United Nations Development Program

برنامج الامم المتحدة الانمائى

Egypt

EGYPTIAN-ITALIAN ENVIRONMENTAL COOPERATION PROGRAM PHASE II

HAND-OVER CERTIFICATE

ISSEMM Project

Institutional Support to Supreme Council of Antiquities for Environmental Monitoring and Management of the Cultural Heritage Sites: applications to Fayoum Oasis and North Saqqara Necropolis

December 2010

Government of the Arab Republic of Egypt

Egyptian Environmental Affairs Agency

Supreme Council of Antiquities

Italian Ministry of Foreign Affairs – Directorate General of Co-operation for Development

Embassy of Italy in Egypt

THE UNITED NATIONS DEVELOPMENT PROGRAM

WHEREAS a Memorandum of Understanding (hereinafter referred to as the "MoU") for the implementation of the Egyptian Italian Environmental Cooperation Program – Phase II (hereinafter referred to as the "Program") was signed in Cairo on November 5, 2003, between the Government of Italy (GOI) - acting through the Ministry of Foreign Affairs, Directorate General of Co-operation for Development - as the first Party, and the Government of Egypt (GOE) - acting through the Ministry of State for Environmental Affairs - as the second Party;

WHEREAS the Management Committee of the Italian-Egyptian Debt-for-Development Swap Program approved to co-finance the Program through a specific Project Implementing Agreement, which was signed on January 21, 2004, between the abovementioned Management Committee and the Egyptian Ministry of State for Environmental Affairs / Egyptian Environmental Affairs Agency;

WHEREAS a Third-Party Cost Sharing Agreement was signed on February 18, 2004, between the Government of Italy - acting through the Ministry of Foreign Affairs, Directorate General of Co-operation for Development - as the Donor - and the United Nations Development Program (UNDP), for the provision of support services by the UNDP Egypt Country Office, in the execution and implementation of the Program within the framework of UNDP National Execution arrangement;

WHEREAS a cooperation program in the field of Environment between the GOE and the GOI has been already undertaken from 1998 to 2003 through the initiative "Institutional Support to the EEAA to improve planning capabilities for rehabilitation and protection of natural and cultural environmental resources and implementation of pilot projects within the framework of Egypt's National Environmental Action Plan (NEAP) activities";

WHEREAS, in the frame of the above program, the project "Enhancement of the Organization and Capabilities to preserve the Cultural Heritage of Egypt" has already prepared a Risk Map for North Saqqara site based on egyptologic, architectural, environmental and conservation data, in order to ensure the improvement of conservation of the monuments and the sustainable management of the site;

WHEREAS the GOE and the GOI considered the need to strengthen the institutional capacity of the Supreme Council for Antiquities (hereinafter referred to as "SCA"), in order to improve monitoring and management of archaeological sites in Egypt.

WHEREAS the project "*Institutional Support to Supreme Council of Antiquities for Environmental Monitoring and Management of the Cultural Heritage Sites: applications to Fayoum Oasis and North Saqqara Necropolis_ISSEMM*" (hereinafter referred to as "The Project"), has been implemented from *March 2004 to November 2010* in the framework of the MoU, with the aim, in Fayoum, to facilitate the sustainable development of the environmental and cultural assets, paying special attention to the preservation and the management of the archaeological site of Medinet Madi, whereas in Saqqara Site, to promote and develop the archaeological site in compliance with environmental protection against stress, to ensure its integrity for the future.

NOW THEREFORE,
UNDP DECLARES THAT

The Project has been substantially completed in accordance with the MoU and with the Project Document originally approved by the Parties and subsequently amended and updated by the Project Executive Committee (PEC), as per Annex 1 "*Declaration of Achievement of Expected Results*";

APPROVES

To transfer the ownership of the project to the Ministry of State for Environmental Affairs, which in turn definitely assign the ownership of all physical assets purchased, as well as intellectual assets delivered through the Project - as per Annex 2 "*Inventory List*", to *SCA*. The Conditions and responsibilities of the recipient party are listed in the Annex 2 "*Declaration on Handing over*";

REQUESTS

The recipient party to guarantee scientific/technical and institutional sustainability and further development to the results achieved by the project as well as to enhance their dissemination and the use among the main stakeholders as per Annex 3 "Declaration of commitment towards sustainability of Achieved Results and Deliverables".

•••

The Parties herewith agree to establish, within 15 days from the signature of the present Hand-Over Certificate, a Quadripartite Committee (*Program Follow-Up and Monitoring Committee*, PFUMC) composed by two Egyptian Members (nominated by EEAA and by UNDP) and two Italian members (nominated by Italian Embassy and DGCD-Rome) with the mandate of monitoring the results

achieved by the Project as well as the implementation of the strategy for their sustainability.

PFUMC shall meet regularly for its ordinary tasks or ad-hoc meetings may be called, upon request of any of the Parties and shall issue decisions and resolutions by consensus.

The following Annexes constitutes integral part of this document

Annex 1: *Declaration of Achievement of Expected Results*

Annex 2: *Declaration on Handing over / Inventory List*

Annex 3: *Declaration of commitment towards sustainability of Achieved Results and Deliverables*

Annex 4: *PEC Meeting, held on 21st September 2008*

Annex 5: *PEC Meeting, held on 2nd March 2010*

Annex 6: *G.I.S Contract signed between ISSEMM/SCA and IT Synergy, signed on 13th July 2010*

Annex 7: *Maintenance Plan_ Visitor Center of Medinet Madi Archaeological Site*

Annex 8: *Maintenance Plan _unpaved track between WRPA Headquarters and Medinet Madi*

Annex 9: *Draft text of the Agreement to be signed between EEAA and SCA*

In witness whereof, the parties hereto have agreed the present document in four originals in the English language.

Cairo, 16th December 2010

(Place and date)

United Nations Development Program
Resident Representative

Dr. James W. Rawley

Supreme Council of Antiquities
The Secretary General

Dr. Zahi Hawass

The Minister of State for Environmental Affairs

H.E. Maged George Elias

Annex 1

Declaration of Achievement of Expected Results

The Ministry of State for Environmental Affairs (MSEA), as the Governmental organ responsible for environmental policies, and the Egyptian Environmental Affairs Agency (EEAA), which represents the main executive and administrative body of the Ministry responsible for environmental protection, considered as an urgent need the preservation, conservation and effective management of the natural resources as cross-sector issues. In order to overcome the difficulties that hindered the strengthening of the environmental legislation, the MSEA/EEAA started up an harmonizing process finalized to introduce environment oriented approaches and integrated actions in cross-sector initiatives.

EEAA acted as the coordinating body for all government activities pertaining to the environment and its conservation, including the coordinated strategy with other concerned authorities in the preparation and implementation of plans and programs for environmental protection. In particular, it started an extensive consultation process with the Supreme Council of Antiquities, which represents the supervising authority for the Ministry of Culture and the organ that assists the government in its decisions concerning Egyptian Cultural Heritage.

Its comprehensive powers and tasks include: formulating plans and implementing sectorial policy on antiquities, issuing resolutions on and guidelines for the study and the protection of antiquities. It encourages and manages archaeological research and the establishment of museums.

Within the framework of donor's initiatives aimed to assist the implementation of the National Environmental Action Plan (NEAP), the Directorate General of Cooperation for Develop (DGCD) of the Italian Foreign Ministry, the EEAA and the United Nations Development Programme (UNDP) have designed the Egyptian-Italian Environmental Cooperation Program (EIECP) Phase II that has been implemented since January 2004.

For Phase I of the EIECP, the Egyptian and Italian Parties decided that the technical assistance services, including transfer of technology, training and scientific dissemination shall be performed by competent and agreed consultancies (AC). On the grounds of the excellent results achieved by the Program and in order to ensure technical continuity, the Parties have agreed to appoint for Phase II the same institution of Phase I to implement the same type of activities in the same fields of expertise.

For the ISSEMM Project "*Institutional Support to Supreme Council of Antiquities for Environmental Monitoring and Management of the Cultural Heritage Sites: applications to Fayoum Oasis and North Saqqara Necropolis"* one of nine components of the larger program the Parties have appointed the

University of Pisa (UNIPISA) as Agreed Consultancy, contracted by UNDP through ISSEMM project.

The ISSEMM project has been formulated upon the experiences and lessons learnt during the previous Phase I of the Egyptian-Italian Environmental Cooperation Program (EIECP), agreed upon through the Memorandum of Understanding signed on June 18, 1998 between the Government of the Italian Republic and the Government of the Arab Republic of Egypt. A component of EIECP Phase I was the project "Enhancement of the Organization and Capabilities to Preserve the Cultural Heritage of Egypt - Risk Map for North Saqqara site, also known as Risk Map of North Saqqara (RMNS). The ISSEMM Project, started in 2005, stems from the need to follow-up Phase I with monitoring system and other implementation activities in North Saqqara to address the problems of strengthening the institutional capacity of the Government of Egypt's Supreme Council for Antiquities for monitoring and managing cultural and natural resources.

In fact, the ISSEMM Project proposal for Fayoum Governorate was based on the desire to investigate and develop the new assessment techniques applied to other antiquity sites in Egypt, through the development of Pilot Projects. The proposal for Fayoum, was composed by two basic components: one cultural which core was the archaeological site of Medinet Madi and one natural, the Wadi El Rayan Protected Area, adjacent to the site, combining in a synergic action the sister project that was an already EIECP Phase I funded activity.

In spite of the problems encountered, the project been discontinued for more than one year and half, it restarted on the grounds of the recommendations received from the Mid-Term Evaluation and the Italian Directorate General of Cooperation for Development.

Thanks to the ISSEMM Project, enhancement of archaeological sites and decentralized management actions had inception and positive results were reached. Among the main achievements:

- In capacity building and training field: training courses and workgroups have been carried out at SCA premises. The personnel was trained through on the job experiences on the following tasks: Archaeology and archive research data entry, Computer graphic, G.I.S data base, Environmental Monitoring and Conservation.
- In monuments and archaeological sites conservation field:
  - the North Saqqara Monitoring System has been enlarged including 15 tombs. The system allows to record variations in temperature, relative humidity and carbon dioxide levels. These environmental factors play an important role in developing a conservation strategy to save the fragile wall paintings in these monuments.
  - the institution of a buffer zone around Medinet Madi archaeological

perimeter, defines a respect area in order to protect and minimize the dangerous impact due to the agricultural and urban expansion around the site area. The 3 Km perimeter results in application of the Decree of the year 1902.

- the restoration of archaeological site (sand removal area, consolidated and restorated surfaces)

- In Management of Cultural Sites through Information Technology:

  - the North Saqqara Monitoring System installed, and its combination with the North Saqqara Geographical Information System, represents the first step towards the implementation of integrated management applied to archaeological areas. Through the dedicate software Sentinel, the collected data are managed by the system, that will allow to plan the flows of visits to the tombs.

  - the Geographical Information System applied on Fayoum Governorate territory, allowed new assessment tools to be developed. It integrates, stores, analyzes and displays geographic information for informing decision makers. The archaeological sites of Fayoum and in general its cultural heritage along with the protected areas and the natural habitats, have been geo-referred and mapped. Those thematic maps may be the base of further studies for a strategic masterplan for Fayoum sustainable development.

- Integrated actions and synergies among the EIECP Components:

  - Regarding Fayoum activities, the design of the project management and institutional arrangements has encouraged local authorities to participate in decision-making thus promoting decentralization and enhancing their management capabilities.

    The close interaction with the other sister project proposed under the umbrella of the EIECP, provided practical cases with which identify and test the various policy initiatives developed during the implementation of the Phase II of the Programme under the policy work of the national level, Legal and Institutional Framework of the MSEA/EEAA Project and protected area management activities at the Wadi el Rayan Protected Area. The construction of the track linking Medinet Madi Archaeological Site to Wadi El Rayan Protected Area has been the practical case of this integrated action.

Furthermore, as stated in the project document, as project of the larger Egyptian Italian Environmental Cooperation Program (EIECP), the outputs of this project are also shared with the EIECP project in the Wadi Rayan Protected Area. Policy outputs are directly linked to the EIECP project, Legal and Institutional Framework, which has a component focusing on regulation of economic activities affecting national protected areas.

Annex 2

Declaration on Handing over

UNDP certifies that all physical assets purchased and used during project implementation, as well as all intellectual assets delivered through the above project - as per the Inventory List here below - have been delivered to Supreme Council of Antiquities.

The recipient Party commits, at its own expense, to keep and maintain in good condition and repair the assets listed here below, as well as to make use of them for the same objectives, target area and target beneficiaries of the project and in accordance to the *Declaration of commitment towards sustainability of Achieved Results and Deliverables* (Annex 3).

Inventory List

A. Physical assets used during ISSEMM Project lifespan:

Asset description	Entity in charge	Location / Office
ADSL Router (SN.6301407)	SCA	Fayoum Inspectorate
Air Condition (Carrier 1.5 H.P Split Floor Mod.vmc14)	SCA	SCA ZAMALEK
Air Condition (Carrier 2.25 H.P high wall Mod. GG18)	SCA	SCA ZAMALEK
Air Condition (Carrier 2.25 H.P high wall Mod. N2)	SCA	SCA Abbasya
Air Condition (Carrier 2.25 H.P high wall Mod. N2)	SCA	SCA ZAMALEK
Air Condition (Carrier 3 H.P high wall Mod. GG24)	SCA	SCA ZAMALEK
Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	SAQQARA
Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	SAQQARA
Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	SAQQARA
Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	SAQQARA

Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	Fayoum Inspectorate
Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	Fayoum Inspectorate
Air Condition (Carrier 3 H.P high wall Mod. N2)	SCA	Fayoum Inspectorate
Air Condition (Carrier 3 H.P Split Floor Mod. Vmc 24)	SCA	SCA ZAMALEK
Air Condition (Carrier 3 H.P Split Floor Mod. Vmc 24)	SCA	SCA ZAMALEK
Air Condition (Carrier 3 H.P Split Floor Mod. Vmc 24)	SCA	SCA ZAMALEK
Air Condition (Carrier 3 H.P Split Floor Mod. Vmc 24)	SCA	SCA ZAMALEK
Cassette Recorder	SCA	Garden City
Chair (hydraulic, wheels, armless)-B871/T	SCA	SAQQARA
Chair (hydraulic, wheels, armless)-B871/T	SCA	SAQQARA
Chair (hydraulic, wheels, armless)-B871/T	SCA	SAQQARA
Chair (hydraulic, wheels, armless)-B871/T	SCA	SAQQARA
Chair (hydraulic, wheels, armless)-B871/T	SCA	SAQQARA
Chair (hydraulic, wheels, armless)-B871/T	SCA	Fayoum Inspectorate
Chair (hydraulic, wheels, armless)-B871/T	SCA	Fayoum Inspectorate
Chair (hydraulic, wheels, armless)-B871/T	SCA	Fayoum Inspectorate
Chair (hydraulic, wheels, armless)-B871/T	SCA	Fayoum Inspectorate
Chair (hydraulic, wheels, armless)-B871/T	SCA	Fayoum Inspectorate
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK

Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, armless)-B871/T	SCA	SCA ZAMALEK
Chair (hydraulic, wheels, arms)-B855	SCA	Garden City
Chair (hydraulic, wheels, arms)-B855	SCA	SAQQARA
Chair (hydraulic, with wheels, with arms)-B855	SCA	Fayoum Inspectorate
Chair (hydraulic, with wheels, with arms)-B855	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, with arms)-B855	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, with arms)-B855	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, with arms)-B867/T	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, with arms)-B867/T	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, with arms)-C551	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, with arms)-C551	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, without arms)-B870/T	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, without arms)-B870/T	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, without arms)-B870/T	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, without arms)-B870/T	SCA	SCA ZAMALEK
Chair (hydraulic, with wheels, without arms)-B870/T	SCA	SCA ZAMALEK

Chair (hydraulic, with wheels, without arms)-B870/T	SCA	SCA ZAMALEK
Chair (hydraulic,wheels, with arms)-B867/T	SCA	SCA ZAMALEK
Chair (hydraulic,wheels, with arms)-B867/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	SAQQARA
Chair (with four legs and armsets)-B881/T	SCA	Fayoum Inspectorate
Chair (with four legs and armsets)-B881/T	SCA	Fayoum Inspectorate
Chair (with four legs and armsets)-B881/T	SCA	Fayoum Inspectorate
Chair (with four legs and armsets)-B881/T	SCA	Fayoum Inspectorate
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK

Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Chair (with four legs and armsets)-B881/T	SCA	SCA ZAMALEK
Computer Table - ASF	SCA	Garden City
Computer Table - ASF	SCA	SAQQARA
Computer Table - ASF	SCA	SAQQARA
Computer Table - ASF	SCA	SCA ZAMALEK
Computer Table - ASF	SCA	SCA ZAMALEK
Computer Table - ASF	SCA	SCA ZAMALEK
Computer Table - ASF	SCA	SCA ZAMALEK
Computer table - NBT80	SCA	SCA ZAMALEK
Computer table - NBT80	SCA	Garden City
Conference Table - TA1/L	SCA	SAQQARA
Conference Table - TA1/L	SCA	SAQQARA
Conference Table - TA1/L	SCA	Fayoum Inspectorate
Conference Table - TB1/L	SCA	SCA ZAMALEK
Conference table - TB1/L	SCA	SCA ZAMALEK
Cupboard (glass) - MO8/G	SCA	SCA ZAMALEK
Cupboard (glass) - MO8/G	SCA	SCA ZAMALEK
Cupboard (glass) - MO8/G	SCA	SCA ZAMALEK
Cupboard (glass) - MO8/G	SCA	SCA ZAMALEK
Cupboard (metal) - MO8/L	SCA	SCA ZAMALEK
Cupboard (metal) - MO8/L	SCA	SCA ZAMALEK

Cupboard (metal) - MO8/L	SCA	SCA ZAMALEK
Curtains	SCA	SAQQARA
Curtains	SCA	SCA ZAMALEK
Desk 120 cm - NA120	SCA	Garden City
Desk 120 cm - NA120	SCA	SCA ZAMALEK
Desk 120 cm - NA120	SCA	SCA ZAMALEK
Desk 120cm - NA120	SCA	SCA ZAMALEK
Desk 120cm - NA120	SCA	SCA ZAMALEK
Desk 140 cm - NA140	SCA	SCA ZAMALEK
Desk 160 cm - NA160	SCA	SCA ZAMALEK
Desk 160 cm - NA160	SCA	SCA ZAMALEK
Desktop Admin. Dell GX520(13MPV1J)	SCA	Garden City
Desktop Admin. Dell GX520(33MPV1J)	SCA	SCA ZAMALEK
Desktop Admin. Dell GX520(43MPV1J)	SCA	SCA ZAMALEK
Desktop Admin. Dell GX520(53MPV1J)	SCA	Fayoum Inspectorate
Desktop Admin. Dell GX520(68NPV1J)	SCA	SAQQARA
Desktop Admin. Dell GX520(B2MPV1J)	SCA	SCA ZAMALEK
Desktop Admin. Dell GX520(D2MPV1J)	SCA	Fayoum Inspectorate
Desktop Admin. Dell GX520(F2MPV1J)	SCA	SAQQARA
Desktop Admin. Dell GX520(G8NPV1J)	SCA	SAQQARA
Desktop Computer (DELL GX 280)-B9MJT-XHM7B-4XFMX-PBYC6-WFH2M	SCA	SCA ZAMALEK

Desktop Computer (DELL GX 280)-CD6XK-7YCQG-R4J4R-63RCW-B7C2J	SCA	SCA ZAMALEK
Desktop Computer (DELL GX 280)-HD3Y9-FJPW6-GC6YR-7G8TB-RM68D	SCA	SAQQARA
Desktop Computer (DELL GX 280)-V7DYF-8T6VC-M7V3Q-HX6BC-PR6CQ	SCA	SCA ZAMALEK
Desktop Computer (DELL GX 280)-WJPF2-FRH8F-8WR26-7KV2C-MY69D	SCA	Fayoum Inspectorate
Desktop Computer (DELL GX 280)-XCDTW-H7CMF-G8482-K69G7-BP3H6	SCA	SCA ZAMALEK
Drawer unit - 844/M	SCA	Garden City
Drawer unit - 844/M	SCA	SCA ZAMALEK
Drawer unit - 844/M	SCA	SCA ZAMALEK
Drawer unit - 844/M	SCA	SCA ZAMALEK
Drawer unit - 844/M	SCA	SCA ZAMALEK
Drawer unit - 844/M	SCA	SCA ZAMALEK
Drawer unit - 844/M with pen Tray	SCA	SCA ZAMALEK
Drawer unit - 844/M with pen Tray	SCA	SCA ZAMALEK
Drawer Unit-SB1 wit Pen Tray	SCA	SAQQARA
Drawer Unit-SB1 wit Pen Tray	SCA	SAQQARA
Drawer Unit-SB1 wit Pen Tray	SCA	SAQQARA
Drawer Unit-SB1 wit Pen Tray	SCA	Fayoum Inspectorate
Drawer Unit-SB1 wit Pen Tray	SCA	Fayoum Inspectorate
Drawer Unit-SB1 wit Pen Tray	SCA	Fayoum Inspectorate
Drawer Unit-SB1 wit Pen Tray	SCA	SCA ZAMALEK
Drawer Unit-SB1 wit Pen Tray	SCA	SCA ZAMALEK
Drawer Unit-SB1 with Pen Tray	SCA	SCA ZAMALEK

Drawer Unit-SB1 with Pen Tray	SCA	SCA ZAMALEK
Drawer Unit-SB1 with Pen Tray	SCA	SCA ZAMALEK
Fax (Ricoh)	SCA	SCA ZAMALEK
Flash memory 512MB	SCA	Garden City
Flash memory 512MB	SCA	Garden City
Flash memory 512MB	SCA	Garden City
Flash memory 512MB	SCA	SCA Abbasya
Flash memory 512MB	SCA	SCA ZAMALEK
Flip Chart Board	SCA	SCA ZAMALEK
Fridge 12F (IDEAL)	SCA	SAQQARA
Fridge 12F 2 Doors (Kiriazi)	SCA	Fayoum Inspectorate
GPS System	SCA	Garden City
Heater 50L (Fresh)	SCA	Fayoum Inspectorate
Image 3D Workstation Dell Precision 380(527PV1J)	SCA	Garden City
Inkjet Printer A3 Photo Business HP 2800	SCA	Garden City
Kitchen	SCA	SAQQARA
Kitchen	SCA	Fayoum Inspectorate
Label Printing Machine (CASIO)	SCA	SCA ZAMALEK
LAN Network	SCA	Garden City
Laptop Latitude DELL D505	SCA	Garden City
Laptop Latitude DELL D505	SCA	Garden City

Laptop Latitude DELL D505	SCA	SCA Abbasya
Laptop Latitude DELL D505	SCA	SCA ZAMALEK
Laptop Latitude DELL D505	SCA	SCA ZAMALEK
Laptop Latitude DELL D505	SCA	SCA ZAMALEK
Laptop Latitude DELL D810	SCA	Garden City
Laptop Latitude DELL D810 (PJ644-BQCF3-7TWV6-6KJVG-V4JGM)	SCA	Garden City
Laser Printer (HP 5100)-CNGG173527	SCA	SCA ZAMALEK
Map Data Entry Workstation Dell 380 (88NPV1J)	SCA	Garden City
Map Data Entry Workstation Dell 380 (98NPV1J)	SCA	Fayoum Inspectorate
Map Data Entry Workstation Dell 380 (D6NPV1J)	SCA	Garden City
Map Data Entry Workstation Dell 380 (H2MPV1J)	SCA	SAQQARA
Map Data Entry Workstation Dell 380 (H8NPV1J)	SCA	Garden City
Map Data Entry Workstation Dell 380 (J2MPV1J)	SCA	SAQQARA
Master Tel. Set - KT-7730	SCA	SCA ZAMALEK
Memory Card Reader	SCA	Garden City
Memory Card Reader	SCA	SCA ZAMALEK
Mixer (Fresh)	SCA	SAQQARA
Mobile phones (Nokia 6680)	SCA	Garden City
Mobile phones (Nokia 6680)	SCA	SCA Abbasya
Monitor (DELL CRT 17")-CN-OR3517-47804-55E-L2YP	SCA	Garden City
Monitor (DELL CRT 17")-CN-OR3517-47804-55E-L3X2	SCA	SCA ZAMALEK
Monitor (DELL CRT 17")-CN-OR3517-47804-55E-L3ZZ	SCA	Garden City

Monitor (DELL CRT 17")-CN-OR3517-47804-55E-L430	SCA	Fayoum Inspectorate
Monitor (DELL CRT 17")-CN-OR3517-47804-55E-L43A	SCA	SAQQARA
Monitor (DELL CRT 17")-CN-OR3517-47804-55E-L43L	SCA	SAQQARA
Monitor Dell 17"(47804-579-L096)	SCA	Garden City
Monitor Dell 17"(47804-579-L0ZH)	SCA	SCA ZAMALEK
Monitor Dell 17"(47804-579-L1MP)	SCA	Garden City
Monitor Dell 17"(64180-56K-00VA)	SCA	SCA ZAMALEK
Monitor Dell 17"(64180-56K-00VC)	SCA	Fayoum Inspectorate
Monitor Dell 17"(64180-572-01QV)	SCA	SAQQARA
Monitor Dell 17"(64180-572-01RA)	SCA	SAQQARA
Monitor Dell 17"(64180-572-01RD)	SCA	SAQQARA
Monitor Dell 17"(64180-592-33S5)	SCA	SCA ZAMALEK
Monitor Dell 19"(47609-566-B3RM)	SCA	Fayoum Inspectorate
Monitor Dell 19"(47609-566-B3RP)	SCA	Fayoum Inspectorate
Monitor Dell 19"(47609-566-B4CB)	SCA	Garden City
Monitor Dell 19"(47609-566-B4CC)	SCA	Garden City
Monitor Dell 19"(47609-566-B4CE)	SCA	SAQQARA
Monitor Dell 19"(47609-566-B4CH)	SCA	Garden City
Monitor Dell 19"(47609-566-B4CJ)	SCA	SAQQARA
Multifunction office jet (HP 5510)-MY53MG102V	SCA	Fayoum Inspectorate
Multifunction office jet (HP 5510)-MY54MG13XJ	SCA	SAQQARA

Office Safe Box	SCA	Garden City
Oven - Flat (Nour)	SCA	SAQQARA
Oven 4Flames- Color (Kiriazi)	SCA	Fayoum Inspectorate
Peugeot car (Black) No. #210245	SCA	SCA ZAMALEK
Peugeot car (Silver / Metallic) No. #203948	SCA	Garden City
Photocopier (Ricoh)	SCA	Garden City
Portable HDD 2.5" (80GB)	SCA	Garden City
Portable HDD 2.5" (80GB)	SCA	Garden City
Portable HDD 2.5" (80GB)	SCA	Garden City
Portable HDD 2.5" (80GB)	SCA	SCA Abbasya
Printing Calculator	SCA	SCA ZAMALEK
Refrigerator (41/2 ft)	SCA	SCA ZAMALEK
Sanyo Projector XU31	SCA	SCA ZAMALEK
Sattlite Images (7 DVDs)	SCA	SCA ZAMALEK
Scanner - EPSON A3 GT 15000	SCA	Garden City
Scanner A$ Epson 4990	SCA	SCA ZAMALEK
Scanner Canon LID30	SCA	SCA ZAMALEK
Server Monitor 17"+Keyboard+Mouse	SCA	SCA ZAMALEK
SERVER X Serve Single G5	SCA	SCA ZAMALEK
Side Table - NA100	SCA	SCA ZAMALEK
Side Table - NA100	SCA	SCA ZAMALEK
Side Table - NA100	SCA	SCA ZAMALEK

Side Table - NA100	SCA	SCA ZAMALEK
Side Table - NA100	SCA	SCA ZAMALEK
Side Table - NA100	SCA	SCA ZAMALEK
Side table - SK3	SCA	Garden City
Side table - SK3	SCA	SAQQARA
Side table - SK3	SCA	SAQQARA
Side table - SK3	SCA	SAQQARA
Side table - SK3	SCA	SAQQARA
Side table - SK3	SCA	SAQQARA
Side table - SK3	SCA	SAQQARA
Side table - SK3	SCA	Fayoum Inspectorate
Side table - SK3	SCA	Fayoum Inspectorate
Side table - SK3	SCA	Fayoum Inspectorate
Side table - SK3	SCA	Fayoum Inspectorate
Side table - SK3	SCA	Fayoum Inspectorate
Side table - SK3	SCA	Fayoum Inspectorate
Side table - SK3	SCA	SCA ZAMALEK
Side table - SK3	SCA	SCA ZAMALEK
Side table - SK3	SCA	SCA ZAMALEK
Side table - SK3	SCA	SCA ZAMALEK
Side table - SK3	SCA	SCA ZAMALEK

Side table - SK3	SCA	SCA ZAMALEK
Small table - OT6	SCA	SCA ZAMALEK
Small table - OT7	SCA	SCA ZAMALEK
Small table - OT8	SCA	SCA ZAMALEK
Sopar Projection Screen 180X180CM	SCA	SCA ZAMALEK
Telephone Line (No. 7360372) + Tel. Set	The line has been cancelled	
Telephone Line (No. 7360378) + Tel. Set	The line has been cancelled	
Telephone Line (No. 7360468) + Tel. Set	The line has been cancelled	
Telephone Line (No. 7360471) + Tel. Set	The line has been cancelled	
Telephone Line No. (084-6375635)+Tel. Set	SCA	Fayoum Inspectorate
Telephone Set - KT- 2371	SCA	Garden City
Telephone Set - KT- 2371	SCA	SCA ZAMALEK
Telephone Set - KT- 2371	SCA	SCA ZAMALEK
Telephone Set - KT- 2371	SCA	SCA ZAMALEK
Telephone Switch System (Panasonic) - KX-TE5824	SCA	SCA ZAMALEK
Tel. Set	SCA	Garden City
TOYOTA PRADO 4X4 Car	SCA	SCA ZAMALEK
UPS (APC 620 VA)	SCA	Garden City
UPS (APC 620 VA)	SCA	Garden City
UPS (APC 620 VA)	SCA	Garden City
UPS (APC 620 VA)	SCA	Garden City
UPS (APC 620 VA)	SCA	Garden City

UPS (APC 620 VA)	SCA	SAQQARA
UPS (APC 620 VA)	SCA	SAQQARA
UPS (APC 620 VA)	SCA	SAQQARA
UPS (APC 620 VA)	SCA	SAQQARA
UPS (APC 620 VA)	SCA	SAQQARA
UPS (APC 620 VA)	SCA	SAQQARA
UPS (APC 620 VA)	SCA	Fayoum Inspectorate
UPS (APC 620 VA)-OS0441224074	SCA	Fayoum Inspectorate
UPS (APC 620 VA)-QS0441127901	SCA	Fayoum Inspectorate
UPS (APC 620 VA)-QS0441223991	SCA	Fayoum Inspectorate
UPS (APC 620 VA)-QS0441224081	SCA	SCA ZAMALEK
UPS (APC 620 VA)-QS0441321289	SCA	SCA ZAMALEK
UPS (APC 620 VA)-QS0523123608	SCA	SCA ZAMALEK
UPS (APC 620 VA)-QS0523224360	SCA	SCA ZAMALEK
UPS (APC 620 VA)-QS0523224557	SCA	SCA ZAMALEK
UPS (APC 620 VA)-QS0523225419	SCA	SCA ZAMALEK
UPS (APC 620 VA)-QS0523225463	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SAQQARA
Wooden Cupboard- SCO8	SCA	SAQQARA
Wooden Cupboard- SCO8	SCA	SAQQARA
Wooden Cupboard- SCO8	SCA	SAQQARA

Wooden Cupboard- SCO8	SCA	SAQQARA
Wooden Cupboard- SCO8	SCA	SAQQARA
Wooden Cupboard- SCO8	SCA	Fayoum Inspectorate
Wooden Cupboard- SCO8	SCA	Fayoum Inspectorate
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Cupboard- SCO8	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SAQQARA
Wooden Desk S150	SCA	SAQQARA
Wooden Desk S150	SCA	SAQQARA
Wooden Desk S150	SCA	SAQQARA
Wooden Desk S150	SCA	SAQQARA
Wooden Desk S150	SCA	SAQQARA
Wooden Desk S150	SCA	Fayoum Inspectorate
Wooden Desk S150	SCA	Fayoum Inspectorate

Wooden Desk S150	SCA	Fayoum Inspectorate
Wooden Desk S150	SCA	Fayoum Inspectorate
Wooden Desk S150	SCA	Fayoum Inspectorate
Wooden Desk S150	SCA	Fayoum Inspectorate
Wooden Desk S150	SCA	Garden City
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wooden Desk S150	SCA	SCA ZAMALEK
Wrtining Board 60X45CM	SCA	SCA ZAMALEK
ADSL Router-D-Link 500T(DRA5163001380)	SCA	SCA ZAMALEK
Digital Camera - Canon A 410	SCA	Fayoum Inspectorate
Digital Camera - Canon A 410	SCA	SCA ZAMALEK
Digital Camera - Canon EOS D 350 EF + 1GB Memory Card + 58MM Filter	SCA	Garden City
Flash memory 512MB	SCA	SCA ZAMALEK
Flash memory 512MB	SCA	SCA ZAMALEK

LAN Network	SCA	SAQQARA
LAN Network	SCA	SCA ZAMALEK
Paper Cutter A3	SCA	SCA ZAMALEK
Portable HDD 2.5" (80GB)	SCA	SCA ZAMALEK
Portable HDD 2.5" (80GB)	SCA	SCA ZAMALEK
Water Dispenser	SCA	SCA ZAMALEK
Nikon Total Station NPL.332	SCA	Garden City
Electricity Generator Lutian (LT7000EC)	SCA	Fayoum Inspectorate
3 Camping Tents Size 4mX4m	SCA	Fayoum Inspectorate
4 Wooden Beds (Mattresses+Below+Sheet)	SCA	Fayoum Inspectorate
8 Blanket	SCA	Fayoum Inspectorate
50 Barawita & 20 Mastaren	SCA	Fayoum Inspectorate
10 Wooden Chairs + Wooden Table 70cmX120cm	SCA	Fayoum Inspectorate
4 Plastic Chairs + Table	SCA	Fayoum Inspectorate
6 Metal Beds + 6 Mattresses	SCA	Fayoum Inspectorate
External Hard Drive Western Digital	SCA	Garden City
Dell Work Station Precision T3500	SCA	Garden City
Dell Work Station Precision T3500	SCA	Garden City

All the above mentioned physical assets are in good working conditions.

B. Physical assets produced by ISSEMM Project:

1.	MEDINET MADI –WADI EL RAYAN PROTECTED AREA LIST OF ASSETS		
Track linking Medinet Madi to Wadi El Rayan Protected Area		To be defined through Agreement	Medinet Madi site-WRPA
21 Km unpaved track fully finished with: • N. 3 Rest areas • Touristic signposts along the track • N. 25 Touritic signposts along two main routes from Medinet El Fayoum			

2.	MEDINET MADI ARCHAEOLOGICAL SITE LIST OF ASSETS		
2.1	Visitor Center compound composed by n.2 buildings overlooking a courtyard :	SCA	Medinet Madi site
The buildings are fully finished with : - floors of lime stone for the interior and the outdoor courtyard, - walls and plaster, - wooden vaults for the cover, covered with plaster, - wooden pergolas, - full plumbing supply and drainage, - full electrical supplies, sockets, switch lights and generators - lighting elements for the entire visitor center in the interior and exterior.			
2.2	Eco-lodge Building complete of:	SCA	Medinet Madi site
• N.1 fully finished building with: • floors of lime stone, • walls and plaster, • wooden cover, covered with plaster, • plumbing supply and drainage,			

• full electrical supplies, sockets, switch lights and generators • lighting elements.			
2.3	Arrangement on archaeological site complete of:	SCA	Medinet Madi site
• 210 m wooden track leading from the VC to the site entrance • Monolithic stone seats • 11 engraved educational panels and their own support to be placed on the visitor's walk			
2.4	Exhibition and educational material at the Visitor Center :	SCA	Medinet Madi site
• N.2 statues of acrylic of 2.00m height • N.2 steles of acrylic of 0.80m height • N.1 maquette of M.Madi of dimension of 4.30X1.50m • N.1 Temple A maquette of dimension of 0.80X0.50m • N.44 printed educational panels • Crocodile eggs			
2.5	Works inside the archaeological perimeter	SCA	Medinet Madi site
1. Sand removal 2. Consolidation of mud brick structures 3. Consolidation of stone architectural elements and structures 4. Restoration of statues 5. Restoration of wall paintings 6. Manwork employed: 180 workers 7. Specialized profiles: 90 restorers, SCA personnel			

3. NORTH SAQQARA ARCHAEOLOGICAL SITE		
N. 1 full Monitoring System installed in 15 tombs: 2. Ty Tomb 3. Ptah Hotep Tomb 4. Unas Pyramid 5. King Teti's Pyramid 6. Mereruka Tomb 7. Kagemni Tomb 8. Two Brother's tomb (Niankhkhnum & Khnumhoteb). 9. Nefer Tomb 10. Butchers Tomb (Irukaptah - khenu) 11. Birds Tomb (Neferherenptah) 12. Idut Tomb 13. Mehu Tomb 14. Unas Ankh Tomb 15. The holy Falcons Galleries. 16. Maya Tomb	SCA	Saqqara Site
3.1 LIST OF TECHNOLOGICAL ASSETS OF THE SYSTEM		
8. N. 16 CO2 Meter 9. N.5 Junction boxes 10. N.3 Substitution of the batteries 12V, and regulator for solar panels 11. N.3 Device for the application of the new sensor to the existing one support 12. N.2 Substitution of the components necessary for the updating of the system accepted also the substitution of the control unit with an updated model 13. N.1 Spare Parts for anemometer 14. N.4 Transformer with protection group for overvoltage 15. N.8 Panel with electric tap and differential switch complete with relè for CO2 interruption 16. N. 3 Configuration of the acquisition units for the compatibility with the complete system 17. N.8 Modem GSM for data transmission 18. N.24 Thermo-hygrometer for inside 19. N.5 Thermo-hygrometer for outside 20. N.24 Special support device for the new 21. N.5 Acquisition unit Mod. CUM3000 composed by: selection group for		

16 instruments, measuring group for analogic sensors, control and memorization unit with capability of 8000 measures, programming keyboard and display, stand by group, overvoltage protections on the incoming signal cables, IP65 resin panel, serial door RS232

22. N.1 Power supply group with 50W solar panel, voltage regulator and 120A/h battery
23. N.16 Junction panel 3+1 ways
24. N.4 Junction panel for 3 extensometer
25. N.4 Junction box
26. N.3 Junction panel 3+1
27. N.4 Transformer with protection group for overvoltage on the feeding line
28. N.4 Power supply group with 50W solar panel, voltage regulator and 120 A/h battery
29. N.2 External Thermo-hygrometer
30. N.12 Extensometer 10mm range
31. N. 4 Triaxial fixing device for extensometer
32. N.1 Stabilizer group
33. N.1 Updating and improvement of the Software SENTINEL or supply of a new Software
34. N.3 Selector card for 8 channels
35. N.2 Data logger complete with control and memorisation Unit
36. N.4 Battery and regulator
37. N.1 Wind direction
38. N.1 Wind velocity
39. N.1 Modem GSM
40. N.1 Barometer
41. N.1 Pirometer
42. N.1 Portable thermo-hygrometer
43. N.1 Wooden Box
44. Shielded cable 10x1mm2, 2120 m
45. Shielded cable 12x1mm2, 400 m
46. cable protection (corrugated pipe with metallic armoured cover), 1730 m
47. N.8 SIM-CARD for data transmission with modem GSM. Possibility to call and to be called in DATA mode by GSM modem throw a phone number. One year licence
48. N.5 support tube of 2" GAS for the application of the acquisition unit and of the solar panel with battery; wooden housing, if necessary, for sunrays protection of the acquisition unit
49. N.1 Monitor
50. N.1 PC
51. N.1 A4 inkjet colour printer

C. Intellectual Assets

	Asset description	Entity in charge
1.	Geographical Information System composed by Database and Cartography	SCA
2.	Bibliographical Research and Archive	SCA
3.	Training courses and seminars: Archaeology and archive research data entry Computer graphic G.I.S data base Environmental Monitoring and Conservation	SCA
4.	Medinet Madi Exhibition and Educational material: Educational panels virtual reconstructions and animations Maquettes	SCA
5.	Medinet Madi archaeological guide book	SCA
6.	Issemm Project's Results Presentation Book	SCA

D. Arrangements and Contracts

	Asset description	Entity in charge
1.	Hosting contract for GIS application with IT Synergy	SCA

E. Acknowledgments and awards

	Description
1.	During the year 2010, the Commodity Aid Programme had inception on the experience carried out by ISSEMM Project (instruments for the monitoring system of Saqqara archaeological site)
2.	Archaeological Mission of University of Pisa, carries on its annual campaign. Start of activities: 25th of October 2010.

Annex 3

Declaration of commitment towards sustainability

of Project Results and Deliverables

The recipient party will guarantee scientific/technical and institutional sustainability and further development to the results achieved by the project, as well as enhance, disseminate and use the results and the physical and intellectual assets of the project, among the main stakeholders.

Upon completion of the ISSEMM Project, the following major assets remain for the advantage of SCA and its departments:

- Upon ISSEMM Project's completion, skilled SCA personnel are in condition to ensure the continuous and proper development of the actions undertaken under the Project within their institution, as referred in Annex 2, section C3.

- The Medinet Madi Archaeological Site ha sbeen achieved, as referred in Annex 2, section B2 and related subsections. This core includes the physical structures of the Visitor Centre and the eco-lodge and will represent the cultural pole of Western Fayum sector, in connection with the Wadi El Rayan Protected Area and Wadi El Hitan paleontological site. The synergies that those poles have developed during the projects' lifespan generated sustainable development, awareness on low impact land transformations and introduced innovative approaches in decision-making based on shared and participatory process.

- The Environmental Monitoring System of North Saqqara Archaeological Site is a technological tool as well as a know-how ready to be used by SCA, as referred in Annex 2, section B3 and related subsection, in the implementation of the site management plan. The system consists in a GSM_Global System for Mobile Communications infrastructure and it allows the efficient management of the site.

- The Geographical Information System, applications to Fayoum Oasis and North Saqqara Necropolis is a technological tool as well as a know-how ready to be used by SCA, as referred in Annex 2, section C1, in the implementation of the site management policies. The system consists in an architecture of Information Systems that allows strategic, managerial, operational activities.

- The institutional dialogue has been achieved in the framework of the Agreement/MoU, which will be signed between the two abovementioned Institutions, thanks to the ISSEMM Project.

The Project sustainability factors are already showing tangible signs of endogenous development, whereas:

- The start-up of the institutional dialogue at local level (EEAA- SCA-Governorate) is a boosting factor of decentralized policies for sustainable local development;

Having recalled, in the present Hand Over Certificate, ISSEMM Project's results, the recipient party declares its determination in consolidating the actions undertaken during ISSEMM Project's lifespan.

Therefore the Supreme Council of Antiquities, in order to guarantee financial and institutional sustainability of the results achieved and the output delivered through the project, hereby declares to be committed to the following:

1 Regarding Dialogue and Cohesive Institutional actions:

The dialogue among Institutions reaching agreements on management regarding cultural heritage sites and protected areas has been achieved through the development of a pilot activity, that allowed to set new tools for the preservation of the natural environment and cultural heritage. The relationship and cooperation between the Supreme Council of Antiquities, the Egyptian Environmental Affairs Agency and Governorate of Fayoum will continue in the future in order to guarantee the effective implementation of the environmental and cultural sites.

2 Regarding SCA institutional capacity actions:

2.1 Regarding its institutional task in cultural heritage preservation, the commitment of the recipient party towards the sustainability of ISSEMM Project's results is addressed to strengthen the institutional capacity of the Supreme Council for Antiquities by fostering the monitoring activities on archaeological monuments and the enhancement of management of archaeological sites in Egypt through an olistic vision, decentralized policies and cohesive local action;

2.2 Regarding the need of further addressing capacity building in the field of cultural heritage conservation, the SCA is committed to support "Training of Trainers" activities, in order to ensure that the personnel already skilled through the project, particularly on the Saqqara Monitoring System, can successfully divulgate and spread the know-how and techniques, that is required to operate on the system, to other personnel inside the Institution;

2.3 Regarding the need of promoting and disseminating the good practices developed during the restoration activities on Medinet Madi archaeological site, the SCA intends to promote specialized seminars on conservation techniques;

2.4 The SCA is committed to support the Medinet Madi archaeological site candidature to the UNESCO Tentative List, in order to obtain the World Heritage Site Declaration.

3 Regarding SCA site management actions:

3.1 Elaborating a strategic policy of enhancement and management of sites in outskirt areas of the country, through the network organization of minor archaeological sites;

3.2 Identifying the Buffer Zones of archaeological sites to preserve them from anthropic and agriculture pressure, in application of the existing Egyptian regulation,

4 Regarding Saqqara Archaeological Site

4.1 It is considered of utmost importance that the SCA shall provide support and training to the inspectors working in the archaeological sites, related to the maintenance and use of the technological devices installed for the monitoring system on the 15 tombs, by promoting "Training of Trainers" activities;

4.2 The SCA is committed to keep the Monitoring System working, also by endorsing the bill of the phone line dedicated for the data transmission and by carrying out ordinary and extraordinary maintenance of the system and through the yearly license subscription renewal of the Sim Cards in use.

5 Regarding the Geographical Information System

5.1 Entering into force in the contract signed by ItSynergy and ISSEMM Project/SCA on July 13th 2010 valid until for a period of 36 months until 14th July 2013, as per specific clauses 2.4 of the above mentioned Contract, for the hosting of the website supporting the web G.I.S. As per art.3 of the contract, the Intellectual and Property Rights remain to SCA.

5.2 Providing free access to the informations contained in the ISSEMM website designed for Fayum Governorate local development and archaeological sites promotion.

5.3 Assuring the possibility, free of charge, to update the informations contained by the G.I.S elaborated during ISSEMM project lifespan.

6 Regarding the unpaved track linking Medinet Madi to Wadi El Rayan

6.1 Need of elaborating a legal framework at the regulatory level through the Agreement to be signed between EEAA and SCA, and the involvement and participation in common assets ordinary maintenance;

6.2 In order to address the problem of garbage collection around archaeological areas, the SCA shall support awareness on landscape and local authority action;

7 Regarding Medinet Madi Archaeological Site

7.1 SCA commits to open the archaeological site to the public, within the first quarter of year 2011 and will create an outpost of the Fayum Inspectorate among the Visitor Center compound;

7.2 SCA commits to take into consideration the outcomes of the external evaluation (ref. PEC March 2010) which will be carried out from the Donor/UNDP in order to provide main guidelines and recommendation for the sustainable management of Medinet Madi archaeological site, versus the environmental pressure and the anthropic carrying capacity;

7.3 SCA commits to draw up a Site Management Plan that includes the maintenance workplan on the archaeological site, as well as take into account, the recommendations issued by the above mentioned external evaluation;

7.4 SCA commits to draw up a Business Plan as operational document of the Archaeological Site Management Plan, including: Marketing, registered logos, concession of services to private companies, within the year 2011;

7.5 SCA shall foster partnership agreements for the management of additional site services related to the Visitor Centre activity, and assignment of the contracts through tender procurements, within the year 2011;

7.6 SCA shall assure visibility to the activities carried out through the Ministry of Foreign Affairs Directorate General for Development Cooperation funding, by including the Italian Cooperation logo on the

foreseen activities related to dissemination and divulgation.

All of the above being stated, bearing in mind that the project's sustainability factors are already showing tangible signs of endogenous development, and having identified the main needs of the SCA on management of archaeological sites and preservation of Egyptian cultural heritage issues, the recipient party declares to continue to exert further efforts in order to enhance its management capacities and to foster the conservation of the archaeological heritage through the adoption and the development of new technologies, as well as business/managerial approach on additional services related to the touristic services.

8 Project final provisional arrangements

Within 15 days from the signature of the present Hand-Over Certificate, a Quadripartite Committee (*Program Follow-Up and Monitoring Committee*, **PFUMC**) composed by two Egyptian Members (nominated by EEAA and by UNDP) and two Italian members (nominated by Italian Embassy and DGCD-Rome) shall be established with the following mandate:

A. Monitoring the results achieved by the different components as well as the implementation of the above exit-strategy for their sustainability;

B. Supervising any pending activity and relevant financial remainder after the closure of the Program.

PFUMC shall meet regularly for its ordinary tasks or ad-hoc meetings may be called, upon request of any of the Parties and shall issue decisions and resolutions by consensus.

At the date of signature of the present Certificate, the following activities are still under implementation and, being part of ongoing contracts with Third Parties or daily works included in the budget already approved, shall be administered by UNDP until completed:

- Construction works of the Visitor Center and related infrastructures;
- Setting up of the exhibit in the Visitor Center;
- Restoration works in Madinet Madi.
-

For the completion of the above activities and all necessary administrative requirements, the funds, which are already handled by UNDP by virtue of the third party cost sharing agreement signed on February 18, 2004, shall be administered directly by UNDP according to its rules and regulations.

All pending payments, if any, shall be paid with a decision of the above-

mentioned PFUMC subject to positive technical approval of the Supreme Council of Antiquities.

Upon taking into consideration the above pending activities and all relevant pending payments, if any financial remainder from the Project will be still available in UNDP, it will be allocated to cover daily works such as for the completion of sand removal in Saqqara, as per agreed in the PEC Follow Up Meeting of December 14, 2010, subject to the Final Decision on the availability of funds.

All funds will be left in UNDP availability until December 31, 2011 after that, whether not disbursed, shall be sent back to DGCD. Should any dispute arise between the contractual parties, the relative funds will be left in UNDP availability until the final decision of the court of jurisdiction.

Annex 4

PEC Meeting, held on 21st September 2008

Minutes of Project Executive Committee Meeting
For ISSEMM Project
September 21st, 2008

Attendees:

Dr. Zahi Hawass – Secretary General, SCA - Chairman of the PEC

Dr. Nino Merola – Cooperation Attache', Italian Embassy

Dr. Said El Dalil – National Coordinator PCU, EEAA Representative

Dr. Mohamed Bayoumi, UNDP-Cairo Representative

Mr. Hisham El Lehity, Project Technical Management, ISSEMM

Dr. Annamaria Meligrana, Cooperation Office, Italian Embassy

D. Marco Marchetti, Italian Coordinator, PCU

Agenda:

To review and approve the Work Plan and Budget for the period November 2008-November 2009

Venue:
Office of Dr. Zahi Hawass, SCA premises – Zamalek - Cairo

Minutes of the Meeting:

After welcoming the attendees, Dr. Zahi Hawass introduced the meeting. He asked in particular to Mr. Hisham if there were changes from the document already discussed at lengthy with the Project Technical Management and UNIPISA representatives some time back. Mr. Hisham reported that the content of the document and the budget are substantially maintained, while slight modifications occurred to comply with the remarks made by UNDP.

Then the Chair asked to the PEC's members their consent on the Work Plan and Budget 2008-2009 as they are illustrated in the documents distributed. No any observation or remark was raised; therefore the Work Plan and Budget for the period November 2008 (re-starting of the project) - November 2009 (termination of the project) were approved, with the following understanding:

(i) The project is re-starting, after been discontinued for more than one and half year, on the grounds of the recommendations received from both the Mid-Term Evaluation and the Italian Directorate General of Cooperation for Development. The Work Plan and Budgets approved by PEC were jointly prepared by SCA and University of Pisa (UNIPISA), in close consultation with the Italian Cooperation Office, UNDP and PCU.

(ii) In spite of the problems encountered, significant activities were carried out during 2005 and 2006, which represent the foundation for the new Work Plan. Among the main achievements, it is worth to mention the purchase of all the equipment planned, the establishment of the main office at SCA headquarters and the two sub-offices in Fayoum and Saqqara. Intensive training was conducted for Egyptologists on different areas:

Archive Research and Data Entry, Computer Graphic for CAD & Image Editing, G.P.S. utilization, Cartographic digitalization, Cartographic geo-referencing, G.I.S. & Data Base implementation, and Environmental Monitoring. At the planning level, the Software for web, G.I.S. as well as for the monitoring system and risk analysis had been completely developed. The Design was completed for the monitoring system, for the sand removal in Medinet Madi, for the Dromos of Menphite Serapeum in Saqqara and for the visiting path in Saqqara. For Fayoum, all satellite images have been acquired and the Implementation of G.I.S. has been initiated.

(iii) The project will be implemented through a new Organization Chart and specific Terms of Reference, to avoid the problems experienced in the past. A Project Scientific Committee (PSC) composed by the Secretary General of SCA and UNIPISA's Scientific Director will guide and overseeing the Project Technical Management (PTM), which will ensure the execution of the approved planned activities and the day-to-day operations through three Technical Staff Teams (Medinet Madi, Saqqara and SIS/GIS). The staff will be organized in specific units, run by key experts.

(iv) A Project Administrative Unit, which will work in close connection with the UNDP-Program Support Team, will support the Project Technical Management on the financial and administrative matters. An UNIPISA Administrative Unit will manage all the financial matters related to the contract with UNDP and the services provided to the project.

(v) In **Fayoum oasis** the project will facilitate the sustainable development of the environmental and cultural assets, paying special attention to the preservation and the management of the archaeological site of Medinet Madi. The expected outcomes are the followings: **(i)** Opening Medinet Madi to the tourists, through the activities of sand removal from the temple area (from the kiosk –South of the Dromos to the end of Roman Square at North), the restoration and consolidation of the monuments, the establishment of visitor paths, the construction of a Visitor Center, and the construction of a new unpaved track from Medinet Madi to Wadi el Rayan, **(ii)** Designing a buffer zone around Medinet Madi to minimize the dangerous impact from the agricultural expansion, **(iii)** Declaring Medinet Madi as Protected Archaeological Area, with special linkage to the Wadi Rayan Protected Area, **(iv)** Drawing up a S.I.S. for Fayoum, comprehensive of detailed archaeological and conservation data's, and **(v)** Design one or more sustainable tourist visiting paths, connecting archaeological and natural resource of the Oasis using the S.I.S. comprehensive

(vi) In **Saqqara** the project will promote and develop the archaeological site in compliance with environmental protection against stress, to ensure its integrity for the future. The expected outcomes are: **(i)** Expanding the environmental monitoring system and site information system established during the First Phase (design developed during the years 2005-06) to 12 new tombs, in addition to the existing systems located in the two mastabas of Ty and Ptah Hotep and in Unas pyramid. The monitoring system to be installed will be more complex than the previous one, to collect more comprehensive environmental observations, **(ii)** Managing the data collected by a system that allows to plan the flow of visits to the tombs (design developed during the years 2005-06), through an adequate software, **(iii)** Restructuring the visitor management system designed for new tourist equipped paths, which will link-up Abousir necropolis, and which will rationalize the visiting of the site itself. The visiting paths will be designed in connection with the new monitor system, **(iv)** Removing the sand from Saqqara and Abousir archaeological areas (developed for the 70% during the year 2005-06).

(vii) The residual allocated fund that will cover the execution of the Work Plan is 2.377.052 Euro, out of which the amount to be received as last installment is 1.332.584 Euro. In order to minimize the risks of possible delays on the arrival of the last installment, the activities have been subdivided in two periods having well defined outputs. During the first semester the activities will be concentrated in Medinet Madi, while during the second period (May - November 2009) the work will be concentrated in Saqqara, besides completing the activities in Medinet Madi.

(viii) In order to re-start the activities, UNDP and UNIPISA shall sign a new contract, based on the approved Work Plan and Budget. An updated Logical Framework, along with the time schedule, will ensure the regular monitoring of the implementation. The budget being translated into the ATLAS format shall undergo a "budget revision" to become operational.

Minutes approved

Dr. Zahi Hawass
Chairman, Project Executive Committee

Annex 5

PEC Meeting, held on 2nd March 2010

Project Executive Committee Meeting – 2nd March 2010

Attendees:

Prof. Ali Radwan – National Scientific Director
Prof. Edda Bresciani – International Scientific Director
Dr. Ginevra Letizia – Director of the Italian Development Cooperation in Cairo
Dr. Luca Montaccini – EIECP/PCU Coordinator
Mrs. Amany Nakhla – UNDP Programme Officer
Dr. Annamaria Meligrana - EIECP/PCU Assistant

Mr. Hisham El Leithy – ISSEMM National Co-Manager
Arch. Antonio Giammarusti – ISSEMM International Co-Manager
Prof. Feisal Esmael - ISSEMM National Co-Manager
Arch. Angela De Vita – – ISSEMM International Co-Manager
Dr. Francesca Rubattu – ISSEMM Landscape Expert
Mr. Mohamed Yousef – Administration and Financial Coordinator
Mr. Karim El Zoghbi – Project Assistant

Agenda:
To review and approve the activities carried out from June 2009 to January 2010. To review and approve the activities to be carried out in the next period.

Venue:
Office of Dr. Zahi Hawass, SCA premises – Zamalek, Cairo

Minute:
After welcoming the attendees the Scientific Directors, Prof. Radwan and Prof. Bresciani, asked the PTM members if there were changes to the documents presented at the PEC meeting submitted in June 2009. The Project Co-Managers, Dr. Hisham El Leithy and Arch. Antonio Giammarusti, reported that the content of the document, the financial report and the budget are substantially maintained.
The PEC meeting held on June 2009 reviewed Project activities up to the end of March 2009, but the late arrival of the last tranche from DGCS, and the consequent impossibility to promptly fund the

Mrs. Amany Nakhla asked about what the Director of the Italian Development Cooperation meant exactly, by saying *in principle,* because the PEC has to approve or not only the carried out activities. She totally approved the work already done.
Dr. Ginevra Letizia renewed her opinion about the on-going activities.
Prof. Ali Radwan explained also that the restoration process is a very sophisticated process and it could take years to finish. For this reason, it cannot be seen as a fast result but the Egyptian and Italian Experts are doing their best and it is important to appreciate what they have already done.

Once more Dr. Ginevra Letizia said that it is important to study the sustainability of the site after the completion of the Project. Moreover, she asked about the publications and she recommended a very high quality material, which should be able to clarify to the public the entire Project achievements. Regarding the brochures, she asked why the new budget is foreseeing a reduction of the amount previously assigned to the brochures.
Arch. Antonio Giammarusti replied that the new budget allows to print 15.000 copies in the same format of the Fayoum pocket guide already realized by the Italian Cooperation.
Dr. Ginevra Letizia asked to be informed and reassured about the quality of this item, at this point Prof. Edda Bresciani said that the Scientific Direction is fully skilled to arrange a didactic brochure.
Prof. Ali Radwan said that the Project will issue a scientific book for the international archeologist around the world like the one made for Saqqara Archeological site. At the same time, the project will start to draft a simple guide book for the visitors.

Dr. Ginevra Letizia introduced to the Committee a document with the recommendations received from the Eng. Guido Benevento, DGCS Expert.
He expressed the following recommendations to the Committe:

- Submission of bimonthly report on the progress of the Project's activities;
- TOR description for an external evaluation mission focused on the sustainability of the Medinet Madi exhibit actions (i.e. sand removal and restoration), versus the environmental pressure, as well as versus the visitor's anthropic carrying capacity.
- A specific regulatory framework for the coming handing over.

No more observations or remarks were raised; therefore the Committee approved the Activities Report, the Financial Report and the Activities Work Plan.

Finally, the Committee was received by Dr. Zahi Hawass, who asked for the ISSEMM Project goals giving his praises for these.
Dr. Zahi Hawass approved and signed the PEC documents.

Hisham Elleithy

Also Dr. Luca Montaccini expressed his total satisfaction about the Project achievements.

Moreover, Dr. Ginevra Letizia underlined that ISSEMM Project is a very important component in the Egyptian Italian Environmental Cooperation Programme, but due to the new economical situation the funds in the future will be less and we will be forced to make a choice. So we should have to study the sustainability of the Site beyond the Project end. We should take into high consideration the Eco- Tourism: the Egyptian Tourism Development Agency needs to start to promote the site.
Dr. Ginevra Letizia continued her speech regarding the approval on the work saying that she can approve the carried out and the future work only *in principle*. This means that the final approval for the ISSEMM Restoration Activity from UTL will be given only when the status of the work will show the final expected output. This does not mean to stop ongoing activities, but to monitor the progress made within this component until the work produces the results that the restoration is supposed to achieve.

After that Dr. Ginevra Letizia asked to the PTM about the materials and methods used in the Visitors Center building, Arch. Antonio Giammarusti replied underlining that the Visitor Centre project had already been discussed in the previous PEC, which approved also the call of tender, so the call of tender was awarded in November 2009 and the building works have already started. Anyway Arch. Giammarusti assured the Director of the Development Cooperation Office about the use of local and natural materials as mud bricks, wood, stone...etc. and the application of ecological architectural methods, following the guidelines of the traditional style of one of the most famous Egyptian Architect, Hassan Fathy.
Besides, Prof. Ali Radwan stated that ISSEMM is using the methods and materials that have been used for hundreds of years, hence modern materials or methods can not be used also for UNESCO declaration.

Dr. Ginevra Letizia inquired about the temperature inside the Visitor Centre building and the way to check and estimate the temperature.
Arch. Angela De Vita explained that a good percentage between the inside and outside temperature is guaranteed by using local construction methods, such as wide walls, wall air gaps for thermal insulation, vaults shapes and opposite windows that can provide a natural air conditioning system.
Arch. Antonio Giammarusti reminded to the Director of the Development Cooperation Office that the Visitor Centre project remains unchanged as regards he showed her on July 2009.

Therefore, Dr. Ginevra Letizia said that regarding her approval on the PEC document there are some comments on the Work Plan which need to be discussed first. She asked to the PTM explanations about the planned and the restoration activity, underlying that, for the last point, it is impossible to judge it before the work is finished.

Mrs. Amany Nakhla asked about what the Director of the Italian Development Cooperation meant exactly, by saying *in principle,* because the PEC has to approve or not only the carried out activities. She totally approved the work already done.
Dr. Ginevra Letizia renewed her opinion about the on-going activities.
Prof. Ali Radwan explained also that the restoration process is a very sophisticated process and it could take years to finish. For this reason, it cannot be seen as a fast result but the Egyptian and Italian Experts are doing their best and it is important to appreciate what they have already done.

Once more Dr. Ginevra Letizia said that it is important to study the sustainability of the site after the completion of the Project. Moreover, she asked about the publications and she recommended a very high quality material, which should be able to clarify to the public the entire Project achievements. Regarding the brochures, she asked why the new budget is foreseeing a reduction of the amount previously assigned to the brochures.
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He expressed the following recommendations to the Committe:

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- TOR description for an external evaluation mission focused on the sustainability of the Medinet Madi exhibit actions (i.e. sand removal and restoration), versus the environmental pressure, as well as versus the visitor's anthropic carrying capacity.
- A specific regulatory framework for the coming handing over.

No more observations or remarks were raised; therefore the Committee approved the Activities Report, the Financial Report and the Activities Work Plan.

Finally, the Committee was received by Dr. Zahi Hawass, who asked for the ISSEMM Project goals giving his praises for these.
Dr. Zahi Hawass approved and signed the PEC documents.

Hisham Elleithy

Dear PEC Members,
With reference to the PEC call done by ISSEMM PMU on February 14th (first call) and 22nd (second call) 2010, considering my impossibility to attend the meeting due to previous commitments in Rome, it is my pleasure to provide the PEC with the results of my analysis of the document to be discussed for approval.
I am referring specifically to the following document:
"ACTIVITY REPORT - FINANCIAL REPORT - ACTIVITIES WORKPLAN - March 2009" edited by ISSEM PMU under the supervision of the Scientific Committee.

The document is elaborating on the following topics:

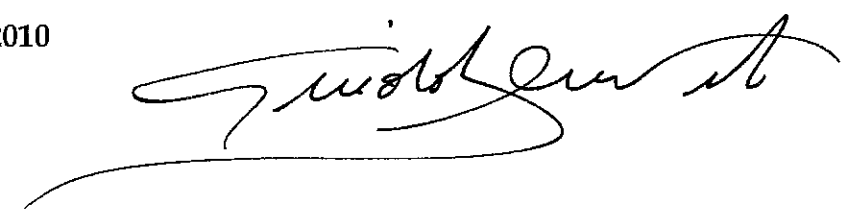
- **Human resources**:
  - List of Project Staff
  - Organization chart
  - ToR's of the Italian staff
- **Activities**
  - Narrative report on activities performed from June 2009 - December 2009, (January 2010)
  - Workplan January (February) - July 2010
- **Financial situation**
  - Report covering the period June - December 2009
  - Budget January (February) - July 2010

After a deep and thorough analysis of the document, as Member of PEC, I express my full no-objection to the approval of the document by the PEC, with specific and explicit reiteration of the approval of the Work-plan and Budget for the current and last semester.

Furthermore, I express the following recommendations:

- Being the final semester work-plan extremely tight, I suggest that PMU **reports** in writing **to PEC Members every 2 months** on the progress of the activities, with reference to the Work-plan hereby approved; PEC, if necessary, might make any remark for actions.
- Being the project at its final phase, I recommend a **specific explicit coordination with EEAA**
- I ask the PMU and the Scientific Committee to provide PEC with a draft **ToRs for an external evaluation**, specifically focused on the sustainability of the MM exhibit actions (i.e. Sand Removal and Restoration) versus the environmental pressure (sand, wind, temperature and solar radiation) as well as versus the visitor's anthropic carrying capacity. PEC might propose to Donor and UNDP to implement such external evaluation, possibly in time to provide the Final Worksop and/or the Final Publication with its conclusions.
- Being MM a satellite site of the Wadi el Rayan Protected Area, I finally recommend that by the time of the ISSEM Handing Over, **a specific regulatory framework**, jointly agreed by the legal departments of EEAA and SCA, should be formulated, approved by relevant Egyptian Authorities for adoption and declared ready for endorsement by EEAA and SCA.

Signed in Rome, 28 February 2010
Guido Benevento



Attached to the already signed documents here the clarifications suggested by the Director of the Italian Development Cooperation in Cairo.

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1) need to correct the venue at pag 1 " SCA premises" instead of SCA promises
2) page 2 "closing ceremony" instead of induction ceremony
3) page 3 first line " total" instead of totally
4) page 3) first par. " choice" instead of choices ; sec. par. the first "only" should be deleted; third par. "the building works are ..."; Arch Angela de Vita....." Is guaranteed" instead of guarantee;
5) last page fourth par: Arch. Antonio ....."Fayoum pocket guide", instead of brochure;
6) TOR for an external evaluation "mission" instead of committee;

Please take note and sign Cairo 2010.03.19

Dr. Ginevra Letizia

Prof. Ali Radwan

Prof. Edda Bresciani

Dr. Luca Montaccini

Mrs. Amany Nakhla

Mr. Hisham El Leithy

Arch. Antonio Giammarusti

Prof. Feisal Esmael

Arch. Angela De Vita

Annex 6

G.I.S Contract signed between ISSEMM/SCA and IT Synergy, signed on 13th July 2010

COOPERAZIONE ITALIANA
التعاون الإيطالي

United Nation Development Programme

Egyptian-Italian Environmental Cooperation Program Phase-II
Institutional Support to the Supreme Council of Antiquities
ISSEMM

UNDP

Contract for supplying of technical assistance and

for Fayoum and Saqqara Geographical Information System application hosting

This Contract is made and entered into the city of Cairo \ Egypt as of: By and between:

ISSEM Project
Address: 1081 Corniche el Nil St. – Garden city – 8th floors – Cairo, Egypt
Represented by:
Arch. Angela De Vita – Project International Technical Manager.
Mr. Hisham El Leithy – Project National Technical Manager
"Employer"

And

ITSynergy
Address: Building 115 Cairo Smart Village - 12577 - Giza, Egypt
Represented by:
Gihan Samir
"Supplier"

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سجل تجاري رقم ٦٠٨٧
ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

المشروع الايطالى للدعم المؤسسى
ISSEMM/EICP

PREAMBLE:

- Under the Program titled "Institunional Support of Italian Aid Assistance to the EEAA-COE/Egyptian-Italian Environmental Cooperation Program, Phase I", financed by the Directorate General for Cooperation of Development of the Ministry of Foreign Affairs of Italy and executed by the Egyptian Environmental Affairs Agency (EEAA), the University of Pisa (UNIPISA) was entrusted to the provision of scientific support and monitoring activities to the project *Enhancement of the Organization and Capabilities to Preserve the Cultural Heritage of Egypt*. The project was successfully executed during the period 2000-2003.

- A Memorandum of Understanding was signed on 5th November 2003 between the Government of Italian Republic and the Government of the Arab Republic of Egypt for the implementation of the "Phase II of the Egyptian-Italian Environmental Cooperation Program" stipulating that UNIPISA will be sub-contracting by United Nations Development Programme (UNDP) as the Agreed Consultancy for Phase II of the Program for the project "*Institutional Support to Supreme Council of Antiquities for Environmental Monitoring and Management of Cultural Heritage Sites: applications to Fayoum Oasis and North Saqqara Necropolis*" (hereinafter referred as "*ISSEMM Project*") funded by the Italian Directorate General of Cooperation for Development and executed by Supreme Council of Antiquities (SCA).

- The project has been developed in the period 2005-2006, which represent the starting point for the Work Plan and re-stared upon approval by the Project Executive Committee held on 21st September 2008. For Fayoum oasis, the project intended to facilitate the sustainable development of the environmental and cultural assets. Among the significant activities carried out: Drawing up of a Site Information System (S.I.S) which contains detailed archaeological and conservation datas; and designing one or more sustainable tourist visiting path connecting archaeological and natural resource of the oasis using the S.I.S.

- WHEREAS the Employer (ISSEMM Project), requires the services from the Supplier to complete its needs of technical assistance in order to transfer the web application in a hosting server environment based on Linux; as well as to provide the web site portal maintenance for the agreed period;

- WHEREAS the Employer recognises that the Supplier (ITSynergy) has knowledge and qualifications needs for the requested tasks;

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ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

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THEREFORE,

based on the foregoing, and after declaring their capacity to enter into this Contract, the two Parties have also agreed to enter into this Contract in accordance with the terms and conditions mentioned below.

- The final total amount of the contract is agreed in **105.234,83 L.E.** (only one hundred five thousand two hundred thirty four/ 83 Egyptian Pounds), amount of offer submitted 18,471 USD, rate change 5.697

ISSEM Project

Mr. Hisham El Leithy – Project National Technical Manager

Hisham Elleithy

Arch. Angela De Vita– Project International Technical co-Manager

IT Synergy

Mrs. Gihan Samir

Gihan Samir

Cairo, 13th July 2010

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سجل تجاري رقم ٦٠٨٧
ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

المشروع الإيطالى للدعم المؤسسى
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G. S
H.E.

CONTENTS

It synergy
Information system technology
ش.م.م
طبقا لقانون إستثمار رقم ٨ لسنة ١٩٩٨
سجل تجاري رقم ٦٠٨٧
ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

المشروع الإيطالى للدعم المؤسسى
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GENERAL CONDITIONS
The Supplier confirms to be in full knowledge of the technical specifications and to agrees to all conditions described in the present document, and of local rules and regulations.

OBJECT
The Supplier agrees to fully comply with the attached technical specifications (Annex I) and the following conditions, which are hereby confirmed and consisting in:

The full technical assistance services in order to complete the Supplier need to transfer the web application elaborated by the Project, in a hosting server environment based on Linux, and the maintenance of the application as a web site portal.

2. CONTRACTUAL RULES

2.2 Price Revision
All works must be realized on "turn-key" basis and prices are not subject to escalation.

2.3 Supplier's Duties
The Supplier's duties included in the total price are all activities described in the enclosed documents, including:

1. Procurement of all technologies and equipment as per technical specifications;
2. All qualified technicians and technologies necessary to supply assistance, all security and safety measures related to the works in progress are the Supplier's responsibility.
3. The provision of a specific domain for the Project and the configuration of a Content Management System as a web site portal to enable the Employer to publish informations about the project's activities;
4. The provision of a WMS/WFS server for serving the layers included within the database in different formats (KML, GML, SVG, PDF, etc.) in order to allow users to load the layers directly into their Google Earth Application by clicking on a URL served from the WMS/WFS. Considering that this device shall allow the easy browsing of layers and data from the desktop, using Google Earth.
5. All activities must be executed following the agreed technical specifications (Annex I) and ISSEMM Project technical staff supervision.

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سجل تجاري رقم ٦٠٨٧
ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

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2.4 Specific clauses

1. In view of the ending of the Project, foreseen in the date 30th October 2010, the present Contract shall undergo the modification of the Institutional Parties hereinafter undersigned. The Supreme Council of Antiquities (SCA) as Executing Agency of the Project shall be the Party to whom the "Egyptian-Italian Environmental Cooperation Program, Phase II " shall proceed with the handing over of the Program assets. Therefore, from the date of 1st November 2010, the SCA shall enter into the Contract, taking over ISSEMM Project Party, with no further modifications in the Terms and Conditions of the present agreed Contract.

2. Whereas the SCA shall enter as Employer's Party of the present Contract, for the remaining validity period, foreseen until 15th July 2013, all assets of the Project shall be return/handed over to SCA at the closure of the Contract.

3. Intellectual and industrial property rights

a. All reports and data such as maps, diagrams, drawings, specifications, plans, statistics, calculations, databases, software and supporting records or materials acquired, compiled or prepared by the Supplier in the performance of the contract shall be the absolute property of ISSEMM-SCA unless otherwise specified. The Supplier shall, upon completion of the contract, deliver all such documents and data to ISSEMM-SCA. The Supplier may not retain copies of such documents and data and shall not use them for purposes unrelated to the contract without the prior written consent of ISSEMM-SCA.

b. The Supplier shall not publish articles relating to the services or refer to them when carrying out any services for others, or divulge information obtained from the Employer, without the prior written consent of ISSEMM - SCA Authority.

c. Any results or rights thereon, including copyright and other intellectual or industrial property rights, obtained in performance of the Contract, shall be the absolute property of ISSEMM-SCA, which may use, publish, assign or transfer them as it sees fit, without geographical or other limitation, except where intellectual or industrial property rights already exist.

3. CONTRACT STARTING DATE

The Contract enters into force in date 15th July 2010, and its duration shall be of 36 months, until 14 th July 2013.

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4. GUARANTEE

The entire system and the related hosting will have Supplier's maintenance guarantee for 36 months, starting from the date of 15th July 2010. Within this period

المشروع الإيطالي للدعم المؤسسى
ISSEMM/EICP

G.S
H.E.

the Supplier will maintain, free of charge, at its head office, any part of the System. The technological equipment repair or replacement, should be at Supplier's charge as well as those for reinstalling the replaced/repaired piece.

5. TERMS OF PAYMENTS

The instalment flow will be as following :

- Down payment up to 10 % of the Contract value within 10 days of signature of the Contract of Services supply.
- a second instalment of 35% of the Contract value, within August 8th 2010, in accordance to the Work Plan (annexed to the Contract).
- a third instalment of 35% of the Contract value, within September 30th 2010, in accordance to the Work Plan (annexed to the Contract).
- a final instalment of 20% of the Contract value, within October 20th 2010, in accordance to the Work Plan (annexed to the Contract).

Signature

ISSEMM Project
Represented By:

Mr. Hisham El Leithy
Project National Technical Manager

Arch. Angela De Vita
Project International Technical co-Manager

Signature

ITSynergy
Represented By

Mrs. Gihan Samir

Cairo, 13th July 2010

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سجل تجاري رقم ٦٠٨٧
ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

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ANNEX I

Technical Specifications

Support Services for ISSEMM

Quotation

IT Synergy

11th of July 2010

Based on: TOR
Prepared for: **Institutional Support To Supreme Council of Antiquities**

RECEIVED
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11 July 2010

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ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

G.S

Overview

The current quotation defines our proposal for providing the following supporting services:

- Technical assistance services for implementing, editing and elaboration of G.I.S input/output data, under ISSEMM Project Experts supervision.
  - The technical assistance activities are described in the Support Section.
- Technical assistance services for web and local applications transfer into a hosting server
  - The current web application will be analyzed and migrated from Windows to Linux. This procedure should not need a reprogramming of the application.
- Hosting service
  - We will provide a hosting server, as specified below.
- Maintenance of the applications as a web mapping and portal site.
  - Maintainability of all applications will be assured for the application and portal that will be developed for the project.

- Monitoring and Supervising the insertion of data from the data collectors to the existent system and database.
  - We will provide expert advice and support with supervision on the insertion of data from the data collectors to the existent system. A local copy of the application will be installed internally in IT Synergy in order to keep track of changes and resolution of issues that might appear due to problems in the upload.
- Technical assistance services for implementing, editing and elaboration of G.I.S input/output data, under ISSEMM Project Experts supervision.
  - We will also provide assistance in the vectorization and digitization of the GIS layers that are part of the project. Coordinate conversions and spatial analysis are part of the activities that will be executed during the assistance.
- Provide all the facilities for the development carried out by ISSEMM Project on the GIS web application to release it online in a Linux Server. Specifically:
  - The technologies being used by ISSEMM Project are all based on open source software, including a Postgres/PostGIS database, PHP/MapServer using p.mapper as a framework for interacting with MapServer to locate all layers in vector and raster formats.
    - The different layers and vector formats will be checked for consistency before uploading them to the system. In special case, the application itself, database and all the information within it will be migrated to linux taking care that all the data is kept intact.
  - The system work has been done in configuring the Mapserver map file and the templates for linking the layers with tabular data contained in related tables.
    - MapServer configurations will be checked for consistency with linux libraries during the migration process. Possibility to upgrade to the latest version of MapServer during the upgrade will be analyzed.
    - Scripts that have been developed in other language different than PHP, in order to give the maximal portability to Linux.
    - By the fact that the application is based on PHP, we can assure that most of the configurations will be migrated with minimal effort.
  - Provision of a specific domain for the Project and the configuration of a Content Management System as a web site portal to enable ISSEMM Project to publish informations about the Project's activities.

  - We will provide a Content Management System based on Drupal to serve as the main portal of the application and provide information about the project and lots of content regarding the project itself as an effort for disseminating the project outcomes.

- The portal shall contemplate the option of leading users to the web mapping application developed by the ISSEMM Project, and that shall be transferred to the Linux server. This application will show all the different layers that are part of the project.
  - The GIS application and the Drupal CMS Portal system will be both integrated into the same platform to provide users with one full integrated environment where they can perform their actions.
- The provision of a WMS/WFS server for serving the layers included within the database in different formats (KML, GML, SVG, PDF, etc.) in order to allow users to load the layers directly into their Google Earth Application by clicking on a URL that is served from the WMS/WFS. Considering that this device shall allow the easy browsing of layers and data from the desktop, using Google Earth.
  - We will use a WMS/WFS for serving the layers in different formats for different usages. Those involve KML, GML, SVG, etc dynamically generated from the database using the WMS/WFS software.

IT Synergy will also provide Linux hosting services for the GIS web application for a period of 36 months.

Following are the financial terms for the proposed solution:

18,471 USD (One hundred three thousand four hundred thirty five)

(*) Taxes, if due, are not included in the quotations.

It synergy
Information system technology
ش.م.م
طبقا لقانون إستثمار رقم ٨ لسنة ١٩٩٨
سجل تجاري رقم ٦٠٨٧
ب. ضريبية رقم ٦٣٥-٠٤٣-٢٠٦

المشروع الإيطالى للدعم المؤسسى
ISSEMM/EICP

Annex 7

Maintenance Plan_ Visitor Center of Medinet Madi Archaeological Site

Embassy of Italy in Cairo

COOPERAZIONE ITALIANA
ITALIAN COOPERATION
التعاون الإيطالى

Supreme Council of Antiquities

United Nations Development Program

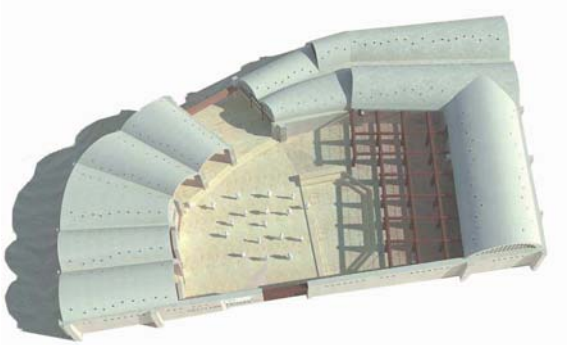
Egyptian Environmental Affairs Agency

Arabic Republic of Egypt

Egyptian Italian Environmental Cooperation Program

Medinet Madi archaeological site

Visitor center
Maintenance plan



Index

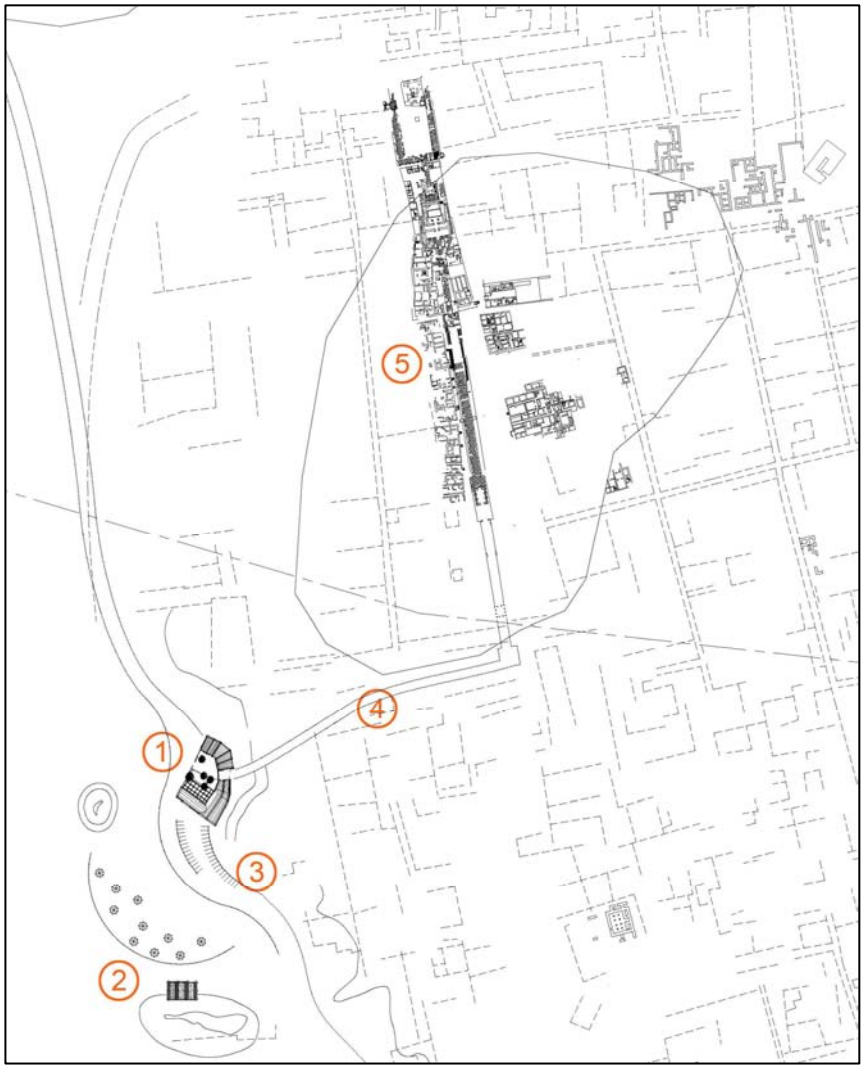
1 Overall Project description

1.1 Overall information about the project

VISITOR CENTER OF MEDINET MADI	
Location	**Medinet Madi Fayoum, Wady Rayan Medinet Madi Protected Area**
Project (client)	**ISSEM Project**
Contractor	**Eng. Macmud**
Architectural designers	**A. Giammarusti, A. De vita, Capitol co.**
Construction managers	**Prof. Magdi, Fayoum University**
Total cost of the work	**1.440.000+270.000 EGP**
Year of implementation	**Works started in 2010 (under construction)**
Procedure followed	**Tender**

1.2 Overall information about the building

1.2.1 Brief description of the project



1. Visitor Center
2. Ecolodge Area
3. Parking Area
4. Way to the Archaeological Area
5. Archaeological Area

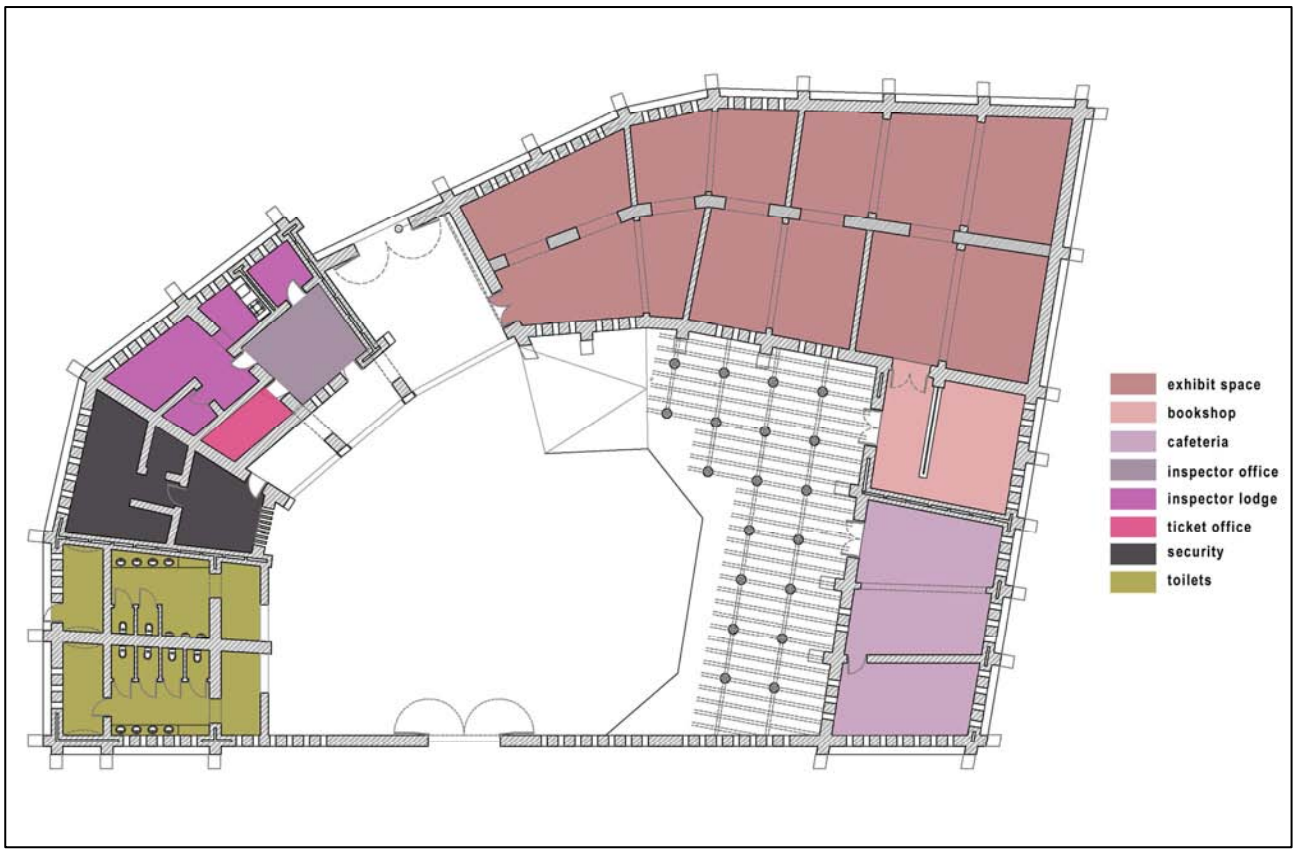
Visitor center

The Visitor Center project of Medinet Madi is designed totally respecting the features of the place, compatible with the surrounding environment by using traditional shapes and local construction materials. The structure is based on sandy soil, accompanying the orography of the territory and laying down on dunes surrounding the ancient city; thus, it is a perfect access point to the itinerary of the visit in the archaeological area. The visitor center' building is developed around the uncovered courtyard with 590 m² surface, where the surrounding environment and the trees, clashing with the course of the sun, gather significant shadow zones, which are necessary to regulate the temperature in an desert climate. The courtyard is conceived as a reception and rest space, as well as a fresh air receiver. A small open area auditorium (20 – 30 places) is placed in the courtyard where the school children, or the tourists groups will be able to sit in order to attend conferences or lessons or same music concert.

The two buildings which surround the uncovered area are both to one floor and are divided into two functional parts: the first one contains the exhibition area, the bookshop, and the cafeteria, covers a surface area of 500 m² and the second one is composed by the services and offices. These buildings cover a surface area of 280 m². The exhibition space (surface area 300 m²) provides the visitor of a first overall approach to the archaeological area, defining the main historical, cultural and architectural characteristics of Medinet Madi and it shows to the visitor the history of the archaeological discovery of the ancient city. It will display scale models of the monuments, graphic reproductions, photos of the decorative elements, copies of the main archaeological finds of the area, as well as didactics texts. The exhibition path leads to the bookshop area (surface area 40 m²), where the visitor will have the possibility of buying informative material and souvenirs. The cafeteria (surface area 70 m²) is equipped with a bar counter, a kitchen, and tables in the external patio, which is covered by a shadow area.

The second wing of the building hosts the toilets (44 m²) and the administration offices including guards accommodation (31 m²), a small office, a kitchenette, a bathroom and a sleeping space and an inspectors offices (20 m²), with related services (31 m²), a small storage area, and the tickets office (8 m²).

The power unit is located nearby and it's provided of a indipendent entrance, located in the back of the building and directly connecting to the outside, to ensuring safety measures.



The whole complex will be fed by electric energy, which will be connected to power generators; the electric system is designed to be, in the future, linked to solar panels fitted on the roofs of the parking area.
Concerning the sewer system, biological basins will be set up nearby the toilets building. The provision of water will be carried out through a holding tank to be filled periodically.
The whole complex follow the shape of traditional Egyptian architecture and it is designed to be compatible with the surrounding environment, using architectonical traditional elements, as vaults and courtyard, and also by using traditional materials such as stone, red bricks, natural stone, wood.

Ecolodge
The intervention will also provide the construction of an ecolodge, located near the visitor center.
The area of the Ecolodge hosts a limited number of visitors in humble accommodations, represented by simple tents disposed in the desert. The structure is a rest stop for the voyager, who arrives to Medinet Madi from Wady el Rayan, crossing the desert towards east. The Ecolodge offers a unique opportunity of relax before carrying out the visit to the archaeological site. The camping area (surface area 3.700 m²) hosts a maximum of 25 persons and the toilets are located beside it.

There is also a parking area located in the rear of the building (south-east front); its covered surface is around 1.000 m² (total of 50 vehicles).

1.2.2 Project data

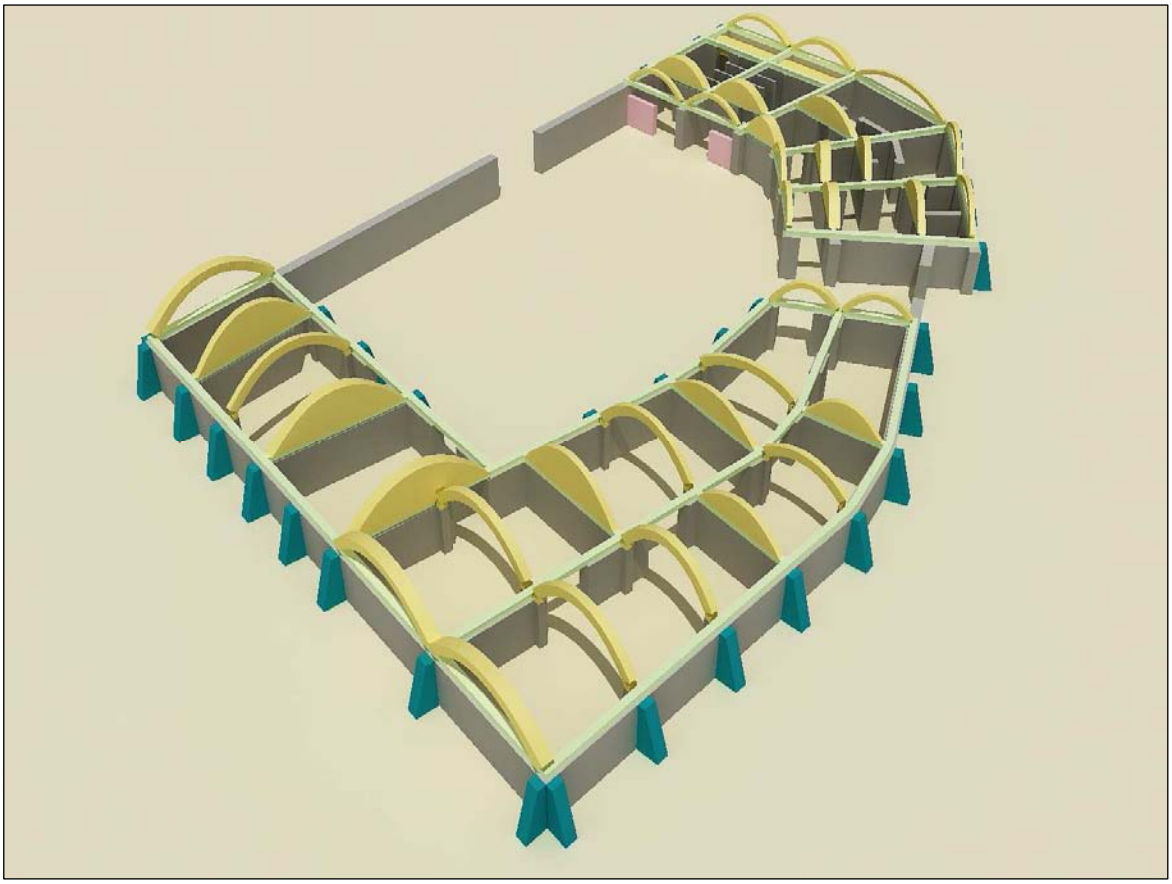
PROJECT DATA	
Covered surface	**780 (visitor center) + 230 (ecolodge) m2**
Internal Courtyard	**590.00 m²**
Maximum height	**6,50 m**
Expected visitors	**15.000 visitors / years**

1.2.3 Current situation

Currently the building is under construction, the expected end of the works is planned on the 10th of December.

1.2.4 Construction Technologies and materials

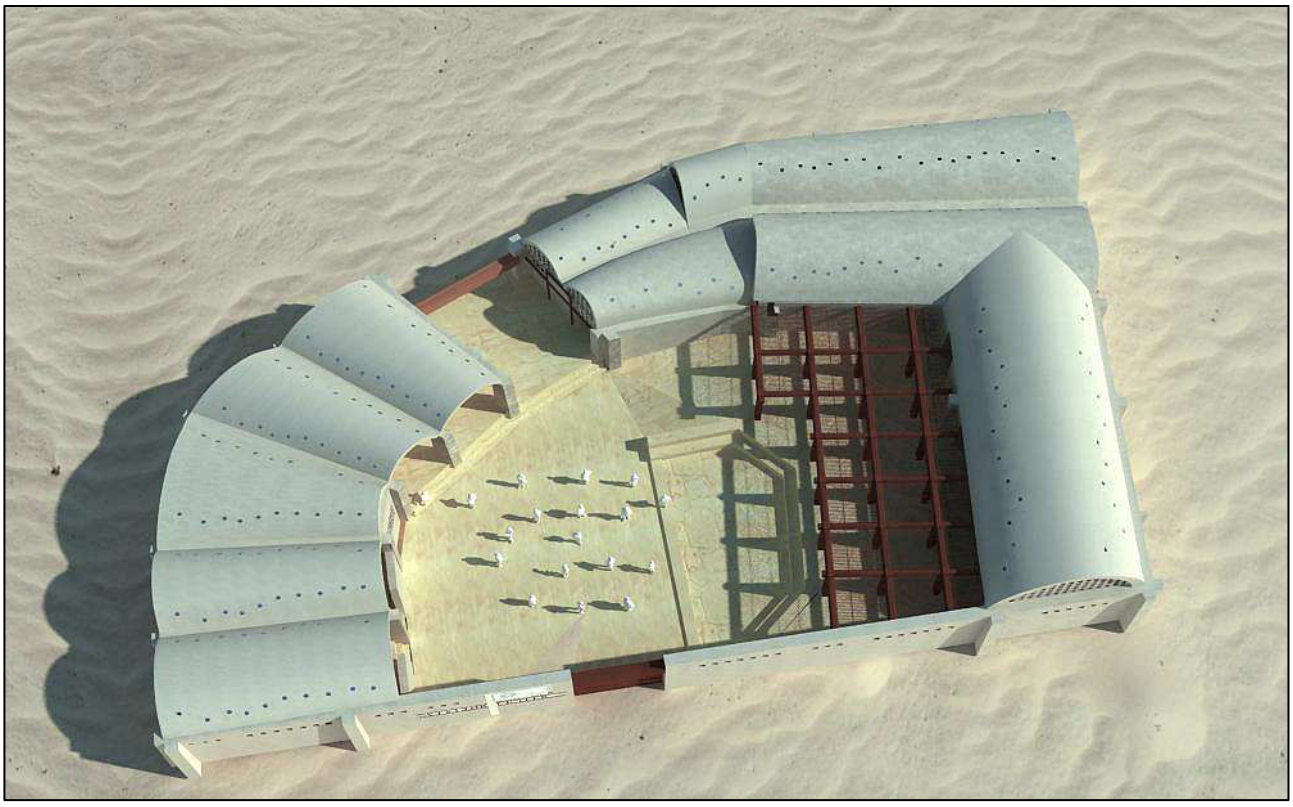
The both buildings have foundations made of stone blocks, according to the attached soil report. The height of foundations is 1, 50 meter under the ground level; the bond between the foundation blocks is composed of lime and sand. The joint between the lime stone foundation blocks are not greater than one centimeter.
The vertical perimeter walls are made of red bricks and it has a thickness of 60 cm; they are strongly clamped to the external buttresses positioned every 4 meters along the walls, which support the horizontal stress of the vaults
The buttresses are also located and connected with the arches, made by wooden trusses, which support the vaults, transeferring it to the vertical walls.



The project wanto to reduce the environmental impact by using only natural and local materials.
Lime stone cladding. Used in the exhibition, as a cladding, to create a contrast with the service rooms (bathrooms, bookshop, cafeteria, etc.) in order to emphasize the exhibit space.
Red bricks. Traditional type of bricks, made locally, using natural components.
Sand stone (hashma stone). Used for the flooring tiles in the whole projects buildings; this type of lmestone it's very common and abundant in Fayoum area.
Natural glass. Natural material, locally made.
Wood. Used for windows frames, doors, lintels and trusses. It's a natural and bearing material that, comparing to concrete or steel, has a low environmental impact referring to its cycle' production.
Plaster. Natural plaster: mixture of water, sand, mud and straw. The colour obteined is like sand colour, to preserve the surrounding landscape.

The control of the internal climate will be achieved by using vaults, which reflect the sunlight out from the top;small windows, will be created to attracting inside the rooms and to reduce the direct sun rays inside the building, and using the shadow area in the courtyard to receive fresh air and shadows.
Thanks to this construction' system it is not necessary to install air condition system, respecting the values of energy saving and environmental compatibility.

1.3 Photorealistic views



Visitor center_top view

Visitor center_exhibit area

* All the pictures used have been provided by ISSEM project.

2 Maintenance plan

2.5 List of the building's technological units

Class	Code	Technological units	Expected life cycle	- 40%
Structural elements	1	Foudations	80/90 years	55
	2	Walls and buttress	80/90 years	55
	3	Partition walls	80/90 years	55
	4	Wooden vaults	30/40 years	25
Outer finishes	5	Plaster work	6/8 years	5
	6	Outer flooring	30/40 years	25
	7	Roof cladding	6/8 years	5
Inner finishings	8	Wall cladding: plaster work	6/8 years	5
	9	Floors	15/20 years	12
	10	Flooring and cladding for toilets and kitchens	15/20 years	12
Windows and doors	11	Window frames and lintels	8/16 years	10
	12	Doors	8/16 years	10
	13	Wastewater system	20/25 years	15
Systems	14	Water distribution system: pipeline	8/16 years	10
	14.1	Water distribution system: hydraulic equipment	8/10 years	6
	15	Electrical system: ductwork)	20/25 years	15
	15.1	Electrical system: equipment	8/16 years	10
Outdoor area	16	Pergola	20/25 years	15
	17	Wooden track (linking visitor center to archaeological site)	20/25 years	15

STRUCTURAL ELEMENTS

Requirements and performances:
1. Stability and resistance to the action of loads or seismic vibrations.
2. Users' safety

CODE	1
Element	**Foundations**
Description	Ffoundations are composed by stone blocks and a reinforced concrete riddle. The Blocks height = 0, 80 m Reinforced concrete riddle= 0, 40 m
Locations	~ 1,50 meters from the natural ground level at least
Expected life cycle (years)	**55**
Anomalies and diseases	**Movements and subsidence** of bearing elements can cause deformations in the structure; if neglected this kind of anomaly can lead to dangerous structural damages. In case of subsidence it's advisable to contact a specialist in structures to establish the appropriate intervention.
Maintenance interventions	Foundations do not need any kind of maintenance, if executed in the appropriate way
Type of reviews	Visual review. Particular attention to local subsidences
Periodicity of reviews	Once a year
Periodicity of maintenance	If necessary
Periodicity of maintenance	If necessary

CODE	2
Element	**Walls and buttress**
Description	The vertical perimeter walls are made of red bricks and concrete (thickness= 60 cm,red bricks have standard dimension:12x6x25 cm). The perimeter walls are strongly clamped to the external buttresses, made of red bricks and afterwards plastered. The buttresses base measure 1,10, buttress are positioned every 4 meters along the perimeter walls which receive the horizontal stress of the vaults. They also have a thickness of 60 cm.
Expected life cycle (years)	**55**
Anomalies and diseases	**Movements and subsidence** of bearing elements can cause deformation of the structure; if neglected this kind of anomaly can cause risky structural damages **Cracks** **Differential settlement** of the structure, due to a differential thermal expansion or resulting from not properly connected floors with the bearing walls; **Detachment** of material due to the powdering of the external finish or binding material.

	Efflorescence formation of substances, usually whitish, crystalline, powdery or filamentous, on the wall surface. **Swelling** of the wall towards the outside; this type of anomaly may be caused by a bad execution of the work during the bricks' laying;
Maintenace interventions	Structures do not need any kind of preventive maintenance if they are executed in the appropriate way. In case of subsidence or wide and deep cracks it's advisable to contact a specialist in structures to establish the appropriate intervention. Concerning other anonalies of wall cladding see the item "outer finishes"
Type of reviews	Visual review. Particular attention to local subsidence and cracks
Periodicity of reviews	Once a year
Periodicity of maintenance	If necessary

CODE	3
Element	**Partition walls**
Description	Partition walls have the same characteristics of bearing walls; the thickness is reduced because these elements don't have a bearing function (15/30 cm).
Expected life cycle (years)	**25**
Anomalies and diseases	**Penetration of moisture** **Pulverization** **Detachment**: **Chips**
Causes of degradation	Bad execution of the artefact, presence of moisture in the rooms contacting the partition.
Periodicity of reviews	Once a year
Periodicity of maintenance	If necessary
Maintenace interventions	These kinds of structures do not need any kind of preventive maintenance if it is executed in the appropriate way. In case of subsidence it's advisable to contact an engineer specialized in structures to establish the appropriate intervention.

CODE	4
Element	**Wooden vaults**
Description	Roof is composed by a wooden vault supporting an insulation layer, made by a nylon sheet, covered by red bricks and finished by mud plaster. Wooden vaults are made of Azizi wood, finished by natural colour. In order to guarantee its preservation wood is treated by a water proof product and sprayed by insecticide. The thickness of the bearing structure is 30 cm and joints are executed with common carpentry.
Expected life cycle (years)	**24**

Anomalies and diseases	**Penetration of moisture** **Deflection** **Detachment** **Swelling** **Rot**
Type of reviews	Visual review
Periodicity of reviews	Twice a year
Maintenace interventions	In order to preserve the quality of the wood over the time interventions have to be provided as follows: - Woodworm and meld treatment on the wooden parts by brushing or spraying of synthetic resin (every two years); - Replacement of waterproof layer (every 3 year) - Protection to insect attacks spraying an appropriate product (every two year). In case of structural damage it's advisable to contact a specialist in structures to establish the appropriate intervention to consolidate of wooden structures. In any case, to ensure a minimal safety level, it's suitable propping the wooden vault using temporary structures.
Frequency of maintenance	(Before written)

OUTER FINISHES

Requirements and performances:

1. Functionality and usability
2. Maintain aesthetic features over the time.

CODE	5
Element	**Plaster work**
Description	The plaster in question is a mix of mud, water, straw and sand. The thickness is around 2, 5 cm, and the final colour is a powder yellow colour to preserve the surrounding landscape.
Expected life cycle (years)	**5**
Anomalies and diseases	**Disaggregation**. **Detachment** **Superficial dump**. **Superficial erosion** **Cracks** **Lack of material** **Swelling**
Causes of degradation	Bad execution or incorrect mixture in the mortar preparation
Type of reviews	**Reviews by the user:** 1. Checking fronts and visible parts. 2. Checking condition of the finishes and verifying diseases and wear of visible parts. Checking the colour surfaces uniformity.

	Reviews by qualified staff: 1. Replacement of parts affected by wear or other forms of degradation through the removal of degraded areas, cleaning underlying areas by brushing. Recovery area with appropriate or similar materials to original plaster paying particular attention to preserve the uniform appearance of the surfaces. 2.Control of more exposed areas to weather accidents: control by non-destructive methods (light hammering on the plaster) in order to locate any anomalies 3. Check plaster functionality of the through some instruments whose use is to be defined referring to the specific type of control and the type of plaster (physic-chemical analysis, stratigraphic analysis, moisture detection systems, adhesion control tests to evaluate the characteristics of homogeneity, monitoring the presence of salts etc...
Periodicity of reviews	Once a year
Maintenace interventions	Removal of deteriorated parts and replacement; when some areas are too damaged it must be provide the total restoration in order to preserve the aesthetic requirement of uniformity of façades.
Periodicity of maintenance	If necessary (total plaster replacement: every 5 year)

CODE	**6**
Element	**Outer flooring**
Description	Floors are composed by a concrete layer of 25 cm covered by Sandstone tiles (Hashma stone, a natural stone durable; tickness=10cm); all stones will be solid bedded with mortar and all voids filled.
Expected life cycle (years)	**25**
Anomalies and diseases	**Bleaching** **Superficial dump** **Disintegration**. **Detachment** **Stains and graffiti** **Lacks** **Depressions or abnormal slopes of the floors** **Formation of sand drifts**
Types of reviews	**Reviews by the user:** Overall control of the visible parts about regularity of finishes. Checking finishes condition and to verify of the degree due to wear and joints erosion.
Periodicity of reviews	Once a year
Maintenace interventions	**Maintenance by users:** 1. Surface cleaning: cleaning and removal of dirt by washing or brushing, cleaning of damaged elements with an appropriate cleaning product. 2. Cleaning and restoration of joints: the joints by brushing manual cleaning. **Maintenance by qualified staff** 3. Replacement of degraded elements: replacement of worn parts. Restoration of degraded joints with suitable material.

	4. Cleaning and levelling sand drifts, especially in the shadow areas
Periodicity of maintenance	If necessary

CODE	7
Element	**Roof cladding**
Description	The plaster in question is a mix of mud, water, straw and sand. The thickness is around 2, 5 cm, and the final coulor is a powder yellow colour to preserve the surrounding landscape.
Expected life cycle (years)	**5**
Anomalies and diseases	**Disaggregation**. **Detachment** **Superficial dump**. **Superficial erosion** **Cracks** **Lack of material** **Swelling**
Causes of degradation	Bad execution or incorrect mixture in the mortar preparation
Types of reviews	**Reviews by the user:** 1. Checking fronts and visible parts. 2. Checking condition of the finishes and verifying diseases and wear of visible parts. Checking the colour surfaces uniformity. **Reviews by qualified staff:** 1. Replacement of parts affected by wear or other forms of degradation through the removal of degraded areas, cleaning underlying areas by brushing. Recovery area with appropriate or similar materials to original plaster paying particular attention to preserve the uniform appearance of the surfaces. 2.Control of exposed areas to weather accidents: control by non-destructive methods (light hammering on the plaster) in order to locate any anomalies 3. Check plaster functionality of the through some instruments whose use is to be defined referring to the specific type of control and the type of plaster (physic-chemical analysis, stratigraphic analysis, moisture detection systems, adhesion control tests to evaluate the characteristics of homogeneity, monitoring the presence of salts etc...
Periodicity of reviews	Once a year
Maintenace interventions	Removal of deteriorated parts and plaster recovery, when some areas are too damaged it must be provide the total restoration in order to preserve the aesthetic requirement of uniformity of facades.
Periodicity of maintenance	Periodical maintenance has to be provided when necessary. Total plaster replacement has to be provided every 5 year.

INNER FINISHES

Requirements and performances:

1. Functionality and usability
2. To maintain aesthetic features over the time
3. To not emit harmful substances

CODE	8
Element	**Wall cladding: plaster work (see item 5)**

CODE	9
Element	**Floors**
Description	Floors are composed by a concrete layer of 25 cm covered by Sandstone tiles (Hashma stone, a natural stone durable; tickness=10cm); all stones will be solid bedded with mortar and all voids filled.
Expected life cycle (years)	**55**
Anomalies and diseases	**Depressions or abnormal slopes of the floors** **Deformations and displacements** **Cracks** **Detachment**
Maintenace interventions	Structures do not need any kind of preventive maintenance if they are executed in the appropriate way. In case of subsidence it's advisable to contact a an engineer specialized in structures to established the appropriate intervention
Type of reviews	Visual review. Particular attention to local subsidence and cracks
Periodicity of reviews	Once a year
Periodicity of maintenance	If necessary

CODE	10
Element	**Flooring and cladding for toilets and kitchens**
Description	All toilets and kitchens use ceramic tiles by size 20x20x2,5 cm, anti-slip. All of tiles are installed with a height 2.10 meters and laying by cement mortar.
Expected life cycle (years)	**12**

Anomalies and diseases	**Bleaching** **Superficial dump** **Detachment** **Stains and graffiti** **Lacks**. **Depressions or abnormal slopes on the wall**
Causes of degradation	Bad execution of the laying, bad quality of the tile material
Types of reviews	**Reviews by the user:** Control of the visible parts and finish regularity Checking finishes condition and testing the degree due to wear and erosion of visible parts, particularly joints. Checking the uniformity of colour surfaces.
Periodicity of reviews	Once a year
Maintenace interventions	**Maintenance by users:** 1. Surface cleaning: cleaning and removal of dirt by washing or brushing, cleaning with appropriate product. 2. Cleaning and restoration of joints by manual brushing. Restoration of damaged joints. **Maintenance by qualified staff** 3. Replacement of degraded elements: replacement of worn parts, broken or raised after the preparing of the underlying plan.
Periodicity of maintenance	If necessary

WINDOW FRAMES AND DOORS

Requirements and performances:

1. Thermal comfort
2. Regularity of finishes
3. Easiness of cleaning
4. Knocks resistances
5. Sand and wind resistance

CODE	11
Element	**Window frames and lintels**
Description	Frames and lintels are made of Azizi wood, finished by natural colour. In order to guarantee its preservation wood is treated by a water proof product and sprayed by insecticide.
Expected life cycle (years)	**10**
Anomalies and diseases	**Chromatic alteration** **Swelling** **Deformation** **Seals degradation** **Cracks**

	Lack of orthogonal structure **Loss of gloss** **Flaking, cracking** **Rupture of the action organs** **Loss of material**
Types of reviews	**Reviews by the user:** 1. Check wood deterioration 2.Controlling finishes and protective surface coating, control flatness of the elements. 3. Hand control 4.Controlling glass uniformity and of sealing glass- frame. Check for deposits or dirt. Verification of presence of anomalies or damages.
Periodicity of reviews	Once a year
Maintenace interventions	**Maintenance by the user:** **Lubricating hinges and locks (once a year)** Purification of locks and hinges with silicone products to ensure the correct operation **Cleaning of the runner slides (once a year)** Cleaning and removal of dirt and deposits with an appropriate detergent product. **Cleaning window casements (once a year)** Cleaning by aggressive detergents of residues and deposits that may affect the correct working **Cleaning gaskets (if necessary)** Cleaning by common detergent product. **Cleaning of working elements (every 6 months)** Clean organic residues that can cause the filling of slots, holes or beats by not aggressive product. **Cleaning of frames** Cleaning of embed and mobile frames by an appropriate detergent product. **Protection and painting of frames (once a year)** Restoration of protective coating after removal of the old layer by abrasive papers and filling of wood cracks by putty. To apply a primer coat by brush, to renovate the protective layer using suitable products according to the type of wood. **Maintenance by qualified staff (if necessary)** Replacement of broken frames or glasses using the same material following project specification
Periodicity of maintenance	(Before written)

CODE	**12**
Element	**Doors**
Description	The entrance door and the inner doors are made of Azizi wood, painted; in order to guarantee its preservation, wood is treated by a water proof product and sprayed by insecticide.
Expected life cycle (years)	**10**

Anomalies and diseases	**Chromatic alteration** **Swelling** **Deformation** **Seals degradation** **Gaskets degradation** **Cracks** **Lack of orthogonal structure** **Loss of gloss** **Flaking, cracking** **Rupture of the action organs** **Loss of material**
Types of reviews	**Reviews by the user:** 1. Check wood deterioration 2.Controlling finishes and protective surface coating,particular attention to swelling of the coating or of the wood. 3. Hand control 4.Controlling glass uniformity and sealing glass- frame. Checking deposits or dirt.
Periodicity of reviews	Once a year
Maintenace interventions	**Maintenance by the user:** **Lubricating of hinges and locks (once a year)** Lubrification of locks and hinges with silicone products, to verify the correct operation **Cleaning of the runner slides (once a year)** Cleaning and removal of dirt and deposits with an appropriate detergent product. **Cleaning of casements (once year)** Cleaning of residues and deposits that may affect the correct working, by aggressive detergents. **Cleaning gaskets (if necessary)** Cleaning by common detergent product. **Cleaning of working elements (every 6 months)** Clean organic residues that can cause the filling of slots, holes or beats by not aggressive product. **Cleaning of frames** Cleaning of embed and mobile frames by an appropriate detergent product **Protection and painting of frames (once a year)** Restoration of protective coating after removal of the old layer by abrasive papers and filling of wood cracks by putty. To apply a primer coat by brush, to renovate the protective layer using suitable products according to the type of wood. Sprying of insecticide (once a year)
Periodicity of maintenance	(Before written)

SYSTEMS

Requirements and performances:

1. Technological functionality and usability
2. Users' safety
3. Ease of inspection
4. Ease of management
5. Ease of use
5. Ease of maintenance

CODE	13
Element	**Wastewater system**
Technological unit description	**Pipes of drainage** provide to the spillage of water from a reservoir placed under the ground. **Sewage wells** must convey, in the sewer wastewater. They are generally circular, and they are composed by precast pieces of concrete. Coarse material is retained by an appropriate drilled basket, leaving only water flow and if it is necessary to retain sand and mud, which would pass easily through the holes of the basket, it's preferable to ensure a settling in a tank located on the bottom of the well. When connecting drainage to the existing sewerage system become difficult it's important to realize **septic tanks**; these elements can be a temporary store for wastewater coming from sewage well. Generally septic tanks are prefabricated and can be easily installed; they must be waterproof in order to prevent leakage that may cause pollution.
Expected life cycle (years)	**15**
Anomalies and diseases	**Pipelines:** **Accumulation of grease**: grease accumulation on the walls of the ducts. **Corrosion**: corrosion of pipes with obvious signs of decay showed the same changes of colour and presence of rust. **Defects in joints and connections**: fluid leakage near the joints due to bad executions of connections or disconnections of joints. **Erosion**: Soil erosion outside the pipes which is usually caused by ground infiltration. **Encrustation** accumulation of mineral deposits on the walls of the ducts. **Penetration of roots**: root vegetables penetrating inside ducts that cause the obstruction of the system **Sedimentation**: accumulation of mineral deposits on the bottom of the duct can cause obstruction of the ducts. **Sewage wells:** **Corrosion** of the walls of the wells due to hard particles in wastewater and on the superficial flowing water **Defects in joints and connections**: fluid leakage near the joints due to errors or disconnections of joints. **Grids' diseases**: grids' breaking can cause leakage of materials such as coarse sand and rubble. **Deposits**: fouling or obstruction of the grid of wells due to accumulation of material which is foliage, vegetation, etc... **Septic tanks:**

	Abrasion: Abrasion of the septic tank walls due to the effects of hard particles used in the water and surface runoff. **Corrosion** of the walls and of the bottom of the basins due to chemical action of fluids. **Deposits**: excessive accumulation of sand and solids elements on the bottom of the tank. **Obstruction**: obstruction of the well grids due to accumulation of material (foliage, vegetation, etc.) **For all the components:** Stench: septic sewage could be produce unpleasant odours, lethal or explosive gas producing chemical effects dangerous for people.
Types of reviews	**Reviews by qualified staff:** 1. Test for detected leaks inside the pipes (once a year) 2. To verify overall status and integrity of grids and cover plates of the wells (twice a year) 3. Checking along the walls of the septic tanks in order to pull out accumulation of mineral material and to verify that there is no loss of materials. (Twice a year)
Periodicity of reviews	(Before written)
Maintenace interventions	**Maintenance by qualified staff:** 1. Cleaning from sediments, causing obstructions and reducing the carrying capacity of fluids. (Twice a year) 2. Cleaning of the wells by removing sludge' storage and washing with pressure water. (Twice a year) 3. Cleaning of tanks removing any material accumulation, ensuring a water pressure cleaning up (Twice year_ if tourist crowd will increase the maintenance will be performed three times a year.)
Periodicity of maintenance	(Before written)

CODE	14
Element	**Water distribution system: pipeline**
Technological unit description	Water pipes provide the spillage of water from a **reservoir,** water tanks, placed under the ground. This tanks provide of potable water all the site and they have a life cycle of 25 years. The distribution system of the hot and cold water allows the facility of water use in the indoor and outdoor areas of a building. Water system is generally composed by the following technical elements: - Connection line , which connects the main water network to user secondary network; - Hydraulic machines, which control physical-chemical microbiological characteristics of water and control also the correct pressure to provide water distribution in the network; - Deposits, which provide to the users an adequate water supply - Heaters that must raise the temperature of cold water to satisfy the user'

	needs; - Cold/hot water distribution network has the function of transporting water to supply terminals; - Networks of hot water circulation, which have the function of keeping in constant circulation hot water to ensure distribution to the desired temperature; - Sanitary equipment and fittings that allow users to use hot / cold water **Polypropylene pipes** transporting thermo-vector fluids to the taps of sanitary equipments trough an underground network.
Expected life cycle (years)	**10**
Anomalies and diseases	**Insulation defects:** leaks detected in the insulation layer. **Defects in the control system**: defects of calibration for safety and control device, like pressure gauges or thermometers. **Leaks**: loss or leakage of fluid circulating in the pipes. **Deformation**: change of initial shape, warping of elements and irregularities **Gradient slope' errors**: errors in the calculation of the slope can cause a backflow of stagnant water **Deposits**: accumulation of storage material inside the pipes and inside the filters; it can cause fluid loss or pipe breaks
Types of reviews	**Reviews by qualified staff:** Check by view: to verify the main characteristics of pipes, particularly referring to: - leaks in joints: to check lesions or disconnection; stability of pipe supports; vibrations; - Presence of condense; insulation of pipes.
Periodicity of reviews	Once a year
Maintenace interventions	**Maintenance by qualified staff:** Cleaning of the water tanks (every two year) Refill of water tanks (if necessary) Renovate insulation of pipes when some signs of deterioration are visible (every three years)
Periodicity of maintenance	Every 10 years (after a review by specialized staff)

CODE	**14.1**
Element	**Water distribution system: hydraulic equipment**
Technological unit description	**Sanitary equipment**: elements for water distribution that allow users to carry out operations related to provision of sanitary water, hot water and / or cold water. **Water closet (WC)**: installed on the floor and made of glazed sanitary porcelain; it includes flush tank and toilet seat and chrome plated connection valves. **Wastewater wall box** made of glazed sanitary porcelain; the glaze is opacified by zirconium silicate, the material obtained has a good resistance to impacts and it allows very low water absorption. **Service sink** for cafeteria service, complete with chrome plated water faucet,

	chrome plated basket. **Kitchen sink** for resident rooms complete with chrome plated water faucet, siphone and all necessary accessories.
Expected life cycle (years)	**6**
Anomalies and diseases	**Failures:** failure of support structures for sanitary devices due to incorrect installation or to vandalism. **Corrosion**: corrosion of pipes in the strong decay parts and presence of rust **Defects in joints or connections**: fluid leakage close to the joints due to errors in the placement phase and / or disconnections of joints. **Defected valves**: bad working due to incorrect installation or poor dimensions design of the valves **Deposits**: accumulations of storage material inside the pipes and in the filters that cause leaks or breaks of the pipes. **Limestone deposit**: especially for chrome plated sink **Chips**: chips in the coating glaze of sanitary devices causing lacks. **Faults in the control** (wastewater wall box) malfunctions of devices controlling the wastewater box due to fouling or deposit of various materials (dust, limestone, etc.).. **Abnormalities of the float** (wastewater wall box) malfunction of the float that controls the water flow.
Types of reviews	**Reviews by qualified staff:** 1. Control by view: to verify and arrangement of the anchor of equipments and wall box with any silicone sealing (every two months). 2. Control by view: to verify the functionality of waste devices and arrangement of devices not fully working and replacement of damage parts (every two months). 3. Checking and replacement of seals (if necessary). 4. Verification required for all discharges of sealing or replacing seals (every two months). 5. Checking, fixing, fitting and replacement (if necessary) of toilet seat with other similar and same quality seat (every six months) 6. Checking of taps: to check taps work by making some openings and closings actions (every two months).
Periodicity of reviews	(Before written)
Maintenace interventions	**Maintenance by qualified staff:** 1. Mechanical unblocking of drains without removal of equipment by the use of pressurized air or flexible probes. (If necessary) 2. Remove lime deposit using chemical products. (Every 4 months) 3. Replacement of damage wastewater wall box (Every 15 years).
Periodicity of maintenance	(Before written)

CODE	**15**
Element	**Electrical system: ductwork:**
Technological unit descryption	The electrical system distributes and delivers electricity. A power generator provides the users of a low voltage power through an electrical group. Inside

	the building the main distribution of energy runs in cables placed in special ductwork, the secondary distribution conductors is placed in special protective sheaths. **Electrical ductwork:** 1. The "channels" are the simplest elements for the passage of electric cables; they are made of PVC.
Description	System in question is connected to public electrical network. In this document we report a description of a traditional electrical system because of the lack of information in the technical drawings about this aspect of the project. For electrical panels, switches and sockets we had a real feedback thanks to the site' inspection.
Expected life cycle (years)	**15**
Anomalies and diseases	1. Short circuits due to defects in the underground electrical system or to power surges. 2. Failures of switches due to excessive dust inside connections or to the presence of moisture and condensation. 3. Defects of calibration in the electricity meters, failures in the connection or e failures in the protection setting system 4. Disconnection of the electricity provision: due to grounding failures, overload voltage, unexpected shot circuit. 5. Main power network failure due to an interruption of authority providing electricity. 6. Interruption of secondary electrical line due to faults in the secondary circuit of the generator. 7. Overheating which can cause defects in protection and isolation system. It could be due to oxidation of the metal masses
Types of reviews	**Reviews by qualified staff:** 1. To check the general condition and integrity of electrical containers, lids and boxes 2. Replacement of damage or degraded parts
Periodicity of reviews	Every six months
Maintenace interventions	**Maintenance by qualified staff:** Restore the expected protection level that should never be less than that one provided by law.
Periodicity of maintenance	If necessary

CODE	**15.1**
Element	**Electrical system: equipments**
Technological unit description	1. Electrical switchboards made of thermoplastic material; they are installed inside the buildings. 2. Sockets and plugs are responsible for distributing electricity from the main line of adduction to equipments which are connected to the system. They are generally placed in special spaces created in the walls or floor (boxes) as well as the switches, they have the task to switching on/off of the lights inside the rooms.

	3. Electrical meter is a mechanical device that operates ON / OFF and is controlled by an electromagnet. It's closed when the coil is energized and, through the poles, it creates the circuit between the power source and the receivers. The moving parts of the poles and auxiliary contacts are controlled by electromagnet moving part.
Description	System in question is connected to public electrical network.
Expected life cycle (years)	**10**
Anomalies and diseases	**Electrical equipments**: Switchboards: 1. Bad working of contactors. 2. Bad working of fuses. 3. Bad working of the unit that manage power control 4. Bad working of the anti-condense resistance. 5. Failure in the lighting alarm and signal lamps 6. Defect in the thermostats. 7. Accumulation of dust on the contacts that causes failures Sockets, plugs and switches: 1. Short circuits due to defects in the grounding of the electrical system and to power surges (overloads). 2. Short circuit due to excessive dust inside connections or the presence of moisture or condensation. 3. Defects in the calibration of meters 4. Overheating which can cause defects in protection and isolation. It could be due to oxidation of the metal masses. Electrical meter: 1. Bad working of the winding coil. 2. Bad working of the mobile magnetic circuit 4. Bad working of the return spring. 7. Excessive noise due to dust accumulation on surfaces
Types of reviews	**Reviews by qualified staff:** Electrical meter: 1. Check power factor unit (every two months) 2. To verify the functionality of the power factor condenser and electrical meter (every six months) 3. Check the efficiency of the grounding of the panel' electrical system (every two months) 4. To check the correct operation of fuses(every six months) Sockets, plugs and switches: 1. Check the correct clamping pressure of the screws and plates, and box cover. To verify that there is a good level of insulation and protection to prevent short circuits (Every six months) Electrical meter: 1. Overall inspection: in case of excessive noise, remove the meter and check the cleanliness of surfaces, electromagnet and coil (every six months) 2. Check tension: measure the terminal voltage of arrival, using a voltmeter (Once a year)
Periodicity of reviews	(Before written)

Maintenace interventions	**Maintenance by qualified staff:** Switchboards: 1. General cleaning using dry air at low pressure (every six months) 2. Run the tightness of all bolts, terminals and switches (ounces year) 3. Replacing the power factor unit using one of the same type (if necessary) 4. Replacing damaged parts for an adjustment according to the rules (every 15 years) Sockets, plugs and switches: 1. To replace them when damaged or not to be able to range law standards (if necessary) Meters: 1. Cleaning electromagnet surface using gasoline or trichloroethylene (if necessary) 2. To make the clamping of all cables of the contactor (every six months) 3. Replacement the meter with another one of the same type (if necessary)
Periodicity of maintenance	(Before written)

OUTDOOR AREA

Requirements and performances:

1. Users' safety
2. Functionality and usability
3. Maintain aesthetic features over the time.

CODE	16
Element	**Pergola**
Description	Pergola is composed by a wood trellis structure. Beam sections = 24x15 cm, Joists section=12x15 vertical column section= 15x30 cm.
Expected life cycle (years)	**24**
Anomalies and diseases	**Penetration of moisture** **Deflection** **Detachment** **Swelling** **Rot**:
Type of reviews	Visual review
Periodicity of reviews	Once a year
Maintenace interventions	The consolidation of wooden structures, following the loss of mechanical properties is generally accomplished as follow: - if the beam is not totally damaged it suitable insert a fibreglass or steel bars in the section cut out in wooden beam; - If wooden elements are totally damaged beams, joists or columns have to be replace with new elements. It's suitable using some ribs for ensuring safety

	measures during the works of replacement; - Woodworm and meld treatment have to be apply on the wooden parts by brush or spray application of synthetic resin; - Restoration of any deficiencies of the external finish by repair or replacement; - Replacement of waterproof layer (every six year); - Cleaning of the wood, then treated with resin, by removing dust and other deposits
Periodicity of maintenancence	If necessary

CODE	17
Element	**Wooden track**
Description	**Technical Specification** wooden track linking the Visitor Centre building with the Medinet Madi archaeological site; the track has a length of 210 meters and a width of 2.40 meters (504 square meters). Wood used is pitch –pine (azizi wood), it is a medium-sized tree with moderately strong, coarse-grained, resinous wood that is used primarily for rough construction and where decay resistance is important. **Chemical Material:** organic solvent, wood preservative. Poisonous to insects, permanent, not liable to bleach, to evaporate or to sublime, non-corrosive to metals, capable of good penetration and not increase the fire hazard, distinctive but not unpleasant smell. **Stone Elements:** rough stones (cm 30-20Ø) settled near the edges of the wooden path and placed at a distance of 150 cm.
Expected life cycle (years)	**15**
Anomalies and diseases	**Penetration of moisture** **Deflection** **Detachment** **Swelling** **Rot** **Breaking**
Type of reviews	Visual review
Periodicity of reviews	Once a year
Maintenace interventions	Interventions for preservation: - Cleaning of the wood, then treated with resin, by removing dust and other deposits; - Woodworm and meld treatment on the wooden parts with brush or spray application of synthetic resin (once a year); - Protection to insects attack by spraying or brushing appropriate product (once a year); - Restoration of any deficiencies of the external finish by repair or replacement (if necessary); - Replacement of waterproof layer (every six year) - Replacement of degradated parts if totally damaged (if necessary) - Replacement of the stones (if necessary)
Periodicity of maintenance	(Before written)

Overall recommendations:

- The ground level outside the building was established in the project design.
  It has to be maintained over the time; for this reason it's important to clean or add sand after sand storms or any other unexpected weather accident which can causes the change of the projects level.
  The excess of sand can causes the aggression of materials as well as their degradation; on the contrary the lack of sand can leave unprotected structural parts of the building or systems.
- Even if it's not a technical maintenance intervention it's important to specify that the periodical cleaning up of rooms and toilets with common disinfectant products allows to maintain good hygienic standards and to preserve the building also during tourist low season.

3. Evaluation of the maintenance costs

3.1. Maintenance costs

Maintenance cost is composed by four subcomponents. A percentage value on the cost of construction is assigned for each component, referring to the whole life cycle of the building, in this of 30 years duration (expected life cycle = 30 years: calculation of the average life cycle of the building-technical standards constructions- by a correction factor = 40%, determined according to the analysis of critical factors, as weather accidents and climate conditions of the building location areas).
Then the percentages are recalculated at five years intervals updating the construction cost, according to an inflation rate of 6%, from an average rate, related to construction materials recorded in Egypt during the last years.

Updating the original cost of the building	
Updating capital at 5th year	1.861.478,94
Updating capital at 10th year	2.492.208,78
Updating capital at 15th year	3.180.760,11
Updating capital at 20th year	4.906.917,27
Updating capital at 25th year	6.566.562,20
Updating capital at 30th year	8.787.541,49

Sources: data on incidence rates of individual maintenance' items on the total cost of maintenance refers to the analysis results conducted on a sample of 78 housing and public building realized at the end of 1990 by traditional technology, comparable to those of the visitor center (Maintenance of buildings: design and management. Manfron, Edited by Vittorio and Enzo Siviero. Utet, 1998 Turin).

The maintenance cost of each building has been analyzed under the following components:

Postnatal costs	They are attributable to pathological behaviours generated by the structure system that

(soon after the end of the works)	generally occur during the first years of the building life, usually by the following anomalies: structural movements and deformations, cracking, atmospheric deposits.	
Preventive maintenance	This type of maintenance costs has to cope with building physiological aging; generally they are in relation to little failures and preventive maintenance. The voices of higher incidence of preventive maintenance are:	
	Systems	70% of preventive maintenance cost
	Doors and windows frames	20% of preventive maintenance cost
	Floorings and claddings	10% of preventive maintenance cost
Rehabilitation of failures	Replacement costs of technological units that have completed their useful lifetime.	
Contingency costs	These costs are related to replacement of significant parts of the building because of damages due to unexpected events.	

MEDINET MADI VISITOR CENTER			
Calculation of Maintenance costs (LEG)			
Construction cost (original cost)	Design expenditure	170.000	1.700.000,00
	Construction works	1.530.000,00	
		Expected life cycle: 30 years	
Maintenantce costs	Postnatal costs (soon after the end of the works)	1% of construction cost	87.875,41
	Preventive maintenance	60% of construction cost	5.272.524,90
	Rehabilitation of failures	9% of construction cost	790.878,73
	Contingency costs	7% of construction cost	615.127,90

TOT	6.766.406,95

		25 years of operation	
Maintenantce costs	Preventive maintenance	55% of construction cost	3.556.887,86
	Rehabilitation of failures	8% of construction cost	492.492,17
	Contingency costs	6% of construction cost	383.049,46

TOT	4.432.429,49

		20 years of operation	
Maintenantce costs	Preventive maintenance	40% of construction cost	1.962.766,91
	Rehabilitation of failures	6% of construction cost	294.415,04
	Contingency costs	5% of construction cost	228.989,47

TOT	2.486.171,42

		15 years of operation	
Maintenantce costs	Preventive maintenance	28% of construction cost	874.709,03
	Rehabilitation of failures	5% of construction cost	143.134,21
	Contingency costs	4% of construction cost	111.326,60

TOT	1.129.169,84

		10 years of operation	
Maintenantce costs	Preventive maintenance	17% of construction cost	440.290,22
	Rehabilitation of failures	3% of construction cost	74.766,26
	Contingency costs	2% of construction cost	58.151,54
		TOT	573.208,02
		5 years of operation	
Maintenantce costs	Preventive maintenance	8% of construction cost	155.123,25
	costi di m. straordinaria	2% of construction cost	15.512,32
	Contingency costs	1% of construction cost	21.717,25
		TOT	192.352,82

During the first five years of operation of the building the estimated expenditures, concerning the maintenance, will be of 192.000 EGP (38.400 EGP per year).
Preventive maintenance costs have the highest incidence on the total maintenance cost; preventive maintenance can be divided into three main items, as follow:

Systems	70% of preventive maintenance cost
Doors and windows frames	20% of preventive maintenance cost
Floorings and claddings	10% of preventive maintenance cost

The schedule below shows a calculation of the costs referring to each item for Medinet Madi visitor center; costs are calculated during a five-years period referring to the whole life cycle of the building, of thirty years long.

Calculation of Preventive Maintenance costs (LEG)			
Construction cost	Design expenditure	170.000	1.700.000,00
	Construction works	1.530.000,00	
		Expected life cycle: 30 years	
Preventive maintenance	Systems	70% of construction cost	1.200.945,93
	Doors and windows frames	20% of construction cost	343.127,41
	Floorings and claddings	10% of construction cost	171.563,70
		TOTALE	1.715.637,04
		25 years of operation	
Preventive maintenance	Systems	58% of construction cost	71.919,10
	Doors and windows frames	16% of construction cost	19.839,75
	Floorings and claddings	8% of construction cost	10.291,87
		TOTALE	123.998,46

		20 years of operation	
Preventive maintenance	Systems	47% of construction cost	1.373.936,84
	Doors and windows	13% of construction cost	392.553,38

	frames		
	Floorings and claddings	7% of construction cost	196.276,69
		TOTALE	1.962.766,91

		15 years of operation	
Preventive maintenance	Systems	35% of construction cost	612.296,32
	Doors and windows frames	10% of construction cost	174.941,81
	Floorings and claddings	5% of construction cost	87.470,90
		TOTALE	874.709,03

		10 years of operation	
Preventive maintenance	Systems	23% of construction cost	308.203,15
	Doors and windows frames	7% of construction cost	88.058,04
	Floorings and claddings	3% of construction cost	44.029,02
		TOTALE	440.290,22
		5 years of operation	
Preventive maintenance	Systems	70% of construction cost	108.586,27
	Doors and windows frames	20% of construction cost	31.024,65
	Floorings and claddings	10% of construction cost	15.512,32
		TOTALE	155.123,25

3.1.1 Thirty-year amortization schedule with annual deferred instalments at constant interest rate.

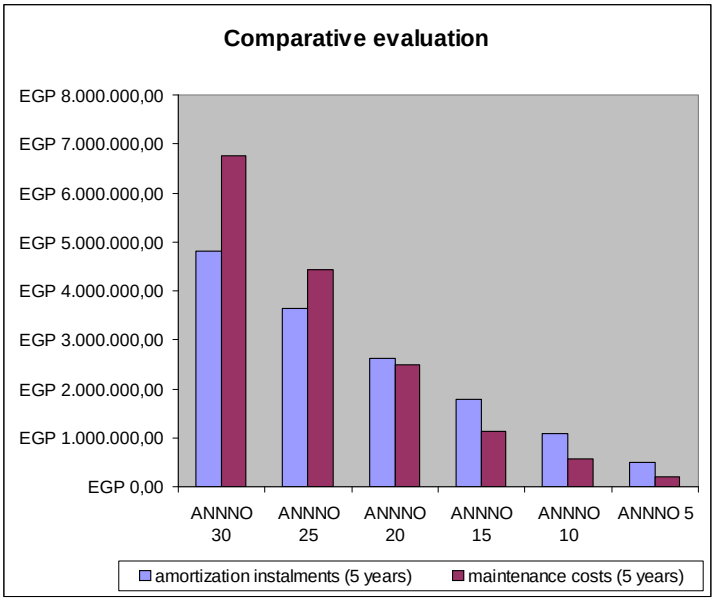
The amortization plan of the construction cost of the building is calculated on a 30 years payback period; the interest rate chosen is 4% (Conventional interest rate for a U.S. Dollar amount in Egypt = 3-5%) while the rate chosen for updating the capital (rate of currency inflation) is 3%, from an average rate of inflation of the currency recorded in Egypt in the last years.

YEAR	AMORTIZATION INSTALMENT	CAPITAL INSTALMENT	RATE INSTALMENT	DEBT PAY OFF	RESIDUAL DEBT
0	0,00	0,00	0,00	0,00	1.530.000,00
1	88.481,10	27.281,10	61200	27.281,10	1.502.718,90
2	88.480,00	28.371,24	60108,756	55.652,34	1.474.347,66
3	88.480,00	29.506,09	58973,90624	85.158,44	1.444.841,56
4	88.480,00	30.686,34	57793,66249	115.844,78	1.414.155,22
5	88.480,00	31.913,79	56566,20899	147.758,57	1.382.241,43
6	88.480,00	33.190,34	55289,65735	180.948,91	1.349.051,09
7	88.480,00	34.517,96	53962,04364	215.466,87	1.314.533,13
8	88.480,00	35.898,67	52581,32539	251.365,54	1.278.634,46

9	88.480,00	37.334,62	51145,3784	288.700,16	1.241.299,84
10	88.480,00	38.828,01	49651,99354	327.528,17	1.202.471,83
11	88.480,00	40.381,13	48098,87328	367.909,29	1.162.090,71
12	88.480,00	41.996,37	46483,62821	409.905,67	1.120.094,33
13	88.480,00	43.676,23	44803,77334	453.581,89	1.076.418,11
14	88.480,00	45.423,28	43056,72428	499.005,17	1.030.994,83
15	88.480,00	47.240,21	41239,79325	546.245,38	983.754,62
16	88.480,00	49.129,82	39350,18498	595.375,19	934.624,81
17	88.480,00	51.095,01	37384,99238	646.470,20	883.529,80
18	88.480,00	53.138,81	35341,19207	699.609,01	830.390,99
19	88.480,00	55.264,36	33215,63975	754.873,37	775.126,63
20	88.480,00	57.474,93	31005,06534	812.348,30	717.651,70
21	88.480,00	59.773,93	28706,06796	872.122,23	657.877,77
22	88.480,00	62.164,89	26315,11067	934.287,12	595.712,88
23	88.480,00	64.651,48	23828,5151	998.938,61	531.061,39
24	88.480,00	67.237,54	21242,45571	1.066.176,15	463.823,85
25	88.480,00	69.927,05	18552,95393	1.136.103,20	393.896,80
26	88.480,00	72.724,13	15755,87209	1.208.827,33	321.172,67
27	88.480,00	75.633,09	12846,90698	1.284.460,42	245.539,58
28	88.480,00	78.658,42	9821,583254	1.363.118,84	166.881,16
29	88.480,00	81.804,75	6675,246584	1.444.923,59	85.076,41
30	88.480,00	85.076,94	3403,056448	1.530.000,53	-0,53

Capital updating (year 5)	488.446,56
Capital updating (year 10)	1.078.567,60
Capital updating (year 15)	1.786.237,94
Capital updating (year 20)	2.629.534,15
Capital updating (year 25)	3.629.022,26
Capital updating ((year 30)	4.808.080,18

Through the processed data it was possible to make a comparative analysis between the amortizing fund and maintenance costs by constructing a histogram where x-axis shows the years of operation of the building and the y-axis shows the maintenance costs (in red) and the amortizing instalments (in blue).
The graph allows making considerations on the convenience of maintenance over the time.
The time interval selected is a five-year interval:



The graphs of the comparative evaluation of maintenance costs and amortizing instalments show that maintenance costs between the twentieth and the twenty-fifth year of life of buildings equal or exceed amortizing partial instalments.
When this happens it could be inferred that the maintenance would stop to be affordable but at the same time the building, thanks to a maintenance performed as required but affording high costs, is kept in good condition ensuring its performance and its functionality.
To determine if the maintenance is affordable or if it is still preferable to replace the existing building with a new one, a revaluation of the structure has to be done on the twentieth year of life. At that time it will have to be established if interventions of no-preventive maintenance (rehabilitation of failures), will reassess the value of the building.
These interventions provide the complete replacement of technological units that have completed their lifetime; they concern primarily systems that have a life cycle shorter than the structural parts and whose replacement has costs much higher than other elements with a life span of less than 30 years.
It will be important to determine if the building has taken a significant value over the years thanks to the integration in the architectural/urban context, representing an architectural reference for the local community.
It will also be useful to evaluate if the architectural elements, that characterize the design of the building, are particularly interesting in the local architecture' style in order to determine the attractiveness of a building restoration.

Annex 8

Maintenance Plan _unpaved track between

WRPA Headquarters and Medinet Madi

Embassy of Italy in Cairo

COOPERAZIONE ITALIANA
ITALIAN COOPERATION
التعاون الإيطالى

Supreme Council of Antiquities

United Nations Development Program

Egyptian Environmental Affairs Agency

Arabic Republic of Egypt

Egyptian Italian Environmental Cooperation Program

Unpaved track between Wadi Rayan Protected Area Headquarters and Medinet Madi

Maintenance plan

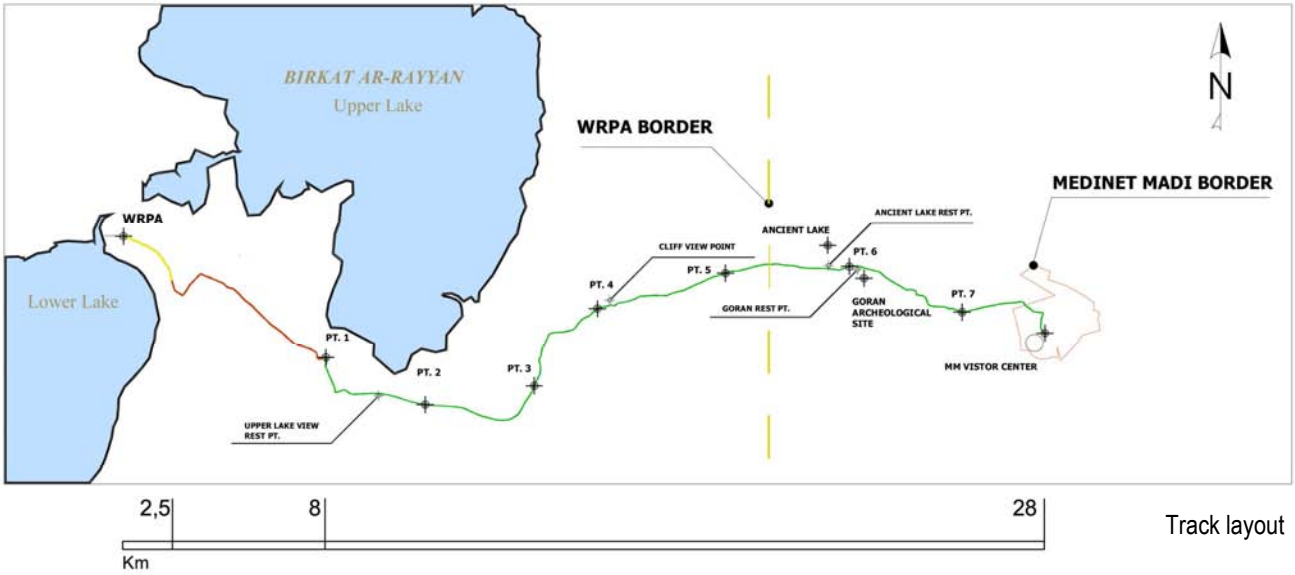
Index

1 Overall information about the project

TRACK LINKING MEDINET MADI AND WADI RAYAN PROTECTED AREA	
Location	**Fayoum Oasis**
Project	**ISSEM project / EEPA project**
Contractor	**Toshka company**
Construction manager	**Engineer Shady Salam**
Project managers	**Arch. A. Giammarusti, Arch. A. De Vita**
Project designer	**Arch. F.V. Rubattu**
Total cost of the work	**900.000 EGP (ISSEM project) +160.300 EGP (EEPA project)**
Procedure followed by	**Tender**
Period of implementation	**2009-2010**

1.1. Brief description

The unpaved track linking Medinet Madi Archaeological Site and Wadi Rayan Headquarters crosses the desert of Fayoum, experiencing beautiful sights of the Rayan lakes, mountains, bird watching and interesting natural sites. The design of the unpaved track aims to create a panoramic road respecting natural and environmental features in order to create a link between important touristic sites, regulating the car traffic into the protected area and allowing the preservation of the area maintaining natural outcome.
The Fayoum Governorate in general, particularly Wady Rayan Protectorate, is characterized by hot dry weather; sand storms are recorded in this area 35 times a year (concentrated in the winter and spring seasons, from September till May). Sand storms form a heavy layer of sand over the roads; such occurrences could cause accident, road blocks or transportation delay.
The total length of the track is 28 km and it has three intersections; these crosscuts would decrease the irregular crossing traffic that could destroy track borders and damages the road surface. The total length of each intersection is 200 meters (100m +100m).
25,5 kilometres of the unpaved track cross a desert area until the Lower Lake where the type of soil changes because of the presence of the accumulation of waste water from the nearby fish farms that often are responsible of the road flooding.
This part of the track (to Wadi Rayan headquarters direction) has recently undergone to a complete rehabilitation work, within the EEPA (Enhancement of Egyptian Protected Areas) project in order to ensure a normal and safe traffic flow; furthermore this road stretch represents one of the most panoramic point of view to the lower lake.
As the desert track and the fish farm' track has different characteristics referring to the material of the road surface and to the technologies of implementation, maintenance interventions to provide will be different.
For this reason this maintenance plan document is divided into two parts: the first one refers to the maintenance of the desert track area and the second one is dedicated to the fish farm'track maintenance.



Track layout

1.2. Project data

PROJECT DATA	
Track	
Total length of the track	**28 km**
Unpaved desert track length **(ISSEM project)**	**20 km**
Unpaved desert track length **(EEPA project)**	**5,5 km**
Fish farm area' track **(EEPA project)**	**2.5 km**
Width section	**6÷11 m** (changeable according to the sections)
Expected visitors for years	**15.000**
Intersections	
Number of intersections along the track	**3**
Length of each intersection	**100m +100m**
Total length	**600 m**
Width section	**9÷11 m**

2 Desert track stretch

2.1 Technical information

Description of works provided

Works required covered an area of about 25,5 km.
The track has been designed after an accurate GIS survey in order to evaluate the most suitable layout; all the works have been be provided after soil survey and laboratory tests and they have been provided as follow:

Soil treatment

1. Construction of a base course layer of well graded material; founded on 2 layers of 15 cm each, each compacted and laboratory tested.
2. Wearing layer; founded from well graded crushed stones, on 1 layer, compacted and tested.
3. Treatment of existing soil on track path; complete works of scraping watering and compaction.

Signage

1. Construction of stone masonry for information signage according to design and position provided in technical drawing.

Track borders

1. Placing of standard size stones: average diameter of 15 cm (50 cm in case of slope) for the stone bordering
2. Placement on both sides of the track every 7 m; every 1,5 m in case of slopes.

2.1.1 Photographic survey

2.2. Maintenance plan

Introduction

Due to hard weather conditions and referring to the wearing of this type of infrastructure the unpaved track need a periodical maintenance in order to ensure its sustainability and its technological and functional performances, maintaining the characteristics of quality and efficiency over time.

Anthropic load during the operating period

A theoretical number of vehicles crossing the track every day has been calculated in order to establish the anthropic load that involved the infrastructure in question.
The calculation refers to a nine-period months: this period starts from September and finishes in May and it corresponds to medium-high season of tourism; in fact during hot season touristic flow is very low and car traffic is markedly reduced.

Operating period: nine months	
Theoretical users / year	**15.000**
Theoretical users / month	**1.700**
Theoretical users / day	**55**
Car (pick-up) / day	**~ 15**

Maintenance iterventions: types of works and equipment needed

Periodical maintenance
This intervention provides the whole track crossing by a tractor towing a rectangular metal frame with heavy tires tied under (wide ~ 3 meters); the dimension of the tires depends on the dimension of the frame (it is possible to use 3 medium tires or 4 small tires).
These activities ensure the sand removal and levelling the track to the desired level; the tractor must travel 4 times up and down to cover the whole width of the track.
Renovation works
This type of periodical maintenance is frequent because it doesn't include watering activity and compaction of road surface on the whole track length and on intersections; for this reason the complete maintenance of the track (renovation works) must be provided every two years to ensure the renovation and compaction of the sandy road surface.
The works to provide for renovation are:

- Cleaning road including removal of earth, debris and other extraneous materials
- Earth excavation for road and ancillary works in all types of soil
- Supply and grading and compacting crushed stone

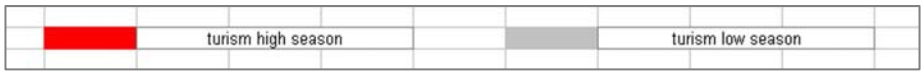
The equipment required is:

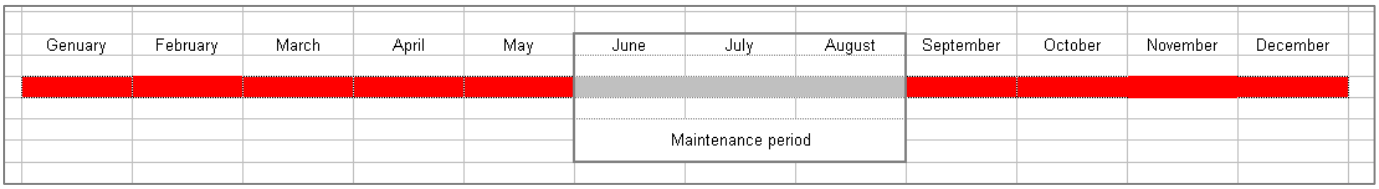
- One motor grader
- Dump tractor
- One vibratory roller
- Tanks of water as per required
- Manpower

The maintenance will be provided as follow:

- **Periodical maintenance** for track and intersections will be provided around every two month. It's important to specify that the plan provides six maintenance interventions per year but periods to perform maintenance will be decided according to the recorded car traffic (during high tourist season periodical maintenance could be more intensive).
- **Renovation works**: every two years

Renovation works must be performed during the following period of the year.





2.2.1 Evaluation of cost

The table below reports activity' items and costs:

Periodical maintenance		
Activities	**Frequency**	**Estimated costs**
The removal sand and levelling the track to the desired level. Equipment needed: one tractor trailing two tires;	Every two months (three days)	300 EGP/day
Labour: two workers	Every two months (three days)	400 EGP/day
Re positioning the stone border requiring one tractor	Every two months (one day)	300 EGP/day
Estimate works duration		2 days
Total cost of the interventions per year		**14.400 EGP**

Renovation works (every two years)	
Activities	**Estimated costs**
The removal sand and levelling the track to the desired level; wheel loader and dump tractor are needed for removal of sand and the motor grader for scraping and levelling.	1000 EGP/day

Watering the track material and final levelling requiring water tanks and motor grader	2000 EGP/day
Compaction of track using the vibratory roller machine	500 EGP/day
Manpower (4 workers)	800 EGP/day
Estimate works duration	~ 20 days
Total cost of the interventions	**86.000 EGP**

The total amount of maintenance costs is ~ 114.800 EGP during a two-year period.

The periodical maintenance' method, described above, has been tested in similar contexts achieving positive results.
It should be performed frequently and this aspect allows a constant monitoring of the conservation status of the whole track and intersections, referring to car traffic and weather events and it can provide a good level of effectiveness for maintenance, even if executed with no specialized equipment and no qualified staff. Anyway the complete maintenance of the track, including renovation works, must be performed every two years to ensure watering and compaction of the road surface.
In the case under consideration the cost of maintenance for this stretch of the track is estimated to be 57.400 LE per year.

3 Fish farm area stretch

3.1 Brief description

The work has been carried out recently providing an operation of draining and channelling wastewaters coming from the fish farms located between the Upper and Lower lakes as well as resettlement of the track surface. The works provided also the construction of three additional pipelines, using concrete pipes, and three PVC pipelines to ensure a better flow of water towards the lake.

Renovation works

3.1.1 Project data

PROJECT DATA	
Track	
Fish farm area' track	**2,5 km**
Width section	**~ 6 m**
Implementation of the work	**November 2010**

3.1.2 Technical information

Description of works

Works required covered an area of about 2,5 km; they have been provided as follow:

Draining and channelling wastewaters from fish farms

1. Clearance of existing drainage canals
2. Re-levelling of the drainage canals
3. Excavation for the n.6 pipelines, diameter dimension as per in the technical drawings
4. N.6 Pipelines fixation, in adequate slope (to ease the drainage)
5. Covering the pipelines sections with compacted sand and soil for a minimum of 20 cm.

Type of pipes

1. Three concrete pipelines have been installed orthogonally to the track direction (see cross section)
2. Three PVC pipelines have been installed orthogonally to the track direction

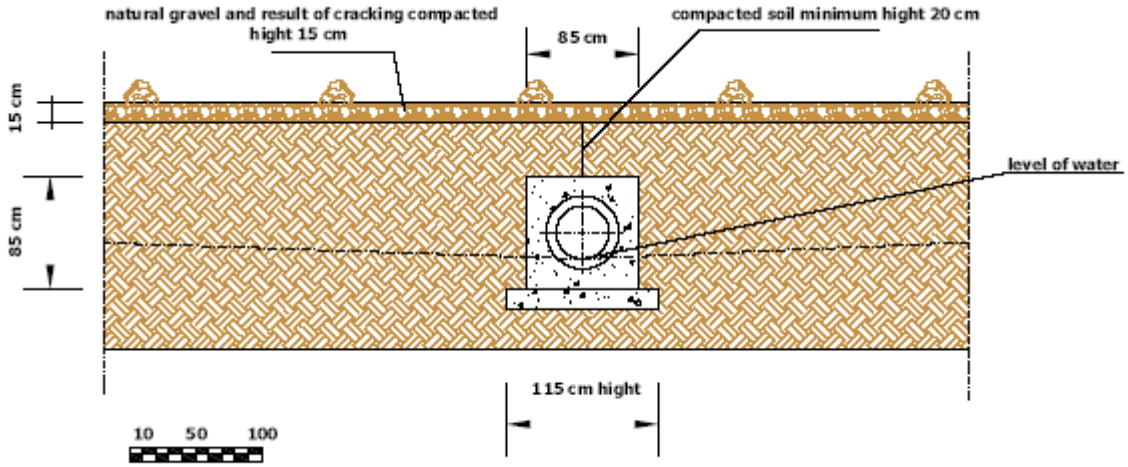
Construction of the track surface

1. Construction of a n.1 layer material gradient gravel natural or the result of cracking, coarse-fine gravels and clays (material collected on site)
2. Compaction and smoothing the upper layer surface of 15 cm of thickness

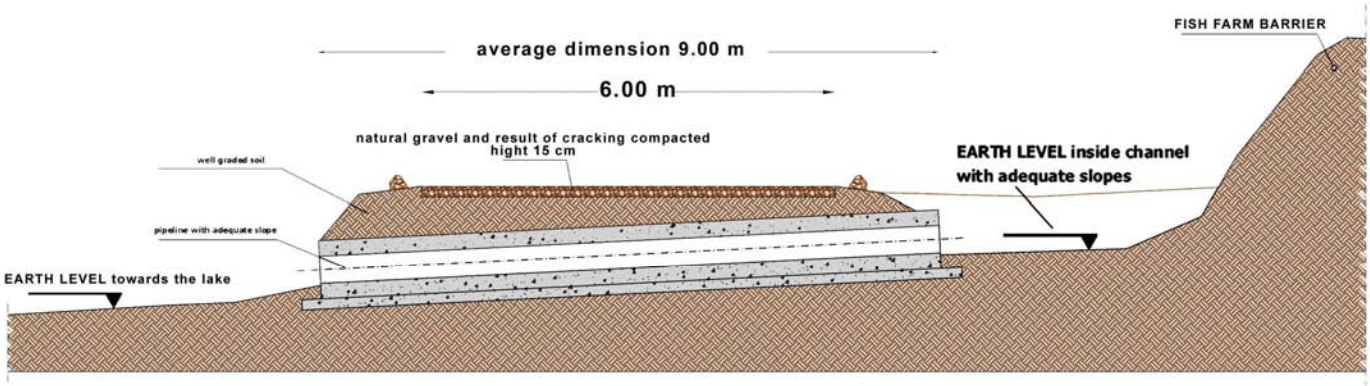
Track borders

3. Placing of standard size stones (50 cm)
4. Placement every 5 m run

Longitudinal section



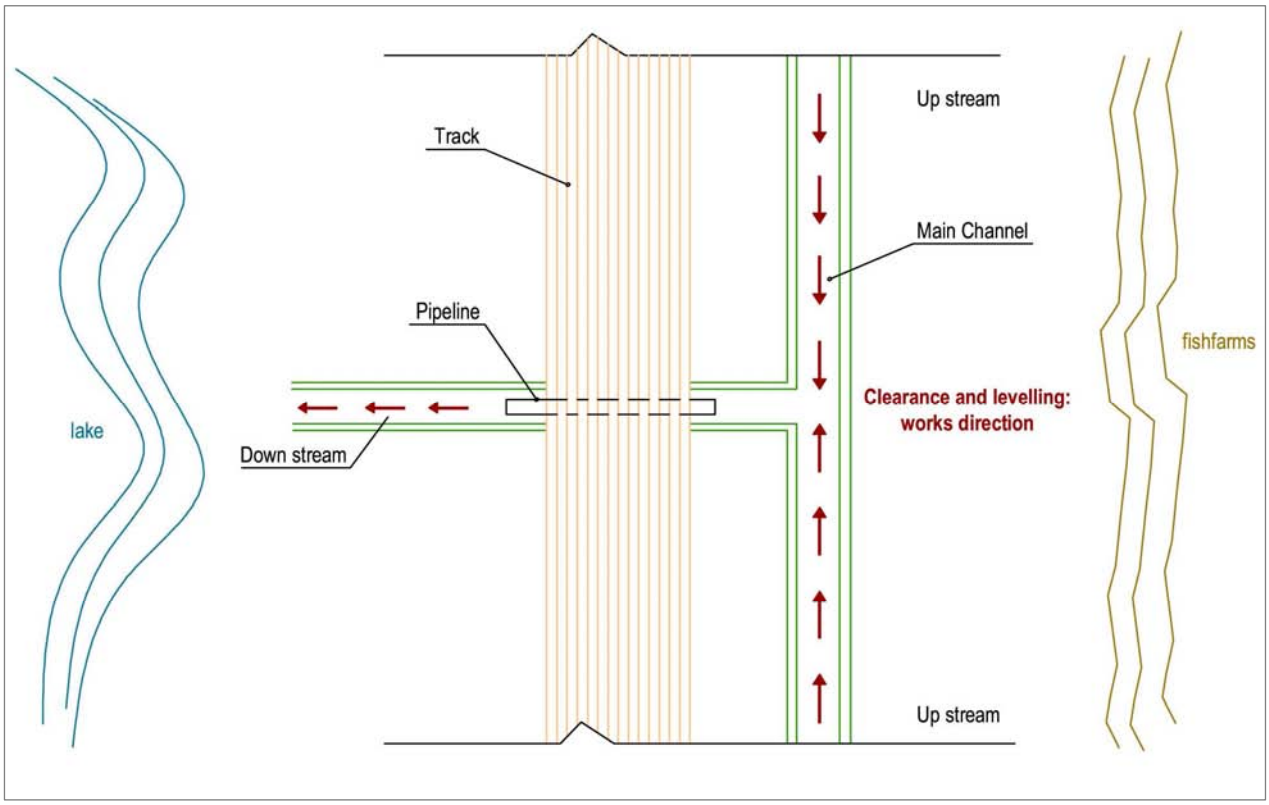
Cross section type



3.2 Maintenance plan

Types of works

The maintenance of these 2.5 km focuses on the cleaning of all the channels along the track from debris and vegetation that may obstruct the water flow toward the lake.
The channel parallel to the track collects the waste water coming from the fish farm, thanks to the appropriate gradient, and it distributes the flow in the orthogonal channels toward the lake thanks to the gradient levelling.
During the cleaning operation it will be respected the sketch plan of intervention below in order to maintain the appropriate gradient of the channels.



The cleaning of the main channel could be provided by the fish farmers, as concessioners of the area in cooperation with the protected area staff and under their supervision.
Maintenance will be performed also for the track surface, referring to compaction and leveling of the soil.

It's important to underline that periodical maintenance of this stretch of track is strictly necessary to ensure the safety and traffic flow; so it has to be performed continuously as indicated in the plan.

3.2.1 Evaluation of costs

The table below reports activity' items and costs.

Periodical maintenance		
Activities	**Frequency**	**Estimated costs**
Works of clearance of channels	Every four months	(Carried up by the fish farmers, as concessioners,

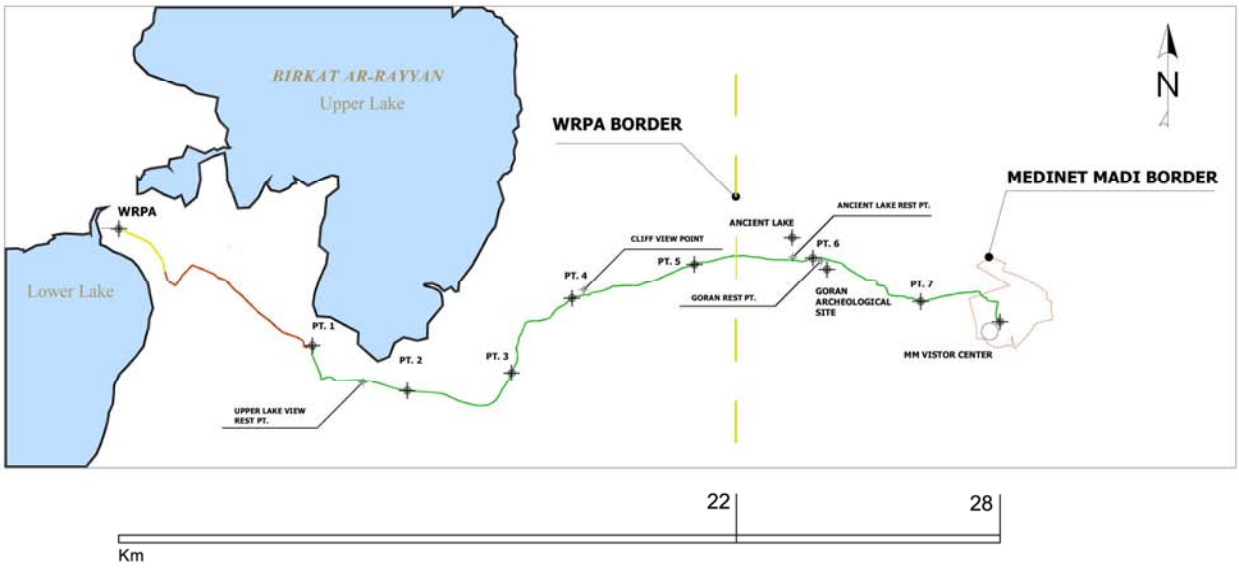
		under the supervision of the rangers)
Levelling of channels (equipment needed: excavator)	Every four months	5.660,00 EGP
Works of maintaining the track surface in order to ensure the traffic flow (loader and motor grader)	Every four months	7.670,00 EGP
Manpower required: 5 workers	Every four months	(included in the previous costs)
Estimate works duration		15 days
Cost per period		13.300,00 EGP
Total cost of the interventions per year		**40.000 EGP**

In the case under consideration the cost of maintenance for this stretch of the track is estimated to be 40.000 LE per year.

4 Conclusions

The cost for the maintenance of the whole track is 97.400 EGP per year, considering maintenance costs for desert track and for fish farm area stretch.

As reported in the project data schedule, the total length of the track is 28 km, included the fish farm area stretch. Around 22 km fall within the borders of the Protected Area of Wadi Rayan, as showed in the picture below.



Nevertheless all the relevant parties - Wadi Rayan Protected Area, Fayoum Governorate and Supreme Council of Antiquities - will have to ensure the complete maintenance of the whole track.
It's important to underline that the fish farm track (2,5 km) need a special maintenance, which interventions have high costs.
Since the protected area staff will ensure the periodical maintenance of this stretch of track, they shall take advantage of the operative contribute of the fish farm concessioners for the channel cleaning, reducing notably

the costs. Works of compaction and leveling of the track surface will have to be provided, charging a private company or using protected area resources.
In any case, modality, frequency and equipments reported in the plan should be respected for every type of maintenance intervention.
Frequency of periodical maintenance is the main aspect to consider referring to the condition of this stretch of the track: a missed intervention could cause serious damages in the infrastructure and make necessary rehabilitation works that could be markedly expensive.

Annex 9

Draft text of the Agreement to be signed between EEAA and SCA

بروتوكول

في مجال التعاون العلمي

بين

جهاز شئون البيئة

و

المجلس الأعلى للآثار

أكتوبر 2010

اتفاق تعاون بين
جهاز شئون البيئة و المجلس الأعلى للآثار

إنه في يوم الموافق /10 /2010 أتفق كل من :

أولاً :- جهاز شئون البيئة بوزارة الدولة لشئون البيئة ومقره المعادى ويمثله فى التوقيع على هذا البرتوكول السيدة الدكتورة/ مواهب أبو العزم بصفتها الرئيس التنفيذي للجهاز . (طرف أول)

ثانياً :- المجلس الأعلى للآثار ومقره الزمالك ويمثله في التوقيع على هذا البرتوكول السيد الأستاذ الدكتور/ زاهى حواس بصفته أمين عام المجلس الأعلى للآثار . (طرف ثان)

تمهيد

لما كان جهاز شئون البيئة يهدف طبقاً لأحكام قانون المحميات الطبيعية رقم 102 لسنة 1983واحكام قانون البيئة رقم (4) لسنة 1994لحماية وتنمية البيئة والمعدل بالقانون رقم 9لسنة 2009 يهدف الى حماية وتنمية المحميات الطبيعية بمصر وكذا حماية التراث الطبيعي والموارد الطبيعية باعتبارها ثروات قومية لا تقدر بثمن .

ولما كان : المجلس الأعلى للآثار طبقا لأحكام القانون رقم 17 لسنه 1983 والمعدل بالقانون 3 لسنه 2010 باصدار قانون حماية الآثار يهدف إلى حماية التراث الثقافي بكافة صورة وتنميته والعناية به والحفاظ علية .

ونظرا لصدور قرار السيد رئيس مجلس الوزراء رقم 2954لسنة 1997بتعديل القرار رقم 943لسنة 1989بانشاء محميتين طبيعيتين فى منطقتي وادي الريان وبحيرة قارون بمحافظة الفيوم وكذا إعلان منطقة وادي الحيتان بمحمية وادي الريان منطقه تراث طبيعي

ونظرا للاكتشاف العظيم الذى قام به خبراء المجلس الأعلى للآثار لمدينة ماضي الأثرية بالمنطقة المتاخمة لمحمية وادي الريان ونظرا لقربها من منطقة وادي الحيتان بمحمية وادي الريان والتي تم إعلانها من قبل اللجنة الدولية للتراث الطبيعي كمحمية دولية ذات تراث طبيعي وثقافي .

وإعمالا لأحكام المادة الثالثة من الاتفاقية الدولية بحماية التراث العالمي الثقافي والطبيعي – باريس نوفمبر 1972والتى تنص على :-

" لكل دولة طرف في هذه الاتفاقية أن تعين وتحدد مختلف ممتلكات الواقعة في إقليمها أي التى تمثل تراثاً دولياً ثقافياً أو طبيعياً طبقاً للتعريف الوارد في المادة الأولى والثانية من الاتفاقية حيث تضمنت المادة الأولى تعريف التراث الثقافي حيث عرفته بأنه أثار الأعمال المعمارية وأعمال نحت والتصوير على المباني والعناصر أو التكوينات ذات الصفة الأثرية والنقوش والكهوف ومجموعات التى لها جميعاً قيمة عالمية استثنائية من وجهة نظر التاريخ أو الفن أو العلم – المجمعات :- مجموعات المباني المنعزلة أو المتصلة التى لها بسبب عمارتها أو تناسقها أو اندماجها في منظر طبيعي قيمة عالمية استثنائية من وجهة نظر التاريخ أو الفن أو العلم – الموقع : أعمال الإنسان أو الأعمال المشتركة بين الإنسان

والطبيعة وكذلك المناطق بما فيها المواقع الأثرية التى لها جميعاً قيمة عالمية استثنائية من وجهة النظر التاريخية أو الجمالية أو الأنثولوجية أو الأنثروبلوجية ، وتضمنت المادة الثانية تعريف التراث الطبيعي بأنه :- المعالم الطبيعية

المتآلفة من التشكيلات الفيزيائية أو البيولوجية أو من مجموعات هذه التشكيلات التى لها قيمة عالمية استثنائية من وجهة النظر الجمالية أو العلمية ، التشكيلات الجيولوجية أو الفيزيوغرافية ، والمناطق المحددة بدقة مؤلفة موطن الأجناس الحيوانية أو النباتية المهددة التى لها قيمة عالمية استثنائية من وجهة النظر– العلم أو المحافظة على التراث الطبيعي – المواقع الطبيعية أو المناطق الطبيعية المحددة بدقة ، التى لها قيمة عالمية استثنائية من وجهة نظر العلم ، أو المحافظة على التراث أو الجمال الطبيعي "

ونظراً لما تمثله منطقة مدينة ماضي من تراث ثقافي وما تمثله المنطقة المحيطة بها من تراث طبيعي مما حدا بالطرفين بالرغبة في التعاون لإعلان كامل المنطقة بما فيها مدينة ماضي كتراث عالمي طبيعي وثقافي.

لذلك فقد إتفق الطرفان على مايلى :–

المادة الأولى

يعمل الطرفان على تنمية تعاونهما في مجال حماية التراث الطبيعي والثقافي وفى إطار اختصاصات وقوانين كل منهما ، هذا التعاون يدور حول تبادل الخبرات والمعلومات بما يخدم إعلان محمية وادي الريان بما فيها مدينة ماضي كتراث عالمي طبيعي وثقافي.

المادة الثانية

يتعهد الطرفان بتقديم كافة التسهيلات اللازمة لإنشاء وتنمية علاقات التعاون بينهما في مجال التراث الطبيعي و الثقافي بمحمية وادي الريان والمنطقة المحيطة بها بما فيها مدينة ماضي .

المادة الثالثة

يتعاون الطرفان في المجالات الآتية :–

* إعداد دورات تدريبية للعاملين التابعين للطرفين في مجالات الحفاظ على الآثار والبيئة .
* القيام بتنفيذ دورات تدريبيه وتثقيفية لنشر الوعي البيئي بين السكان المحليين في المنطقة.
* إعداد كتيب يتضمن التشريعات البيئية والتشريعات الخاصة بحماية الآثار لزيادة الوعي البيئي بتلك التشريعات .
* إعداد كتيب بالإرشادات والقواعد الواجبة إتباعها أثناء زيارة محمية وادي الريان وكذا المناطق المحيطة بها بما فيها مدينة ماضي.

المادة الرابعة

أتفق الطرفان على تشكيل لجنة مشتركة لمتابعة تنفيذا هذا البروتوكول والتنسيق بينهما .

المادة الخامسة

اتفق الطرفان على إنشاء طريق بين محمية وادي الحيتان ومدينة ماضي بطول 25كم على أن يتحمل التمويل (المشروع المصري الإيطالي للرصد والإدارة البيئية للمجلس الأعلى للآثار – المرحلة الثانية) نفقة إنشاء ذلك الطريق ويتولى الطرف الأول أعمال الصيانة لذلك الطريق

المادة السادسة

أتفق الطرفان على قيام الطرف الأول بعمل برنامج تدريبي لتدريب العاملين التابعين للطرف الثاني في مجال الحفاظ على بيئة المحمية .

المادة السابعة

أتفق الطرفان على التعاون من أجل إبراز خصائص المنطقة كلها بما فيها مدينة ماضي وذلك تمهيداً لإعلانها منطقة تراث عالمي طبيعي وثقافي وذلك بالتعاون مع اللجنة الدولية للتراث الطبيعي والثقافي بمنظمة اليونسكو .

المادة الثامنة

أتفق الطرفان على قيام الطرف الأول بإعلان المنطقة المحيطة بمحمية وادى الريان والتى تقع بداخلها مدينة ماضي بقرار وزاري من المناطق المحمية وذلك لوقف زحف الأنشطة البشرية التى تؤثر بالسلب على المنطقة

المادة التاسعة

أي خلاف ينشأ بخصوص تنفيذ أو تفسير هذا البروتوكول يتم حله عن طريق اللجنة المشتركة من الطرفين لمتابعة تنفيذا هذا البروتوكول.

المادة العاشرة

مدة العمل بهذا البروتوكول لمدة عامين اعتبارا من تاريخ توقيع هذا البروتوكول على أن يجدد لمدة أخرى أو مدد أخرى مماثلة باتفاق الطرفين كتابة .

المادة الحادية عشر

حرر هذا البروتوكول من نسختين تسلم كل طرف نسخه للعمل بمقتضاها .

الطرف الأول
جهاز شئون البيئة

(د / مواهب أبو العزم)
الرئيس التنفيذي

الطرف الثاني
المجلس الأعلى للآثار

(أ.د/ زاهي حواس)
الأمين العام