy Prime Minister, representative of the royal government of Cambodia  
The representative of UNESCO, Dr. Kishore Rao, Director General,  
Your Excellency the Ambassador of France, Mr. Serge Mostura,  
Distinguished professors and colleagues,

I am Suwanna Gauntlett, CEO of Wildlife Alliance. The mission of my organisation is not archaeology but forest protection and we have a 13 year track record of effective forest protection in Cambodia. As a result the Government has asked Wildlife Alliance to make a scientific study of the status of forest cover and to present solutions to save Phnom Kulen. We are known mostly for practical, hands-on interventions on the ground.

[slide] Here what you see on this map is, as Mr. Jean-Baptiste Chevance has explained, the interdependency of Phnom Kulen and the Angkor complex. The deforestation on Phnom Kulen has already been studied and its impact on the hydrology going to the Angkor Complex has already been analysed in detail by H. E. Hang Peou, Deputy Director General of the APSARA. According to its information from 2010, the Siem Reap River, which is responsible for recharging the aquifer under the Angkor complex, was already diminished by half, which is 50 percent. To compound the problem, the users in Siem Reap Town, who are today about 200,000, consisting of both tourists and population, 75 percent of these users are pumping directly from the aquifer in an unregulated manner.

The study that we have conducted was on 25 March 2013. We have done what is called also photographic mapping and, with over 22,000 photographs, nothing has escaped the study. [slide] Here is a sample, in black, which I am going to show you now where we can see the extent of this deforestation. It is systematic photography of every single hectare, or acre of Phnom Kulen. [slide] Then here is a close-up view one square represents 25 hectares. I'm just going to go very rapidly.

[slide] That little forest in the middle corresponds to a community-protected area which is vastly deforested. [slide] Here is another community-protected area.

I have been asked whether this deforestation has improved. It has not. Since the elections the deforestation has vastly increased. Unfortunately, in March the minimum forest was only 22 percent; we estimate it today at 18 to 19 percent only.

[slide] I am showing you this photo because this is the kind of dense evergreen forest that must be restored in order to generate water, both surface streams and underground

aquifers. I would like to say that only natural forest can fulfill this role. No monoculture is able to regulate rain.

[slide] Here are the facts: In 2002, we had eight percent deforestation, in 2010 we had 44 percent deforestation and in 2013, this year, it is 78 percent. [slide] The correlation underwater is as follows: we are attempting to show you an animation, which we hope will work. The important point is that we need non-fragmented forest; it must be continuous forest cover.

[slide] If no protection is conducted on the ground, the river flows will diminish, the ground water will shrink and the population's demand for water will increase to approximately 400,000 in the year 2020. The Tonle Sap Lake will continue to have diminishing levels.

[slide] I am now going to the animation. Wildlife Alliance has a proposal, a very practical, hands-on, experienced, genuine proposal to the parties, which I have put on some desks.

We are proposing a five-year field programme based on our Cardamom Mountain protection programme. We have 20 years' experience implementing models for protected areas, for a cost of US\$9.5 million. It does not include any reforestation. The track record of growth of Phnom Kulen's forest is very good. The forestry grows there in a thick manner. Our recommendation is to follow two objectives: One is to restore 90 percent of Phnom Kulen forest cover and the other is to restore the water flow to the Angkor complex and the city of Siem Reap. But communities alone cannot do this.

[slide] It must be done on the ground with law enforcement: to stop logging, to stop the waves of immigration, to stop the allocation of land permits by local authorities, to create livelihoods for over 1,000 families. Here you have the names of the villages. The combination of carrot and stick is very important: Law enforcement on the ground, plus livelihoods.

People think that if you do a community-centered approach that is only based on livelihoods it will automatically work. Our experience has shown that it does not. It does not give human incentives, it does not change behaviours, it only gives the opportunity for local people to increase their livelihoods without changing their destructive unsustainable farming. The idea is to do both: law enforcement and livelihood together.

[slide] Wildlife Alliance, as I have mentioned, has 20 years experience, and one of the things that we do very well is deal with crises; forest crises. We would be very happy to intervene for Kulen to save the temple of Angkor. We think, based on the information that we have, the aquifer under the temples of Angkor has already reduced by two meters, which will destabilise and potentially lead to the collapse of the temples of Angkor. We cannot do this alone, we need everybody's support and we hope that we can receive the financial backing that is needed to put this plan into action. One of the main points of the strategy is that this must be a rapid intervention. As Jean-Baptiste mentioned before, this cannot be delayed any longer.

Thank you very much."

Comment from the Co-chairman for France: "Thank you Mrs. Gauntlett and Mr. Chevance. We have ten minutes for a general discussion. It is 3.30 p.m, which means that we are 40 minutes late on schedule. Would anyone like to take the floor? If not, then fine, we can gain ten minutes on the agenda.

No one would like to take the floor then I would ask members of the Committee to listen to Professor Guo Huadong who will talk about remote sensing for the environment of



the Angkor site, sponsored by the International Centre on Space Technologies for Natural and Cultural Heritage (HIST), China, under the auspices of UNESCO. Professor the floor is yours."

### III - NEW PROJECTS

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#### **III.1. Remote sensing for the environment of the Angkor Site, sponsored by the International Centre on Space Technologies for Natural and Cultural Heritage (HIST), China, under the auspices of UNESCO, by Professor Guo Huadong**

[OrigE] "Your Excellency Deputy Prime Minister,  
Distinguished guests,  
Ladies and Gentlemen,

[slide] The International Centre on Space Technologies for Natural and Cultural Heritage (HIST) was established in July 2011 and is the first UNESCO Category II Centre dedicated to providing technical services to UNESCO and its member states on the use of space technology for World Heritage sites. The Institute of Remote Sensing and Digital Earth (RADI) from the Chinese Academy of Sciences hosts it.

RADI is one of the world's best earth observation institutions. With 700 staff and 500 graduate students, it possesses large scientific facilities, including three satellite-receiving stations and two remote sensing aircraft.

The three satellite receiving stations are able to receive satellite data which can cover 70 percent of the Asian area. RADI/HIST has two remote sensing aircrafts currently and will have other two new aircraft in the near future. Here is a short video to present who we are.

[A video is being played] The project named Remote Sensing for the Environment of the Angkor Site (REAS) was launched in July, 2013, and is supported by HIST, the APSARA and the UNESCO Phnom Penh Office. The background of this project is as follows:

The Memorandum of Understanding (MOU) between the APSARA National Authority of the Kingdom of Cambodia and HIST from the People's Republic of China was signed on the 14<sup>th</sup> of June, 2013, which aims to strengthen and build the APSARA capacity for the application of space technologies for the conservation and management of the Angkor World Heritage site and the sustainable development of the region of Siem Reap in Cambodia.

Most existing projects in the Angkor site mainly focus on restoration and protection of the monuments. To dynamically monitor the surrounding environment and its impact on the Angkor Site is of great significance to the conservation of Angkor and its sustainable development. Space technologies provide a systematic approach in studying the complex natural and human environmental interactions in Angkor (400 km<sup>2</sup>) and surrounding areas (5,000 km<sup>2</sup>);

The Royal Government of Cambodia and the APSARA have expressed strong interest in using remote sensing technologies for systematic research of Angkor. H.E. Dr. Sok An, Deputy Prime Minister, expressed his full support for the proposed collaborative project when he met with the HIST/RADI delegation in Phnom Penh in June.

[slide] HIST and the APSARA carried out field studies at Kulen Mountain in June and October respectively. The project aims to monitor the Angkor site and its surrounding environment by space technology, and to better understand the relationship between them.

This project is composed of the following contents: Environmental management of the Angkor Landscape including dynamic monitoring of Kulen Mountains in the north of Siem Reap and regulation of human settlements surrounding the Angkor site; water resources management and ancient water system reconstruction using satellite optical and SAR images; SAR applications to monitor land subsidence as a threat to the Angkor monuments; spatial database construction of Angkor Site; capacity building.

[slide] The Research progress: Land use & land cover change: The urban area is gradually increasing; as for the forested area it shows unstable growth. The water area has seasonal fluctuations.

[slide] The urban area change of a Siem Reap city study has yielded the following conclusions: High speed urbanisation since 2000; no urban area in 1985 (MSS image); the increased urban areas were mainly converted from crop, forest and barren areas.

[slide] The conclusions of our study on forest change are: The forest area reduced to 593.2 km<sup>2</sup> (18 percent of the whole forest) in the past 30 years; the forest loss was mainly due to conversion to crop fields and grassland areas.

[slide] Water surface analysis revealed seasonal fluctuations. The rainy season always causes flooding, which is sometimes devastating. We used landsat-TM, SPOT-5, DEM and other documentations. The derived results show that there are very close ties among the river systems, roads and settlements.

[slide] For the ground subsidence monitoring we analysed 42 scenes of TerraSAR-X SAR data (February 2011 until July 2013). The surface displacement equals to -50 to +12 mm/yr. The main subsidence regions are located in Phnom Bakheng Temple and nearby areas, as marked by the white ellipses.

[slide] For the spatial database we used airborne, satellite and ground LIDAR data, photos, video, etc, multi-spatial data integration and management, environment dynamic monitoring management and protection

[slide] Capacity building is one of the main tasks of HIST. The APSARA experts have been to HIST for training or academic exchange in the past two years.

[slide] Our future work on research will include: A dynamic monitoring system for Angkor and its surroundings; environmental impacts and monitoring of major drivers of change; Angkor spatial database and a 3D visualisation system.

[slide] Academic Exchange will be the organisation of international workshop on space technologies for the Angkor site and technical meetings.

[slide] Capacity building will include training courses; hosting visiting scholars and PhD Students and virtual satellite receiving station training.

Thank you for your attention."

Comment from the Co-chairman for Japan: <sup>[OrigE]</sup> "Thank you Professor Guo Huadong. Let's move on to the next presentation. I would like to give the floor to Mr. Ros Borath, Deputy Director General of the APSARA National Authority."

**III.2 Presentation by His Excellency Mr. Ros Borath, Deputy Director-General, APSARA National Authority, new Japan-Cambodia cooperation for the Angkor Wat causeway restoration project submitted to Japan for financing and New Korea-Cambodia cooperation for the Preah Pithu temple restoration project, financed by Korea (KOICA)**

"Distinguished Co-chairs,  
Your Excellency Deputy Prime Minister,  
Dear colleagues,

Before it is officially announced, I would first like to express my gratitude to the Japanese government for their donations of heavy equipment and materials benefiting the restoration works of the Angkor monuments,

I am honoured to expound on two new cooperation projects in Angkor. The first project is between Japan and Cambodia, the second between Korea and Cambodia, bringing the number of countries working on the Angkor site to 17. A bit of background on the fact that the Angkor landscape is made up of specific trees, water, monuments and a population living on the site which gives it special features that need to be preserved.

A new cooperation project between Japan and Cambodia: The restoration of the causeway dike of Angkor Wat. Japan has agreed to the financing of this project.

This west causeway dike at Angkor crosses the 190 metres of moat and was built a century after the monument was completed. This project is the continuation of an older project and will be in operation from 2014 and divided in two phases to be completed by 2019. The first project was started in 2007 and Sophia University and the APSARA National Authority will jointly lead the new project.

[slide] These pictures show you familiar views of Angkor Wat and the causeway dike at hand. The phasing of the project can be seen on the causeway where the northern section of the eastern part was restored and the second phasing will start work on the northern area of the western section, and then this last section will be part of the last phase.

Here is the historical background: [slide] This picture was taken in 1952, when a collapse occurred. This was quickly repaired and the restoration lasted from 1953 until 1956. [slide] This shows you the entire causeway with the phasing of the works. The EFEO worked on the entrance platform from 1949 until 1964 and on the southern and northern sections works have been undertaken by Sophia University.

[slide] The reason for the collapse on this section where 45 metres crumbled: This line highlights a massif made of clay soil which subsided and was used as the inner supporting structure of the causeway. A gap was created which let the water seep in and wash away the backfill, leaving the paving unsupported.

[slide] These pictures come from the EFEO and they illustrate the collapsed area and the weakened massif. [slide] Pictures of the works in 1954, where concrete foundations were built and the external moats reworked. [slide] These pictures show that works were going on day and night, as we can see some floodlights for the work at night time.

[slide] This is the section restored from 1960 until 1966 by the EFEO. On this section you can see the concreting, the backfill and the paving. Most of the run off water is collected by this drainage pipe and flows out.

[slide] This is the initial stage of the Sophia University work including investigations, measured drawings, documentation, etc, before work was started. [slide] In 1998 many

stones had been deposited and stored here. On that picture a section of the moat is being used to create access to the site.

[slide] This highlights the training work of young archaeologists, architects and engineers on site and also in stone mending. I would like to draw your attention to the fact that Sophia University is dedicated to training, educating and teaching young students. Yesterday, Mrs. Abe from Sophia University presented the number of Cambodians trained at the highest level. Today 16 of them have graduated with Masters' degrees and seven at the PhD level. As far as I know they have all returned to Cambodia, here in Siem Reap, once their study was completed to shore up the APSARA National Authority and heritage in general.

[slide] This section here is to highlight the fact that this massif made of stone caused the weakness of the walls. For the first phase, Sophia University started by backfilling with improving the compaction of the soil massif, which was done manually. Simultaneously, they consolidated the outer wall with stone buttresses to stiffen this wall which looked like it was rested on a weak bed of stones.

The clay soil forming the structure of the causeway was strengthened, as were the outer walls again using stone buttresses on the inner side. The rainwater is naturally drained out to the moat. This background is very useful to better understand the two phases to be implemented. The approach will be the same although there is a need to analyse, to see what can be preserved and if needed to add new material but as little as possible. I believe I have been a bit long on this point.

[slide] Just to show you, on the 3<sup>rd</sup> of November 2007, the causeway was restored and [slide] this is another picture of a section to be worked on in the coming phases. What we need to be careful with is to avoid complete dismantlement. A diagnosis must be first established and then analyses made and interventions should take place only where needed.

[slide] This picture shows you how important the presence of water is for the future site. This is the causeway along the external wall to be improved. [slide] In 2002 the access path to the site was under one metre of water. When we work we need to make sure that water will not reach that level.

[slide] This is a perspective of the site in 2004 and 2013 which implies the need to re-think the itinerary so that access is guaranteed. Nowadays we cannot close half of the access causeway to Angkor Wat, as was the case before. This was the first part of my presentation on Angkor Wat.

A new cooperation project between Japan and Cambodia on the restoration of Preah Pithu, financed by Korea through the KOICA.

Where is this temple located? [slide] This is the Royal Square and here a LiDAR picture to locate Preah Pithu within the complex. This bird's eye view gives you an idea of the natural environment of this place. I said earlier that 17 countries and 28 institutions work at Angkor. This represents 70 completed or ongoing projects.

This is Preah Pithu here on a plan, and I would like to highlight that around the Royal Square we will have the French, Japanese, Indonesian, Czech and now Korean flags which will complete the square.

[slide] I will describe Preah Pithu as it is not a famous temple. Visitors most often overlook it and do not stop. It was built in the 12<sup>th</sup> and 13<sup>th</sup> centuries. It is of the Angkor Wat, post-Bayon style, built during the reigns of Suryavarman II and Jayavarman VIII. Tcheou Ta-Kouan at the end of the 13<sup>th</sup> century described this square now bordered with different flags. The new and last one, the Korean, will float in the north-west corner.

[slide] The Preah Pithu complex includes five temples indexed with letters engulfed in vegetation. Two of them, temples T and U, face west and were probably built simultaneously. The first, T and the second U are respectively surrounded by 45 x 40 metres and 35 x 28 metres enclosures, their axes are east-west and they are surrounded by the same moat. A cruciform terrace to the west is the entrance.

[slide] To the east of T and U, slightly to the north, is monument X, probably the most recent (dated from the 14<sup>th</sup> century), with no enclosure and surrounded by a large moat. The latter connects on its southwest with the former moat. Two levels of tiered steps on a terrace of 40 x 40 metres and of four metres' height give to the temple a certain height. Also, without any enclosure is monument V located to the north of U accessed from the west by an approximately 70 metre long causeway. Thirty metres from that monument is located the fifth temple. It was built at a later date than T, U and V. All the monuments are Hindu, apart from X, which is Buddhist.

I have used my allocated time; I do believe that 15 minutes for both projects is a bit short. [slide] These are some slides illustrating the different temples, of which four are Hindu and one, X, is Buddhist.

I will skip. Briefly the alterations and small restorations carried out at Preah Pithu. It changed from Brahmanism to Shivaism which triggered recycling of the stones used for the construction of other monuments. The religious community undertook some post-Angkorian restorations, and the French intervened in the early 20<sup>th</sup> century and finally the recent intervention of the APSARA National Authority.

[slide] This is to show you how the stones were recycled. Some of the members of temple X were used on temple V. Also at Preah Pithu, what is of importance during the work is the natural environment. [slide] These are archived pictures of the five temples and [slide] the temples presently. I cannot comment as my time is up.

[slide] A quick stop on this picture to underline the heritage value of Preah Pithu. It presents a great variety of styles, functions, and uses in different eras, as well as various forms, spaces, landscapes and topographies. The natural environment of the site has been well preserved and it has cultural and historical wealth. This complex should be developed for enhancing visitor experience. In terms of authenticity: the monuments have not been disturbed by the past century's restorations apart from a few minor interventions for maintenance.

[slide] I am taking a bit longer on these pictures, so please bear with me. When the Royal Square was provisionally developed the stalls were located in this area and the car-park as well; this was to solve traffic issues.

[slide] From the monument you can see the line of stalls and restaurants. The restaurants dump their rubbish to their rear, which faces the monuments. In addition we have the constant noise of the generators. I will not present on the bad smell, as my PowerPoint does not yet convey it.

I thank you for your attention and beg your pardon for the longer time used."

Comment from the Co-chairman for Japan: [OrigE] "I thank Mr. Ros Borath. Also thank you very much for your understanding about time. We have the last presentation by Dr. Hang Peou and Mr. Pierre Clément. You have the floor."

**III.3 Water development and water management in Angkor and Siem Reap, by His Excellency Dr. Hang Peou, Deputy Director-General, APSARA National Authority and Mr. Pierre Clément, Association des Amis d'Angkor, President**

**Dr. Hang Peou:**

"Your Excellency, Deputy prime Minister, President of the APSARA National Authority, Ladies and Gentlemen,

[slide] I will introduce our project on development and management of water in Angkor and Siem Reap. The goal of the project is to set up a remote management system to see to a better flow of the water resource management in the Siem Reap region. This includes integrating the existing system with new technologies to move forward and better manage the last five years of flooding issues.

[slide] This project will enable us, once set up, to obviously manage the flows and not only to prevent natural disasters but also daily issues, even during drought. The third point is to see to the best possible management of natural resources with a view to safeguarding the Angkor heritage and the development of the Siem Reap/Angkor region. Of course the locals living in the Angkor Park should benefit from this system through sanitation for some villages with water shortages or other water-related issues. Another goal is to include training for young Cambodians throughout the project.

[slide] Just quickly a few pictures to show you: The red dots are areas where we collect data; there will be more added. The automatisisation of the system will enable us to send, in real time, all data on the measurements of the level of water and weather stations to the APSARA National Authority's offices. Once we get that data in the office we will know the situation. From this data, and this is the second phase of the project, we will remotely manage and take the right decisions after having trained technicians to understand the physical phenomena and the mathematical models that the data offers.

This means that we will not have to go to the sites and manually open or close the sluice gates. As you know, the site is 401Km<sup>2</sup> which means, taking into account the three watersheds, an area of almost 1,000 Km<sup>2</sup> to manage, thus, the practicality of this automation to remotely control any problems. This is the most common approach in cases of natural disaster. I will now hand over the floor to Professor Pierre Clément who will continue on the project's next step."

**Mr. Pierre Clément:**

"We are delighted to support the Department of Water Management of the APSARA National Authority with this very important programme highlighted by the several presentations made by Dr. Hang Peou these past two days. It has shown that water is involved in all parameters of life, development and conservation and of everything that is supporting the entire site.

François Legrand, an engineer who has been working since 1980 in Phnom Penh and on the water of the Angkor site, has put pressure on us these past three or four years. In the footsteps of the Water Seminar and within the framework of historical studies on the hydraulic city, we are delighted to inscribe this support within the broadened perspective of the knowledge of the historic and archaeological patterns of Angkor, as the soon to be set up facilities will enable sketching of the hydraulic model of the watershed.

François Legrand managed to convince the Syndicat d'assainissement de la vallée de la Bièvre (SIAVB) presided over by Alain-Victor Marchand, who came several times, in per-

son, to present the outlines of the project. Sadly, he died this year and we would like to pay tribute to his action. Jean-Paul Berthelot, his successor as president of the SIAVB, is among us today, along with other representatives of the SIAVB, technical staff composed of enthusiastic young engineers and also the Syndicat d'assainissement de l'agglomération parisienne is attending, represented by Dominique Roblin, the administrator and Christian Vernet, director of international relations.

This project is bringing together several specialised institutes which will have input on the first assessments of the scientific analysis and measures to be taken and additional actions that the Agence Française de Développement and the Agence du bassin Seine-Normandie, and the Agence de l'eau have agreed to support and guaranteed to the Cambodian authorities and to all project stakeholders. We hope that through this activity some of the issues mentioned today may be resolved.

We are all satisfied with the twenty years of international and governmental actions at Angkor which is no longer in danger, but for the past two days, unfortunately, we have been told about newly emerging threats that are the consequence of the popularity of the site. This city's large ephemeral population is facing air pollution and deforestation which may shrink its resources. There are issues with non-infiltration of water, run-off water, technical problems which will be first impacted by the project and then the locals and especially those living in the Park will benefit from additional sanitation activities.

The Deputy Prime Minister, H.E. Sok An told us that we signed this Memorandum of Understanding yesterday afternoon with the governor and the APSARA National Authority. We are delighted that this is on the occasion of the 20<sup>th</sup> anniversary of the Technical Committee and are delighted to continue supporting you.

I thank you for your attention."

## General discussion

Comment from the Co-chairman for Japan: <sup>[OrigE]</sup> "I thank Dr Hang Peou and also Mr. Pierre Clément. Now we were supposed to have a general discussion, but the chair is tempted to skip this part because of time management, unless you have some objections. Should I allow some people to air their views? Would anybody like to say anything about these three projects which have been presented? Anne, please."

Comment from Mrs. Anne Lemaistre: "Thank you Mr. Co-chair. I will be brief. This is something that UNESCO has been mulling over for years and on the occasion of these new restoration projects we would like to launch an appeal to all national and international teams on the iconography of the temples. For example, Preah Pithu is a temple which changed in devotion from Brahmanism to Buddhism, which makes its iconographic study a very important prerequisite before the restoration is started. That was all. I thank you for your attention."

Comment from the Co-chair for Japan: <sup>[OrigE]</sup> "Would anybody else like to take the floor? If not, let me proceed to the next point on the agenda. Now UNESCO will present again, who is going to make the presentation? You have the floor."

## IV- PERSPECTIVE FOR THE NEW DECADE

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### IV.1 Presentation and discussion on prospective themes

**Mr. Azedine Beschouch:**

"Thank you Co-chair. Rapidly, just to say that we have circulated the notes that we have drafted to assist the royal government, which is our host for this meeting, and as we did in Paris and Tokyo the Secretariat distributed the work load but the final decision is still made by the royal government host of the conference. From preventive conservation until the role of the ICC we have prepared a series of notes. Just to add that UNESCO, the Secretariat and even ICCROM helped us for training and of course so did our *ad hoc* experts professors Hubert and Furt. These notes have been drafted and sent to all, we hope they will kick off further reflection for the Ministers and heads of delegations. Obviously the final say will be tomorrow. These notes are simply guidelines."

### IV.2 Presentation of the drafted recommendations and declaration of the 3<sup>rd</sup> Intergovernmental Conference on Angkor

**Mr. Azedine Beschouch:**

"I now move on to the Declaration and the recommendations. What was our approach? We started at the level of the Secretariat and distributed the work among ourselves. The French and Japanese Co-chairmanship, UNESCO and the ICC Secretariat submitted a first draft. We convened several times and examined these drafts. The drafts, available in French and English are purely for guidance, they will be tomorrow adopted at the conference as was done in Tokyo and Paris. These proposals might be amended and so on. H.E. The Deputy Prime Minister has thanked the team which has worked on the project and already informed us that there were some amendments on their part. They are not that many of them.

What I would like to add Co-chairs is that the national authority must adopt the text he would like to submit and thereby has proposed amendments. Any riders will then be circulated so we do our work and that the royal government may table a declaration and recommendations draft. This is how we proceeded in Tokyo and Paris. If there are no observations and to make up some time I would suggest that we move on to the points of information."

*Comment from the Co-chairman for Japan:* <sup>[OrigE]</sup> "Thank you very much for your presentation. The delegations and participants will study the text which has been delivered to you tonight and explained. Tomorrow we will try to discuss this based on this material and try to adapt it. Anything further on this agenda? Anyone would like the floor? If not, we move to the next agenda, miscellaneous items. Four points under this agenda and we are going to present the number one. Thank you. You have the floor."

## V- MISCELLANEOUS ITEMS

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### V.1 Points of information

#### 1. Convention APSARA-Inrap



**Mr. Azedine Beschaouch:**

"Thank you. I am not sure whether the Director General of INRAP is attending. I would just like to hand over the floor to him as he will comment better than I would on the Convention signed between the APSARA National Authority and INRAP. Just to inform our ICC, no need to present the Convention as it has been signed but just to give a quick overview."

**Mr. Pierre Dubreuil:**

"Distinguished Co-chairs,  
Your Excellency Deputy Prime Minister,  
Excellencies,

I will be short as I presented yesterday the collaboration between INRAP and the APSARA National Authority. I just would like to underline that the relationships between both organisations are now tight and that since 2004 and the first intervention of an INRAP team at the request of the APSARA National Authority we have continued to deepen our partnership to better serve preventive archaeology and the preservation of remains in the Siem Reap airport area, which importance has now been evidenced.

As just mentioned, we have signed a new Convention following those of 2005 and 2010; this will be celebrated in the presence of the Minister of Culture and of Communication this week and with H.E. the Director General of the APSARA National Authority Mr. Bun Narith. This new Convention is extending the relationship between the APSARA National Authority and INRAP and will continue until 2016, with Cambodia Airports and Vinci carrying out archaeological excavations within the framework of the Siem Reap airport extension.

To conclude I would like to insist on the exemplarity of this partnership between INRAP and the APSARA National Authority, which aims at being continued and is pursuing three goals: 1) To combine economic development with the preservation of the archaeological heritage of the subsoil. 2) This point is the main focus of this Convention: The training and skill transfer to Cambodian archaeologists and 3) to host trainees in France for training. Something we are presently doing— as I am speaking two Cambodian archaeologists are doing their training with us in Paris. I am delighted to inform you that this experience will be renewed within the framework of this Convention with two more Cambodian trainees.

I would also like to add how delighted and proud I am to demonstrate with the APSARA National Authority that preventive archaeology serving the sustainable management of the Angkor site is a key dimension of this partnership and that we have been pleased to present it within the framework of this Convention to be signed tomorrow.

Thank you to all of you."

**2. Exchange of cultural exhibitions between China and Cambodia**

**Mr. Azedine Beschaouch:**

"Thank you Director General. The second item is about an exchange. Earlier this year there has been an important cultural exchange between the APSARA National Authority and the Chinese organisation for cultural relations with foreign countries.

An exhibition on Angkor was hosted at the Forbidden City and although figures of 50 to 100,000 visitors seem normal in China they are quite consequential when put in relation to Cambodia. This exhibition marks the beginning of a process. China through the Centre for Foreign Cultural Relations has decided to send an exhibition to be exhibited here in 2014 about Chinese sites inscribed on the World Heritage List, which number more than 45."

**3. Exhibition at the Guimet Museum, Paris: "*Naissance d'un mythe – Louis Delaporte et le Cambodge*" (16 October to 13 January 2014)**

**Mr. Azedine Beschaouch:**

"The third item: Exhibition at the Guimet Museum, Paris: "*Naissance d'un mythe – Louis Delaporte et le Cambodge*" [Birth of a myth—Louis Delaporte and Cambodia]. Please Madame, take the floor."

**Mrs. Sophie Makariou:**

"Co-chairs,  
Your Excellency Deputy Prime Minister,

Just a few words on the success of this exhibition, which pays tribute to one of the key characters and of course to the place that has us all gathered here. Louis Delaporte, one could say, was the inventor of Angkor and also of the Imagination of the Khmer Art. I would actually like to quote Mr. Sok An: 'A heritage benchmark of universal scope.'

I believe that the huge success of the exhibition and of its splendid catalogue is a benchmark tool. Besides its fascinating reading and design, it highlights the continuous keen interest of the public, especially in France, but not only, for the Angkor site. The mouldings presented were taken during the several missions organised in the late 19<sup>th</sup> century and have played an important role.

I would also like to underline, as we are all together here for these proceedings on a site close to our hearts, that these mouldings are also of value for academics as some of them have preserved an image of the Angkor reliefs which have decayed on some monuments. I hope that these mouldings, some of which have been digitalised, may be more widely disseminated so that they could be a tri-dimensional iconographic reference of the sculpture of the Angkor monuments to benefit the academic world. Thank you."

**Mr. Azedine Beschaouch:**

"Thank you Madame. May I, co-chairs, take the floor again to continue a bit on this subject? This exhibition is beautiful and major and thanks to the mouldings presents a perspective on how the monuments were and how they have evolved. An old inscription stipulates that 'time is corroding monuments, but also pollution'."

#### 4. Recent publications:

- *World Heritage Magazine (UNESCO): special issue, Cambodia*
- *The World of Khmer Mythology, by Professor Vittorio Roveda*
- *Mohasenapadei Sangrama, by Professor Sachchidanand Sahai*

#### Mr. Azedine Beschouch:

"Let me now move on briefly to the publications. I am delighted in the presence of our friend the Director of the World Heritage Centre to talk about something acclaimed by all. Each year the World Heritage Magazine dedicates a volume to the heritage of one country. This volume was a particular success as the texts were outstanding. This is also due to our ICC as most of the contributors are members of teams from France, Japan, Germany, etc. and UNESCO. It was published in French, English and Spanish and thanks to an agreement with UNESCO it has been published in Khmer. It will be circulated to schools and libraries; this is a great achievement for World Heritage.

At the request of the Deputy Prime Minister H.E. Dr. Sok An, for the occasion of the 37<sup>th</sup> session, the government, through the APSARA National Authority, has published a magnificent publication where Dr. Roveda, a great academic on Khmer mythology, has compiled his studies into this great book, *The World of Khmer Mythology: A truly remarkable achievement including iconographic references which will make it a work of reference for studies on mythology.*

Also on the occasion of the 37<sup>th</sup> session, another book was published in English and Khmer. It depicts Mohasenapadei Sangrama, a mythological hero that defended Angkor and Preah Vihear between 1051 and 1065—a hero among many in the 11<sup>th</sup> century. Sachchidanand Sahai, a great scholar and advisor to the APSARA National Authority wrote this book. He was also the student of another great French academic when he studied in France for his PhD. The book was prepared for this 37<sup>th</sup> session of the World Heritage Committee and was published in English and Khmer.

Finally two more publications: A collaborative work with *National Geographic* which three years ago published an outstanding issue with a study on the people and the state of Angkor before its downfall, if I may say. These articles have been considered as seminal for the thinking on the history of Angkor. This publication was translated into Khmer and will be circulated in libraries, schools and universities. This endeavour should be recognised as it goes from science to culture and it is in Khmer.

The last publication is the third from our Hungarian friends from the Southeast Asia Institute. This year it covers a major *Prasat*, the *Prasat Krachap* in Koh Ker, where they are working. The previous publications were on epigraphy and archaeology. This time they put in perspective works started valiantly more than a century ago in Angkor by the EFEO.

This is, Co-chairs, the bulk of what I had to say. This is obviously the work of the teams and I almost forgot one publication, but last but not least, as it is a remarkable book and should not be overlooked: The *20 ans d'Angkor [20 years of Angkor]* available in French and English. There was already a publication published after ten years in Paris and now it is celebrating twenty years of activity. In Tokyo, the founding conference, we had no time to publish anything, but in Paris a publication was done and the same here. A team worked on it and we congratulate it and also the Co-chairs, H.E. Dr. Sok An and the Director general of UNESCO, they all contributed.

This work would not have been achieved without the input of one young man, where is he? Please rise. I can assure you he spent practically a week deprived of any sleep. I am

talking about the famous Bun Hok, who we all know. We checked the document; all the teams have been included and they all gave their input. One can say that after twenty years if someone would like to know what the ICC is, he would just need to open this brochure."

Intervention from Mr. Lim Bun Hok: "My apology to Tokyo which is not pleased with the English version as the logo was left in French. It is the 'French Kiss' that we willingly left on it."

**Mr. Azedine Beschouch:**

"Co-chairs there are a couple of points before concluding. One is to adopt the recommendations before fixing the date of the next technical session. Regarding the recommendations, the 37<sup>th</sup> session of the World Heritage Committee deprived us of our June technical session and it was only held yesterday and this morning. Under the benevolent guidance of the Co-chairs we have worked on the recommendations which have been circulated in French and English.

If there are no objections can we, the Secretariat, ask our colleagues whether they adopt them? The final version will be distributed later, as usual. You have also been given the yearly report in French and English of the proceedings and as a lawyer would say 'what is in writing is the law'. We will work on any amendments and if you agree as usual when you see something is wrong you send it to us at the UNESCO Office and the Secretariat will amend it accordingly so that the final version will be that which commits the ICC."

Comment from the Co-chair for Japan: <sup>[OrigE]</sup> "Thank you Mr. Beschouch. Let me handle this item V on the agenda first. Thank you for your information, very useful indeed. Your information about the publication was very intriguing; we applaud your team who contributed to this publication. Congratulations. It is a great achievement, especially the book on 20 years of work at Angkor, which is something that we are all going to appreciate and are really looking forward to reading. Thank you again and congratulations to your team.

We need to move on to item VI. As you have explained, the recommendations which are made by the experts were debated in the technical session yesterday and this morning. They have been distributed to all the participants. May I take a hard copy? The plenary session is ready to accept them. You have the floor."

## **VI - ICC RECOMMENDATIONS**

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### **A SPECIAL RECOMMENDATION – PROCEDURE**

ICC–Angkor recalls that its long record of activity (2013 marking its 20th anniversary) is due in particular to the willingness of everyone to comply with its internal regulations.

The activity of the *ad hoc* experts is crucial for the smooth functioning of the ICC-Angkor. Their periodic report is binding for all of them. When presented by an individual, it does not reflect the personal position of any one of the experts.

Likewise, the ICC-Angkor insists on the absolute necessity of only undertaking an invasive intervention (including even the partial dismantling of a structure) without preliminary submission to the Secretariat and, through it, the *ad hoc* group of experts, of a technical file describing the proposed operations.

### **B GENERAL RECOMMENDATIONS**

#### **A. Respect for the sacred significance of the site**

Ever since it was first proposed that Angkor be put on the World Heritage List, special attention has been given to the sacredness of the site. The Conferences of TOKYO (1993) and PARIS (2003) expressed the wish for actions designed to raise awareness of this amongst visitors. The continued growth tourist numbers from year to year as well as the repeated observation of a disregard for the spirit of the site and even ignorance of their sacredness, require a coordinated response in order to highlight this special feature of Angkor and have effective measures taken in this regard. ICC–Angkor recommends such action and wishes to be informed of its results in the future.

#### **B. Stone Conservation**

ICC–Angkor welcomes the increased interest expressed by international teams with regard to the science and techniques of stone

conservation. It particularly pays tribute to the activities undertaken by GACP, the University of Palermo and GIZ/SCU. It strongly recommends the coordination of activities in order to harmonize the training programmes.

### **C. Maintenance plan**

Aware of the importance of maintenance in each of the temples of Angkor Park, ICC–Angkor reiterates its recommendation regarding the need to develop a maintenance plan either by the teams in charge of a conservation/restoration project or the APSARA National Authority. A budget must be allocated for this purpose during the project preparation phase and likewise for the relevant directorates within APSARA.

### **D. Project follow-up**

In general, the ICC-Angkor recommends that the *ad hoc* group of experts be informed sufficiently in advance of the projects contemplated by the various teams working on all sites and monuments, if necessary, outside of the ICC-ANGKOR sessions using Internet through the channel of the ICC-Angkor Standing Secretariat (UNESCO).

The ICC-Angkor recommends also that the APSARA National Authority be systematically represented by a high level officer when the *ad hoc* experts visit the various projects and sites (instead of only the visits of sites that it is in charge of) so as to avoid the risk of inconsistency of instructions between them.

## **C**

### **RECOMMENDATIONS FOR CONSERVATION**

ICC–Angkor recommends:

#### **1. Srah Srang (APSARA)**

- a. Demolish the upper concrete slab, currently in a damaged state;
- b. Repair the lower fill with insertion of a geotextile and geogrid device, along the principle of compacted earth as used by the Italian team on the Angkor Wat moats or as is being done by the French-Khmer team at the Western Mebon site, which would make it possible to ensure a proper level of stability while preventing sand from being drawn out by water infiltration;

- c. Replacement of the upper reinforced concrete slab using stainless steel reinforcement prior to final repositioning of the slab and the steps arrangement;
- d. Invite the team implementing this project, which has extended over many months, to pull itself together with an eye to efficiency and greater performance to complete this project as soon as possible.

## **2. Elephant Terrace (Angkor Thom) (APSARA)**

- a. Complete investigations in order to obtain transversal sections with indication of the subsoil and their structures;
- b. Acquire knowledge of the exact scheme of construction of the walls and of the technique of anchoring the wall structure device. In this regard, it is also recommended to contact the Indian team that is most willing to share its experience in the use of anchorage bars acquired during its work on the Ta Prohm temple.

## **3. Eastern Mebon (APSARA)**

- a. As decay of the laterite blocks is worsening, an accurate documentation of the façades must be performed quickly, hopefully with more staff and appropriate equipment;
- b. Dismantling and reinforcement of corner blocks should be moved ahead in accordance with the principle of minimum intervention;
- c. This reinforcement intervention should envisage appropriate support for the heavy elephant sculptures found at each corner of the terrace;
- d. Original drainage gutters should be cleaned and appropriately maintained;
- e. The mechanical behaviour of the soil at each corner should be better analysed for corner reinforcement;
- f. Priority should be given to the south-west corner;
- g. Structural intervention should be planned for the leaning towers on the second terrace. The wooden support device should be replaced by an iron support device even for temporary use.

## **4. Ta Prohm (ASI)**

- a. Inside the third gopura fallen stone blocks piled up along the west wall tend to increase its outward leaning of the wall. These stone blocks, after being properly documented, should be removed in order to lessen harmful leaning on the wall;

- b. The structural behaviour of the vestibule on the side of the third go-pura should be carefully monitored and structural analysis should be carried out on the basis of long-term data collection. On the basis of this understanding of the structural behaviour of this section, the vestibule, composed of the large heavy pediment, may be partially dismantled and reassembled in its upper half in order to avoid a dangerous collapse and to enable the necessary reinforcement in the lower bearing structures;
- c. After being documented, the south gate should be reconstructed on the basis of the principles of anastylosis and minimum intervention;
- d. It is necessary to detour the main road and create a visitor intake space. The impact study must include analysis of visitor and vehicle flows in order for them to be well regulated and managed within the given space, with minimal bypass of the main east-west traffic route.

## **5. Ta Keo (CSA)**

- a. Assess the safety conditions of the damaged structures and identify the priorities in order to obtain adequate safety levels;
- b. Continue cooperation with the German GACP team on stone conservation, safeguarding the bas-reliefs and documentation work; and
- c. Monitor changes in the small cracks appearing in the corner of the walls using automatic or manual system. Compare the movements with the outside temperature and verify that the movements are stabilized.

## **6. Western embankment of Angkor Wat moat (IGeS)**

- a. Adjust and align the upper part of the steps by replacing, where necessary, the unusable sandstone blocks and by consolidating those that are only partially damaged;
- b. Adjust the position and size of the geotextile layer after dismantling of all blocks and replacing the unusable laterite blocks;
- c. See to restoration of the visual aspect of the rows of steps between the Italian team work site now underway and APSARA's work site that will commence shortly;
- d. Take into consideration the difference in structure and profile with regard to what may originally have been wooden bridges.

## **7. Bakheng (WMF)**



- a. That the World Monuments Fund continue the inventory of the various stone storage sites made by the Angkor Conservation Office when the large Buddha statue was dismantled, in order to try to identify potential complementary components of the 5 towers of the upper terrace of the temple.
- b. That the World Monuments Fund, now in charge of the monument, use its own funds or funds raised through external partnerships, for the particularly urgent safeguarding of the 20 or so brick towers still standing on the site.

#### **8. Western Mebon work site (APSARA-EFEO)**

- a. Create an experimental span with compacted soil approaching as much as possible the original layout at the time of the Khmer Empire, and another experimental span, on top of the compacted soil, including a symmetrical sole. Both must allow an in situ analysis of the distribution of the weight of the architectural structures and thus facilitate the requisite technical opinion;
- b. Continue dismantling the enclosure wall and pavilions and obtain as quickly as possible authorization for the excavation site within the timeline set by APSARA;
- c. Finally, particular ongoing attention must be given to controlling the water level in the baray, especially during floods, when the water level also depends on opening the sluiceways by the competent provincial departments.

#### **9. Banteay Srei visitor intake area (*parvis*) (APSARA)**

- a. Adoption of an overall maintenance and management plan, to be prepared and implemented in a timely manner. Since the work carried out long ago by the EFEO on this temple, it seems that no further safeguarding operation was planned. Therefore, it is recommended to work on the systematic inventory of stone storage areas and to set up a lapidarium in one of the existing wooden buildings at the north of the temple. This lapidarium could be useful in the future for any team wishing to resume restoration work on the monument and its perimeter area;
- b. Management of visitor flows and tour itinerary, based on the following:
  - ✓ Promote an overall plan of the site and its surroundings which are rich in information for those interested in the temple's natural environment;

- ✓ Facilitate cleaning and drainage of stagnant water;  
Revise the traffic plan.

## D RECOMMENDATIONS FOR CONSERVATION

### The ICC recommends:

#### 1. Angkor site temple visitor intake areas (*parvis*)

- a) That future temple visitor intake areas be inspired by the general approach adopted by the Banteay Srei visitor intake areas project and its specifications both for building materials (choice of materials, colour scheme, overall layout) and societal aspect;
- a) That a detailed setup plan for the future visitor intake area of Ta Prohm temple be submitted to the ICC-Angkor so that the foregoing recommendations are taken on board.

##### 1.1 Angkor Wat visitor intake area

- b) In order to create a comfortable space for tourist intake during the rainy season. the area and its surroundings require a drainage system with sufficient capacity that is hooked up to a sewage treatment plant;
- c) With regard to the current operation and management of visitor intake areas and related facilities, installation of a pollution-free electricity generator or hook up to a reliable, adequate public electricity supply must be provided for in order to ensure environmental protection in the archaeological park;
- d) That any future changes that may be made to visitor itineraries within Angkor Wat itself be taken into account when finalising the visitor intake area project;
- e) That the departments and senior management of the APSARA National Authority having jurisdiction over tourism verify and confirm that the segments of the project involving non-commercial visitor intake functions (visitor monitoring, locker rooms, information, safety, storage areas, etc.), correspond to actual needs in order to avoid under-sizing compared to the more general commercial functions;

- f) That the use of green cement tiles proposed for the roofs of the buildings be abandoned in favour of traditional terra cotta tiles that are handcrafted and come in natural colours;
- g) That work on the proposed implementation of the tree planting and landscaping project be more finely tuned in order to better ensure that there is no co-visibility between the new facilities and the Angkor Wat temple;
- h) In order to allow the healthy growth of tall trees in the inner courtyards of the visitor intake area, at least one meter of unpaved area must be maintained around such trees to protect their spreading deep roots;
- i) That a specific working group be set up to validate and monitor the project at its various stages of study and implementation: design stage, project execution, choice of materials and colours, work site progress, monitoring of impact of the work on the archaeological subsoil and existing trees on the site, etc.

## **1.2 Banteay Srei temple and visitor intake area (*parvis*)**

- a) That an overall maintenance and management plan be adopted, prepared and implemented in a timely manner;
- b) That a systematic inventory of stone storage areas be performed and that a lapidarium be set up in one of the wooden buildings located south of the temple. The lapidarium could be useful in the future for any team wishing to resume restoration of the monument and its perimeter area;
- c) That stagnant water be cleaned and drained;
- d) Prepare an overall site plan for the temple and its perimeter area, that has valuable information for all visitors interested in the natural environment of the temple;
- e) That the visitor itinerary be revised and that the road leading back to the west gate toward the south be reopened as soon as possible, so that the investment made to put it in is not wasted.

## **2. Heritage Management Framework (HMF)**

- a) That all aspects of the Heritage Management Framework (HMF) be implemented very quickly and operations be monitored closely;

- b) In order to make long-term use of the high quality, reliable Angkor World Heritage risk map, a regular update of its data is of utmost importance. Furthermore, the reliability of all data entered into the GIS risk map must be checked by the responsible departments.

### **3. Active leisure activities (zip line, rafting)**

That such activities be set up and practiced outside the archaeological park;

#### **Flight of the Gibbon**

- a) In spite of the fact that the operators of this facility are being very careful to avoid any damage to the trees, ongoing attention should be given to the trees annually to detect any unfavourable development over time;
- b) That the area of activity of this facility be limited to the perimeter area of Ta Keo temple and the East Baray.

#### **Rafting on Siem Reap River**

- a) That regular monitoring be done to see that this activity does not cause erosion of the riverbanks or riverbed. If anything untoward is noted, a report should be made to the ICC and appropriate action taken;
- b) That the water quality, possible presence of parasites or pests in the water, wandering livestock, etc. be checked carefully before this activity is allowed.

#### **Kampong Phluk**

That thorough discussion among the provincial government, local authorities and communities, private sector and the APSARA National Authority take place in order to protect the cultural and natural values of this unique village.

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### **VI.1 Adoption of the recommendations examined at the last technical session**

*Comment from Mr Richard Mackay:* <sup>[OrigE]</sup> "Honourable Cochairs, if I may make one suggestion because we had only a short time this morning. I am referring particularly to item 2 in the recommendations from the sustainable development experts. I thank you very much indeed for the advice and contributions, but I did note that in H. E. Dr Sok An's introductory remarks to this Plenary Session he advised the meeting about the adoption of the

Heritage Management Framework in a meeting on the 2<sup>nd</sup> of December, earlier this week. With your forbearance may I suggest that it might be appropriate in view of the forthcoming Intergovernmental Conference that a third element be added to item 2 in the recommendations to sustainable development, that notes the resolutions of the HMF steering committee, because I think this would tie together very neatly. Thank you co-chairs."

Comment from Mr. Philippe Delanghe: <sup>[OrigE]</sup> "I would just like to clarify this for the HMF team; the secretariat was just including this as a point to see."

Comment from the Co-chairman for Japan: <sup>[OrigE]</sup> "With that explanation, is it satisfactory to you? It seems to be the case. Please you have the floor."

Comment from Mr. Bruno Favel: "Thank you very much Co-chairman and Ambassador. In the sustainable development section, on the leisure activities, zip lining and rafting in paragraph A there is in French an ambiguity which we would like to remove: 'That such activities be, wherever possible, set up and practiced'. 'Wherever possible' is not desirable we would rather draft 'That such activities be set up and practiced outside the archaeological park'. 'Wherever possible' should be deleted if possible. Thank you."

Comment from the Co-chairman for Japan: <sup>[OrigE]</sup> "It seems to be a problem, please take that part out. Anybody else would like to take the floor? I see nobody. I think that the plenary is ready to adopt the recommendations. They are adopted. Thank you."

Comment from the Co-chairman for France: "Co-chair, I am sorry to interrupt, but I believe that point B of III is redundant if we delete the 'wherever possible'. That's all. Thank you."

Comment Co-chairman for Japan: <sup>[OrigE]</sup> "Ok with that. Do we have an agreement on it? So we do. We adopt these recommendations. Now let's move on to the date of the technical session. You have the floor."

## **VI.2 Date of the technical session**

### **Mr. Azedine Beschouch:**

"Usually, Co-chairs it is held in June. Usually, we do not set an exact date but a week to allow yourselves, co-chairs and H.E. the Deputy Prime Minister according to your time table to choose the date. Most of the time it is for late June, and then you set a date with the UNESCO Office. We propose late June of 2014. We have been doing this for the past seven or eight years and the exact date is set by the UNESCO Office after agreement with the representative of the royal government, H.E. Sok An and with the two co-chairs.

Nevertheless, we have to take into account one date and we have the new and former directors of the World Heritage Centre with us, and they will have to be in Qatar in late June. Actually, the 38<sup>th</sup> session of the World Heritage Committee will be held in Qatar. Thereby the session would rather be held the first week of June. The date will be later confirmed by the UNESCO Office."

Comment from the Co-chairman for Japan: <sup>[OrigE]</sup> "The proposal is the first week of June. Do we have a general agreement on the date? Of course, I will ask you to consolidate the date as soon as you can for the convenience of all the participants. Mr. Beschouch, we all agree that the first week of June will be good for the technical session of ICC. Thank you."

### **Mr. Azedine Beschouch:**

"That's it, we have finished. Thank you Co-chairs for your patience. We are only seven minutes late, which is not a lot and we have caught up the previous lateness which was scaring all of us. Co-chair you are now tasked with concluding our proceedings."

Comment from the Co-chairman for France: "Thank you very much. Seven minutes out of 2,000 years of history, I guess no one will hold a grudge against us for that."

Your Excellency Deputy Prime Minister, Excellencies, Ladies and Gentlemen, we have to conclude the proceedings of this 20<sup>th</sup> Plenary Session of the ICC-Angkor and this will be done by H.E. Mr. Yuji Kumamaru, the Ambassador of Japan to Cambodia. You have the floor Yuji."

## VII- CLOSING SESSION

### VII.1 Statement by the Japanese Co-Chairman, His Excellency Mr. Yuji Kumamaru, Ambassador of Japan to Cambodia

[OrigE] "Your Excellency Dr. Sok An, Deputy Prime Minister and President of the APSARA National Authority,  
Your Excellency Mr. Kol Bunly, High Representative of His Majesty the King  
Your Excellency Mr. Serge Mostura, Ambassador of France to the Kingdom of Cambodia,  
Your Excellency Mr. Kishore Rao, Director of the UNESCO World Heritage Centre,  
Mrs. Anne Lemaistre, Representative of UNESCO in Cambodia,  
Distinguished representatives of Governments, International organisations and other organisations,  
Ladies and Gentlemen,

First of all, as co-chair of the 20<sup>th</sup> plenary session, I would like to express my sincere appreciation to all the participants for your active contributions to the discussion. I would also like to thank H.E. Mr. Mostura, co-chair of the session, for his wonderful chairmanship and his helpful support, and the ICC secretariat for their good preparation without which this session could not have happened.

Thank you all for your good support and cooperation; I think we can successfully conclude today's session. Thank you for the cooperation of all speakers, presenters, for keeping your speeches within the time planned. The co-chairs apologise for not having extensive general debate on each item, but more or less I think we had a good discussion on several issues, I am very satisfied with the fact that we could take up a wide variety of agenda items such as new technology, restoration and water management and had substantial discussion on each subject in a forward looking manner.

In particular, I am very happy that, as has been always the case in the past, the good recommendations prepared by the *ad hoc* experts and examined by the ICC technical session were adopted at this plenary session. I would like to call all stakeholders concerned to properly implement them and I also suggest that the ICC should conduct appropriate follow-up and monitoring of those recommendations.

It is also my great pleasure that the drafted recommendations and declaration of the third Intergovernmental Conference were delivered to you, upon which we will continue discussion tomorrow.

Tomorrow will be the day that deserves special mention in the history of the ICC-Angkor, as the third Intergovernmental Conference on Angkor will be held here in Cambodia for the first time, 20 years after the First Conference in Tokyo in 1993, and the second

Intergovernmental Conference on Angkor in Paris in 2003. I sincerely hope that we will have a fruitful discussion based upon the outcome of today's ICC session as well as all the experiences and expertise we have accumulated together in these past 20 years.

To commemorate this special occasion of the 20<sup>th</sup> anniversary of the ICC-Angkor, Japan, as a co-chair of the ICC, has invited the AUNJ Orchestra, a group of most prominent Japanese musicians to perform on a special stage at Angkor Wat. Tonight, they will present us a spectacular music performance together with renowned musicians from Cambodia, Thailand, Indonesia, and Vietnam. This special event is also the closing event for the 60<sup>th</sup> Anniversary of the Japan-Cambodia Friendship in 2013.

The concert will be followed by a gala reception at Le Meridien Angkor. It is my great pleasure to extend a cordial invitation to all the participants of today's ICC plenary session to these special events.

Let me conclude my remarks by expressing once again my sincere gratitude to all of you for your great contribution to this successful session of the ICC.

Thank you very much."

Comment from the Co-chairman for France: "Thank you to all of you and for these encouraging words. The session is over."

**\*\* Conclusion of the 20<sup>th</sup> ICC Plenary Session \*\***

## Participant list

### 20<sup>th</sup> Plenary Session of the ICC-Angkor Siem Reap–Sokka Angkor Hotel 4 December 2013

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# APSARA National Authority 2013 Activity Report

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## A. Introduction

### 1. The APSARA National Authority Organisation

- The decree N° NS/RKT/0295, dated 19 February 1995, established the APSARA National Authority. Several provisions have been amended according to Royal decree N° NS/RKT/0199/18, dated 22 January 1999. Articles 4 and 5 were amended according to Royal decree N° NS/RKT/0904/267, dated 20 September 2004 and Royal decree N° NS/RKT/0904/267, dated 10 January 2007.

- According to Royal sub-decree N° 50ANK/BK, dated 9 May 2013, the APSARA National Authority is made up of 14 departments.

- According to the Royal sub-decree N° 17 ANK/BK, dated 11 July 2011, the Angkor International Centre for Research and Documentation was established with a status equal to that of a Department.

### 2. APSARA National Authority Staff

It comprises of a staff of 3,054.

#### 2.1 Staff listed according to education level

N°	Degree	Individuals	Miscellaneous
1	Bachelor and post degrees	524	116 archaeologists 35 architects 15 engineers 358 officers with different qualifications
2	A level and higher education	306	
3	Other	2,224	

#### 2.2 Listed per duties

N°	Post, duty	Individuals	Miscellaneous
1	Management	130	
2	Qualified employees working on temples and sites	1,092	
3	Tourism and forestry officers and workers on a monthly payroll	46	
4	Daily workers	1,426	

## B. Achievements

### 1. Conservation, restoration and maintenance of tangible heritage

#### 1.1 Angkor site

1. **At Angkor Wat:** Wooden platforms were built in 45 locations; the drainage system in the vicinity of the temple was restored. In collaboration with the IGeS Italian team, the working site for the restoration of the laterite steps of the west moat on the northern half has been set up and construction of dikes on the western side of the entrance causeway to carry out preventive excavations and installation of 56 awnings to protect the sites has been completed.

2. **Phnom Krom Temple:** The northern library and the three central towers have been belted and six doorjambes propped. The monks have been able to permanently remove the cement statues standing on the hill.

3. **Wat At Veahr Pagoda temple:** Weak areas have been propped in nine locations and a security post installed.

4. **Preah Ko temple:** The south-western laterite wall and the brick door to the west have been propped. The broken members of the doorjamb of the west door of the west library have been rejoined.

5. **Eastern Mebon temple:** The northern and western steps have been restored and a lion statue reset in its original location.

6. **Elephant Terrace:** Three locations have been shored and 225 wooden crosspieces have been laid to prevent any visitor accidents.

7. **Angkor Thom wall and Northeast Prasat Chrung:** Propping in four locations.

8. **Ta Prohm:** A new car park has been developed to the west.

9. Inventory of historical sites in Chreav neighbourhood, Siem Reap town, Siem Reap province.

#### Sites outside the Angkor Park

10. Contact has been established with youth volunteering for Samdech Decho with a view to preventing any surveying of plots of land encroaching upon the protected areas of the Koh Ker site, the Ta Siem sites, Svay Leu commune, Svay leu district and the protected areas of the ancient bridges and roads of Beng Mealea Temple up to the village of Khvao, Chikreng district, Siem Reap province.

11. Collaborative work with the Kham Someth Company to build a staircase to reach the main temple of Koh Ker, *Prasat Thom*.

12. At Phnom Kulen: Construction of a security post and of a rest room at the rear of the latter, near the River of a Thousand Lingas.

At Kbal Spean: wooden stairs have been erected to reach the site in four locations. Works financed by the Venerable Tep Vong.

13. 17 markers to demarcate the protected site at Koh Ker and 16 more at Beng Mealea have been erected.

14. At Banteay Ampil temple, propping at three locations and at eight locations at Chau Srey Vibol.

15. A new informative sign has been put up to communicate on Kbal Spean statues and a new informative panel at Koh Ker on the history of the site.

16. A village from Angkor Chum district, Siem reap province, handed over three sculptures to be stored at the Preah Norodom Sihanouk-Angkor Museum.

17. At Beng Mealea, the guardrails of a 200 metre long wooden bridge have been fixed and a wooden bridge and two wooden platforms built.

18. Collaborative work with the Archaeology and Development Foundation (ADF) to erect 113 markers to demarcate archaeological sites at Phnom Kulen.

## **2. Intangible heritage conservation**

### **2.1 Religious and traditional heritage**

1. Organisation of three seminars dedicated to monks, *achars* and to the 35 pagoda committees located in the Angkor Park's protected areas and nearby sites to raise awareness and engage themselves and their devotees with the protection of heritage.
2. Organisation of a Monk Committee to assist the APSARA National Authority in the maintenance of pagodas located in the protected sites of Angkor.
3. Assistance in planning the renovation of some buildings in various pagodas.
4. Monks, representatives of local authorities, the elderly living in villages and guides have been invited to sit in on seminars on intangible heritage. The aim of these seminars is to foster exchanges (protection standards of the intangible heritage). Several targeted publications have also been circulated in Khmer and English

## **DEVELOPING ANGKORIAN CULTURE**

In line with its mission of developing Angkorian Culture, the Department of Cultural Development, Museums and Heritage Standards (DDCMNP) has set up activities highlighting some of the lesser known tangible or intangible aspects of the monuments.

### **Devising new cultural tours:**

This work, which aims at diversifying visitor offer, has necessitated on-site surveys and the review of existing and popular tours among guides and tour operators:

- The Public Observatory has surveyed and counted tourists at the temples of Ta Prohm, Angkor Wat, Pre Rup, Preah Khan and Banteay Srei. On the one hand, the team analysed the increase in the number of visitors; on the other hand, they have asked visitors what would enhance their Angkor sojourn.
- Vehicles parking at Angkor Wat have been counted within the perspective of the future development of the temple *parvis* (tourist intake area).
- Also, at Phnom Bakeng, visitors were counted, in order to reorganise the itinerary allowing for a limited amount of people climbing to the top of the temple in order to prevent any bottlenecks, notably at sunset.
- A questionnaire was established on the satisfaction of the youth teams taking part in the 37<sup>th</sup> Session of the World Heritage Committee.
- Visitors at Beng Mealea have been counted within the framework of the pilot project of the Heritage Management Framework (HMF), and in particular of the Tourism Management Plan (TMP).

### **Cultural development**

This endeavour has been a component of different APSARA National Authority projects:

- The coordination of the training project for Khmer artefacts in wood, metal and stone targeted twenty trainees originating from the Phnom Penh University of Fine Arts, the Preah Vihear National Authority and the APSARA National Authority, and was facilitated by the DDCMNP. This co-operation with the Italian government and especially with the University of Palermo has been terminated and all trainees have graduated with a certificate.
- The Department of Water Resources Management (DGE) saw to the development and the improvement of the West Baray with hydraulic works and the construction of platforms for sunset viewing. As for the DDCMNP it devised and set up visiting itineraries.
- The DDCMNP also established and implemented a botanical tour at the North Baray in collaboration with the DGE. Notable was the creation of canoeing tours on the Baray, which were entrusted to the communities living in the area at Reach Dak. Villagers were advised on marketing techniques targeting guides, travel agencies, hotels and Siem Reap-based companies. This project has further been included within the community participatory programme and entrusted to the Department of Land Use and Habitat Management (DATGH).

- Contribution to the cultural and tourism development in the villages within the framework of the community participatory programme and in cooperation with New Zealand and the DATGH and DGE Departments.
- Study, design and implementation of cultural tour itineraries:
  - . The tour of 13 pagodas located along the Siem Reap River included itineraries tailored for children and disabled;
  - . Ta Prohm itinerary designed with a view to ease visitor flow, in co-operation with the Archaeological Survey of India (ASI) team, which is responsible for the restoration of the monument;
  - . Tours of the ancient Angkorian capital, especially of the surrounding walls of Angkor Thom and of buildings built by Jayavarman VI,;
  - . Sunset and sunrise tours;
  - . Tour itineraries of Beng Mealea established within the HMF pilot project.
- Filming and organisation of the Angkor, World Heritage Site exhibition displayed at the Summer Palace of Beijing, China, in cooperation with the People of Beijing Association for Friendship with Foreigners which in turn has organised a photographic exhibition of the Beijing Summer Palace at the Banteay Srei *parvis*.

### **Monitoring of heritage standards**

To address this matter the units working at the Department have undertaken the following:

- Advising visitors at Angkor on an appropriate dress code when visiting sacred sites;
- Checking the quality of cultural products sold on the Angkor site and advising sellers on the preservation of Khmer culture by selling relevant products;
- Seeing to the compliance to heritage standards of events organised within the Angkor site, such as: dinner shows organised by travel agencies and special events such as the One Asia Joint Concert celebrating 60 years of Khmer-Japanese friendship, as well as the Khlors Group concert and that of the Royal Ballet of Cambodia marking the 20<sup>th</sup> anniversary of the inscription of the Angkor site on the World Heritage List, the 20 years of the ICC and the third intergovernmental conference on Angkor;
- Management of the Banteay Srei *parvis* and maintenance of the pathways, trees and signage at the Srah Srang site.
- Filming inside and outside the monuments of the Angkor site was monitored. 140 instances were authorised and 379 non- authorised;
- Monitoring 58 cases of wedding shoots inside and outside the Angkor site monuments;

- Contribution to the drafting of the contract regarding the Google Street View operation from Google Company and taking part in the official inauguration of this activity;
- Collaboration with various international production companies for shooting of documentaries and motion pictures either for commercial or cultural and tourism purposes.

## Museums

The development of the Angkorian heritage also includes museums, notably those managed by the DCMNP.

- The cultural information displayed on signs at the Grand Panorama Museum built by North Korea was checked;
- Management of the Angkor Ceramic Museum at Tani;
- Organisation of the exhibition of the Ganga Mekong Traditional Textile Museum, a co-operation with the Indian government. A textile expert was outsourced to the APSARA National Authority and trained young professionals on the different textile techniques. The Museum should soft open in 2014. India, Cambodia, Laos, Myanmar, Thailand and Vietnam will set up an exhibition of their respective textiles. Cambodia and India jointly manage the museum;
- Preah Norodom Sihanouk-Angkor Museum:
  - . Leaflets printed to promote the museum's collections,
  - . Management of the Museum library: a new internal regulation has been drafted for the librarians, 1,541 books have been shelved respecting the Dewey Decimal classification and listing of the newly received books has been undertaken,
  - . Organisation of the temporary exhibition 'Our Common Heritage' in co-operation with the UNESCO Paris Museum Section,
  - . Exhibited objects taken care of (labelling, information, etc.),
  - . Restoration of damaged artefacts,
  - . Museum maintenance,
  - . Research: Analysis of ceramics coming from the Kok Patri temple,
  - . Intangible heritage development: Data collected on the traditional festivities organised by the villages located on the Angkor site, research on the *kan ben*, *chak chek* and *bay sey* ceremonies and on the blessing of new Buddha statues,
  - . Organisation of awareness campaigns on heritage for primary and secondary school children from the Angkor site. For example, explaining the symbolic gestures of the Buddha's hands

(*Mudra*), in co-operation with the University of Sophia-Asia within its Centre for Research and Human Development for school children and teachers of Siem Reap schools;

. Recording of new artefacts from the different national and international teams and the APSARA National Authority excavating within the Angkor site:

Ceramics	Stone sculptures	Organisation
98 baskets	7 fragments	Department of Conservation of the Angkor Monuments and Preventive Archaeology (DMA)
	15 fragments	École française d'Extrême-Orient
	4 pieces	Phnom Kulen Archaeological Programme
	17 pieces and 4 bags	From various excavations and handed over by the general management of the APSARA National Authority

. Inventory of the collections in 2013:

Components		Number of pieces
Stone	Sandstone	532
	Laterite	2
	Quartz	2
Terra cotta	Unidentified stones	5
	Ceramic	2
Metal	Bronze	2
	Iron	1
	Bone	6
Organic substances	Lime	1
	Charcoal	1
<b>Collection total: 554 pieces</b>		

### **3. Cultural tourism development**

#### **3.1 Tourism management**

1. In collaboration with the tourism police, 13 lost items were returned to tourists. In 46 cases tourists were advised to file a complaint with the Tourism Police in case of items not being returned.
2. 41 cases of injured tourists following accidents led to assistance in sending them to hospital with the help of the tourism police and the heritage police.
3. Tourists were warned 221 times not to trespass, touch or tread on sculptures, to dress accordingly and not to take pictures in the Angkor site without prior approval. On 40 occasions the officers intervened to stop the deployment of banners inside the temples and to prevent the use of megaphones, which disturb visitors. Advice was given with regard to encouraging the sale of souvenirs promoting Khmer culture.
4. 48 dinners and cultural shows were organised in the temples.
5. Organisation of 15 shooting sessions at Phnom Bakheng in order to promote the tourism potential of this site.
6. Monitoring, in 140 instances, of filming authorized inside and outside the Angkor site and of wedding videos and photos on 58 occasions.
7. Review and set up of itineraries of the 13 pagodas along the Siem Reap River, tailored for children and people with disabilities; of Ta Prohm ; of the visit of the former Angkorian capital within the walls of Angkor Thom; of Jayavarman VII's constructions and finally of sunrise and sunset experiences.
8. Monitoring and control on ten occasions of the hygiene, cleanliness and quality of the products and services offered in restaurants, and of souvenir and miscellaneous stalls found on the Angkor site. Eight awareness raising campaigns on the environment organised for vendors.

#### **3.2 Tourism data**

9. The number of international tourists who bought an entrance pass to the Angkor site was of 2,021,715 in 2013, representing a year on year increase of 11.78 percent.
10. The total receipts of the Angkor site entrance pass amounted to US\$57,687,680 in 2013, representing a year on year increase of 12.41 percent.



11. International visitors benefiting from gratuity to the site in 2013 were members of international or national delegations courtesy of the royal government of Cambodia. A total of 8,662 individuals benefited from this complimentary access representing 421 days (a grand total of 22,812 days). Also benefiting were 720 academics representing 70,463 days.
12. Short-term complimentary passes (one to nine months) were granted to 774 academics to sites located in and out the Angkor site.
13. One-year passes granted to 245 academics to sites located in and out the Angkor site.
14. Passes granted to 39 members of delegations.
15. Three-month passes delivered to 155 contributors to the Tour Leader Programme on the Angkor site.

#### **4. Development of the Angkor site and of the heritage of Siem Reap town**

##### **4.1 Infrastructures development**

1. Road works on the Small and Big Circuit over 31.5 kilometres.
2. Construction of a road and of a car park at the Phnom Bakheng site over an area of 7,000m<sup>2</sup>.
3. Road works on the bypass road over 3.01 kilometres, on the portion south of Siem Reap town.
4. Ducts installed along the 60m road at four locations and mending of the stones protecting the abutment of the Sre Khvao Bridge.
5. A 35 metre long steel bridge has been built and the dirt roads improved at Ta Ngoy village, Ampil commune, Siem Reap town.
6. Maps demarcating precisely the protected areas of Beng Mealea and Koh Ker temples have been drawn for further publication.
7. Ongoing road works of the 9.6 kilometre road leading to the new seat of the APSARA National Authority.

##### **4.2 Siem Reap Town heritage:**

1. Reviewing of five hotel construction projects and further advice to the Siem Reap governor on these forthcoming sites. Construction of a monastery, of

two centres, of four petrol stations and of a road sign. Proposal to build an exhibition hall to display a solar energy storage system.

2. Siem Reap town heritage development project: Study of the conservation and protection of the town's heritage provisions.
3. To date, 67 percent of the advertising signs and other miscellaneous boards located in the Phsar Chas (Old market) area have been studied. They seriously disturb the heritage area landscape. Standards and procedures have been devised for this site.
4. A project is ongoing to name and index streets and houses in Kam Reuk and Svay Dangkm communes, Siem Reap town. This project is being reviewed by the Groupe 8 Company and supported by the Association internationale des maires francophones (International Association of French Speaking Mayors, AIMF) after completion of the first phase. The implementation of the second phase is subject to ongoing fundraising activities.
5. Collaborative work with the provincial authorities to monitor and provide technical advice on the maintenance and repair works of the sewage and waste water system to the east of the river. This is supported by the Agence Française de Développement (French Agency for development, AFD).
6. AIMF and SIAPP (Syndicat Interdépartemental pour l'Assainissement de l'Agglomération Parisienne) carried out prospective missions. In collaboration with the neighbourhood chiefs of the Kam Reuk commune, an awareness campaign to the maintenance and use of wastewater natural filters and of the watering system was organised for the general public. The detailed project on the 2014 sanitation of wastewater, including an estimate, was sent to the SIAAP for further assistance.
7. Monitoring of the construction of the ticket office (Visitor Centre).
8. Repair of sewage canals on the shoulders of roads and canals. Electric power lines have been hidden inside and outside the tourism and cultural sites. The Sokay Senda construction company has started these works.

#### **4.3 Improvement of the ancient hydraulic system**

1. Construction of dikes to the west of Preah Khan over a length of 534.44 metres.
2. Cleaning of dirty surface water and removal of seaweeds found in the moats of Angkor Wat. Soil collected opposite Prasat Kravan was transported with 62

trucks (a volume of 186 m<sup>3</sup>) to Phlung village and will be used to improve ancient dikes.

3. Construction site of a major sluice gate and consolidation of the Angkor Wat moats by covering the main dike with 700 m<sup>2</sup> of grass, repairing the 180 m<sup>3</sup> dike located west of the main works, and dredging of 836 m<sup>3</sup> of soil and sand deposits at the northern moats of Angkor Wat.
4. Dredging of the soil sediments in the northern canal of the Bayon and drying of the stagnating water opposite the Elephant Terrace.
5. Irrigation system
  - Closure of the dike located at the corner of the Angkor Thom moats, at Nokor Krao village, in order to prevent water exiting the canals and closure of the dike starting at the construction site of the large bridge up to Ta Som Temple corner.
  - Improvement of the dike foundations at O Klot, O Rokar, and O Anlong Damrey Slap and at those located at the bridges of Nokor Karao and Vat Thmey villages.
  - Portions eroded by water improved over a length of 500 metres at the West Baray.
  - Topographical survey of the area of O Analong Damrey Slap until the Puork River.
6. Water table management and air quality monitoring.
  - Monitoring of the level of the water table within the Angkor site sampled from 87 selected wells in 17 villages (located inside five districts) and analysis of the collected data.
  - Quality control of the water of the Siem Reap River using a Water Quality Meter (WQC) in three different locations: Upstream of the town (at *Prasat Keo* dike), in town (at the Phsar Chas Bridge) and downstream near the Tonle Sap Lake (Tadong Bridge). The department carried out analyses of some of the data coming from the water samples using a Digital Analyser ( $\lambda$ -8000 Series) in order to monitor the water quality and the level of pollution.
  - Monitoring and control of the air quality analysing six major components (dust, O<sub>3</sub>, NO, NO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>2</sub>) carried out by the Department.
  - Monitoring and control of the air quality on the Angkor site using a GASTEC detector tube with key components (NO<sub>2</sub>, SO<sub>2</sub> and CO). This was done over

seven days and in two locations: at the Angkor site ticket booth and at the car park located to the west of Angkor Wat.

- Collaboration with the University of Kanazawa to monitor the air quality at the Angkor site. Samples were taken in three different locations (at the Department of Water resources Management, at Preah Ang Chek, and Preah Ang Châm (opposite Angkor Wat) and then sent to a laboratory in Japan.

- Rain water, air and humidity data collected in six weather stations at Preah Kral Pagoda (Phnom Kulen), Phnom Krom, the Spice Garden, Kraing Krauch, Slat Rumchey pagoda and at Chau Srey Vibol.

#### 7. North Baray:

- Guards have been dispatched morning and night around the North Baray to stop people from cutting trees or poaching.

- Topographical survey carried out of the access road to the 1,200 metre long bridge being built and of the dikes along the construction of the main sluice gate. The volume of soil to be dug and backfilled has been calculated.

- 17 metre long sewage ducts installed and repair works on two roads which lead to Leang Day and Phlung villages where soil dug in O Clot is sent. The roadwork aims at facilitating the dike repairs and villagers' movement. Double nettings set up on floaters have been fixed around the West Mebon temple with a view to stopping waves from damaging the dikes during high water.

### **4.4 Maintenance and management of the forest, landscape and the environment**

#### **\*Angkor site**

1. Finalisation of the survey and data collected concerning a forested area of 2,796.13 hectares
2. Systematic control of the 15 firebreak paths covering 17,866 metres of the Angkor site.
3. 60 name tags affixed to trees; 352 plants have been studied and will be name- tagged inside the sites of Angkor Wat, Preah Khan, Ta Som and Banteay Srei.
4. Inventory of 2,455 sugar palm trees located within the temple enclosures.

5. Planting of 33,371 small plants and of 16,453 small plant shoots. Collection of 125 kilograms of seeds; plastic bags enclosing 4,120 small plants have been changed and 349 young fruit trees planted.
6. 26,520 plants have been distributed to schools, hotels, pagodas, to the Union of Youth Federations of Cambodia, to the province of Siem Reap and to various departments.
7. Conservation of the seeds of 73 types of spices, study of more spices to be further added to the APSARA National Authority Spice Garden.
8. Study of 1,141 trees at risk in the enclosures of Preah Khan and Bakong temples and in the temples located on the Small Circuit. Inventory of 481 plants located west of Ta Prohm; treatment of 371 sick trees and pruning of 1,567 trees located in the temple enclosures and on main roads.
9. 23 awareness campaigns undertaken on environmental cleanliness, waste collection, waste storage and the value of trees to the benefit of 1,133 participants (776 women) members of the village communities, monks, stallholders or school children. 21 cases of control and preventive work pertaining to breaches of the law such as illegal deforestation in the Angkor Park. Seven interventions to prevent forest fires; 19 interventions to prevent pollution of the environment and 8 health hygiene safety checks carried out on the Angkor site.

**\* Areas outside the Angkor Park**

10. 9,338 young seedlings planted at Koh Ker, Kbal Spean, Phnom Kulen, Beng Mealea, Chao Srey Vibol, and Preah Tih Bridge.
11. The chain saw of an illegal woodcutter was seized. He was felling trees at night, inside the enclosure of Trapeang Char Temple (near Koh Ker). Also, seizure of two oxcarts used for the illegal transportation of *beng*, timber trunks, felled in the enclosure of Koh Ker. A motorised vehicle, *koyun*, was seized as it was used to transport illegal timber felled inside the protected site, near Sampoar and Svay Temples (Koh Ker complex). The material seized was handed over to the head rangers.
12. 50 wooden posts have been put up to prevent cars from accessing the embankments of the River of One Thousand Lingas.
13. 4,100 young seedlings collected at the forest in the Mount Kulen to be planted in the Phnom Kulen nursery.

14. 30 signs have been put up to demarcate the protected forest within the Koh Ker site and similarly 20 at Beng Mealea.

#### **4.5 Community work and agricultural development**

##### **\* Community work**

1. First stage (24/12/2012 – 26/4/2013): Regulations and management strategy of the Angkor site were circulated to 43 villages covering 5,977 people. During the second stage (2/5/2013-14/6/2013), similar activities were extended to 70 villages reaching to 13,438 people.
2. 131 requests from villagers have been granted. They concerned the construction and improvements or relocation of houses, the construction of rest rooms, henhouses, farmyards, stables, rice lofts, stores and miscellaneous repair works. All these activities were undertaken in collaboration with the local authorities.
3. Following the request of the villagers of Bangkaong, Ampil commune, Siem Reap town, a new bridge has been built to replace the existing structure. It was inaugurated on 25/7/2013.
4. Following flooding, which damaged rice fields, the request of three villages representing 59 families from the Khnath commune, Puork district, was granted with 100,000 riel per family to compensate their loss. This expenditure was budgeted by the APSARA National Authority.
5. The same for 238 families from Nokor Krao, Kok Châk commune, Siem Reap town, with the sum of 5,000 riel granted per family (again from the APSARA National Authority budget) and of 25 kilograms of cargo rice donated by the Siem Reap Red Cross.
6. The population has shown a good understanding of their interest in engaging in a collaborative manner with the APSARA National Authority works, as have the local authorities when reaching out and informing the population; nevertheless, some districts and city authorities have hardly engaged.
7. Constructions in the Angkor Park:
  - Construction permit requests totalled 734, of which 365 were granted and 336 rejected. There are still 18 pending requests from 2013 being reviewed.
  - Control and monitoring of granted construction permits: Experts have inspected sites and monitored 96 of the APSARA National Authority

authorized construction sites. Three congratulating letters sent to landlords who fully respected the master plans and contracts, whereas 96 landlords have been notified to improve their construction works.

- The APSARA National Authority rejects constructions which do not follow the master plan or the contract and those which completely overlook the construction regulations. This did not happen in 2013.

**\* Agricultural development**

8. 100 tons of compost, 1,000 litres of EM fertilizers, 200 litres of tobacco extracted liquid and 2,000 kilograms of paddy seeds were produced and the latter distributed to 50 families which suffered from the floods.
9. 2,500 fruit tree plantations distributed to selected schools and farmers.
10. Agricultural development in 5 districts.

N°	District/Town	Chicken raising teams using EM fodder		Intensive farming team		Compost making team		Market gardening production team		Savings team		
		Number of groups	Members	Number of groups	Members	Number of groups	Members	Number of groups	Members	Number of groups	Members	Savings (in riel)
1	Siem Reap	4	65			1	6	2	17	2	24	2,493,200
2	Bakong	6	100	5	53	4	28	6	69	5	89	26,468,500
3	Angkor Thom	6	127	6	21	6	21	6	107	7	153	38,022,656
4	Puork	9	84	9	80	9	76	9	78	15	343	320,942,100
5	Banteay Srei	6	90	5	35	5	28	5	40	5	131	44,880,000
	Total	31	466	31	189	25	159	28	311	34	739	432,806,456

## **5. Communication and research**

### **5.1. Communication**

1. Information collected among 99 community work groups (representing 19,415 people) further broadcasted on provincial and national radio and television network. The data is also available on the APSARA National Authority website.
2. Information gathered regarding 13 inspected, unauthorised construction cases. The aim is to entice the owners to file a construction permit request and in some cases to demand the relocation of the construction. Activities undertaken with the contribution of the community work teams and the Department of Order and Cooperation, with the cooperation of the Siem Reap provincial court's prosecutors, the lawyers of the APSARA National Authority and the local authorities.
3. Important communications made 93 times to herald significant events.
4. Press, broadcasts and Internet review and monitoring of any information relevant to the APSARA National Authority (94 cuts) and different related activities (331 cuts).
5. Airing of 110 radio programmes and broadcast of 187 TV programmes dealing with community work, the protection of the forest and the environment, archaeology and research (especially through the "Radio views" show) and seminars and meetings.
6. 26 training sessions on Khmer stone inscriptions organised to the benefit of civil servants and staff of the APSARA National Authority.
7. Rubbing of inscriptions at Khna Temple, Preah Vihear and review of the inscriptions at the Roluos group and Angkor Wat. Publication of a book on Angkorian inscriptions in collaboration with the Centre for Khmer Studies (CKS).
8. Awareness campaign to 36 school children representing 17 countries on heritage undertaken ahead of the Youth Forum on World Heritage, organized in collaboration with partner organisations. This forum was organized and managed jointly with the 37<sup>th</sup> session of the UNESCO World Heritage Committee held in Phnom Penh and Siem Reap.

### **5.2. Research**

9. The APSARA National Authority has signed 6 MoU for 6 projects with international partners: 1. Smithsonian Institute on the advanced archaeology training; 2. Nara Institute on the ancient brown glazed ceramic kilns; 3. The EFEO on the 3D digitalisation of Kraham Temple sculptures in Koh Ker; 4. INRAP: cooperation guidelines as stated in the agreement; 5. Digitalised



photography of the Angkor Wat temple including bas-reliefs project using a 3D laser sensor; 6. CKS: Strengthening capacity of young Cambodians and international researchers.

10. 45 fragments of artefacts from Ta Prohm have been received and stored at the Preah Norodom Sihanouk Angkor Museum.
11. Using a 3D laser sensor, a 3D digital photography project has been set up on the bas-relief structure of Angkor Wat. This is a collaborative work with the Tokyo University.
12. Reception of new documentation donated by institutions and private donors: 188 copies of reports, books, magazines and official newspapers (13 donated).
13. The fifth edition of the Cambodian and Thai students' meeting was organised in Siem Reap within the framework of the research project on Ancient roads from Angkor to Phimai, in partnership with Thailand.
14. Excavations undertaken at Phnom Bakheng with the World Monuments Fund (WMF).
15. Archaeological research to the south of the Sothor Baray with the EFEO for the Yaçodharâçrama project. Collaboration with the Franco-Khmer Mission on the development of the Angkorian territory (MAFKATA) on the pre-Angkorian temples located around the Teuk Thla Baray. Work with the French Archaeological Mission in Angkor (MAFA) inside the Angkor Thom enclosure. Finally, collaboration with the *Prasat* Ta Keo research led by the CSA, Chinese team.
16. Excavation projects with the University of Sydney at Lovea village, Puork district and at Angkor Thom. Excavations with INRAP at the Siem Reap international airport for archaeological research.
17. In collaboration with the Archaeology and Development Fund, archaeological research at the Kulen Mountain range.
18. Collaboration with a Hungarian organisation on the archaeological studies carried out in Koh Ker.
19. Excavations of ancient kilns undertaken in collaboration with the Smithsonian institute (US) and including contributions from foreign researchers: Vietnamese, Burmese, Indonesian and Australian archaeologists. Excavations of ancient kilns in collaboration with the Nara Institute at Kambaor Or village, Khvao commune, Chikreng district.

## **6. Consolidation of the capacity of the institution**

### **6.1 The APSARA National Authority Service Centre (CSA)**

The APSARA National Authority Service Centre has been established under *Prakas* N° 112BK, dated 2/9/2008. It applies the one-window scheme which aims at easing miscellaneous administrative requests from the population, partners, national and international visitors and the different cooperating teams working in the Angkor site. Its achievements have been the following:

1. Establishment of a tariff for services applied by the APSARA National Authority (document N° 065/12RBThS, dated 17/01/2012) notified to all ministers and Cambodian and international bodies.
2. An informative panel has been designed to inform on the different services offered by the APSARA National Authority through the APSARA National Authority Service Centre, dated 17/1/2012.
3. 884 requests for tourism and cultural services have been received, of which 840 were replied to by mail and 44 are still under review.
4. 759 construction permit requests of which 713 were responded to (347 granted and 366 rejected) and 46 are still pending and 84 cases investigated.
5. 274 requests for administrative services of which 257 were replied to (250 authorised, 7 rejected) and 17 under review with one investigated.
6. Annual receipts from December 2008 until December 2013: grand total US\$1,068,367 (from December 2008 until December 2009 = US\$164,605; in 2010 = US\$175,680; in 2011 = US\$180,619; in 2012 = US\$234,457 and in 2013 = US\$313,006).

### **6.2 Training**

1. Collaborative and coordinating work with the Italian University of Palermo on the first stage of the training of 20 specialists in artefact restoration, of whom 15 are members of the APSARA National Authority staff. The training lasted two years, the first stage.

### **6.3 Control of building works in the Angkor site**

2. Statistics on the data pertaining to the building works control in the Angkor site.

N°	District/Town	Number of constructions						
		Halted	Demolished by the owners	Demolished and rebuilt by the APSARA National Authority	Not demolished by the owners	Authorised by the community team	reviewed	authorised
1	Siem Reap	110	31	2	2,991	20	2,004	190
2	Bakong	37	3	0	347	1	306	65
3	Banteay Srei	64	1	0	356	2	450	62
4	Puork	19	4	0	332	3	375	105
5	Angkor Thom	3	0	0	48	0	127	18
	Total	233	39	2	4,074	26	3,262	440

### 3. Cases examined by the Court in collaboration with the APSARA National Authority

- 36 complaints filed with the Siem Reap Court of first instance.
- 22 complaints on facts (verdict given on two cases for demolition, in three cases the owners demolished themselves, and 17 cases monitored).
- 13 protection orders (9 cases where the order was applied, one case pending the application of the order, 2 cases were stripped of the protection order after Court verdict and one case filed a complaint for halting exploitation).
- Appeal was submitted on the protection order request.

### 6.4 APSARA National Authority headquarters swap

1. Conforming to the N° 1504SCN notification taken by the Council of Ministers, dated 12/8/2013, the APSARA National Authority in collaboration with the Siem Reap authorities has decided on the exchange between the seat of the administrative city of the Siem Reap province and that of the APSARA National Authority on 10/09/2013. Minutes of the meeting have been taken. The exchange and moving ceremony was held on 16/9/2013.
2. The APSARA National Authority organised a meeting to iron out some of the difficulties regarding the far location of the new seat: The staff was awarded a

luncheon indemnity of 15,000 riel per working day and an additional 30 litres of petrol/month.

3. The former Siem Reap administrative city extends over 431,772.77 hectares with 62 buildings including 6 small rooms for janitors, first aid and security and 56 buildings.
4. In the first instance the APSARA National Authority has moved into 32 buildings for the different department offices.
5. Presently, the APSARA National Authority is holding talks with the Construction Committee of the administrative city on the refurbishment of the buildings project to be further submitted to H.E. the Deputy Prime Minister and President of the APSARA National Authority.

## **1. Solving the Cultural and Tourism City land issues**

- Disputed plots of land solved by the former Committee from 2000 until 2005 covered 3,924,804.50 m<sup>2</sup> (where 1,250 families lived). The families have been compensated for US\$3,319,023.30.
- Disputed plots of land solved by the new Committee from 2005 until 2013 covered 1,469,178 m<sup>2</sup> (occupied by 170 families). The families have been compensated for US\$3,505,288.25.
- In 2013, negotiation started with a view to offer US\$832,348.50, disbursement pending, for an area of 326,506 m<sup>2</sup> (occupied by 53 families).
- The total area free of disputed land issues and solved by the old and new Committee between 200 and 2013 covered 5,393,982.50 m<sup>2</sup> (occupied by 1,420 families). The compensations amounted to US\$6,824,311.55.

## **2. Khmer-Korean bypass road**

- The plots of land where compensation was agreed on covered 329,030 m<sup>2</sup> (occupied by 635 families). The amount awarded for compensation was US\$529,636.99 and in line with the strategy adopted.
- The plots of land where compensations were awarded cover an area of 8,542m<sup>2</sup> (occupied by 12 families) which, as of today, compensation amounts to US\$6, 523.90—payment is pending.

- The plots of land investigated, but where the owners have yet to show up for negotiations, and those where investigations were carried out on the basis of information given out by the local authorities cover an area of 216,421 m<sup>2</sup> (occupied by 91 families). The resolution of these disputes has been postponed. They will be resolved, as requests have been filed by the dwellers with the local authorities.

### **3. Improvement of ancient dikes and canals**

- The plots of land where compensation was agreed on covered 840,423 m<sup>2</sup> (occupied by 90 families). The amount awarded for compensation was US\$116, 537.45.
- The plots of land surveyed by the Committee and where prices have not been negotiated extends over 193,794.45 m<sup>2</sup> (occupied by 57 families).

### **4. Scout camping site and traditional medicinal plants garden**

The plots of land where compensation was agreed on covered 207,128 m<sup>2</sup> (occupied by 34 families). The amount awarded for compensation was US\$83, 438,20. There are still 209,842 m<sup>2</sup> to be investigated and where conflict resolution is still pending.

### **5. West Baray *parvis* (intake area for tourist):**

The plan of a 20,000 m<sup>2</sup> area is being studied on and further proposal will be made in 2014.

### **6. The new access road to the APSARA National Authority headquarters**

- It measures 9,680m and passes through the Cultural and Tourism City for 3,200 metres.
- Investigations and negotiations have been carried out for the 53 plots of land located inside the Cultural and Tourism City extending over 326,506 m<sup>2</sup> and for the 59 plots of land located outside the City and covering an area of 343,579.33 m<sup>2</sup>. Prices have not yet been negotiated in the latter case (6 plots of land have not yet been investigated and the negotiation is ongoing with the owners).

## **7. Measures taken against illegal constructions**

- 104 houses have been identified as illegal, of which 52 are masonry constructions (mainly the ground floor), 47 in wood and 5 in metal. They include nine old buildings which have been demolished and rebuilt on the original location.
- A total of 107 bans on construction have been ordered, and seizing of materials of an illegal construction; demolition of concrete fence posts and additional 11 posts removed. Recommendations were given by the builders themselves to demolish two houses which were built on lands where compensations had already been agreed on.

## **C. Special projects achievements**

### **1. “7 January” Electric Car Unit**

- 1.1 Established on 7/3/2008, it comprises of a pool of seven cars, increased to 20 in 2013. They are stationed in the enclosure of the former capital, Angkor Thom.
- 1.2 Contacts have been made with travel agencies, hotels, universities, and museums to distribute leaflets in Khmer and in English and to circulate the APSARA National Authority’s monthly newsletter.
- 1.3 Further contacts have been established with 14 travel agencies and 46 hotels, of which 20 have signed a cooperative agreement where they commit to send customers to the Unit.
- 1.4 In 2013 the total receipt of the Electric Car Unit amounted to US\$100,183, mostly from daily rentals and transportation of authorised tourists. A total of 37,899 people used this means of transportation.

### **2. Development project of the Angkor Wat *parvis***

The Royal government of Cambodia entrusted the operation of this project to the APSARA National Authority. The latter signed an agreement on 4/5/2012 to execute the development of the *parvis* of the Angkor Wat Temple, turning it into a visitor centre offering quality services. It includes the development of a visitor centre and of high quality services such as information booths, art and cultural exhibition areas, restaurants, and tax-free souvenir boutiques. The project will cover 37 hectares and is located opposite Angkor Wat.

- 2.1 The development of the Angkor Wat *parvis* has been contracted to the Green Angkor Company and will be rolled out in three stages. The first phase regards the construction of a public car park, the second the development of a shopping area and the third the construction of a visitor centre.
  - 2.2 Green Angkor has started the first phase, the construction of the public car park, on 7/5/2013 and by late January 2014, it was 90 percent completed.
3. **Green Belt project** (17/10/2013, Development Programme of the Red Area).
- 3.1 A total of 97 staff (at Siem Reap provincial and district levels and technicians) is working on this project. An association of farmers has been established by more than one hundred private sector micro-businesses through the programme. It acts as middleman and supplier.
  - 3.2 In 2013 the Red Programme covered rural areas, or 830 villages representing 90 percent of all the villages in this area. The programme has benefited 22,500 families.
  - 3.3 In many areas the August 2014 targets have already been achieved.
  - 3.4 One of the three June 2013 established-programmes regarding the strengthening of the needed capacity for the communes and districts councils has been implemented and is ongoing with cooperation of public partners located in the affected areas.
  - 3.5 On top of rice and market gardening activities, the programme launched a bamboo related activity in Varin district, one of the poorest of the province. Two investors have established a production unit for chopsticks and floorboards. 20 to 25 workers, coming from the 400 families living in the district, plant bamboo which later will be used as raw materials. This activity fits within the framework of the Red Line Strategy which aims at exploiting local natural resources whilst creating sustainable added income for the population
  - 3.6 The 15,000 rural families, representing 14 percent of the poor of the area, have seen their yearly income increase by US\$185, or 22 percent.
  - 3.7 The volume of subsidiary local products output on the market increased from 7 percent (in 2008) to 17 percent (in 2013). More than 800 farmers have, on a long-term basis, improved their rice yield, as much for quantity and quality, with an average of 220 percent increase.
  - 3.8 The cooperation between the public and private sectors and civil society has widely improved. The six districts, where 36 groups have been established in so-

called “brain storming areas”, have organised 160 activities to value collective innovations.

- 3.9 In rural districts, the quality of seedling production has been improved, which enables compliance with the norms and transparency required within the trade agreement and the generation of a higher income.
- 3.10 The Association of New professional Activities has been established in order to bring together different types of handicraft. The authenticity of local products can now be vetted through the AHA labelling respecting the quality standard of products available in souvenir stalls and shopping centres. New designs are also developed to attract new output markets. Finally, the establishment of the Association of Natural Fibres brings further support to its members.
- 3.11 **Cambodian people’s contribution:** The Ministry of Economics and Finance has earmarked Euros 455,000 for the second stage. Cambodian NGOs, respecting their commitments, have carried out outreach activities on farming. The first Euros 100,000 have been spent. The remainder has been used to respond to tenders on the construction of small-scale hydraulic infrastructures and systems to be constructed at the end of the monsoon. Communication expenditures are not covered by the project budget.
- 3.12 **Request to continue the programme:** The royal government of Cambodia has asked for renewal of the Red Programme beyond the second stage. This request also includes works to be carried out in Siem Reap province and activity models to be developed in two underdeveloped provinces adjoining that of Siem Reap. The Red Programme model has been a success and other approaches should be undertaken in Siem Reap province, in order to see to sustainable development with the aim of reducing poverty in Cambodia.

#### **4. Run Ta Ek ecovillage development:**

Established according to sub-decree N°69ANK.BK, dated 19/10/2004, this village is located in the Run Ta Ek commune. It extends into Banteay Srei district and Sna Sang Kream village, Balaing commune, Prasat Bakong district, and is located 4 kilometres to the east of the Angkor Park. It covers an area of 1,012 hectares.

##### **4.1 Conditions of the population and community development**

- During the first step, the APSARA National Authority has distributed 1 hectare of rice field, a plot of land of 15x25 metres and construction materials to 100 families who lived in Zone 1 and 2 of the Angkor Park protected area, when they accepted to move to Run Ta Ek ecovillage.



- These 100 families built 94 houses, of which 55 have been completed (an increase of 4 houses), 36 are 80 percent completed (-4 houses) and three 50 percent completed. Six families have yet to start building their houses; one of them does not have sufficient resources to do so and has abandoned the project.
- Five families have been taken off the list (four families relocated and one family abandoned its original dwelling).
- Up to December 2013, only 94 families have their home in the village of which 38 live permanently. The members of most of these families are employed as workers by the APSARA National Authority, 28 families migrate in and out and 26 live there temporarily because of other employment far from this area or are seasonal farming labourers.
- Two families have asked to be granted leave from Run Ta Ek village and have handed back built houses to the APSARA National Authority. They asked for cash as compensation so that they could build a house in another location. One of these two families is from the Roluos commune, *Prasat Bakong* district and cited the distance of the village from its workplace as the reason to leave. It decided to move in with relatives and committed not to build any new houses in Zone I and II. The second family used to live on the river embankments and also requested to move out of the village and to hand back its house and plot of land. The arrival of a newborn motivated this decision with an ageing grandmother, 82, living in Kampong Cham and needing care.

#### **4.2 Community development and miscellaneous activities**

- Two meetings were organised with the population to establish a saving group. The first was attended by 22 people and collected 1,590,000 riel (the group has been disbanded and the capital divided among the members and used for the construction of doors and windows). The second meeting gathered 23 people and tallied 4,028,100 riel.
- A census of families living in Run Ta Ek is possible although one family moved to *Prasat Bakong* district and another in Siem Reap. It has been impossible to contact these two families as they work far from their homes. Thereby, the last figures include 92 families or 380 people (176 women).
- Among these 92 families are 192 children still under parental responsibility (78 girls), 43 (32 girls) enrolled at Chealea Thom primary school and 67 children (20 girls) enrolled in schools where their parents reside, and 81 children (33 girls) who are not enrolled in any school.

- 44 people from Run Ta Ek have been hired as workers, with only 13 remaining full time employees. 12 others work with the GYGC Company planning the Home Stay Project.
- Awareness activity on schooling carried out to 45 children of five different levels (20 in primary school, 8 in first grade, 4 in the second grade, 5 in the third grade and 8 in the fourth). In 2013, a fence was built around the school and trees planted thanks to the contribution of students from BBU and KUNKU (Korea) universities. A well was dug thanks to the generous donation of Mrs. Roat Srey, business owner of the Chè Srey Brides shop. Other donations to the school were: soft drinks, 300kg of rice, canned fish, oil, salt, corn and beans all donated by the World Food Programme and coordinated by UNICEF and PLAN. As for schooling material, it is supported within the framework of the PB Project from the Ministry of Education, Youth and Sports.
- Awareness campaign to citizens on the planting of trees and animal rearing on a small and sustainable scale (five families manifested their intention to rear pigs).

#### **4.3 Domestic and international visitors at Run Ta Ek.**

- In 2013, 58 domestic and international delegations and tourist groups visited the village. 28 groups from Cambodia, 11 from the USA, 1 from Canada, 3 from France, 7 from Japan, 1 from England, 5 from South Korea, 1 from Italy, 1 from Malaysia, 2 from JCI (made up of Cambodians, Japanese, Singaporeans and Malaysians), and other miscellaneous groups.

#### **4.4 Home stay Organisation**

- In order to generate income, raise the living standard of the population and to reduce poverty in Zones I and II, new dwellers are encouraged to migrate to the Run Ta Ek ecovillage. In collaboration with GET YOUR GUIDE CAMBODIA, the APSARA National Authority launched a Home stay Project in Run Ta Ek which was approved by H.E. the Deputy Prime Minister. An agreement was signed for this project. From October until December 2013, the GYGC Company recruited 12 employees among the population of Run Ta Ek. A restaurant is being built as is a sports ground (volley ball and petanque); the main road along the lake has been filled in with laterite and a commitment agreed to with eight families of the village to organise the Home Stay Project.

- 4.5 **Development works in the project-targeted area:** A pilot-house and farm land, where a plantation project has started, have been developed to show to the Run Ta Ek people their agricultural potential.
- 4.6 Improvement and dredging of the bed of a 1,369 metre long canal which flows through the village and which rainfall has damaged.
- 4.7 Levelling, using 503 m<sup>3</sup> of soil, of the dike surrounding the lake. The breaches caused by water infiltration on the dike have been filled with 35 m<sup>3</sup> of soil. 20 windmills have been repaired and maintained.
- 4.8 7,924 plants have been staked, plant pots repaired, weeding undertaken around 6,404 plants, 365 *angkanh* plants have been replaced, fertilisers sprayed on 167 plants, 60 plants pruned and 380 plants planted.

## 5. Angkor Heritage Management Framework (HMF)

The HMF is a collaborative project between the Royal Government of Cambodia, represented by the APSARA National Authority, UNESCO and the Australian government in partnership with the Godden Mackay Logan (GML) consultancy. The MoU of the project was signed on 15/12/2009 and work on the Angkor World Heritage site started on October 2010 for an initial three years. The overall participation of the Royal Government of Cambodia to the total budgeted of the project amounted to US\$81,043 and US\$981,157 for that of Australia. Also, the Cambodian government has contributed unilaterally an earmarked US\$600,000 to support the four staff training pilot projects and the procurement of materials and miscellaneous expenses. The outcomes of these joint projects are the following:

- **Tourism Management Plan (TMP):** This plan is the achievement of a long process undertaken by the project teams. It was proposed by the APSARA National Authority and the Angkor-ICC following field surveys, review of founding texts, meetings among the APSARA National Authority management, interviews with the tourism industry stakeholders and seminars, held in Siem Reap in March 2012, conducted by the technical team with relevant actors (travel agencies in Siem Reap, the communities, NGOs and monks). The finalised plan was submitted in December 2012 to the Royal Government of Cambodia and implementation commenced in March 2013. The year 2014 will see the implementation of the first pilot project.
- **Risk Map:** This identifies any factors that may pose a threat to the monuments, the people (tourists or locals) and the ecosystems of the Angkor Park. The Maps are then based on data related to these threats. The data is recorded in a Geographic Information System (GIS) aiming at better management of the risks and facilitating the decision making process. The

Australian government, through GML, has nevertheless yet to send the Risk Map to the APSARA National Authority, as UNESCO has requested the APSARA National Authority purchase the GIS software license before any handover.

- **Training:** It was grouped and taught on site to staff, guards and workers of the APSARA National Authority and to heritage and tourism police officers operating in the Angkor Park, Angkor Thom or Beng Mealea Temple. These training sessions were collated in a publication for the Beng Mealea staff on “Assessing site management” and in a guide “The management of heritage including temples and cultural landscape”. There were also additional training sessions on the GIS system for five technical officers who will contribute to the conception of Risk Maps in the Angkor site.
- **Four pilot projects:** These projects are the determining factors for pilot strategies with a view to developing framework concepts managing the entire Angkor heritage and later to be applied to other sites. These projects are:
  1. **Beng Mealea Pilot project:** The project is carried out by several teams: the first is undertaking tourist surveys, the second sees to the drafting of these surveys, the third is in charge of water resources management and the fourth analysis the Risk Maps. These teams undertook surveys, analysed visitor itineraries and new areas to be visited. They developed a water drainage system in the temple to protect it in case of heavy precipitations, and studied temple management and facilitating access to visitors.
  2. **North Baray Natural Circuit project:** Besides the organisation of visitor itineraries, the team established a community called “the Community of solidarity for the Development of Tourism at Baray Reach Dak” which is located in the villages of Phlung and Leang Day in Angkor Thom district. In order to diversify tourism experience, it also set up canoeing tours in the baray for Cambodian and international tourists, thereby generating revenue for the local population through this activity and participating in a potential increase of their living standard.
  3. **Sunset pilot project, west of Angkor Wat:** The working team has selected new locations which will be promoted on a leaflet and on the Internet explaining the sunset experience to visitors.
  4. **Air Quality Pilot project:** An automatic air quality station has been installed at the Angkor Park ticket booth. The project terminated in December 2013 and was supported by the GML team who handed over the project to the APSARA National

Authority. UNESCO has taken over to continue the project until December 2014. It continues to review the Risk Maps and to implement the four pilot projects and complete miscellaneous unfinished tasks.

## **6. West Mebon restoration project**

This is a collaborative project between the APSARA National Authority and the École française d'Extrême-Orient (EFEO) to restore the West Mebon. It has been planned for four years and is supported by the French government for US\$2,560,000 and by the APSARA National Authority which allocated US\$86,000 to pay workers' wages in 2013 and the construction of a surrounding dike to protect the working site from water infiltration, which renders the site operational all year-round. The central area of the West Baray, where the temple is located, is underwater all year-round, whereas the Eastern portion dries up for three months per year. Besides, the Baray is also a reservoir where water is stored for irrigation during the dry season, but do not hamper the temple restoration works with the erection of the dike. The latter extends in length over 668 metres with a width of 15 metres at its foot and of 5 metres at the top. Planting of grass and vetiver has reinforced the banks of the dike. The construction of the dike lasted from 20/4/2012 until 30/08/2013, using soil extracted from the eastern portion of the West Baray and from Trapeang Khyâng. The APSARA National Authority is in charge of maintaining and protecting the dike until completion of the restoration works of the West Mebon. The restoration site *per se* is spearheaded by the EFEO. As of today the progress of the works is as follows:

- The surrounding dike of the West Mebon has been completed.
- Excavations ongoing with a view to unearthing ancient stones or artefacts.
- The scattered stone blocks have been organised and inventoried in order to facilitate the temple's reconstruction.
- Excavations of the temple foundations with the aim of redressing the four tiers.

## **7. Hydraulic management project**

The Siem Reap Angkor area suffered flooding in 2009, 2010 and 2011. The latter year was the worse. The past five years have been challenging for the town, which with the flooding saw a decrease of visitors in the heart of the monsoon, in September and October. To remedy this issue, the APSARA National Authority has endeavoured to use and develop the old hydraulic system, built by our ancestors 1,000 years ago. To this end, repair and improvement works of the hydraulic system

have been needed to protect and develop the Siem Reap/Angkor area and to mitigate the flooding risk for the temples, the airport and the city of Siem Reap.

Once the Department of Water resources management had devised a Flood Management System (see picture), the government decided to begin the improvement of the existing hydraulic system inside the Angkor Park. Also, new infrastructures have been built such as the construction of a water management system at Spean Thom with a sluice gate and 17 kilometres of water drainage canals, bridges and etc. This work aims at diverting the water flow and to mitigate and prevent floods in the temple areas, the town and the airport as they led to a decrease in visitation of the temples.

In 2012 and 2013 the built infrastructures were tested and demonstrated their relevance. In September and October 2013 in order to prevent flooding in the town, the temples and villages located around the Angkor Park, the working team diverted the Siem Reap River to the West and North Barays and to the Puork and Roluos Rivers. Faced with a high volume of water and the malfunctioning of the sluice gate built by the Provincial Office for Water Resources and Meteorology and with the water inside the West Baray reaching its maximum level, the APSARA National Authority was forced to close the sluice gate. The Takao gate was consequently damaged and the village of Kok Tachan and the road linking Angkor Wat to the airport flooded. After agreement from H.E. the Deputy Prime Minister and President of the APSARA National Authority, the work team, heeding the situation, decided to clear an area southwest of the West Baray to create a temporary pond to store water and to lower the dangerously high level of water, spare the villages and protect the dike of the ancient West Baray. The West Baray (56 million m<sup>3</sup>), the North Baray (5 million m<sup>3</sup>), the Angkor Thom moats (2 million m<sup>3</sup>) and the Angkor Wat moats (more than one million m<sup>3</sup>) can store a total of 65 million m<sup>3</sup> of water. In 2014, old streams have been improved; that at Phlung village, which flows opposite Preah Khan in O Khlot, and that of O Anlong Damrey Slap which flows into Preah Srok (Puork district). Some hydraulic constructions have also been built to further improve water management in the Siem Reap-Angkor area.

### **Measures taken to reduce flooding**

- The measures taken to prevent the 21-30 September 2013 floods in the aftermath of the 20-21 September 2013 storms were: redirecting the rain water into canals and consolidating dikes.
- Temporary closure of a damaged dike following water infiltration to the west of the construction of the main bridge on the Siem Reap River to prevent water from flowing into the Siem Reap River.

- Canvas and sand bags laid on the ancient dike banks from the corner of Ta Som until the Takos village dike, so that water would not overflow the dike or provoke damage through seepage.
- Two ancient dikes were improved and raised and grass planted to protect them from water infiltration.
- A dike located 23 metres east of Leang Day was temporary closed to prevent any water from flowing into the temple enclosures.
- Ongoing improvement works on an ancient, 23 metre dike, damaged during flooding and located east from the Leang Day road.
- Soil transported to Phlung village to repair an ancient dike damaged by the flood.

## **8. Natural Resources and Community Development Programme**

1. **Project objective:** New Zealand, collaborating with the APSARA National Authority, devised a management plan of the Angkor Park between 2005 and 2007. New Zealand, within the framework of this project, also contributed to the drafting in 2009 of a management programme of the natural resources and of community development within the Angkor Park.

### **2. Project background**

- **Project objectives:** To reduce poverty, protect and maintain heritage and the environment while ensuring that people living in the Angkor Park benefit from the resources accrued within a sustainable development strategy.
- **Project content:** Development of the community and the APSARA National Authority staff capacities, management of natural resources, community engagement and assessment.
- The Angkor Participatory Natural Resource Management and Livelihoods Project (APNRM&L) has been rolled out in two steps:
  - A. First step:** Two pilot projects have been set up in two villages, North Srah Srang and Rohal, for 4,339 people. This project was initially planned for six months in 2009, but its implementation was delayed pending a decision on the second step and it was extended until 2010.
  - B. Second step:** The project has been extended to eight villages, for 11,384 people:

- South Srah Srang and Kravan villages (Nokor Thom commune, Siem Reap Town);
- Leang Day and Phlung villages (Leang Day commune, Angkor Thom district);
- Tuol Kralanh and Banteay Srei villages (Khnar Sanday commune, Banteay Srei district);
- Trapeang Ses and South Kasin villages (Kok Châk commune, Siem Reap town).

**C.** The ten villages total a population of 15,723.

**D.** Duration: 2010-2013.

3. **Budget:** The Ministry of Foreign Affairs and Trade of New Zealand supported the project:

- First step: US\$250,000.
- Second step: US\$1,000,000.
- Total: US\$1,250,000.

The APSARA National Authority contributed by covering the wages of staff and housing the project offices.

#### 4. **Management**

- The APSARA National Authority directly set up the project with assistance from specialised Cambodian and international staff, especially during the first step.
- A Technical Committee whose members stem from three departments managed the project: The Department of Land use and Angkor Park Habitat (DATH), of Water Resources Management (DGE), and of Cultural Development, Museums and Heritage Standards (DCMN).
- On site, a staff of 25 is working on the project: 17 from the DATH, two from the DGE and two representatives of the Department of Agricultural Development and Community and one from the DCMN.
- New Zealand selected the Live & Learn organisation as coordinator of the project to work alongside the APSARA National Authority.



## 5. Achievements

### A. Community capacities development

- A study (Participatory Rural Appraisal [PRA]) on the needs of ten villages with a view to organising participative activities for the targeted 15,723 people.
- Heritage training sessions undertaken in ten villages or 2,102 people.
- 16 representatives from eight villages took a study trip to Vietnam to examine experiences set up in this country.
- Several study trips in Cambodia to the Takeo, Kampong Chhnang, Banteay Meanchey and Siem Reap provinces and visit of the GIZ Green Belt Project.
- Aerial pictures taken of all the protected areas of the Angkor Park, covering 401,000 hectares. Commune counsellors and villagers have been explained the Participatory Land Use Planning principles.
- Micro-business Training to 20 villager representatives (3 men and 17 women).
- Value chain training.
- *Angkor, Our heritage*, a cartoon DVD was made to raise awareness to the population on heritage, to treasure it and contribute to its protection.
- Three seminars organised for monks, *achars* and members of pagoda committees, from 35 pagodas located in the Angkor Park and surrounding areas. Training tools on heritage have been distributed to pagoda with a view for further training of the followers.
- A Monk Committee has been established to help the APSARA National Authority in seeing to the maintenance of pagodas.

### B. APSARA National Authority Capacity training

- Training on planning and the setting up of projects within the communities given to 17 members of the community teams of the DATH and to eight other staff from four different departments.
- Villagers representing ten villages have been trained in the undertaking of basic studies in their respective villages.

- Further training to these same representatives on the assessment of the level of participation to rural life.
- Staff from the community encouraged to take up English courses at ACE school.
- Training in the making and use of training tools on heritage awareness dissemination to the population.
- Value chain training.
- Study trip to Vietnam and provinces of Cambodia with the representatives of the ten villages.
- Topographical survey tools training.
- Training to the Geographical Information System (GIS) and to the use of aerial photography for land use mapping.
- Training given to the villagers on participating to land use planning.

### **C. Participatory management of natural resources**

- Assistance in the drawing of a 3D map of the hydraulic system of the entire Siem Reap province, of Mount Kulen and the Tonle Sap Lake.
- Construction of sluice gates at the villages of Rohal and Phlung to prevent flooding and store the necessary water for irrigation and maintain sufficient fish stocks for the benefits of the locals.
- Assisting in the organisation of seminars on intangible heritage and to the publication of documents on the intangible heritage protection standards.
- Distribution of 571 water filters to the most disadvantaged people in the ten villages.
- Distribution of 165 water jars to the most disadvantaged people in the ten villages.
- Distribution of 305 improved stoves using less charcoal and distribution of firewood to the most disadvantaged people in the ten villages.
- Awareness raising campaign to the environment and especially to the value of new tree planting carried out to schoolchildren in the ten villages.

- Construction of two solar energy powered stations, one for the villages of Leang Day and Phlung, and the second for the villages of Tuol Kralanh and Banteay Srei.
- Establishment of nine saving groups totalling 107 members.
- Establishment of an oxcart community comprising of 20 members from the villages of Rohal and North Srah Srang.
- Establishment of a community of tourism canoes comprising of 30 members from the villages of Tuol Kralanh and Banteay Srei.
- Establishment of a handicraft (Katiso) community comprising of 84 members from the villages of Rohal and North Srah Srang.
- Training to handicraft; rattan and palm leaves distributed to 52 people in 8 villages.
- Model farmers selected: 41 families in six villages who were rewarded with fish farming training and a starting up kit tool to this activity.
- Model farmers selected: 43 families in six villages who were rewarded with intensive farming training.
- Model farmers selected: 43 families in six villages who were rewarded with compost making training.
- Model farmers selected: 41 families in six villages who were rewarded with market gardening training.
- Assistance in English language courses offered to 433 learners in six villages.
- Grant awarded to the 70 best and underprivileged learners from the ten villages; they were also given gifts such as bicycles, schoolbags, pens and notebooks.
- Awareness campaign on domestic violence reaching out to 480 people from four villages.

#### **D. Monitoring and evaluation**

- Appointment of a consultant who constantly monitors the project.
- The coordinator drafts a progress report every other month that is later sent to the Ministry of Foreign Affairs of New Zealand.

- A representative of the New Zealand Ministry of Foreign Affairs monitors the project every quarter.
- The New Zealand Ambassador visited the site twice.
- The New Zealand head of State also toured the project in August 2013.
- The government of New Zealand sent independent experts to assess the project which consequently has been deemed as meeting all the targeted criteria. This is evidence of the major success of this project which should become a model for other projects. Experts advised New Zealand to further its support to this project carried out in the Angkor Park.
- The project terminated on 30/9/2013.

## **6. Activities to be continued**

- Thanks to the sustained effort of the Technical Committee in the implementation of the project supported by the government of New Zealand, the latter notified on 21/11/2013 that it wished to continue its support for the third step of the project—over five years the government has pledged US\$3,750,000.
- The Technical Committee has prepared the dossier on the implementation of an activity plan and is planning the yearly expenditures with the New Zealand coordinator.
- It is hoped for the project to be continued from March 2014.

## **7. Immediate needs**

- An additional ten staff should be hired. They would be tasked in communicating back and forth with the communities and a liaison officer should be appointed to each of the 21 communes within the protected areas.

## **9. Srah Srang development project**

### **1. Objectives**

- Srah Srang is 780 metres long by 380 metres wide. The jetty to the east has weathered with cracks in the stone appearing in several locations.
- Srah Srang is located opposite Banteay Kdei Temple, with an esplanade separating them. During the French Protectorate period a Small Circuit was

planned and consequently a road was built crossing this esplanade and cutting off the Srah Srang from the temple.

- The project aims at restoring the jetty and to divert traffic in order to restore the esplanade linking Srah Srang to Banteay Kdei.
- Srah Srang is also located at the heart of three villages (North Srah Srang, Rohal and South Srah Srang) where the New Zealand-supported project on community development is undertaken. This has widened the scope of the project associating the tangible heritage protection project with that of the development of the villages. It is a unique set up associating different types of projects at the Angkor Park.

## **2. Information on the Srah Srang project**

The restoration and development project of Srah Srang has included the following works:

- A. Archaeological excavations and restoration of the jetty.
- B. Traffic diversion to stop vehicles from driving through this area and improvement of an ancient dirt road linking Angkor Wat to Beng Mealea via Bat Chum Temple and leading to the Khmer-Korean Friendship Road and the village of Pradak.
- C. *Parvis* (intake area for tourists) development: A car-park and souvenir shops to be developed south of Banteay kdei temple; construction of a car park to the north of Banteay Kdei, close to the Khmer Habitat Centre; walking tours organised around Srah Srang leading to Bat Chum or Pre Rup temples via the village of Rohal and to Ta Prohm; oxcart tours in the villages of North Srah Srang and Rohal.
- D. Organisation of the community development associating the North and South Srah Srang villages and Rohal. The project is supported by New Zealand. The Khmer Habitat Centre Project is also in this area.

## **3. Budget:**

- Jet Tours, a tour operator, financed the project through UNESCO for a total of US\$77,410.
- This budget fell short of supporting the dismantling and reassembly of the jetty's stone blocks. The royal Government of Cambodia agreed to set aside US\$143,175 to continue the project.

- The New Zealand government also extended its original contribution for US\$20,500. This brings the latter contribution to a total of US\$241,085.

#### 4. Management

A steering Committee leads the project in close collaboration with relevant departments such as the DATH, the Department of Conservation of the Angkor Park and Preventive Archaeology, the Department of Water Resources Management, the Department of Cultural Development, Museums and Heritage Standards and the Department of the Office for Trans-sectoral Projects and Technical Support.

#### 5. Operation

Started in 2009, the project is still in operation.

- Archaeological excavations and restoration of the jetty:** Archaeological excavations, studies on restoration methods, completion of the dismantling of the stone blocks; ongoing consolidation of the jetty's foundation and reassembly.
- Organisation of the traffic:** Excavations undertaken on a portion of the road leading to Beng Mealea have been completed. The study on the bypass road is also completed; the road works can be started.
- Parvis (intake area for tourists) organisation:**
  - Negotiations on the construction project of a car park and souvenir shops on the plot of land located south of Banteay Kdei have been done.
  - The topographical survey undertaken.
  - The plan of the *parvis* is yet to be drawn.
  - The land located north of Banteay Kdei temple, close to the Khmer Habitat Centre, was swapped. The topography and plan are yet to be carried out.

The Khmer Habitat Centre was inaugurated in 2012.

- Organisation of the community development:** A path for walks has been cleared around Srah Srang and paths have also been cleared and handicraft workshops established in the villages of Rohal and Srah Srang. Visitors have been able to enjoy oxcart tours since 2012.

## 6. Main targets to be continued

- A. **First priority:** The works should step up a gear for the reassembly of the jetty stones which must be finished before the end of the dry season and the arrival of the monsoon. Following Decision N° 546/13RB.SSR, dated 20/12/2013, the team has been reorganised with two experts joining it and the recommendations of the *ad hoc* experts, adopted by the Angkor-ICC, need to be respected and applied.
- B. **Second priority:** Development of the *parvis* to the south of Banteay Kdei and concomitant construction of the bypass road close to Bat Chum and leading to Pradak.
- C. **Third priority:** Construction of the bypass road close to Bat Chum.
- D. **Fourth priority:** Construction of the *parvis* north of Banteay Kdei.

## 10. The Spice Garden

1. *Prich* bamboo uprooted and replanted over 120 metres.
2. Improvement of 1,322 metres of canal in the three protected zones.
3. Clearing of the north garden over 40,366 m<sup>2</sup>.
4. Construction of props to protect the hereunder listed species of 131 plants: *rumdenh* (madder family), *tromoung* (garcinia family), *makak* (ambarella), lime tree, lime tree *phlea*, lime *combera*, *sandann* (garcinia), *nhor* (Morinda citrofolia), *paun* (wild ambarella), *kantuot* (Phyllanthus acidus).
5. Bat guano dispersed to fertilise the soil and speed up spice growth on blocks B and C. This has to be repeated 24 times a year. Weeding of 27,880 m<sup>2</sup> of land located inside and outside of the garden. Weeding of 6,210 metres along the laterite road.
6. Transportation of 17.2 m<sup>3</sup> of compost, of 21 m<sup>3</sup> of black soil, of 14 m<sup>3</sup> of ashes and burnt rice husk and transportation of 14 m<sup>3</sup> of mixed soil to be stored in a loft.
7. Replacement on three occasions of dead spice plants and new plants to be cared for and watered regularly.
8. Construction of small rest rooms and of a fence. Topographic data entered in the Spice Garden master plan.

#### **D. Assessment and conclusions**

1. Since 2012, following the rehabilitation of the ancient hydraulic system, the Angkor site, the city of Siem Reap and the international airport have been spared of any flooding, although in 2013 some populated areas were under water for a short period due to the unusual high level of water.
2. New Zealand committed to continue financially supporting the Natural Resources Management and Community Development Project for a duration of five years and for US\$3 million. This community development project is a collaborative endeavour between the APSARA National Authority and New Zealand and was set up in 2009. The original project rolled out in two stages and was successfully completed late September 2013
3. The Angkor Heritage Management Framework brings together the Royal government of Cambodia through the APSARA National Authority, the government of Australia and UNESCO. The studies which have been taking place for the past three years have shown convincing results:
  - The Tourism Management Plan aims at improving the quality of the visitor experience while minimising negative impacts.
  - The Risk Maps make up for a database monitoring the level of risks of the temple structures, of the environment and of society; it is a state of the art tool for site management that has proven its worth.
  - Training sessions have been organised on tourism management of the sites benefiting circa 30 Cambodian staff.
  - Four pilot projects (air quality monitoring, organisation of new sunset experience locations inside the Angkor Park, natural circuits at North Baray and Beng Mealea) target an efficient and positive operation of the scheme.
4. The APSARA National Authority spurred these projects in 2014 and UNESCO will continue their coordination until the end of the year. Also, on the margin of the regional seminar of the World Tourism Organisation held in Siem Reap on 1-3 November 2013, the Director General of this organisation committed to supporting the APSARA National Authority in the implementation of the Tourism Management Plan for the year 2014.
5. Japan offered US\$947,000 to support the restoration project of the northern portion of the entrance causeway at Angkor Wat within a cooperative framework between the APSARA National Authority and the Japanese University of Sophia.
6. Italy pledged to continue the training of conservation experts in stone, wood and metal artefacts. From late 2011 until late 2013, the University of Palermo, Italy, assisted by the Department of Cultural Development, Museums and Heritage



Standards, has spearheaded the training. A total of 20 people have been trained, of whom 15 are APSARA National Authority staff. The ICC has appraised the outcomes of this endeavour.

7. Following a request from the APSARA National Authority, French organisations specialising in the sanitation of water (Syndicat Intercommunal pour l'Assainissement de la Vallée de la Bièvre {SIAVB} and Syndicat interdépartemental pour l'assainissement de l'agglomération parisienne {SIAAP}) have pledged to technically and financially support improved management of the water resources within the Angkor site. In a first instance, they committed to disburse €273,000 for three years in order to undertake technical assessments with a view to equipping the main water stations with automatic data collecting instruments. Further, on additional funding, they will be to furnish the main control stations with an automatic monitoring system
8. The Cultural Heritage Office of the Republic of Korea will proceed to the restoration of Preah Pithu Temple located within the Angkor Thom walls, in the framework of an agreement signed with the APSARA National Authority on the implementation of a study and the organisation of the restoration project.
9. The Panasonic Company, through UNESCO, donated 1,500 solar lanterns which have been distributed to the people living in the Angkor site. It agreed to donate an additional 1,500 solar lanterns next year.