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NOTICE: The languages used during the sessions of the ICC are English and French. In the record of the debates, all material spoken originally in French is therefore a translation. Presentations and comments made originally in English are indicated by ^[OrigE] at the beginning of the contribution.

ICC RECOMMENDATIONS

NEW PROJECTS

1. WORLD MONUMENTS FUND

The “Churning of the Sea of Milk” gallery in Angkor Wat temple is not affected by any structural problem, the ongoing threat for conservation of the bas-relief being from rainwater penetration and the migration of salts. The WMF has prepared a well-founded project supported by thorough documentation, tests and a structural analysis. The philosophy advocated by this operator is good and could be described as “preventive measures to prevent damage and decay”. However, due to the fact that there is no immediate risk (the decay process is very slow), it is suggested that further analytical thinking be done on three main points:

- **Stability.** The insertion of lead sheets between the joints needs to be experimentally evaluated because it could reduce friction and therefore introduce an element of risk as far as the structural conditions are concerned;
- **Cultural aspects.** It has been repeated on numerous occasions that dismantling and rebuilding should be a very exceptional measure to be undertaken only where an alternative solution is not possible or reliable.
- **Future benefits.** Whenever possible, any undertaking should be an opportunity to acquire experience that can be used in similar work, with obvious benefits from the standpoint of economics and technology.

Based on these observations, it is suggested that the following laboratory and on-site testing and analysis work be carried out:

1. Establish the actual extent of salt brought on by the presence of cement in this gallery;
2. Establish the friction coefficient of lead sheeting on sandstone;
3. Measure the tilting of the pillars in the gallery and inclination of “horizontal” points;
4. Determine the amount of water penetrating through all the roofs of the gallery;
5. Make a test on a limited area to be defined by APSARA, in order to verify the feasibility and relevance of the solution proposed by WMF;
6. Carry out further theoretical and experimental research to look for alternative solutions to ensure impermeability that do not require the systematic dismantling of dry masonry.

Based on the results obtained from the aforementioned tests and studies, it is also recommended that alternative solutions for waterproofing be explored for all the roofs of Angkor temples, to be presented during a special site workshop to be held prior to the next ICC Technical Committee.

2. ARCHAEOLOGICAL SURVEY OF INDIA

Referring to the statement made by Mr C. Babu Rajeev, Director General of the Archaeological Survey of India during the 14th Technical Committee, namely: “We have

made very detailed studies and discussed among ourselves and came to the conclusion that we should undertake only **minimum restoration activities**," to which he added that "one of the most serious problems is the **accumulation and stagnation of water**";

Taking into account both the outstanding value and specificity of this monument, as well as its unique character resulting from the harmonious coexistence of the nature and ruins;

Expressing appreciation for the statement made by HE Ambassador of India, on November 29, 2005;

The Committee recommends:

1. That the *ad hoc* experts carefully study the Project Implementation Program that has been submitted in order to share their advice and suggestions with the APSARA National Authority regarding the proposed activities at the next session of the Technical Committee (June 2006);
2. That the Indian team, in cooperation with the APSARA National Authority, undertake a hydrological survey in order to propose a solution for the drainage system to protect the temple from the constant flooding that is damaging it.

In the meantime and while awaiting project implementation, it is recommended that no historical stone materials be moved or removed from their current positions.

LAND OWNERSHIP PROBLEMS

Referring to the basic principles of the Royal Government of Cambodia's policy for Angkor park and desirous of assisting the APSARA National Authority to ensure **monument conservation** as well as to provide **the most suitable access routes to the monuments**, the ICC recommends that in order to obtain further cooperation from Switzerland, the Royal Government of Cambodia arrange for land ownership measures to be taken to quickly free up land in the approach area of the Banteay Srei temple.

In this way, the BSCP in close cooperation with the APSARA National Authority will be able to move into phase 2 that involves approach area structuring.

URBANISM PLAN OF THE CITY OF ANGKOR THOM AND DIRECTIONS FOR MANAGEMENT OF THE ARCHEOLOGICAL HERITAGE FOUND THEREIN

The Committee is pleased with the important new findings resulting from the excavations and research work that led to discovery of the urban plan of the city of Angkor Thom.

The Committee feels that this plan and the recommendations it embodies should be a tool enabling the APSARA National Authority both to protect the archeological reserves in it as well as manage the site and monuments within the city.

SUSTAINABLE DEVELOPMENT

1. Given the desire of the Royal Government of Cambodia to achieve a proper balance between the duty of preservation and the necessities of development, it is recommended that, under the aegis of the two co-chairmen, with the assistance of the Secretariat and in consultation with the APSARA National Authority, the **Advisory Group of Experts for Sustainable Development** agreed to by the ICC be made operational. Its make-up and regular manner of operation are to be decided prior to the next meeting of the Technical Committee in June 2006.

2. While expressing its satisfaction with the rehabilitation work being done on the Western Baray, which will be brought back into operation for irrigation and agricultural development purposes, the ICC recommends that there be close cooperation between the APSARA National Authority and the Ministry of Water Resources and Meteorology throughout the work operations. Particular attention must be paid to the heritage value of the Western Baray and the archeological and historical reserves found in it, which are precious assets for tourism promotion around the area.

MANAGEMENT TOOLS

Given the new challenges arising on the Angkor site, UNESCO recommends that **new management tools** be developed in keeping with the directions to guide implementation of the World Heritage Convention:

- 1) Fine-tune the system of identifying priorities in terms of conservation (need for a ten-year action plan that includes a risk map);
- 2) Coordinate working methods and finalize the recommendations for Angkor monument conservation and restoration;
- 3) Streamline project acceptance procedures (execution time frame, sustainable funding arrangements);
- 4) Provide better follow-up of project execution (supervise application of the findings).

Subsequent to the mission carried out by legal expert Mr Lucien Chabason on protected zones 1 and 2, the Committee agrees with the conclusions of this report and recommends that they provide the basis for discussion within this Committee.

In the framework of drawing up a management plan and on the basis of the findings of the Lucien Chabason mission and observations made by UNESCO, it is recommended:

- 1) That, as a matter of urgency, the current zoning for zones 1 and 2 established by royal decree in 1994 be updated, so that reference to public utilities is included therein;
- 2) That an implementation sub-decree for the development of a statutory technical framework and a more efficient, straightforward and transparent means of data management be drafted, in order to ensure further communication related to protected zone management policies;
- 3) That, in carrying out this updating process, the need for habitat and services upgrading for the communities living in zones 1 and 2 be taken into account;
- 4) That an inventory of new buildings (legal and illegal) that have grown up in zones 1 and 2 be made quickly, as well as a population registry in both of these zones be set up;
- 5) That the rules governing domanial (state-owned) property and ownership rights applicable to land in zones 1 and 2 be clarified and that putting in place a computerized land registry system for the Angkor / Siem Reap site be looked into;

- 6) That the policies of the APSARA National Authority pertaining to zones 1 and 2 be integrated into the town of Siem Reap master development plan;
- 7) That the technical skills of the APSARA National Authority be strengthened in the areas of urban planning, land registry and communication with regard to zoning.

OTHER

1. The ICC recommends that the *ad hoc* group of experts be strengthened by having an archeologist appointed to it.
2. The ICC recommends specifically that the Sophia University mission move quickly to complete its restoration work program on the Angkor Wat causeway-dike, in close cooperation with the APSARA National Authority and in keeping with the recommendations adopted at the Angkor Wat Study Workshop organized in 2004 by the APSARA National Authority with the support of UNESCO and the ICC Secretariat.

RECORD OF THE DISCUSSIONS

I. OPENING SESSION

I.1. Opening Speech by the French Co-chairman, HE Mr Yvon Roé D'Albert, Ambassador of France

"In my opening remarks for this 12th Plenary Session of our Committee, I would like first of all to pay tribute to the unflagging devotion of HE the Deputy Prime Minister and Chairman of the APSARA Authority and his regular attendance at the proceedings of the ICC.

He stands as guarantor that the political orientations of the Royal Government dovetail what is being done in the field by APSARA with the support of the ICC.

I also salute the presence of Mr Francesco BANDARIN, Director of the UNESCO World Heritage Center. He is on hand to provide meaningful insight to this Committee on the requirements involved in world heritage protection.

The Convention on Cultural Diversity recently adopted by the UNESCO General Assembly with the support of the international community, including the Kingdom of Cambodia, has now provided this institution with expanded means of protecting and promoting cultural and artistic production, which could find inspiration from Angkor and generate new activities that will be of benefit to the Siem Reap region.

Alongside UNESCO and Japan, France reiterates its support for the model of coordination embodied in the ICC. The delegation that I am leading, in addition to representatives from our ministry, Mr Michel Pierre, Deputy Director of Archaeology and Social Sciences and Ms Francine d'Orgeval, has with it this year for the first time two leading personalities in the field of archaeology and historical monuments. I am referring to Mr Jean-Pierre Demoule, Chairman of the National Institute for Preventive Archaeological Research (*Institut national pour la recherche en archéologie préventive* [INRAP]) and Mr Christophe Tardieu, General Manager of the Versailles Public Institution, both of whom will bring much consequential input to the scientific and technical exchanges with the APSARA Authority in their respective fields.

As the year 2005 closes, some ten years after the establishment of the APSARA National Authority, the Siem Reap / Angkor site will be receiving nearly 1 million visitors for the first time, and this concurrence of elements confirms the decisive choice of the Royal Government of Cambodia, supported by this Committee, to link respect for the site and the Angkor heritage with the sustainable development of the region.

This qualitative and quantitative transformation that the Angkor site is undergoing makes it imperative that the management structures put in place be strengthened.

The technical level of this Committee must be continued. It is the central space for scientific and technical synthesis and it must be able to count on the skills of the *ad hoc* group of experts, which group should have one or two archaeologists on it. The challenges of archaeological research go beyond the requirements of scientific knowledge and reach out for new insight on how the space was structured and how to help the policy makers in the park zone and its periphery. In this regard, we will listen very attentively to any recommendations that may be made throughout the day to improve land management in Protected Zones 1 and 2.

What the ICC is doing to coordinate things must now be extended to the areas of sustainable development, the ICC being supported by technical arms specializing in the various fields of development.

Under the senior leadership of its Chairman, support should be given to what APSARA is doing to structure itself. The conservation and study of the Angkor heritage remain the ongoing priority missions of APSARA. In these areas, international cooperation has been a powerful supporting force over these last ten years and there is a need to keep it going. France has contributed to anchor technical skills within this institution in its areas of specialization:

- Maintenance of the park monuments
- Emergency and exploratory archaeological interventions
- Monument approach area management
- Familiarity with the publics
- Cultural management of the sites
- Prevention of trafficking in artifacts, a matter requiring ongoing vigilance

Although progress has been made in temple surveillance within Angkor Park, we are sad to hear reports that looting is continuing on remote sites. For this reason, I would like this critical issue of the prevention of trafficking of artifacts to be covered in a report by our Scientific Secretary, Mr Azedine Beschaouch.

Overall, and in synergy with the initiatives of all ICC members, my country is committed to pursuing this knowledge and skills transfer process.

APSARA plays a central role in carrying out this mission that calls for expertise, resources and above all good coordination. The many and diverse functional fields of this mission mean that the managing authority of the site has an ambitious future. In this perspective, APSARA would be unable to pursue its duties and successfully meet these new challenges if it did not implement the internal structuring and management measures necessary to enhance its effectiveness and highlight its professionalism in the following areas:

- Mission and function identification,
- Personnel management,
- Procedures and implementation of general and specific rules and regulations.

It is now both imperative and urgent for APSARA to follow through on the recommendations made in these areas at last June's meeting of the Technical Committee.

APSARA's international partners must not be involved just in the scientific and technical fields. They must provide ongoing support to the transformations that APSARA

is undergoing in order to help it overcome difficulties as it fulfills its role as coordinator and project owner in management of the Angkor site.

With regard to the environment, efforts to strengthen the administrative and technical structures must be accompanied by a phase of major implementations in two major fields:

For one thing, its activity in the legal field should deal with procedures for land use and construction—particularly for Zone 2 for which UNESCO's expertise was sought—as well as for protection of world and archaeological heritage. A number of legal uncertainties need to be dispelled. The time has come to control unregulated commercial setups that are contributing to the gradual degradation of areas surrounding the most popular temples.

It is vital to protect the landscape setting of the monuments and conserve an atmosphere appropriate to the splendor of these majestic sites.

Both the local government and communities within the park as well as private operators must realize that concerted structuring of the territory in the broadest sense of the term, seeking to ensure the most favorable balance between socio-economic, cultural and tourism activities, is the very basis for sustainable development.

Furthermore, this Committee strongly calls for priority structuring programs to be devised, those essential to bring about minimal conditions for regulating the development and future management of the park:

- Structuring the approach areas and tour routes,
- Traffic management program,
- And the project that will be an umbrella for all of them: getting the visitor center up and running, on which construction is slated to start in 2006.

With these new tools, the APSARA Authority will be in a better position to control the very rapid growth in tourist flows gathering on the site perimeter areas.

At our Technical Committee meeting in June, a number of technical reports were made and further insight was added to our scientific knowledge of the field. I express the wish that this Plenary Session will enable us to draw conclusions in terms of heritage governance and development policy. Thank you for your attention."

I.2. Opening Statement by the Co-chairman for Japan, HE Mr Fumiaki Takahashi, Ambassador of Japan

"HE Mr Sok An, Deputy Prime Minister, Minister in Charge of the Council of Ministers and Chairman of the APSARA Authority,
HE Mr Yvon Roé D'Albert, Ambassador of France, Co-chairman and Dear Colleague,
HE Mr Vann Molyvann, Senior Advisor to His Majesty the King of Cambodia,
Mr Jinnai Teruo, UNESCO Representative,
Excellencies the Ambassadors, Dear Colleagues,
Distinguished Guests, Ladies and Gentlemen:

It is a great honor for me to share for the second time as Co-chairman of this meeting of the ICC which, for many years now, has been playing a pivotal role in safeguarding the historic site of Angkor and development of the periphery zones.

As you know, the key purpose of this meeting is to coordinate and exchange information regarding monument safeguarding projects and operations, as well as development of the Siem Reap / Angkor region among Cambodian government officials and various agencies from the concerned countries.

The seven new projects that are going to be presented as today's agenda unfolds cover vast areas such as monument restoration operations, the planning project for the town of Siem Reap, archaeological excavations and research, as well as the dating of construction materials. Furthermore, the agencies taking on these various projects represent several different countries and organizations.

The fact that the Angkor site is 'open' to the exterior, that monument safeguarding activities and various academic research activities taking place on the site are being carried out in harmony, in a spirit of cooperation among the various countries, gives, I am sure, greater clout and consistency.

Moreover, I would like to raise two points that I feel are essential in order to achieve greater success in these projects, given the current circumstances wherein the number of projects at Angkor keeps on growing and growing.

- 1) Capacity building of the APSARA Authority in various areas;
- 2) Improved information exchange among the teams involved in conservation and research.

I would like to come back to the first issue, that of the need for APSARA to become more specialized as the agency responsible for management of the Angkor site and development of the periphery zones.

With regard to monument restoration activities, it is our duty to train Cambodian experts. Many sites at Angkor require further restoration operations. We would like to see Cambodia in a position to carry on its own site safeguarding activities at a high level, which means that we must constantly be training high-caliber specialists right in the country.

According to the report made at the last meeting of the Technical Committee by HE Mr Ros Borath, Deputy Director General of APSARA, 12 teams from different countries and organizations are working on 23 different sites. This has even led some people to call these restoration operations the 'Olympic Games' of safeguarding. As I see it, the primary value of these activities resulting from assistance from different countries is that the Cambodian people are becoming more acutely aware of the importance of the cultural property belonging to them and Cambodian specialists are indeed being trained to assume responsibility for safeguarding a part of mankind's heritage.

Various field operations with a training component are being conducted by the EFEO team that has been active here for a long time, as well as by the Sophia University, as well as the German, Swiss, Italian and Chinese teams to name but a few. This is indeed a very valuable contribution to technology transfer in the framework of improving APSARA's level of expertise.

With regard to our national team with, as its basis, the desire to preserve as much as possible the original appearance of the heritage, JSA has been involved in safeguarding operations for some ten years now. Soon a cooperation arrangement with APSARA will take us into new projects on the Bayon temple. We intend to broaden the technology transfer towards APSARA through field-based research, restoration and training activities.

Additionally, the Angkor site is both the symbol of the government of Cambodia and the national heritage of its people. For this reason, UNESCO has unceasingly emphasized in its recommendations that the teams from the various countries must turn over to APSARA all documents regarding monument safeguarding operations. Along these lines, I wish that the choices made by site safeguarding and protection operations be decided on the basis of the opinions expressed by the *ad hoc* group of experts after adequate consultation and discussion has taken place with the Cambodian side.

As far as sustainable development of the Siem Reap / Angkor region is concerned, it is my wish that APSARA's management arms become more efficient in the future. I also note a greater need to share information, as I mentioned at the outset of my statement.

Back in 1993, UNESCO had a study report prepared regarding tourist development, referred to as ZEMP, the Zoning and Environmental Management Plan for the Angkor Area. This report highlighted a number of problems foreseen with regard to tourism development at Angkor, including excessive development, but especially problems involving building and housing development in the protected zones.

It is highly unfortunate, but the reality in Siem Reap is causing me to fear that cases have already arisen that confirm the concerns raised in that 1993 report. Given the increase in tourist numbers and local population growth focusing on tourism activities, serious problems affecting the environment and land use issues have come up that can have a negative impact on the future of the industry of the Angkor site and its surroundings.

To guard against these problems springing from the fast-track 'touristification' of the Angkor site, it is ineffective to go about it alone. It is absolutely essential that all development stakeholders, namely the APSARA Authority, the provincial authorities, the various donors and the local communities get together to review the balance between development and the environment and develop a joint, overall development strategy based on a long-term vision. I hope that JICA's report that will be presented later on today on the development master plan study for Siem Reap / Angkor will prove useful for sustainable development in the Siem Reap region.

Also, in today's meeting, as requested by Deputy Prime Minister Sok An at the last Technical Committee meeting, UNESCO will present a report on the current status of the site's protected zone and future prospects. With regard to these very complex issues, I feel that it is necessary to listen to specialist opinions and take a multi-faceted look at the problems in order to come up with a solution to be applied resolutely by the Cambodian government.

Ladies and Gentlemen:

The Angkor site is a symbol of the country of Cambodia, but also a historic heritage of mankind, one of great value for the whole world.

It is the duty of the international community with its commitments made through the ICC for over ten years now, to continue monitoring closely development problems and provide constructive advice so that the Angkor site never loses its value as heritage belonging to all mankind.

I would like to close my speech by expressing the wish that the twice-yearly meetings of the ICC offer a venue for information exchange, that the fruitful discussions held at each of these meetings will be a positive contribution to the future of the Angkor site. I thank you for your attention."

**I.3. Opening statement by the Representative of the Royal Government,
HE Mr Sok An, Deputy Prime Minister and Chairman of the APSARA
Authority**

"Excellencies,
Honorable Director of the UNESCO World Heritage Center,
Honorable Professors,
Ladies and Gentlemen:

It is again a pleasure for me and my accompanying delegation to be back with our colleagues to work together for the advancement of our great undertaking at Angkor. I would first of all like to greet our two Co-chairmen, the Ambassador of France, Mr Yvon Roé D'Albert, and the Ambassador of Japan, Mr Fumiaki Takahashi. I must say that their devotion to Angkor is unflagging, that under their chairmanship, this ICC is in good hands, and that their cooperation is exemplary. I would also like to say how pleased I am with the presence of Mr Francesco Bandarin, Director of the World Heritage Center and welcome him among the members of the ICC. It is my hope that this is the first of many opportunities for the Center to be represented and that in close cooperation with the UNESCO Office in Phnom Penh he will strengthen the contribution from UNESCO and speak to the World Heritage Committee on behalf of the APSARA National Authority.

Indeed, and this is the first point that I would like to expand upon, the APSARA National Authority is bound to strict compliance with the Royal Government's policy as far as Angkor heritage conservation, enhancement of cultural tourism potentialities and promotion of sustainable development are concerned.

Excellencies, dear colleagues:

I mentioned 'conservation', 'cultural tourism and 'sustainable development'. These are the major pillars and objectives of the policy that Prime Minister Samdech Hun Sen is advocating for Angkor and the Siem Reap region. These are also the choices acknowledged and stressed by UNESCO. You will recall that at the last meeting of the Technical Committee in July 2005, the Deputy Director General for Culture, Mr Mounir Bouchenaki, expressed his pleasure at seeing the APSARA National Authority 'keeping a careful balance between *the necessities of conservation*, which apply to all without exception, and the *development effort*, which is such a crucial factor in the socio-economic resurgence of Siem Reap/Angkor'.

We therefore continue to ask that the various departments and directorates within APSARA show even greater vigilance and put forth greater effort in carrying out their missions. In the eyes of the Royal Government, this is the only possible way, indeed a 'royal way'. Indeed, by means of concomitant activities and increasingly sophisticated technology, we must see first of all to safeguarding the specificity of the Angkor site and the authenticity of these monuments classified as mankind's heritage. After that, we must organize tourism in a balanced, well-thought-out manner, tied in with the growth effort. And finally, we must not merely create awareness among the communities at Angkor and in Siem Reap, but continue to ensure them of an increased share in the profits.

Honorable Co-chairmen, Ladies and Gentlemen:

I am now coming to the crucial point, that of Angkor Park's future. This future, as you realize, involves structuring the territory as well as the activities of the communities that have been living for a long time on this site, one which has been classified as a cultural heritage site of mankind. With an eye to the future, the concern involves seeing to it that the communities do not sacrifice heritage for their own interests, nor should they be sacrificed for the interests of heritage.

With this in mind, the Prime Minister has issued explicit instructions for the APSARA National Authority to prepare detailed development plans for Zone 2, which is a buffer or protection zone for the Angkor monuments, as well as a zone open to environmentally friendly, non-invasive economic activities. We have given thought to agriculture, fish growing in the water ponds and reservoirs, animal husbandry, as well as rural handicraft production, as well as possibly organizing leisure and discovery tours or ecotourism. Everyone agrees that such activities, while not being harmful to Angkor Park, do not relieve the APSARA Authority of its conservation duty. But what a fine opportunity to contribute to development! In this way the Royal Government can meet the legitimate expectation of the communities and thereby make progress in poverty alleviation.

Happily, with the support of the ICC, we have been able to have this view shared by UNESCO. Thus, during his official visit to Phnom Penh, the Director General of UNESCO, Mr Koichiro Matsuura, made the decision to follow up on our request and dispatch on mission to Angkor a high-caliber legal specialist with long experience in issues relating to heritage land development. We have just received the expert report that he has submitted.

Prior to outlining the key points discussed in this report which are of obvious interest to the ICC, I would like to make a basic overarching remark: The report states that the situation is satisfactory in Protected Zones 1 and 2. Despite constant and ever increasing pressure, it states, to the relief of everyone, that there has been no irreversible alteration of the landscape value or depreciation of the Angkor site's heritage value. It goes without saying that we are most delighted to see that our efforts have been acclaimed by the international community and that with the unceasing vigilance of the Royal Government led by Samdech Hun Sen and the phased-in intensification of measures taken by the APSARA National Authority, Angkor is considered as an outstanding example, a success story, in the field of world heritage conservation.

But aside from the laurels, vigilance is the byword. While congratulating UNESCO and the outstanding expert it provided, I would like to inform the Director of the World Heritage Center in particular that I am giving specific instructions to the general directorate of the APSARA National Authority, to all department heads and to all directors, to keep things moving in the same line and, wherever possible, to improve the performance and make up for deficiencies. The UNESCO expert report does in fact propose improvements in the implementation provisions of the law and statutory measures.

Ladies and Gentlemen:

We do indeed have proper legal instruments, but obstacles and problems are being met in the implementation thereof. In this regard, I would like to point out that while we are thinking about the means, we must not forget the goal that we are seeking to achieve. As for us, we are fully convinced that the obstacles will be removed and that the difficulties will gradually diminish by getting the communities involved. To achieve this, there has to be profit sharing. People need to be able to benefit from the land on which they are settled. Therefore, as was pointed out by the UNESCO expert, we have to come back to the principle of the 1994 *kret*. Under article 8, it provides for Zone 2 to be set aside for basic development, for preservation of local life styles.

This means then that we have to undertake a new approach to managing the Angkor site. On this point, we are looking forward to recommendations from UNESCO but more importantly to a genuine partnership between the World Heritage Center and the APSARA National Authority. It will be up to the Authority to implement the emergency actions recommended by UNESCO and the ICC. Nevertheless, what we are interested in is the in-depth action. The sustainable safeguarding of Angkor is the important thing for us. What we want to ensure sustainably is community involvement in the development process.

Honorable Co-chairmen, Excellencies, Ladies and Gentlemen:

Although it is up to the Royal Government to make the final decision in all matters that concern Angkor, we have nevertheless made the choice of preparing files in advance, associating the ICC in the analytical thinking, asking experts to do thorough studies, asking all of you to share in the discussions. This will obviously be the method we will continue to follow. But let me make one thing clear. This genuine partnership on the intellectual and technical level has proven to be most satisfactory for handling issues and collecting data concerning site conservation and planning, approaches to monument restoration, research and publications. However, I must say that things have not yet moved very far ahead with regard to tourism projects such as the visitor routes, procedures for promoting the temples, and so on. The Advisory Group for Sustainable Development that this ICC decided to set up should be functioning regularly, following the example set by the *ad hoc* group of experts for conservation, which group I would like to commend for its constancy, enthusiasm and outstanding activity.

If our Co-chairmen allow, I would like to speak to them, asking them personally to kindly, with the assistance of our Secretariat, give attention to how the advisory group might get up and running. Given the friendly devotion displayed by our Co-chairmen for Angkor and their great wisdom, I can expect that this group will find a way for it to operate consistently and effectively. But we can already express satisfaction with those projects that are underway and with the future prospects. Germany, for

instance, is offering to contribute to putting a green belt around Siem Reap. And New Zealand is starting up a major community management program in the framework of managing the Angkor / Siem Reap zone, along with reforestation activities in Angkor Park.

Honorable Co-chairmen, Excellencies, Dear Colleagues:

As usual, a number of issues that are just as important call for our joint attention. I wanted to stick with those that the Royal Government considers to be the vital, priority concerns, namely the future of the world heritage site and the future of the Angkor communities. We will look at those matters together and discuss them. However, before concluding, I would like to express my deep satisfaction with the growing contributions that France and Japan are making to the showcasing of Angkor. A new FSP arrangement will be implemented and a third phase of the major Bayon safeguarding project will be started under the terms of a cooperation agreement between JSA and APSARA. Similarly, Germany has given us the pleasure of continuing its commitment in the form of a new GACP package. I am particularly interested in the exhibitions that, in friendly countries, will strengthen the Angkor drawing card, and it is my pleasure to congratulate Germany, Japan and the Republic of Korea in this regard.

Ladies and Gentlemen:

You always have a home away from home in Siem Reap / Angkor, among your Khmer friends. I sincerely wish you an enjoyable visit and full success in your proceedings. Thank you for your attention."

The French ambassador thanked HE Mr Sok An on behalf of the Committee for his comprehensive, in-depth and most relevant contribution. He stated that the message uttered by the Deputy Prime Minister had been well understood and that the Co-chairmen would make it a point of honor to meet his expectations.

I.4. Statement by the Representative of UNESCO in Cambodia, Mr Teruo Jinnai

[OrigE] "Honorable Co-chairmen,
Your Excellency Deputy Prime Minister and Chairman of the APSARA Authority,
Excellencies,
Honorable Professors and Heads of Heritage Missions,
Ladies and Gentlemen,

It is indeed a pleasure and a great honor for me to deliver this speech on behalf of the Director General of UNESCO, Mr Koichiro Matsuura. I have been attending ICC meetings since 1998 and today, for the first time, I am delivering a UNESCO speech as Head of the UNESCO Office in Phnom Penh. First of all, please allow me to pay tribute to my colleague and friend, Mr Étienne Clément, who was promoted to Headquarters in early September this year but whose dedication to the ICC and strong commitment to safeguarding Angkor and in particular for the protection of Khmer cultural heritage from looting and illicit trafficking remain the same.

The 12th Plenary Session of the ICC is following a very special event for our organization, the celebration of the 60th anniversary of UNESCO. Immediately after

World War II, on November 16, 1945, the Constitution of UNESCO was ratified in the spirit of preventing wars and of constructing everlasting peace. The world joined together in London, England, on that day and engraved this spirit in the Constitution of UNESCO, saying: 'War begins in the minds of men; it is in the minds of men that the defenses of peace must be constructed.' UNESCO is celebrating during this year its 60th anniversary. In the tradition of many countries in Asia, including my home country, Japan, and in Cambodia, the country I love and have lived in for the past nine years, in accordance with oriental mythology, 60 years complete the end of the first life cycle. And it is the beginning of the age of wisdom. In this regard, I'd like once again to ensure the Royal Government of Cambodia and our co-Chairmen, the Ambassadors of France and Japan, that UNESCO will continue to put all its knowledge, competence, resources and growing wisdom, to provide the best possible services as the ICC Standing Secretariat, a task entrusted to our organization during the 1993 Tokyo Conference for Angkor and confirmed at the second Intergovernmental Conference on Angkor, in Paris, in 2003.

On behalf of UNESCO Phnom Penh and the Standing Secretariat, I would like to express my gratitude to Mr. Francesco Bandarin, Director of the World Heritage Center for his presence that will allow the audience to have a broader view of world heritage processes and to be associated with the most recent and advanced guidelines regarding the implementation of the World Heritage Convention. I believe that Mr. Bandarin's vision and the impressions that he will share with us will be a very important contribution to the ICC's thinking on the management of the Angkor World Heritage Site.

I would like to thank warmly our Co-chairmen, HE Mr Yvon Roé D'Albert, Ambassador of France, and HE Mr Fumiaki Takahashi, Ambassador of Japan, for their continued support to the ICC, the forum which facilitates the continuation of strengthening the successful partnership of all national and international partners working to make the sustainable development of Angkor stronger and more effective.

Also, I have the great pleasure to confirm to you that the proceedings of this Plenary Session will again benefit from the erudition, authority and personal passionate engagement of Mr. Azedine Beschaouch, Scientific Adviser to the Sector of Culture (UNESCO) and Scientific Secretary of the ICC Angkor.

I'm also pleased to find a number of young experts here in this hall today, who are the graduates of the Royal University of Fine Arts. Now these young experts are assuming very important roles in safeguarding and developing Khmer cultural heritage. They benefited from the UNESCO assistance project at the Royal University of Fine Arts which has been funded constantly by the Japanese government over the past ten years.

And now I am very pleased to have learned that France is very seriously considering making its contribution to the enforcement of the higher education with a master's program in five different fields including archeology and architecture.

Finally, I am very pleased to make an important announcement. Four days ago, last Friday, in Paris, the Director-General of UNESCO, Mr. Koichiro Matsuura, proclaimed 43 masterpieces of oral and intangible cultural heritage of humanity. Among these masterpieces is *Sbaek Thom*, the Khmer Large Shadow Theatre. This proclamation constitutes an international distinction destined to raise over the world the fullest awareness of the exceptional value of this facet of Khmer cultural heritage. On behalf of

UNESCO and all my colleagues, I would like to express my deep and warm congratulations to the Royal Government and the people of Cambodia. Thank you very much."

II. ACTIVITY REPORTS FOR 2005

II.1. ICC Activity Report, by Mr Azedine Beschouch, ICC Standing Scientific Secretary

"Honorable Co-chairmen,
Honorable Deputy Prime Minister,
Excellencies,
Dear Friends and Colleagues:

The report that I am presenting on behalf of the Secretariat will as usual cover the main achievements during 2005 in the areas that are of concern to us since the setting up of this Committee, namely ensuring technical and scientific continuity through training provided in the three major fields of activity: firstly, conservation and restoration, secondly excavations, research and museums, and thirdly the means to enable sharing of the knowledge gleaned from the discoveries, mainly through publications and to a lesser degree through large exhibitions.

I will start with training, pointing out the fact that this area features two main activities. The first is the training provided by France through the FSP arrangement. We will have a presentation on this that will highlight of course both the current activities and future prospects. Speaking on behalf of the Secretariat, I feel that all the participants in this great international undertaking recognize the value of the contribution made available through the *Fonds de solidarité prioritaire* and let me say that from seeing with my own eyes how things are going within APSARA as well as in the field, I am very happy to express not only my deep personal friendship for but also deep gratitude to Mr Michel Verrot. He is the pivot man in this action and we will be happy to see him carry on his work.

As for Japan, it is not only providing a Co-chairman for this committee, but it is also one of the initiators in this training operation. What Japan is doing, and as was mentioned by my colleague the Office Chief, is seen essentially in the form of the active financial contribution it has been making for over ten years to the training of architecture and archaeology students, many of whom are being trained right here on the teams and within APSARA. Japan is thereby rounding out our training action. I have talked to people with the Royal University of Fine Arts who are benefiting from scholarships and hence from what Japan is doing. A number of these students were trained this year by the Sophia University mission. Ten of them have received scholarships to round out in the field the academic training they got at university.

While talking about training and skills development on the site, I also would like to mention the outstanding work being done by the Italian team under Mr Valter Santoro. This is in complete harmony with everything that is being done throughout this world heritage archaeological park.

And I do not want to talk about hands-on, work-site training and not also mention the academic aspect, since the Center for Khmer Studies is working to ensure

complementarity with the overall work being done at Angkor. Some years ago, you expressed the wish that the Center for Khmer Studies be more closely involved. This center is offering eleven doctoral and post-doctoral fellowships, as well as four master's degree fellowships, thus rounding things out on this score. The master's degree program and doctoral fellowships are being offered in India, the United States and the United Kingdom in particular. This promotion of research, this training of young people, is particularly noteworthy.

Having discussed this matter of training, the importance of which you all realize, let me now move on to the three core activities, starting with conservation and restoration. I would like to cover them under two main headings, first of all operations that we are happy to see have reached the completion stage. These recently concluded operations involve firstly those that were conducted by the Japanese Government Team, JSA, on the Angkor Wat northern library. These major undertakings, as you know, extended over six years and were concluded with a ceremony that was dignified with the presence of His Majesty King NORODOM Sihamoni last June 3. Another ceremony on July 19, 2005 wrapped up operations on Banteay Srei conducted by the Swiss Confederation team. This BSCP team was also honored by the presence of His Majesty the King when it held its closing ceremony. As for the German team, GACP, it has been working for several years now mainly in the southwest pavilion of the Angkor Wat third enclosure.

I do not want to overlook another type of activity that you wished for. Our Co-chairmen have often insisted on the idea that we not speak of teams working side by side, but about an international enterprise that involves cooperation among the teams, exchanging ideas, joint analytical thinking from one work site to the next. I can assure our Co-chairmen what they have wished for is indeed a reality in the field. Thus, the German team has been working with the Italian team on Pre Rup, has consulted the World Monuments Fund team, and so on. Along these lines, we hope that in the years to come, the insight that has been gained, the state-of-the-art technology that has been developed, will be passed around and that APSARA will be able to benefit from this knowledge, insight and expertise.

I would also like to state that the Italian team that I mentioned earlier in connection with training has concluded Phase 3 of its operations on Pre Rup. These operations that were started in 2004 have now been wrapped up, thus concluding the major program that was started seven years ago. I must add that fortunately for us, the Italian government has decided to continue on through a major financial contribution that will be announced to us by the Italian team. The government of Italy, through its Funds-in-Trust with UNESCO, will now focus on Angkor Wat. This helps you to see that these key achievements are a credit to this leading international undertaking under the aegis of France and Japan.

While some operations are winding down, that doesn't mean that things should come to a stop. Quite the opposite, one of the features of what is being done at Angkor is that as soon as the conclusion of one program is announced, other programs are immediately tabled. I mentioned the JSA program on the Angkor Wat northern library that concluded on June 3, 2005. The Phase II components of this project—Prasat Suor Prat and the Bayon Master Plan—ended in 2005. Now, a new phase is about to begin on the Bayon. Our friend Prof. Nakagawa will announce this himself to the Committee, but this new partnership formula between JSA and APSARA will soon get up and running, in

a form that was discussed between the APSARA Authority, representatives of the Japanese government and the Secretariat who facilitated the background work.

Along the same lines, the Deputy Prime Minister heading the Cambodian government delegation announced that Germany is not pulling out now that GACP has completed its operations. A new program is already taking shape in a different form that Ambassador Fischer will himself introduce a little later on. As for India, you heard for yourselves the key points of India's program for Ta Prohm last June at the Technical Committee meeting. Since then, India has prepared the technical file and it will be submitted to our meeting as required by procedure, after which your Secretariat will submit it to the *ad hoc* group for advisement. This will enable us to comply with the procedure and ensure that the major work this program calls for is implemented smoothly and harmoniously. Our Indian colleagues are of course very much aware of the specificity of Ta Prohm and of the complexity of their undertaking on this flagship temple on the Angkor landscape.

I will now discuss two projects. In our report, we referred to completed work sites and new work sites, and we will now focus on projects. Let me begin with one that has been of keen interest to us for many years because of its reputation as a jewel of Cambodian art, Khmer art, it being the basis for many souvenirs, including literary ones, that are associated with it. It is also one of the highlights of our great undertaking. It is not just stones, carvings and architectural works of art, but something of the imagination and of a great literary memory. Among works of great literary memory, the Banteay Srei temple is one that stands out as a feature in this great undertaking. Happily, the work the Swiss team is doing on Banteay Srei is not going to stop. The team announced at the Technical Committee meeting that its government had already allocated the means so that could now be given not just to the structure, safeguarding the temple itself, which has some problems as you are aware, but also to the actual visitor experience at the temple.

Again we see this link between conservation and showcasing, as well as concern for providing a balanced tour of the site arranged in such a way as to avoid any encroachment on the integrity and specificity of the monument. Therefore, the Swiss team, working along with APSARA, is working on the visiting experience, on the approach area and structuring the intake area. Funding will also be provided for that. But it is obvious that this comes with a condition. This condition does not involve the Swiss team, but rather APSARA, and that is to quickly find a solution to the land problem. Based on information provided by APSARA Director General Mr Bun Narith as well as from numerous contacts with the man in charge of the department, our friend and colleague Mr Ros Borath, we have come to realize that there isn't any major problem in this regard.

And if you allow, your Secretariat will make a recommendation that will be included at end of today's session when we come to that point. I would like to give you the substance right now: move as quickly as possible to solve the land problem—and I repeat that that is not a really difficult problem—so that the Swiss team along with APSARA can get this visitor intake program up and running.

Similarly, with regard to projects, I will quickly point out the key ones. For Sophia, it involves work on the western causeway-dike. We have recommended that our Sophia friends speed up completion of these operations. You see that there is both a technical and financial cooperation arrangement between APSARA and Sophia. And the

Sophia University team, led by Rector Ishizawa, will undoubtedly see that this recommendation is followed up.

The Chinese team has completed its work on Chau Sey Tevoda, also a key temple. We can say along with the team, since your *ad hoc* experts reported on it, that this work is moving along smoothly and harmoniously with the APSARA Authority. We can only express satisfaction with what the Chinese team is doing. I would like to inform our honorable Co-chairmen, the senior official of the Royal Government and all members of the ICC that the Chinese team intends to continue on and that it will soon be working with APSARA to select another temple. That shows you that there is a relay operation underway not just by one team on the same site, with Phase I, Phase II and Phase III, as is the case with the Bayon, but also with a team that will move from one temple to a different one. By this time next year, we will no doubt be in a position to announce the name of this temple after APSARA has selected it.

With regard to the Baphuon, we are happy to note that the team has completed restoration on the second tier. Gopura 2 east and gopura 2 south, hence two gopuras, have been completed, and that was a big undertaking. Major re-assembly work has been done in keeping with the announced program. I would here also ask you to allow me to express the satisfaction felt by the experts, both because this work has been done in a remarkable manner by the team headed by EFEO architect Mr Pascal Royère, but also because despite some real challenges—you see that sometimes the poor condition of the stone on some parts of monuments and structures, such as the Reclining Buddha, are a source of tremendous problems—these operations are basically on time and we can now say that the program will be completed up to standard and based on the time frame that the French government has announced and confirmed through the Ambassador.

Of course, nothing has been said yet about the tremendous job taken on by the World Monuments Fund. The WMF is a veteran team here, one of the first that came to share in the international undertaking after peace was restored. I will always remember Prof. John Sanday among the various officials I met. Over ten years ago the WMF team started working on Preah Khan, followed by Ta Som, as requested by APSARA. And last year it announced its project for Bakheng.

This does not mean of course that the WMF is dropping one monument to take on others. It is not abandoning things, but rather there is continuity either because APSARA Authority requested a further intervention such as on Ta Som or because, in response to the international appeal and having funds at its disposal such as those that the United States government kindly made available, the WMF has taken on the Bakheng project.

There is a perilous aspect in this Bakheng project, involving part of the monument, especially its platform. Tour operators are out to get as many people as possible to come to Angkor and they talk about the sunset from Bakheng. All the guidebooks include this. We can't say we are sorry about that, because it is in fact one of the great drawing cards of Angkor. So we have hundreds if not thousands of people climbing this fabulous monument on the Angkor landscape.

But this causes very serious problems because the platform is starting to 'reel' if I might say. Sometimes you can feel it when you go up, even in a small group. You can sense the 'pain' felt by the stone as some writers might put it when describing the Angkor stone. The operation has now been prepared. One of our experts, Prof. Croci,

even shared in fine-tuning the recommendation with Prof. Gavrilovic from the World Monuments Fund to go all out to on these emergency operations. We are all looking forward to seeing our friends with the WMF move ahead quickly on this matter.

We now move on to research activities. I would ask you to allow me to cover this point rather quickly despite the fact that my archaeology breeding makes me want to dwell on the 'excavations and research' component. You are already aware of how important this is. The French archaeological mission has gradually turned into a Franco-Khmer mission, which is something we are very happy to see. It started out at Roluos. At Roluos, as you know, we have the first capital of Angkor, dating from the late 9th century, about 870 to 880 A.D.

Mission director Mr Pottier is also a senior member of the EFEO and we know about his many achievements on the Angkor site over many years. He is also one of the old-timers in this great international campaign, going back to the days when he got work going on the Terrace of the Leper King. He has now become involved in an outstanding research project that is looking into both the territory and history of Angkor. In other words, if he allows the archaeologist part of me come out and say it, he has made an extensive excavation *on* the territory and another excavation *down into* it to study the stratigraphy, the archaeological stratum, and gain insight into land use throughout Angkor's history.

So it is that in the Western Baray area, he was to excavate a prehistoric site, one of great significance because we learned that it is a burial site dating back to the Bronze Age. So you see, we are probing deeply into the history of Angkor. Similarly, we have a major joint project between the EFEO and University of Sydney, and Mr Pottier is actively involved in it. You saw a presentation about this, and I would like to stress its importance. As far as chronology is concerned, it starts with remains dating back to the first millennium B.C. And it will eventuate into a new map of Angkor's history, one that is territorial in nature because of the area it covers, as well as one that is stratigraphic with regard to the dating.

I would like to spend a little longer talking about museums because we have had queries about this. One of APSARA's officials, HE Mr Uk Someth who as you know is head of the Department of Urban Planning and Development, is in charge of museums, not their content but rather their layout, and he will surely give us some good news about the Buddha Museum. It is being promoted and funded by the Sophia University on land that was generously contributed by the Royal Government and APSARA at the personal incentive of Deputy Prime Minister Sok An.

Similarly, at the National Museum of Phnom Penh, with French funding through the FSP arrangement, a restoration workshop directed by Mr Bertrand Porte has now set up a bronze workshop with co-funding from the Getty Foundation. This helps you to see that there is also continuity between Phnom Penh and our World Heritage Site—Phnom Penh for training as well as for artifact safekeeping—since a large number of Angkor statues have been stored at the National Museum for many years now. As for bronze statues, we have been informed that they will now be conserved by this workshop as well as by young Cambodians who are being trained in this field.

Honorable Co-chairmen, Ladies and Gentlemen:

I will now briefly mention publications, the 2004 volume that you saw recently, produced by Prof. Nakagawa and his JSA team and the tenth volume by the Sophia University mission. And while on the subject of publications, we have the Banteay Srei brochure which was published and 3,000 copies distributed. Congratulations to our Swiss friends!

In conclusion, I would like to tell all of you, team leaders, heads of missions, my fellow archaeologists, architects and heritage specialists, that the Secretariat's reports are your reports. All that I just reviewed here for the past year was made possible due to the reports you made available to us in a timely manner so that we could mention them at today's Plenary Session.

I would like to invite you to please not hesitate to send us a couple of pages, even for the major projects. The idea is that we can pass the information on to the Committee and then expand on it at the information and communication stage. After that, all of you will need to prepare much more comprehensive reports. But do not hesitate to get them in to our Secretariat in Phnom Penh, who is available to you at the UNESCO Office, so that the Co-chairman, the Royal Government and all members of the Committee can have a precise idea of what is taking place.

Just in a nutshell, though, what is taking place is truly, and I say this with all my heart, something that our ICC can be proud of. Thanks to the ICC, the exemplary cooperation of the teams with APSARA, the support of the Royal Government, we can say that this is indeed an international undertaking, at all levels, from training to publication, one that is really working out very, very well. A few minutes ago, we heard with much interest what the Deputy Prime Minister had to say. He pointed out that we must not be content with laurels, in other words, patting ourselves on the back, but that we have a lot more to do, that we have to be vigilant. Well, for the present, let's say that all the teams deserve a pat on the back. As far as we are concerned on the Secretariat, we will remain vigilant in giving all of you the opportunity to find in this final report an expression of what they have done and show that everyone really deserves a pat on the back. Thank you."

II.2. Report on the Activities of the APSARA Authority, by HE Mr Bun Narith, APSARA Authority Director General

"Excellencies,
Distinguished Guests,
Ladies and Gentlemen:

The 12th Plenary Session of the ICC once again has the privilege of welcoming the most learned and faithful friends of Angkor who have been working for over ten years now to showcase it and help get the site off of the List of World Heritage in Danger. From year to year, the ICC increases in size as new participants join to help conserve and safeguard the Angkor site. I would like to wish a special welcome to Mr Francesco Bandarin, Director of the UNESCO World Heritage Center, and to the General Manager of the Versailles Public Institution, which has been a constant and outstanding source of technical assistance for the APSARA Authority and its partners, hosting visitors and trainees alike, in keeping with the memorandum of understanding signed between our two agencies. I would also like to welcome representatives of countries who are

attending this semiannual ICC meeting, and we cannot overlook the very welcome presence among us again of Mr Azedine Beschaouch, Permanent Secretary of the ICC.

A number of work sites have concluded, but the takeover is being ensured by other forms of technical assistance. The JSA structure has given birth to a bilateral cooperation arrangement called JASA, between Japan's technical team and that of Cambodia. On July 19, 2005, under the high patronage of His Majesty King NORODOM Sihamoni, we celebrated the conclusion of the restoration operations on Banteay Srei temple conducted by the Banteay Srei Conservation Project team in the framework of a partnership arrangement between the Swiss government and the APSARA Authority. A second phase for showcasing the site is now being negotiated.

We have paid tribute to the outstanding technical work done by Mr Michel Verrot in the 'Angkor Site—Heritage and Development' program under the *Fonds de solidarité prioritaire* arrangement, which provided training for our junior restoration and administration staff for the Angkor site. We are happy to learn that another FSP project will come into being, subsequent to a new agreement signed in Paris in September 2005. The new components provide for technology transfer by French experts to junior management level Cambodians through training. We are most delighted to hear the French government's decision to plan for the establishment of a heritage trades technical study center sponsored by the *Centre des hautes études de Chaillot* (Chaillot Center for Advanced Studies). These two centers, one located at Angkor / Siem Reap for monument heritage, and the other in Phnom Penh for urban heritage, will enable greater national ownership and thereby promote the sustainability of the successful cooperation between our two countries.

We would like to again state how grateful we are to governments of all the countries friendly to Cambodia and to Angkor in particular for their unfailing support and encouragement. We would never have been able to get so much done and to have grown as much as we have without their technical and financial assistance. The successive experiences over the last ten years in areas involving conservation and development have aided the APSARA Authority to confidently undertake its work in the field and take on development projects that are the logical extension of site showcasing. Indeed, the tangible image of the Khmer heritage would not have justified its magnificence without its intangible heritage that is often eclipsed by the imposing presence of the monuments.

It is high time to get people, their traditions and environment associated with the temples. The ever insightful advice and coaching from UNESCO have helped us to handle the challenging technical files in the areas of both monument conservation and sustainable economic development. I would also like to express my gratitude for all the actions studied and also for your faithfully standing by Angkor in the most difficult moments as well as in the happiest ones of its history.

I will give the floor to Mr Ros Borath, Deputy Director General in charge of monuments and archaeology, who will discuss safeguarding projects and site maintenance. After the decade of safeguarding, the APSARA Authority, while continuing to work for the preservation of the monuments, is now deploying its efforts to ensure the sustainable development of the Angkor site. Everything done must take the development of Siem Reap town into consideration, which is inseparable from that of Angkor Archaeological Park. Mr Uk Someth, Deputy Director General in charge of town planning, will outline the urban structuring projects.

The Technical Committee meeting of June 2005 formulated many recommendations to enable the APSARA Authority to implement projects for tourism development on the site in a stable manner. Mr Tep Henn, Deputy Director General in charge of tourism, will provide a progress report on projects introduced at the last meeting of the ICC Technical Committee.

In implementation of the sustainable development policy advocated by the Royal Government of Cambodia, the APSARA Authority has for its part undertaken the following:

- 500 hectares of land was purchased, to be expanded to 1,000 hectares in the Run Ta Ek area to relocate people living in Protected Zones 1 and 2 who want to expand their dwellings. The development of this land will be studied by the technical departments of the APSARA Authority;
- Starting on April 1, 2006, vehicles with a capacity of over 24 passengers will be not be allowed into the Angkor Thom enclosure;
- A reforestation campaign for Zone 1 located past the old dike crossing the road built with AFD funds to serve the Culture and Tourist City was completed, with 6,000 trees put in;
- The entrance ticket sales concession contract was renewed with Sokha Hotels Corporation for a five-year period. Management of entrance fees into Angkor Park includes investments for the implementation of tourism development projects;
- A road maintenance and repair unit under the direct authority of the Director General was set up to maintain and upgrade the roads in Angkor Park.

We conclude by thanking the Royal Government of Cambodia and the Deputy Prime Minister and Chairman of the APSARA Authority, HE Mr Sok An, for their constant support for the protection and development of the Angkor site. Thank you for your attention."

II.2.1. Report on Safeguarding and Conservation Activities, by HE Mr Ros Borath, APSARA Authority Deputy Director General

"Honorable Deputy Prime Minister,
Excellencies,
Ladies and Gentlemen:

My remarks will cover first of all what was done to follow up on the recommendations made at the 14th ICC Technical Committee meeting in June 2005 and secondly what the department is seeking to accomplish as it carries out its terms of reference.

My department was in a position to follow up on recommendations 1 to 7. The first recommendation involved recruiting new staff for DMA 1 and 2. At the last meeting of this Committee, I pointed out the fact that we did not have the resources required by the expanded duties assigned to us. Since then, we were able to recruit in a short space of time three archaeologists to round out the archaeology unit. Also, a call for applications for the recruitment of 10 architects is underway. Our goal is to raise the staff level by phasing in the new recruits. As we do this, we will be able to set up one step at a time the new internal structure entailed by this staff increase.

The next two recommendations, numbers 2 and 3, refer to documentation. The international teams working on temple restoration must not only file their technical documents regarding operations they are currently carrying out, but also supply upon completion a set of specifications for maintenance in order to ensure handover to the national institution and enable site monitoring. As of now, the APSARA Authority has received some reports, but it may still be premature for the sets of specifications to be filed. The one for the BSCP project by the Swiss team on Banteay Srei is now being finalized. We would ask that these documents be prepared for work sites finalized since 2004.

As for recommendation number 4, we are now consulting the benchmark document—the archaeological map of Angkor—for any intervention project on the site, for instance, as we shall see later, the Angkor Thom moat cleanup project. Since then, we have not hesitated to consult Mr Gaucher, such as when we wanted to undertake a feasibility study to present some of the Buddhist terraces in Angkor Thom. It would be advisable for such documents to have official validation. This way, we can use them not merely as recommendation documents but also as a statement of requirements with broad enforceability.

With regard to recommendation number 5 involving Ta Prohm, we will hear a presentation from the Archaeological Survey of India about its temple restoration program.

As for recommendation number 6, the 'Churning of the Sea of Milk' gallery, the WMF has made a technical proposal and I am therefore awaiting the report from the *ad hoc* experts on this project.

I would like to come back to recommendation number 7. Let us take as an example the APSARA / INRAP operation on Trapeang Tropic on Siem Reap International Airport land. The Committee called for development of a public-private partnership to promote preventive archaeology or archaeological surveying at Angkor. This gives me an opportunity to stress the obligation of having an archaeological appraisal performed in the course of any development operation in zones where there is a major archaeological risk, and that means a major part of the area within Siem Reap district. This applies to both private and public operators.

Here is another example of such an operation, the Puok golf course project that enabled a field evaluation to be conducted by our teams in partnership with the Phokoethra Country Club on two remains that were discovered—a mound on which stands a very ruined temple as well as an Angkor-era bridge which had to be excavated. All aspects of this campaign were handled by the APSARA Authority's archaeological teams. This example highlights the advantage of doing such an operation, not simply for the purpose of safeguarding the memory of the Angkor territory, but also as a potential way of highlighting a development project. The idea is to fit this bridge into the overall landscape design on the site.

Honorable Co-chairmen, Excellencies, Ladies and Gentlemen:

I would now like to talk about project orientation and explain the new directions that the department is looking into and in fact is starting to implement in order to do a more thorough job of its assignments. As for archaeology, over and above archaeological surveying, we are starting to do some archaeological research operations

on our own. Last year for instance we did an excavation in Ta Prohm temple in order to help the ASI team do a diagnosis of the foundations. And I would like to highlight two projects that we did on force account. The first one involved restoration work on Bat Chhum of which the initial phase was completed last season by our maintenance and archaeology teams. The success of this project that we were able to do with support from the Accor Group, confirms the value of developing public-private partnerships. We also did some excavations on the Kauk Patri site. This mound is found at the edge of what is now National Route 6, and gives evidence of a lengthy period of occupation. It is home to a wealth of archaeological materials.

Turning now to the subject of restoration, we are also moving into more sustainable maintenance practices. Indeed, general maintenance is now being cared for and we know how precarious those wooden props are that we put up in emergency situations. We are therefore planning to launch actual conservation operations, minor in extent but viable in the long run, such as on part of the west landing of the basin at Sras Sang, on the southeast terrace of Phimeanakas at the Royal Palace as well as in Angkor Thom, where the other inventory unit has started research work at the Angkor Conservation Office on a project to put back the original Asura and Devatâ heads at the south gate. And staff workers and technicians in the department are increasingly developing contributions for seminars and conferences, such as the *École française d'Extrême-Orient* presentation on archaeological monitoring as part of the Bat Chhum restoration project.

Some comments now about research and communication. The research focal point will be the ceramics laboratory, which is developing by means of hands-on workshops and inventory work. The joint project between Cambodia and Thailand is moving along. The "Living Angkor Road" from Pimai to Angkor has been researched, with locations identified and surveyed.

Moreover, given the need for supplies of limestone and restoration materials, we have identified protection zones of open-pit quarries so that material can be taken from the banks with no risk. As far as the environment is concerned, we are also working to improve the environment of the monuments to a greater extent. For instance, we cleaned out the moats at Bakong. You can see the results in these pictures. This site was included in yesterday's tour. Similarly, with all due precautions in mind, we are planning to clean the Angkor Thom moats starting on the southwestern section.

As for landscapes, we are planning to continue the work already undertaken on temple landscapes by creating a landscape unit, in close liaison with the DMA 1 perimeter area management unit, with the DMA 2 team and in cooperation with the Department of Water and Forests. Our plans include the establishment of a small team supported by a consultant that will be in a position to respond to the many needs in the area of temple perimeter area landscaping and the overall landscape of the park.

Honorable Co-chairmen, Excellencies:

I will now take up the matter of temple approach areas. Studies to map out the zoning were done for the 27 approach areas we have listed. Diagnostic archaeology operations have been completed on 12 of them and five more have been scheduled. In order to move along in the project, we now have to free up the land in question. There are land problems on some sites which require us to redo our studies to find another

location. Then we also have to get final validation of these zonings in order to effectively control the spatial development of tourist activities.

To move ahead meaningfully with the detailed project, we have to have a specific program design, and we are now working on a program design for the most urgent temple approach area needs, based on what we have available. However, the approach areas have to be designed as satellites of the main visitor center, planned consistently both in terms of space and function with the visitor center. At our June meeting of the Technical Committee a program design study was presented and we are now anxiously awaiting the finalized document.

In order to do the studies needed for the establishment of more detailed regulatory control for Protected Zone 2 in the archaeological park, a committee with representation from all the concerned APSARA departments was formed to study this very large, complex zone of over 400 square kilometers. We are following a three-step work plan. The first step is to analyze the existing situation and then select typical or problem sectors on which to conduct a more thorough analysis. Next, a sensitivity map is made up, outlining a proposed management plan. After validation by the concerned levels, a final enforceable document has to be drawn up, including both sector layouts and limitations. We worked on this basis with UNESCO legal expert Mr Lucien Chabason when he was here last September.

So, honorable Chairmen, there you have a quick outline of what we have done. Thank you."

The French Co-chairman thanked HE Mr Ros Borath for his presentation and expressed appreciation for the fact that much of what he said referred to the recommendations made at the 14th Technical Committee meeting.

II.2.2. Report on Sustainable Development Activities, by HE Mr Uk Someth, APSARA Authority Deputy General Director

"Honorable Co-chairmen,
Honorable Deputy Prime Minister,
Excellencies,
Ladies and Gentlemen:

I will deal with two different aspects, first an assessment of the status quo of what is referred to as sustainable development, and second what APSARA has done and intends to do. We now need to take stock of the situation. 'Sustainable' development has become a buzz word, something everybody is talking about it. Conclusions must be drawn based on what we have accomplished during the first ten years. We can naturally expect that things have moved ahead, or developed, in Siem Reap. The development has been tremendous, fast-paced and is now taking place at lightening speed.

- Point number one, the environmental aspect: During the last ten years, has the environment been protected or has it been spoiled? Examples can be found in the town itself, in the countryside and even in Angkor Park.
- Secondly, touching on the most basic issue for development—the water resources. Where do things stand on this problem of water resources? How can we talk about sustainable development if we don't have enough water for the communities or for

tourism growth? I have talked about this problem time and time again; we can't get around it, and I have no qualms about bringing it up again. It's a problem that has everything to do with sustainable development.

- Point number three: spoiling of both the natural and urban environment. As far as the urban environment is concerned, the examples are there. And examples of natural environment degradation are also there, and an assessment of this point is timely.

Although development is fast-paced and stimulating growth, it is threatening to throw the economic and financial context off track. For that very reason, APSARA with the assistance of JICA has gone to work on the draft Master Plan for the Sustainable Development of Siem Reap / Angkor. Why do we need such a plan? Because examples have already shown that the two plans developed over the last ten years are showing signs of going adrift. I feel that this plan is not only necessary, but absolutely vital, because it is a vision of the future, the guideline that will enable us to keep development on the rails and avoid perverse effects. This plan will be outlined in greater detail later on.

The second aspect, what have we done in this regard, in the light of this assessment? APSARA is planning things on three fronts:

- The first one involves long-term action, development pillars focusing on heritage. With its focus on heritage, APSARA has a development surface that we are calling the Culture and Tourist City. Why is this Culture and Tourist City so important? Because it represents the development fund and investment capital that will enable APSARA to generate its own-source revenue in future years. This own-source revenue will be redistributed in harmony with the 'preservation-development / development-preservation' cycle. If we don't do that, we will always have to be asking for assistance.
- The second thing we are doing is taking preventive measures. Preventive measures involve many smaller actions in cooperation with the municipality and all project stakeholders, both in the private sector and in the communities. What prompted these measures was the realization that without these key actors, sustainable development would never be on a solid basis.
- The third thing we are working on is a long-term plan, which involves developing the Culture and Tourist City. The first core undertaking in the development strategy has already gotten underway, because such a vast piece of land requires vast sums of money and a long-term plan is a must. What can be called the hub of the Culture and Tourist City is soon to be set up. It is anticipated to be the hub around which various satellite projects will gravitate. These will stimulate economic actions right in the core of the Culture and Tourist City, which is also considered to be a buffer for the historical monuments, but designed in such a way that it will be self-sustaining as to the resources it needs.

I think that the studies already conducted on the development scheme have shown that without the three pillars of 1) water resources, 2) comprehensive, thorough implementation of the Master Plan and 3) involvement of the necessary legal stakeholders—government, private sector, communities—sustainable development and all that it promises are on shaky ground. I am convinced that if we can resolve these three problems right now, the energy of development will enable us to get things back on track and avoid disastrous consequences in the near future. That brings this report to a conclusion and I thank you with all my heart."

II.2.3. Report on Sustainable Development Activities, by HE Mr Tep Henn, APSARA Authority Deputy Director General

“HE the Deputy Prime Minister in Charge of the Office of the Council of Ministers, Chairman of the APSARA Authority, Honorable Co-chairmen Representing France and Japan, Distinguished Delegates, Excellencies, Ladies and Gentlemen:

It is my pleasure to brief you on the implementation of the new tourism development projects outlined at the June 2005 meeting of the Technical Committee. In implementation of the Royal Government of Cambodia’s poverty alleviation strategy the June 2005 ICC Technical Committee meeting came up with recommendations to guide the APSARA Authority in setting up tangible and intangible heritage safeguarding measures to ensure sustainable development. Thus, all economic expansion projects are to ensure protection of the monuments while accommodating increasing tourist numbers, with a view to employment creation for people living in Angkor Park, providing them with income to improve their standard of living.

Among the 17 recommendations made, the sixteenth was a reminder to the APSARA Authority, in keeping with previous recommendations made by the ICC, of the need to test out new tourism projects to ensure their quality, viability and acceptability by tourists prior to any actual application. It is my privilege today to outline what has been done in implementation of the projects submitted at the June 2005 ICC Technical Committee.

Point 1: Rental of battery-run bicycles. Relay stations have been set up near the key monuments as a service to users and to contribute to the effective use of this mode of transportation. The main office has just been completed. Commercial and technical staff have been recruited and the battery recharging equipment set up. An initial test was done when the South Korean delegation arrived to do preparatory work on the Khmer Art Exhibition in Seoul in October 2005. The actual bicycle rental service started on November 8, 2005.

Point 2: Plastic slippers to be worn by visitors to the Angkor monuments. Rental offices of two different sizes have been built near the monuments selected for the project. Three 8- by 6-meter buildings have been put up west of Angkor Wat temple, north of Preah Khan temple and north of Banteay Kdei temple. Five 5- by 6-meter buildings were set up east of Angkor Wat temple, southwest of Banteay Srei temple, northwest of Preah Khan temple and southwest of Ta Prohm temple. At the request of Mr Ros Borath, the director of the concession company for the slipper wearing project provided a design file along with a PowerPoint presentation to show the key features of the product. The following points were decided: the slippers need to undergo technical analysis by an international laboratory specializing in sports shoes; the concession company, in agreement with the APSARA Authority, will determine a trial period to test the products free of charge with tourists.

Point 3: Putting up a stairway and monoculars for Phnom Bakheng visitors. After an engineering study, the Department of Monuments and Archaeology 1 decided to put up a wooden stairway to allow Phnom Bakheng visitors to access the monoculars. Two stairways will be set up on the round-about trail rather than on the existing old trail.

One will be used to go up and the other to come down, along the edges of the historic trail. Locations for setting up the monoculars up are now being prepared.

Point 4: Electricity-powered shuttles. A working group made up of technicians from the Department of Monuments and Archaeology 1, Department of Tourism Development and staff from the battery-powered shuttle dealers has been formed to study procedures for implementation of these projects, which includes itineraries and shuttles, locations for parking slots, vehicle battery recharging stations and parking lots for authorized vehicles.

Point 5: As for the *Cambodia Guide for Tourism and Investment*, we are looking into an appropriate channel for distribution. Thank you for your attention."

Comment by Mr Azedine Beschaouch: "On behalf of the Secretariat and I think on behalf of our Co-chairman as well, let me first of all express our satisfaction at seeing the APSARA Authority's efforts to implement the Technical Committee recommendations. At that meeting, we asked that precautions be taken, that preliminary studies and testing be done to facilitate the decision-making process. We have now learned that even a laboratory analysis is going to be done. We commend the APSARA Authority for its desire to foresee and avoid any backlash and especially for wanting to make sure that tourists get reliable products. We are happy about that.

I would like, with your permission, to raise a couple of questions. The first one is addressed to HE Mr Borath. He spoke about approach areas. Can he give us a quick overview of the studies conducted so that we know what to include in the recommendation? Exactly what has to be done in 2006 and perhaps even in 2007, because the approach area work is not something that can be completed in just one year? That is my first point.

The second point, may I ask HE Mr Uk Someth if he could kindly give us a quick overview of the museum timeline. And perhaps one more thing, I would like to express what all of our colleagues on the ICC have been saying. For some time, they have been hearing that the Royal Government, thanks to the kindness of HE Mr Sok An, Deputy Prime Minister, has made a grant of land, has allocated the money to build the APSARA headquarters. Everyone is getting a quite anxious to see all APSARA representatives together in one building so we can go and see them, talk with them and let it be known that 'APSARA is there, the APSARA Authority are people that we can get in touch with at any time, not in Phnom Penh but in Siem Reap.' That's what the Royal Government wants. So, Excellency, can you tell us the dates, with the permission of our two Co-chairmen, and more importantly with the permission of your Chairman, the Deputy Prime Minister? We can make a record of these dates and we can remind you of them in the future."

Response from HE Mr Ros Borath: "With regard to the approach areas, the ones on which we have made the most progress, as you know, are at Angkor Wat and Banteay Srei. As for Angkor Wat, we have moved ahead on a design program or rather a simulation on our part because we have come up with a ballpark estimate based on the design program, of the requirements from the standpoint of tourism and the demands as far as tours are concerned. This will give you an idea of the progress being made on the current master plan based on the zoning plan. Subsequent to the zoning plan, we

did an archeological survey and now we are at the design stage and making progress on the master plan that will be dead on target as far as the future goals are concerned.

So where do we now stand regarding the engineering studies? We have launched a drainage study. We cannot take on this project bit by bit, but we are trying to take an overall view, come up with an umbrella design program. Thus, we are setting up an engineering design office that will handle river water and waste water drainage as well as electricity and garbage collection. The study office has been selected and we are now in the discussion stage to determine if the objectives that we had set at an earlier stage are still valid.

As for Banteay Srei, allow me to say that the design program was carried out in the same way, but the land issue still has not been solved. As an extension of the main visitor center, it seems to me that we have to work on at least three other approach areas in the 27 that have been announced, including Neak Poan to take the pressure off of Angkor Thom. Preah Khan and Sras Srang are next on the list. That gives you a quick overview of where things stand with regard to these studies and progress of the work."

Response from HE Mr Uk Someth: "I firstly apologize for not being able to get all these documents handed out yet. These documents show the work plan and schedule for operations starting in the first quarter of 2006. As for the APSARA Authority headquarters building, an invitation to bid is being prepared. Plans call for work to start in March 2006.

Secondly, regarding the Buddha Museum to be built next to the APSARA headquarters, the architectural drawings and detailed blueprints have been completed and I believe things are at the stage where a contractor is being selected for the construction. Plans call for construction to take place in February 2006.

Thirdly, documents for the Textiles Museum have been completed to the stage of getting the invitation to bid process underway, which is expected to go ahead in January or February 2006 once approval has been given by the Indian authorities.

Now regarding the centerpiece that I referred to earlier, which includes the International Tourist Information Center, it is in the preliminary study stage. While that is going on, funds are being looked for. The schedule calls for the project to take shape during the first six months of 2006, with the individual buildings going up in the second quarter of 2006."

Comment by the Japanese Ambassador: "I would firstly like to thank the APSARA Authority for this activity report. I want to raise a question mainly for the attention of HE Mr Bun Narith. It concerns the renewal of the contract with the Sokha Hotels Corporation for the collection of entrance fees. I am asking this question from the standpoint of consistency, because I raised it at last year's Plenary Session. So if you allow, I would like to quote the passage: 'An increase in the APSARA Authority's financial resources is necessary so that the Cambodian government can undertake activities on its own to safeguard the site. Nevertheless, in the current state of things, the share earmarked for APSARA out of all fees collected is still inadequate. I would therefore like to restate the necessity of increasing this share. I have been informed that the contract will come up for renewal next year, and I strongly hope that an upward adjustment of the distribution of shares will take place.'

I just heard a very brief mention that this contract has been renewed for five years. May I have some information on the point I just raised? I feel this is important because the entrance fee to the Angkor site is quite high for tourists. I think that the tourists will agree to a higher fee if they could trust that these resources are being invested either in site infrastructure replacement or upgrading, for increased research or restoration activity."

Response from HE Mr Bun Narith: "In reply to the query from the Japanese Co-chairman, I would like to provide the following information: This concession contract was first submitted to the Council for the Development of Cambodia as early as 2003 and received the approval of Prime Minister of Cambodia. After the formation of the government, this application received the further approval of the Co-chairman of the Council for the Development of Cambodia in the person of Prince Norodom Ranariddh. As for the APSARA Authority, in compliance with the high-level instructions of Deputy Prime Minister Sok An, in charge of the Office of the Council of Ministers and Chairman of the APSARA Authority, we see to it in our discussions with the company that substantial advantages are obtained for the APSARA Authority, as requested by the Japanese Co-chairman.

The advantages that we can outline for the ICC here are as follows, and I am quoting some articles from the additional clause to the contract: 'Annual receipts from admission tickets to the Angkor site collected by the concession holder, after VAT deduction (10 percent) are to be shared between the APSARA Authority and Sokha Hotels based on the following schedule: a) for the bracket from 0 to 3 million dollars, the split will be as follows: 50 percent for the APSARA Authority; 50 percent for the Sokha Hotels Corporation; b) for the bracket above 3 million dollars, the split will be as follows: 15 percent to be allocated to the Angkor Region Conservation and Development Fund—a fund intended to cover emergency expenses and to help carry out activities necessary for the promotion of the World Heritage Site both in Cambodia and abroad, priority short-term technical consultations as well as contributions to social welfare in the concerned region; the remaining 85 percent will be shared between the APSARA Authority and Sokha Hotels in the following proportion: 80 percent for the APSARA Authority and 20 percent for Sokha Hotels Corporation.

In addition to this split, the concession holder is expected to make investments during the 2005-2010 period in the projects detailed below to promote cultural tourism and ecotourism in Angkor Park, of a total amount of 3.75 million dollars on the basis of an annual average of 750,000 dollars. The projects involved are as follows:

- Repair or upgrading of 20 kilometers of road for a total amount of 750,000 dollars;
- Provision of special equipment for a total amount of 1.6 million dollars;
- Contribution to the setting up of entrance area structuring in the framework of the program developed by the APSARA Authority;
- Setting up light units equipped to fight forest fires;
- Setting up small units equipped to provide first aid to tourists—illness, minor injuries, minor traffic accidents;
- Building of 20 WCs for an amount of 400,000 dollars based on an average cost of 25,000 dollars per unit;
- Constructing and equipping a new ticket sales booth to be set up in the framework of the Visitor Intake and Information Center to be constructed in the Culture, Tourist and Leisure City. The amount of this latter project will be 1 million dollars."

Comment from ad hoc expert Giorgio Croci: "I just wanted to express my appreciation for the commitment of APSARA'S junior archaeologists and architects and the quality of the work they are doing on the sites, in particular the ones that we visited yesterday."

Comment by Mr Azedine Beschaouch: "Two points, one simply a matter of procedure. I would like to ask permission from the Co-chairman to request that HE Mr Bun Narith provide something in writing for the record, in English and in French, so that everyone can be aware of how things stand. He just gave a list of very specific figures, and obviously we won't remember that. In this way, both of the Co-chairmen, the Ambassador of Japan, and yourself, the Ambassador of France, as well as all members from the international community can be aware of where things stand."

The second point is that, with your permission, I would like to make a personal comment on the part of Mr Bun Narith's report in which he referred to the visitor center. We are happy to learn that the visitor center will have a new ticket sales office and that consideration is being given to allocating at least a million dollars to it in the visitor center. That being the case, I think that we need to be very specific: Nothing has been changed since the decisions were made by our Technical Committee and the recommendation that I have before me. This involves a visitor intake and information center and, from that point of view, the leading contributor up to now has been the *Société concessionnaire de l'Aéroport*, which is made up of VINCI in the majority. They are the source of the funding. Obviously now a million dollars is being added to the sector, for the ticket sales office.

We are happy about that and although there is a need to move quickly to get the operation up and running, we need to stay within the framework that this Committee decided last time, the recommendation and what the Royal Government wishes, and that is to move quickly to put this center in place based on a plan that has been determined and that cannot change in midstream because this is a center that is to provide a transition between the public space for those coming in and the heritage space for those who are going to visit it. Therefore, this transition point will be serviced by shuttles, will have information facilities and public leisure facilities, as well as boutiques, ticket sales booths, etc. This is a plan that is underway and I feel that nothing has changed from what we said the last time."

The French Ambassador thanked HE Mr Bun Narith for the details he provided and affirmed the request made by the Standing Secretary on behalf of the Committee. The French Co-chairman also thanked Mr Azedine Beschaouch for his comments regarding the visitor center.

II. 3. Ad hoc Group of Experts Reports

II.3.1. Ad hoc Group of Experts Report, by Mr Pierre André Lablaude

"The three *ad hoc* experts have been able to spend time over the last few days visiting and analyzing some ten different projects and work sites in the field and discuss things with the persons in charge of the various teams. My colleagues and I will spare you the details and take this opportunity at our Plenary Session to mention only a few cases that we felt are confronted with particularly thorny problems.

The first example is the project being carried out by the Archaeological Survey of India on Ta Prohm temple. You all realize that of all the Angkor monuments of various time periods and architectural styles, Ta Prohm stands out as absolutely unique for its esthetic quality and cultural value, the outstanding association between a monument in ruins and this magnificent tropical forest, these huge trees, the very growth of which is the reason for this ruin. The result is a remarkable relationship but the balance between nature and culture is fragile. It is a flagship picture of Angkor and I would even say, using the language of commercial tourism, a genuine traffic builder for Angkor.

This quality and uniqueness have led the successive authorities of the Angkor site for close to a century to always clearly and constantly recall an intervention choice that is very original and very clear—conserving to the greatest extent possible the old trees that have overgrown the buildings, thus maintaining this image of a temple being invaded by the forest and preserving the monument as a ruin, which means avoiding any dismantling and reassembly of architectural structures, built-up structures, and furthermore any anastylosis work, which is the reassembly of structures that are currently laying collapsed on the ground.

This specific option was confirmed and validated during previous visits and meetings of the ICC—conservation and consolidation of the temple and site in their existing condition, thus making no attempt to reestablish earlier structural features that have disappeared.

For this reason—and I am speaking in a very friendly terms on behalf of my colleagues and personally—I would like to say to our Indian friends that we were quite surprised on our list visit on location a few days ago to see that on half of one of the two front galleries of the temple a lot of work had been done in just the last few weeks to clear away fallen stones, sort and store them, in preparation for an anastylosis operation, a reconstruction of fallen structures.

What has just been started therefore seems to us to be going against the general guidelines that had been mutually agreed upon earlier, and which is of even greater concern given that we still do not have as of today an overall project plan spelling out and detailing the various types of work that our colleagues from the ASI intend to carry out on this site monument.

In addition, we became aware of two major problems at Ta Prohm. First the hydraulics. When it rains, some parts of Ta Prohm literally turn into swimming pools. That poses a very serious risk for the stability of the structures and conservation of fallen materials lying on the ground. We feel that this area requires study and intervention as a matter of priority.

A final point is the poor quality of the visitor experience inside the temple at this time. We feel that some comfort and safety fittings are absolutely crucial to enable the visitor to come into Ta Prohm and find the anticipated feeling of adventure and discovery, as well as to be able to enjoy this adventure and discovery in normal conditions of safety.

I will conclude by saying that the problems facing Ta Prohm can be broken down into four components: the trees, the stones, water and man, that is to say the visitors. We feel that the intervention priorities should now focus on the two latter aspects, water

and visitors, without calling into question the principles that were adopted earlier by the ICC with regard to the first two aspects, the trees and the stones.

I trust that my expressions here reflect the anticipation felt by all three of us to receive soon a comprehensive project plan spelling out clearly and concretely what the *Archaeological Survey of India* proposes to do on this temple. I now give the floor to my colleague, Mr Suzuki."

II.3.2. Ad hoc Group of Experts Report, by Prof. Hiroyuki Suzuki

[OrigE] "I share the point of view of Mr. Lablaude and the opinion of Professor Croci. I would like, at the outset, concerning the Ta Prohm project, to say that I highly appreciated your efforts to organize the Ta Prohm symposium during the previous year. It was a very good occasion for an interchange on methodology, philosophy and practical information concerning restoration works. I might add that I hope that Ta Prohm symposium will be organized again throughout the course of your operation on the site.

Next, I'd like to make some comments on the restoration work on the north half of the west causeway of the Angkor Wat temple being carried out by Sophia University. It began a long, long time ago and still continues. And I understand that they have reached the conclusion to keep the level of the right and left side of the causeway the same. I appreciate their conclusion but it actually took many years to reach that conclusion and the restoration work itself is, I'm afraid, actually too slow. I've heard that they are planning to complete their restoration work in 2009 but it will have been 10 years of work. The causeway is a most important place not only for Angkor Wat but also for all the places of the Angkor area. To occupy such an important place for ten years is actually too long, in my view. So I hope for some swift decisions and swift restoration work on sound principles for the restoration. I want to ask the director general of the Sophia team to decide things swiftly and smoothly and we hope for the project's completion in the near future."

II.3.3. Ad hoc Group of Experts Report, by Prof. Giorgio Croci

[OrigE] "The ad hoc experts, jointly with the UNESCO Secretariat, met yesterday to discuss some points of the project proposed by the World Monuments Fund concerning the 'Churning of the Sea of Milk' Gallery. This gallery, as all of you know, is made of blocks and the main problem today is not a problem of stability. The gallery was dismantled and rebuilt in a certain way firstly by a French team and then by an Indian team several years ago. Now from the structural point of view, it is stable. But there is the problem of water penetration and water brings salts, creating problems for the conservation of the bas-relief. The wall of the gallery is a very important structure and is one of the most beautiful bas-reliefs of Angkor Wat.

For these reason, it was said in the meeting yesterday that perhaps some analytical thinking would be necessary, especially on three points: first concerning the future stability because the project policy is to dismantle again, once more, and to rebuild by eliminating concrete and by putting in some very thin lead sheets. That may reduce the friction between the blocks. Since stability is ensured in this kind of walls by friction, it is indispensable to carry on some tests both in laboratory and on the site in agreement with APSARA.

The second point is the cultural aspect. To dismantle, as has been said several times in previous meetings, is something that should be avoided. That is something that should be undertaken only when it is impossible to solve the problem in another way and that is the last alternative to follow.

Another point is repeatability or replication, that is, we would like, from the moment that we start the operation of improving the waterproofness of galleries, to have the possibility to benefit from these experiences on all the galleries, not only the galleries of Angkor Wat but also on other sites, because this is a very important problem. I'm not saying everywhere, but in several sites. And since this solution should be an exception, even if it is a justified one, we have to think also that if we have other possibilities, it might be possible to follow different lines and we could benefit from this experience.

So in conclusion, the study of the World Monuments Fund is very much appreciated. It has been a huge undertaking, very well done, very detailed and, in a certain way, an example of how to work. So the comments I have made do not reflect any lack of appreciation for the work, but simply because of the importance of this gallery, as there is no immediate risk of collapse, nor risk of instability. There is certainly the risk of progressive damage on the bas-relief but this progression is very slow so it is not something that has to be measured in months or years.

We therefore suggest that some tests be carried out on the friction, as I already said, and also some further analysis be done on salt distribution in different parts of the wall. You can then try to evaluate the possibility of alternatives, both theoretically and experimentally. For example, and I am not saying that this is the solution to be followed, we could open a little bit the joints on part of the surface and seal it with lead. Also, with liquid lead to prevent penetration from the external surface, if there is no penetration of water into the wall, even the role of salt becomes less important. Certain solutions of this kind should be tested both from the esthetical point of view, to determine if this sign would be visible or not and also from the point of view of efficiency. So we are leaving the door open for further thinking on these points, even if, as I already said, the project that has been presented is a very good project.

We will now say just a few words on the recommendations. We have spoken several times in these meetings about the work that has been carried out. There is a documented set of recommendations for the conservation and restoration of Angkor monuments. Those who shared in developing this document were the *ad hoc* experts, APSARA experts and some experts on international teams who have agreed to contribute to it. Of course, the contribution is free and open, so anybody who is willing to give some time to that is welcome. We started with this document in 2002 and we have had nine revisions of the text. And speaking yesterday with Messrs. Bandari, Beschouch and Ros Borath we said that probably now is the moment, after we have written the tenth revision, to disseminate this work. The idea is to give this work to all the teams, to everybody, during the next meeting. Then we'll wait a certain time to receive the comments, six months perhaps, so that we take into account the comments of everybody and then, if it is agreed, use this as a document of reference in preparing projects. It will be more readily accepted because everybody will have agreed from the beginning to follow a common philosophy, a common line, a common cultural and technical line. Thank you for your attention."

II.3.4. Ad hoc Archaeology Expert Report, by Mr Azedine Beschouch

“With your permission I will overstep what I refer to as a ‘law of ethics’, one that was well expressed up by the universal thinker, the great French writer Pascal: ‘The self is loathsome’. But since I am now putting on my hat as an archaeologist, I would like to preface this by saying that last year it was my pleasure to attend an international conference convened at a university in Italy to celebrate my archaeological jubilee. Yes, I have been involved in archaeology part time or full time in Tunisia, France and Italy for 50 years.

So in my capacity as an archaeologist, I can assure you that I have experienced many moments of discovery and personal satisfaction but few moments of great satisfaction with some of my colleagues. I can therefore assure that what has been accomplished by Prof. Gaucher and his team at Angkor Thom is something exemplary and which has, at least as far as I am concerned after working 50 years in that field, awakened my enthusiasm, and I want to thank him publicly. I am from a region that has conserved traces of Roman urban development up to this day in the streets of Carthage, the city in which I live. It is a region considered to be the epitome of what the Romans had promoted and initiated by way of urban planning with the great city of Timgad and its rectilinear layout that is taught everywhere. Well, here in this region far away from the Mediterranean we have a type of Timgad but with three kilometers on each side, making it a large square.

So congratulations to Prof. Gaucher’s team, and for good reason, and I would like, if you agree, to formulate the recommendation in the following way: first, we will not refer to any ‘master plan’; there was never any idea that this would be a master plan. What he discovered is an urban planning layout. The important thing is the directions it provides for management of the site, because we are on a World Heritage Site. Thus, if you agree, and we will come back to this point in a few minutes, the Committee expresses its great pleasure with the new results of the excavations and research that led to the discovery of the urban planning layout for the city of Angkor Thom. We observe, we note something truly remarkable. But what does it mean for the APSARA Authority and for us? It means that we need to take advantage of that and say: ‘The Committee considers that this layout should constitute, for the APSARA National Authority, a tool for the protection of the archaeological reserves—for that is the consequence; we know what it involves; we know that there are reserves and now we are going to protect them—as well as a tool for management of the site and monuments within the city.’ We are on a World Heritage Site. The priority is management focusing on conservation, avoiding risks, any danger that threatens the monuments. So if you agree, we will put what I just read in English and French so that, with your approval, this will be a proposition adopted by this Committee. I thank you.”

The French Ambassador thanked the Standing Secretary and pointed out that the applause of the members was also intended for Prof. Gaucher’s team. He added that two documents, one in English and one in German, about Prof. Gaucher’s work had been handed out to those in attendance.

II.4. Presentation of the UNESCO Evaluation Mission on the Conservation and Restoration Project on the Royal Plaza (Prasat Suor Prat and Its Terrace), the Bayon (Development of the Master Plan) and Angkor Wat (Northern Library, Phase II), by Prof. Hiroyuki Suzuki, Evaluator

[OrigE] "I am very pleased to report on the final evaluation mission for the project involving the preservation and restoration of the Royal Plaza—Prasat Suor Prat and its terrace—, the Bayon and Angkor Wat Northern Library inside the outermost enclosure from 1999 to 2005, supported by Japanese Funds-in-Trust for the Preservation of World Cultural Heritage in Angkor. Prof. Cruciani of the University of Firenze and I, Suzuki, of the University of Tokyo visited the site in last September and made the report. I will start out by reporting on the project's overall achievements.

The Japanese government and its official mission, JSA, achieved considerable results during the project's second phase, from 1999 to 2005, both in methodology and in practical work, in keeping with the spirit of the Tokyo Declaration and the advice of the ICC. JSA completed the restoration of the Prasat Suor Prat towers, Angkor Wat Northern Library and the Bayon Master Plan in the course of this phase.

Concerning the methodology and exchange of information, JSA sponsored the annual Bayon Symposium in Siem Reap. The Symposium served as a forum for presenting reports of JSA activities for the year as well as for discussing the formulation of the Bayon Master Plan. Five such symposiums were held from 2000 to 2004. JSA also conducted numerous workshops at various intervals. To widely disseminate JSA activities to the Japanese public, JSA has hosted an international symposium on the Angkor monuments in Tokyo, paneled by overseas experts. Four such symposia have been held from 2000 to 2003. It was not held in 2004 due to budgetary reasons. This October, JSA carried out a forum at which it comprehensively presented all JSA activities implemented to date.

JSA has documented, disclosed and published all data obtained through its surveys and conservation and restoration works. It has published five annual reports from 2000 to 2004. A report on the conservation and restoration work on the Prasat Suor Prat towers has just been published. JSA has also published five issues of a public relations newsletter called *JSA News* from 2000 to 2004. In addition to the above, JSA has publicized its activities through the use of the print media, such as pamphlets describing JSA activities and its human resources development efforts. It is also disseminating information on its activities through its website, available in both Japanese and English.

I will now comment on training and human capacity building. The relationship between the JSA team and APSARA with its staff members has certainly proven to be successful. Training activities have permitted a transfer of the know-how and skills needed in the maintenance and restoration fields to APSARA. The fields of competence of the Japanese experts were wide ranging and included restoration planning, stone engineering, construction management, on-site construction, architectural and urban planning, archaeology, petrology, ground engineering, environmentology, conservation science and art history.

During the peak of the second phase, there were as many as six residents from Japan and approximately 250 Cambodian JSA staff members working at JSA's restoration sites, engaged in the fields of conservation, restoration and archaeology.

There is no doubt that the policy followed by JSA, its methodology and techniques can be regarded as a good point of reference for an approach to temple restoration, according to concept of authenticity in conservation of immovable heritage as discussed at the Nara Conference in 1994.

The consciousness of this fundamental notion constitutes a specific feature of the training process of local experts. This connotation is certainly useful in view of the human capacity building in the field of the heritage maintenance and restoration.

The integration of traditional masonry techniques and modern technologies tried out in JSA's restoration yards at Angkor played an important role in order to promote capacity building of Cambodian experts.

The relationship between JSA and APSARA could have been developed in a more profound way during the project's second phase. JSA invited three experts from APSARA to their work sites and it certainly generated fruitful results. Their mutual efforts of association should be undertaken in a more sustained and systematic manner. For example, JSA in addition to associating the APSARA experts in its work should also have extended their consultancy inside APSARA, in dispatching their consultants or advisors.

Next, I will comment on the impact of the project. Although it is difficult to assess the economic impact of the project in quantitative terms, one indicator is perhaps the mode of transport of the Cambodian staff. At the beginning of the project, the majority of the Cambodian staff members commuted on foot or by bicycle, but most of them now commute by motorcycle or by car. Every year, JSA had been acquiring information on the inflation rate in Siem Reap from the Cambodian government, and in response to that inflation rate, it had worked to increase the basic wage or provide incentive technical allowance.

Local experts and workers signed only a single-year contract with JSA, but the contract offered continuity, and ensured that they would receive severance pay from JSA in compliance with the local labor law. JSA recruited workers mainly from nearby villages. Their engagement with JSA not only allowed them to acquire technical skills, but also helped revitalize the entire village. However, it is not possible to employ all those who participated in previous phase activities in the third phase. Therefore, JSA intends to continue to support as much as possible their village, with which it has maintained a strong cooperative relationship up to now, as well as former JSA staff in charge of stone elements by building a vocational school in the village for the maintenance and upgrading of stone element technology.

As is widely known, the number of tourists to Angkor from inside and outside Cambodia has increased dramatically. In 2004, more than one million tourists visited Angkor. The accumulation of diligent efforts made by JSA and other restoration teams has no doubt contributed to attracting this great number of tourists. JSA has also received tour groups from Japan. In the previous year alone, it received close to 1,000 visitors in approximately 135 groups. They included government dignitaries, the press, study tours, school-related groups and people from various spheres of society. For the future relationship between Japan and Cambodia, it is crucially important to keep stable activities on the sites.

Finally, I will comment on the organization. JSA activities were implemented over a period of about six years from May 1999 to April 2005. A short-term mission is to continue until August of this year. The budget for the third phase has been drastically reduced to one-fifth, and a framework of local leadership is presently being explored. The Japanese government should have avoided such a drastic change in budget and considered a more stable and trustworthy cultural policy for the ongoing project.

It is true that the organization of JSA functioned quite satisfactorily under the leadership of its director general, Prof. Nakagawa of Waseda University, all through the period of the first and second phases. It is however time to introduce a younger generation into responsible positions in every part of the organization. This young blood will enable JSA to create more fruitful and continual products in the next decades. This is our report. Thank you for your attention."

III. POINTS FOR DISCUSSION

III.1. Status of Protected Zones 1 and 2 and Prospects for Solutions

III.1.1. Contribution from Mr Khuon Khun Neay, Director, Department of Monuments and Archaeology 2 (DMA2), APSARA Authority

"Since the last quarter of 2004 and throughout 2005, the APSARA Authority put forth great effort to contain the situation that prevailed up till then in Protected Zones 1 and 2, in particular to implement Article 2 of Royal Government Decision No. 70 of November 16, 2004. This decision defines the standards for land use in Zones 1 and 2 on the Angkor / Siem Reap site and includes such provisions as:

1. Citizens who have lived in these zones for a long time are allowed to maintain their domicile in it without being forced to leave their residence;
2. Citizens are allowed to retrofit their domicile or renovate their dwelling if it has become damaged or to build a new house to replace the old one provided that they obtain permission from the APSARA Authority;
3. Citizens are entitled to administer and dispose of their lands, that is to say they can bequeath them by estate to their heirs or transfer them to other family members or sell them to other members of the village community in order to deal with difficulties in life.

[slide] Here are the protected zones: in red is Zone 1 and in yellow Zone 2 or the buffer zone. To the north, the Banteay Srei temple zone, in the centre the Angkor group and to the south the Roluos group. Zones 1 and 2 have a total area of 401 square kilometers.

- The APSARA Authority has taken some ad hoc measures since then, including:
- A census of the population living in Zones 1 and 2 was taken by the Population and Development Department;
 - Markers have been put in by DMA 1 to clearly indicate the boundaries of Zones 1 and 2;
 - Billboards have been posted to show the zone boundaries and outline the rights of the people regarding their residences in Zones 1 and 2. [slide] As you can see, the population already reached the 100,000 mark in 2005;

- Means of communication with the communities have been set up. Eleven letter boxes were put up in five districts and feedback is regularly being received and assessed by APSARA;
- Brochures have been prepared on the legislation governing management of the cultural zones;
- Two telephone lines have been installed that people can call 24 hours a day to give us any feedback they wish;
- Brochures have been prepared regarding the type of dwellings that it would be advisable to have in the zone. Even for fencing, the wish has been expressed to put in living hedges to enhance the landscape;
- Work was done to communicate directly with the village communities by training trainers. APSARA staff is trained first, then the Heritage Police Unit, the provincial police.

The awareness-raising program was presented to students in lower and upper secondary school and university as well as to pupils in primary school. The monks have also been contacted to brief them about heritage conservation. A special seminar on religious heritage was put on last month under the senior chairmanship of His Holiness the Supreme Leader of the Mohanikkay Order and a representative of HE Sok An.

[slide] Here a monk is making a presentation during the seminar. From the standpoint of the communities, 102 villages were approached and efforts to get in touch with the people living in Zones 1 and 2 have just now concluded. The documents were distributed and there was an information exchange.

[slide] We even take advantage of meetings arranged by NGOs, such as this one involving a meeting of villagers with members of Parliament. APSARA was on hand to provide information.

The APSARA Authority has undertaken some ongoing measures. The organizational chart and operations were revamped part way through 2003 with the introduction of three new departments:

- Department of Monuments and Archaeology 2 which cares for the communities and land use;
- Population and Development Department that takes has jurisdiction over development projects in the villages; and
- Department of Water and Forests.

These three departments are caring for the expanded missions of the APSARA Authority that now include heritage maintenance as well as sustainable development.

During the period of one year from August 1, 2004 to August 30, 2005, 378 applications were received for building permits, 167 permits to rebuild homes were issued, while 169 were refused.

The DMA2 has made its architectural consultation services available free of charge to the communities and the Buddhist clergy. Monks are also given assistance to oversee their work sites.

There are other forms of assistance and support to the communities living in the zones. [slide] First of all here, the Development Department is providing training to make compost using traditional and organic methods. [slide] Rice growing test plots were planted in the five districts. Here is a trial use of mud from the Tonlé Sap for rice

growing. Explanation is given on how to increase the rice yield using modern yet natural methods such as transplanting rice one stalk at a time instead of three or four as people have usually done. The difference can be seen between the very traditional method and the introduced method that gives a better yield.

The Department of Water and Forests does maintenance on the ancient irrigation systems in the villages, giving villagers an opportunity to plant dry season fruit or vegetable crops. APSARA also put in a tree nursery for park reforestation and to allow for distribution to the people. [slide] Even the clergy shared in this reforestation work along Route 60 that enters Angkor Wat, also known as APSARA Road.

When the communication team goes into the villages, the farmers are given small gifts. Exercise books are distributed to the pupils.

Things improved considerably after this information campaign, but afterwards we had to deal with some pressure, first from government departments that wanted to move into the protection zone, as well as from private individuals wanting to bask in the prestige of the site by building their villas there. [slide] Here we have a district office that was relocated in Zone 2. The police headquarters was also relocated in Zone 2, another police station in the *khum* was built in exchange for the old station. [slide] And here people have bought up a large piece of prime land which they intend to divide up for sale for fancy villa construction. Land is being cleared off to plant a fruit tree orchard, and a new house has gone up on it, without a permit.

So as I mentioned this morning, APSARA and the Government submitted a request to UNESCO which led to the mission that Mr Chabason was assigned to conduct. We are looking forward to the results. As for potential solutions, we have in mind New Zealand's project for park planning and community development. As for APSARA itself, we are going to put in an interpretation center on Khmer habitat to inform the people regarding the type of habitat we would like in the zone. [slide] Here is the new Run Ta Ek development zone, outside of Zones 1 and 2. This new development at Run Ta Ek is intended to accommodate the natural increase of the population that has been living for so long in Zones 1 and 2. As it grows and marriages take place, new houses will be needed by the newly weds.

[slide] This is an aerial shot of the Run Ta Ek area. As of this time, 500 hectares have been purchased and it will be expanded to 1,000 hectares. Currently, a commission is being set up to see to the physical preparation of the land and [slide] here are some pictures showing the team out working with the communities.

You can see that the *ad hoc* and institutional measures taken by the APSARA Authority have mitigated the situation in the park. Most of the local people have become aware of the need for the protective measures advocated by the APSARA Authority and have begun to cooperate with us. I repeat here an idea expressed by Mr Chabason. He stated that the fact that most of the villagers filed an application with the APSARA Authority prior to renovating or replacing their houses is tangible evidence of that cooperation. It is to be hoped that the new measures such as the New Zealand project, the Khmer Habitat Interpretation Center and the new Run Ta Ek development zone will provide further relief for the pressure being brought to bear on the protected zones. Nevertheless, new pressures from government departments and wealthy individuals have come to the fore and we are anxiously awaiting the report from UNESCO expert Mr Lucien Chabason to respond effectively to that. I thank you for your attention."

The French Co-Chairman thanked Mr Khuon Khun Neay for his presentation outlining things that have been done with the local communities. He was also reminded of the time when he accompanied the Japanese Co-Chairman and the Deputy Prime Minister to a meeting with village and district chiefs and expressed his satisfaction with these major offshoots from that meeting in the field. However, the French Co-chairman admitted that the transition from a conservation driven approach to one based on sustainable development was accompanied by pressures that brought on new problems. He went on to say that for this reason the UNESCO Director General had directed that a study be conducted by Mr Lucien Chabason in July 2005.

III.1.2. Contribution from Mr Francesco Bandarin, Director of the UNESCO World Heritage Center (WHC)

"In my opening remarks, before delving into the theme we are discussing here, please allow me convey the greetings of the Director General, Mr Matsuura, and the Deputy Director General, Mr Bouchenaki, who as you know was in attendance at the meeting of the Technical Committee. On the occasion of this trip, they asked me to follow up and send back a quick report on the situation because they are very interested in this project. You know that UNESCO has given much importance to Angkor. It is a flagship project as far as we are concerned, one for which the organization has always made all possible means available from the standpoint of its technicians, officials, experts and resources. Similarly, the World Heritage Committee which is very interested in this major operation, especially in view of the fact that the site was taken off the World Heritage in Danger List a year ago, feels that the time has come to fix the position for the future. The World Heritage Committee will do this at its upcoming session.

I would also like to thank the Cambodian Government for its support to the organization of this Committee and congratulate our honorable Co-chairmen. I have the job of serving as Secretary on the World Heritage Committee. I am very well aware of how difficult it is to organize this type of activity, one in which the work is sometimes not always seen but which is nevertheless vital for the success of the initiative. I would also like to congratulate my colleagues on the Secretariat, especially Azedine who works non-stop night and day for the success of this Committee.

I would like to say that this is my first visit. Although I haven't seen everything, it has been a tremendous experience for me both personally and professionally. I think that it is truly a privilege to visit such an absolutely outstanding creation of mankind as well as to have the opportunity of working with the greatest experts in the world in implementing projects for its conservation. And for all these reasons, as well as the fact that the Director General has now given the World Heritage Center responsibility for monitoring this project, subsequent to a revamping of the Culture Sector, I would like to make the commitment to personally care for the follow-up of the portfolio and to be on hand for ICC activities in the years to come. And as Mr Sok An requested, I will be back and in the years to come I will care for follow-up on this major project.

I just mentioned that the site was taken off the danger list last year, which is a real success story as far as we on the World Heritage Committee Secretariat are concerned. For everybody, but especially for the Committee, getting sites off the List of World Heritage in Danger is really what we are all about. This year we did not have the opportunity to discuss the Angkor case, but the Committee will meet at Vilnius,

Lithuania, next year in July and the Secretariat will give a report on Angkor and all of the activities going on and the challenges to be met. So today's meeting is very significant as far as we on the World Heritage Secretariat are concerned, not just to make observations and listen in on the discussions, but also to plot a position for various long-term conservation initiatives on this site.

I would now like to move into a number of issues for discussion, which is the title of this session, that relate to my visit, but more importantly make an overall observation concerning the various international experiences and management problems being faced on major World Heritage Sites. This I will do in two parts, the first one focusing on the problem of conserving and restoring large monuments and secondly the management of large sites. Obviously, there is a close link between both parts and the articulation is purely functional. But I feel that there has to be a full integration and linkage of the management tools.

All can see that Angkor is a success story, not only because at the outset it was put on the danger list and now it has been taken off, but more importantly because Angkor is an outstanding framework, a model of effective international cooperation involving both international and government institutions that are working together for monument restoration. In a short span of just 15 years, the site was essentially restored and taken out of a situation of extreme danger due to the political conditions of the region. The site has become an international tourism 'must see' destination and I feel that that is a very positive thing because it means that its communication function as a universal value is starting to work very effectively. I have to say that I was impressed with the very good upkeep of the site that I observed when visiting it. So there is good organization behind the daily supervision, maintenance and upkeep operations. And all the knowledge input has enabled the building of high-level national capacity, which I feel is a tremendous result.

It always bears repeating that building capacities here that are increasingly self-sufficient as far as site management is concerned is one of the purposes behind our international cooperation. And as I said, in just a short period of time, there has been capacity building. And an international cooperation development model is represented here on this Committee, one which UNESCO has applied, as you know, to other complex situations such as in Afghanistan and Iraq. The cases there are different, but the same experience has been used, the same model, in an attempt to get all the grassroots stakeholders come to one table for conservation of the site.

With this in mind, let me stress that this is a model of cooperation as far as we are concerned. I think that the new challenges now coming to the fore call for the design of new working tools. Today I listened to all of the contributions and I noted that several of these tools are already being prepared. But let me just list them because I think that that is basically the approach we are taking on other World Heritage Sites.

The first tool that I think it is interesting and important to apply is a **priority action plan** with a reach of at least ten years. You have to have a mid- and long-term vision for conservation, especially to guide what the partners are doing and obviously to limit the damages and risks that can occur if a priority action plan has not been set up in a timely manner. So I think that a system of priority identification in terms of conservation is necessary as an umbrella management tool, and I will come back to this management plan.

A second very important tool, as has been correctly decided, is a form of **coordination of working methods** for monument restoration, while at the same time seeking to maintain differences in the approaches used for conservation at Angkor. The idea is not to try to homogenize the various approaches, but rather to coordinate them, in other words allow room for various methods within one strategy. So I think that the recommendation framework that we just discussed is very important and it would be very worthwhile to see it finalized in the near future, making it into a tool of a technical, professional nature. Obviously we need to avoid getting bogged down in rules and regulations. Recommendations, rather than being rules and regulations, are guidelines that prevail in an undertaking and that provide benchmarks for routine choices.

I think that there is room to **improve the procedures for approval and project quality control**. For instance, there is a need for guarantees regarding execution times and the sustainability of funding. So it may be that management of these project approval procedures has more to do with APSARA's role.

And there has to be **better monitoring of project execution**. Projects need to be verified as they develop so that guidance can be given as they move along. I would like to say that these recommendations are not specific to Angkor but are requirements for all World Heritage Sites that merit the highest level of protection.

Perhaps you heard that the World Heritage Committee in February of this year adopted new directions for implementation of the World Heritage Convention. The document is the result of several years of work and is considered like the Bible, so to speak, for managing the conservation process. As far as we are concerned, all that I just said is part of but one framework, an overall guidance framework that applies to all World Heritage Sites and in which management of restoration and management of territorial planning become part of only one system. You will see that this system hinges around a specific tool—the site management plan.

Let me now discuss the issue of managing large sites. I would like to focus more specifically on the case of Angkor because here we have something that, although not unique, is taking on somewhat specific, unusual forms here. I am thinking of the spiraling growth of the tourism sector. Here, growth has been so fast that we can talk of a doubling of tourist flows and service facilities in just one or two years. I have seen some rather impressive statistics showing that in the last two years, for instance, the number of international tourists has jumped by 43 percent. Imagine what that means over a decade. It means a five-fold or even higher increase because obviously a geometric type of growth is involved. There were 6,000 rooms in 2004. In 2005 there are 9,000, which means 3,000 rooms were added in just one year. As the Ambassador just said, we have now reached the figure of one million visitors. That is a manageable number, I presume, although a higher figure would still be manageable, but the problems that arise because of this build-up are on the table and represent perhaps our main challenge, our central concern, for the years to come.

So I think that this completely new situation that did not exist over the past decade and a half while all of the restoration activities were being developed, demands an updating of the existing legal and technical provisions. Pressures from tourism growth can be direct—the construction of hotels and other facilities—as well as indirect. We have just seen, for example, the transfer of certain public services, the building of new accommodations and other forms of activity that can directly impact on Zone 2 as

well as on Zone 1. So this is not just the buffer zone but also the protection zone or core zone that may be affected.

At the same time, the population is increasing. So there is not just the matter of tourist arrivals, but also the issue of development for the permanent communities. We are now looking at a population figure of 100,000, but if you look at 1998, it was only 68,000. That is an increase of 22,000 in just seven years. That is a considerable jump considering that the law makes provision for the sustainability of the existing population, but not its increase.

So in this framework I see that the Cambodian Government has undertaken many things. For instance, even Mr Chabason's mission was approved by the Government, which is obviously very much aware of the situation. I feel that Mr Chabason's mission is indeed a very important base point for the whole discussion of this issue. I hope that the report, which I find to be exceptionally well put together, will be the starting-off point for a discussion to be held in the framework of this Committee, not just because it gives us quite a precise, detailed analysis, but also because it outlines the range of possible tools that can be put to use in order to do what the situation requires, that is establish a long-term control framework, not just a stopgap measure, but a long-term control framework valid for the next 10, 20 or 30 years.

In the past, the Government created legal instruments for the region, such as Decree No. 1 establishing Zones 1 and 2 and the 1996 Decree giving special status to the Siem Reap region. There is the September 16, 2004 Decision of the Royal Government confirming the earlier 1999 Decree stipulating that all land in Zones 1 and 2 of the site is public land belonging to the State, inalienable and imprescribable. Legal tools therefore do exist. The 1994 Decree, for instance, states clearly that Zone 1 is vital for the protection and presentation of the site, while Zone 2 is for development essential to conservation of local ways of life.

Everything needed is there in the legal framework, the need for both conservation and for community development, which must remain one of the essential purposes of what we are doing. So I think the legal apparatus is clearly in focus, but the concrete enforcement thereof is unfortunately a little vague. There is no implementation regulation and there are the many obstacles that were just mentioned. For example, APSARA is a regulatory institution empowered to enforce these decrees that stipulate what land belongs to the public domain. However, because of the prevailing very uncertain land holding system, transactions are taking place despite the fact that on paper ownership is held by the State. Furthermore, I think that APSARA lacks clear technical standards to assess compliance of permit applications.

So we have some work to do here to implement a regulation and a set of clearer, more transparent conditions, because obviously you have to be transparent with the people. And for the time being there is a lack of information required for the proper management of the site. A population register is obviously needed. I saw that this was planned for by APSARA, but for the time being the registry has not come into being. Neither is there a land ownership registry. I appreciate that land registry is a complex operation. We are not asking for the moon in an hour, but without this type of tool, we will never have clarity in what we are doing.

In the framework of what we has just been outlined, we have seen both positive points and negative points. The Royal Government is well aware of the situation and

issued a decree in 2003 to give APSARA more clout. A Department of Monuments and Archaeology was set up to manage the issuance of building permits. That of course has made it possible to sort out some parts of the procedure and we also saw that there is an increase in the number of permit applications being submitted. So the people are responding positively. In other words, the system is credible and people are reacting positively. So it is having some effect. APSARA has a mixed unit that is supposed to supervise constructions. It has quite a large staff base, 40 persons. You saw that there was a public information unit, with brochures, etc. So a lot of things have taken shape. We must be really clear on this. The Government has done a lot and it has supported APSARA and the other organizations in the field.

Nevertheless, I think we have to ask the question: Is all of that enough to be sure that the objective will be reached, that is, the long-term conservation, the safeguarding of heritage values, along with development of the region? I will leave that as an open question because it is also to some extent up to the ICC to deal with it in the next session on the basis of the relationship and Chabason report and other factors because I have seen that the discussion framework is quite rich. But it is a crucial question on which conservation of the site will be played out in the years to come. I think that it is a core issue and deserves, honorable Co-Chairman, a measure of attention and perhaps future ICC meetings will also include a specific session to cover it.

Coming to my conclusion, in the terminology of the World Heritage Convention, there is a key instrument, the management plan, which does not yet exist here even though, as Mr Ros Borath just said, work is being done to prepare it. I would like to be clear on the nature of this management plan: We are not talking about UNESCO coming and asking for another plan. I appreciate that making a plan is a lot of work. We are already in a situation fraught with difficulties and I imagine that such a thing might be considered as of no use. To the contrary, I think that there are two reasons to streamline all of this.

The first is a form of compliance with obligations. The World Heritage Convention document contains the obligation to make a site management plan. The Angkor site has undergone much planning because of its large area, so we have already moved along quite well, but many points are missing regarding essential conservation activities. There is a management plan for all sites, especially the major sites. In Asia alone, to mention just a few of them, a management plan for Hampi, India, is now on the drawing board, one for Katmandu, Nepal, one for Borobudur, which is a similar site, as well as the really important experimental one at Luang Prabang, Laos, that I just visited a couple of days ago and in which there is an entire historical city that, subsequent to a program supported by many partners, notably by French Cooperation, has been conserved and has been managed in its evolution. So the management plan is important.

But as was said by a great strategist in the 20th century, Mr Dwight D. Eisenhower: 'Plans are nothing, planning is everything.' He didn't have much confidence in the plan as a document but the main thing was the planning process, the long-term strategic thinking. This enabled him to win the war and become president of the United States. The results are there, so it may be a good approach for this type of activity. It's a long, complex process. I admit that sometimes we get discouraged because it takes years to get it done, but it is essential to ensure safeguarding of the heritage, not just for that which exists already, because as you know, the criteria for identifying values on World Heritage Sites are in a state of flux. For instance, we are now talking about not

just the 'monuments of Angkor' but of 'agriculture and forest landscapes', and so on. Management plans are therefore used to identify new values and also to add things that are not yet protected in the framework of the World Heritage Convention.

In summary, I feel that UNESCO has some recommendations to make and these recommendations are quite straightforward because they are in response to the challenges that have been highlighted. It is obvious that the zoning is good and must be maintained as it is. It is obvious that the decree has to be updated to include public service. It is obvious that the need to upgrade dwellings and services, the regulatory framework, needs to be taken into consideration. An inventory must be made of new constructions, legal and illegal. And on that point, I would also like to say that we are in a position to assist you with a specific program that we have been working on now for a couple of years, a remote sensing program, that really fills the bill for this type of site because it can identify variations, even from one month to the next.

The population registry will make it possible to clarify the rules of domanial rights and public propriety when studying what type of land registry can be fitted into this type of situation. A land registry system is very costly, so you have to devise an appropriate one, less expensive, but with which you can achieve the same goal. Integration of APSARA's policies for Zones 1 and 2 in the land planning of Siem Reap town, which we will hear about in a few minutes, and of course technical capacity building for this key tool of site management, which is APSARA itself. I think that all of this must fall into the framework of discussions with the ICC and I also admit that it will be difficult to get this type of theme out of our discussion in the next few years because these are themes of a strategic nature.

You have perhaps noted that I keep making reference to the World Heritage Convention. It is a duty for all of us because the Angkor site was recognized in this framework. It implies that the management tools have been implemented. It is not only a matter, I repeat, of adding the plan, but also of enabling the development of a conservation strategy that may include extension of the site to other zones that are not in the perimeter at this time. It is important to identify and preserve new values and even include new sites that belong to the Angkorian civilization such as Preah Vihear. Its inscription remains subservient to the overall situation of the Angkor temples.

I see that there is general agreement on developing a long-term framework which binds conservation and sustainable socio-economic and human development together, even as part of poverty reduction. That is the ultimate goal of our effort, the joint effort of the international community and Government of Cambodia, in order to preserve the living memory of Angkor. I assure you that with this in mind, the World Heritage Center and UNESCO will be right beside the Government and APSARA in a long-term partnership. Thank you."

The French Ambassador thanked the Director of the World Heritage Center for the relevancy of his recommendations. He expressed the wish that these recommendations be considered as themes for further analytical thinking and discussion. At the proposal of the Standing Secretary, the French Co-chairman announced that there would be an adjustment of the agenda in order to include a discussion about the filing of technical documentation in the final recommendations.

Discussion

Comment by Mr Azedine Beschaouch: "I simply wanted to ask one of the APSARA Authority officials here if he could kindly provide some specific information about the land registry. I realize that work is going on and it is important that UNESCO, that the Director of the World Heritage Center who brought up this matter of land registry, be briefed specifically because, once again, it is one of the key elements of this work."

The French Co-chairman stated that the Committee would like to hear how the APSARA Authority feels regarding Mr Bandarin's conclusions and presentation on the Chabason report.

Response from HE Mr Ros Borath: "With regard to the land registry, here is a point of information on the work now underway. The land registry process was started in the Siem Reap region, firstly in Siem Reap district. Since last November we have been requesting that action be taken basically to relocate part of the monument zone towards the Zone 2 area. Up till now, a number of operations are going on in the area north of Phnom Krom, located south of Siem Reap, in the Watt At Tvea area. The work is ongoing and an overview, perhaps in the course of next year, will provide some additional area for Zone 2. So there you have some information about the work being done by LMAP."

Comment by Mr Azedine Beschaouch: "Another point of information about the methodology that we will follow. The Chabason expert report, of which we just had an overview for a strategy in the overall safeguarding policy for Angkor, presented to us by the Director of the World Heritage Center, quite obviously requires that we take action, that follow-through be done, so that at the upcoming meeting of the Technical Committee a major time allotment can be made to discuss this vital question, maybe even a full morning. That is fundamental for the mid- and long-term, as Mr Bandarin so well pointed out and described."

The Deputy Prime Minister, Chairman of APSARA, gave his instructions so that the Secretariat and I can have a meeting as soon as possible with the APSARA Authority and go over the Chabason report, informing His Excellency of how each of the officials feels, including the Deputy Director Generals, Directors, all those who due to their training, terms of reference, technical status, can provide very precise input on the questions raised by Mr Chabason, most importantly the main guidelines provided by Mr Bandarin. This is the first thing that will be done.

Next, my colleague, Chief of the Phnom Penh UNESCO Office, informed me that if the APSARA Authority needs any information, anything at all after this meeting, the Office is available to it. In this way, the dialogue that the World Heritage Center wants with the APSARA Authority can be fleshed out with specific requests, an open-ended methodology, so that by the time we get to our next meeting, we have both a thorough analysis of the action already taken, identification of shortfalls and proposals made to the Royal Government through the APSARA Chairman, the Deputy Prime Minister. In that way I think we will fulfill what each of us is expected to do so that the ICC is not just a forum of ideas or questions, but that it will have conclusions, findings and especially proposals by the time it holds its next meeting."

Remark by the French Ambassador: "Thank you very much for those comments. Yes, I feel that this report is very rich and needs therefore to be followed up with some analytical thinking, some positions, follow-up, and I think that I can perhaps express the general view, or at least I submit this proposal. I think that we can ask the APSARA

Authority to see to it that the Chabason report is followed through upon, to think about practical points of application of this method, because, as pointed out by the Director of the World Heritage Center, we are really working on a long-term process that involves many years, although a number of decisions will no doubt have to be considered for the short term.

Of course, it is up to the APSARA Authority to do appropriate work and therefore I feel that the procedure that you just outlined, with some rather quick consultation work between the APSARA Authority experts, should enable follow-up to be started on the report and enable us to take a look, one step at a time, at future meetings of the Technical Committee and Plenary Sessions, and see if we are still on course and especially how to assist the APSARA Authority learn how to manage this challenge that Mr Francesco Bandarin so clearly pointed out and most importantly, if I can say, both for Angkor as well as on other World Heritage Sites. So with regard to how the Co-chairmen feel, that is what I have to say, but I am of course subject to the control of my Japanese colleague. ... I see he agrees with me, I am very happy about that and reassured."

IV. POINTS OF INFORMATION

IV.1. Statement by HE Mr Alope Sen, Indian Ambassador

[OrigE] "Honorable Co-chairmen,
Excellencies,
Ladies and Gentlemen:

I would like to thank you for this opportunity of making a few comments about India's engagement in the conservation and restoration work at Angkor. I would like to touch first on Ta Prohm, the most important project that India is doing here. This morning, a lot of references were made to Ta Prohm. There are a lot of complexities to this project and I would like to inform this meeting that we are fully aware of these complexities. At the last session of the ICC in June, we had announced that the Archaeological Survey of India, which is working on this project, will be preparing and submitting a detailed project implementation schedule. I have the pleasure to inform the meeting today that this program has been prepared in detail, a project implementation program, and it will be submitted today at this meeting.

Governing principles for conservation and restoration of the Ta Prohm temple complex are framed around the concept of preservation and restoration as advocated in the Venice Charter and in other documents of authenticity. The strategy aims to protect both the natural and built heritage and insure its sustainability for the future generations. Ta Prohm temple is very significant as a tree temple. The local community has strong association with the numerous trees in the complex. Hence this component of intangible heritage forms the basis of all conservation work. The coexistence of the trees with the built heritage must be conserved in its authentic form, we are aware of that. Hence only some parts of the temple, where there are no trees, have been proposed, in our plan program, for conservation interventions while the other areas are left in their authentic state.

The work contemplated by the Archaeological Survey of India is being undertaken in five phases of two years each. It started in January 2004 and will come to a conclusion in December 2013, covering a period of ten years. The following items of

work are proposed for completion by us, by the end of 2013: third enclosure eastern side; western side south and north wings; southern side east wing; the causeway between third and fourth enclosures. Partial conservation work has been proposed for the following: first enclosure and central shrine, towers and galleries inside the third and second enclosures, eastern and western gateways of fourth and fifth enclosures, and the Hall of Dancers.

An important component of the work that the Indian team has been doing is the detailed documentation, including photo documentation. We would think this would form a comprehensive database which will facilitate future conservation and restoration interventions. I would like to express the Indian team's gratitude for the comments and the advice already obtained from the *ad hoc* experts. Trees, stones, hydrological problems, management of visitors, these have been mentioned in the morning session. I would like to think that these have already been factored in the program we are going to submit today. I would like to thank Prof. Suzuki for his suggestion that India should be thinking of doing more Ta Prohm Symposiums. The past one we have done was extremely fruitful and we have every intention of doing it again. The Indian team for the third working season has arrived and the conservation work has already commenced. We would of course wait for the suggestions, recommendations, from ICC and the APSARA Authority on the program that we are going to submit today so that we can fine tune the nature of our future work on the project.

I would also like to mention very briefly two more projects that India has been doing in Siem Reap. One is the Western Baray irrigation project, which is as much a cultural project as an economic one. The second is the Textile Museum. Since the last meeting of the ICC, we have made considerable progress on both fronts and expect to see a commencement of these two projects at an early date.

The last thing I would like to mention is that India has offered ten scholarships to the APSARA Authority. These are degree-level courses, full courses in museology, conservation and other related areas. We feel this would be particularly meaningful in the ongoing work of APSARA Authority at Siem Reap and we would be very happy to see nominations in due course. Thank you."

Comment by Mr Pierre-André Lablaude: "I was saying this morning that at previous visits and ICC meetings, it had been agreed that with the Ta Prohm temple we have something unique among the temples of Angkor, that it was the only one that had this extremely harmonious cohabitation between the tall trees and the temple ruins, that this complex was a cultural and natural entity of its own right, that it was important to maintain this coherence, which was the viewpoint that had always been expressed by the ICC on previous occasions.

That explains why we were surprised on our recent visit this week to see that stone storage areas were being created, which meant that collapsed sections were being taken apart and put to one side, that they were being sorted with the intention of reassembling them. I therefore feel that in relation to previous meetings, some tremendous ambiguity has crept in. I think that our Indian colleagues understood what was just said a few minutes ago, that is that where there were trees, nothing was to be done, and where there were no trees, anastylosis of collapsed sections could be done. I maintain that that is not the position expressed earlier by the ICC. The ICC's position was to keep the trees, but also to keep the ruined parts as a means of maintaining the consistency and originality of Ta Prohm."

Comment by Mr Azedine Beschaouch: ^[OrigE] "I would like to remind you of the exact words not only of the decision made by our Technical Committee but also of the speech made by our colleague, Mr. Rajeev, Director General of the Archaeological Survey of India. I quote: 'We have made very detailed studies, discussed among ourselves and the conclusion is that we should undertake only the minimum restoration activity.' Those are the guidelines given by our colleagues, which is very, very important. That is not only the position of our Committee. Before receiving our recommendations, they agreed totally with our colleagues to undertake only minimum restoration activities. That's the first point.

Secondly, one of the most serious problems is the accumulation, stagnation of water. We have not yet been able to come up with solutions but the studies are continuing. It means we have to recommend that our colleagues and friends continue the studies of the situation, of the water, because that is the danger for the moment. And, later, we have to maintain this main guideline: minimum restoration activity because that is the choice made by our colleagues."

Response from the Indian Ambassador: ^[OrigE] "I just want to add to this, and I am really repeating myself, that the comments have been noted: trees, stones, water, visitors. We have noted that. And there is a program submitted today, or that is going to be submitted today. If these factors have not been adequately taken into account in our program, we would be waiting for recommendations and advice. We can always fine-tune the program on those lines."

^[OrigE] The Japanese Ambassador noted that the Indian team is willing to discuss this matter fully with the Secretariat and with the experts as well as with the APSARA Authority, who is command of the project. He expressed the wish that a satisfactory result be found for this project.

Comment by Mr Azedine Beschaouch: ^[OrigE] "I would like to remind you of the procedure because when I submitted this problem to our colleagues yesterday and this morning, they insisted: 'Please, on behalf of our group, we request to have exactly, in detail, the technical files. In that case, we will be in a position to study and to make a statement and to indicate to UNESCO what we have to do.' Unfortunately, at this point, we are not in a position to give any documents. But immediately, when His Excellency, when my friends, my colleagues of the Archaeological Survey of India, submit the files, in that case there will be no problem. We will discuss all the points. But we have to follow the procedure."

Comment by HE Mr Vann Molyvann: "Please accept my sincere apologies for this interruption. On this particular subject of the restoration of Ta Prohm, two years ago I was asked by His Majesty Norodom Sihanouk to ask the ICC and the Archaeological Survey of India to kindly preserve this temple in the state in which it was found by the early French explorers. The historical quality of this temple, this duty of memory, is what is to be preserved. And I had an opportunity to submit this preservation theme to the ICC meeting at the time. The ICC of the time, a number of its members, as Mr Beschaouch recalled, showed on behalf of the Indian delegation its willingness to follow through on the wish expressed by His Majesty Norodom Sihanouk. I would be extremely happy on the occasion of this meeting to report back to His Majesty regarding how this decision was followed through upon. I thank you for this decision."

IV.2. Presentation of the Khmer Art Exhibition in Bonn and Announcement Regarding a New Stone Conservation Project, by HE Mr Pius Fischer, German Ambassador

[OrigE] "I would like to inform the Committee on two points or projects. The first relates to a major exhibition which will highlight the visibility of international efforts to conserve and safeguard the world cultural heritage at Angkor. The Art and Exhibition Hall of the Federal Republic of Germany is preparing a grand exhibition on Angkor and Khmer civilization which will be shown in Bonn and possibly also in Berlin starting from the middle of December 2006. This exhibition will be part of a series of exhibitions on major civilizations of the world such as the civilization of the Aztecs, Egyptians or Mongolians, exhibitions which have been visited by hundreds of thousands of visitors from all over Europe and received wide acclaim by the media.

With respect to the exhibition on Angkor, a cooperation agreement was signed last year on July 30 between the Royal Cambodian Government and the Art and Exhibition Hall of the Federal Republic of Germany in the presence of Deputy-Prime Minister Sok An. The agreement allows the museum in Germany to show some of the most extraordinary works of art from the National Museum of Phnom Penh as well as from the collections in Siem Reap and Battambang.

The *Musée Guimet* in Paris, will also lend its support to the exhibition which will present a unique survey of the art and culture of Cambodia beginning in the 6th century: the stone sculptures from the pre-Angkorian kingdoms of Funan and Chenla. The main focus however will be the art and architecture of the Angkorian period for the 9th to the 13th centuries but attention will also be paid in the framework of this exhibition to the post-Angkorian period and particularly to aspects such as water management, rice cultivation and trade relations since they formed the economic basis for the Khmer civilization. Stones sculptures, bronze figures, inscriptions, architectural elements and large scale photographs will document this period of incomparable cultural achievement. The exhibition attempts to present the interaction of mythology, religion and architecture in the planning of the temples and engineering works of Angkor, thus allowing the visitor to experience the various development stages of one of the greatest civilization of history in Southeast Asia.

The idea of this exhibition evolved over the course of many years. The concrete plan was finally drawn up during an international conference of scientists in Cambodia in 2004. UNESCO unhesitatingly agreed to support the exhibition and has placed it under its patronage. The exhibition concept has been developed by scientists who have been involved in Cambodia for many years in numerous research projects. Thus, the exhibition includes the latest research findings.

Thanks to the Cambodian Government, up to 300 exhibits of different genres from sculptures to small works of art will be put on display. Museums from Cambodia's neighboring countries such as Thailand and a few collections in Europe will also contribute objects to this exhibition. It will be accompanied by a virtual 3-D reconstruction depicting the development into structural relations of the architectural monuments found in the archaeological park of Angkor. This CAD-based reconstruction of the architectural spaces in monuments, some of which have been destroyed or which disappeared altogether, will be realized by teams from the Technical University of Darmstadt applying state-of-the-art technologies. The 20 minutes 3D visualization will

allow a guided tour through Angkor and will be an integrated part of the exhibition. Likewise, the Art and Exhibition Hall is producing a film on the history, on the art and culture of Cambodia, which will give due credit to the international efforts to conserve and safeguard the world cultural heritage of Angkor. Together with illustrations and descriptions of each exhibit, the planned first-class exhibition catalogue will include articles from renowned scientists on diverse aspects of the topic.

The exhibition will also be accompanied by a cultural program as well as scientific conferences and symposiums. I do hope that this exhibition will also give you the opportunity to come to Germany and to actually see this project once it's realized there.

The second point I wanted to inform you about is the continuation of the German Apsara Conservation Project. The German Foreign Office has been lending its financial support to the GACP for almost over 10 years now and in 2006, the financial support of the Foreign Office to the GACP will come to its end so we are trying now to find a continuation and means to preserve the *acquis* of this project.

There are two approaches. One, Prof. Leisen, who has been directing the GACP over the last few years, will propose a new project that would allow his team of Cambodian experts in stone conservation to act as a kind of rapid deployment team for measures of emergency and urgency in the whole archaeological park of Angkor. Not just for Angkor Wat but for other temples as well. I am still confident that there should be planning in the Foreign Office to continue to support this new project also for the next few years.

For the interim period, an agreement has been signed between Cambodia and the German Development Service, the DED, allowing two German experts on stone conservation to be sent to assist the APSARA Authority in the endeavor to make emergency preservation work at the various temples. This agreement was confirmed on the occasion of the last bilateral negotiations between Germany and Cambodia on the future of our economic cooperation in October of this year. And it foresees that the German Development Service will send two stone conservation experts to the APSARA Departments DMA 1 and 2. Additionally we will support three Cambodian professionals working closely with these DED experts on the project. These Cambodian experts will possibly be recruited from the GACP team, but there will be an open tender form for these positions. APSARA will moreover contribute five working places including working material and transport facilities in order to support the project and its teams. I will not go into the details of the descriptions of these two postings but we are confident actually that by the middle of next year these two experts will be sent to Siem Reap and that they will start their work with APSARA. Thank you very much."

The Japanese Co-chairman thanked the German Ambassador and praised his continued commitment for the conservation activity of the Angkor site as well as his supporting the capacity building of the APSARA Authority.

IV.3. Presentation of the Traveling Exhibition of Khmer Art in Japan, by Mr Susumu Inoue, Minister-Counselor at the Japanese Embassy

"It is a pleasure for me today at this meeting of the International Coordinating Committee to introduce a major Khmer art exhibition now underway in Japan and

highlight the work of those who have contributed so much for the successful holding of this event.

The exhibition is made up of 82 precious artifacts from the National Museum of Phnom Penh, including items of Hindu statuary and Buddhist statues, as well as sculptures from the pre-Angkorian and Angkorian periods, in other words from the 6th to 13th centuries. This is the first time that these Khmer artifacts have been displayed to the Japanese public. The exhibition includes four parts or installments, in order to help the devoted observers to readily grasp the completeness of Khmer art, referred to as art in stone.

[*slide*] Installment 1: 'Holy Royal Power'. Prelude to the glory of the Khmer dynasty symbolized by the enigmatic smile of King Jayavarman VII. Installment 2: 'Water Sanctuary'. Water, symbol of holiness and eternity, of the coherence of the Khmer people and symbol of the Buddhist sutra of the Greater Vehicle. Buddhism originated in India, spread to China and was passed on to Japan, and it is also a symbol of Buddha's wisdom. Installment 3: 'Angkor in the Deep Forest'. Symbol of the supreme harmony between nature and human art. The fourth and last installment, 'Twilight in Beauty', represents the last shining point of Khmer art.

The exhibition was opened to the public starting in July this year and will move to eight large cities in northern and southern Japan, winding up in September next year, a total of 14 months.

Two Khmer art exhibitions have previously been put on in Japan, the first one in 1963 and the second in 1998, just after peace was restored to Cambodia. The current exhibition is therefore the third Khmer art exhibition to be held in Japan and the first one to travel to all the main regions of Japan. Two stages of the exhibition have already been held in two big cities west of Tokyo and the third is taking place right now in Yokohama, a large seaport right next to Tokyo. A total of 126,000 visitors has been tallied up till now, and a projection would indicate that over 500,000 people will eventually visit the exhibition.

Why is there so much interest in Khmer art among the Japanese people? Allow me to give you my personal interpretation after showing you very quickly a few snapshots taken when the exhibition took place at Fukuoka.

[*slide*] In my opinion, it is because the culture of Angkor appeals deeply to the hearts of the Japanese. Every Japanese person bears in his heart a lingering, even centuries-old nostalgia for Indian culture, although some of us may not realize it very much if at all. It came in first of all with Buddhism, with carefully retold legends from India, as is also true of the Khmer heritage. That is one of the reasons for which many travelers come to Siem Reap each year to enjoy the supreme beauty of Khmer art and that is also why large numbers of Japanese visitors are anxiously looking forward to visiting this exhibition, without precedent in Japan for its grandeur and artistic richness.

For the Japanese people, there is nothing more elegant, no smile so tender, as that seen on the Bayon temple, and they can never remove this enigmatic image from their hearts. That reminds me of Yukio Mishima, one of Japan's greatest writers, especially in the wake of World War II, and for whom I have the greatest devotion. He was inspired by the fading beauty of Angkor, in that the first installment already paves the way for the last one, the twilight of the beauty. The artifacts furthermore represent

a true-life experience inviting us to venture into cultural history. Through Khmer art, we can not only come face to face with the supreme beauty of the ancient Khmer empire but also experience the great wisdom with which human beings are endowed.

I am therefore convinced that the Khmer art exhibition in Japan will certainly offer the Japanese people a wonderful opportunity to deepen their understanding of Khmer art and help strengthen the cultural links that have long existed between Japan and Cambodia.

Take for example what I mentioned in my opening words. *Phanya* is the title of the most popular Buddhist sutra in Japan. This word borrowed from Sanskrit means wisdom, the wisdom of Buddha of course. Cambodia has the word *panhalay*. *Panha* means wisdom, just like the word *phanya* in Japan, while the word *alay* means house. Thus, *panhalay* [bannalay] means house of wisdom, or library.

When the Khmer artifacts were being selected for this exhibition, we insisted strongly that items currently exhibited in the National Museum of Phnom Penh be made available to us, in addition to those in the museum storage rooms, as initially agreed. Why were we so insistent on this point? Because we really wanted to bring the full essence of Khmer art to the Japanese people, let them come in direct contact with the heart of Khmer culture, in order to discover the very wisdom of the Khmer people.

It is no exaggeration whatsoever to say that this very ambitious project would never have succeeded if it wasn't for the decisiveness and vigorous cooperation of HE Mr Sok An, Deputy Prime Minister and Minister in charge of the Council of Ministers. I would like to thank him from the bottom of my heart. I would like to take this opportunity to again express my deep gratitude to the Government of Cambodia, including the Ministry of Culture and Fine Arts, as well as the National Museum of Phnom Penh, for their kind and helpful cooperation. The success of this exhibition, if I can say so in advance, is completely due to their sense of great devotion to the extension of the great Angkor heritage throughout the world.

I would like to conclude my short presentation on the Khmer Art Exhibition in Japan by paying tribute to the total perfection of Khmer art in supreme beauty, subtle divineness and human wisdom. Thank you very much."

Comment by Mr Azedine Beschaouch: "While we are talking about Japan and the exhibition, I would like to draw to your attention that UNESCO Director General Koichiro Matsuura is also a reader of Mishima and an admirer of Khmer art because after his official visit to the Kingdom of Cambodia, he took the initiative to promote a great exhibition by the famous photographer Bakou Saito, some of whose finest pictures are included in a large book that we released some years at one of our Committee meetings. This exhibition will take place on the Angkor site, with an introduction from the Director General highlighting the work done by UNESCO and this great international operation. It will start in April or May 2006. I wanted to mention this because it is complementary to what Japan is doing through the Bakou Saito photos and what UNESCO is doing at the highest level, in the office of the Director General."

IV.4. Conclusions from the Siem Reap / Angkor Master Plan Development Study, Introduction to the Concept Behind the Plan and Its Significance Plan, by Mr Hiroto Mitsugi, JICA Representative in Cambodia

[OrigE] "First of all, I would like to take this opportunity on behalf of the Japanese International Cooperation Agency to express my sincere thanks to all for their cooperation in this study.

[slide] I would like to report very briefly today on the scheduled progress, the main concept and also the provisional output of this study. This study was started in November 2004 and we are now at the beginning of its final phase, Phase IV, which means that we are in the process of finalizing the plan, which always takes many kinds of consultation with several stakeholders. By next February, we will set up inter-ministerial meetings to talk about this master plan.

[slide] This slide shows the basic strategic visions for the development of Siem Reap town, always taking into account the Angkor heritage. The slide here indicates the direction of the study mainly aiming at Khmer history, art and harmony of nature in the town. The practical concept, I would say, is that it is the most beautiful and unique tourist town in Southeast Asia. And actually this is quite a crucial challenge.

[slide] This vision describes the framework which consists of six strategies aiming at developing the local economy, maintaining tourism resources and preserving the environment in Siem Reap. And you can see the slides from number 1 to number 6 which are about infrastructure development and the capacity development of the town. According to these strategies, a number of action programs are going to be prepared and some issues will be raised. So now I'll show some development of these actions as well as some issues.

[slide] The strategy of Phase IV aims at making the town more sustainable with regard to its environment and this strategy examines raising awareness and also a bottom-up approach to attain the concept of a beautiful Siem Reap town. Through this examination, we are asking a number of primary schools in Siem Reap to mobilize their children and teachers to try to organize campaigns to collect garbage off the town streets. And we also set some dustbins around the town. So as a result, some garbage was collected and sent out of Siem Reap town. Our staff also shared in that activity. As a result of the good impact on the schools, teachers agreed that this kind of activity also helped the education of the children.

[slide] As for the strategy of Phase V, this one is also aiming at strengthening infrastructure for tourists as well as for the people and residents of Siem Reap. We are focusing on high-density areas in the Siem Reap township. What we are looking at is a kind of program such as a cost-effective sewage treatment system in the town. Actually in the dense areas, a kind of centrally controlled infrastructure is very effective. However, when we look at the suburban areas, a little bit far from the dense areas, maybe each house setting up its own waste sewage treatment system is adequate.

[slide] This one is focusing on strengthening local administration and finance. Capacity building for urban and provincial development is our main concern in this study as well. This table rates the trend of the ratio of APSARA expenditures to entry fee receipts collected between 2000 and 2003. As the Ambassador of Japan said this morning, increasing its financial capacity is a crucial issue to extend further development

and also to preserve the Angkor heritage with such activities. In this sense we are now also looking for any ideas on how to adjust and increase such financial capacities and human resources development. Of course, it is targeting the APSARA Authority as well as the Siem Reap provincial government.

[slide] Finally, I would like to introduce you to Strategy II: 'Maximizing local benefits from tourism'. This strategy also aims at the possibilities of further developing Siem Reap. In order to attain such strategies we are now trying to find local resources, appropriate kinds of agricultural products, handicrafts, and so on. For this strategy we are going to promote the 'Angkor Products Fair 2005' which will be held in next December, between the 9th and the 11th. This fair will attempt to facilitate a mobilization of local resources and also try to link the resources to the market. This four-day fair is an initial experiment in Siem Reap town but we expect good results to be attained. Also, this leaflet will be delivered to all participants."

Comment by HE Mr Uk Someth: "I would like to say that the project is going on very well, according to the plan. The schedule has been respected and we are now at the last phase and are waiting for a final proposal and recommendations. The final proposal and recommendations will concern three topics: the strategy for the implementation of the plan, how to plan with management and then what kind of priority project should be determined. And this is waiting for the final phase."

IV.5. Contribution on the Extension of APSARA Authority's Safeguarding and Management Operations to the Koh Ker Site, by HE Mr Ros Borath, APSARA Authority Deputy Director General

"First of all, with your permission, I would like to go back to Ta Prohm. India is doing a tremendous job of documentation on this temple and its effort deserves commendation. We have been enjoying a very close working relationship. True, we did not think that moving stones would cause much of problem, an ethical problem. I think this is a problem with communication as well as with procedure. Ta Prohm, I dare say, is the most challenging temple on the site, both with regard to areas where restoration needs to be done and areas where the stone is to be left alone. It is the most difficult monument and demands considerable vigilance on our part. Any operation on the site requires a project plan, and the project plan must of course be approved by the *ad hoc* experts and by the ICC. I think that we, the ASI and APSARA, will go back to work and we will follow the recommendations made at our 12th session. I thank you for this point and if you allow, I would now like to move on to the Koh Ker project.

I would first of all like to introduce our colleague Mr Mey Marady, present here today, who will be in charge of the Koh Ker site. This site was the royal capital for a little over 20 years, under the reign of Jayavarman IV and his son. During the first half of the 10th century, Hindu temples of the time were most often dedicated to Shiva, and some later additions were made up to the late 10th century. The Koh Ker complex includes a main royal temple, the Prasat Thom, where the 35-meter-high pyramid is found, as seen in the picture. There is a nice view of the surrounding forest from the top. There is also a baray called Rohan and a series of periphery temples with a great variety of features, including inscriptions, large monolithic lingams, carved pediments, etc.

Due to its remote location, the site was only studied in detail in 1939 by architect and archaeologist Henri Parmentier, who completed the initial field surveys done by

Lunet de Lajonquière. Generally speaking, the state of conservation of the monuments is a matter of concern. The APSARA Authority whose jurisdiction is normally limited to Siem Reap alone, was consulted in 2004 in preparation for development of the site. A new road was to be built into the northern part of the country, thus making it much easier to access the site. This gave reason to foresee an increase in the number of visitors. The Ministry of Culture therefore compiled a set of specifications for the APSARA Authority consultation process, including perimeter area structuring work.

Thus, in April and May 2004, DMA 1 made several visits to the site in order to see what to do to provide access while also protecting the monuments and their perimeter areas. A phased-in master plan was developed containing proposed by-pass roads for the monument complex, outer parking lots, easy access to the village and a tour itinerary. We also make provision for the best locations for setting up Heritage Police Unit stations. These stations have now been built and police officers are patrolling the site, still using bicycles as we still need get them nine all-terrain motorcycles through FSP funding. When I was out there just two weeks ago, only one of the nine motorbikes had made its way to the site.

Under the July 21, 2005 Royal Decree, the APSARA Authority has been empowered to take on safeguarding and management operations for the whole Koh Ker complex. We now have to adapt to the new situation. The main access road has now been extended right up to the base of Prasat Thom, contrary to the initial perimeter area development plans. A few shops have gone up. Fortunately there has not yet been an explosion of visitor numbers, although we do not yet have exact figures. This additional responsibility will entail considerable investment in terms of staff and resources, not only for perimeter area studies but more importantly to do a health report on the many monuments and draw up a site risk map. The preliminaries to any intervention include of course demining operations and getting specific site cartography and topography maps completed."

The Japanese Ambassador expressed satisfaction at seeing the extension of the APSARA Authority's area of jurisdiction to include the very important Koh Ker site. He expressed the wish that this measure would contribute to good management of the site and would round out and expand the options available to tourists who come to see Khmer historical sites.

Mr Azedine Beschouch added that the JSA team under Prof. Nakagawa had prepared a thorough corpus of scientific documentation on Koh Ker entitled: 'A Vision and Inventory of Monuments at Koh Ker'. The Scientific Secretary expressed his satisfaction with the quality of this work that focused on knowledge of the monuments, thus providing a good basis for the APSARA Authority's further work.

IV.6. Announcement Regarding the 2006 Cultural Exhibition Between the Provinces of Gyeonsanbuk-do (Republic of Korea) and Siem Reap, by HE Mr Mey Marady, APSARA Authority Deputy Director General

[OrigE] "I have the great honor and pleasure to very briefly inform you about the World Cultural Expo 2006, which will be held in Siem Reap province.

The name of this event will be "Angkor-Gyeongju World Cultural Expo 2006". It will take place from December 2006 to January 2007, thus a total of 50 days. The exact date will be confirmed later. The location will be in the Cultural and Tourism City, Siem

Reap province, and the total space will be 150,000 square meters. The theme of the expo will be 'Ancient Future—the Myth of the Orient'. We are expecting other countries to join us and participate in this event.

Approximately 400,000 visitors, local and international, are anticipated. The event will be hosted by the Royal Government of Cambodia and the Gyeonsanbuk-do provincial government, Republic of Korea. The Angkor / Gyeongju World Cultural Expo 2006 Organizing Committee will be handling this event. It aims to show visitors from all over the world that the two happinesses of humanity do not come from material production or from increased consumption but from harmony between people and between man and nature. It is also about finding an alternative form of social development aside from western industrialization, based on a healthy and sustainable foundation.

Concerning the framework of the events, there will be six main activities including official events. We will have an expo eve celebration, opening ceremony and closing ceremony and performances. There will be a world performing arts festival and Cambodian-Korean special performances and film screenings. We will have a 3-D film presentation, Cambodia myth and heroic mythologies of Hwarang exhibitions, Silla and Khmer cultural exhibitions, cultural heritage of mankind, participatory events, Cambodian and Korean traditional folk villages, world travel fairs and international flea markets, special events for the evenings during the expos. There will be André Kim fashion shows, World Big 3 concerts and laser performances. Results oriented, we hope we will help the myth of the Orient to be widespread, contribute to the acknowledgement of how to live together in harmony with nature and in peace, highlight Cambodia as the newest tourist destination in the world and promote mutual understanding among countries in the world, especially between Cambodia and Korea. And we will promote Cambodian cultural and natural products and learn from that partnership. Thank your for your kind attention."

IV.7. Project for Dike Consolidation Work on the Western Baray by the Ministry of Water Resources and Meteorology, by Mr Koeut Kittanet, Deputy Director, International Cooperation Office

[OrigE] "On behalf of the Ministry of Water Resources, I would like to briefly present the Western Baray irrigation rehabilitation project. The background of the project is a loan budget by India. Its objective is to improve the irrigation system, the domestic use of water, in order to expand food security and the socio-economic development of the region.

Among the goals of the project, we want to contribute to regional agricultural production and to increase crop production in the region. Also, we want to reduce poverty in rural communities and reduce the economic gap between the rural and urban areas. The next point is to support tourism through enhancement of the scenic beauty, water- based recreation and diversification of agriculture. Also, we have to build the capacities of the farmers as well as of the staff in the Department of Water Resources and Meteorology in Siem Reap. The strategy of the project is to integrate water resource management and to increase the baray storage because we need more water for irrigation purposes and for domestic consumption. We have to manage the baray in order to cater to the needs of irrigation and domestic users, integrate land drainage with irrigation, promote the preservation of cultural artifacts, as well as balance desirable and

undesirable environment impacts. We also have to promote stakeholder participation and joint management.

A long time ago, we used to have an existing net service area of about 8,000 ha in the project area, but presently, during the wet season, we only have 4,000 ha; and during the dry season we have about 2,500 ha, for about 6,500 ha. But after rehabilitation, we can increase the common area up to 10,854 ha. Besides, we can improve or create a new area of about 2,100 ha. [slide] This is the picture that we just took last season.

[slide] This is a schematic diagram of the baray reservoir and also of the rehabilitation activity that we have to do, with the feeder canal, approach canal, main outlet structure. The Western Baray reservoir is important because it was built to feed the manpower during the construction of the historical temples. Also we can stabilize the drainage system downstream from the Angkor temples. This is a tourist attraction and we have to provide irrigation for the production of rice and vegetables for the local population and tourists.

[slide] This is the rehabilitation work that we have to do in the Western Baray: over there we have the rectangular shape of the reservoir which is 8 km long and 2.2 km wide. On the top of the embankment, it starts from 4.5 to 30 m and the top elevation varies from about 32.6 to 30.2. Also we have to rehabilitate the main canal over about 2.9 km, the secondary canals over 59.2 km; the tertiary canals over about 150 km and other regulators in about 23 places.

[slide] We have to divide the proposed rehabilitation works into four components. First, we have to rehabilitate the dike in the baray reservoir, the feeder canal and the approach canal. Also, we have to put concrete pavement on the road on the crest of the dike. Second, we have to rehabilitate the existing canal system, with the main canal, the secondary and the tertiary canals. We have to set up the gates that are missing or that are broken, rehabilitate them and set up new ones. In component III we have to create about 1,800 ha of micro-canalization and to divide it in blocks of 20 ha. The final component is to construct a building for Western Baray management and for the training institute.

[slide] This is the layout of the baray reservoir with the irrigation scheme. This is a plan of micro-canalization. This is a detail of what we are proposing for what I have mentioned before. This work would take about 27 months. Four months have already passed but we may now require two years to implement all the work. [slide] This is about the funding, which is provided by the government of India for about 90 percent and by our side for about 10 percent.

[Slide] This picture shows the headwork in front of the feeder canal, the feature of the tertiary canal and the structure that is broken. We have to rehabilitate it. This is the outlet of the baray, connected to the main canal. Finally the project plans to encourage integrated water resources management in the region and envisages the use of water for agriculture and domestic supply. But also, environmental impact, tourism and related concerns as well as the need for preserving artifacts have all been integrated in the plan. The result of economic analysis indicate that the investment in the project would be sound and attractive and the benefit also possible. Thank you very much."

Comment by Mr Azedine Beschaouch: "While commending our colleagues and expressing my pleasure at seeing this major rehabilitation operation, I simply wanted to point out two rather significant facts. Firstly from the standpoint of principle: We are a committee set up for both safeguarding and development. Secondly, because of that principle, whenever we have been briefed on any of those points, we are duty bound to inform our colleagues from the Ministry of Water Resources that they must take the patrimonial value of the baray into consideration, although not letting that result in any delay with their work.

It is home to a very significant record from prehistory up to the Angkorian period and it is important that the APSARA Authority be informed of any plans involving it, so that the baray rehabilitation work does not result in the loss of its great value. It is in fact one of the great achievements of Khmer engineering. So while rehabilitating it, making it into a current development tool, one for sustainable development, it must not be allowed to become just a commonplace reservoir, despite its eight-kilometer length. If its patrimonial value is not kept to the fore, we will lose a major part of Khmer history, the hydraulic genius of the Khmer people, remembering too that people visit this monument. I simply wanted to make that comment and I am sure that the Ministry will enjoy the full cooperation of our APSARA colleagues."

Comment by Philippe Peycam, representing the Center for Khmer Studies: ^[OrigE] "A very brief announcement since we are talking about water and hydrology. The Centre for Khmer Studies and the International Institute of Asian Studies from Holland are co-organizing an international workshop on water in mainland Southeast Asia which will be held in Siem Reap, starting tomorrow, for three days, at Wat Damnak, in the monastery enclosure where the Center is located. This workshop aims to be a cross-disciplinary dialogue on the many aspects related to water in mainly Southeast Asia from development, environment, and village life related issues to historical and cultural perspectives. We have put a poster at the exit of this conference hall for whoever wants to come, starting tomorrow morning. Thank you."

Comment by Prof. Roland Fletcher: ^[OrigE] "I would like to add one further comment. I noticed that this plan does concern itself with the preservation of cultural material. There is an extremely important matter to consider in the work on the West Baray. That is, of course, the West Mebon which is a unique Baphuon period temple in the middle of the baray.

The Greater Angkor Project, which is a joint project of APSARA-EFEO and the University of Sidney, inspected the West Mebon in the middle of this year and we have to report that the monument is not stable. The east wall which was restored in the 1930's and 40's is leaning to the west and would need to be stabilized. The banks of the pond are slumping and more seriously the western side of the central platform and the whole western side of the West Mebon is slowly sliding outwards and westwards. In other words, it is sliding towards the direction in which there is deeper water.

So any matter of raising the water level of the baray has to take into account very seriously what is done with the Mebon. At the present time, with the water at the level it is today, the Mebon is actually already flooded; the water is higher than the original operating system and I think this matter should be borne in mind very seriously when this project is being developed."

The Japanese Ambassador expressed the wish that the Ministry of Water Resources and the other teams concerned by the Baray project take into consideration this matter and work closely with the APSARA Authority.

V. NEW PROJECTS

V.1. AFD Project to Support the Urban Development of Siem Reap and the APSARA Authority—Content and Progress Report, by Mr Yves Terracol, Director of Phnom Penh Agency

"At the meeting of the Technical Committee last June, I had the pleasure of outlining the Siem Reap / Angkor urban planning project. That presentation was made on the basis of the conclusions drawn by the feasibility team. In October, the AFD assessed the project and the discussions that we had with the Cambodian authorities led to finalization of the content and execution parameters. Let me give you a brief overview of where things stand as well as some background information.

The background, of course, is the extremely rapid growth of Siem Reap. Back in 1970 it had a population of 11,000 habitants, whereas it has over 80,000 at the present time. It is hemmed in by the lake to the south and the Angkor site to the north. The hydrological system is complex, with a town built on land with very little gradient, which of course does nothing to facilitate water drainage. And the town has developed in a somewhat anarchic manner, and what you see when you go out into the town's development zones is that people are filling in the existing canals and putting in culverts. Culverts are far from having the draining capacity of the open-ditch canals. Some culverts are put in very poorly, and with the low gradient they quickly become blocked up. The town therefore experiences frequent flooding problems during the rainy season.

On this very briefly outlined backdrop, the purpose of the project is to promote the creation of development conditions in the Siem Reap / Angkor zone in a context of rapidly growing tourist flows, along with the physical and demographic expansion of the town. The project is therefore pursuing two sets of objectives. With regard to Siem Reap district, the project will deal with the periodic flooding problems that afflict the southeastern part of the town, the section south of National Route No. 6 and east of the river. The thrust is to implement a priority drainage and roadwork program, while also providing the provincial authorities with support in project management and planning.

The fact that the urban district of Siem Reap has been designated as a pilot district in the decentralization process will also be taken into account. With regard to APSARA, since the project has a component involving this entity, it will focus on streamlining internal procedures and improving the planning and development process for the Tourist and Hotel City that we heard about this morning. The project will also provide support in the area of tourism development strategies as well as riverbank development and related tourist itineraries.

As for the content of the project for Siem Reap district, it basically involves a design study and implementation of drainage works and rehabilitation of the associated road network in the Siem Reap urban district extension zone southeast of the town. This network will include about 27,000 meters of primary, secondary and tertiary canals, along with the associated road network. This component also includes a support mission

to the project owner for the operations being funded, because the extent of the work and expenditures involved is far beyond operations that the district has ever had to manage before. The component will also include drawing up a drainage and sewage disposal master plan for the whole urban district as well as a study of the river regimen. The river is manmade and little is known about its flow characteristics at this time despite its great importance for Siem Reap.

As for the procedures, the province and district of Siem Reap will be in charge of implementation, with a strong support package because, as I just mentioned, the province does not have experience in managing projects as large as this one. But the involvement of the district is absolutely necessary inasmuch as discussion will be required on the entire built up section and on areas where culverts have already been put in. The only solution will be to reopen all of that and put in open-ditch canals. So we need to talk with the owners who, in any event, have no choice in the matter. Either they unblock the canals or they will be walking in water! The component will also include substantial support for 'building technical capacity in the district and province'. This component is fully complementary to what was said regarding the Siem Reap Master Plan for Development funded by the JICA because it is in fact an emergency program for matters identified by the JICA. It is also a project complementary to the one under Asian Development Bank funding for the western section of the town.

The APSARA component is therefore one which will have four main axes. First, an assessment and some recommendations concerning internal procedures, followed by a support program for getting the Tourist and Hotel City up and running, support for design programming of tourism facilities in the zone, in particular support for the management of tourist flows within the archaeological zone, and finally implementation of a limited amount of work to upgrade the river banks and related tourist pathways. Along the river, some locations can be upgraded. In some locations along these pathways there are beautiful pagodas that can be included in tourist itineraries and thus enable tourists visiting Siem Reap to get some respite from the stone temples that they have spent all day walking through and to see something different, something that will give them a break.

This project will be submitted to the AFD Supervisory Board on December 13. It comes with a price tag of 4.5 million euros, 4 million for Component 1 and 500,000 for Component 2. If the Supervisory Board gives its approval, this project can be carried out in the second half of 2006, as time will be required to do all the follow-up studies required prior to execution."

V.2. Safeguarding the Bayon Temple—Phase 3 of the Operational Project, by Prof. Takeshi Nakagawa, JSA

[OrigE] "In the morning session, *ad hoc* expert Prof. Suzuki very kindly recommended it is time for me to retire from JSA. I would like to accept completely when our new project will reaches cruising speed. On behalf of JSA, I would like to present our new project.

We are now preparing to start the third phase of the project in cooperation with UNESCO and APSARA. It has been properly decided that UNESCO, APSARA and Japan will have a share in accomplishing the project in accordance with the Bayon Master Plan which has already been acknowledged as a guideline for the project. The following is an

outline of the restoration plans for three main subjects: Southern Library, the Central Tower and Bas-relief of the Bayon Temple.

[slide] This is the Bayon Master Plan.

[slide] This is the present condition of the Southern Library of the Bayon Temple in 2004.

[slide] This is the condition of the exterior wall.

[slide] This is a provisional idea for a dismantling and reconstruction area proposed by Cambodian experts from JSA and APSARA. This project will be carried out on the initiative of Cambodians experts based on the results of the Northern Library of the Bayon operation and the Bayon Master Plan.

[slide] Needless to say, the central tower is one of the most important symbols of the Bayon temple. Concerning fundamental ideas for the restoration of the central tower, Mr. Iwazaki from JSA experts presented an outline of the problem at the last ICC meeting. So on this occasion, I would like to short cut these explanations.

[slide] We had already carried out many investigations and tests and of course we have published the Bayon Master Plan.

[slide] We continue to monitor the tests.

[slide] Mechanical instability

[slide] We tried urgent treatment.

[slide] This is a fundamental idea to our department and measure for conservation.

[slide] Next, precision documentation and restoration of the bas-reliefs on the galleries of the Bayon.

[slide] This is a cooperation project on documentation between JSA and Ikeuchi Laboratory, Institute of Industrial Science, University of Tokyo. We engaged in modeling reliefs in the Bayon temple using 3-D laser measurement technologies. The performance of laser measurement technologies enables us to accurately obtain the shape of the surface of a target object. As a result, it is possible to preserve shape information of bas-reliefs as digital data. Such digital data can be easily duplicated and permanently preserved. Furthermore, differences among several pieces of data modeled at different times over a long period of time provide us with secular variations such as disintegration or collapse. Such information is useful for simulation of original conditions and serves as a guideline for restoration works. There are two aspects in modeling bas-reliefs. One is geometric modeling and the other is photometric modeling. This picture shows both types of recording instruments.

[slide] We performed four missions in order to model the whole Bayon temple and simultaneously modeled the reliefs in each mission except for one mission. Furthermore, we plan to execute one more mission this December. For example, we took 620

geometric modeling measurements and 30 photometric modeling measurements for the northern wall of the inner gallery in the Bayon.

[*slide*] This image shows the geometric modeling results of the reliefs that are on the north wall of the inner gallery between Tower 33 and Tower 34. The light source is moving from left side to right side. We can confirm the stereoscopic wall by this way.

[*slide*] This is a detailed view. The light source is moving from left to right too.

[*slide*] The past two slides show images obtained by geometric modeling. And then photometric modeling is superimposed on this model. The photometric modeling is more important when a target object is clearly figured or colored as in this case.

[*slide*] Reconstructing a more realistic image. We can also record the adherence of plant organisms and the color tone of the sandstone.

[*slide*] JSA has recorded all of the bas-reliefs of the inner gallery of the Bayon in the second phase by line drawing. We are considering the utilization of these drawings and 3-D modeling data in research, education, tourism, conservation and restoration.

[*slide*] Then, concerning the restoration of the bas-reliefs, it goes without saying that high temperature and humidity in the Angkor area create extremely harsh conditions for sandstone. Moreover, the pyramidal shape of the Bayon temple could constitute one more adverse condition. Because of the big mass of the platform, large amounts of water are contained there and go down to lower level then evaporate from the stone surface. This means that the surface of the sandstone is in a wet condition for a long time. The wet condition leads to many types of deterioration, loss of cohesion, disintegration, scaling, adherence of plant organisms, along with cracks, lost elements, large-scale flaking and collapse. The wet condition also prevents the restoration works. This slide is one bas-relief of the inner gallery of the Bayon. Certain areas of the relief were able to be identified up until a few years ago, but are no longer identifiable. Progression of the deterioration does not stop, but recently it seems like it has been accelerating.

[*slide*] Each survey unit of JSA, its petrological unit, geology, geotechnology and environmental unit and conservation science unit have worked to elucidate the mechanism of sandstone deterioration. For example, these figures show the result of the secular change on the cell densities of heterotrophic microorganisms and sulfur-oxidizing bacteria on the surface of sandstone in the Bayon from 1998 to 2004. They show a consistently high cell density of each bacterium. We consider that the implications of microorganism and plant organism growth are serious as far as the deterioration process is concerned.

[*slide*] We have attempted to pursue the reasons for deterioration. And we could confirm the high impact of bat guano and rain water. We have proved that deterioration due to the sulfate-phosphate problems are aggravated mainly by bat guano, and deterioration of the calcite is mainly due to rain water.

[*slide*] JSA developed restoration specifications as it worked on its past three restoration sites. But because bas-reliefs on the gallery wall will not be dismantled, the situation differs from previous works. So we have examined the appropriate method of

restoration by, for example, exchanging information on restoration techniques with the German team (GACP) that has worked successfully on Angkor restoration sites.

[slide] We need a continuous investigation for pursuing the best restoration technique. Now we are designing the restoration plan as follows: covering the disintegration with acrylic resin, dealing with scaling and loss of cohesion by injection of epoxy resin and / or inorganic polymer mortar in cracks and collapse parts, Koretrek treatment for removing plant organisms, and applying water repellent on the partially dry area for preventing the regrowth of plant organisms.

[slide] This is a draft working plan for five years.

[slide] This is also a precise working plan.

Thank you very much."

V.3. Announcement Regarding the New FSP Agreement, by Mr Dominique Dordain, Cooperation and Cultural Action Advisor, French Embassy

"My presentation will be a progress report on the new FSP project 'Angkor Heritage and Sustainable Development' since, as you are aware, the French FSP team spent the past year actively preparing for the new project which culminated last September 19 with the signing in Paris of a new funding agreement for 2.75 million euros, or about 3.5 million dollars, not including technical assistance, and this will ensure the continuity of what is being done out in the field.

The key thrust of this new project continues to be strengthening the support given to the APSARA Authority and, more broadly speaking, to national institutions in charge of conserving and showcasing the Angkor heritage. It is based on three pillars, the first one of which is a partnership involving the Baphuon temple restoration project. The proposal is for the Baphuon restoration work site, in its initial phase, to provide skills development for APSARA by involving the latter in the design and monitoring of operations, as well as in the aspects of showcasing the temple, organizing the site and putting in tour itineraries.

This phase is innovative in two areas, first of all with regard to the phased-in transfer of project ownership to the APSARA Authority. This transfer is something that has to take place in the framework of an architectural and technical project that sets out the parameters and objectives of the project, as well as its implementation time line. This means there must be full coordination with APSARA, of course, in the identification of goals as well as in the way in which they are attained. Secondly, and this is complementary to it, the phased-in transfer of project implementation to APSARA's technical teams in the field and/or possibly to private partners or tradesmen.

The second component is devoted to the pursuit of institutional support, but with a training dimension that will be strengthened. This involves the transfer of skills and ongoing training of the operational units of the institution, in close liaison with the first component: keeping this effort going and extending it to the deconcentrated field unit staff of the APSARA Authority. This will be followed by the establishment, under the coaching of the Chaillot Center for Advanced Studies (*Centre des hautes études de Chaillot*), of a technical training center in the heritage trades, with a regional focus.

There will be three levels of instruction: university, as mentioned by the UNESCO Director this morning, with the Royal University of Fine Arts; occupational, with the APSARA Authority, the EFEO and other international scientific teams who are in a position to join this training center; and specialization, because a skills transfer center will be established at the academic specialization level.

The FSP project includes the establishment of a center for advanced hands-on study for heritage conservators. The training delivered by this center will be open primarily to the three countries of the region—Cambodia, Laos and Vietnam. The subject of the training is essentially knowledge, inventory and technical analysis of the urban and landscape architectural heritage, its protection, upkeep, management and restoration. This technical instruction will be based on the learning of methods. The major audience will be architects, urban planners and archaeologists already holding a degree or certificate and working professionally on a technical team. Supervision and orientation of the center will be cared for by a scientific board that will support the training directorate, with a representative designated by the Ministry of Culture in each of the three countries involved and experts representing the main institutions linked to the project.

Finally, the third component involves the National Museum of Phnom Penh, in keeping with the sixth recommendation made by the ICC Plenary Session in December 2004 which advocated the presentation of architectural and museographical programs for all museum projects. With this in mind, two objectives have emerged:

- Firstly the establishment of a national workshop extending to the various collections scattered throughout the country, in particular those at the Angkor Conservation Office, the base point being the National Museum restoration workshops;
- Secondly, the development of one large museum fulfilling all the requirements of a modern national museum with regard to the management set up and showcasing of the collections, as well as its insertion into the social and urban cultural fabrics.

With regard to strengthening the museum's workshop and making it into a national structure, plans focus on three different axes:

- i) Expansion of the workshop's inventory, conservation and management activities to include other Khmer art collections in the country, eventually reaching the neighboring countries.
- ii) Organization of these actions, some of which have already been undertaken by the workshop, in the framework of a duly incorporated permanent structure of national jurisdiction, with an appropriate, specialized staff base.
- iii) It would include training in other techniques and materials to meet the needs and requirements repeatedly voiced by National Museum officials for the preservation and protection of artifacts of wood, bronze and ceramics.

The museum master plan will therefore be implemented in parallel and would be an umbrella for all forthcoming initiatives in the framework of the museum's presentation. This component will include pilot or emergency operations, such as implementation of emergency conservatory operations and setting up sample display rooms. The first achievements should be visible by December 2006, when the museum will host a showing of original paintings by sculptor Auguste Rodin made in 1906 when King Sisowath visited France.

I would also like to point out that all of the resources made available through this new FSP project will be operational, as promised, starting in 2006. Thank you for your attention."

V.4. Opportunities Offered by Partnering With the APSARA Authority, by Mr Christophe Tardieu, General Manager, Château de Versailles Public Institution

"The existing cooperation arrangement between the APSARA Authority and Versailles goes back a few years, and the first question that we might ask is: What is the reason for this cooperation? The first reason is that Versailles, like Angkor for which APSARA has guardianship, is inscribed on the UNESCO World Heritage List. We have a site that was greatly imperiled, that came close to disappearing throughout the 20th century, and we are still in a situation of peril, although things are improving somewhat. The second reason is that Versailles, like Angkor, originates from the initiative of a king who succeeded in imposing his will in the face of great natural obstacles. And the third reason is that Versailles, like Angkor, is now a member of this rather elite club of tourist sites that receives over a million visitors a year.

The basis for this partnership springs from the fact that, in the final analysis, we are confronted with the same issues in the management of a cultural site. The foremost issue confronting us, and you as well, is how to improve visitor intake, most of whom are foreigners, 75 percent in our case, and a more limited number of nationals. The first lesson that we have learned from our experience is that the software for the ticket sales booths and the entire reservation system related thereto are absolutely vital. We start at the very moment visitors enter the site in our effort to get to know them better and thus better manage their needs and meet their expectations. All of the studies that we have done show that the foremost concern of visitors is to avoid long queues as much as possible, to get onto the site quickly, which means that it is very important that tickets be issued in a straightforward, effective manner.

The second concern we have is also close to what you are experiencing—the sustainable development of the site over which you have guardianship. We are much smaller, having only 800 hectares, but we have experienced many challenges which have underscored the need to optimize sustainable development. For some years now we have had very serious droughts, which have curtailed the use of water, and just over five years ago a storm completely ravaged the park. This forced us to revamp things, provide for contingencies and take many more precautions with regard to our tree and plant heritage. We are not blessed as you are to have 100,000 people living on the site. We have only some 500 persons with their families at Versailles, but I am sure that we will learn many lessons from the solutions that you eventually adopt.

The fourth issue that we have to deal with is replenishing our own-source revenue. For some years we have had a very regular program of shows at Versailles on themes relating to the 17th and 18th centuries, and these have been a real hit with both foreign and national tourists. And we are extremely careful to see to it that any use of the Versailles image brings in royalties for us, for it is irritating to the utmost to have people spread the Versailles image around the world with nothing in it for us.

The final question confronting us is that we are making increasing use of sponsorship, such as private corporate sponsorship, in order to carry out such things as

restoration, reconstruction or grounds replanting work. Given the lack of certainty of public funding, we have come to realize that we just had to turn to private facilities, private funding sources. This morning there was some discussion of the public-private partnership and we have a lot of experience with this.

So what do we do now? Naturally, with all due modesty and humility, the Versailles Public Institution is available to its APSARA Authority partners to develop mutual cooperation. We have an agreement dating back to 2002 that is subject to amendment in order to make it more specific and include a time frame for things to be done over the next few years. We truly hope that we can develop our relationship, that we can carry out such things as hosting APSARA trainees at Versailles to help them see how we are doing our best to manage our site. We would of course be most interested in having experts from Versailles to also come here to help our APSARA partners to develop certain areas in which we have considerable expertise. And perhaps to conclude this point, I believe that one of the most meaningful symbols of the depth of the working relationship between APSARA and Versailles would be to hold in the future a cross-exhibition in which each entity would present in the partner's country the architectural wonders that we have succeeded in safeguarding. Thank you for your attention."

V.5. Opportunities Offered by Partnering With the APSARA Authority for Preventive Archaeological, by Mr Jean-Paul Demoule, President of the National Institute for Preventive Archaeological Research

"I will provide some brief background information: The *Institut national de recherches archéologiques préventives* was established in 2002. It is in charge of most excavations that come under the category of preventive or rescue, which precede any major development work in France. It has a staff of 2,000 archaeologists and performs some 2,500 field operations under the authority of the Ministry of Culture and Ministry of Research. In the 1990s, INRAP staff was working with the EFEO in field research at Angkor. After the first FSP project was set up under Mr Michel Verrot, the technical director, Mr Éric Claupis, previously with INRAP, was with it until 2004. Similarly, Mr Pierre Baty, in cooperation with the EFEO and of course with the APSARA Authority, conducted what I consider to be an exemplary operation on Siem Reap airport land, with support from the development group, a affiliate of the VINCI Corporation.

Various machine-assisted, fast topsoil stripping techniques for preventive archeology were able to be used during this operation, with the necessary contribution from the developer toward the cost of doing the excavations. All of this has now resulted in a core agreement between the APSARA Authority and INRAP, while an agreement between the EFEO and INRAP is on the drawing board.

What are the prospects for expanding this cooperation? This would basically be in the area of training, which is one of the terms of reference of a public research institution working in the realm of international cooperation. The training can be broken down into the three key pillars of organizational training, hands-on training and scientific research:

1. Organizational training: as requested by the APSARA Authority, so that it can receive support to set up the complete chain in preventive archaeology process, from studying the development files and integrating archaeological work into the schedule of development operations up to the legal aspect, which is reasonably expected to

come to fruition at some time. In France, it has taken at least 30 years for one legal aspect, that being to have it written into Cambodian law, that funding is to be provided by the major operators for preventive archaeology operations that involve them;

2. Field operations: assistance to develop the methods and techniques specific to preventive archaeology, the use of time-saving mechanical means, of recording systems and processing of very large volumes of information;
3. Scientific studies in partnership with the other scientific institutions involved, including the EFEO: studying archaeological materials that have been dug up, such as pottery items, and more specifically studying the paleo-environment which is obviously of tremendous importance in the context of Angkor.

What forms will these various training aspects take?

- First, with support from the French authorities, Cambodian trainees will be hosted on sites where INRAP is working in France, to provide them with training in all the phases of the preventive archaeology operating chain;
- Second, making INRAP experts available for varying lengths of time for training initiatives right in Cambodia on various types of field interventions;
- Third, making supervisory staff available for actual preventive archaeology operations. This would involve the full chain of processes, starting with appraisal of the files and including the scientific study and publication, as well as awareness-raising work with the public.

In conclusion therefore, I would be delighted if as far as the necessary conservation work is concerned on the outstanding heritage represented in the temples of Angkor, which are part of the heritage of all mankind but fortunately for which the danger is diminishing, the invisible heritage found under the ground and which makes up a large part of the vestiges of the history and archaeology of the Khmer capital, in particular all the urban build-up, could also be preserved in parallel with the continued growth of the modern-day town of Siem Reap, which growth is vital for the sustainable socio-economic development of Cambodian society. This scientific capital is currently in grave danger as the town and its facilities expand. INRAP would like to position itself to support the APSARA Authority in setting up and developing the necessary preventive archaeology measures that must accompany the expansion of Siem Reap. Thank you."

V.6. Announcement of a New Project "Elementary Analysis and Dating of Construction Materials" Under the Czech Academy of Science Research Center and Institute of Nuclear Physics, by Dr Daniel Kranda, Chief Project Coordinator, and Mr Jan Kucera, Project Scientific Director

Daniel Kranda:

^[OrigE] "It is a great pleasure for me to be able to introduce a joint research project to be carried out by the Nuclear Physics of the Academy of Science of the Czech Republic and the Center of Research. Both of these are located on the outskirts of Prague.

The project which I am going to present or introduce constitutes perhaps a precedent of Czech involvement in Angkor which has never been attempted. The project, endorsed by the Czech foreign minister, will be supported within the framework of foreign aid to the Kingdom of Cambodia. Just to explain about the originality of this approach, it is perhaps to be mentioned that the Czech Republic is now the remnant of

the original Czechoslovakia which divided in 1992, forming two separate entities. Preparatory work of the Czech team, conducted in close collaboration with the APSARA Authority is hoped to begin in 2006.

I will say a few words about our intentions and objectives. The technical aspects will be elaborated upon by my colleague, Jan Kucera. The principal aim is to investigate rather than to intervene. This approach is in a certain way complementary to the existing conservation efforts and to the existing archaeological survey. We intend to analyze building materials of the constructions existing in Angkor and also archaeological artifacts found on the site. These include bricks, ceramics and also metallic objects. Our intention is to determine the identity and origin of some of these materials on the bases of their unique elemental composition. This would be carried out with an analytical method called nuclear activation analysis. Whenever possible, we will attempt to date such materials either with luminescence or thermo-luminescence methods which will be done in collaboration with the University of Gent.

The result of the proposed analytical methods may reveal something about the chronology of how the monuments were built, what is the original structure, what are the later additions and also what are the later repairs. In this effort, we will naturally rely on collaboration with other teams working at Angkor, hoping to provide them with analytical information which might aid them in their conservation efforts. Now I would like to ask my colleague Jan Kucera to elaborate on few of the technical aspects of the project."

Jan Kucera:

[OrigE] "The scientific scope of our project involves the use of modern nuclear analytical techniques, namely neutron activation analysis, x-ray fluorescence, radio carbon dating and luminescence dating for research and conservation of Angkor monuments.

Neutron activation analysis is one of the most powerful analytical techniques which is capable of the determination of up to 45 elements at even ultra-trace levels. The results of the analysis of construction materials, artifacts, pigments, etc. can be used for the identification of the origin of the materials and consequently for the selection of materials which are best suited for reconstruction. However, to be able to use neutron activation analysis, we need to collect a small amount of sample here and to irradiate it with neutrons in a nuclear reactor, in the Czech Republic. A large number of elements can also be determined using x-ray fluorescence techniques. Unlike neutron activation analysis, XRF can be performed without *in situ* sample taking. We can come here with our equipment, point it at a certain structure, paintings, decorations, etc. and in a couple of minutes we can tell the elemental composition of the material analyzed.

Similarly to the neutron activation analysis, the results can be used for identification of the origin of the analyzed material. XRF is especially suited for analyzing metallic objects, ceramics, paintings and constructions materials. Another nuclear analytical technique we can apply is radio carbon dating. It is applicable for the dating of organic materials which in the past metabolized the naturally occurring radioactive isotope of carbon, carbon-14. Examples of such materials are remnants of plants, wooden objects, charcoal, animal and human bones and also lacquers of natural origin. The age which can be dated spans from zero to 50,000 years with accuracy of 15 to 7 percent.

Inorganic materials containing quartz grains or other minerals can be dated using luminescence techniques, which is based on optical or thermal stimulated emission of the energy of natural radio activity and cosmic rays which was deposited in the minerals over the years. The technique can be used for the dating and authenticity testing of ceramics, for the dating of kilns in which the ceramics was produced, for the dating of sediments and to a certain extent also for the dating of construction materials, especially bricks. The age which can be dated using the luminescence technique covers the span of fifty to 100,000 years with accuracy of 5 to 10 percent.

We are absolutely sure that the Angkor monuments and activities of the APSARA Authority deserve the best analytical techniques available to add more knowledge about these monuments and to preserve this cultural heritage. We are able to offer a unique combination of four nuclear analytical techniques to the APSARA Authority and to the individual national teams. We are also prepared to train Cambodian fellows in this technique, in our Institute, in the Czech Republic. Thank you very much for your attention."

V.7. Presentation of the New Project on Medieval Hospitals of Angkor, Codirected by Christophe Pottier and Prof. R. K. Chhem (University of Western Ontario, Canada), by Christophe Pottier, EFEO

"Thank you for giving me the opportunity to outline this new archaeological research project for submission to you. The project is the fruitage of an international collaboration arrangement bringing together Prof. R. Chhem of the University of Western Ontario, Canada, and myself on behalf of the EFEO, with the support of our friend, Prof. Allan Kolata of the University of Chicago, USA.

This project was recently signally honored with receiving the royal patronage of His Majesty King NORODOM Sihamoni, for which we are deeply indebted to Him. This high royal patronage certainly testifies to the interest there is in the study of the hospitals of ancient Cambodia, which in themselves are evidence of the social infrastructures promoted by the Angkorian rulers, in particular the great King Jayavarman VII. His achievements have been long known. He founded chapels in 102 hospitals in the Kingdom, as indicated on the Ta Prohm stele, which provides fascinating details, as well as the hospital steles that have been found on numerous sites and that provide an abundance of information on how they were operated, the staff that was affiliated with them. For instance, in Angkor Thom, over 200 persons worked in these hospitals, including two doctors, 28 pharmacists, and so on.

As mentioned, numerous chapels have been identified throughout the Kingdom. Four were identified outside Jayavarman VII's capital, hence outside Angkor Thom and they are in fact the most important hospitals and best provided for by the king. But no research has been done up to this time on the hospitals themselves that are found in proximity to these chapels. That explains what prompted the design of this archaeological project, which will seek to compare epigraphical information with archaeological realities. Incidentally, this is really quite a unique opportunity here as it is very unusual to be able to confront and compare archaeological sources with epigraphical sources in the Angkor region.

In continuity with the research we are doing at the *École française d'Extrême-Orient* alongside the APSARA Authority with the financial support of the French Ministry

of Foreign Affairs and our partners from the University of Sidney, to achieve an understanding of the spatial contexts beyond the monuments generated by the Angkor civilization. Among the Angkor Thom chapels, we are familiar with the southern one. However, it is located in a complex spatial setting, to which major later modifications were made. The eastern chapel, near Ta Keo, is deep in the forest, hence difficult to study through archaeological research. The one to the north is possibly a better one for that, but it too is very spread out, quite special and rather complex, and it too has undergone some later additions and modifications.

The western chapel founded in 1181 by King Jayavarman VII appears to be the best site on which to conduct a pilot research project, although it has undergone much greater alteration. However, that is not really a problem because our study is actually outside this chapel that was studied in detail in 1926 by Fombertaux. The fact that the site is relatively unencumbered will enable us to make detailed explorations and surface surveys without major problems and without having too much impact on the current occupation.

[slide] Here we have a view of the site from the southeast. We will make good use of a large water carrying ditch that was dug in 1940 when the Western Baray was first refilled. It crosses the entire site from east to west. We will therefore use this canal to get a stratigraphic vision of the whole site.

[slide] Current pictures show the site and the environment in which the surveying, core sampling and test pit work can be carried out.

The primary objective of the pilot project is to locate and even identify ancient occupation around the hospital chapel in order to perhaps make out various installations giving evidence of the hospital activity during the Jayavarman VII period. Thus, the initial phases of the study are anticipated to cover a rather large zone in order to spell out, based on the results, more detailed avenues of research for the subsequent phases. The purpose is to gain new insight on ancient Khmer medicine and the monument facilities. Thank you for your attention."

Comment by Mr Azedine Beschaouch: "I would like to make a comment, if you allow, on two points. But first let me express my satisfaction, and I think that of everyone else as well, with the extension of the FSP arrangement, for it has provided us with the wherewithal, the financial resources and the means to strengthen training activity and of course to conduct major research programs such as those which have been carried out at Angkor Thom.

The first point I would like to make concerns safeguarding the Bayon temple. Prof. Nakagawa gave us a broad picture of the work that has been done. To that let me simply add that we proposed in the very spirit of this new phase, that we refer to this new partnership phase not simply as 'JSA and APSARA' but 'JASA', a new title that stands for 'Japanese APSARA Team for Safeguarding Angkor'. We felt that this was an even better way of linking the two teams. You remember, honorable Co-chairman, that during our luncheon a year ago with the Deputy Prime Minister, this proposal was accepted. Is there any objection to our continuing to use it? It is very symbolical. That is the first point.

The second is that personally I am just delighted to see the way in which archaeology and archaeological research are developing in the Angkor realm. Up to now

the focus has been on the monuments, which involved of course ground-breaking research on the layout of the Angkor Thom urban plan, but here we are going much deeper, digging into the social history and even more than that, into a history of techniques. A few minutes ago we were shown a scene illustrating consultation and intervention on the Bayon bas-reliefs. In my life, I have done a lot of work with inscriptions, in the Mediterranean Basin, where we are used to making the connection between inscriptions and archaeology, but now that is taking place here, and I am very glad about that. Prof. Claude Jacques, the Angkor epigraphist, is even much more so than I to see how archaeology and epigraphy will give us much greater insight. Thank you."

Comment by Mr Michel Pierre: "The new projects and ongoing projects also call to mind the November 2003 Paris Declaration which said under point 7: 'We invite the international organizations and scientific institutions that have contributed to the safeguarding of the monuments to contribute to the elaboration of a methodological document on the ethics and practice of conservation at Angkor (conservation, showcasing and development).' There are grounds to think that this methodological document could perhaps be presented at the next meeting of this Committee because it seems important, two years after signing the Paris Declaration, to thus take stock of a number of issues and outcomes that have been tabled today."

Comment by Mr Azedine Beschaouch: "Thank you for this reminder. Indeed, for exactly two years now and in implementation of the Paris recommendations, an archeologist group made up mainly of monument architects and engineers, has been meeting, chaired by one of our *ad hoc* experts here present, Prof. George Croci, in his capacity as chairman of the ICOMOS Structures Committee, one of the most important as far as methodology is concerned. We have had a complete representation, meeting twice right here and continuing our communication by correspondence. The document was reworded and reviewed several times. We promise that between now and the next meeting of the Committee this document with input from the main contributors will provide the basis for what we would refer to as the 'Angkor ethics'. It will give us the means to avoid certain future difficulties or misunderstandings in various areas. Obviously, heritage ethics is extremely important to our international cooperation mode."

Comment by Prof. Claude Jacques: "Our friend Prof. Nakagawa will not be surprised at my request. I would like to know, when the Bayon southern library is being restored, if it would be possible to do some extensive test pits under this library. We appreciate that it is a secondary structure as far as the Bayon is concerned. It was certainly never part of the main layout, and there are surely some interesting things under it. So if it was possible when doing this restoration operation, I'm not sure exactly how, as I am neither an archaeologist nor an architect, to see what there is underneath, to see if there wasn't a monument. That would be interesting. It would also be in the spirit of what our friend Mr Beschaouch was saying a few minutes ago, as it would establish a tangible link between inscriptions and archaeology."

Comment by Mr Azedine Beschaouch: "Before we go on to the concluding session and decide when we will have our meeting next June, there are two matters, one being the recommendations. With your approval I will come to that, but just before, under the heading of miscellaneous matters that we usually have, there is one item that our Secretariat would like to raise. It has reference to an erosion of Khmer heritage in

general, not simply that of Angkor, with the sale of Cambodian artifacts in various art and antiquities markets.

The fact is that because of the vigilance that the APSARA Authority, the Heritage Police Unit and the Royal Government have shown regarding Angkor, thievery has virtually ceased in the Angkor space. But given the principle that pressure is exerted in all directions, despite the vigilance, due to the lack of staff and resources, a lot of artifacts are being stolen—not just stolen but destroyed. For just one artifact to get out on the market in another country, many others are demolished, smashed, pulverized! I am referring in particular to the very beautiful Angkorian ceramics, as well as Chinese ceramics imported over the centuries. It's being broken up into pieces just to get a couple of objects out on the international market.

Recently, on the Paris market, very specifically in Drouot, a historical Cambodian pediment was put up for sale. Because of its historic value and because it was obviously stolen, it's circulation is in breach of international law—France has signed, as did Cambodia, the 1970 Convention on the prevention of illicit trafficking and circulation of artifacts. The French Ambassador had the object confiscated until it had a file. I think that everyone will congratulate the French government for its vigilance and the French Ambassador, our Co-chairman, for his interest in this.

The UNESCO office will therefore—but I am announcing orally today—ask the Ministry of Culture, the representative of the Royal Government, to respond very quickly because the decision made to keep the purchased object from being delivered, which decision was made by the police at the incentive of the Ambassador, is only temporary. According to the international provisions, the French government can only enforce the 1970 Convention if the country concerned submits a request and more importantly provides documents to prove that it is a stolen Khmer artifact. I think that it is quite possible, and even quite straightforward for the Ministry of Culture to submit the request via the French Embassy, and the Ministry can be assisted in this using the EFEO archives and procedurally through the UNESCO Office, but I do want to stress the urgency of the matter.

Prof. Claude Jacques showed me photographs of inscriptions that are on sale, this time in a country we have to mention by name, that is Thailand. The Thai government through its Directorate of Fine Arts, got involved, as Prof. Claude Jacques can bear witness, to say that these are things that have to be fought against, but as you know, Thailand has not yet adhered to or ratified the 1970 Convention. So the Thai government and its official archaeology and fine arts departments are with us for the safeguarding of Angkorian heritage, but the resources for intervention are limited on this point.

Prof. Claude Jacques is an epigraphist himself and followed up on these cases at UNESCO's request. Every time he went through Thailand, and in particular through the Bangkok art markets, thanks to his friends from the Ministry of Culture and the General Directorate of Fine Arts, he was able to halt a number of things and more importantly he was familiar with the documents. So if you allow, Honorable Co-chairman, he will make a comment on this subject."

Comment by Prof. Claude Jacques: "Back in February 2004 I had the opportunity to speak to you about a recent development, the trafficking in steles and doorposts that have inscriptions on them. This trafficking is all the more deplorable because generally

the purchasers absolutely refuse to find out what the inscriptions say. They don't care. They are collectors but the items themselves don't interest them. I can't understand it; it's just something I observe. We regret to see now an increase in this type of trafficking with the very recent appearance of fake inscriptions. They look like those that we are familiar with and often the stones are historiated, in other words have the small personage at their base. I even found a large doorpost broken in two to make it look more authentic! But they are fakes and they are not copies of ancient writings. They have absolute gibberish written on them, just one character after another, more or less correctly copied but that mean absolutely nothing.

You might think that it doesn't matter. Khmer researchers are on the watch and are working to protect the many newly discovered inscriptions in Cambodia. But what is to be feared is that these fakes, which are not really of much value, are contributing to a highly condemnable form of trafficking in authentic artifacts. This trafficking is all the more condemnable because these are archival documents, the only archives in Cambodia referring to ancient Cambodia. We historians really need them to enhance our insight on Cambodia's history, which at the present time is all too often hypothetical. What I can only hope for is that if a lot of valueless inscriptions flood the market, it might slow down this dreadful trafficking."

Comment by the French Ambassador: "I would like to make a brief comment in response to what just said. I think that we first have to emphasize that the artifacts traffic is a market and we cannot be content with going after just one end of the chain. We have to go after it at both ends. We have already worked with APSARA on site surveillance and we are happy to see that looting of property has stopped in the Angkor region. But we have to go after the other end of the chain, to the showrooms and art markets. My experience from my previous assignments is that we should always use the full legal means at our disposal to take action against illicit selling of property. One way or another, after some time, the agencies in charge of the sales, the salespeople, realize this and prices go down. And when prices go down, the market dries up.

I don't know if we will succeed this time to block or challenge this sale, but I think we should not lose hope even if we do not succeed. This should be our automatic reflex."

VI. CLOSING SESSION

VI.1. Statement by the French Co-chairman, Ambassador Yvon Roé D'Albert

"I would like to conclude with a few very brief remarks based on what I got out of this working conference. I would first of all like to thank the UNESCO team for the outstanding job it did for the preparation. Teruo Jinnai, thank you; Tamara Teneishvili, thank you; and Dominique Ballé-Calix, thank you.

With regard to the conclusions that I am drawing personally, I saw a number of positive aspects. We gave ourselves laurels, patted ourselves on the back, so to speak, for quite a number of reasons. I will conclude in the same line, fully realizing that self-praise means that we have to be very watchful in the future. The operating of the ICC enabled us, beyond the analysis of ongoing projects, exhibitions, monitoring major

operations and scrutinizing future projects, to deal with major methodological problems, which I think we cannot get away from.

First, the issue of making sure projects fit in with the overall balance of what we might call the Angkor domain. What was said concerning Ta Prohm, and I feel positive about it, is rather significant. Similarly for the reflooding of the Western Baray and the issue of the Mebon's stability. Another point that I would like to make also involves a problem of approach, coordinating the operations being done by the various teams. I would like to extend my thanks to the *ad hoc* experts for the particular emphasis they gave to this point in their own conclusions.

I would also like to salute a number of aspects, including the growing public-private partnership that is coming on the scene. We talked about what Accor is doing for Bat Chhum, we put considerable emphasis on excavations in developing future projects, excavating the bridge in connection with the future golf course, preventive excavations that are taking place on airport land. All of this appears to be going in the right direction. I would say the same thing about the development of international partnerships, be it with the Public Institution of Versailles, with INRAP or the Angkor medieval hospital project which is an international one.

Beyond these few particular points on approaches, this 12th Plenary Session also afforded us an opportunity to deal with a number of grassroots problem. First the debate on Protected Zones 1 and 2 which I won't rehash, but all of us are aware of how significant this is, the projection of Siem Reap's future development, be it the Cultural and Tourism City that APSARA spoke to us about, or the projection of Siem Reap to 2020 in the JICA project. I would also like to underscore the issues linked to the extension of APSARA's jurisdiction at least in technical ways to other cultural sites and on the exemplarity of what is being done in this regard, notably on the Koh Ker site.

One last point that I would like to highlight is the thematic and transversal logic that we are encountering, notably in the area of hydrology. Be it Ta Prohm, the Western Baray or the AFD project, we are dealing with a vital issue: how to regulate the distribution, control of water and land. That is a fundamental problem which does not date from yesterday, I well know, on the Angkor site. Also, still speaking in terms of thematic and transversal logic, we need to take the tourist flow into consideration. We have now moved, if I might say, truly from a logic of restoration to a logic of anticipation.

One last word, I would like to thank APSARA for organizing our tour yesterday, which was particularly exemplary, and I would like to take this opportunity to thank Kérya who was the mainspring for that day. Thank you very much, and I think that we had two fine days of proceedings."

VI.2. Statement by the Japanese Co-chairman, Ambassador Fumiaki Takahashi

[OrigE] "I'd like now to present my comment as Co-chairman in handling this meeting. First of all, I would like to join my colleagues in thanking the Secretariat for their hard work, especially for preparing the recommendations and other preparations for the success of this meeting. I think that today's meeting shows again that the historical site of Angkor is facing two major challenges, those being the protection of the cultural site and how attain sustainable development for the region. To tackle these

challenges, it is very clear that cooperation between the international community and the Cambodian Government is becoming more and more important, on top of the efforts made by the Cambodian Government to manage the site as it is their own national cultural heritage.

As far as international cooperation is concerned, we notice the importance of the role of this ICC meeting and I would like to express my deep appreciation for the constructive discussions that we had not only today but also during the site visit yesterday. Especially, we appreciate very much the enlargement of the cooperation within the international community, as reported by Mr Beschouch, and we hope that this meeting will continue to be a model for administration as well as for cooperation concerning the conservation of World Heritage Sites.

Concerning the efforts deployed by the Cambodian Government, as mentioned in the opening statement made by HE Deputy Prime Minister Sok An, we are witnessing serious efforts to strengthen the role and the capability of APSARA Authority. And I think it is very important to reiterate that APSARA has a key role in tackling the challenges of the preservation of the cultural heritage and also in attaining the sustainable development of the region. From this point of view, we would like to see the APSARA Authority have the utmost possibility to increase its revenue coming from the entrance fees to the site so that it could, not only in terms of human resources but also financially, exert its initiative on the fields of development and of environmental preservation, as well as ensure that tourism is conducted harmoniously with the conservation of the historical site.

It might be possible to increase the transparency on that score and there might have been some exchange of views before this contract was concluded. Concerning the efforts exerted by the APSARA Authority I would like to add also that we are very much struck and appreciate very much that APSARA is very actively following up on those points of advice which were discussed at the last Technical Committee meeting.

The other point which I would like to mention is about the important role played by the *ad hoc* expert group of this Committee. It provides much advice not only from the technical viewpoint but also in terms of preserving the conservation value or the cultural value of the historical site. As we have now adopted the recommendations concerning various points, we highly value the efforts made by the experts. Especially, the question raised concerning the temple of Ta Prohm relates to a very difficult issue which implies the symbiosis of both nature and the national site. So this is a very important subject which necessitates the continuous attention of this Committee.

The next point concerning Protected Zones 1 and 2, I would like to express my appreciation for the activities which have been deployed by the APSARA Authority on this question and we know that it implies very difficult and delicate political problems. But I would like to expect that with the very strong initiative and leadership of HE Deputy Prime Minister Sok An and by gaining the understanding of the people living in these areas, the APSARA Authority will be successful in tackling this question of regional development in a harmonious manner, likewise by preserving the balance with the preservation of the cultural heritage. We would like to expect that the final report which we hope that the JICA team will produce in the near future concerning the global and comprehensive administration and control of the water usage and also development of the water resources.

Finally I would like to say that the most impressive element I noticed during today's meeting is that we are facing a challenge to realize a balance between stones, trees, water and human beings, living and sharing the same special dimension in this vision, and to realize the symbiosis of these four elements. If we lack balance, one of the four factors will be lost or damaged and we won't be able to realize the symbiosis. So I hope that, based upon the discussions which were conducted today, the upcoming meeting of the Technical Committee will continue to tackle and deliberate on this question. I'm sure that with the deployment of the wisdom and knowledge of the international community, this challenge will surely be faced and we will be able to find the solution.

To close my remarks, I would like to thank again the members of the Secretariat for organizing the conference. Thank you very much."

VI.3. Statement by the Representative of the Royal Government of Cambodia, Deputy Prime Minister Sok An

"Honorable Co-chairmen,
Excellencies,
Honorable Director of the UNESCO World Heritage Center,
Dear Colleagues:

At the conclusion of our proceedings, it gives me pleasure to share with you my feelings of deep satisfaction and the reasons for it.

We have spent the entire day looking into vital questions, and no one hesitated to describe honestly and precisely the obstacles and challenges ahead of us that we have to overcome.

We were happy to learn of the analytical thinking of international expert Mr Lucien Chabason, who the Director General of UNESCO, Mr Koichiro Matsuura, sent on mission to Angkor.

We were likewise delighted with the conclusions outlined by the Director of the World Heritage Center, Mr Francesco Bandarin, who came to visit Angkor Park and who was apprized of various reports and information, including statistics.

Our position is indeed clear, and that is of great value.

The Angkor site, symbol of Khmer civilization and cultural heritage of mankind, is prospering. That means that it is being conserved in a fine manner and that it is developing without danger, despite pressures brought on by the concurrence of circumstances.

In making this assessment, the international community is paying tribute to the cultural policy of the Royal Government headed by Prime Minister Samdech Hun Sen. And by the same token, it is strengthening the determination of the APSARA National Authority to keep on track and show itself up to the challenges.

Excellencies, Ladies and Gentlemen:

Let me review what these challenges are.

First of all, we have to focus our means, human resources and strength of conviction on the achievement of a fundamental goal. That goal is the long-term safeguarding of Angkor's values: values of art and archaeology, values of memory and history, values of cultural and tourist attractions.

It is obvious that to achieve this noble and prestigious goal, with the impetus and support of the Royal Government, the APSARA National Authority will see to the gradual filling in of gaps, improving the legal regulatory and administrative tools, especially adopting transparent technical criteria to facilitate communication with the government and public.

I therefore invite all officials, the Director General, department heads and directors to actively become aware of and find, where necessary, appropriate solutions to follow through on the recommendation expressed so legitimately by Mr Bandarin: establish as soon as possible a priority action plan to orient the mid- and long-term activities of the APSARA National Authority.

I also would like to ask them to give their full attention to the matter of follow-up: follow-up on decisions, follow-up at the coordination level and follow-up to keep the World Heritage Committee periodically informed about the state of conservation and development of Angkor.

Honorable Co-chairmen:

I would like to first of all express to you my sincere thanks. Your velvet-gloved authority has enabled us to work in the best intellectual and ethical conditions.

Excellencies and dear members of the ICC:

It is a pleasure for me to express to you the warm gratitude of the Royal Government. Beyond the issues of funding, which of course have their due importance, we greatly appreciate the scientific and technical input from your teams and experts.

In particular, we are satisfied with all that you are doing in the area of training and skills development of junior Cambodians.

Honorable Head of the UNESCO Office:

I would now like to speak to you and your associates who so valiantly provide the services of Standing Secretariat for this ICC. They work along with Mr Beschaouch with skill and devotion. I think I am expressing the feelings of everyone when I warmly commend them. These words of commendation include of course the *ad hoc* experts possessed of both knowledge and know-how.

In conclusion, I would like to take this opportunity to express my warmest and most heartfelt thanks to HE Ambassador Yvon Roé D'Albert who eloquently voiced his sympathy and motivation to contribute to the defense of Cambodia's archaeological wealth. His response to the Koh Ker pediment clearly shows his motivation and determination.

I also express my sincerest thanks to Prof. Claude Jacques, who supplied us with such valuable information on the inscriptions that he sighted in a foreign country.

Ladies and Gentlemen:

As I mentioned at the outset, you are at home here or anywhere in the Kingdom of Cambodia. Thank you so much for your contributions. See you again at the next session of the ICC. Thank you for your attention."

VI.4. Statement by the Representative of UNESCO, Mr Teruo Jinnai, Interim Head of the UNESCO Office in Phnom Penh

"Honorable Deputy Prime Minister,
Honorable Co-chairmen,
Excellencies,
Ladies and Gentlemen:

I would like to thank you for the privilege and opportunity of this second statement to express the satisfaction felt by my colleagues at UNESCO Phnom Penh and myself for the way this Plenary Session was conducted, for the in-depth discussions, for the significant recommendations made.

I am duty bound to assure the Co-chairman and Royal Government of Cambodia, as desired by the Deputy Prime Minister, that the ICC Secretariat will spare no effort to see that these recommendations are followed through upon and will do all in its power to facilitate any action and any exchange of information in order to assist the APSARA National Authority first of all as well as all of the ICC's partners to implement these recommendations.

Before moving on to the most pleasant part of my brief statement, my expressions of thanks, I have the great pleasure to announce that the Director General of UNESCO, Mr Koichiro Matsuura, has granted the high patronage of UNESCO to the conference entitled 'Angkor—Landscapes, Cities and Temples' that will be held from July 18 to 23, 2006 at the University of Sidney, under the auspices of that university. I would like to salute and congratulate the kingpin of this undertaking, Prof. Roland Fletcher, here present.

Many thanks are due to our two Co-chairmen for their gracious way of managing our meeting, to our Scientific Secretary for the quality of the recommendations, to the APSARA Authority staff on detachment to the ICC Secretariat under the direction of Ms Chau Sun Kérya, to my colleagues from headquarters, Anne Lemaistre and Nao Haysahi, for their outstanding contribution to the proceedings of the ICC, and to Ms Valérie Jullien, in charge of the capacity building project at the Royal University of Fine Arts.

I extend my thanks to the English and French interpreters, and especially to the Khmer interpreters for their hard work. Their presence was a first for our Plenary Session and their work was not easy because of the very scientific terms used.

My deepest thanks are expressed to Ms Dominique Ballé-Calix whose devotion and Cartesian mind have enabled us to improve the procedures of the ICC, to be

identified by our badges, and especially for her unflagging energy which motivated the teams to get their reports in. I am sorry that Dominique is leaving us, but I hope that her commitment to Angkor will continue in all the projects that she intends to undertake in France.

I have another sad piece of news. My warmest congratulations to my colleague and best friend Ms Tamara Teneishvili, who has been called away by our office in Beirut, Lebanon. Tamara Teneishvili has been working with the ICC Secretariat in our office since 1999, but will leave Cambodia in a few more months. However, I would like to confirm the office's commitment to follow up on the Angkor portfolio in close cooperation with the World Heritage Center and its Director, who promised all of us that he will come back and give close attention to Angkor.

Thanking you for your attention, I would like to turn the floor over to him for a few closing remarks."

Francesco Bandarin: "I don't have much to add to what my colleague Teruo Jinnai just said. I might say though that my thanks are extended to the Government of Cambodia, on behalf of UNESCO, and especially to Deputy Prime Minister Sok An, to our two Chairmen, and to all the experts and delegates for giving life to a most interesting and rewarding session as far as I am concerned. That heightens my desire to come back, and come back I will. But also because it provided me with the framework for a project that is an incredible challenge for the international community.

As you can imagine, I care for a large number of World Heritage Sites. I assure you that it is difficult to find a site with the tremendous complexity of Angkor. The response that has been given is up to the scope of the site. I feel that 12 years of work are confirmation of this, 12 years of work by this Committee, the ICC.

When a complex problem comes up, complex solutions have to be found. Here, we are dealing with items of legislation, institutions, technical capacities, funding arrangements, urban planning, archaeology, just about everything. So you can see the vastness of the technical and institutional panorama. I am going back to Paris with full confidence in the efficiency of this system. I am going to be reporting to the Director General and will confirm the effectiveness of the ICC and its capacity also to deal with new challenges as they arise in the future.

I would like in conclusion to thank my colleagues. Teruo, I think that you won't be left alone here, I can assure you of that, even though it seems like everyone is leaving. But we are going to really support what you are doing and you will see that UNESCO will be in the same boat.

If you allow, Honorable Co-chairmen, let me share with you a short quotation that impressed me and that I feel is most in keeping with all that we want for the Angkor site. It is a quotation from French naturalist Henri Mouhot, one of the discoverers of Angkor, written in 1868: 'We kept on contemplating without ever wearying, nor of seeing them nor of talking about them—these glorious remains of a civilization that is no more. We felt to the highest degree this sort of veneration, of saintly reverence, that one feels for men of great genius or in the presence of their creations.' Thank you."

The Japanese Co-chairman thanked the contributors. He congratulated HE Mr Sok An and the APSARA Authority teams for their outstanding contribution to the success of

this conference. He stressed that given the increased responsibilities incumbent upon the APSARA Authority, this conference bore the hallmark of success. The Co-chairman then declared the session closed.

LIST OF PARTICIPANTS

Department of Monuments and Archaeology 1 and 2 = DMA 1 and DMA2; Department of Tourism = DDTA; Department of Water and Forestry = DWF; DPM = Deputy Prime Minister

Department of Population and Demography = DDD, Department of Urbanism and Development of the Siem Reap region = DUD

Department of Administration, Personnel, Finance and Public Relations = DAPF; Joint Intervention Unit = MIU; Environment Management System = EMS

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49	JIN Kim Sean	Secretary of State	Ministry of Environment
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ANNEX I

**APSARA NATIONAL AUTHORITY
(ANA)**

ACTIVITY REPORT

JANUARY TO OCTOBER 2005

[Translated into English from the French]

The tenth anniversary of the International Coordinating Committee for the Safeguarding and Development of the Historic Site of Angkor (ICC) was celebrated in Paris in 2003. Significantly, 2005 marked the 10th year that the APSARA NATIONAL AUTHORITY (ANA) has been in existence, which is a canonical age for an institution that in spite of financial problems, various challenges in setting up its institutional organization and obstacles in enforcing regulations that it was faced with in its early years, went on to acquire sufficient maturity and stability to develop the strategies required for its development.

An important backdrop to this report is the following list of legal documents enacted by the Royal Government of Cambodia to enable the ANA to carry out its missions:

1. In 1994, Royal Decree No. 001/NS-RKT of May 8, 1994 respecting zoning and management of the Siem Reap / Angkor region, dividing the said region into five zones with varying levels of protection.
2. In 1995, Royal Decree No. 295/12/NS/RKT of February 2, 1995 establishing the Authority for the Protection of the Site and Management of the Angkor Region, known as the APSARA National Authority.
3. In 1995, Sub-decree No. 079 of October 13, 1995 co-signed by the co-Prime Ministers, granting the APSARA Authority a land allotment of 560 hectares, located east of Temple Road, to develop a new hotel and tourist zone.
4. In 1996, the Law on Cultural Heritage Protection (NS/RKM/196/26 of January 25, 1996), approved by the National Assembly and promulgated by His Majesty the King, stating in Chapter II, Section 1, under the heading "Management and Executing Institution", under Article 5, "*For the particular case of the Siem Reap / Angkor region, the protection, conservation and showcasing national cultural property are put under the jurisdiction of the APSARA National Authority*", thereby conferring due legitimacy to the Authority.
5. In 1997, Sub-decree No. 60/ANK/PK of October 8, 1997 establishing the Heritage Police Unit in order to strengthen the ANA's field operations, enabling it to ensure security in Angkor Park and prevent the illicit trafficking of artifacts.
6. In 1999, a new Royal Decree No. 0199/18/NS/RKT of January 22, 1999 amending a number of provisions of the 1995 Royal Decree No. 295/12, in order to bring the status of the ANA into line with that of national public administrative institutions.
7. In 1999, a new Sub-decree No. 093/ANK/PK of October 18, 1999, extending the hotel zone to 1,007 hectares.
8. In 1999, Sub-decree No. 102/ANK/PK providing for the appointment of the ANA Board of Directors.
9. In 2001, *Prakas* No. 074 Prk of May 31, 2001 signed jointly by the Senior Minister in charge of the Office of the Council of Ministers and the Senior Minister, Minister of Economy and Finance, setting forth the requirements for issuance of free entry permits into the Angkor site for foreign visitors.
10. In 2001, Royal Decree No. NS/RKT/0601/192 of June 2, 2001 appointing a new team to the directorship of the ANA and restructuring the institution with the inception of two new technical departments.
11. In 2003, Decision of the Governor of Siem Reap No. 014 SSR/February 27, 2003 establishing a joint committee to put a stop to unregulated activities (logging, building construction, etc.) in Angkor Park.
12. In 2003, Circular from the Prime Minister (No. 01 SSR/May 15, 2003) ordering the shutting down of unregulated activities in Angkor Park.

13. In 2003, Decision of the Governor of Siem Reap (No. 041 SSR/May 25, 2003) reinforcing the joint committee for shutting down unregulated activities in Angkor Park as established under Decision No. 014 SSR/February 27, 2003.
14. In 2004, Circular from the Deputy Governor of Siem Reap province (No. 04 Snn/April 4, 2004), regulating the activities of tour guides operating on the Angkor site.
15. In 2004, Sub-decree No.15 ANK/PK of June 15, 2004 respecting the organization and functioning of the ANA General Directorate.
16. In 2004, an ordinance from the Prime Minister (No. 02 BB of June 23, 2004) on the discontinuance and shutting down of unregulated activities in Angkor Archaeological Park and Siem Reap province.
17. In 2004, Royal Decree No. NS/RKT/0904/267 of September 20, 2004 respecting amendment of Articles 4 and 5 of Royal Decree No. NS/RKT/0199/12, appointing a Chairman assisted by a Director General and a number of Deputy Director Generals and outlining the membership of the ANA Board of Directors.
18. In 2004, Sub-Decree (No. 69 ANK/PKS of the 19-10-2004) creating the development zone of Run Ta Ek to relocate the inhabitants of the protected zone wishing to enlarge their houses for family reasons.
19. In 2004, Circular from the Prime Minister (No. 70 SSR/November 15, 2004) outlining land use parameters for Zones 1 and 2 of the Angkor site.
20. In 2005, Circular from the Governor (No. 002 SSR/January 12, 2005) establishing a committee for stopping unregulated activities in the Siem Reap / Angkor region.
21. In 2005, Sub-Decree from the Prime Minister (No. 69 ANK-BK of October 15, 2004) establishing a development zone for relocation of persons living in Protected Zones 1 and 2 desirous of expanding their housing.
22. In 2005, Circular from the ANA (No. 499/05 – SNN of August 11, 2005) prohibiting the use of vehicles with over 24 seats for the transportation of passengers within the Angkor Thom complex.

The will of the Royal Government to control development of the Angkor site is clearly evident through the development of human resources in all areas to ensure enforcement of the regulations enacted so that concrete action could be taken in the field.

This has led to various departments moving into Siem Reap to deal with queries from the public that involve the areas of jurisdiction that come under the ANA, in anticipation of construction of the institution's headquarters expected to take place very shortly in the Culture and Tourist City.

Due to a negative backlash from the communities when markers were being put in along the boundaries of the protected zones, the ANA Directorate decided to conduct various awareness-raising campaigns to get the people themselves involved in protecting the cultural and historical heritage of the Angkor site.

The first six months of 2005 were set aside to get across to the public messages regarding the missions assigned to the institution. The information campaign targeted the communities actually living in Angkor Park, civil servants within the various levels of government, the schools and universities as well as the staff of the ANA. The purpose is to help people to understand why it is necessary to protect Zones 1 and 2 from unregulated activities. Information was also provided regarding the rights of the people and the activity leeway open to them within these protected areas.

A special community information unit was set up along with a development committee to handle matters relating to the zone selected for relocation of persons wishing to expand their housing to accommodate the members of their family unit.

DEPARTMENT OF ADMINISTRATION, STAFF, FINANCE AND PUBLIC RELATIONS
(DÉPARTEMENT DE L'ADMINISTRATION, DU PERSONNEL, DES FINANCES ET DES
RELATIONS PUBLIQUES [DAPF])¹

The main focus of this department's activities in the early months of 2005 was conducting information and awareness-raising campaigns among the communities living in the protected zones, helping residents to understand the reason for the various actions taken since 1994. The ANA Chairman dispatched into the field the Director General, a number of Deputy Director Generals, the Director of the Department of Monuments and Archaeology 2, staff from the Department of Monuments and Archaeology 1, Tourism Development Department, Population and Development Department, etc. for these communication campaigns planned by a DAPF representative. The provincial authorities were also involved.

At the same time, two green telephone lines directly to the Director General (600 number) and Deputy Director General in charge of the Joint Intervention Unit (604 number), were made available to persons wishing to ask questions about building in the protected zones.

Letter boxes were also installed throughout Angkor Park in order to get feedback from the communities in the form of complaints or suggestions.

Following the two seminars held in August and November 2004, a third one took place on February 2, 2005 in Siem Reap, during which ANA Chairman, His Excellency SOK AN, drew to the attention of the provincial authorities and village representatives the Royal Government's desire to control population growth in Zones 1 and 2.

The Population and Development Department (*Département de démographie et de développement* [DDD]) was commissioned to take a census of the population living in Zones 1 and 2. With hard statistics available, the ANA will be in a position to manage and control population growth.

The unit in charge of getting the ANA's policy message out to the communities as a means of ensuring the protection of the zones has visited all of the villages in the area to explain to the people the reasons why it is necessary to limit construction so as to keep urban development from taking place all around the monuments.

In this regard, the Royal Government of Cambodia undertook to acquire a 1,000-hectare plot of land in the Run Ta Ek area, put in the necessary service facilities and develop activities conducive to the relocation of people living in Zones 1 and 2 wishing to enlarge their housing for family reasons. A development committee with members from various ANA departments is in charge of implementing this project.

The Director General has signed a long-term lease contract with the Angkor Palace Company for the construction of a luxury hotel in the Culture and Tourist City. Getting the first hotel facility up and running will be an incentive for other investors to move into this new development zone.

Other contracts are close to finalization and will be signed in the near future. The initial land allotment of the Culture and Tourist City is now fully occupied.

¹ Please note: The acronym for the various French department titles has frequently been retained in the English version of this report for easier cross-reference.

The contract for battery-run shuttle vehicles provides for the concession holder to put in parking lots on the approach areas of Angkor Wat, Neak Pean and Sras Srang. A typical Khmer-style house will be built on the latter location.

The ANA also undertook a reforestation campaign on Zone 1 located after the old dike crossing the road built with funding from the *Agence française de développement* in order to service the Culture and Tourist City. The Department of Water and Forestry oversaw the planting of some 6,000 valuable timber trees (*bêng, koki, cheutil*, etc).

The contract for the sale of entrance tickets was renewed with the concession holder, Sokha Hotels Ltd., for an additional five years. Management of fees for admission into Angkor Park is to include investments to implement a number of tourism development projects.

I.1. The DAPF human resource base was strengthened by the recruitment of a media relations officer and a number of administrative staff. The department includes the following staff:

	Phnom Penh	Siem Reap	Total
Administrative Section			
Administrative Unit	6	4	10
Public Relations Unit	1		1
Research Unit		1	1
Road Management Unit		3	3
GIS Unit		5	5
Awareness / communication unit		3	3
<i>Subtotal</i>	<i>7</i>	<i>16</i>	<i>23</i>
Accounting Section			
Accountants	6	4	10
Total DAPF staff	13	20	33

I.2. A Road Maintenance and Repair Unit reporting directly to the Director General was established in order to ensure maintenance and rehabilitation of the thoroughfares in Angkor Park, and it cared for the following tasks:

1. Completed upgrading work:

- Installation of drainage canals at the northern corner of Mebon Temple, measuring 1.1 m x 1.60 m;
- Upgrading the curbs along the road in front of Phnom Bakheng, measuring 2 m x 150 m;
- Upgrading curbs along the road from the Tonlé Oum Gate to the small triangular garden south of Bayon Temple;
- Upgrading of curbs along the road in front of Ta Keo Temple, measuring 1 m x 214 m;
- Installing 32 traffic signs in the Angkor region;
- Trenching work for 4,200 meters of drainage channels along roads making up the "Petit Circuit" and "Grand Circuit";
- Putting in 18 concrete safety posts at the turn along the Dei Chhnang Gate road, 4 posts in front of the runoff canals of the Angkor Wat moats, 29 posts at the turn in the

road south of Ta Som Temple and 4 metal safety posts at the drainage canal at the Tonlé Oum Gate and at Bayon Temple.

2. Ongoing upgrading work:

- Repair and macadam surfacing of the "Grand Circuit" road starting from the point 60 meters to the north and running to Pradak village, 6,350 meters in length;
- Double bitumen surface treatment (DBST) of the road from the Angkor Wat approach area to Trapeang Ses, 1,260 meters in length;
- DBST of 630 meters and laterite surfacing of 230 meters on the road to Wat Atvea,
- DBST of 200 meters of roadway in front of Banteay Srei Temple.

3. Upcoming work:

- Apply macadam surface to a 350-meter stretch of the east access road to Ta Prohm Temple, to a 250-meter stretch of the west access road to Banteay Kdei Temple, to a 540-meter stretch of the east access road and 160-meter stretch of the north access road to Preah Khan Temple;
- Restoration and upgrading of a 3,900-meter length of laterite road (width 7 meters) that takes the Angkor Thom bypass road up to the Pek Sneng road.

I.3. Geographic Information System Unit:

The following work was done from January to May 2005:

1. Translation and publication:

- Of the names of the villages in the Siem Reap / Angkor region based on the map made by JICA in 2003. There are 875 villages located in the Sroks (districts) of Batong, Kralanh, Srey Snom, Angkor Chum, Angkor Thom, Banteay Srey, Sonikum, Siem Reap, Chikreng, Puork and Varin;
- Of the names of the Khums (communes), Sroks (districts) in the Siem Reap / Angkor region from English into Khmer based on the JICA 2003 map, and the names of the Phums (villages), Khums (communes) and Sroks (districts) from the Angkor GIS established by the Royal Angkor Foundation in 1995;
- Of the names of the temples (annotation, road directions) in the Siem Reap / Angkor region from English into Khmer from the JICA 2003 map;
- Of the names of the temples from English to Khmer, along with the coordinates of a number of temples in the Siem Reap / Angkor region from Zamp (Royal Angkor Foundation).

2. Maps:

- Preparation of administrative maps of the Sroks (districts) in the English language: Kralanh, Puork, Angkor Chum, Angkor Thom and Banteay Srei;
- Preparation of the Siem Reap map as requested by DMA-1,
- Publication of the archaeological map of "Greater Angkor" at a scale of 1/50,000 made by the University of Sydney in 2003;
- Preparation of the land allotment map for the Run Ta Ek development project using GPS measurements and lot designations from the map;
- Preparation of the map for Banteay Samre Temple as requested by DMA-1,

- Preparation and introduction of maps into the GPS, as requested by the Department of Monuments and Archaeology 2 (DMA-2), to compare and verify lots located in the protected zones.

3. Area boundaries and coordinates:

- Preparation and reckoning of boundaries of Protected Zones 1 and 2 in the Center, Banteay Srei, Roluos and Phnom Krom areas as requested by the Joint Intervention Unit;
- Preparation and reckoning of boundaries of the protected zones of Phnom Krom, Wat Atvea as requested by DMA-1;
- Participation in operations to verify the coordinates and boundary marking of Zones 1 and 2 with the DDD and DMA-2. Boundary marking of the Banteay Srei area is underway,
- Verification of the coordinates of the Phnom Krom site to verify the "affected" zones located in Phum KoKranh, Khum Siem Reap, Siem Reap province,
- Measure and mark the boundaries of the Bêng Mealea temple's moat.

4. Other activities:

- Participation in research work on ancient Khmer roads located in Thailand in response to the second invitation from Silpakorn University;
- Reassembly of the JICA aerial photos (black and white) of the Angkor perimeter taken in 1998, the first operation being completely erroneous. Phase 1 involves rectifying the 130 plates using Erdas Imagine;
- Participation in operations involving the Run Ta Ek development project: surveys and measuring of the lots in this development area starting;
- Meeting with the Swiss Agency for Development and Cooperation at the Angkor International Documentation Center: discussion, correction of the GIS Web page and new introduction for other information.

The statements of receipts and expenses of the ANA for year 2005 as an annex hereto.

ENVIRONMENTAL MANAGEMENT SYSTEM UNIT ISO 14001 (EMS UNIT)

During the last 10 months, the Environmental Management System Unit (EMS) carried out the following activities:

II.1. Assistance provided to set up environmental programs and get the EMS up and running:

Environmental programs were identified and validated by the Deputy Director Generals and respective Directors of the 8 departments prior to final acceptance by the Environment Officer. Work started on these programs in January 2005 with actual implementation beginning in April. During the first two quarters the Angkor EMS became operational and tests were conducted in preparation for an internal audit in November. The results of the internal audit will then be forwarded to the Director General for a

comprehensive EMS review. The idea is to plot a position for the environmental situation and make decisions to keep improving its performance as provided for in the "Plan-Do-Check-Act" cycle, which is the basis on which an EMS meeting the ISO 14001 standard is implemented.

II.2. Observation and monitoring of environmental aspects:

The EMS Unit made site visits to monitor and assess the volume of garbage during the Cambodian New Year celebration. Data was recorded and documented so that this problem could be dealt with more effectively in the future.

II.3. Staff development:

Japanese experts held numerous training and booster sessions for the EMS Unit, the group of departmental environment representatives and officers in charge of environmental programs on the following themes:

- ♦ International Organization for Standardization;
- ♦ Anticipated results from having an EMS;
- ♦ Organizational structure of the EMS within the ANA as well as the attendant responsibilities;
- ♦ ISO 14001 and the requirements that must be fulfilled to meet this standard;
- ♦ The Angkor site EMS;
- ♦ The environmental policy, objectives and programs for each department;
- ♦ Preparation for certification.

Training sessions on the procedures for measuring and controlling the quality of water and air were given to the Water and Forestry Department by Ministry of Environment technicians specializing in this field.

Furthermore, to meet ISO 14001 requirements that entail special expertise with regard to internal auditing, the EMS Unit held a four-day session on this subject with the assistance of a Japanese expert from the Japanese Quality Assurance Institute for a group of 15 persons who will be in charge of auditing the Angkor Environmental Management System in the future. We thus have available 15 internal auditors prepared to handle the internal auditing needs of the ANA's Environmental Management System.

II.4. Internal communication:

In order to facilitate the efficient setting up of the EMS, information meetings and discussions were held between the EMS Unit and the directors and officers in charge of environmental programs.

Similarly, an EMS guidebook now about to go to press will be distributed to all staff involved in getting the system operational on the Angkor site.

Results of the EMS after six months of operation:

a) Department of Administration, Staff, Finance and Public Relations (DAPF)

- ♦ Development of working documents for the EMS seminars based on the ISO 14001 standards;
- ♦ Training of administrative staff for the Angkor EMS;
- ♦ Putting up posters explaining the Environmental Policy in the departments and offices of the ANA;
- ♦ Distribution of laminated cards containing the Environmental Policy for staff members;
- ♦ Quarterly monitoring and assessment of the results of the programs implemented by the department.

b) Department of Monuments and Archaeology 1 (DMA1):

- ♦ Development of awareness-raising documents for souvenir vendors and monuments guards on the need to protect the environment;
- ♦ Operations to remove weeds around and pull water plants from the monument moats and pumping in water to maintain the required level;
- ♦ Quarterly monitoring and assessment of the performance of the programs implemented by the department.

c) Department of Monuments and Archaeology 2 (DMA2):

- ♦ Publication and distribution of brochures explaining the principles adopted by the ANA for construction regulations applying to Zones 1 and 2,
- ♦ Publication and distribution of brochures providing models of traditional Cambodian houses;
- ♦ Quarterly monitoring and assessment of the performance of the programs implemented by the department.

d) Department of Urban Planning and Urban Development of the Angkor Region (DUDU):

- ♦ Maintenance of gardens and green spaces along Siem Reap River;
- ♦ Survey of hotels in Siem Reap that do not have a waste water disposal system;
- ♦ Quarterly monitoring and assessment of the performance of the programs implemented by the department.

e) Angkor Tourism Development Department (DDTA):

- ♦ Awareness raising regarding the environment among primary and secondary school students as well as tour guides;

- ♦ Radio and television announcements to request foreign and Cambodian tourists to cooperate in maintaining cleanliness in the archaeological park during the New Year's holiday;
- ♦ Quarterly monitoring and assessment of the performance of the programs implemented by the department.

f) Population and Development Department (DDD):

- ♦ Education provided to 5th-graders in the Kravan and Sras Srang primary schools on the theme of environment;
- ♦ Distribution of prizes to school children who shared in Step 2 of the environment education program;
- ♦ Quarterly monitoring and assessment of the performance of the programs implemented by the department.

g) Water and Forestry Department (DEF):

- ♦ Inventory and labeling of trees within the enclosures of historical sites;
- ♦ Computer entry and recording of tree names;
- ♦ Test of water sample from Siem Reap River and air test in conjunction with the Ministry of Environment;
- ♦ Determination of locations in Protected Zones 1 and 2 for the replanting of endangered tree species.

II.5. External communication:

a) Universities in Siem Reap:

The EMS Unit worked with the Angkor Tourism Development Department to put on EMS introductory sessions for students attending universities in Siem Reap that requested them.

b) JICA project to develop a Master Plan for the Development of Siem Reap:

The EMS Unit was invited to share in a project led jointly by the JICA and the ANA, the purpose of which is to draw up a Development Plan for the town of Siem Reap. As a result, the EMS Unit was represented at a number of meetings highlighting themes such as environmental management, tourism development, as well as urban and rural development in the context of setting up the Angkor EMS.

c) Primary school pupils given information about the environment:

The EMS Unit initiated the second phase of its program to raise awareness among school children regarding preservation and cleanliness in the Archaeological Park. This second phase involves getting the young pupils themselves to raise the consciousness of vendors and stallholders in front of the temples so that they contribute to keeping the sites clean.

II.6. Publication and distribution:

a) Internal newsletter:

Newsletter No. 6 was published and distributed to all departments; editions 7 and 8 are now being prepared and will soon be made available to the staff.

b) International press:

The May 2005 issue of the magazine ISO Focus, Volume 2, No. 3, carried an article about the environmental awareness-raising effort targeting the young school children in Siem Reap, written by the magazine's editor-in-chief, Roger Frost.

JOINT INTERVENTION UNIT (UNITÉ D'INTERVENTION MIXTE [UIM])

The ANA's Joint Intervention Unit ascertained that there had been an upsurge in house building in Zones 1 and 2 since the early months of 2005. Some of the people in charge of charge looking after land for owners took advantage of the opportunity to build a house in hopes of getting it legalized in the future. In another section of Mondol 3 village overlapping the boundary between Zones 1 and 2, people had illegally occupied lots of public land so that they could resell them.

Some local authorities 'knew nothing' about the illegal building work, which was often done at night. *Decca* No. 002 SSR from the Governor of Siem Reap did not seem to be very effective in stopping illegal constructions that are increasing from month to month. Action was needed to prevent this constant increase.

Since early 2005, the Joint Intervention Unit took action to suspend illegal activities in 5 districts in Protected Zones 1 and 2.

III.1. Results of action taken to prevent illegal activities:*a) 357 cases of illegal activity in Siem Reap district:*

♦ Concrete construction	120 houses,
♦ Wood construction	118 houses,
♦ Metal frame construction	1 house,
♦ Wood and concrete construction	11 houses,
♦ Thatched construction	52 houses,
♦ Concrete fence construction	27 locations,
♦ Earth removal	4 locations,
♦ Deforestation	4 occurrences,
♦ Putting in wood fences	8 locations,

- ♦ School building 1 location,
- ♦ Canal construction 1 location,
- ♦ Construction of shelters for rest stops 2 locations,
- ♦ Destruction of illegal markers in hotel zone 1 occurrence,
- ♦ Construction without a building permit 4 houses,
- ♦ Relocation "advice": 16 owners provided it,
- ♦ Control of two buildings with a building permit.

b) 40 cases of miscellaneous types of illegal activity in Angkor Thom district:

- ♦ Concrete construction 10 houses,
- ♦ Wood construction 28 houses,
- ♦ Concrete and wood construction 1 house,
- ♦ Illegal tree cutting 1 occurrence.

c) 24 cases of illegal activity in Bakong district:

- ♦ Concrete construction 8 houses,
- ♦ Wood construction 10 houses,
- ♦ Wood and concrete construction 3 houses,
- ♦ Putting in wood fences 1 location,
- ♦ Soil removal 1 occurrence,
- ♦ Sand pumping activity 2 occurrences,
- ♦ Taking down a straw hut,
- ♦ Supervision of houses being built with a building permit.

d) 50 cases of illegal activities in Banteay Srei district:

- ♦ Concrete construction 12 houses,
- ♦ Wood construction 20 houses,
- ♦ Metal frame construction 1 house,
- ♦ Wood and concrete construction 7 houses,
- ♦ Thatched construction 4 straw huts,
- ♦ Putting in concrete fencing 2 locations,
- ♦ Putting in wood fencing 1 location,
- ♦ School construction 1 location,
- ♦ Sand pumping 2 occurrences,
- ♦ Control of house building with building permit.

e) 81 cases of illegal activities in Puork district:

- ♦ Concrete construction 23 houses,
- ♦ Wood construction 24 houses,
- ♦ Metal frame construction 3 houses,
- ♦ Thatched construction 19 houses,
- ♦ Land excavation activities 1 location,
- ♦ Wood and concrete construction 3 houses,
- ♦ School construction 1 location,
- ♦ Illegal construction 3 houses,
- ♦ Concrete fencing 4 locations,
- ♦ Relocation advice to a house owner,
- ♦ Supervision of two houses being built with official permits.

III.2. Summary of activities conducted by the Joint Intervention Unit:

1. Patrolling and information gathering;

2. Stopping and demolishing unauthorized constructions;
3. Putting in concrete posts and wood posts;
4. Controlling and stopping deforestation, illicit excavation and brush-cutting activities;
5. Supervision of authorized constructions;
6. Removal of illegal posters;
7. Destruction of illegal fencing;
8. Taking pictures of construction sites,
9. Collecting letters from suggestion boxes;
10. Investigating suspicious cases;
11. Cooperating with the Slar Kram commune representative to check out and identify the 3 illegal constructions in Mondol 3 village.

III.3. Overall conclusion:

a) *Assessment of the situation:*

After one year of working in the field, the Joint Intervention Unit finds that the increase in illegal buildings for housing or businesses put up by both wealthy, powerful individuals and commoners is making for a very worrisome situation. A number of persons with an incorrect understanding of the laws and decrees are hired by rich individuals to watch their land or cut down vegetation, while others put up thatched straw huts on lots as a means of misleading the ANA, with the idea that they can more easily get a building permit later on. Some have taken over public land and have sold lots to businesspeople (such illegal activities have often occurred in Mondul 3 village). A number of local authorities are in league with the wrongdoers and have accepted bribes to issue permits for unauthorized constructions, which take place largely at night. Provincial ordinance No. 002-SR seems to be ineffective in stopping these illegal constructions. Subsequent to various inspections conducted, it has been found that unauthorized constructions are increasing from day to day. More stringent action is needed to come to grips with these problems.

b. *Facilities:*

- ♦ The intervention forces have more fully grasped their duties and terms of reference.
- ♦ The Joint Intervention Unit has sufficient staff to take action.
- ♦ The JIU enjoys the support of the provincial authorities at all levels.
- ♦ The JIU is fully familiar with the Royal Decree on zoning as well as with the relevant sub-decrees and circulars, enabling its staff to provide information to the public.

c. *Difficulties:*

- ♦ It is impossible to ensure proper supervision over such a vast area of intervention.
- ♦ Stopping illegal constructions has proven ineffective because it runs against the interests of wealthy, powerful people, as well as the commoners who are often hired by the former. The fact that 'important' individuals get away with their buildings, while other people are clamped down upon is causing a major backlash.
- ♦ Despite the fact that agreements have been reached with the ANA concerning the suspension of construction work, some owners keep right on going with their building operation.
- ♦ Most unapproved construction work is done at night.

- ♦ When the JIU comes on the scene, work stops, but is resumed as soon as the unit moves on.
- ♦ People who have title to land granted by the commune protest against the ANA.
- ♦ All construction work proceeds with the approval of the local authorities, village or commune chiefs, so those carrying it out do not feel that they are doing anything illegal.
- ♦ Most of the land in Angkor Park and in the Culture and Tourism City has belongs to powerful, wealthy individuals.

These difficulties explain why the hoped-for results have not been achieved.

d) Proposals:

- ♦ Any illegal construction done without a permit and for which a prohibition notice has been given should trigger a complaint process by the ANA.
- ♦ It is proposed that a compliance unit be established so that the law is properly enforced.
- ♦ A request has been made for the acquisition of a heavy-duty vehicle suitable for use in any weather or topographical conditions.
- ♦ A request has been submitted for discretionary power in the event of intervention.
- ♦ A request has been submitted to have a powerful "Motorola" walkie-talkie transmission antenna in order to facilitate communication when interventions take place.

DEPARTMENT OF MONUMENTS AND ARCHAEOLOGY 1 (DMA-1) OR DEPARTMENT OF ARCHITECTURAL AND ARCHAEOLOGICAL CONSERVATION

IV.1. Perimeter Area Management Unit:

Studies - Reports:

- For the Department of Water and Forestry: Revising plant identification labels and proposal to put in an access road for fire engines as part of forest fire fighting measures;
- For DMA-2: Preparation of the general layout of the pagoda at the foot of Phnom Bok;
- Locations for setting up outlet points for shoes to be worn to prevent wear to the monument stones. Inspection of the sheds constructed and report on buildings west of the Bayon and Preah Khan;
- Approach areas: Study and fine-tuning of the master plan for the Angkor Wat and Banteay Srei approach areas in preparation for implementation (problems to be resolved include rainwater, clean water, waste water and electricity); determination of the number of shops in front of Banteay Srei;
- Battery-powered bicycles: Introduction of a relay station on the Banteay Samre Temple layout, finalization of bidding documents for the main station and relay stations in front of the monuments, and study of the waste water reservoir for the storage building, study of information panels for the 16 battery-powered bicycle sheds ;
- Preparation of the file for the Angkor region lighting system;
- Preparation of the specifications for a shelter to be put up on the Kbal Spean site visitor rest area;
- Project for visitor information and traffic signs to be put up in Angkor Park;
- Interim plan for the construction of police stations and design of the ANA logo;
- Documentation on land use in the buffer zone;
- Report on the designing of Internet sites;
- Detailed study of the plan and supervision of construction work on the visitor rest area at Kbal Spean;

- Continuation of work on the master plan for the Angkor Wat approach area;
- Meeting regarding the use of battery-powered shuttle vehicles and setting up shops in the park with the Director General and with the concession holder YEE Hee;
- Meeting about the temple illumination project with the SOU CHING Company.

Supervision of work – field visits:

- Supervision of tree trimming along the pathway to allow visitors to enjoy the sunset on Phnom Bakheng;
- Supervision of shed construction for battery-powered bicycles;
- Field trip to study land crumbling on the slope down from the Tonlé Oum Gate;
- Visit to Phnom Bakheng to study the environment of the pathway going up the north side and check on the restoration technique being used by the WMF.

IV.2. Maintenance Unit:

Operations – field visits:

- Finalization of support work on Phnom Krom Temple;
- Finalization of consolidation work on Bat Chum Temple;
- Inventory work on Prasat Khleang North and study of Prasat Top West, located within the Angkor Thom enclosure, the Phnom Bakheng temples, the Royal Palace wall for emergency interventions;
- Finalization of support work on the Tonlé Oum Gate and on Prasat Chrung South/West in the Angkor Thom enclosure;
- Inspection mission on Prasat Top West and drafting of tree cutting plan;
- Support work on the Tanei Temple site, 75 percent completed;
- Support work on Banteay Samre Temple, 20 percent completed;
- Support work on Prasat Khleang North in Angkor Thom;
- Support work on the south-east bulwark of Phimeanakas Temple;
- Support work on the wall of the Tonlé Oum Gate;
- Consolidation of the Bakheng Temple walls;
- Cooperation for emergency work with the ASI on Ta Prohm Temple and with the WMF at Phnom Bakheng.

Studies:

- For the consolidation of Ta Som Temple, Sras Srang, of the western causeway of Neak Pean Temple;
- Detailed plans for the monuments of Bat Chum Temple,
- For the scaffolding project in cooperation with the forestry unity to trim branches off trees in Preah Khan Temple.

IV.3. Archaeology Unit:

Operations:

- Conclusion of excavation work, research and report writing on phase 1 and opening the excavation and research work site for phase 2 on Bat Chum Temple;
- Cooperation with the University of Sydney and the EFEO in archaeological excavation and research work on Prasat Trapeang Phong and Bakong Temple, as well as with the ASI on Ta Prohm Temple;
- Monitoring of upgrading work on the road west of Kravan Temple to Banteay Srei;
- Emergency excavation in the Koh Patri Temple enclosure and completion of overall layout drawing of temple;

- Excavation to recover statue of the Giant Tugging on the Rope at the Tonlé Oum Gate;
- Study excavation on structures and soil layers in the southern pond of Angkor Wat in preparation for dredging and refilling it with water;
- Rubbings at Angkor Wat;
- Visit of location for the construction of a concrete bridge in Traing village, Slar Kram commune, Siem Reap district;
- Visit of landfill locations of the Cambodian Association of Handicraft Workers for persons disabled due to landmine accidents or polio in Pradak commune;
- Archaeological excavation of the Koh Tameas hillock in the Western Baray in cooperation with the EFEO.

Meetings – Studies:

- Meeting regarding the location of the new road to bypass the ancient bridge in Srok Chikreng;
- Opening of the work site and report on the emergency excavation made at Thommanon Temple;
- For DMA-2: Study of the location for the building of a school for orphans in Roluos commune, determination of location for a crematorium to be built in Seila Cha Pagoda, Banteay Srei, and study of a proposed road to Pradak village, Banteay Srei district, as well as determining the location for building the Chedei at Wat Atvea Pagoda; inspection of locations for putting in line pipes and fencing in Chrey village, Teuk Vil commune, Pourk district, and supervision of the work site to put in 1,900 meters of road in Pradak commune, Banteay Srei district;
- Study of the new road bypassing the Angkor Wat approach area as an extension of the laterite road to the south and linking it with Commaille Road;
- Study and research on an ancient temple in Prey Chrok commune, Puork district, Siem Reap province;
- Detailed study of a problem of “encroachment” involving the elephant farm and horse farm in the Angkor region;
- Archaeological investigation of dredging work site on the ancient water line system from the S canal to Sras Srang;
- Determining the location of high protection zones at Phnom Krom Temple;
- Study for dredging operations on the Beng Mealea Temple moat;
- Supervision of limestone excavation work at O Thmor Dap and Beng Mealea to supply temple restoration work sites in the Angkor region;
- Finalization of studies of locations for buildings to house selling operations for plastic slippers to be worn to protect the Angkor Wat, Ta Prohm, Sras Srang, Bayon, Preah Khan and Banteay Srei Temples;
- Finalization of study of locations for the construction of 16 Heritage Police stations in Angkor Archaeological Park;
- Participation in TVK national television interview on the history, preservation and management of the Angkor site.

IV.4. Monument Management Unit***Group work:***

- Internal meeting with the Deputy Director General on the various problems encountered in managing the monuments;
- Capacity building of guard staff: discipline, rules and regulations, hygiene, alertness to damage that can be caused to the temples by the presence of bats,

ants, termites, trees, water; alertness to act quickly in the event of situations such as forest fires, children pestering visitors, visitors needing first aid, etc.;

- Training new temple guards to get them familiar with their duties and role;
- Finalization of study of locations for water and forestry services to be taken over by the Department of Water and Forestry.

1. Unit in charge of Angkor Wat:

Operations:

- Inspect the north and south ponds, moats, water lines from Trapeang Ses and vegetation accounting for drop in water level; repair line between Trapeang Ses and Run Ta Dev to provide a new water supply;
- Put out forest fires at Arak Svay and behind Phnom Bakheng;
- Removal of moisture measuring instruments with Sophia University;
- Stop foreign visitors from making illegal rubbings of bas-reliefs and columns at Preah Roy and Preah Pean.

Meetings:

- Meeting with Sophia University to discuss procedures and changes to the restoration work sites;
- Preparation to supply water to the northern pond of temple;
- Accompany World Bank delegation on a tour of Angkor Wat.

2. Unit in charge of the Bakheng:

Studies – Meetings:

- Study and preparation work on a system to allow the Phnom to be bypassed, fill in areas where water puddles form as well as put up directional signs on the Phnom;
- Recording the number of vendors at the foot of Phnom Bakheng;
- Intake of technical experts on hand to study dangerous points on Phnom Bakheng;
- Meeting with investors interested in developing elephant ride services for visitors to Phnom Bakheng and Angkor Wat.

Operations – Miscellaneous:

- Collaboration with the Angkor park clean-up team for hauling and guarding lumber intended for consolidation work on the Phnom;
- Assistance to remove a mine from the western slope of the Phnom with CMAC;
- Collaboration with the Forestry Management Unit to upgrade a pathway up to the top with proper safety precautions;
- English language instruction session for guards to assist them to handle various problems arising in dealing with foreign tourists;
- Filling in areas where water puddles form within the temple enclosures;
- Intervention to put out a 4.5-hectare rice paddy fire about 300 meters south of the Phnom;
- Replacement of old waste bins with new ones at various locations;
- In collaboration with the Archaeology Unit and Heritage Police, inspection visit made regarding the finding of a “recent” Buddha head of no historical value

according to archaeologists that examined it. The police kept the item for further investigation and will later turn it over to the authority;

- Services to visitors: first aid given to a child, a French tourist, two Korean tourists and a Japanese tourist who were hurt in an accident when descending the eastern slope of Phnom Bakheng; backpacks forgotten by tourists returned to them by Tourism Police; three national tourists intercepted and educated as they tried to go into the Bay Kaek and Bey Temples at night to burn incense and have a meal.

3. Unit in charge of the Bayon

Operations – Miscellaneous:

- Provide a lost and found service for tourists;
- Supervision of light shows on monuments organized by tour operators and the Royal Government;
- Handle organization of a religious ceremony at Preah Koh Thlok Temple for 1,330 parishioners and 552 monks under the aegis of Samdech Sang Tep Vong;
- Cutting brush away from the Tonlé Oum Gate, east of Prasat Chrung and on top of the Bayon in collaboration with the Maintenance Unit;
- Inventory termite nests and bats at the Bayon;
- Traffic control at the Tonlé Oum Gate when traffic back ups occur;
- Opening restoration work sites with the Maintenance Unit at the Tonlé Oum Gate and east of Prasat Chrung;
- Completing projects to put in stairways, one at the south, two on the west side and two on the east side of the Bayon;
- Restoration of the wood protection at the Tonlé Om Gate that was broken as a result of being hit by tourist vehicles when going through;
- Excavation in collaboration with the Archaeology Unit to recover 31 pieces of the giant statue at Tonlé Oum;
- Supervision of reconsolidation work on the Bayon in cooperation with JSA.

Meetings, studies:

- Preparation for the project to put in 3 stairways at the Bayon;
- Inventory of trees that pose a threat;
- Study of the project to put boundary posts around the Bayon,
- Two film shootings from the “balloon” in collaboration with the JSA team;
- Report on accident caused by a vehicle that skidded at the Tonlé Oum Gate, striking and damaging a giant statue; the statue was put back in place with the assistance of GACP and the JSA;
- Meeting to negotiate the price of wood for consolidation work at Tonlé Oum Gate, Phnom Bakheng and Banteay Samre.

4. Unit in charge of Angkor Thom

Operations – supervisory work:

- Supervision of light shows for night events and welcoming international delegations;
- Map outlining threats due to the presence of termite nests and bats;
- Supervision of excavations: being carried out by the JSA team west of the Preah Pithou pond (discovery of 6 stair steps measuring 2 meters long and 2 meters wide 35 meters from the monument) and by the Archaeology Unit north of the Day Chhnang Gate;

- Application of termite repellent by guards south of Kleang, at the entrance to Preah Palilay and on the summit of the Phimeanakas;
- Supervision of dangerous zones in the temples;
- Recording of broken pediments in front of the Preah Palilay Temple, pieces of split laterite to the west and on the summit of the Phimeanakas Temple in preparation for emergency consolidation;
- In collaboration with the JSA, trimming 8 branches off a tree to prevent them from breaking off and falling on the summit of the Suor Prat;
- Construction of scaffolding to consolidate 14 pieces of limestone threatening to collapse on the north side of Kleang Temple;
- Temporary earth fill work to prevent water puddles from forming north of the Bayon, at Preah Palilay, to facilitate traffic movement within the temple complex.

Education, inventories, studies:

- Numbering of wooden supports on the Phimeanakas Temple;
- Education and advice to vendors in front of the Phimeanakas and Baphuon Temples to assist them to keep things tidy and clean, reminding them that it is prohibited to put up tables and chairs in front of the Phimeanakas Temple;
- Education of vendors at Preah Pithou who have been having conflicts, also splashing wash water on the monuments, which could make things unpleasant for visitors;
- Arrest and education of a guide that broke off a piece of laterite, handing him over to the police to follow procedure;
- Preparation of the bulwark consolidation project on the entrance gates to the Phimeanakas and East Pralilay Temples.

5. Unit in charge of Phnom Bok, Banteay Samre and Chau Srey Vibol*Operations:*

- Recruiting guards for the temples of Banteay Ampil, Leak Neang and Tor;
- Putting out fires at the foot of Phnom Bok and in the Chau Srey Vibol enclosure with the guards;
- Cleaning out the ancient drainage system;
- Emergency intervention by the Maintenance Unit to consolidate temples that are leaning or threatening to collapse;
- Removal of dead trees from the temple terraces;
- Cutting away trees and cleaning up the temples of Leak Neang, Tor and Banteay Ampil upon noting a gradual increase in the number of national and international visitors to them.

Studies – reports – training:

- Guard staff: preparation of documentary research on the history of the Banteay Samre, Phnom Bok, Chau Srey Vibol, Tor, Banteay Ampil and Leak Neang Temples to provide training for the guards looking after these monuments; training given to enhance preservation and protection of the environment of the temples (the guards at Phnom Bok and Banteay Samre also received courses on land use problems);
- Villages: distribution of legal documents relating to the establishment of the ANA to monks, village chiefs and commune chiefs in proximity to Banteay Samre Temple, Phnom Bok and Chau Srey Vibol; education of villagers living around the temple to help them understand clearly the role and jurisdiction of the ANA and

distribution of the various sub-decrees regarding the Angkor site signed by Samdech Hun Sen to villagers living around the temples for their information and understanding;

- Identification of trees that pose a threat and locations where water accumulates after a rain.

6. Unit in charge of Phnom Krom, Wat Atvear and Chedei Pagoda:

- Identification of sensitive areas and marking off the boundaries of Zone 4 around the Phnom Krom complex after study of the situation;
- Study and supervision of the ponds around the Phnom Krom enclosure;
- Cleaning out the ancient drainage system;
- Identification of trees that pose a danger and locations where water accumulates after a rain, thrice weekly checks of locations in the Tavang, Yeay Pok and Trapeang Chok Temples that pose a threat;
- Study of termite nests and report on bats living inside the central monuments, then smoking them out;
- Supervision of deforestation activities and stone splitting taking place at the foot of the mountain.

7. Unit in charge of Roluos

- Cutting and clearing away small trees that fell across the road to the east in front of Preah Ko Temple, cleaning out dead leaves, weeds, brush in the Preah Ko, Bakong, Lolei, Prey Monty, Totung Thngay and Spean Kaek temple complexes; pulling out small roots inside, outside and on the terraces;
- Meeting with the various authorities in Bakong district concerned with organizational and directional measures to handle traffic during the Khmer New Year affecting the Lolei and Preah Ko Temples and particularly the Bakong;
- Ongoing distribution of documents prepared by the ANA on the preservation of Angkor Park and land use to officers under the territorial authorities of Bakong district: village and commune chiefs in Ovlork, Lolei, Bakong commune, in the village and commune of Thnal Trang, Roluos commune and village, Or commune as well as Kan Dek commune;
- Request made for assistance from the Joint Intervention Unit to stop excavation and selling of earth in Zone 1, at a location between Spean Kaek and Spean Roloum south of National Road No. 6, about 200 meters away;
- Interruption of tours in collaboration with the Heritage Police to ensure the safety of both the temples and tourists.

8. Unit in charge of Kbal Spean – Banteay Srei

- Collaboration with the Banteay Srei Conservation Project (BSCP) to continue restoration of laterite slabs on the ground in the second courtyard and replace with new ones slabs that have weathered, rotted, crumbled or broken. Dig a small shaft 2 meters deep to drain away stagnating water;
- Collaboration with the Maintenance Unit to lop branches off trees growing in the temple annex structure.

9. Unit in charge of Preah Khan – Neak Pean

- Supervision of events such as dinners and classical dance shows put on by the World Monuments Fund at Preah Khan,
- Provision of teaching assistance from the ANA for the third time at the Faculty of Archaeology;
- Meeting with the EMS structure of the ANA's project and program for environmental management and research missions in various historical sites in Thailand;
- Inspection of temples located in Nokor Krav village such as Prasat Ta Aun, Banteay Thom, Top Tonlé Snguot;
- Put out fire at Banteay Prey Temple;
- Make a record of and provide advice to vendors, individuals taking collections for religious purposes and musicians at the Neak Pean and Preah Khan Temples on orderliness and keeping their set-ups clean and tidy;
- Repair of directional signs at the Neak Pean Temple hit by vehicles;
- Inventory of guard uniforms;
- Photographs of the various temples for archiving;
- Keep the wives of Ministry of Culture monument guards from lighting lamps in the temples;
- Set up mobile forces to supervise the various temples on the northern stretch of the "Grand Circuit".

10. Unit in charge of Ta Prohm, Banteay Kdei, Thommanon Temples and surroundings

- Sras Srang: Study of stones to repair the terrace and project for landscaping the open space in front of Sras Srang to the west (parking lot, police station) and putting in safety fencing to protect the stones from visitors passing by;
- Study and implementation of the project to consolidate 6 dangerous points in the Tanei Temple;
- Ta Prohm: in cooperation with the Indian technical team, remove stones south of the fortress, repair access roads to the temple, put in wooden protection devices in passageways and supervise film shooting activities of the "FOCUS ASIA" Company;
- Rescue excavation in collaboration with the Archaeological Unit at Thommanon Temple;
- Study of detailed plans and bidding documents for the construction of 10 housing units for Angkor Park guards;
- Designation of a camping place for young Cambodians at Banteay Kdei Temple;
- Awareness-raising among villagers living in Angkor Park to help them understand better what living in a protected zone involves;
- Excavation to look for the remains of Vietnamese soldiers at Srah Srang and Banteay Kdei;
- Put out a forest fire in the Culture and Tourist City;
- Monitor deforestation and sand pumping activities at Phnom Bok in areas where it is prohibited;
- Remove 969 pieces of stone at Banteay Kdei and put them in safekeeping.

11. Unit in charge of Beng Mealea and surroundings

- Mobile patrol unit to monitor Chrey and Kong Phluk Temples;
- Cleaning off outer south side moat banks and southern entrance;

- Determine location of sites for stone quarrying outside of the archaeological zones;
- In collaboration with the Heritage Police Unit: night surveillance to keep visitors from sleeping in the temple, stop business activities in the monument enclosure, fishing activities in the moat in order to keep the water for the common use of the villagers, put out forest fires and apprehend those who cause them;
- Study by the Maintenance Unit of the threatening situation in the southern causeway;
- Mobile Monitoring Unit to inventory stones, stone excavation sites after the workers have left;
- Repair of wooden protective devices in passageways to facilitate tourists going through.

12. Unit in charge of Ta Som – Pre Rup – Eastern Mebon

- Study of dangerous sections and taking pictures in order to undertake emergency consolidation measures;
- Monitoring of temple enclosures to stop illegal tree cutting and graffiti writing on the stones;
- Stopping people from setting up souvenir stalls in front of the temples;
- Removal of weeds from the southern pond and cleaning up the entrance alley in the temples;
- Stop removal of bricks from the Italian work site at Pre Rup Temple;
- Cleaning out and unclogging the water drainage cavity along the temples;
- Monitoring dismantling work and restoration operations at the western gate of the Ta Som Temple by the WMF.

IV.5. Upkeep Unit

Group 1: Completion of propping work at Phnom Krom and Banteay Samre.

Group 2: Cutting brush and vegetation off of Ta Keo Temple and the northern bulwark of Tonlé Oum Gate, Ta Prohm, Banteay Kdei Temples, the Gate of the Dead, Phnom Bakheng, Angkor Wat, Bayon, the entrance to Phimeanakas Temple, Preah Pithou, entrance to Day Chhnang. Props put in at the Tonlé Om Gate, Prasat Chrong southwest of Angkor Thom.

Group 3: Cutting away brush and vegetation to the east of Tonlé Oum Gate, at Tanei, construction of scaffolding the Suor Prat temple in cooperation with the Angkor Park Forestry Management Unit.

Group 4: Ongoing propping work at Bat Chum Temple, Phnom Krom, Tonlé Oum Gate and Phnom Bakheng.

Group 5: Cutting away brush and vegetation to the east of Tonlé Oum Gate, at Ta Prohm, Banteay Kdei, Ta Keo, Victory Gate, Phnom Bakheng and Bayon. Propping work at Phnom Bakheng. Putting up and taking down scaffolding at Suor Prat Temple.

Group 6: Ongoing operations to cut away brush and vegetation at the Bakong, Lolei, Sra Nge, Orlauk, Spean Kaek, Chau Srey Vibol, Trapeang Phong and Prey Monty Temples.

Group 7: Cutting away trees from Angkor Wat and Wat Atvear Temples and cutting wood at Preah Khan Temple. Putting up a scaffold to cut down trees, sawing the trees into lumber at the Suor Prat and Phimeanakas Temples, as well as at the Bakong, Preah Khan, Banteay Srei and Baphoun Temples. Transporting lumber to the temple lumber yard at Tanei and Preah Khan.

Group 8: Sawing down and cutting up trees near the Special Police Commissariat. Putting up a scaffold to cut down trees at the Bakong, Suor Prat, Preah Khan, Banteay Srei and Baphoun Temples. Taking down the tree cutting scaffold at the Suor Prat temple, sawing down and cutting the trees into lumber at the Victory Gate and transporting it to Tanei Temple.

IV.6. Angkor Park Clean-up Unit

- Removal of garbage from the temples;
- Angkor Wat: Watering grass to the west of the temple and at Trapeang Ses, removal of water plants from the moats, water supply into the northern pond and excavation in the southern pond;
- Digging of canal to drain water at Sras Srang and removal of water plants;
- Cleaning work and excavation at Kauk Patri Temple;
- Sharing in research work conducted by the Department of Water and Forestry;
- Underbrush clearance in the forest to put in the parking lot for Neak Pean;
- Sharing in work done by the Indian team at Ta Prohm Temple.

IV.7. Forestry Management Unit

- Cutting down trees, sawing trees into lumber, lopping off branches, setting up wood and metal scaffolding along with the JSA. Transporting lumber to the Tanei Temple lumber yard.

IV.8. Work done in cooperation with international organizations

APSARA-GACP work site: Preah Ko Temple

This work site has been directed by two ANA technicians (Saray Kimhuol and Tan Sophal) from January to the present to restore the central tower to the east of Preah Ko Temple.

- ♦ Photographs taken of the temple (before, during and after restoration);
- ♦ 383 new bricks manufactured for the restoration operation;
- ♦ Bricks ground into powder for restoration work;
- ♦ Restoration of the first gallery to the southwest, with 95 bricks replaced with new ones.

Ongoing operations:

- Fifty percent of restoration work completed southeast of the second gallery;
- Reinforcement of the temple structure using two fiber glass;
- Fifty percent of restoration work completed northeast of the second gallery;
- Preparation for restoration work southwest of the second gallery of the west central tower.

APSARA-CSA work site: Chau Say Tevoda Temple

- Completion of restoration work on the east and south gate as well as on the south and east terrace of the central tower;
- Completion of work on the east gate;

- Restoration work on the north gate, 60 percent completed for phase 1 and moving into phase 2;
- Work on the northern library (from January 1, 2005 to the present);
- Work on the western façade of the central tower (March 1, 2005 to the present).

APSARA-BSCP work site: Banteay Srei Temple

- Finalization of the temple risk and overall condition map;
- Excavation in the first and second galleries to determine the temple structure;
- Restoration of drainage works in the second and third galleries.

APSARA-ASI work site: Ta Prohm Temple

- Moving stones in the southeast part of the temple;
- Excavation work site to ascertain the condition of the plinth and structure of the subsoil;
- Removing pieces of limestone and laterite from the western moat.

APSARA-ITASA work site: Royal Palace, Phimeannakas, Angkor Thom

- Restoration of the ITASA information office roof (put up by the Indonesian team for restoration operations on the Angkor site) in the Royal Palace, Phimeannakas and Angkor Thom enclosures (from February 7, 2005 to the present).

APSARA-JSA work site: Suor Prat Temple, Angkor Wat

- Restoration of laterite and sandstones components of the temple;
- Restoration of the Angkor Wat pediment;
- Sculpturing of Angkor Wat bas-reliefs;
- Drawing and scanning the map.

DEPARTMENT OF MONUMENTS AND ARCHAEOLOGY 2 (DMA-2) OR DIRECTORATE OF MONUMENT AND URBAN HERITAGE

Under Sub-decree No. 15 ANK/BK of June 11, 2004 on the internal restructuring of the ANA, the Department of Monuments and Archaeology was divided into two, the result being the DMA-2 Directorate:

- The DMA-1 Directorate is referred to as the "Architectural and Archaeological Conservation" while
- The DMA-2 Directorate is referred to as the "**Directorate of Monument and Urban Heritage**".

The main terms of reference of the DMA-2 and what it accomplished from January to October 2005 are outlined as follows:

V.1. Guidelines for sustainable land use management

It has not been possible to implement the Land Use Plan (LUP) *per se* and an international expert is expected to arrive very soon.

Mr Lucien CHABASON, UNESCO expert, came to Cambodia during the last week of September 2005 to assess the situation and make appropriate recommendations. The

drawing up of guidelines for the sustainable management of land use in Zones 1 and 2 will be done based on the conclusions presented in the expert's report.

Meanwhile, the DMA-2 developed procedures for building permit applications in Zones 1 and 2 based on commonly accepted good practices.

V.2. Habitat in the Park

- ***Issuance of building permits on the Angkor site***

The Directorate has focused most of its energy in this area since its establishment. Applications for building permits received are verified on the spot, the documents analyzed and appropriate recommendations are made to the Director General who is empowered to issue or refuse to issue the permits.

The results of this activity from August 1, 2004 to August 30, 2005 are as follows:

- Applications received: 378
- Permits issued: 167
- Applications refused: 169.

It is noteworthy that the DMA-2 successfully handled a few sensitive disputes involving Buddhist monasteries: Wat Svay Romiet, Wat Phnom Krom, Wat Chedei, Wat Angkor Khang Tbaung, Wat Phnom Bok, etc.

- ***Inspection when work is completed (certificate of compliance)***

This activity will be implemented soon with the participation of the Joint Intervention Unit. New technical staff (architects and engineers) will be recruited in the near future.

V.3. Site preservation

- ***Signage on the site***

In collaboration with the Angkor Tourism Development Department (*Département de développement touristique d'Angkor* [DDTA]), the DMA-2 determines the types and location of signs in the park to be put up for tourists.

It also works with the Provincial Committee to determine where commercial advertising billboards can be put up, particularly in Angkor Park.

- ***Upkeep operations on infrastructure (roads, access pathways, gutters, etc.) on the Angkor site and other sites under the jurisdiction of the ANA***

The DMA-2 has not yet been able to acquire all the technical staff required, so it has not been able to fully assume this task, which for the time being is placed under the responsibility of the ANA's Central Administration. Nevertheless it was able to work on drawing up the specifications for the bidding process for repair work on the road from the Culture and Tourist City to Banteay Srei.

V.4. Public awareness raising

a. *Scope*

This involves raising awareness among the public and concerned authorities regarding the importance of heritage preservation as well as the laws and regulations pertaining thereto, in order to get everyone working together in this area of civic duty.

The DMA-2's Director is responsible for organizing briefing meetings for the APSARA Authority's staff. He also participates in such meetings held for pupils and students, Buddhist monks and the communities at large.

A major two-day seminar is scheduled for mid-October 2005 for the Buddhist clergy and members of monastery committees set up in Protected Zones 1 and 2, which will have as its honorary chairman His Holiness the Supreme Leader of the Monks.

b. Architecture consultations

The DMA-2 furthermore organized a type of free consultation workshop to help the communities and the clergy in various matters, including the repair, renovation and construction of houses, as well as commune and religious buildings.

c. Working tools

The DMA-2 shares actively in the preparation of awareness-raising materials intended for the print media and radio, as well as in the preparation of television broadcasts.

The DMA-2 designed a mailbox to be used in order to get input from the local communities.

Three practical tools were developed:

- ♦ A folder to invite the communities to avail themselves of the architecture consultation services and to file applications for building permits;
- ♦ A folder outlining a number of suggested models of traditional Khmer houses advocated in Protected Zones 1, 2 and 3;
- ♦ A folder outlining some examples of fencing and live hedges recommended for Protection Zones 1, 2 and 3.

A handbook for home construction is now in the draft stage.

A compendium of laws respecting the management of the cultural Protected Zones 1 and 2 in the Siem Reap / Angkor region was compiled and published by the ANA in Khmer, English and French.

Khmer habitat interpretation center

A model traditional Khmer style house will be put up soon on the Angkor site. The location has been identified and documents for its construction are in the draft stage. It is slated to become the future Khmer Habitant Interpretation Center.

e. Work with the provincial authorities

The DMA-2 contacted a number of provincial officers in the line ministries and garnered their support for analysis of construction files. Heads of departments such as those under the Ministries of Cults and Religious Affairs; Education, Youth and Sports; Land Planning, Construction and Urban Planning; Land Registry; the Environment; and Health

are the most frequently consulted. It is noteworthy that these departments have been most cooperative.

4. Angkor International Documentation Center

The Angkor International Documentation Center, established with assistance from UNESCO, has been put under the jurisdiction of the DMA-2 Director. It continues to provide library services by gathering documents about Angkor and making them available to both researchers and the general public.

The Center is also home to photo collections, maps, epigraphic documents, etc.

It is also a venue for training sessions and seminars such as:

- The seminar on Khmer ceramics;
- An exhibition featuring the University of Sydney / EFEO research project;
- A course in Web design for APSARA conducted by the Swiss Agency for Development and Cooperation;
- Work sessions held by the Environment Group and ISO 14001, etc.

5. Staff

a. Angkor International Documentation Center

It is being cared for by a staff of two, with no plans to hire more.

b. DMA-2 Directorate

It has a current staff level of 11:

- ♦ 4 archaeologists from the former Department of Culture;
- ♦ 2 experts specializing in administration and document management;
- ♦ 2 architects, one of whom is the Deputy Director;
- ♦ 1 interior designer;
- ♦ 2 IT specialists.

Given the scope and diversity of tasks, it is now imperative to recruit 11 more technicians:

- ♦ 3 archaeologists;
- ♦ 6 architects and engineers;
- ♦ 2 technicians specializing in architecture and engineering.

ANGKOR TOURISM DEVELOPMENT DEPARTMENT (DÉPARTEMENT DE DÉVELOPPEMENT TOURISTIQUE D'ANGKOR [DDTA])

The DDTA actively participated in a number of major projects, including working meetings with consultants and field visits, such as:

- Design of the future Visitor Center in the Culture and Tourist City with the support of UNESCO and other ANA departments. This center will be located at the traffic circle where the east-west and north-south roads intersect in the Culture and Tourism City.

The Visitor Center will be the starting point for tours of the temples; it will contain the new ticket sales booths and main parking lot for vehicles going to the Angkor site;

- The DDTA was a main contributor to the tourism development study conducted by the JICA in its work to develop a Master Plan for the Sustainable Development of Siem Reap / Angkor;
- The DDTA also sits on the Run Ta Ek Zone Planning and Development Committee that is working on the design of a village for the relocation of people living in Protected Zones 1 and 2 that wish to expand their housing;
- The DDTA also assisted the Population and Development Department (DDD) in its census-taking operations by making two junior staff members available to it for a six-month period in order to speed up work in the field.

VI.1. Projects for infrastructure and intake facilities:

- The initial contract for battery-powered shuttle vehicles that had been entered into with a South Korean firm has been turned over to a Chinese company. The clauses of the contract remain unchanged. The new concession holder must submit any plans for infrastructure work to the ANA for prior approval. As for development of the Angkor Wat approach area, the Department of Monuments and Archaeology 1 is now studying the plans for setting up the parking lot and other structures necessary for the electrical shuttles to go into operation. A working group including an architect from DMA-1, DMA-2 and the DDTA has been formed to work with the new concession holder for matters pertaining to the project (parking lot, shuttle vehicles, shops and snack-bars);
- Putting up directional and cultural information signs will be done with the assistance of the DMA-2 and the Department of Urban Planning and Urban Development in the Angkor / Siem Reap Region (DUDU). Other signs for traffic control will be put up by the Road Unit under the Central Administration Directorate;
- Study and layout of the DDTA office at the point of entrance ticket sales: ideas for the layout were discussed with the DMA-2. The Sokha Hotels Company will repair the roof when the rainy season ends and some changes will be made inside in order to have a small space at the visitor reception area for the sale of informational documents about Angkor.

VI.2. Tourism development activities:

- *The Public Observatory* for the most part was busy with survey-taking activities to gather information needed for the design and architectural programming of the future Visitor Center in the Culture and Tourist City.

It is anticipated that the training course taken by ROS Try with the Public Observatory operated by the French National Monuments Center will expand cooperation between the ANA and this French public institution. A partnership agreement is now being drafted and will soon be submitted to the ANA's General Directorate and the National Monuments Center.

The 10 survey-takers with the DDTA's Public Observatory are continuing to take actual counts of visitors and interview them to get feedback regarding the Angkor site.

Since its establishment, the Public Observatory has cared for the following operations:

a) Monitoring visitor numbers:

With over 451,000 foreign visitors coming to Angkor in 2004, the site obviously needs to be monitored in terms of tourist numbers.

The Public Observatory collates the information and produces regular reports on a monthly, quarterly and annual basis.

Various sources of information are used:

- ♦ Data regarding entrance ticket sales;
- ♦ With a systematic record of groups organized at the entrance ticket sales location, it possible to monitor market trends, identify the nationality of visitors and, more importantly, set up systems of making reservations for tours of the fragile monuments at peak periods;
- ♦ Regular counts (at least two weeks every month) at Angkor Wat, Ta Prohm and Banteay Srei are used as a basis for controlling visitor flows in these “absolutely must-see” temples, making suitable provision for intake amenities in the approach areas, etc.

b) Familiarity with the publics:

Actual counts provide information about the visitors (such as patterns that can be observed), but getting a precise grasp of visitor profiles, their needs and expectations is one of the crucial jobs cared for by the Public Observatory.

Two surveys were made this year in order to:

- ♦ “Determine the path visitors follow inside the park” as part of an operation to design new tour routes;
- ♦ “Find out how visitors perceive the temple environment” in order to determine what adjustments should be made to diversify the conventional tour of the monuments.

These surveys were taken by Public Observatory survey-takers in five languages: Khmer, English, French, Chinese and Japanese.

c) Miscellaneous studies:

- ♦ **Surveys regarding the number of visitor going to Banteay Srei Temple made it possible to take action to protect the monument components, such as cordoning off the central Gopura. Visitors are allowed to walk around it and take photographs without their view being obstructed by other tourists who find it very tempting to reach out and touch the fragile bas-reliefs;**
- ♦ **A survey was taken in 2003 to get feedback from visitors with regard to the matter of having them put on special slippers to protect the stones from wear caused by treading on them;**
- ♦ **A count of visitors to Phnom Bakheng was taken throughout the day and the sharp rise at the approach of 5 p.m. pinpointed the urgent need to protect the monument while awaiting consolidation work to be done on specific locations where crowds gather to take panorama shots of the setting sun;**
- ♦ **Generally speaking, as various needs were felt this year by the ANA, the Public Observatory conducted a number of one-off studies (studies of visitor numbers at the Bayon, studies of visitor flows along the various itineraries in the park, etc.). This was particularly true of the DMA-1 Monument Perimeter Area Management Unit in its efforts to plan out the approach areas as well as in early 2005 when the experts on hand to design the future Visitor Center in the Culture and Tourism City were in urgent need of information.**

d) *New directions*: Questionnaires to get visitor feedback regarding battery-powered shuttle vehicles and the fee scale for entrance tickets into the Angkor site are being studied and will soon be put into use.

- **Visitor Itinerary Unit**: The five technicians assigned to the Visitor Itinerary Unit received training in pre-design study (documentary research, product design, PowerPoint presentations, etc.) from a junior consultant who completed her mission. The next phase in developing the new visitor itineraries will be handled by a junior consultant and will cover communication, distributing the bidding documents and field trials with tour operators on itineraries that are ready to be introduced. A large number of visitor itineraries are being looked into:
 - ♦ Setting up an ecotourism program in a partnership arrangement with the Food and Agriculture Organization (FAO), JICA and DDTA at Kompong Phluk to help people in the local community increase their income through additional activities relating to fishing and protection of the flooded forest;
 - ♦ A walking or bicycle tour along the Angkor Thom enclosure wall: This tour route and the necessary attendant facilities have been studied and tested out on foot by the DEF, DMA-2 and DDTA.

Other tour itineraries have been proposed: Tours of the monuments according to chronological order, tours based on themes such as religious buildings or activities, Buddhist monasteries, etc. will receive technical assistance from the DMA-2 and especially from Mr Vittorio Roveda, who has a very broad background with regard to the pagodas in the Siem Reap region.

- **A unit to identify new tourist projects** has been established. Manned by three junior graduates (with a master's degree in tourism), this unit is now contributing to the communication campaigns put on by the ANA to raise public awareness and help residents understand what Protected Zones 1 and 2 are all about:
 - ♦ Public opinion surveys targeting the communities in Zones 1 and 2;
 - ♦ A seminar on the ANA's terms of reference for the information of the university milieu, pupils, students, professors and teachers;
 - ♦ Research on developing Phnom Krom as an alternative to Phnom Bakheng as a site to enjoy the sunset;
 - ♦ Preparation of TV spots on the management of Phnom Bakheng, Beng Mealea and Angkor Wat;
 - ♦ Participation in approach area operations with DMA-1.
- **An operational unit to care for management of the battery-powered bicycle rental project** has been formed by the Chairman in order to get this operation up and running. It is made up of a team of four persons: one operator, one administrator-accountant, one sales and marketing representative and one maintenance repairperson. At this time they are working with the other departments on the construction of a central warehouse and 14 relay stations in Angkor Park to:
 - ♦ Service the 300 battery-powered bicycles housed at the Angkor Conservation Office;
 - ♦ Take pictures of the equipment for hand-out folders;
 - ♦ Promote use of the equipment on the Internet and distribute the folders;
 - ♦ Get the bicycles licensed;
 - ♦ Draw up the unit's work schedule;
 - ♦ Recruit staff for promotion and marketing;

♦ Organize the office and order office equipment and supplies.

- **Koh Ker site:** Meeting to prepare for tours to the site. A DDTA team shared in the field study mission for development and management of the Koh Ker monument group.
- **ANA/New Zealand bilateral cooperation:** Subsequent to the study funded by NZAID and carried out by Fraser Thomas Ltd. from New Zealand on the theme "Angkor Management Plan and Community Development Project," approval in principle was given by the ANA Chairman for implementation of the project based on bilateral funding. Social development projects will be studied and implemented to help the local communities benefit from the economic growth generated by tourism in Siem Reap province.

The bilateral cooperation arrangement will be signed officially in the near future.

- **Publication of an audio book** (DVD) initiated by UNESCO as part of its encouragement to preserve mankind's sound heritage: Funding is being provided by the SOKHA Hotels Company and the *Groupe Hachette Photos Presse*, with logistics being cared for wholly by the DDTA. Film shootings and recordings were made at the Preah Vihear Temple, the Kbal Spean, Phnom Kulen and Angkor sites, as well as in villages bordering on the Tonlé Sap Lake.

Work has been completed and a preview presentation was made to UNESCO's Communication and Information Sector. The sound book met with a very enthusiastic response and the decision was made to use the DVD featuring the sound heritage of Angkor as one of the flagship products for events to be held in celebration of UNESCO's 60th anniversary in 2006.

Significantly, the Angkor site was the first UNESCO World Heritage Site to benefit from a sound communication link.

VI.3. Missions to monitor film shooting and domain occupancy:

The unit to monitor film shooting operations and domain occupancy worked in a supervisory or monitoring capacity with various operators in the monuments:

- Numerous documentary and tourism film shootings were done on the Angkor site by various producers from countries such as Japan (NHK national television), Germany (ARD national channel for a TV series), France (ARTE channel), Malaysia, China, Denmark, Spain, etc.;
- Filming a German serial story by Focus Asia;
- Domain occupancy: numerous tourism promotional events were held on the approach area to the Terrace of the Elephants (banquets and art shows by the Green Travel Agency, gala dinner for the Annual UNICEF Congress), at Kravan Temple (ASIA Society, PATA, etc.);

The DDTA in cooperation with the Department of Monuments and Archaeology 1 kept an eye on things as these operations took place.

VI.4. Visitor and environmental management missions:

A team of 12 tourism workers monitor tourist activities in the monuments to assist the guards (most of whom do not speak a foreign language) to help tourists maintain a sense of decorum, providing them with guidance or assistance when necessary.

The number of people assigned to this detail is inadequate given the number of monuments that tourists are visiting. The decision was therefore made to provide such surveillance in the most popular monuments while waiting for more assistants to be recruited:

- Stationary staff are assigned to Banteay Srei, Angkor Wat and Ta Prohm;
- Mobile supervisory staff make rounds of the other monuments in Angkor Thom.

This unit is also in charge of making sure that no illegal affixing of posters is done and sees to environmental cleanliness and order in Angkor Park.

The DDTA actively shared in the tree-planting ceremony in Zone 2 organized by the ANA's Department of Water and Forestry.

VI.5. Missions to control commercial concessions:

A visitor information bureau has been set up at the Angkor site entrance ticket sales office. Three staff members are on hand at all times to check the sale of entrance tickets to the Angkor site and provide information for visitors.

Concessions in the park include:

- ♦ Elephant rides;
- ♦ Balloon rides;
- ♦ Concession for the Beng Mealea site: the record shows a total of **12,166 visitors in 2004 and 7,879 from January to April 2005;**
- ♦ The concession for the Koh Ker site was recently turned over to the APSARA Authority: the road to the site is in very good condition and the trip can be made in less than three hours;
- ♦ Angkor site ticket sales: There has been a sharp increase in tourist numbers, approximately 45 percent over the first 10 months of 2004.

VISITORS TO ANGKOR ARCHAEOLOGICAL PARK						
	2000	2001	2002	2003	2004	2005
January	17,100	24,189	30,578	39,809	51,875	79,398
February	18,900	23,351	32,612	37,414	37,342	67,386
March	17,550	21,550	33,007	31,673	31,660	55,598
April	10,750	15,826	21,837	13,529	26,830	45,131
May	10,300	11,322	18,203	8,795	25,474	39,587
June	8,750	12,453	14,826	10,547	21,632	35,013
July	13,550	18,893	21,798	19,512	29,954	49,495
August	16,400	21,937	26,197	24,777	37,229	59,478
September	12,201	15,838	19,107	21,681	30,735	40,992
October	14,612	17,016	23,137	25,546	39,193	59,543
November	23,274	26,097	35,337	42,204	56,130	79,910
December	22,525	30,619	39,058	46,070	62,992	79,455
Total	185,912	239,091	315,697	321,557	451,046	690,987

VI.6. DDTA administration

The department's administrative staff based in Phnom Penh and Siem Reap is responsible for the intake of tourists, visitors and persons from government agencies:

- Applications for free entrance passes: verify applications, submit approved applications to the Director General for signing, get back to persons whose applications were not approved;
- Applications for film shootings: submitted for the advisement of the Director General, preparation of contracts appropriate to the shooting operation: photography, film or video, and submission to the Director General for signing.

They handle the collection of royalty payments for photography or film shooting and domain occupancy rights.

They also care for monthly report writing, personnel management and department administration.

They assist the Director to prepare any project involving tourism development as well as event organization.

VI.7. Training:

- **Mr ROS Try**, in charge of the Public Observatory, was sent on a training course with the French National Monuments Center and a number of other institutions. This enabled him to gain further experience in taking surveys and handling administrative matters involving monument tourism.

- **Two training sessions for tour guides** operating on the Angkor site to upgrade their skills were arranged by the DDTA. 160 tour guides speaking variously French, English, Japanese or Thai were able to take these booster courses, the first of which took place in June, the second in September.

The various departments of the ANA shared in the retraining sessions for tour guides by conducting technical courses on their particular fields of jurisdiction and field activities.

VI.8. National and international events:

- *Organization:*
 - ♦ **Green Travel: promotion targeting the Japanese market with bimonthly dinner shows on the Terrace of the Elephants and Bayon approach area;**

♦ **ASIA Society: The 33rd Williamsburg Conference was held in Siem Reap / Angkor and the closing gala dinner took place on the approach area to the Kravan Temple;**

♦ **UNICEF: Its regional congress was held in Siem Reap and the official dinner took place in front of the Terrace of the Elephants;**

♦ **SOFITEL ROYAL ANGKOR: The ACCOR Group, in keeping with its policy of sustainable development, funded restoration work on the Bat Chum Temple. It held dinner shows to promote the site while at the same time raising awareness among the participants on how to contribute to maintenance of the monuments.**

- *Participation:*

♦ **The DDTA attended a seminar on tourism development in the Greater Mekong Sub-region,**

♦ **The DDTA director was invited to attend and act as moderator at the seminar put on by the Royal University of Phnom Penh on social development in Siem Reap / Angkor;**

♦ **PATA (Pacific Asia Travel Association): Its annual conference brought together all its members and guests in Siem Reap / Angkor;**

♦ **Work meeting with the Directorate and Deputy Governor of Siem Reap in charge of tourism to implement traffic control measures inside Angkor Thom;**

♦ **Seminar on the preservation and promotion of culture in Southeast Asia, put on by the Royal Academy of Phnom Penh;**

- ♦ Seminar put on by the Department of Monuments and Archaeology 2 to raise awareness among the clergy regarding the issue of preserving the ancient pagodas in Siem Reap;
- ♦ Study trip by the NPO-Japan Conservation Project, a non-profit organization for the development of conservation projects: worked with the event organizer (Mr EA Darith) to welcome the delegation;
- ♦ CATA (Cambodian Association of Travel Agencies): meeting to elect the association's new chairman;
- ♦ Negotiation and preparation with the organizers for upcoming night events planned during the 2005-2006 season;
- ♦ Preparation for holding the "Nuits d'Angkor" event with the French Cultural Center, slated for December 16, 17 and 18, 2005.

VI.10. Tourism promotion operations:

- ♦ Gateway to Cambodia: a promotion targeting the Thai market, sponsored in Bangkok by Siem Reap hotels;
- ♦ Work with the Kompong Phluk local authorities to arrange the shooting of a Norwegian national television film featuring a Norwegian family experiencing the daily life and activities of a Cambodian family in a floating village and the flooded forest. Cambodia was chosen by 8 countries in the world;
- ♦ Preparation of a shooting for the USHUAIA television program by Nicolas Hulot for French channel TF1;
- ♦ Preparation of informational material about visiting the Beng Mealea and Koh Ker sites.

SIEM REAP / ANGKOR REGION URBAN PLANNING AND URBAN DEVELOPMENT
DEPARTMENT (DÉPARTEMENT DE L'URBANISME ET DE DÉVELOPPEMENT URBAIN DE LA
RÉGION DE SIEM REAP / ANGKOR [DUDU])

The terms of reference incumbent upon the Siem Reap / Angkor Region Urban Planning and Urban Development Department are clearly spelled out under Article 11 of Sub-decree No. 15 ANK/BK of June 11, 2004:

- *"Contribute, in cooperation with all competent authorities, to the formulation and development of urban management plans, in the framework of sustainable, balanced, integrated tourism growth in the Siem Reap / Angkor region and other concerned zones;"*

- *“Contribute to the development of an urban planning master plan for the town of Siem Reap and provide direction for land use procedures and building standards in the Siem Reap / Angkor region;”*
- *“Monitor and provide ongoing supervision of construction in the Culture and Tourism City zone, giving particular attention to enforcement of existing laws, standards and regulatory provisions...”.*

To achieve the stated objectives, the DUDU has mobilized the available human and material resources to implement the Royal Government’s sustainable development policy. The thrust of this policy is to develop tourism in this region so as to promote poverty alleviation while preserving the authenticity of the temple site, the town of Siem Reap and its environment.

VII.1. Activities:

- ***Development master plan:***

- a) *International cooperation:*

The Master Plan for the Sustainable Development of the Siem Reap / Angkor Region is being prepared collaboratively by the Japanese International Cooperation Agency Master Plan team, the German Development Department, the province of Siem Reap and the DUDU. Studies commenced in October 2004 and will be completed in April 2006. An initial submission report has been drafted, including a section which analyzes the socio-economic, environmental and institutional situation of Siem Reap district, while another section contains recommendations.

The principal choices indicated are based on current laws and decrees, while recommendations made at the Paris Conference in November 2003 (chapter on Sustainable Development and Poverty Alleviation) propose that quality tourism be developed, embodying cultural values, to promote economic growth in the country. Other recommendations involve strengthening the environmental protection program, rehabilitation of urban and tourism infrastructures, and developing the legal, institutional and financial tools needed to better control development in Siem Reap district.

This international cooperation arrangement has also made it possible to revise the Land Use Plan developed in 2000 by the ANA. The former plan, with its simple presentation, put emphasis on preserving the traditional character of the town while advocating consistent management of building permits and legal control over constructions. The new plan, while adhering to the basic directions, amends the specificities of the activities in the various zones of the town. It is still in the discussion stage.

b) Training:

A JICA volunteer provided training to DUDU staff in use of the Arc GIS software, setting up and managing databases for urban data. This Geographic Information System (GIS) will be used to generate sheets showing the urban needs in each commune and inventories of heritage components that need to be highlighted in the downtown area.

c) Cooperation with the Korean International Cooperation Agency (KOICA):

The government of Korea has offered grant assistance to the government of Cambodia in the amount of US\$1.6 million for the construction of two bypass roads around the archaeological site. The DUDU conducted a feasibility study along with KOICA experts. Work will start in January 2006, and the DUDU will be on hand to assist the KOICA team throughout the construction period.

- *Emergency projects during the first quarter:*

For the last five years, the city has experienced accelerated growth driven by tourism development on the Angkor site. People in search of work are moving in from all over the country and settling in the zone. Town services can handle a population of approximately 50,000 and are being severely taxed due to the needs of the new arrivals.

This growth is causing ongoing degradation of the urban environment and a dysfunction of the system for sewage drainage and disposal as well as the street network. Squatter areas have sprung up in many places, along with high-density building construction as people get involved in land speculation. This trend is bound to continue and worsen if measures (including regulation of the land market, construction controls, etc.) are not taken.

Projects and work that have been undertaken since the beginning of 2005 basically involve emergency action to control development of the town of Siem Reap, including:

a) Revision of the Land Use Plan:

The APSARA National Authority drafted a legal document, the Land Use Plan, back in 2000. In view of the fast-paced development of the town, this Land Use Plan is being revised. The provincial line departments are sharing in these amendments. A new document has been prepared, which includes broad input from the provincial authorities. The document has now been submitted for advisement to the Ministry of Land Management, Urban Planning and Construction.

b) Developing rules for putting up advertising billboards and signs in urban Siem Reap:

At the request of the province, the DUDU shared in identifying zones where the putting up of such panels is prohibited. Subsequent to many meetings, a *Decree* from the province has been signed, spelling out prohibited zones and outlining a permit application procedure for putting up advertising billboards and signs.

c) Operational plan for sewage drainage and disposal:

The helter-skelter development of Siem Reap town is causing havoc with the town's sewage drainage and disposal system. Hotel complexes and Chinese-style shop houses have been built along National Road No. 6, resulting in many flood locks. Rainwater drainage is taking place perpendicular to NR6 and water crossing points are inadequate. The national road itself is an obstacle to surface drainage of rain water, and this results in major flooding during the monsoon season.

The ANA has received a funding package from the AFD in the amount of 4 million euros. A large part of this financial assistance is being used to deal with flooding problems in the town itself and put in a primary sewage drainage and disposal network in the urban extension zone. The DUDU has worked with various experts dispatched by the AFD to analyze the town's drainage system. It has now drawn up an operational plan for sewage drainage and disposal for the eastern section of the town as well as in the Culture and Tourist City.

d) Projects for drainage and beautification of NR6 (road to the airport):

The stretch of NR6 between the airport and downtown Siem Reap is of crucial importance for the town's image.

There used to be large lotus ponds and an irrigation canal alongside this highway. Even during the dry season, these ponds could be filled with water from the Western Baray. Visitors to Siem Reap province coming in along this road could get an idea of the significance of the Angkor water system and enjoy the beauty of the lotus ponds and the expanse of fertile agricultural land.

In addition to contributing to the beauty of the landscape and to irrigation, these ponds also played a role in draining the western side of NR6.

With the growth in tourism, these ponds are being filled in, hotels are turning them into private gardens, people are using them for parking lots, places to store building materials, etc. Three quarters of the western section along NR6 has been spoiled in this way. A length of about 2 kilometers from the airport traffic circle to the Cultural Village has not yet been adversely affected to the same extent. The provincial authorities and the ANA appreciate the importance of this stretch of road and have gotten together to plan out its development, which can be done with low social impact if action is taken early.

- **Urban management projects:**

In addition to sharing in international cooperation projects, the DUDU has had to handle a number of emergency infrastructure-related projects needed to improve sanitary drainage in the town as well as visitor intake, in order to make things more appealing to tourists and thus encourage them to extend their stay in the area:

a) Drainage and street network:

Drainage system and street network improvements will be carried out in the town extension zone with the financial assistance made available to the ANA by the *Agence française de développement*. The operational plan covered in the cooperation arrangement between AFD experts and the DUDU has been completed and submitted to the AFD for approval. It is anticipated that it can be implemented in early 2006.

b) Drainage and beautification:

The focus zone is the 2-kilometer stretch of NR6 from the airport traffic circle to the Cultural Village along which there are no serious land problems. The development project involves the creation of lotus ponds, reopening the irrigation canal, creating access roads to lots bordering the road and putting in cycle paths. The technical documents have been prepared, and the only matter remaining is finding the necessary funds.

c) Landscape enhancement of public spaces in the downtown area:

Siem Reap is a garden town. This characteristic must be preserved at all costs and highlighted in order to make it a drawing card for tourists. Tourism growth has spawned the construction of large hotel complexes, guesthouses, housing units and shop-house style commercial buildings, which is changing the town from green to concrete. Without land control and the Land Use Plan, it is impossible to preserve green spaces on privately owned land. Pending implementation of the necessary rules and regulations, the town must go to work to preserve public spaces, turning them into parks and plant them with trees and growing plants.

In this regard, the DUDU has developed the following operational projects with the provincial authorities:

- ♦ A development project along NR6 (see "sewage drainage and disposal" project);
- ♦ Siem Reap River: Two major problems have hindered full implementation of the Siem Reap River project: *i)* first, the removal and relocation of squatters living along the banks from the Angkor Conservation Office up to Wat Polanka; *ii)* second, the need to reshape and clean out the riverbed in order to improve the river's flow capacity. These operations require a detailed study and major external funding assistance.

Meanwhile, the province and the ANA have been caring for some basic operations (putting up public lighting, putting in sidewalks, maintaining the planted areas, cleaning the banks) so as to maintain a modicum of cleanliness along the river and preserve the green look of Siem Reap town as a tourism asset. For three years now, the provincial authorities and the ANA have done routine upkeep and

presentation work on various sections of the Siem Reap River banks. This has attracted many pedestrians to the downtown area. Given the positive results, the DUDU decided to put in a 700-meter-long walking path along the bank from the Polanka Pagoda to the Preah Prom Rat Pagoda. The plans have been finalized and the project is seeking funds.

♦ Tourist facilities: To provide visitors with information to help them enjoy the architectural heritage of the old town, key spaces will be put in along the riverside walkway. Information panels will be put up and a tour map of the town displayed. Street furniture will be put in for the comfort of strollers. This project is now on the drawing board.

♦ These information spaces will be the start-off point for visits to various pagodas. The first one, now close to completion, involves development of the access road into Wat Bo Pagoda with its outstanding wall frescos and architectural authenticity.

♦ A project to develop the square located at the intersection of Temple Road and the road leading to the Angkor Conservation Office has received the approval of the governor, who is now seeking funds for its completion.

♦ Tourist development of the colonial center of old Siem Reap town with street tree planting has been approved by the provincial authorities. Only the funding remains to be cared for.

- **Short- and mid-term projects:**

- a) Ongoing development and clean-up operations along the Siem Reap River to keep it as a tourist attraction and as a channel for draining rainwater away to the lake;
- b) Developing and beautifying public spaces;
- c) Study and completion of the system in the eastern part of the town;
- d) Study and completion of the temple bypass roads with funding assistance from Korea. This project is slated to get underway in November 2005;
- e) Basic infrastructure enhancement in the town: streets, public lighting, street furniture, directional and informational signs for tourists, drainage, sanitation in the downtown area and areas frequented by tourist;
- f) Feasibility study for management of the Culture and Tourist City;
- g) Establishment of a new development zone at Run Ta Ek for the relocation of people living in the Angkor Park protected zones.

VII.2. Angkor Culture and Tourist City:

- **Freeing up land:**

An inter-ministerial commission was struck subsequent to the Royal Government's decision of October 18, 1999 to deal with land expropriation problems on the Culture and Tourist City. Since 2000, the ANA has freed up 392 of the 560 hectares of land, leaving about 168 hectares of land still to be expropriated. (The owners are refusing to allow the expropriation team to measure their land or are not in agreement with the price offered.) Expropriation has been frozen for two years now because of growing land speculation in Siem Reap province. A new team of 23 persons has been put in charge of freeing up 150 hectares of land east of Tram Neak Road for 2006.

- **Primary infrastructure:**

In April 2005, access roads totaling 8 kilometers built with AFD funding were finally handed over. The DUDU superintended the work done to join this road up with NR6 (section T1) and the "Petit Circuit" (section T2). It is caring for the maintenance and upkeep of these two new service roads. A project is currently being worked on to put in a low overhead barricade to keep large trucks from going through the Culture and Tourism City and causing damage to the road and bridge. Two such barricades will be put in, one at the northern junction with the "Petit Circuit" and the other at the junction with Charles de Gaulle Road.

- **Lot concessions to investors:**

At the present time, the ANA has a land holding of 392 hectares that has been fenced off and serviced with drainage canals and with 8 kilometers of asphalt surface road.

A number of projects have been identified to be set up in the near future on lots along sections T1 and T2 on the north-south road leading to the temples. These projects include concessions of a public nature such as the "Silk Museum" funded by the Government of India, and of a private nature such as the "Sihanouk Museum" funded by the Japanese AEON Foundation. The Angkor Palace Company will be putting in a hotel complex. Plans call for parking lots to be put in and for two other lots to be leased south of the one taken by the Angkor Palace Company. Boundary markers are now being put in.

- **Public concessions:**

a) The Silk Museum funded by the government of India was given one hectare of land by the ANA. As of late 2005, the building project had not yet got underway;

b) As for the Buddha Museum funded by the Japanese AEON Foundation, architectural design is now in the final stage. The ANA who will become owner of the museum, allotted 16,200 square meters of land to Sophia University who will care for the museum construction work site, scheduled to get started in 2006;

c) The ANA headquarters building will go up on a 3.2-hectare lot. Plans are in the architectural design stage. An architecture competition was held to select the plan for the future offices of the Authority in the Culture and Tourism City and a call for bids has now been launched for the building contractor;

d) Visitor Center: The ANA worked with UNESCO and French experts to conduct technical studies on the design of the Visitor Intake and Information Center in the Culture and Tourism City. The various implementation phases and time line are now being determined.

- ***Private concessions:***

a) The contract to build a Beta Mekong hotel complex on 8 hectares of land was signed in 2005, but the construction work site has not yet been started;

b) A concession contract to grant a 23-hectare lot to Sokha Hotels Co., Ltd., on the basis of a 70-year lease was signed in 2005. Plans call for the construction of a hotel, restaurant, duty-free shop and leisure facilities on this land;

c) A 6-hectare lot was exchanged with an investor holding 2.5 hectares of land in Zone 2 for hotel construction;

d) An 8.4-hectare lot was granted to a Japanese firm, Angkor Osaka Co., Ltd., for the construction of a 5-star hotel. Construction has not yet gotten underway;

e) A 3.2-hectare lot has been granted to a Chinese firm for parking and warehousing battery-powered vehicles. The ANA also made 3,000 square meters of land available for the construction of a garage to maintain and repair the electric vehicles;

f) A 1.3-hectare lot has been made available to a Korean firm for the construction of a shed for horses.

VII.3. Run Ta Ek relocation zone:

For three years now there has been a sharp increase in the population of Zones 1 and 2. In order to avoid unregulated development in the protected zones of the Angkor World Heritage Site, the Government, in agreement with the international community and

UNESCO, has taken strict measures to control the population in the archaeological park. Thus, in late 2004, the ANA was commissioned to take a census of the inhabitants and to establish the Run Ta Ek relocation zone.

The Run Ta Ek site, covering an area of 1,012 hectares, was established under Sub-decree No. 69 of October 19, 2004. It is intended to accommodate people living in Angkor Park who agree to relocate in order to expand their family units, since it is prohibited to extend existing living quarters.

In early 2005, the ANA succeeded in freeing up 90 percent of the land, with some 20 hectares remaining to be expropriated. The site is now being demined and a technical team is working on the topographical survey.

VII.4. Urban heritage preservation:

A study of architectural and urban heritage is now being completed. It is focusing on the colonial quarter and one traditional quarter in the southeastern part of the town. The various urban complexes, pagodas, public spaces and planted areas are being inventoried. The inventory will be accompanied by a description of the urban context such as traffic movement, links between the old quarters to the rest of the town, condition of the habitat, infrastructure facilities, the standards of living and ways of life of the people. The resulting document will serve as a medium for campaigns to raise the awareness of the community dwellers and pupils attending school regarding the history of their home town and features of the local environment, thus involving them in the work of safeguarding and showcasing the part of town where they live and the cultural heritage it embodies.

POPULATION AND DEVELOPMENT DEPARTMENT (DÉPARTEMENT DE DÉMOGRAPHIE ET DE DÉVELOPPEMENT [DDD])

Our activities focus of course on the two key themes of population and development.

VIII.1. Population

Our job is to monitor population developments in Protected Zones 1 and 2 of Angkor Park and familiarize ourselves with the problems confronting the people living there.

- *Monitoring population growth:*

The census of the people living in the protected zones of Angkor was completed in May 2005. It is estimated that the number of families is 18,500 for a population of approximately 100,000 people.

Verifications and checks are being made to give greater credibility to the figures.

It has been striking to see recently an about-turn among people who initially shied away from the census but who are now requesting to be counted.

- *Getting familiar with the problems facing the communities:*

Surveys on education, health, arts and crafts and skills development have just gotten underway. The results will be passed on later.

VIII.2. Development

Five agronomists have been recruited to care for the five districts in the Angkor protected zones. Their purpose is to provide agriculture development assistance to:

- Introduce a new technique for intensified organic rice growing in the months to come;
- Introduce an extension service regarding our two most effective enzyme or micro-organism formulas.

Protected Zones 1 and 2 cover 5 different districts. Each district has been assigned a **rural development facilitator** to help implement the **sustainable** development policy. The facilitator's role will be to promote the activities NGOs and other agencies working in development.

Through these facilitators, a number of grassroots activities have been successfully carried out:

- **Setting up structures conducive to the formation of farmer associations**, a important early step in any development undertaking;
- **Input of new technology** to improve farmer incomes, with sustainable development as the goal.

Working with the local authorities, 28 **model farmers** were selected in the five districts. After receiving an explanation from the facilitators, they agreed to have demonstration plots set up on their land.

The effectiveness of the **new rice growing intensification approach** has been proven, the yield doubling without the use of chemical inputs (chemical fertilizers and pesticides). The success achieved in this component bodes well for the introduction of other new technologies:

- **Use of effective Khmer micro-organisms** (previously called enzymes),
- **New method for raising chickens** recommended by Mr TAT Bun Chhoeurn, Director of the Siem Reap Department of Agriculture.

The model farmer program is something new that will spread out to the villages, and people's view of the ANA will change.

The facilitators are permanently assigned to the field where they will identify other dynamic components that they can use as a basis for talking up the value of forming associations.

Naturally, the final decision is up to the farmers themselves and the facilitators will assume the role of technical advisers.

Once associations are formed, the facilitator will work in the background to help them run smoothly.

Getting local associations formed is a basic early step, as the farmers can work through such groups to apply for **micro-credit**, something they desperately need.

VIII.3. Applied research

Although the anticipated results are often somewhat hit and miss, the Chairman of the ANA, His Excellency Mr SOK An, made the decision to allow research to be conducted on the following:

1. **Effective micro-organisms** (formerly called *enzymes*):

Used world wide, this new product is one that is a recognized contribution to the sustainable development of agriculture. It is heralded to replace the chemical fertilizers, pesticides, hormones and antibiotics currently used in agriculture, such as in raising hogs, growing chickens and fish farming. Furthermore, such chemical inputs pollute the environment and leave *toxic residues* harmful to consumers.

Effective micro-organisms are unknown in Cambodia, so we had to do extensive ***bibliographical research*** to find out about the nature of this technology and how it works, benefiting from experience acquired elsewhere.

Meanwhile, the ***product had to be formulated***, as firms keep such information secret and the formula is not available in literature. Fortunately, a Thai colleague, Dr ROSUKON, passed vital information on to the DDD and it was possible to start making it. The raw ingredients are from Cambodia, the micro-organisms as well, so we have called the product **Khmer EM**. This name has been approved by the Ministry of Agriculture.

- ***Experiments to test the effectiveness of Khmer EM:***

A great variety of raw ingredients were used to produce several types of Khmer EM.

Both pot and field crops were used to demonstrate the effectiveness of the products.

Depending on the raw ingredients used, the results were more or less good:

♦ *Observation under the microscope:*

The degree of effectiveness was studied in relation to the number of micro-organisms. A personal microscope was used to identify the main germs contained in the EM. A more powerful microscope with picture-taking capability will be acquired.

♦ *Micro-organism count:*

With the kind assistance of the National Dairy School in Mamirolle, France, populations of yeasts and lactobacillus present in a sample of Khmer EM Khmer could be counted.

The lab results confirm the results obtained in field experiments, so a Khmer EM made from a variety of vegetation, giving the best results, was produced and used in the agriculture extension work.

We see the need to acquire a properly equipped laboratory.

UNESCO has kindly offered us its assistance in seeking funds for this purpose.

2. Tonlé Sap Lake mud

The purpose of the research is to use mud from the Tonlé Sap as a soil builder to compensate for the lack of colloids (humus and clay), which deficiency explains why the soil in Siem Reap is sandy. There is a tremendous reserve of such mud, so the study is an important one that will have far-reaching effects.

- ***Step 1:*** Sampling campaign

Samples of mud have been taken from Boeung Thom and Boeung Toch for analysis in the laboratories of the Ministry of Agriculture and Ministry of Environment (for heavy metals).

- ***Step 2:*** *Experiments* to be conducted at the Tuk Vil Station and Royal University of Agriculture in Chamcar Daung (Phnom Penh). It is anticipated that this step will take at least two years.

3. Compost

Research was carried out for the most effective composting technique with the assistance of a trainee.

4. Market study on agricultural products

The study got underway in May 2005 with the arrival of an expert.

5. Nurseries

3,500 fast-growing plants were sown, usable for:

- Human food as early as 6 months;
- Green fertilizer and animal food as early as 6 months;
- Fuel wood after two years.

The plants will be distributed to the model farmers in the irrigation area.

DEPARTMENT OF WATER AND FORESTRY (DÉPARTEMENT DES EAUX ET FORÊTS [DEF])

IX.1. Work meetings

- *January 2005:*
 - ♦ 5th: General meeting of the ANA under the senior chairmanship of HE Mr SOK AN;
 - ♦ 6th: Working meeting with Prof. Robert Acker from the University of California at Berkeley to prepare for the project "Explaining Angkor's Greatness—The Hydrology of Angkor-Era Sites";
 - ♦ 13th: Meeting with Mr UK Someth and Prof. Robert Acker to prepare the agreement for collaboration with the ANA;
 - ♦ 17th: Working meeting with the JICA on the Master Plan for the Sustainable Development of the Siem Reap / Angkor Region;
 - ♦ 18th: Seminar organized by JICA and the provincial authorities regarding its work on the Master Plan for the Sustainable Development of the Siem Reap / Angkor Region;
 - ♦ 21st: Working meeting with the University of Sydney;
 - ♦ 24th: Working session with Cécile Califano of DMA-1 about putting identification labels on trees;
 - ♦ 25th: Meeting to delineate the respective areas of jurisdiction of the DEF, DMA-1 and DMA-2;
 - ♦ 26th: Working session with Prof. Ivan Johnson of the University of Sydney, and Mr Rathanab of the JICA, and finally on the underground water situation at Banteay Srei Temple with Mr Marc Franiatte from the Banteay Srei Conservation Project (BSCP).
- *February 2005:*
 - ♦ 1st: Working session with Cécile Califano from the DMA-1 to review the project to plant trees in front of Angkor Wat, submitted earlier to the Director General for approval on January 10, 2005 (ref. Letter No. 117 of January 6, 2005);
 - ♦ 2nd: Seminar regarding announcement of *Decca* SS02 of January 12, 2005 under the senior chairmanship of HE Mr SOK AN;

- ♦ 3rd: Participation in the first seminar on the Master Plan for the Sustainable Development of the Siem Reap / Angkor Region;
 - ♦ 4th: Working session with Prof. Phil Hirsh from the University of Sydney;
 - ♦ 11th: Meeting with Mr Son Kisy, director of the Siem Reap Water Resources and Hydrology Department to determine the level of collaboration with the DEF;
 - ♦ 18th: Meeting of the ANA with the Deputy Prime Minister and Chairman of the Authority, HE Mr SOK AN;
 - ♦ 21st: Working session with Cécile Califano from DMA-1 on projects to plant trees in front of Angkor Wat and put on the DEF's tree identification labels, then with the chief of Nokor Thom commune regarding digging a canal to bring water into Sras Srang, and finally with the chief of Pradak commune to get authorization to pump water over to Sras Srang;
 - ♦ 22nd: Meeting with the village chief and villagers to brief them about the ANA project to bring water over to Sras Srang and use of the water by the people during the dry season.
- *March 2005:*
- ♦ 10th: Meeting with the JICA on the project: Study on the Integrated Master Plan for the Sustainable Development of Siem Reap / Angkor;
- *April 2005:*
- ♦ 7th: Working session with Mr Tharapong Sreisuchat, director of the Sixth Regional Office of the Fine Arts Department, University of Culture, Thailand;
 - ♦ 21st: Working meeting with the ANA Director General on the project to bring water over to Sras Srang and regarding topography with a view to repairing the Khmer Rouge Dam;
 - ♦ 26th: Working session with Mr Uk Someth regarding a study of the water situation for the development of the Run Ta Ek area;
 - ♦ 28th: Meeting with the Environmental Management System team.
- *May 2005:*
- ♦ 11th: Working session with Ms Andrea Brown from the University of Florida on the different irrigation systems in the Siem Reap / Angkor region, followed by a meeting with Mr Charles R. Ortloff on groundwater use.
- *June 2005:*
- ♦ 3rd: JSA work site closing ceremony under the High Patronage of His Majesty King NORODOM Sihamoni;
 - ♦ 7th and 8th: Meeting of the ICC Technical Committee.
- *July 2005:*
- ♦ 6th: Participant;
 - ♦ 7th: Working meeting on water problems with the Center of Water Research, Gwangju Institute of Science and Technology;
 - ♦ 14th: General meeting of the ANA chaired by HE Mr SOK An;
 - ♦ 19th: Banteay Srei work site closing ceremony organized by the BSCP under the High Patronage of His Majesty King NORODOM Sihamoni.
- *August 2005:*
- ♦ 4th: Meeting on the theme "Tonle Sap EMSB" with the University of KANAZAWA (Japan);
 - ♦ 8th: Meeting with DMA-1 on land use in Zone 2;

- ♦ 15th and 16th: Ceremony to give prizes to children at Sras Srang and meeting on the ISO 14001 program relating to the environment;
 - ♦ 17th: Meeting on planning the Run Ta Ek zone;
 - ♦ 18th: Briefing meeting on sound and light projects and surveillance of the Angkor site by the Korean firm SO CHENG;
 - ♦ 19th: Inter-ministerial technical meeting on canal networks and sewage water disposal system;
 - ♦ 30th: Meeting with JICA on the Master Plan for the Sustainable Development of the Siem Reap / Angkor region.
- *September 2005:*
- ♦ 7th: Meeting on planning the Run Ta Ek zone;
 - ♦ 12th and 13th: Opening ceremony of the 7th Angkor tour guide retraining session and provision of courses on water and forestry;
 - ♦ 13th to 16th: Participation in a field survey operation in preparation for shooting of the USHUAIA film on environment and ecology for French TV channel TF1;
 - ♦ 19th: Meeting to review plans for the future headquarters building of the ANA presented by the KCEC firm and the agenda for the ICC Plenary session on November 28 and 29, 2005;
 - ♦ 21st: Meeting on planning of the Run Ta Ek zone;
 - ♦ 22nd to 26th: Various working sessions with UNESCO expert Mr. Lucien Chabasson on land use procedures in Protected Zones 1 and 2;
 - ♦ 28th: Meeting on planning of the Run Ta Ek zone with the DUDU;
 - ♦ 29th: Working meeting with the University of KANAZAWA (Japan).

IX.2. Investigations conducted in response to needs of the DEF

- Comprehensive study of the Western Baray irrigation systems, the water supply canal from Angkor Thom to Trapeang Ses and from the water pumping point on Trapeang Ses to the moats of Angkor Wat, and sourced from Kok Chan on the Northern Baray, the Ta Niev Dam, the Chombok Thom dam at Banteay Srei Temple, in order to get a clear picture of irrigation possibilities.
- Seed harvesting (seeds from *bêng*, *kokok*, *thnoug* trees, etc.) in the park, gathering statistics on the trees in front of Angkor Wat, Banteay Kdei Temple and other trees in the park, from the Kbal Spean site as part of the tree labeling operation.
- Fresh study of the trees in front of Angkor Wat for the treatments (along the road in the Culture and Tourist City) and set up of fire routes in the forest in Protected Zone 1.

IX.3. Cooperation arrangements

- *International:*
 - ♦ With the JICA for the "Study on the Integrated Master Plan for the Sustainable Development of the Siem Reap / Angkor Region";
 - ♦ University of Sydney, Australia for the hydraulic study of the Siem Reap River;

- ♦ University of California at Berkeley, research by Prof. Robert Acker on “Explaining Angkor’s Greatness—The Hydrology of Angkor-Era Sites”;
 - ♦ Banteay Srei Conservation Project for preservation of the Banteay Srei Temple highlighting the water and forest;
 - ♦ Fine Arts Department, University of Culture, Thailand to gain insight into environmental management at the Sukothai World Heritage Site and Kamphaeng Phet;
 - ♦ University of Florida, USA: Siem Reap province irrigation system and modulation of underground water;
 - ♦ University of Kanazawa, Japan: *i)* Tonlé Sap EMSB Program: assessment of the sustainability mechanism of the Great Tonle Sap Lake’s biodiversity and proposals for the “Tonlé Sap EMSB-U32 program”; *ii)* Surface hydraulics of Siem Reap / Angkor and the Great Tonlé Sap Lake; *iii)* air quality in Siem Reap/Angkor;
 - ♦ French television channel TF1: Field survey to prepare for shooting the film “USHUAIA” on the environment and ecology, scheduled for December 2005;
 - ♦ UNESCO expert Mr Lucien CHABASSON: Preparation of legal measures for land use in Protected Zones 1 and 2.
- *Other departments of the APSARA National Authority:*
- ♦ With the DDTA to organize *i)* a new tour circuit in the Angkor Thom forest (Boeung Thom); *ii)* Visit of the Kompong Phluk site in order to set up a tourist itinerary featuring the flooded forest; *iii)* production of maps of the tour itineraries available in the Siem Reap / Angkor region; *iv)* development of Run Ta Ek as a tour destination; and *v)* project for “botanical water and forest” gardens in Angkor Park;
 - ♦ With DMA-1 for *i)* bringing water into Sras Srang and the Angkor Wat moats; *ii)* dredging the Taneav canal at Sras Srang by DEF workers; *iii)* putting identification labels on trees in Angkor Park; and *iv)* organization of a new circuit to Banteay Srei Temple including the surrounding environment, to be carried out with the DDTA, as a means of controlling visitor flows;
 - ♦ With DMA-2 for preparation of *i)* the project to reforest and supervise the irrigation zone as requested by the villagers in Nokor Thom commune; *ii)* use of water and the forest in the protected zone in response to the needs of the communities and for development of the Run Ta Ek zone, *iii)* construction of a bridge and dirt road; *iv)* assistance from the DMA-2 for the architectural design of

a Khmer vegetable, spice and flower garden on the 2-hectare lot in front of the SOS Children's Center and a botanical garden on the theme "Water and Forest" on 315 hectares west of Phnom Bok;

♦ With the DDD to provide assistance in *i)* the urgent work of taking a census of the communities in Zones 1 and 2 (making staff and means of transportation available); and *ii)* agriculture development in the Run Ta Ek zone slated for the relocation of people living in Zones 1 and 2;

♦ With the DUDU for *i)* development work on the banks of the Siem Reap River; *ii)* study of water problems in the Culture and Tourist City and of water and forestry concerns in the wake of urban development in the Run Ta Ek zone.

- *Province de Siem Reap*

♦ With the Siem Reap Provincial Department of Water Resources and Meteorology to *i)* determine responsibility sharing for management of the Siem Reap River and other concerned regions; *ii)* manage the valves on the Ta Keo dam (also known as Frenchmen's dam) and on the Western Baray; and *iii)* control of the Tukvil divisor;

♦ With the Siem Reap Provincial Department of Mines and Energy for *i)* information on clean water production in Siem Reap province: town of Siem Reap and Pradak commune; *ii)* use of the Taneav (Phnom Bok) reservoir;

♦ With Nokor Thom commune: supervision of the Taneav reservoir water drainage canal at Sras Srang that crosses both Pradak and Nokor Thom communes. This work was negotiated earlier with the rice paddy owners in order to get the canal dug from the Taneav reservoir to Sras Srang.

IX.4. Activities of the department

1. Water management:

- *Sras Srang:*

The study of Sras Srang and the Angkor Wat moats revealed that the region was being affected by a serious drought. The DEF took steps to bring in water and set up a working group to keep an eye on water sources and control water supply canals. The department submitted an application to carry out this work (letter No. 159/05 and letter No. 160/05 requesting that a canal be dredged from the Angkor Thom moats up to Trapeang Ses and for Sras Srang to be supplied with water as a matter of urgency) and received approval from the Director General to fill Sras Srang. Research on water sources and ways of bringing water into Sras Srang pointed out that water first had to be brought in from the Ta Neav dam by canal up to the Khmer Rouge dam and that the canal required dredging over a distance of some 7 kilometers. The digging work and dredging started on February 22, 2005, after which it was possible to have water flow into Sras Srang starting on March 16, 2005. As March is in the middle of the dry season, the water level at the Ta Neav dam was low because that the people were taking water from the canal to flood their rice paddies, and the result was that only a little water actually reached Sras Srang.

The department's Water Management Unit is therefore working on the following countermeasures:

- ♦ A project to install drain lines at the water input point for Sras Srang;
- ♦ A project to study the topography in certain zones;
- ♦ The historical waterway from the Northern Baray;
- ♦ A project to repair the opening of the Khmer Rouge dam;
- ♦ Study the underground water situation using existing wells.

The drainage canal between the Sras Srang bridge and its reservoir has been partially completed, 400 m long, 4.5 m to 6.5 m wide and 1.45 m to 2.35 m deep.

To protect the banks from erosion, grass and *rum-chek* (*Pandanus humilis* *Pandanaceae*), a local plant that grows along the edge of the canal and on rice paddy bund walls, were planted on them.

- *Siem Reap River and Roluos River:*

While awaiting acquisition of a rotating current meter (a device that measures the speed and volume of the water flow) for the collection of hydrological data, the DEF borrowed the one belonging to Water Resources Consultants Co., Ltd. in order to carry out this operation.

The department also measured the depth of the Siem Reap River upstream from the Banteay Srei bridge, Kraing Kroch bridge and Canal A. The Roluos River was likewise measured upstream from the Phnom Bok reservoir and downstream from the Rumchek bridge. These operations yielded information on the runoff rate of these rivers.

A project to install equipment on the slopes of the watershed basin of both rivers to model and predict flooding was proposed to the Directorate as a means to manage water resources more efficiently.

- *Underground water:*

The level of underground water has been recorded by taking measurements manually in the open wells used by the people in villages in a radius of 30 kilometers around Angkor Park. **1,019** wells have been listed, but due to the lack of automatic recording equipment, measurements could only be taken from **318** of these reference wells.

2. Forest management

- *Statistical work on trees:*

♦ Phase 1: Work got underway in the areas frequented by tourists: the gateway areas in front of the monuments and within the temple enclosures;

♦ Phase 2: Work is underway in the zones accessible from the "Petit Circuit" and "Grand Circuit" to put identification labels on the trees. It involves: *i*) recording the names of the trees; *ii*) determining specific locations where they grow; *iii*) determining the numerical coordinates thereof; *iv*) developing a description of each species and group and including various characteristics of the tree.

After these two phases were completed, the DEF started work to identify the trees in Angkor Park as well as at Kbal Spean and Beng Mealea. Identification labels are now being put up in order to create a tourist attraction complementary to monument visits. To date, **7,379** trees have been recorded and 600 identification labels have been put up:

No.	Temples	Number of plates	Follow-up
1	Bayon	91	1 broken plate
2	Phimeanakas and Baphuon	43	1 broken plate
3	Ta Prohm	99	9 broken plates
4	Banteay Kdei	56	
5	Preah Khan	68	
6	Takeo	50	
7	Thommanon	21	
8	Kravan	15	

9	Pre Rup	15	
10	Eastern Mébon	14	
11	Ta Som	57	
12	Palilay	71	
Total		600	11 broken plates

Within Siem Reap town, **104** identification labels for plants growing in the Wat ReachBo Pagoda courtyard have been put up.

- *Tree seedling station:*

The DEF set up a nursery (Mondul 3) and seedlings are produced from seeds collected in the protected zones of Angkor Park. It is home to **13,449** seedlings of 11 different species as shown in the table below:

No.	Khmer name	Scientific name		Number
1	KOKI	<i>Hopea odorata</i>	Dipterocarpaceae	5,100
2	CHHEU TEAL	<i>Dipterocarpus alatus</i>	Dipterocarpaceae	2,200
3	RUMDUOL	<i>Goniothalamus repevensis</i>	Annonaceae	2,200
4	POPEL	<i>Hopea recopei</i>	Dipterocarpaceae	1,300
5	BEING	<i>Azalia xylocarpa</i>	Leguminosae- caesalpinioideae	1,200
6	THNONG	<i>Pterocarpus indicus</i>	Leguminosae- papilionoideae	600
7	TRACH	<i>Dipterocarpus intricatus</i>	Dipterocarpaceae	400
8	KHNOR PREY	<i>Artocarpus rigidus</i>	Moraceae	240
9	SEMOAN	<i>Nephelium hypoleucum</i>	Sapindaceae	100
10	ANGKANH	<i>Cassia siamensis</i>	Leguminosae- caesalpinioideae	87
11	CHUNLOU	<i>Lepisanthes rubiginosa</i>	Sapindaceae	22

- *Reforestation:*

A 22-hectare piece of land northwest of the Culture and Tourist City Road put in by the ANA has been set aside for reforestation to round out the Mondul 3 nursery. There were not enough seedlings for the area to be planted, so the DEF made an appeal for donations, the results of which are shown below:

	Donors	Trees	Source
1	APSARA Authority	6,000	Siem Reap province
2	CHAU SUN Kérya (DDTA director)	50	Siem Reap province
3	DEF staff (APSARA)	300	Siem Reap province
4	DEF (APSARA)	304	Mondul 3, Autorité APSARA

5	Toul Damnak, Kompong Thom	200	Kompong Thom province
	Total	6,854	

With the 6,854 trees thus obtained, 6 of the 22 hectares available have been replanted.

- *Compost:*

As a nursery off-shoot activity, the DEF began making compost from the fallen leaves collected by the HCC Company, which holds the concession for clean-up operations in Angkor Archaeological Park.

The yield was **25 cubic meters** of compost that was used during the tree-planting operation in the area northwest of the Culture and Tourist City road. Another **42 cubic meters** are now being processed. On the average, it takes 105 days per batch.

- *Forest health:*

15 workers are removing weeds to promote the rapid growth of the seedlings in the reforested area along the northwest section of the Culture and Tourist City Road. Only an area of 10 hectares remains unweeded as there is a shortage of staff and work is extending into other zones of Angkor Park.

Some trees in Angkor Park have been mutilated by people in the local communities who slash holes in them and fire them to draw out resin that is used for fuel. These wounds are aggravated due to the humidity and tropical climate conditions. The affected trees can suffer from serious disease if they are not cared for. Tests have been made using an ancient treatment on large trees suffering from injury growing along the road that edges the western moat of Angkor Wat.

3. Environment

There is no technical control of motor-driven means of transportation and there are no anti-pollution regulations to protect the Angkor Park environment. Because of constant increase of traffic in Angkor Park, it became necessary to set up a device to analyze air quality at two sensitive points: the Sokha Hotels ticket sales booth and the parking lot west of Angkor Wat. The data collected is used to determine the level of pollution caused by vehicle emissions and dust. These measurements are taken twice yearly (in April and October).

The water quality of Siem Reap River is also analyzed monthly at three different points: *i)* Prasat Keo dam (upstream from the town of Siem Reap), *ii)* Wat Damnak Bridge (downtown); and *iii)* Ta Doung Bridge (downstream from the town).

4. Tourism

In cooperation with the DDTA, after ten months of field study focusing on bodies of water, water flow and landscape changes from one season to the next, a tour itinerary and requisite amenities have been determined for the walking or bicycle tour from Boeung Thom to RunTadeav (Bayon).

Included among the projects for tourist attractions to add diversity and encourage visitors to stay longer is a Khmer vegetable, spices and flower garden. It is being studied (in cooperation with the DDTA and DMA-2). Plans call for it to occupy a 2-hectare area in front of the SOS Children's Center on Temple Road. The garden is to be divided into two sections, the larger one to the west being used for vegetable growing with 119 different plant groups, while the remaining one is to be used for local flowers, of which there are 75 species. A landscape plan showing plots for the various types of plants is being developed and a study is being done on the drainage and irrigation system to make it into an all-seasons garden.

IX.5. Human resources in the department

The department has a total staff base of 14 people:

- 1 department director
- 13 technicians.

IX.6. ICC recommendations

Among the 17 recommendations made at the ICC Technical Committee meeting in June 2005, the DEF was particularly concerned with the following:

- **The 10th recommendation on water management:**
 - ♦ Sustainable development of water resources depends entirely on having precise hydrological data from the field. Thus, **9** stations for taking measures of the water level have been selected to monitor annual changes in the watershed basin of the Siem Reap and Roluos Rivers, and **2** meteorological stations for the Siem Reap / Angkor region. The equipment needed to carry out this project will cost approximately **US\$50,000**, and this matter is awaiting approval from the Chairman of the APSARA Authority.
 - ♦ To carry out this work, the DEF has recruited three new hydraulics engineers.
- **The 11th recommendation on the forest at Phnom Kulen**

Subsequent to the studies made, a proposal regarding the **sustainable management of the Phnom Kulen forest** has been made and submitted to the Director General, outlining the major risks for the environment along with remedial forestry activities. It comes with a price tag estimated at:

- ♦ Equipment: **US\$244,100** (two hundred forty-four thousand one hundred US dollars);
- ♦ Monthly operating expenses come to **US\$63,050** (sixty three thousand US dollars), which amounts to an annual cost of **US\$756,600** (seven hundred fifty-six thousand six hundred US dollars).

VISITORS NUMBER OF ANGKOR ARCHAEOLOGICAL PARK					
	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004
January	17 100	24 189	30 578	39 809	51 875
February	18 900	23 351	32 612	37 414	37 342
March	17 550	21 550	33 007	31 673	31 660
April	10 750	15 826	21 837	13 529	26 830
May	10 300	11 322	18 203	8 795	25 474
June	8 750	12 453	14 826	10 547	21 632
July	13 550	18 893	21 798	19 512	29 954
August	16 400	21 937	26 197	24 777	37 229
September	12 201	15 838	19 107	21 681	30 735
October	14 612	17 016	23 137	25 546	39 193
November	23 274	26 097	35 337	42 204	56 130
December	22 525	30 619	39 058	46 070	62 992
Total	185 912	239 091	315 697	321 557	451 046
Revenue	5 795 160,-	7 277 620,-	9 124 240,-	9 487 940,-	13 218 680,-

5. Human resource strengthening and training:

- Sessions of continuing education for the staff of the ATDD and sessions of retraining of the guides operating in the Angkor site have been organized by the ATDD to improve professional expertise and human resources.
- Tourist guides retraining program: a session of recycling and improving had been organised in May 2004 for 100 tourist guides operating in the Angkor Park. These courses will be held in French, English, Japanese and Thai languages.
- Continuing education of the ATDD staff: one week of training in early December, by a professor of Sorbonne University of Paris, specialist of the environment and the management of the parks in the South of France has been organized for the staff of the department.

6. International cooperation in tourism:

- The W.T.O. (World Tourism Organization) organised a conference for Asian countries on "Cultural Tourism to Reduce Poverty" held in Siem Reap/Angkor.
- The Director of the ATDD actively participated in the meetings for the signing of a bilateral administrative arrangement between the Ministry of Tourism of Cambodia and the Ministry of Tourism of France, during the visit of His Excellency Mr. Léon Bertrand, Minister of Tourism, France
- The ATDD, in collaboration with UNESCO, organised an international seminary on the theme of "Tourism and Sustainable Development" in October 2004 at Siem Reap/Angkor. The closing ceremony was made by the Vice Prime Minister, His Excellency Mr. SOK An at the Office of Council of Ministers in Phnom Penh. Journalists and national television stations attended the closing ceremony.

7. Abroad missions:

- the Director of the ATDD has been invited by ICOM International to represent the National Committee, at a meeting in Seoul and to present the actions undertaken by Cambodia for the fight against the illicit trade of Khmer Artefacts.
- A staff member of the ATDD, Mr. LOUK Sok Leng, has been trained in Tourism Administration for 5 months in France, at Carcassone City.

- Mr. ROS Try, in charge the Public Investigation Unit of the ATDD will go to France at the end of the year for training at the MONUM' (National Monuments Center of France).

VI. The Department of Urbanism and Development of the Region of Siem Reap/Angkor (DUD)

Previously known as The Department of Urbanism and Urban Development, this department has been renamed "The Department of Urbanism and Development of the Region of Siem Reap/Angkor".

All projects are ongoing, some with completion as far as 2008.

As a result of problems with administrative procedures, accounting only covers the period January through to October 2004.

The present document reflects the actions hired in the year 2004, work and the performance of the former Department of the urbanism and Urban Development of the APSARA authority that carries the name of Department of the urbanism and Development of the Region of Siem Reap-Angkor henceforth. Most projects and studies are, or ongoing of completion or continue on the basis of a slippery multi-year scheduling and can be considered like projects having some objective à middle and long fixed terms on the horizon 2008.

It also reviews the undertaken major actions and achieved in 2004, while trying to be clear, precise for a fast understanding, but considering the administrative procedures of accounting, and the unavailability of all financial information, it only covers only 9 months of 2004, of January in October.

The focus of the program is to develop a Cultural and Tourist City that embraces a globally strategic plan. In order to achieve this APSARA Authority will follow 2 strategies:

- The first is to give the APSARA Authority the ability to promote clean resources through various investments while using local and foreign funds. The collected incomes will then be redistributed to achieve other important projects. Part of these funds will be dedicated to the preservation of monuments and the culture.
- The second is to assure the protection of that part of the natural environment, which is the world heritages. The future City should play a cohesive roles where past meets present and maintains a harmonious balance between economic development, social progress and the well-being of the population.

It is from this perspective that a path of lasting development can be laid and a substantial contribution to the reduction of poverty can be made.

All projects and studies of 2004 are finished or ongoing. They are listed in the Picture N°1.

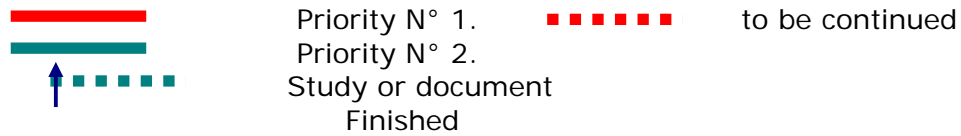
- a. Regulations of urbanism and construction.
- b. Ongoing communication program for mass media.
- c. The Angkor Park reforestation project to be completed and submitted to Miss Angelina Jolie for financing.
- d. Project No 1 of the French Development Agency (AFD) to be finished.
- e. Recruitment program submitted for approval.
- f. Management plan for the Cultural and Tourist City (CTDZ) to be prepared with the project No 2 of the AFD.

- g. Project of creation of Siem Reap City urban databank (French speaking countries project).
- h. Project No 2 of the AFD started with the feasibility study by ICEA Company.
- i. Water resource management plan for the region of Siem Reap/Angkor, prepared and presented.
- j. Museum of Asian Traditional Cloth, grant of the government of India), presentation of the project on next ICC meeting.

Tableau N° 1

Objet	Projects	September 2004		October 2004			
		Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
1	Urbanism regulation	—	—	—	—		
2	Mass media programme	—	—	—	—	—	—
3	Angelina Jolie Project	—	—	—	—	—	
4	Project N° 1 AFD	—	—	—	—	—	—
5	Recruitment Programme	—	—				
6	Management Plan		—	—	—	—	—
7	Urban data bank			—	—	—	—
8	Project N° 2 AFD	—	—	—	—	—	
9	Water resource management			—	—	—	—
10	Museum of Traditional Cloth	—	—	—	—	—	—

Legend:



VII. The Department of Demography and Development (DDD)

- Creation date: June 9, 2004.
- Technical staff: 14 engineers; most of them are graduated from the Agricultural Royal University of Chamcar Daung and recruited in September 2004 (1 agronomist, Ph D of Sciences).

I. Main Activity (since its creation): demographic Survey

1. September 2004 - October 2004: compilation of statistical data of the population living in the protected zones 1 and 2 of Angkor and that, by the local authorities.

Results:

People number: 98.000
Number of families: 17.120

2. November 2004: census and identification (photo) of every family in the same zones (1 and 2)

Results: 1.900 families have been counted.

II. Supplementary activities

1. Biologic Agriculture

As the objective of sustainable development, the Department recommended biologic agriculture which uses natural products such as compost, muds (of the Large Lakes of the Tonlé Sap)

Enzymes* are being an innovation in Cambodia, as the use of muds.

For the " Enzymes ", we proceeded to:

1.1. Clarify their manufacture (from the local natural products)

1.2. Survey their efficiency.

The muds of the Large Lakes of the Tonlé Sap are currently in the process of testing their efficiency and their toxicity (for plants).

2. Framing for end study thesis of a student of the International school and Development, Lyons (France).

Natural *Biocatalyst acting like stimulants of the microbial activities

VIII. The Department of Water and Forestry

1. A project proposal for the reforestation of 1 885 ha of land in zone 1 between Angkor Vat, Bayon and Baray (' Reforestation Project in Siem Reap/Angkor Region') prepared seeking financial help from the American actress, Ms. Anjolina Jolie. However, this proposal was delayed until the meeting of the APSARA Authority of September 22, 2004 at the Office of the Council of the Ministers with Vice Prime Minister H.E Mr. SOK An

2. Registration of the names of trees growing in the region of the most frequented tour areas for using a GPS (Global Positioning System) to determine the exact position of the trees.

This registration will be used to make identification signs written in Khmer and scientific name and family.

The DEF recorded 3 933 trees with 200 different names. This work was made in the tour of the temples as referred to in the appendix.

3. During the period of drought (November and December) of this year, the DEF cooperated with the DDD of the APSARA Authority and the Department of Water Resource and Meteorological of Siem Reap province to irrigate the rice fields at:

- the township of Svay Chék in the district of Angkor Thom and
- the township of Preah Dak in the district of Banteay Srey.

4. Sourcing the locations of waste-water disposal in the Siem Reap River in order to determine the sources of pollution.

5. Placement of water level measuring points for the Siem Reap river and at the meteorological station of Siem Reap.

6. Examine existing system of downstream irrigation at Toeuk Vil (until the Phnom Krom).

7. Survey to check the quality and level of underground water of villager's wells installed by the JICA.