



**LEBANON RECOVERY FUND  
PROJECT DOCUMENT COVER SHEET**

<b>Participating UN Organisation:</b> <b>UNESCO</b>	<b>Sector:</b>
<b>Programme/Project Manager:</b> <i>Joseph Kreidi</i> <b>Name:</b> UNESCO-Beirut <b>Address:</b> Beirut -Lebanon <b>Telephone:</b> 01/850013 <b>E-mail:</b> j.kreidi@unesco.org	<b>Sector Working Group Leader</b> <b>Name:</b> <b>Address:</b> <b>Telephone:</b> <b>E-mail:</b>
<b>Programme/Project Title:</b> Capacity building of human resources for digital documentation of World Heritage Sites affected by 2006 war in Lebanon <b>Programme/Project Number:</b>	<b>Programme/Project Location:</b>  <b>National Project: Baalbek and or Tyre</b>
<b>Programme/Project Description:</b> UNESCO assessment mission for (July –August 2006) war damages on World Heritage Sites of Lebanon expressed concern regarding the routine maintenance of those sites and recommended to prioritize the establishment of an integrate action plan for tangible cultural heritage conservation all over the country. This Action Plan should be considered as an umbrella for few most important components such are: <ul style="list-style-type: none"> <li>• Establishment of risks' map for each heritage site;</li> <li>• Establishment of digital exhaustive technical documentation for each heritage site;</li> <li>• Capacity building of human resources able to address above components</li> </ul> Main objective of the proposed activity is to build capacities of Human Resources in charge. or potentially linked with, the conservation, the development and the enhancement of tangible cultural heritage in Lebanon. The main target group will be the DGA staff, but also Lebanese University (UL) students, while the main subject of the action is to establish accurate high definition 3D digital data and documentation for World Heritage Sites through pilot on-site operation for <b>Baalbek or Tyre</b> World Heritage Sites.	<b>Total Programme/Project Cost: 767,226 US\$</b> <b>LRF:</b> <b>Government Input:</b> <b>Other:</b> <b>Total:</b> <b>Programme/Project Duration: 14 months</b>
<b>Development Goal and Key Immediate Objectives:</b> <ul style="list-style-type: none"> <li>▪ To contribute to the risk mapping of the affected World Heritage Sites in Lebanon, ;</li> <li>▪ To ensure the state of conservation of the affected World Heritage Sites in Lebanon;</li> <li>▪ To build capacities of human resources for conservation and enhancement of cultural heritage sites in Lebanon;</li> <li>▪ To establish a model of full survey of one of the affected World Heritage Sites in Lebanon;</li> </ul>	
<b>Outputs and Key Activities:</b> Paragraph outlining essential details of the programme/project	
Sector Review Date: _____ Sector Working Group Review Date: _____ Steering Committee Approval Date: _____	

On behalf of:  
UNESCO – Beirut

Chair, LRF SC

<i>Signature</i>	<i>Date</i>	<i>Name/Title</i>
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## 2. Logical Framework

Narrative summary of proposal	Verifiable indicators	Risks/ Assumptions
<ul style="list-style-type: none"> <li>• Establishment of digital exhaustive technical documentation for one World Heritage Sites;</li> <li>• Establishment of risks' map for one World Heritage Site;</li> <li>• Capacity building of human resources able to address above components</li> </ul>		<p>The actual political situation in the country may reflect negatively on the output and commitment of the DGA staff in addition to the unstable security situation in the country, this may hinder and delay the implementation process and may not be able to implement the project on time.</p>
<ul style="list-style-type: none"> <li>▪ To contribute to the risk mapping of the affected World Heritage Sites in Lebanon</li> <li>▪ To ensure the state of conservation of the affected World Heritage Sites in Lebanon, witness of remarkable cultural diversity over the centuries and millenniums:</li> <li>▪ To build capacities of human resources for conservation and enhancement of cultural heritage sites in Lebanon through most advanced techniques of digital documentation, risk mapping exercise.:</li> <li>▪ To establish a model of full survey of Baalbek or Tyre monuments selected by DGA with laser scanning technologies, and a procedure to follow for its regular updating;</li> </ul>		<p>The actual political situation in the country may reflect negatively on the output and commitment of the DGA staff in addition to the unstable security situation in the country, this may hinder and delay the implementation process and may not be able to implement the project on time.</p>
<ul style="list-style-type: none"> <li>▪ Accurate high definition 3D <u>digital data and documentation</u> for the monuments of one World Heritage Site selected by DGA, using advanced laser scanning technologies:</li> <li>▪ Procedure for a regular update of the digital documentation for each</li> </ul>	<p>The output data that will be produced in digital format as "point clouds" will be delivered on digital storage media to the DGA. A presentation to the UNESCO office in Beirut will be done to present the output of the work done and to discuss future steps of the project.</p> <p>Document for diachronic data</p>	<p>The actual political situation in the country may reflect negatively on the output and commitment of the DGA staff in addition to the unstable security situation in the country, this may hinder and delay the implementation process and may not be able to implement the project on time.</p>



		the country may reflect negatively on the output and commitment of the DGA staff in addition to the unstable security situation in the country, this may hinder and delay the implementation process and may not be able to implement the project on time.
<ul style="list-style-type: none"> <li>A- Digital data acquisition and processing</li> <li>B- Risk mapping</li> <li>C- Training</li> <li>D-</li> </ul>		The actual political situation in the country may reflect negatively on the output and commitment of the DGA staff in addition to the unstable security situation in the country, this may hinder and delay the implementation process and may not be able to implement the project on time.

### 3. Programme/Project Justification

#### Background

An assessment of the state of conservation of cultural heritage sites in Lebanon, in particular World Heritage Sites and other sites listed in the Tentative List of Lebanon, after the recent conflict and severe bombardments in South Lebanon and Beqaa Valley has been undertaken by a UNESCO mission under the leadership of Mr. Mounir Bouchenaki, Director general of ICCROM and special advisor for Culture for UNESCO's Director General. Fortunately, the impact of the war on the World Heritage Sites was minor, except the consequences of oil spill on the ancient harbor (marina) and medieval towers of Byblos World Heritage Site. Only **two locations** affected by war were identified: 1) a fallen stone block in the hexagonal courtyard of Baalbek and 2) suspected detachments of painted coat in one of Tyre's hypogea located at around 200m distance from the closest bombed spot. However, the state of conservation of all visited sites is critical and the recent war unveiled the urgent problem of the daily maintenance of the heritage sites - a maintenance that should be based on a computerized digital technical working documentation that could be easily updated. On the other hand, the daily maintenance of a heritage site strongly depends on the availability of well trained human resources.

#### Programme/project approach

The Ministry of Culture of Lebanon is recruiting new staff in order to better preserve and manage cultural heritage sites all over the country.

Capacity building of human resources for conservation of cultural heritage sites in Lebanon would be more efficient and immediately operational if it could respect steps, as follows:

1. **Documentation**. Establishment of a proactive and regularly updated technical documentation of the site. The documentation should be highly accurate, interactive, based on a range of photographic and digital techniques, including 3-Dimensional laser surveys, as well monitoring based on specialists' analysis. The monitoring documentation should include standardized procedures to follow in order to regularly update the data and information and to observe the development of specific conservation risks such as, for example, development of cracks, development of inclination of structures, etc.
2. **Risk Mapping**. Based on the above-mentioned technical documentation, the establishment of a risk map for one of the World Heritage Sites in Lebanon should be considered as the next step of a comprehensive program. The above-mentioned tools are essential in the risk mapping and monitoring of structural changes in monuments since most of the critical alterations are reflected above all in the standing architecture. Widely used computerized survey system allowed the identification of different levels of risks by different graphic conventions. More developed system of documentation legends will diversify risks by its natures:
  - Decay of materials;
  - Problems of stability of structures;
  - Damages from the use of Monuments

## Justification

UNESCO believes that the expressed urgent need for capacity building of Lebanese human resources in the field of conservation and management of heritage sites is beneficial for the reconstruction of Lebanon. Broad objective of the digital documentation for heritage sites and its risk mapping could be launched by a limited operation on one selected World Heritage Sites of Lebanon and be considered as a pilot experience that in the future will be extended to other sites. Establishment of a training tool concerning the digital documentation of heritage site with most advanced and sophisticated techniques, a tool, which should be disseminated as an on-line course, and an on-site training of DGA staff and potential sites managers, students of UL, will contribute to the development of the country. Promotion of new information technologies for the main purpose of heritage management: conservation and daily maintenance will ensure the impact of heritage components in Lebanon, country with rich in heritage and strong tourism potential.

International Centre for Study of the Preservation and Restoration of Cultural Property (**ICCROM**), intergovernmental institution with unique training experience which cover all aspects of cultural heritage conservation and management, partner chosen by UNESCO in close cooperation with the Ministry of Culture of Lebanon for the proposed activity has very rich experience with number of similar projects in the region. UNESCO partners are able to deliver training programs and to run a survey with techniques identified by DGA as most reliable and useful for the purpose of conservation\*.

Finally, UNESCO supports the choice of the Ministry of Culture of Lebanon for either Baalbek or Tyre World Heritage Site\*\* as pilot site for the digital documentation and on-site training on risk mapping. Mainly, the reasons are, as follows:

1. First of all the temples of Baalbek and Tyre are in an urgent need of daily maintenance and monitoring. Only detailed digital documentation that would be use as a reference for the state of conservation followed by an elaborated procedure of regular updating could facilitate the complicate and delicate conservation task;
2. Surveys already undertaken within other projects, as the World Bank project, could facilitate the establishment of documentation for reference and enable the implementation of the activity with a very tight but reasonable time-table of twelve (12) months;
3. Risk mapping one of the World Heritage Sites and the knowledge acquired by concerned DGA staff through risk mapping training will contribute to the long term management of WH site enabling to prioritize interventions and design conservation action plans for heritage sites all over the country.
4. The sites provides wide scope of maintenance problems: structural stability (mostly Jupiter Temple), decay of materials (Bacchus Temple), detachment of coat with wall paintings in hypogea, development of cracks, vegetation etc. Therefore, digital documentation tool will be highly educational covering broad conservation issues;

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\* The description of the techniques follows below (see *Description and activities*).

\*\* The overall description of the sites is available in Annex III and IV

#### **4. Management Arrangements**

##### **1. Directorate General of Antiquities (DGA), Ministry of Culture of Lebanon**

- Manager of the World Heritage Site of Baalbek and , pilot sites chosen for the implementation of the activity;
- Main beneficiary of the training component of the activity as well of the acquisition of new 3D tools and equipments as well as the final products – digital documentation, procedure of updating and virtual reconstruction;
- DGA selects monuments for operations;
- DGA dispatch its staff for the training;
- DGA provides all existing reference documentation for Baalbek, deliver authorisations and facilitates the execution of the activity;
- DGA elaborates the necessary procedures of the continuous data gathering process for the diachronic monitoring purposes.

##### **2. International Centre for Study of the Preservation and Restoration of Cultural Property ICCROM**

- Deliver training for risk mapping. This training should be based on most recent documentation including digital one;
- Provide separate training for conservation action plan that should be based on the assessment of risk through mapping and on clear protocol prioritizing interventions and establishing its short, medium and long term strategies
- Provide training for wall painting conservation (Tyre hypogea). This training should be on-site exercise with trainees from DGA and UL
- ICCROM in its capacity of UNESCO sub-contractor regularly submits to UNESCO technical reports and financial statement on the execution of operations
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##### **3. UNESCO**

- Overall coordination and supervision of the activity
- Administrative and financial management of the activity
- Regular reporting to the donor

#### **5. Analysis of risks and assumptions**

The actual political situation in the country may reflect negatively on the output and commitment of the DGA staff in addition to the unstable security situation in the country, this may hinder and delay the implementation process and may not be able to implement the project on time.



## **6. Programme/Project Budget**

### **Budget by expenditure component**

The budget would utilise the Standard Format agreed by UNDG Financial Policies Working Group.

### **See Annex 1**

\* The rate will be within the UNDG agreed range of 5% to 9%, with overall expected average of 7%, of the total of categories 1-8. To the maximum extent possible such costs should be integrated into categories 1-7 if appropriately determined as "direct costs attributable to the programme/project" thereby reducing the overall indirect cost rates.

## **7. Progress Report**

See Appendix D for preliminary outline.

Annex 1

Project Budget

CATEGORY	ITEM	UNIT COST	NUMBER OF UNITS	TOTAL COST	
<b>1. Personnel</b>	Technical Coordinator (14 months)	\$ 3,500 / month		49,000	
	Consultants (UNESCO Consultants)			10,000	
	UNESCO Staff mission costs			6,000	
	Temporary appointments	\$ 1,500 / month		21,000	
	<b>Total</b>				<b>86,000</b>
<b>2. Contracts</b>	<b>CONTRACTS FOR ONE WORLD HERITAGE SITE</b>				
	<b>Contracts and expenses for survey, digital documentation and related training as well as for risk mapping with related conservation plan exercises and training</b>				
	Training DGA/UL/ESGT (Laser Scanning)		4p.DGA/2p.ESGT/2p.UL	51,968	
	Survey (Laser Scanning) International Consultant	Int Cons (survey)	3p. Int.Cons	52,680	
	Survey (Laser Scanning) Local Experts		3p. locl.Experts	72,900	
	Report (Laser Scanning)	Int cons.( survey)	1 Int. Consultant	9,064	
	Training DGA (Risk Mapping)		6p.DGA	19,488	
	Training DGA (Risk Mapping)	- Int. Cons. / Structure - Int. Cons. / decay of materials - Int. Cons. / mural painting			29,340
	Risk Mapping DGA		3p. Int. Cons. 6p.DGA		48,720
	Risk Mapping International Consultant	Int. Cons. (Structure, decay of materials, mural painting)		3p. Int. Cons	17,670

	Report (Risk Mapping)		9,064	
	Publication		30,000	
	<b>Total</b>			<b>340,894</b>
<b>3. Transport</b>	Transport of personnel, trainees and experts		15,000	
	<b>Total</b>			<b>15,000</b>
	<b>Office Supplies</b>			
	Folders, Paper, Ink, other related materials, etc...		6,000 \$	
	Generator, electric cables and other supplies		10,000 \$	
	Communication Costs	\$200/month	2,800 \$	
	<b>Total</b>			<b>18,800</b>
	Digital camera specifications have to be as follows:		39,340	
	<ul style="list-style-type: none"> <li>• Rollei 6008 metric camera with a P20 digital back : 18 700 Euros</li> <li>• 80 mm metric lens : 3 700 Euros</li> <li>• CDW software : 5 700 Euros</li> </ul>			
<b>5. Equipment</b>	3 lap tops + 2 workstations		22,000	
	laser scan station of Leica is 100,000 Euros		140,000	
	Scaffolding		10,000	
	Project car		30,000	
	<b>Total</b>			<b>241,340</b>
<b>6. Miscellaneous</b>				<b>15,000</b>
<b>Total Project</b>				<b>717,034</b>
<b>7. Agency Management Support</b>	7% of total above			<b>50,192</b>
<b>Grand Total requested from LRF</b>				<b>767,226</b>

**Detailed expenses for component No. 2 (Contracts)**

Description	Personnel	Needed personnel	Duration of work	Salaries	Perdiem	Travel Cost	Total US\$
training DGA/UL/ESGT (Laser Scanning)		4p.DGA/2p.ESGT/2p.Ul	8 weeks		56 x 116 x 8 = 51,968		51,968
Survey (Laser Scanning) International Consultant		3p. Int.Cons	8 weeks	1133 x 8 x 3 = 27,192	56 x 116 x 3 = 19,488	3 x 2 x 1000 = 6,000	52,680
Survey (Laser Scanning) Local Experts		3p. locl.Experts	15 weeks	808 x 15 x 3 = 36,360	105 x 116 x 3 = 36,540		72,900
Report (Laser Scanning)		1 Int. Consultant	8 weeks	1133 x 8 = 9,064			9,064
training DGA (Risk Mapping)		6p.DGA	4 weeks		28 x 116 x 6 = 19,488		19,488
training DGA (Risk Mapping)		3p. Int. Cons.	4 weeks	1133 x 4 x 3 = 13,596	28 x 116 x 3 = 9,744	3 x 2 x 1000 = 6,000	29,340
Risk Mapping DGA		6p.DGA	10 weeks		70 x 116 x 6 = 48,720		48,720
Risk Mapping International Consultant		3p. Int. Cons	2 weeks	1133 x 2 x 3 = 6,798	14 x 116 x 3 = 4,872	3 x 2 x 1000 = 6,000	17,670
Report (Risk Mapping)		1 Int. Cons	8 weeks	1133 x 8 = 9,064			9,064
<b>TOTAL</b>				<b>102,074</b>	<b>190,820</b>	<b>18,000</b>	<b>310,894</b>



**Submission Form  
To  
The Lebanon Recovery Fund Steering Committee**

To be completed by the **Recovery and Reconstruction Cell (RRC)**

Meeting No:	Date of Meeting:
Item No:	Programme/project

To: <b>Lebanon Recovery Trust Fund Steering Committee</b>	Date of Submission: <b>20 April 2007</b>
From: <b>UNESCO and the Ministry of Culture</b>	Contact: <b>Abdel Moneim Osman</b> Address: <b>UNESCO Office - Beirut</b> Telephone: <b>961-1-850013</b> Email: <b>am.osman@unesco.org</b>
Through: Working Group  <input type="checkbox"/> Endorsement <input type="checkbox"/> Comments	Contact: Address: Telephone: Email:
Proposed submission, if approved would result in:  <input type="checkbox"/> Continuation of existing programme/project <input checked="" type="checkbox"/> New programme/project <input type="checkbox"/> Other (explain)	Proposed submission resulted from:  <input type="checkbox"/> National Authorities initiative within national priorities <input checked="" type="checkbox"/> UN Agency initiative within national priorities <input type="checkbox"/> Other (explain)
Programme/project title: <b>Capacity Building of Human Resources for Digital Documentation of World Heritage Sites affected by 2006 War in Lebanon</b>	
Amount of funds requested for proposed programme/project: <b>\$ 717,034</b>	
Estimated number of beneficiaries: direct _____ indirect: _____	
Request against specific earmarking or unearmarked:	
Amount of indirect costs requested: <b>\$ 50,192 (7%)</b>	

## 1. Background

An assessment of the state of conservation of cultural heritage sites in Lebanon, in particular World Heritage Sites and other sites listed in the Tentative List of Lebanon, after the recent conflict and severe bombardments in South Lebanon and Beqaa Valley has been undertaken by a UNESCO mission under the leadership of Mr. Mounir Bouchenaki, Director general of ICCROM and special advisor for Culture for UNESCO's Director General. Fortunately, the impact of the war on the World Heritage Sites was minor, except the consequences of oil spill on the ancient harbor (marina) and medieval towers of Byblos World Heritage Site. Only **two locations** affected by war were identified: 1) a fallen stone block in the hexagonal courtyard of Baalbek and 2) suspected detachments of painted coat in one of Tyre's hypogea located at around 200m distance from the closest bombed spot. However, the state of conservation of all visited sites is critical and the recent war unveiled the urgent problem of the daily maintenance of the heritage sites - a maintenance that should be based on a computerized digital technical working documentation that could be easily updated. On the other hand, the daily maintenance of a heritage site strongly depends on the availability of well trained human resources.

## 2. Purpose of Proposed Programme/Project

### Development Goal:

To contribute to the risk mapping of Baalbek or Tyre, and its emergency operation plan.

### Key Immediate Objectives:

- I. To ensure the state of conservation of the Baalbek or Tyre World Heritage Sites, witness of remarkable cultural diversity over the centuries and millenniums;
- II. To build capacities of human resources for conservation and enhancement of cultural heritage sites in Lebanon through most advanced techniques of digital documentation, risk mapping exercise;
- III. To establish a model of full survey of Baalbek or Tyre monuments selected by DGA with laser scanning technologies, and a procedure to follow for its regular updating;

## 3. Evaluation of Proposals by the Working Group

<i>General principles and selection criteria</i>		
(a)	Is explicitly based on Lebanon's national priorities and needs, as noted in the public domain.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(b)	Falls with the UN's mandate, and must address the Millennium Development Goals, directly or indirectly through a human rights-based approach.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(c)	Promote and ensure national ownership.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(d)	Is at an acceptable level of risk, within UN parameters.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(e)	Falls within the areas of UN's comparative advantage.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(f)	The UN is an appropriate system to deliver the intervention.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(g)	The UN response is properly designed for and within the Sector setting, is effective, coherent, context-sensitive, and cost-efficient and the	Yes <input type="checkbox"/> No <input type="checkbox"/>

	outcomes sustainable.	
(h)	Avoids duplication of and significant overlap with the activities of other actors.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(i)	Builds on existing capacities, strengths and experience.	Yes <input type="checkbox"/> No <input type="checkbox"/>
(j)	Promotes consultation, participation and partnerships.	Yes <input type="checkbox"/> No <input type="checkbox"/>
If one or more of the above criteria is not met, please explain:		

*Implementability*

	2007	2008	2009
<i>Estimated commitments (\$mill)</i>	_____	_____	_____
<i>Estimated disbursements (\$mill)</i>	_____	_____	_____

Does the project correspond to national priorities? Yes  No

Please elaborate

Project approved by Line Ministry: Ministry of Culture on 2.07.07 (date)

*[Handwritten signature]*

**4. Review by Recovery and Reconstruction Cell (RRC)**

*Check on Programme/Project Proposal Format Contents*

- |  |  |
|--|--|
| <input type="checkbox"/> Cover sheet (first page)                  | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| <input type="checkbox"/> Logical Framework                         | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| <input type="checkbox"/> Programme/Project Justification           | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| <input type="checkbox"/> Programme/Project Management Arrangements | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| <input type="checkbox"/> Risks and Assumptions                     | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| <input type="checkbox"/> Budget                                    | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| <input type="checkbox"/> Support Cost                              | Yes <input type="checkbox"/> No <input type="checkbox"/> |

*Overall review of programme submission  
Recommendations*

Elaborate

**5. Decision of the LRF Steering Committee**

- Approved for a total budget of \$.....
- Approved with modification/condition
- Deferred

**Reason/Comments**

Elaborate
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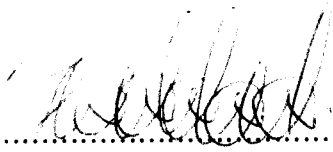
**Chair of the LRF Steering Committee**

.....  
**Signature**

.....  
**Date**

**6. Follow-up action taken by the Administrative Agent**

- Project consistent with provisions of the Letter of Agreement with donors (if applicable)

  
.....  
**Signature**

.....  
**Date**