

## **18.8 Implementation and Management Recommendations**

### **18.8.1 Action Plan Authorization**

It is highly desirable that the action plan for the year 2005 including the 6 priority projects be given a clear statement of support from a high level government body. It is recommended to obtain an approval of the appropriate authority of the Syrian government simultaneously with the approval of the master plan.

### **18.8.2 Implementation Structure**

The 6 priority projects are planned in different areas and are composed of a variety of components. Several agencies are naturally involved in the implementation of each project according to the location, ownership of existing facilities, related plans and projects and its characteristics. For realizing the package of 6 priority projects, therefore, it is necessary to establish a system which ensures sufficient coordination among related agencies.

The implementation structure should be as simple as possible for speedy and smooth implementation of priority projects. A structure which includes a variety of implementing bodies causes delays in project progress, which may result in the loss of expected benefits generated by the projects.

In addition, knowledge and expertise of outside experts and consultants will be needed for implementation procedure from the beginning to the end including planning, design, tender preparation, and evaluation procurement and supervision of the projects, in order to support the engineering skills of implementing agencies, as well as to introduce international standards to the projects.

Based on the understandings mentioned above, the following system is recommended to implement the package of 6 priority projects, with two options concerning implementation responsibility of construction work.

- Establishing a Central Coordination Committee, and Regional Committees for each project site, for the coordination of related agencies;
- Establishing a Project Office for implementing and coordinating the projects as an independent department of MOT;
- Attaching foreign and domestic consultants to the MOT Project Office for technical support; and
- Two options for the implementation of construction work.
  - **Option 1:** In principle, MOT is to be the single implementing body of all the projects except for two components of the projects, MOCO for roads to Salahdin Castle, etc., and MOTR for passenger piers.
  - **Option 2:** The implementing body of each project component is according to the relevant agency of management responsibility.

Diagrams of the implementing structure are shown in Figure 18.8.1 and 18.8.2 for each option. Specific responsibility of related agencies are explained in Section 18.8.3.

Option 1 is to assume MOT to be the implementing body for most of the project components. According to its establishment law, the MOT is empowered to implement all tourism projects

where necessary. It has been actually active in implementing the projects of constructing government-owned hotels mainly until 1988 and for some exceptional cases after then. It has also been in charge of park development, lighting facilities improvement, and restoration of historic buildings. (GCETP is basically responsible for this construction work.) In this sense, MOT has sufficient legal background and capability to implement these improvements. Moreover, the implementation structure is very simple in that it is easy to control design and construction. The number of tenders and contracts with private contractors will be small so that less burden will arise for tender and supervision procedures. However, many components involve improvement of existing facilities and it is not realistic for MOT to assume ownership or provide any regular maintenance for any of the improved areas. Ownership and maintenance responsibility should remain with the present owner, the municipality. A cooperative working arrangement between MOT and each municipality regarding ownership and maintenance matters (i.e. transfer of ownership, management assignment agreement) needs to be negotiated at the outset to avoid any confusion of maintenance and operation of facilities after completion. Cooperation of municipality is also essential for negotiation and coordination with affected residents. There will be several exceptions because of engineering expertise of other ministries.

Option 2 calls for the municipality to implement the physical construction work where the municipality is the present owner of the land and existing facilities. There will be no barrier for it to be an implementing authority. There will be some difficulty in coordination and supervision of construction work up to consistent modern international standards, because the responsible bodies differ project by project. It is necessary for MOT and municipalities to establish a system to sufficiently advise and supervise design and construction procedure. In addition, the number of tenders and contracts will increase because each municipality has to work separately.

The final selection of an option should be thoroughly discussed and decided by the Supreme Council of Tourism.

Specific roles and functions of the different committees and the MOT Project Office are as follows.

#### (1) Central Coordination Committee

The Central Coordination Committee is an organization with members representing agencies concerned with the projects. The main function of the Central Coordination Committee is to discuss the major coordination matters related to priority projects, reaching agreement and recommend their opinion to MOT. MOT Project Team will serve as its secretariat.

The Central Coordination Committee will convene periodically and occasionally upon the request of MOT to make decisions with respect to substantial matters such as major changes in the project contents, annual budget provision, authorizing the matters supported by Regional Committees and other crucial matters. However, ordinary and day-to-day decisions will be made by MOT Project Team.

Central Coordination Committee is to include the following members.

- Minister of Tourism (Chairman)
- Representative from State Planning Commission
- Representative from Ministry of Local Administration
- Representative from Directorate General of Antiquities and Museum

- Representative from Ministry of Transport
- Representative from Ministry of Communication
- Representatives from Mohafazat (Damascus, Aleppo, Hama, Tartous, Latakia)
- Deputy Minister of Tourism (Reporter)

## (2) Regional Committees

Five Regional Committees are recommended to be established, in Damascus, Aleppo, Hama, Latakia and Tartous. The main function of the Regional Committee is to discuss and coordinate the necessary matters concerning project progress. MOT Project Team will serve as its secretariat.

Each Regional Committee will meet occasionally for discussing the matters requested by MOT and Central Coordination Committee with respect to substantial matters such as major changes in the project contents and other crucial matters related to the project in the respective area. Regional Committees submit the results of meetings to the Central Coordination Committee for its approval. However, ordinary and day-by-day decisions will be made by MOT Project Office.

Regional Committee is recommended to include the following members.

- Deputy Minister of Tourism (Chairman);
- Representative from Mohafazat;
- Representative from Municipality;
- Representative from Directorate General of Antiquities and Museum;
- Representative from Ministry of Transport (only Tartous);
- Director of Tourism (Regional Branch Office);
- Representative from Ministry of Communication (only Latakia); and
- Director of MOT Project Office (Reporter).

## (3) MOT Project Office

The MOT Project Office plays a key role of coordination and implementation of the projects. It works as a secretariat of the Central Coordination Committee and all Regional Committees. It also works for resolving matters requiring coordination whenever possible. At the same time, it is the specific implementation body for the component that MOT implements (depending on Option 1 or 2).

Specifically, its major roles in terms of project coordination are:

- Secretariat work for Central Coordination Committee and Regional Committees;
- Planning and negotiation of annual budget allocation; and
- Coordination with related agencies.

And its major roles in terms of project implementation are:

- Supervision of the design work;
- Overall review of the implementation program based on the results of detailed design and cost estimates, and if necessary, modify and readjust the project packaging;
- Pre- and post-evaluation of the projects, which may have significant impacts on the socio-economic and environmental conditions;

- Establishment and management of procedural formalities for the disbursement of foreign and local funds;
- Tender preparation and processing including advertising, pre-qualification of bidders, short-listing of bidders, tender call, pre-tender conference, site orientation, opening of bid and other relevant activities;
- Preparation of bid evaluation reports to recommend the lowest responsible bidder;
- Contract negotiations with the successful bidder;
- Supervision of the construction work (in cooperation with GCETP regional offices);
- Monitoring of project progress;
- Project accounting; and
- Necessary procedure for administrative arrangement concerning property management and maintenance including about ownership transfer and management assignment.

The Project Office should be headed by a director class engineer and his or her assistant. Enough number of staff should be manned at the office, about 15 members in case of Option 1 and 10 members in case of Option 2. Staff should include engineers with enough engineering skills, negotiation ability and deep understanding of the project. Appointment of counterpart members of this study is recommended to satisfy above mentioned condition. It should also include skilled staff for accounting and contract. In addition, it is recommended to have staff from SPC who knows about the procedures and conditions of foreign assistance when the project is funded by foreign donor agencies.

### **18.8.3 Implementation and Management of Project Component**

Based on the principle mentioned above, responsibilities of the related agencies on each project component are examined. Because the responsibility on its implementation can not be separately considered from its management, the desirable management organization and necessary operational work are examined as well. Following is the recommendation for implementation, maintenance, management and operation of each component. (Table 18.8.1) There are two options for implementation responsibility in accordance with the options of overall implementation structure.

#### **(1) Information Offices and Visitor Centers**

There is little room for discussion about responsibility of MOT on Information Offices and Visitor Centers. They should be designed, constructed, equipped and then operated by MOT. Arrangement on right of ownership and right of use should be made before the start of construction in the case of Damascus Visitor Center (renovating Mohafazat owned old building) and Tartous Visitor Center (using a room of an old house owned and renovated by the municipality). Cooperation of Mohafazat and municipality, especially as sources of information and old materials, is desirable and necessary for better operation of these facilities.

MOT should provide necessary staff for the operation through continuous staff training program which is assumed to be included in the project for only the initial three years. Basically the offices and the centers should open 7 days a week, at least from 9 a.m. to 6 p.m., requiring three staff shifts. Number of staff is assumed at 2 to 4 for each shift in general excluding maintenance and cleaning staff, yet, a few more staff will be required for Damascus centers. The duration of staff training is assumed at 3 months and should include:

- lectures on tourist services and major foreign languages;
- lectures on geography, history and culture;
- operation of equipment;
- educational trip to observe foreign examples; and
- practices of tourist services.

Information Office is provided with sufficient amount of free, handout tourist information materials (maps, general guide brochures, site-specific brochures, etc.) for the relevant district and some on other district. Information on tourist sites and facilities (holidays, opening hours, access route), hotels and restaurants (location, star, standard price, phone number) should also be ready to be provided. The contents of materials and displays will be periodically reviewed and renewed in consultation with experts.

The Visitor Center is provided with one form of site-specific brochure (ranging from 1-sheet site map leaflet to multi-paged site brochure, depending on the size or importance of site), to be distributed to visitors. It is also provided with introductory information of sites including explanation exhibition of sites, local products exhibition, etc. with appropriate materials (panels, models, audio-visual, etc.). The contents of exhibition and display and the collection of books in the library will be periodically reviewed, renewed and added in consultation with experts, with a help of Mohafazat/Municipality. Foreign currency exchange will be operated by Commercial Bank of Syria. Kiosk or cafeteria can be provided for the convenience of visitors under a concession to private sector.

## **(2) Tourist Signs and Interpretation Boards**

Tourist direction signs along tourist routes and access roads are different from the ordinary traffic direction signs because the objectives are often different. They should show the information prepared by MOT. MOT should plan, design and set up these signs in consultation and coordination with road management authority and traffic control and safety authority.

On-site signs and interpretation boards are also the responsibility of MOT. Because the management authority differs from site to site, from facility to facility, it is important that a single authority, MOT, provide uniformly designed signs and boards, so that tourists can find and identify easily places of interest. Specific location for signs and boards should be discussed with related authorities.

Maintenance of these signs and boards should be carefully planned by MOT. Yet help of Mohafazat and Municipality in supervising the conditions of signs and boards will greatly help MOT for reducing its burden.

## **(3) Tourist Trails, Parks, Promenades, Bridges, Taxi Stops and Car Parking**

Signs and interpretation boards along tourist trails are to be managed in the same manner as those described above (2).

There are two options for physical construction work, either by MOT or by the municipality (Mohafazat in case of Damascus).

The first Option is for MOT to implement the physical improvement. It is the simplest arrangement and easy to supervise the design and construction for modern international tourist standards. The administrative agreement between MOT and each municipality

on property and maintenance responsibility (i.e. transfer of ownership, management assignment agreement) should be properly arranged at the outset to avoid any confusion of maintenance and operation of facilities after completion. In addition, cooperation of Municipality is necessary about the negotiation and coordination with affected residents.

The second Option is for municipality to implement the physical construction work. Because the municipality is the present owner of land and existing facilities of street and parks, there is no barrier for its role as implementing authority. There will be some difficulty in coordination and supervision of construction work to suit modern international standards, because the responsible bodies differ area by area. It is necessary for MOT with outside experts and related municipalities to establish a system to sufficiently advise and supervise design and construction.

In either case, cooperation between MOT and municipality is essential.

With either option as to the responsibility of construction work, the municipality will take care of physically improved tourist trails including pavement, drainage, lighting fixture, underground pedestrian crossing, etc. Cooperation of the Hijaz Railway Corporation is expected in the maintenance of facilities in and around Hijaz Station.

#### (4) Other Components

##### a. Noria Museum (Hama)

It will be constructed inside the riverside park proposed as a component of the same project. There are several alternatives for the operation of the museum.

MOT can be the operating body using its knowledge of operating visitor centers. Another alternative is that the municipality operates it using know-how as the owner of Norias including engineering skills for maintenance of Norias. As yet another alternative, establishment of a joint operation organization between MOT and the municipality can be assumed.

Joint operating organization, however, is not recommended in the initial stage of its operation. The facility itself is not so big to merit an independent operating organization. Thus, either MOT or the municipality should be the operating body and it should be decided by the negotiation of two agencies. In either case, technical cooperation of both agencies in the operation of the museum is essential. The operating body will also be the implementing body of design and construction of the building.

MOT or Municipality should provide necessary staff for the operation through a continuous staff training program which is assumed to be included in the project for only the initial three years. Basically the museum should open at least from 9 a.m. to 6 p.m., so three staff shifts are necessary. Number of staff is assumed at 4 to 8 for each shift. The duration of staff training is assumed at 4 months, including some technical lectures and practices as curator, and lectures and practices on water wheels in Hama in addition to staff training program for Information Office and Visitor Center.

The Museum is provided with introductory information on water wheels in Hama, by appropriate materials (panels, models, audio-visual, etc.). The contents of exhibition and display will be periodically reviewed, renewed and added in consultation with experts. The cooperation of MOT and Municipality is essential.

b. Passenger Pier (Tartous and Arwad)

It appears that there are two options for passenger pier improvement in Tartous and Arwad. There will, however, be engineering difficulty for MOT in implementing work on passenger pier because it requires special engineering skill. Therefore, even in case of Option 1, it should be dealt with as an exception, to be implemented by MOTR. Design, construction and maintenance work should be done by MOTR in coordination with MOT.

c. Solid Waste Management (Arwad)

The biggest construction work in this component is the construction of a high performance incinerator. It will be a small one for the population of 7,000, yet some staff and engineering knowledge are required for the supervision of design and construction. Arwad municipality has only one civil engineer. He alone is not enough to do the job. The incinerator itself is not the responsibility of MOT in general, yet there are enough sanitary engineers with knowledge.

Regardless of capability, management of solid waste as a whole is the very responsibility of Municipality, so that no other agency can be in place. Collection of solid waste is being done rather well at present. Difficulty may be to deal with the new incinerator and work to prevent easy disposal of waste to the coast. Sufficient number of qualified staff and their education is essential.

Therefore, it is recommended that MOT implement the construction work of incinerator. After completion, the Municipality should have the right to use the facility, and to be responsible for the management of the facility and solid waste management. Education for management staff should be done at the same time.

d. Access Road (Latakia/Salahdin Castle, etc.)

It appears that there are two options for access road improvements in Latakia and surrounding places. There will, however, be institutional difficulty for MOT to implement large scale road construction work. Therefore, even in the case of Option 1, it should be dealt with as an exception, to be implemented by MOCO. Design, construction, and maintenance work should be done by MOCO in coordination with MOT.

Figure 18.8.1 Project Implementation Structure (Option 1)

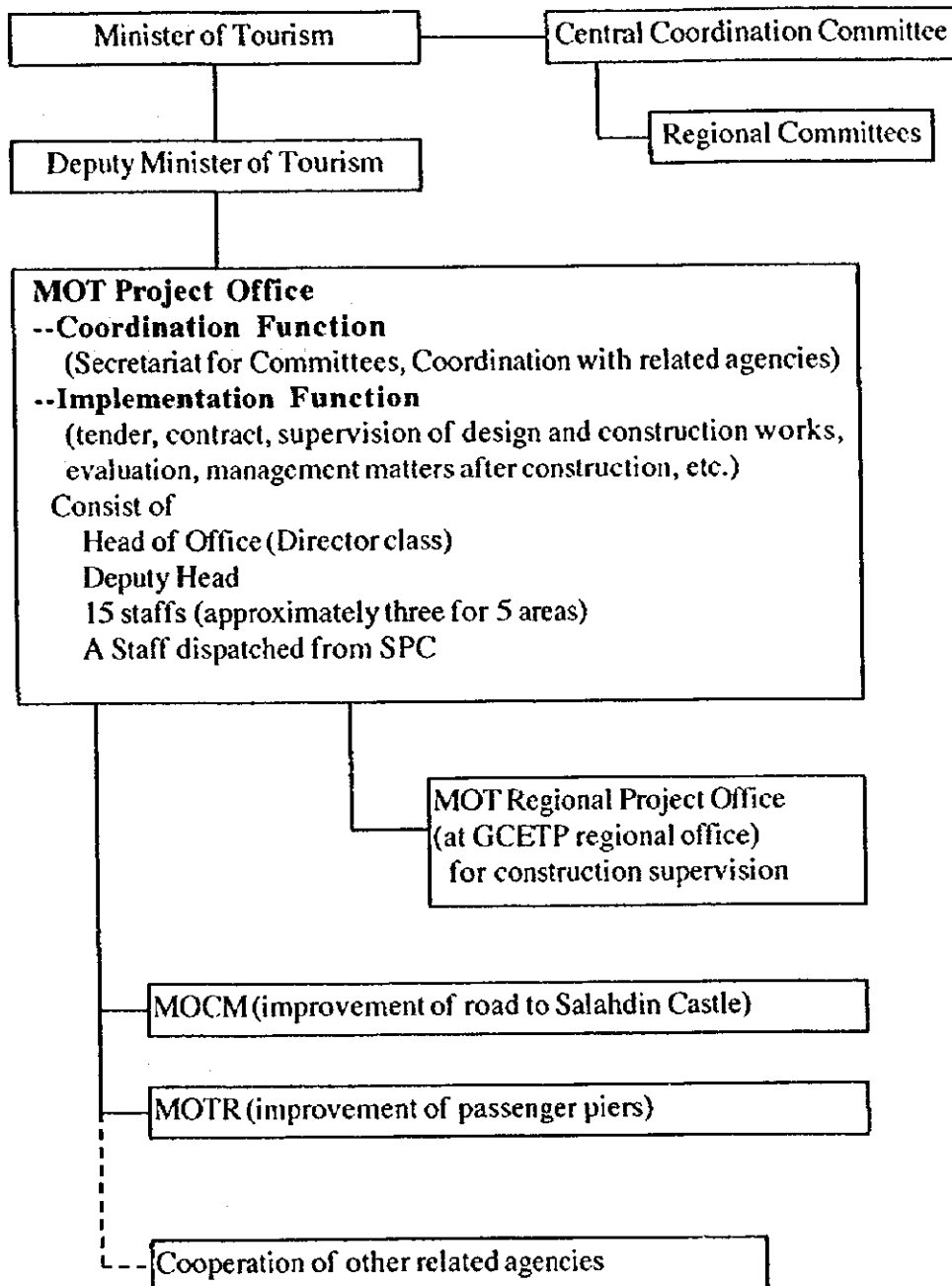
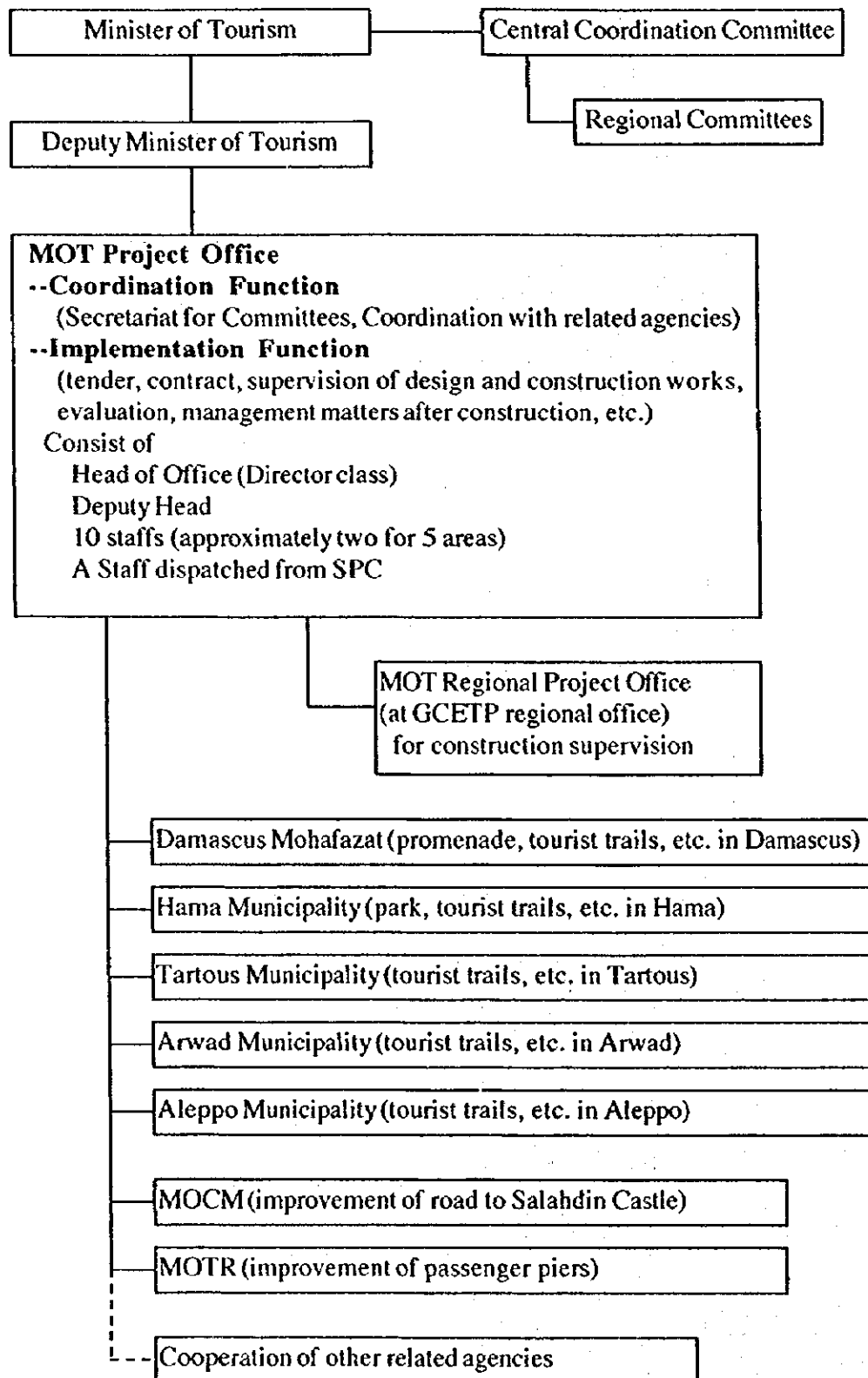




Figure 18.8.2 Project Implementation Structure (Option 2)



**Table 18.8.1 Project Implementation and Management Responsibility**

Component	Present Ownership	Construction Agency	Management/Operation Agency	
<b>Project A:</b>	<b>The Great Damascus Heritage</b>			
Green Promenade	Mohafazat	MOT/Mohafazat	Mohafazat	Management Assignment
Tourist Trails	Mohafazat	MOT/Mohafazat	Mohafazat	Management Assignment
Visitor Center	Mohafazat	MOT	MOT	Ownership Transfer or Land Lease
Information Center	MOT	MOT	MOT	
Taxi Stops and Parking	Mohafazat	MOT/Mohafazat	Mohafazat	Management Assignment
Hijaz Railway Exhibition	Hijaz Railway Corp.	MOF	MOT/Hijaz Corp.	
<b>Project B:</b>	<b>Old Hama of Norias</b>			
Tourist Trails	Municipality	MOT/Municipality	Municipality	Management Assignment
Information Center	MOT	MOT	MOT	
Khan Rustam Pasha	MOT	MOT	MOT	
Noria Park	Municipality	MOT/Municipality	Municipality	Management Assignment
Noria Museum	Municipality	MOT or Municipality	MOT	Ownership Transfer or Land Lease
Bridges Improvement	Municipality	MOT/Municipality	Municipality	Management Assignment
<b>Project C:</b>	<b>Historic Tartous-Arwad</b>			
Tourist Trails	Municipality	MOT/Municipality	Municipality	Management Assignment
Information Center	MOT	MOT	MOT	
Old Tartous Visitor Center	Municipality	MOT	MOT	Space Lease
Arwad Visitor Center	MOT	MOT	MOT	
Passenger Piers	MOTR	MOTR	MOTR	
Solid Waste in Arwad	---	MOT & Municipality	Municipality	
<b>Project D:</b>	<b>Latakia Cultural Circuit</b>			
Information Center	MOT	MOT	MOT	
Road Improvement	Mohafazat	MOCO	Mohafazat	
Observation Point	---	MOT	MOT	
<b>Project E:</b>	<b>Aleppo the Silk Road</b>			
Information Center	MOT	MOT	MOT	
Visitor Center	MOT	MOT	MOT	
Tourist Trails	Municipality	MOT/Municipality	Municipality	Management Assignment
Taxi Stop and Parking	Municipality	MOT/Municipality	Municipality	Management Assignment
<b>Project F:</b>	<b>Tourist-Friendly Syria</b>			
Direction Signs	Road Manage Authority	MOT	MOT	Permission of Road Authority
Interpretation Panels, etc.	MOT	MOT	MOT	
Promotion Campaign	---	MOT	MOT	

Note: "MOT/Municipality" as Construction Agency means that physical improvement is done by MOT in case of Option 1 and done by Municipality (Mohafazat in case of Damascus) in case of Option 2. Signs and boards are improved by MOT.

"Management Assignment" is necessary only in case of Option 1.

#### **18.8.4 Funding Sources**

It is recommended that priority projects be financed by general budget of the government of Syria and loans and/or grants from foreign donor agencies. While the projects need foreign currency for its implementation, expected major benefit from the projects is foreign currency earnings from foreign tourists. Financing the projects by low interest loans from foreign donor agencies is, therefore, considered suitable.

#### **18.8.5 Implementation Schedule**

The implementation schedule of each priority project may vary depending on its nature and scale, and readiness for implementation. Figure 18.8.3 shows the time schedule assumed that all 6 priority projects will be implemented together as one package.

The following were taken into account in formulation of the implementation schedule:

- a pre-implementation period to elaborate the components of the projects and to secure funding sources will be needed before starting the projects;
- all 6 priority projects will be completed within 5 years and in full operation by the year 2005; and
- a maintenance and guarantee period of one year after the completion by the contractor (excluding training and printing, etc.) is also included in the 5 years' project period.

Figure 18.8.3 Implementation Schedule of the Priority Projects

PROJECTS	Implement. Agency	1st year	2nd year	3rd year	4th year	5th year	Design Start M	Execute Start M
<b>The Great Damascus Heritage</b>								
1 Barada Green Promenade	MOT/DM	█	█	█	█		01 01 9	04 02 12
2 Tourist Trails	MOT/DM	█	█	█	█		01 01 9	04 02 12
2-5 handout production	MOT		█	█			10 01 6	10 02 3
3 Old Damascus Visitor Center	MOT	█	█	█	█		01 01 6	01 02 12
3-4 training	MOT		█	█	█		10 01 3	07 02 36
4 Tourist Information Center	MOT	█	█	█			01 01 3	10 01 6
4-3 training	MOT		█	█	█		07 01 3	04 02 36
5 Parking and Taxi Stops	MOT/DM	█	█	█	█		04 01 3	01 02 9
6 Hijaz Railway Exhibition	MOT	█	█	█	█		07 01 6	07 02 6
<b>Old Hama of Norias</b>								
1 Tourist Trails	MOT/HM	█	█	█	█		01 01 6	01 02 9
1-5 handout production	MOT		█	█			07 01 6	07 02 3
2 Tourist Information Upgrading	MOT	█	█	█	█		07 01 3	04 02 6
2-4 training	MOT		█	█	█		07 01 3	04 02 36
3 Visitor Center	MOT	█	█	█	█		07 01 3	04 02 6
3-4 training	MOT		█	█	█		07 01 3	04 02 36
4 Noria Park and Museum	MOT/HM	█	█	█	█		01 01 9	04 02 12
4-6 training	MOT		█	█	█		10 02 3	10 02 36
5 Bridge Construction	MOT/HM	█	█	█	█		01 01 6	01 02 9
<b>Historic Tartous-Arwad</b>								
1 Tourist Trails	MOT/TM-AM	█	█	█	█		01 01 6	01 02 9
1-5 handout production	MOT		█	█			07 01 6	07 02 3
2 Tourist Information Upgrading	MOT	█	█	█	█		07 01 3	04 02 6
2-3 training	MOT		█	█	█		07 01 3	04 02 36
3 Old Tartous Visitor Center	MOT	█	█	█	█		07 01 3	04 02 6
3-4 training	MOT		█	█	█		07 01 3	04 02 36
4 Arwad Visitor Center	MOT	█	█	█	█		01 01 6	01 02 9
4-5 training	MOT		█	█	█		07 01 3	04 02 36
5 Passenger Piers	MOTR	█	█	█	█		01 01 6	01 02 9
6 Solid Waste Management	MOT/AM	█	█	█	█		01 01 6	01 02 9
6-2 education and training	MOT/AM		█	█	█		07 01 3	04 02 24
<b>Latakia Cultural Circuit</b>								
1 Tourist Information Center	MOT	█	█	█	█		07 01 3	04 02 6
1-3 training	MOT		█	█	█		07 01 3	04 02 36
2 Access Road Improvement	MOC/M	█	█	█	█		01 01 9	04 02 12
3 Observation Points	MOT		█	█	█		01 02 3	10 02 3
<b>Aleppo the Silk Road</b>								
1 Tourist Information Center	MOT	█	█	█	█		07 01 3	04 02 6
1-4 training	MOT		█	█	█		07 01 3	04 02 36
2 Old Souq Visitor Center	MOT	█	█	█	█		01 01 6	01 02 12
2-3 training	MOT		█	█	█		10 01 3	07 02 36
3 Tourist Trails	MOT/AM	█	█	█	█		01 01 6	01 02 12
3-5 handout production	MOT		█	█			07 01 6	07 02 3
4 Parking and Taxi Stops	MOT/AM	█	█	█	█		04 01 3	01 02 9
<b>Tourist-Friendly Syria</b>								
1 Tourist Direction Signs	MOT	█	█	█	█		01 01 6	01 02 12
2 Interpretation and Amenity	MOT	█	█	█	█		01 01 6	01 02 9
3 Foreign Promotion Campaign	MOT	█	█	█	█		01 01 6	01 02 12
<b>Overall Project Management</b>	MOT	█	█	█	█			

DM Damascus Mohafazat      █ Design      █ Implementation      █/█ Contractors' O-M period  
 HM Hama Municipality      MOT Ministry of Tourism  
 TM Tartous Municipality      MOTR Ministry of Transport  
 AM Arwad Municipality / Aleppo Municipality      MOTR Ministry of Transport

## **18.9 Environmental and Social Consideration**

### **18.9.1 Initial Environmental Examination (IEE)**

#### **(1) Evaluation Methodology**

The Initial Environment Evaluation (IEE) of the proposed priority projects was conducted, based on the data and information collected (refer to Appendix A4), and the output of field surveys. It was decided before conducting IEE that the implementation of the priority projects must be in compliance with the following criteria:

- to be in compliance with laws, regulations and environment conventions;
- to be in compliance with regulatory environmental quality standards either national or those drawn from external organizations;
- to keep the project outside designated nature conservation areas if any;
- to specify, if necessary, means to prevent significant effects upon endangered species and to ensure conservation of biodiversity;
- to minimize negative community effects through ensuring that the project affects the smallest number of people, if necessary with advanced plans for the mitigation of involuntary resettlement with income restoration and/or other important treatments; and
- to include mitigation and monitoring costs, if any, into the project costs.

As a result of IEE, the priority projects were categorized into three categories as follows:

- Category A: An EIA report is required;
- Category B: Appraisal required in the light of the guidelines, but no formal EIA report; and
- Category C: No EIA report, and appraisal in the context of the guidelines may be omitted.

Category A project characteristics relevant to the tourism sector are large-scale road construction projects or which are affecting:

- areas of salt accumulation or soil erosion;
- semi-arid areas;
- natural forests;
- water resources;
- protected habitats;
- areas of unique historical, cultural or scientific interest;
- areas of concentrated population or industrial activities; and
- areas of social interest to vulnerable groups.

Those projects which involve the following characteristics also would qualify for an EIA:

- wide, diverse and irreversible environmental effects;
- affect large numbers of inhabitants;
- consume large amount of non-renewable resources;
- significant change in land use or social, physical and/or ecological environment;
- disposal of large amount of hazardous wastes.

If any of the priority projects are deemed to have a possibility of causing significant environmental effects classified as "Category A", an EIA report should be required before the implementation.

(2) Project A: The Great Damascus Heritage

This project will restore an heritage building of 150 years as Old Damascus Visitor Center and improve walking environment in the city including Old City. These activities will obviously relieve the registered world heritage of Old Damascus from degradation, and bring considerable socio-economic effects to the community.

While there is potential to increase tourist traffic, the project aims to increase the tourist capacity without significant increase of tourist vehicles, especially around the proposed Old Damascus Visitor Center and major tourist attractions at peak seasons. Adequate traffic management will be needed, which should be incorporated in the on-going urban transportation study by Mohafazat and JICA.

Table 18.9.1 shows the results of IEE, and this project is classified as Category B.

Table 18.9.1 Environmental Check List - The Great Damascus Heritage

Check Item	major	small	none	not clear	Potential Problems /Benefits	Actions/ Countermeasures
<b>Pollution</b>						
1. air pollution			*			
2. water pollution			*			
3. noise & vibration			*			
4. subsidence			*			
5. construction disturbance		*			during pedestrian crossing construction	adequate construction management
6. waste generation		*			potential for tourist litter	waste management needed
<b>Natural Environment</b>						
1. conservation site			*			
2. protected species			*			
3. water resources			*			
4. soil erosion			*			
5. landscape quality			*			
6. resource consumption			*			
<b>Human Environment</b>						
1. resettlement			*			
2. cultural resources		*			restoration of ruined heritage and foot path	adequate restoration work needed
3. native people			*			
4. socio-economic effects		*			possible skewed spread of tourist benefits to residents	
5. infrastructure pressure			*			
6. land use change		*			potential for change in business	monitoring of situation needed
7. traffic congestion		*			potential for traffic conflict at visitor center and parking	traffic control during peak needed
<b>Others</b>						

Source: JICA Study Team

Barada river will be cleaner after the sewerage treatment plant will be in operation this year. Barada Green Promenade component with improved landscape will be an important place to recognize the importance of environmental preservation. This component needs sophisticated landscape design.

(3) Project B: Old Hama of Norias

This project will restore and preserve water wheels of Hama together with the skills for maintenance which are inherited from fathers to sons for centuries.

Orontes River has been and will be the source of culture and life in this area. In Hama, the sewerage treatment plant is expected to be in operation this year. Although this project does not deal with the river directly, adequate environmental management for the river is needed in order not to increase tourist litter along the river.

Table 18.9.2 shows the results of IEE, and this project is classified as Category B.

Table 18.9.2 Environmental Check List - Old Hama of Norias

Check Item	major	small	none	not clear	Potential Problems /Benefits	Actions/ Countermeasures
<b>Pollution</b>						
1. air pollution			*			
2. water pollution		*			potential pollution by tourist litter	provision of trash bins, adequate waste management
3. noise & vibration			*			
4. subsidence			*			
5. construction disturbance		*			potential muddy water during bridge construction	adequate construction management
6. waste generation		*			potential for tourist litter	waste management needed
<b>Natural Environment</b>						
1. conservation site			*			
2. protected species			*			
3. water resources			*			
4. soil erosion			*			
5. landscape quality		*			risk to damage landscape by Noria Park	adequate design and construction needed
6. resource consumption			*			
<b>Human Environment</b>						
1. resettlement			*			
2. cultural resources		*			risk to damage historical Kelani bridge	adequate construction work needed
3. native people			*			
4. socio-economic effects		*			possible skewed spread of tourist benefits to residents	
5. infrastructure pressure			*			
6. land use change		*			potential for change in business	monitoring of situation needed
7. traffic congestion			*			
<b>Others</b>						

Source: JICA Study Team

(4) Project C: Historic Tartous-Arwad

This project will improve the value of cultural resources in Tartous and Arwad, and will improve sanitary conditions in Arwad by introducing an improved solid waste management. Arwad island is densely inhabited and no space is available for waste landfill. The final disposal has been the critical issue in the island. The proposed small-scale advanced incinerator can solve the issue, however careful attention for the design of specifications and its operation must be paid in order to avoid air pollution and operational stoppage.

As the passenger piers construction will be only within the water of the existing local ports, no major environmental impact is foreseen. However, adequate construction management is needed to avoid excessive murkiness in water during construction.

Table 18.9.3 shows the results of IEE, and this project is classified as Category B.

Table 18.9.3 Environmental Check List - Historic Tartous-Arwad

Check Item	major	small	none	not clear	Potential Problems /Benefits	Actions/ Countermeasures
<b>Pollution</b>						
1. air pollution		*			potential pollution by incinerator	careful design and operation needed
2. water pollution			*			
3. noise & vibration			*			
4. subsidence			*			
5. construction disturbance		*			potential muddy water during pier construction	adequate construction management
6. waste generation		*			potential for tourist litter, improvement of waste management in Arwad	waste management needed
<b>Natural Environment</b>						
1. conservation site			*			
2. protected species			*			
3. water resources			*			
4. soil erosion			*			
5. landscape quality			*			
6. resource consumption			*			
<b>Human Environment</b>						
1. resettlement			*			
2. cultural resources		*			restoration of foot path	adequate design and construction management
3. native people			*			
4. socio-economic effects		*			possible skewed spread of tourist benefits to residents	
5. infrastructure pressure			*			
6. land use change		*			potential for change in business	monitoring of situation needed
7. traffic congestion		*			potential increase of tourist traffic near the local port	adequate traffic management needed
<b>Others</b>						

Source: JICA Study Team



(5) Project D: Latakia Cultural Circuit

This project will improve the value of three major cultural sites around Latakia by improved presentation and improvement of existing access roads. Although the road improvement includes full re-pavement and improvement of unsafe parts of roads, and the alignment and width will not be changed, careful design and construction management are needed in order not to damage the important forest of the area.

Table 18.9.4 shows the results of IEE, and this project is classified as Category B.

Table 18.9.4 Environmental Check List - Latakia Cultural Circuit

Check Item	major	small	none	not clear	Potential Problems /Benefits	Actions/ Countermeasures
<b>Pollution</b>						
1. air pollution		*			potential emission increase by increased tourists	adaptation of emission control
2. water pollution			*			
3. noise & vibration		*			potential noise by increased tourist vehicles	adequate traffic control needed
4. subsidence			*			
5. construction disturbance		*			potential disruption during road improvement	adequate construction management
6. waste generation		*			potential for tourist litter along improved access	provision of trash bins, waste management needed
<b>Natural Environment</b>						
1. conservation site		*			potential damage of trees by alignment improvement	careful design and adequate construction method
2. protected species		*			potential damage of animals by increased traffic	provision of protection fence where necessary
3. water resources			*			
4. soil erosion		*			potential damage by road improvement	careful design and adequate construction method
5. landscape quality		*			potential damage by observation points	careful design needed
6. resource consumption			*			
<b>Human Environment</b>						
1. resettlement			*			
2. cultural resources		*			potential damage by sign and panel posting	careful design needed
3. native people			*			
4. socio-economic effects		*			possible skewed spread of tourist benefits to residents	
5. infrastructure pressure			*			
6. land use change		*			potential for change in business	monitoring of situation needed
7. traffic congestion		*			potential increase of tourist traffic at peak seasons	adequate traffic management needed
<b>Others</b>						

Source: JICA Study Team

(6) Project E: Aleppo the Silk Road

This project will improve the presentation of cultural resources and walking environment in the city including the Old City. These activities will obviously relieve the registered world heritage of Old Aleppo from degradation, and bring considerable socio-economic effects to the community.

While there is potential to increase tourist traffic, the project aims to increase the tourist capacity without significant increase of tourist vehicles, especially around Aleppo Citadel and Bab Qinesrin (the gate to proposed visitor center) at peak seasons. Although the project includes the provision of parking area for both, adequate traffic management in general and for peak seasons will be needed

Table 18.9.5 shows the results of IEE, and this project is classified as Category B.

Table 18.9.5 Environmental Check List - Aleppo the Silk Road

Check Item	major	small	none	not clear	Potential Problems /Benefits	Actions/ Countermeasures
<b>Pollution</b>						
1. air pollution			*			
2. water pollution			*			
3. noise & vibration			*			
4. subsidence			*			
5. construction disturbance		*			during pedestrian crossing construction	adequate construction management
6. waste generation		*			potential for tourist litter along improved access	waste management needed
<b>Natural Environment</b>						
1. conservation site			*			
2. protected species			*			
3. water resources			*			
4. soil erosion			*			
5. landscape quality			*			
6. resource consumption			*			
<b>Human Environment</b>						
1. resettlement			*			
2. cultural resources		*			restoration of historical building, foot path	careful design needed
3. native people			*			
4. socio-economic effects		*			possible skewed spread of tourist benefits to residents	
5. infrastructure pressure			*			
6. land use change		*			potential for change in business	monitoring of situation needed
7. traffic congestion		*			potential increase of tourist traffic at peak seasons	adequate traffic management needed
<b>Others</b>						

Source: JICA Study Team

(7) Project F: Tourist-Friendly Syria

This project will improve the value of cultural heritage in the country by provision of interpretation panels and easier access signs. However, adequate design of panels and resource management are needed in order not to damage the cultural resources by increased tourists.

This project includes the foreign tourism promotion and bring considerable socio-economic benefit not only for local communities but also for the country as whole.

Table 18.9.6 shows the results of IEE, and this project is classified as Category B.

Table 18.9.6 Environmental Check List - Tourist-Friendly Syria

Check Item	major	small	none	not clear	Potential Problems /Benefits	Actions/ Countermeasures
<b>Pollution</b>						
1. air pollution			*			
2. water pollution			*			
3. noise & vibration		*			potential noise by increased tourist vehicles	adequate traffic control
4. subsidence			*			
5. construction disturbance			*			
6. waste generation		*			potential for tourist litter along improved access	provision of trash bins, waste management needed
<b>Natural Environment</b>						
1. conservation site			*			
2. protected species			*			
3. water resources			*			
4. soil erosion			*			
5. landscape quality			*			
6. resource consumption			*			
<b>Human Environment</b>						
1. resettlement			*			
2. cultural resources		*			increased value by presentation upgrade	careful design and management needed
3. native people			*			
4. socio-economic effects		*			possible skewed spread of tourist benefits to residents	
5. infrastructure pressure			*			
6. land use change			*			
7. traffic congestion			*			
Others						periodical monitoring of isolated sites needed

Source: JICA Study Team

18.9.2 Social Considerations

The well-being of the affected Syrian populations will improve as a result of these projects. Table 18.9.7 summarizes expected impacts of each project component on the quality of life within the radius of influence of each. These projects are designed to convert these cities into "tourist-friendly open air museums" that facilitate touring and relaxation by both foreigners as well as Syrians. They are designed to encourage prolonged touring by foot and to disperse tourist flows from key attractions into nearby neighborhoods; likewise they will spread the

foreign currency expenditure into the neighborhoods for the benefit of small enterprise.

The improved information services provided by the tourist information centers and visitor centers, will stimulate expenditure of all types and to a limited extent encourage the dispersal of spending in neighborhoods. This economic benefit to some extent will be realized through increased food & beverage consumption, local transport services, personal services and retail sales of souvenirs and high quality arts and crafts found in abundance. Generally, this process will induce expansion and upgrading of shops and restaurants by local merchants and the creation of guest houses and small hotels will create jobs for local unskilled and moderately skilled labor. These mostly unskilled and moderately skilled service jobs can be staffed by inner-city unemployed. Some of these jobs can be filled by women. The job creation at cities other than Damascus will provide jobs in provincial Syria and needed alternative employment opportunities as a substitute for migration to the capital city. It is significant from our social survey, that a large part of the population, particularly the young, have positive expectations of tourism, and are quite willing to acquire new working skills to use when employed in tourism related activities.

In general, the effect of the projects on the quality of life for the local citizenry will be quite positive. Expected motor traffic effects are minimal. City inhabitants will derive daily benefit from streetscape and park improvements to the urban environment. In the case of the Barada Green Promenade, and the tourist trails through Hama, Tartous and Aleppo, since these projects feature significant streetscape improvements (burial of utility lines, re-paying of walkways, lighting, facade touch-ups, etc.), there will also be a safety benefit for pedestrian traffic as well as a psychological one. More businesses located along the most popular tourist routes will extend their operating hours into the evening as tourist activity grows. A minor drawback will be the rise in prices at businesses (taxis, some restaurants & cafes, etc.) that serve the higher income foreign clientele. This effect is not expected to be major in view of the wide availability of services in the general economy.

As new business opportunities open up due to these projects, it is likely that some businessmen with entrepreneurial mind will make use of these opportunities and succeed, while others will be left out. Hence, it is somewhat inevitable that social discrepancies will widen. It is therefore desirable to keep the transformation of the economy at the local level as transparent as possible.

This program of priority projects is intended to contribute to the related objective of urban revitalization in the historic city centers suffering from considerable decay. However, it is not intended itself as an inner-city revitalization program; it is intended to boost the economic and social vitality of these city centers through international tourism, and thereby contributes in a secondary way to the related objective of urban revitalization. The case of Arwad Island is delicate because of its densely built environment and isolation from the urban services of Tartous city. For this reason the unique component of trash management has been added to this program, for both sanitation and beautification.

**Table 18.9.7 Social Impact Assessment of Priority Projects**

Project Component	Economic Stimulus	Cultural Heritage	Amenity	Traffic Congestion	Noise after Completion	Health & Hygiene	Community Integration
<b>The Great Damascus Heritage</b>							
Barada Green Promenade		POSITIVE	positive			positive	positive
Tourist Trails	positive	positive	positive			positive	
Old Damascus Visitor Center	positive	POSITIVE					
Tourist Information Upgrading							
Taxi Stops and Parking	positive		positive				
Hijaz Railway Exhibition		POSITIVE					
<b>Old Hama of Norlas</b>							
Tourist Trails	positive	positive	positive			positive	
Tourist Information Upgrading	positive	positive					
Visitor Center	positive	POSITIVE					
Noria Park and Museum		positive	positive				
Bridge Construction				positive	negative		positive
<b>Historic Tartous-Arwad</b>							
Tourist Trails		positive	positive			positive	
Tourist Information Upgrading							
Old Tartous Visitor Center	positive	POSITIVE					
Arwad Visitor Center	positive	positive					
Passenger Piers	positive		positive	POSITIVE			POSITIVE
Solid Waste Management			POSITIVE			POSITIVE	
<b>Latakia Cultural Circuit</b>							
Tourist Information Upgrading							
Access Road Improvement	positive	positive	positive	positive	positive		POSITIVE
Observation Points	positive	positive	positive				
<b>Aleppo the Silk Road</b>							
Tourist Information Upgrading							
Old Souq Visitor Center	positive	POSITIVE					
Tourist Trails	positive	positive	positive			positive	
Taxi Stops and Parking			positive				
<b>Tourist-Friendly Syria</b>							
Tourist Traffic Direction Signs			positive				
Interpretation and Amenities		positive	POSITIVE				
Foreign Promotion Campaign	POSITIVE						

Note: "POSITIVE" MAJOR POSITIVE impact;  
 "positive" minor positive impact;  
 "NEGATIVE" MAJOR NEGATIVE impact; and  
 "negative" minor negative impact.

Source: JICA Study Team

## 18.10 Cost and Feasibility of the Priority Projects

### 18.10.1 Cost Planning for the Priority Projects

#### (1) Premises

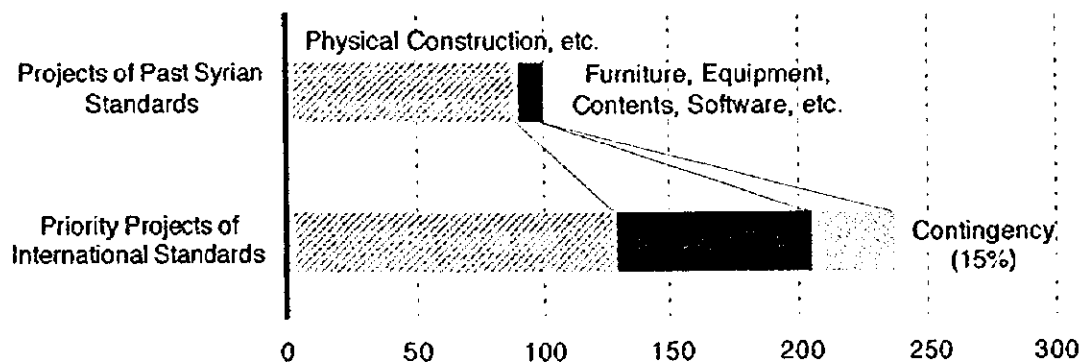
It is important to plan the appropriate cost for the priority projects at the desirable quality level, including the necessary operational materials, furniture, equipment, display contents and the provision of well trained staff, which the past simple cost estimation often neglected.

The project cost planning was made under the following premises:

- quality of work was assumed at international standards;
- costs planning was made by multiplying inclusive unit prices with needed number of units which are appropriate to achieve objectives of each priority project;
- costs were all planned at May 1998 prices;
- the costs for the design and supervision including preparation of tender documents are calculated on a percentage basis: 6 to 25 percent of the estimated construction, procurement and execution cost;
- the overhead profits are included in each cost;
- contingency of 15 percent is added to the cost for both the design and supervision, and the construction, procurement and execution taking into account physical and price contingency;
- for the currency conversion, in case necessary, exchange rate of Commercial Bank of Syria in May 1998: US\$ 1.00 = SP 45.00 is applied; and
- land acquisition costs and taxes are not included.

Figure 18.10.1 explains conceptually what was included in the cost planning applied here. The physical construction cost was provided at a slightly higher level in consideration of the international standards. In addition, the cost for the "software" was taken into account of higher importance. Contingency was added as described above.

Figure 18.10.1 Conceptual Diagram of Priority Projects' Cost Planning



Source: JICA Study Team

## (2) Project Cost

The total cost of the 6 priority projects amounts to SP 3,351 million (US\$ 74.48 million) including the costs for the consulting services for the overall project management of 6 priority projects, and 15 percent of contingency. The cost for the overall project management is provisionally calculated on a percent basis of 6 percent. This will depend on the necessary consulting services and input of experts in accordance with the implementation structure.

The following Table 18.10.1 shows a summary of the project costs for the package of 6 priority projects. Table 18.10.2 shows its breakdown. These costs include all those for the 6 priority projects implementation except for land acquisition and taxes.

### (3) Operation and Maintenance Cost

Operation and maintenance costs of each component of the 6 priority projects were estimated considering the nature of the project component in question and likely management structure, and they were summed up for each of the 6 priority projects. Annual outlays were estimated considering individual construction schedules and opening time. The results are shown in Table 18.10.13. Figures represent desirable levels.

Table 18.10.1 Summary of Project Cost Planning

Project and Component	Cost (thousand SP)				
	Design, S/V	Execution	Subtotal	Contingency	Total
<b>Project A: The Great Damascus Heritage</b>	55,084	632,500	687,584	103,138	790,722
1. Barada Green Promenade	15,624	181,800	197,424	29,614	227,038
2. Tourist Trails	24,510	290,600	315,110	47,267	362,377
3. Old Damascus Visitor Center	7,807	79,700	87,507	13,126	100,633
4. Tourist Information Upgrading	2,142	20,700	22,842	3,426	26,268
5. Taxi Stops and Parking	2,976	37,200	40,176	6,026	46,202
6. Hijaz Railway Exhibition	2,025	22,500	24,525	3,679	28,204
<b>Project B: Old Hama of Norias</b>	38,056	449,800	487,856	73,178	561,034
1. Tourist Trails	12,150	140,500	152,650	22,898	175,548
2. Tourist Information Upgrading	1,578	18,800	20,378	3,057	23,435
3. Visitor Center	1,904	19,900	21,804	3,271	25,075
4. Noria Park and Museum	14,648	173,400	188,048	28,207	216,255
5. Bridge Construction	7,776	97,200	104,976	15,746	120,722
<b>Project C: Historic Tartous-Arwad</b>	51,085	437,000	488,085	73,213	561,298
1. Tourist Trails	10,630	121,000	131,630	19,745	151,375
2. Tourist Information Upgrading	2,049	20,400	22,449	3,367	25,816
3. Old Tartous Visitor center	2,184	23,400	25,584	3,838	29,422
4. Arwad Visitor Center	4,904	50,400	55,304	8,296	63,600
5. Passenger Piers	11,920	86,000	97,920	14,688	112,608
6. Solid Waste Management	19,398	135,800	155,198	23,280	178,478
<b>Project D: Latakia Cultural Circuit</b>	30,462	325,600	356,062	53,409	409,471
1. Tourist Information Upgrading	2,824	32,900	35,724	5,359	41,083
2. Access Road Improvement	26,828	273,800	300,628	45,094	345,722
3. Observation Points	810	18,900	19,710	2,957	22,667
<b>Project E: Aleppo the Silk Road</b>	26,888	401,100	427,988	64,198	492,186
1. Tourist Information Upgrading	2,116	27,100	29,216	4,382	33,598
2. Old Souq Visitor Center	4,432	51,200	55,632	8,345	63,977
3. Tourist Trails	18,720	295,800	314,520	47,178	361,698
4. Taxi Stops and Parking	1,620	27,000	28,620	4,293	32,913
<b>Project F: Tourist-Friendly Syria</b>	56,000	260,000	316,000	47,400	363,400
1. Tourist Traffic Direction Signs	4,000	40,000	44,000	6,600	50,600
2. Interpretation and Amenities	2,000	20,000	22,000	3,300	25,300
3. Foreign Promotion Campaign	50,000	200,000	250,000	37,500	287,500
<b>Overall Project Management</b>	0	0	150,360	22,554	172,914
<b>GRAND TOTAL</b>	257,575	2,506,000	2,913,935	437,090	3,351,025

Source: JICA Study Team

Table 18.10.2 Cost Planning of Priority Projects (1)

PROJECTS	Detailed Design (D/D), Supervision (S/V)				Construction, Procurement and Execution						Sub-Total			Contingency			Grand Total			Outline
	(000 SP)	FCP (000 SP)	(%)	LCP (000 SP)	(%)	(000 SP)	FCP (000 SP)	(%)	LCP (000 SP)	(%)	(000 SP)	FCP (000 SP)	LCP (000 SP)	15% (000 SP)	FCP (000 SP)	LCP (000 SP)	(000 SP)	FCP (000 SP)	LCP (000 SP)	
<b>The Great Damascus Heritage</b>	55,084	36,218	65.7	18,866	34.3	632,500	351,350	55.5	281,150	44.5	687,584	387,568	300,016	103,138	58,135	45,604	790,722	445,703	345,019	
<b>1 Barada Green Promenade</b>	15,624	8,368	54.8	7,056	45.2	181,800	113,400	62.4	68,400	37.6	197,424	121,968	75,456	29,614	18,295	11,318	227,038	140,263	86,774	
1- physical improvement	7,200	3,600	50.0	3,600	50.0	90,000	67,500	75.0	22,500	25.0	97,200	71,100	26,100	14,580	10,665	3,915	111,780	81,765	30,015	1.5km long
1- landscape	3,024	2,268	75.0	756	25.0	37,800	18,900	50.0	18,900	50.0	40,824	21,168	19,656	6,124	3,175	2,948	46,948	24,343	22,604	0.9km long
1- underground crossing	5,400	2,700	50.0	2,700	50.0	54,000	27,000	50.0	27,000	50.0	59,400	29,700	29,700	8,910	4,455	4,455	68,310	34,155	34,155	3 crossings
<b>2 Tourist Trails</b>	24,510	18,143	74.0	6,368	26.0	290,600	144,350	49.7	146,050	50.3	315,110	162,693	152,418	47,267	24,404	22,863	362,377	187,096	175,280	
2- physical improvement	20,640	15,480	75.0	5,160	25.0	258,000	129,000	50.0	129,000	50.0	278,640	144,480	134,160	41,796	21,672	20,124	320,436	166,152	154,284	4 km long
2- direction signs	960	720	75.0	240	25.0	9,600	4,800	50.0	4,800	50.0	10,560	5,520	5,040	1,584	828	756	12,144	6,348	5,796	24 km long
2- maps and panels	1,200	900	75.0	300	25.0	8,000	4,000	50.0	4,000	50.0	9,200	4,900	4,300	1,380	735	645	10,580	5,635	4,945	80 nodes/points
2- amenity	960	480	50.0	480	50.0	12,000	6,000	50.0	6,000	50.0	12,960	6,480	6,480	1,944	972	972	14,904	7,452	7,452	every 1 km
2- handout production	750	563	75.0	188	25.0	3,000	750	25.0	2,250	75.0	3,750	1,313	2,438	563	197	366	4,313	1,509	2,803	100,000 copies
<b>3 Old Damascus Visitor Center</b>	7,807	4,920	63.0	2,887	37.0	79,700	47,275	59.3	32,425	40.7	87,507	52,193	35,312	13,126	7,829	5,297	100,633	60,024	40,609	
3- restoration	1,500	750	50.0	750	50.0	18,750	9,375	50.0	9,375	50.0	20,250	10,125	10,125	3,038	1,519	1,519	23,288	11,644	11,644	1,250 sq.m total
3- interior work	2,500	1,250	50.0	1,250	50.0	31,250	15,625	50.0	15,625	50.0	33,750	16,875	16,875	5,063	2,531	2,531	38,813	19,406	19,406	1,250 sq.m
3- display & equipment	3,375	2,531	75.0	844	25.0	22,500	16,875	75.0	5,625	25.0	25,875	19,406	6,469	3,881	2,911	970	29,756	22,317	7,439	750 sq.m
3- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
<b>4 Tourist Information Upgrading</b>	2,142	1,581	73.8	561	26.2	20,700	14,400	69.6	6,300	30.4	22,842	15,981	6,861	3,426	2,397	1,029	26,268	18,378	7,890	
4- interior work	360	180	50.0	180	50.0	4,500	2,250	50.0	2,250	50.0	4,860	2,430	2,430	729	365	365	5,589	2,795	2,795	300 sq.m
4- display & equipment	1,350	1,013	75.0	338	25.0	9,000	6,750	75.0	2,250	25.0	10,350	7,763	2,588	1,553	1,164	388	11,903	8,927	2,976	300 sq.m
4- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
<b>5 Taxi Stops and Parking</b>	2,976	1,712	57.5	1,264	42.5	37,200	18,600	50.0	18,600	50.0	40,176	20,312	19,864	6,026	3,047	2,980	46,202	23,359	22,844	
5- physical improvement	2,080	1,040	50.0	1,040	50.0	26,000	13,000	50.0	13,000	50.0	28,080	14,040	14,040	4,212	2,106	2,106	32,292	16,146	16,146	16 taxi stops+2 parki
5- sign & shelter	896	672	75.0	224	25.0	11,200	5,600	50.0	5,600	50.0	12,096	6,272	5,824	1,814	941	874	13,910	7,213	6,698	16 taxi stops
<b>6 Hajar Railway Exhibition</b>	2,025	1,294	63.9	731	36.1	22,500	13,125	58.3	9,375	41.7	24,525	14,419	10,106	3,679	2,163	1,516	28,204	16,582	11,622	
6- physical improvement	900	450	50.0	450	50.0	15,000	7,500	50.0	7,500	50.0	15,900	7,950	7,950	2,385	1,193	1,193	18,285	9,143	9,143	1,000 sq.m
6- display & equipment	1,125	844	75.0	281	25.0	7,500	5,625	75.0	1,875	25.0	8,625	6,469	2,156	1,294	970	323	9,919	7,439	2,480	500 sq.m
<b>Old Hama of Norias</b>	38,056	26,105	68.6	11,951	31.4	449,800	233,250	51.9	216,550	48.1	487,856	259,355	228,501	73,178	38,903	34,275	561,034	298,258	262,776	
<b>1 Tourist Trails</b>	12,130	8,963	73.9	3,168	26.1	140,300	69,500	49.5	70,800	50.3	152,650	78,463	74,188	22,898	11,769	11,128	175,548	90,232	85,916	
1- physical improvement	9,600	7,200	75.0	2,400	25.0	120,000	60,000	50.0	60,000	50.0	129,600	67,200	62,400	19,440	10,080	9,360	149,040	77,280	71,760	2 km long
1- direction signs	600	450	75.0	150	25.0	6,000	3,000	50.0	3,000	50.0	6,600	3,450	3,150	990	518	473	7,590	3,968	3,623	15 km
1- maps and panels	600	450	75.0	150	25.0	4,000	2,000	50.0	2,000	50.0	4,600	2,450	2,150	690	368	323	5,290	2,818	2,473	40 nodes/points
1- amenity	600	300	50.0	300	50.0	7,500	3,750	50.0	3,750	50.0	8,100	4,050	4,050	1,215	608	608	9,315	4,658	4,658	every 1 km
1- handout production	750	563	75.0	188	25.0	3,000	750	25.0	2,250	75.0	3,750	1,313	2,438	563	197	366	4,313	1,509	2,803	100,000 copies
<b>2 Tourist Information Upgrading</b>	1,578	1,211	76.7	367	23.3	18,800	11,300	60.2	7,500	39.8	20,378	12,711	7,667	3,037	1,907	1,150	23,435	14,618	8,817	
2- extension work	84	42	50.0	42	50.0	1,400	700	50.0	700	50.0	1,484	742	742	223	111	111	1,707	853	853	200 sq.m extension
2- interior work	720	540	75.0	180	25.0	9,000	4,500	50.0	4,500	50.0	9,720	5,040	4,680	1,458	756	702	11,178	5,796	5,382	600 sq.m
2- display & equipment	450	338	75.0	113	25.0	3,000	2,250	75.0	750	25.0	3,450	2,588	863	518	388	129	3,968	2,976	992	200 sq.m
2- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
<b>3 Visitor Center</b>	1,904	1,377	72.3	527	27.7	19,900	12,800	64.3	7,100	35.7	21,804	14,177	7,627	3,271	2,126	1,144	25,073	16,303	8,772	
3- interior work	400	200	50.0	200	50.0	5,000	2,500	50.0	2,500	50.0	5,400	2,700	2,700	810	405	405	6,210	3,105	3,105	200 sq.m
3- display & equipment	900	675	75.0	225	25.0	6,000	4,500	75.0	1,500	25.0	6,900	5,175	1,725	1,035	776	259	7,935	5,951	1,984	200 sq.m
3- landscaping	280	210	75.0	70	25.0	3,500	1,750	50.0	1,750	50.0	3,780	1,960	1,820	567	294	273	4,347	2,254	2,093	500 sq.m
3- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
<b>4 Noria Park and Museum</b>	14,648	10,667	72.8	3,981	27.2	173,400	90,850	52.4	82,550	47.6	188,048	101,517	86,531	28,207	13,228	12,980	216,255	116,744	99,511	
4- construction	504	252	50.0	252	50.0	8,400	4,200	50.0	4,200	50.0	8,904	4,452	4,452	1,336	668	668	10,240	5,120	5,120	600+600 sq.m
4- interior work	1,536	1,152	75.0	384	25.0	19,200	9,600	50.0	9,600	50.0	20,736	10,752	9,984	3,110	1,613	1,498	23,846	12,365	11,482	600+600 sq.m
4- display & equipment	2,700	2,025	75.0	675	25.0	18,000	13,500	75.0	4,500	25.0	20,700	15,525	5,175	3,105	2,329	776	23,805	17,854	5,951	600 sq.m
4- water wheel restoration	516	129	25.0	387	75.0	8,600	2,150	25.0	6,450	75.0	9,116	2,279	6,837	1,367	342	1,026	10,483	2,621	7,863	5% of the component
4- landscaping	8,960	6,720	75.0	2,240	25.0	112,000	56,000	50.0	56,000	50.0	120,960	62,720	58,240	18,144	9,408	8,736	139,104	72,128	66,976	80% of 2.0 ha
4- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
<b>5 Bridge Construction</b>	7,776	3,888	50.0	3,888	50.0	97,200	48,600	50.0	48,600	50.0	104,976	52,488	52,488	15,746	7,873	7,873	120,722	60,361	60,361	
5- bridge expansion	4,320	2,160	50.0	2,160	50.0	54,000	27,000													



Table 18.10.2 Cost Planning of Priority Projects (1)

PROJECTS	Detailed Design (D.D), Supervision (S/V)				Construction, Procurement and Execution				Sub-Total			Contingency			Grand Total			Outline		
	(000 SP)	FCP (000 SP)	(%)	LCP (000 SP)	(%)	(000 SP)	FCP (000 SP)	(%)	LCP (000 SP)	(%)	(000 SP)	FCP (000 SP)	LCP (000 SP)	15% (000 SP)	FCP (000 SP)	LCP (000 SP)	(000 SP)		FCP (000 SP)	LCP (000 SP)
<b>The Great Damascus Heritage</b>	55,081	36,218	65.7	18,866	34.3	632,500	351,350	55.5	281,150	44.5	687,584	387,568	300,016	103,138	58,135	45,002	790,722	445,703	345,019	
<b>1 Barada Green Promenade</b>	15,624	8,568	54.8	7,056	45.2	181,800	113,400	62.4	68,400	37.6	197,424	121,968	75,456	29,614	18,295	11,318	227,038	140,263	86,774	
1- physical improvement	7,200	3,600	50.0	3,600	50.0	90,000	67,500	75.0	22,500	25.0	97,200	71,100	26,100	14,580	10,665	3,915	111,780	81,765	30,015	1.5km long
1- landscape	3,024	2,268	75.0	756	25.0	37,800	18,900	50.0	18,900	50.0	40,824	21,168	19,656	6,124	3,175	2,948	46,948	24,343	22,604	0.9km long
1- underground crossing	5,400	2,700	50.0	2,700	50.0	54,000	27,000	50.0	27,000	50.0	59,400	29,700	29,700	8,910	4,455	4,455	68,310	34,155	34,155	3 crossings
<b>2 Tourist Trails</b>	24,510	18,143	74.0	6,368	26.0	290,600	144,550	49.7	146,050	50.3	315,110	162,693	152,418	47,267	24,404	22,863	362,377	187,096	175,280	
2- physical improvement	20,640	15,180	75.0	5,160	25.0	258,000	129,000	50.0	129,000	50.0	278,640	141,480	131,160	41,796	21,672	20,124	320,436	166,152	154,284	4 km long
2- direction signs	960	720	75.0	240	25.0	9,600	4,800	50.0	4,800	50.0	10,560	5,520	5,040	1,584	828	756	12,144	6,348	5,796	24 km long
2- maps and panels	1,200	900	75.0	300	25.0	8,000	4,000	50.0	4,000	50.0	9,200	4,900	4,300	1,380	735	645	10,580	5,635	4,945	80 nodes/points
2- amenity	960	480	50.0	480	50.0	12,000	6,000	50.0	6,000	50.0	12,960	6,480	6,480	1,944	972	972	14,904	7,452	7,452	every 1 km
2- handout production	750	563	75.0	188	25.0	3,000	750	25.0	2,250	75.0	3,750	1,313	2,438	563	197	366	4,313	1,509	2,803	100,000 copies
<b>3 Old Damascus Visitor Center</b>	7,807	4,920	63.0	2,887	37.0	79,700	47,275	59.3	32,425	40.7	87,507	52,195	35,312	13,126	7,829	5,297	100,633	60,024	40,609	
3- restoration	1,500	750	50.0	750	50.0	18,750	9,375	50.0	9,375	50.0	20,250	10,125	10,125	3,038	1,519	1,519	23,288	11,644	11,644	1,250 sq m total
3- interior work	2,500	1,250	50.0	1,250	50.0	31,250	15,625	50.0	15,625	50.0	33,750	16,875	16,875	5,063	2,531	2,531	38,813	19,406	19,406	1,250 sq m
3- display & equipment	3,375	2,531	75.0	844	25.0	22,500	16,875	75.0	5,625	25.0	25,875	19,406	6,169	3,881	2,911	970	29,756	22,317	7,439	750 sq m
3- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
<b>4 Tourist Information Upgrading</b>	2,142	1,581	73.8	561	26.2	20,700	14,400	69.6	6,300	30.4	22,842	15,981	8,861	3,426	2,397	1,029	26,268	18,378	7,890	
4- interior work	360	180	50.0	180	50.0	4,500	2,250	50.0	2,250	50.0	4,860	2,430	2,430	729	365	365	5,589	2,795	2,795	300 sq m
4- display & equipment	1,350	1,013	75.0	338	25.0	9,000	6,750	75.0	2,250	25.0	10,350	7,763	2,588	1,553	1,161	388	11,903	8,927	2,976	300 sq m
4- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
<b>5 Taxi Stops and Parking</b>	2,976	1,712	57.5	1,264	42.5	37,200	18,600	50.0	18,600	50.0	40,176	20,312	19,864	6,026	3,047	2,980	46,202	23,359	22,843	
5- physical improvement	2,080	1,040	50.0	1,040	50.0	26,000	13,000	50.0	13,000	50.0	28,080	14,040	14,040	4,212	2,106	2,106	32,292	16,146	16,146	16 taxi stops+2 parki
5- sign & shelter	896	672	75.0	224	25.0	11,200	5,600	50.0	5,600	50.0	12,096	6,272	5,824	1,814	941	874	13,910	7,213	6,698	16 taxi stops
<b>6 Hijaz Railway Exhibition</b>	2,025	1,294	63.9	731	36.1	22,500	13,125	58.3	9,375	41.7	24,525	14,419	10,106	3,679	2,163	1,516	28,204	16,582	11,622	
6- physical improvement	900	450	50.0	450	50.0	15,000	7,500	50.0	7,500	50.0	15,900	7,950	7,950	2,385	1,193	1,193	18,285	9,143	9,143	1,000 sq m
6- display & equipment	1,125	844	75.0	281	25.0	7,500	5,625	75.0	1,875	25.0	8,625	6,469	2,156	1,294	970	323	9,919	7,439	2,480	500 sq m
<b>Old Hama of Norias</b>	38,056	26,105	68.6	11,951	31.4	449,800	233,250	51.9	216,550	48.1	487,856	259,355	228,501	73,178	38,903	34,275	561,034	298,258	262,776	
<b>1 Tourist Trails</b>	12,150	8,963	73.8	3,188	26.2	140,500	69,500	49.5	71,000	50.5	152,650	78,463	74,188	22,898	11,769	11,128	175,548	90,232	85,316	
1- physical improvement	9,600	7,200	75.0	2,400	25.0	120,000	60,000	50.0	60,000	50.0	129,600	67,200	62,400	19,440	10,080	9,360	149,040	77,280	71,760	2 km long
1- direction signs	600	450	75.0	150	25.0	6,000	3,000	50.0	3,000	50.0	6,600	3,450	3,150	990	518	473	7,590	3,968	3,623	15 km
1- maps and panels	600	450	75.0	150	25.0	4,000	2,000	50.0	2,000	50.0	4,600	2,450	2,150	690	368	323	5,290	2,818	2,473	40 nodes/points
1- amenity	600	300	50.0	300	50.0	7,500	3,750	50.0	3,750	50.0	8,100	4,050	4,050	1,215	608	608	9,315	4,658	4,658	every 1 km
1- handout production	750	563	75.0	188	25.0	3,000	750	25.0	2,250	75.0	3,750	1,313	2,438	563	197	366	4,313	1,509	2,803	100,000 copies
<b>2 Tourist Information Upgrading</b>	1,578	1,213	76.7	367	23.3	18,800	11,500	61.2	7,300	38.8	20,378	12,711	7,667	3,057	1,907	1,150	23,435	14,618	8,817	
2- extension work	84	42	50.0	42	50.0	1,400	700	50.0	700	50.0	1,484	742	742	223	111	111	1,707	853	853	200 sq m extension
2- interior work	720	540	75.0	180	25.0	9,000	4,500	50.0	4,500	50.0	9,720	5,040	4,680	1,458	756	702	11,178	5,796	5,382	600 sq m
2- display & equipment	450	338	75.0	113	25.0	3,000	2,250	75.0	750	25.0	3,450	2,588	863	518	388	129	3,968	2,976	992	200 sq m
2- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
<b>3 Visitor Center</b>	1,904	1,377	72.3	527	27.7	19,900	12,800	64.3	7,100	35.7	21,804	14,177	7,627	3,271	2,126	1,144	25,075	16,303	8,772	
3- interior work	400	200	50.0	200	50.0	5,000	2,500	50.0	2,500	50.0	5,400	2,700	2,700	810	405	405	6,210	3,105	3,105	200 sq m
3- display & equipment	900	675	75.0	225	25.0	6,000	4,500	75.0	1,500	25.0	6,900	5,175	1,725	1,035	776	259	7,935	5,951	1,984	200 sq m
3- landscaping	280	210	75.0	70	25.0	3,500	1,750	50.0	1,750	50.0	3,780	1,960	1,820	567	294	273	4,347	2,254	2,093	500 sq m
3- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
<b>4 Noria Park and Museum</b>	14,648	10,667	72.8	3,981	27.2	173,400	90,850	52.4	82,550	47.6	188,048	101,517	86,531	28,207	15,228	12,980	216,255	116,744	99,511	
4- construction	501	252	50.0	252	50.0	8,400	4,200	50.0	4,200	50.0	8,904	4,452	4,452	1,336	668	668	10,240	5,120	5,120	600*600 sq m
4- interior work	1,536	1,152	75.0	384	25.0	19,200	9,600	50.0	9,600	50.0	20,736	10,752	9,984	3,110	1,613	1,498	23,846	12,365	11,482	600*600 sq m
4- display & equipment	2,700	2,025	75.0	675	25.0	18,000	13,500	75.0	4,500	25.0	20,700	15,525	5,175	3,105	2,329	776	23,805	17,854	5,951	600 sq m
4- water wheel restoration	516	129	25.0	387	75.0	8,600	2,150	25.0	6,450	75.0	9,116	2,279	6,837	1,367	342	1,026	10,483	2,621	7,863	5% of the component
4- landscaping	8,960	6,720	75.0	2,240	25.0	112,000	56,000	50.0	56,000	50.0	120,960	62,720	58,240	18,144	9,408	8,736	139,104	72,128	66,976	80% of 2.0 ha
4- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
<b>5 Bridge Construction</b>	7,776	3,888	50.0	3,888	50.0	97,200	48,600	50.0	48,600	50.0	104,976	52,488	52,488	15,746	7,873	7,873	120,722	60,361	60,361	
5- bridge expansion	4,320	2,160	50.0	2,160	50.0	54,000	27,000													

Table 18.10.2 Cost Planning of Priority Projects (2)

PROJECTS	Detailed Design (D/D), Supervision (S/V)				Construction, Procurement and Execution				Sub-Total	Contingency				Grand Total				Outline				
	FCP		LCP		FCP		LCP			15%	FCP		LCP		FCP	LCP						
	(000 SP)	(%)	(000 SP)	(%)	(000 SP)	(%)	(000 SP)	(%)			(000 SP)	(%)	(000 SP)	(%)								
<b>2 Tourist Information Upgrading</b>	2,049	1,435	70.1	614	29.9	20,400	13,425	65.8	6,975	34.2	22,449	14,860	66.3	7,589	33.7	2,229	1,138	25,816	17,089	8,727		
2- interior work	600	300	50.0	300	50.0	7,500	3,750	50.0	3,750	50.0	8,100	4,050	50.0	4,050	50.0	1,215	608	9,315	4,658	4,658	500 sq m	
2- display & equipment	1,125	844	75.0	281	25.0	7,500	5,625	75.0	1,875	25.0	8,625	6,469	75.0	2,156	25.0	1,294	970	9,919	7,439	2,480	500 sq m	
2- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	75.8	1,382	24.2	859	651	6,583	4,993	1,590	12*3months	
<b>3 Old Taurus Visitor Center</b>	2,184	1,587	72.6	597	27.4	23,400	14,550	62.2	8,850	37.8	25,884	16,137	62.4	9,747	37.6	3,838	2,420	29,422	18,357	10,865		
3- interior work	400	200	50.0	200	50.0	5,000	2,500	50.0	2,500	50.0	5,400	2,700	50.0	2,700	50.0	810	405	6,210	3,105	3,105	200 sq m	
3- display & equipment	900	675	75.0	225	25.0	6,000	4,500	75.0	1,500	25.0	6,900	5,175	75.0	1,725	25.0	1,035	776	7,935	5,951	1,984	200 sq m	
3- landscaping	560	420	75.0	140	25.0	7,000	3,500	50.0	3,500	50.0	7,560	3,920	51.7	3,640	48.3	1,134	588	8,694	4,508	4,186	1,000 sq m	
3- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	75.8	1,382	24.2	859	651	6,583	4,993	1,590	12*3months	
<b>4 Arwad Visitor Center</b>	4,904	3,144	64.1	1,760	35.9	50,400	30,300	60.1	20,100	39.9	55,304	33,444	60.5	21,860	39.5	8,286	5,017	63,600	38,461	25,139		
4- construction	210	105	50.0	105	50.0	3,500	1,750	50.0	1,750	50.0	3,710	1,855	50.0	1,855	50.0	557	278	4,267	2,133	2,133	500 sq m	
4- interior work	1,000	500	50.0	500	50.0	12,500	6,250	50.0	6,250	50.0	13,500	6,750	50.0	6,750	50.0	2,025	1,013	15,525	7,763	7,763	500 sq m	
4- display & equipment	2,250	1,688	75.0	563	25.0	15,000	11,250	75.0	3,750	25.0	17,250	12,938	75.0	4,313	25.0	2,588	1,941	19,838	14,878	4,959	500 sq m	
4- landscaping	1,120	560	50.0	560	50.0	14,000	7,000	50.0	7,000	50.0	15,120	7,560	50.0	7,560	50.0	2,268	1,134	17,388	8,694	8,694	2,000 sq m	
4- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	75.8	1,382	24.2	859	651	6,583	4,993	1,590	12*3months	
<b>5 Passenger Piers</b>	11,920	8,660	72.7	3,260	27.3	86,000	61,000	70.9	25,000	29.1	97,920	69,660	71.1	28,260	28.9	14,688	10,449	112,608	80,109	32,499		
5- construction of piers	10,800	8,100	75.0	2,700	25.0	72,000	54,000	75.0	18,000	25.0	82,800	62,100	75.0	20,700	25.0	12,420	9,315	95,220	71,415	23,805	2 piers	
5- landscaping	1,120	560	50.0	560	50.0	14,000	7,000	50.0	7,000	50.0	15,120	7,560	50.0	7,560	50.0	2,268	1,134	17,388	8,694	8,694	2,000 sq m	
5- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	75.8	1,382	24.2	859	651	6,583	4,993	1,590	12*3months	
<b>6 Solid Waste Management</b>	19,398	14,549	75.0	4,850	25.0	135,800	99,150	73.0	36,650	27.0	155,198	113,899	73.4	41,500	26.6	23,280	17,055	178,378	130,753	47,224		
6- waste disposal	18,750	14,063	75.0	4,688	25.0	125,000	93,750	75.0	31,250	25.0	143,750	107,813	75.0	35,938	25.0	21,563	16,172	165,313	123,984	41,328	new incinerator+othe	
6- education and training	648	486	75.0	162	25.0	10,800	5,400	50.0	5,400	50.0	11,448	5,886	51.4	5,562	48.6	1,717	883	13,165	6,769	6,396	4*3months+Educatio	
<b>Latakia Cultural Circuit</b>	30,462	22,560	74.1	7,902	25.9	325,600	214,380	65.8	111,220	34.2	356,062	236,940	66.5	119,122	33.4	53,409	35,541	409,471	272,481	136,991		
<b>1 Tourist Information Upgrading</b>	2,824	1,917	67.9	907	32.1	32,900	21,550	65.5	11,350	34.5	35,724	23,467	65.7	12,257	34.3	5,339	3,320	41,063	26,387	14,676		
1- interior work	1,000	500	50.0	500	50.0	12,500	6,250	50.0	6,250	50.0	13,500	6,750	50.0	6,750	50.0	2,025	1,013	15,525	7,763	7,763	500 sq m	
1- display & equipment	1,500	1,125	75.0	375	25.0	15,000	11,250	75.0	3,750	25.0	16,500	12,375	75.0	4,125	25.0	1,856	619	18,975	14,231	4,744	500 sq m	
1- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	75.8	1,382	24.2	859	651	6,583	4,993	1,590	12*3months	
<b>2 Access Road Improvement</b>	26,828	19,914	74.2	6,914	25.8	273,800	183,380	67.0	90,420	33.0	300,628	203,294	67.6	97,334	32.4	45,094	30,494	345,722	233,788	111,934		
2- road construction	26,000	19,500	75.0	6,500	25.0	260,000	182,000	70.0	78,000	30.0	286,000	201,500	70.0	84,500	30.0	42,900	30,225	328,900	231,725	97,175	10km fully+80km pa	
2- parking and amenities	828	414	50.0	414	50.0	13,800	1,380	10.0	12,420	90.0	14,628	1,794	12.3	12,834	87.7	2,194	269	16,822	2,063	14,759	1,800 sq m total	
<b>3 Observation Points</b>	810	729	90.0	81	10.0	18,900	9,450	50.0	9,450	50.0	19,710	10,179	51.6	9,531	48.4	2,957	1,327	22,667	11,706	10,961		
3- landscaping	630	315	50.0	315	50.0	10,500	5,250	50.0	5,250	50.0	11,130	5,565	50.0	5,565	50.0	1,670	835	12,800	6,400	6,400	500 sq m each	
3- maps and panels	180	135	75.0	45	25.0	3,000	1,500	50.0	1,500	50.0	3,180	1,635	51.4	1,545	48.6	477	245	3,657	1,880	1,777	30 points	
<b>Aleppo the Silk Road</b>	26,838	19,838	73.8	7,000	26.2	401,100	217,980	54.3	183,120	45.7	427,988	237,818	55.6	190,170	44.4	64,198	35,673	28,526	492,186	273,490	218,696	
<b>1 Tourist Information Upgrading</b>	2,116	1,381	65.3	735	34.7	27,100	16,850	62.2	10,250	37.8	29,216	18,231	62.4	10,985	37.6	4,382	2,735	33,398	20,965	12,633		
1- expansion work	84	42	50.0	42	50.0	1,400	700	50.0	700	50.0	1,484	742	50.0	742	50.0	223	111	1,707	853	853	200 sq m	
1- interior work	1,000	500	50.0	500	50.0	12,500	6,250	50.0	6,250	50.0	13,500	6,750	50.0	6,750	50.0	2,025	1,013	15,525	7,763	7,763	500+300 sq m	
1- display & equipment	600	450	75.0	150	25.0	6,000	4,500	75.0	1,500	25.0	6,600	4,950	75.0	1,650	25.0	990	743	7,590	5,693	1,898	200 sq m	
1- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	75.8	1,843	24.2	1,145	868	8,777	6,657	2,120	16*3months	
<b>2 Old Souq Visitor Center</b>	4,432	2,989	67.4	1,443	32.6	31,200	14,480	46.4	16,720	53.6	35,632	17,469	49.0	18,163	51.0	8,345	5,620	42,724	21,089	20,888		
2- interior work	1,600	800	50.0	800	50.0	20,000	10,000	50.0	10,000	50.0	21,600	10,800	50.0	10,800	50.0	3,240	1,620	24,840	12,420	12,420	200+600 sq m	
2- display & equipment	2,400	1,800	75.0	600	25.0	24,000	18,000	75.0	6,000	25.0	26,400	19,800	75.0	6,600	25.0	3,960	2,970	30,360	22,770	7,590	200+600 sq m	
2- training	432	389	90.0	43	10.0	7,200	6,480	90.0	720	10.0	7,632	6,869	90.0	763	10.0	1,145	1,030	8,777	7,899	878	16*3months	
<b>3 Tourist Trails</b>	18,720	14,010	74.8	4,710	25.2	295,800	147,150	49.7	148,650	50.3	314,520	161,160	51.2	153,360	48.8	47,178	24,174	23,004	361,698	185,934	176,364	
3- physical improvement	16,560	12,420	75.0	4,140	25.0	276,000	138,000	50.0	138,000	50.0	292,560	150,420	51.4	142,140	48.6	43,884	22,563	21,321	336,444	172,983	163,461	3 km long
3- direction signs	480	360	75.0	120	25.0	4,800	2,400	50.0	2,400	50.0	5,280	2,760	52.3	2,520	48.1	792	414	6,072	3,174	2,898	12 km long	
3- maps and panels	600	450	75.0	150	25.0	6,000	3,000	50.0	3,000	50.0	6,600	3,450	52.1	3,150	48.0	990	518	7,590	3,968	3,623	60 nodes/points	
3- amenity	480	240	50.0	240	50.0	6,000	3,000	50.0	3,000	50.0	6,480	3,240	50.0	3,240	50.0	972	486	7,452	3,726	3,726	every 1 km	
3- handout production	600	540	90.0	60	10.0	3,000	750	25.0	2,250	75.0	3,600	1,290	35.8	2,310	64.2	540	194	4,140	1,484	2,657	100,000 copies	
<b>4 Taxi Stops and Parking</b>	1,620	1,458	90.0	162	10.																	

Table 18.10.2 Cost Planning of Priority Projects (2)

PROJECTS	Detailed Design (D.D), Supervision (S/V)				Construction, Procurement and Execution				Sub-Total		Contingency			Grand Total			Outline			
	FCP		LCP		FCP		LCP		FCP	LCP	15%	FCP	LCP	FCP	LCP					
	(000 SP)	(%)	(000 SP)	(%)	(000 SP)	(%)	(000 SP)	(%)	(000 SP)	(000 SP)	(000 SP)	(000 SP)	(000 SP)	(000 SP)	(000 SP)					
2 Tourist Information Upgrading	2,049	1,435	70.1	614	29.9	20,400	13,425	65.8	6,975	34.2	22,449	14,860	7,589	3,367	2,229	1,138	25,816	17,089	8,727	
2- interior work	600	300	50.0	300	50.0	7,500	3,750	50.0	3,750	50.0	8,100	4,050	4,050	1,215	608	608	9,315	4,658	4,658	500 sq m
2- display & equipment	1,125	814	75.0	281	25.0	7,500	5,625	75.0	1,875	25.0	8,625	6,469	2,156	1,294	970	323	9,919	7,439	2,480	500 sq m
2- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
3 Old Tartous Visitor enter	2,184	1,587	72.6	597	27.4	23,400	14,550	62.2	8,850	37.8	25,584	16,137	9,447	3,838	2,420	1,417	29,422	18,557	10,865	
3- interior work	400	200	50.0	200	50.0	5,000	2,500	50.0	2,500	50.0	5,400	2,700	2,700	810	405	405	6,210	3,105	3,105	200 sq m
3- display & equipment	900	675	75.0	225	25.0	6,000	4,500	75.0	1,500	25.0	6,900	5,175	1,725	1,035	776	259	7,935	5,951	1,984	200 sq m
3- landscaping	560	420	75.0	140	25.0	7,000	3,500	50.0	3,500	50.0	7,560	3,920	3,640	1,134	588	546	8,694	4,508	4,186	1,000 sq m
3- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
4 Anvad Visitor Center	4,904	3,144	64.1	1,760	35.9	50,400	30,300	60.1	20,100	39.9	55,304	33,444	21,860	8,296	5,017	3,279	63,600	38,461	25,139	
4- construction	210	105	50.0	105	50.0	3,500	1,750	50.0	1,750	50.0	3,710	1,855	1,855	557	278	278	4,267	2,133	2,133	500 sq m
4- interior work	1,000	500	50.0	500	50.0	12,500	6,250	50.0	6,250	50.0	13,500	6,750	6,750	2,025	1,013	1,013	15,525	7,763	7,763	500 sq m
4- display & equipment	2,250	1,688	75.0	563	25.0	15,000	11,250	75.0	3,750	25.0	17,250	12,938	4,313	2,588	1,941	647	19,838	14,878	4,959	500 sq m
4- landscaping	1,120	560	50.0	560	50.0	14,000	7,000	50.0	7,000	50.0	15,120	7,560	7,560	2,268	1,134	1,134	17,388	8,694	8,694	2,000 sq m
4- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
5 Passenger Piers	11,920	8,660	72.7	3,260	27.3	86,000	61,000	70.9	25,000	29.1	97,920	69,660	28,260	14,688	10,449	4,239	112,608	80,109	32,499	
5- construction of piers	10,800	8,100	75.0	2,700	25.0	72,000	54,000	75.0	18,000	25.0	82,800	62,100	20,700	12,420	9,315	3,105	95,220	71,415	23,805	2 piers
5- landscaping	1,120	560	50.0	560	50.0	14,000	7,000	50.0	7,000	50.0	15,120	7,560	7,560	2,268	1,134	1,134	17,388	8,694	8,694	2,000 sq m
6 Solid Waste Management	19,398	14,549	75.0	4,850	25.0	135,800	99,150	73.0	36,650	27.0	155,198	113,699	41,500	23,280	17,055	6,225	178,478	130,753	47,724	
6- waste disposal	18,750	14,063	75.0	4,688	25.0	125,000	93,750	75.0	31,250	25.0	143,750	107,813	35,938	21,563	16,172	5,391	165,313	123,981	41,328	new incinerator +othe
6- education and training	648	486	75.0	162	25.0	10,800	5,400	50.0	5,400	50.0	11,448	5,886	5,562	1,717	883	834	13,165	6,769	6,396	1*3months+Educatio
Latakia Cultural Circuit	30,162	22,560	74.1	7,602	25.9	325,600	211,380	65.8	111,220	34.2	356,062	236,910	119,122	53,409	35,511	17,868	409,471	272,481	136,990	
1 Tourist Information Upgrading	2,824	1,917	67.9	907	32.1	32,900	21,550	65.5	11,350	34.5	35,724	23,467	12,257	5,359	3,520	1,839	41,083	26,987	14,096	
1- interior work	1,000	500	50.0	500	50.0	12,500	6,250	50.0	6,250	50.0	13,500	6,750	6,750	2,025	1,013	1,013	15,525	7,763	7,763	500 sq m
1- display & equipment	1,500	1,125	75.0	375	25.0	15,000	11,250	75.0	3,750	25.0	16,500	12,375	4,125	2,475	1,856	619	18,975	14,231	4,744	500 sq m
1- training	324	292	90.0	32	10.0	5,400	4,050	75.0	1,350	25.0	5,724	4,342	1,382	859	651	207	6,583	4,993	1,590	12*3months
2 Access Road Improvement	26,828	19,914	74.2	6,914	25.8	273,800	183,380	67.0	90,420	33.0	300,628	203,294	97,334	45,094	30,494	14,600	345,722	233,788	111,934	
2- road construction	26,000	19,500	75.0	6,500	25.0	260,000	182,000	70.0	78,000	30.0	286,000	201,500	84,500	42,900	30,225	12,675	328,900	231,725	97,175	10km fully +80km pa
2- parking and amenities	828	414	50.0	414	50.0	13,800	1,380	10.0	12,420	90.0	14,628	1,794	12,834	2,194	269	1,925	16,822	2,063	14,759	1,800 sq m total
3 Observation Points	810	729	90.0	81	10.0	18,900	9,450	50.0	9,450	50.0	19,710	10,179	9,531	2,957	1,527	1,430	22,667	11,706	10,961	
3- landscaping	630	315	50.0	315	50.0	10,500	5,250	50.0	5,250	50.0	11,130	5,565	5,565	1,670	835	835	12,800	6,400	6,400	500 sq m each
3- maps and panels	180	135	75.0	45	25.0	3,000	1,500	50.0	1,500	50.0	3,180	1,635	1,545	477	245	232	3,657	1,880	1,777	30 points
Aleppo the Silk Road	26,888	19,838	73.8	7,050	26.2	401,100	217,980	54.3	183,120	45.7	427,988	237,818	190,170	61,198	35,673	28,526	492,186	273,490	218,696	
1 Tourist Information Upgrading	2,116	1,381	65.3	735	34.7	27,100	16,850	62.2	10,250	37.8	29,216	18,231	10,985	4,382	2,735	1,648	33,598	20,965	12,633	
1- expansion work	81	42	50.0	42	50.0	1,100	700	50.0	700	50.0	1,481	742	742	223	111	111	1,707	853	853	200 sq m
1- interior work	1,000	500	50.0	500	50.0	12,500	6,250	50.0	6,250	50.0	13,500	6,750	6,750	2,025	1,013	1,013	15,525	7,763	7,763	500+300 sq m
1- display & equipment	600	450	75.0	150	25.0	6,000	4,500	75.0	1,500	25.0	6,600	4,950	1,650	990	743	248	7,590	5,693	1,898	200 sq m
1- training	432	389	90.0	43	10.0	7,200	5,400	75.0	1,800	25.0	7,632	5,789	1,843	1,145	868	276	8,777	6,657	2,120	16*3months
2 Old Souq Visitor Center	4,432	2,989	67.4	1,443	32.6	51,200	34,480	67.3	16,720	32.7	55,632	37,469	18,163	8,345	5,620	2,724	63,977	43,089	20,888	
2- interior work	1,600	800	50.0	800	50.0	20,000	10,000	50.0	10,000	50.0	21,600	10,800	10,800	3,240	1,620	1,620	24,840	12,420	12,420	200+600 sq m
2- display & equipment	2,400	1,800	75.0	600	25.0	24,000	18,000	75.0	6,000	25.0	26,400	19,800	6,600	3,960	2,970	990	30,360	22,770	7,590	200+600 sq m
2- training	432	389	90.0	43	10.0	7,200	6,480	90.0	720	10.0	7,632	6,869	763	1,145	1,030	114	8,777	7,899	878	16*3months
3 Tourist Trails	18,720	14,010	74.8	4,710	25.2	295,800	147,150	49.7	148,650	50.3	314,520	161,160	153,360	47,178	24,174	23,004	361,698	185,334	176,364	
3- physical improvement	16,560	12,420	75.0	4,140	25.0	276,000	138,000	50.0	138,000	50.0	292,560	150,420	142,140	43,881	22,563	21,324	336,444	172,983	163,461	3 km long
3- direction signs	480	360	75.0	120	25.0	4,800	2,400	50.0	2,400	50.0	5,280	2,760	2,520	792	411	378	6,072	3,174	2,898	12 km long
3- maps and panels	600	450	75.0	150	25.0	6,000	3,000	50.0	3,000	50.0	6,600	3,450	3,150	990	518	473	7,590	3,968	3,623	60 nodes/points
3- amenity	480	240	50.0	240	50.0	6,000	3,000	50.0	3,000	50.0	6,480	3,240	3,240	972	486	486	7,452	3,726	3,726	every 1 km
3- handout production	600	540	90.0	60	10.0	3,000	750	25.0	2,250	75.0	3,600	1,290	2,310	540	194	347	4,140	1,481	2,657	100,000 copies
4 Taxi Stops and Parking	1,620	1,458	90.0	162	10.0	27,000	19,500	72.2	7,500	27.8	28,620	20,958	7,662	4,293	3,144	1,149	32,913	24,102	8,811	
4- physical improvement	1,200	1,080	90.0	120	10.0	20,000	16,000	80.0	4,000	20.0	21,200	17,080	4,120	3,180	2,562	618	24,380	19,642	4,738	10 taxi stops, 2 parki
4- sign & shelter	420	378	90.0	42	10.0	7,000	3,500	50.0	3,500	50.0	7,420	3,878	3,542	1,113	582	531	8,533	4,460	4,073	10 taxi stops
Tourist-Friendly Syria	56,000	29,500	52.7	26,500																

## 18.10.2 Economic Evaluation

### (1) Projection of Economic Benefits from the Priority Projects

As stated in Section 12.1, project benefits are measured in the form of difference in expenditure borne by the projected number of hotel tourists and holiday villa tourists between the cases of with and without the priority projects. The difference was assumed to be one percent increment in the annual growth rate of tourist arrivals between with and without cases. As shown in Section 12.1 and Appendix A12.1, this assumption is in the side of conservative one, rather than optimistic one, considering actual effects of tourism development experienced elsewhere in the world.

The following assumptions were made for the purpose of benefit estimation:

- Expenditure including accommodation and other expenditures by a foreign tourist varies widely from SP 12,150 per day to SP 2,700 per day according to our survey, which provided statistically insufficient number of samples. The expenditure by foreign tourists was estimated on the basis of data provided by the Central Bank of Syria and using a weighted arithmetic mean.
- Multiplier effect was taken into consideration to determine the Benefit Value Added by adapting a factor of 2.087, taking into account economic effects on related services and industries. In the estimation of economic size of tourism from tourist receipts, a multiplier is usually applied to encompass the direct and secondary effects of tourist expenditures on the economy, less "leakage", i.e. amount paid to foreign countries. The value of the multiplier in tourism depends in large part on how well developed the supplying sectors are and how closely linked they are to tourism. The value of multiplier in tourism is typically between 1.5 and 3.0. As shown in Appendix A4.5 in Volume III, a multiplier in the tourism sector in Syria was conservatively calculated at 2.087, based on actual expenditure structure of major tourism industry components, which could justify the multiplier applied here. It was assumed that the extent of supplying sector and linkage to tourism are not significantly different among the areas of the 6 priority projects.
- The subject of calculation is limited to hotel tourists and holiday villa tourists. Benefits brought about by other types of tourists such as shopping tourists from neighboring countries, VFR (visiting friends and relatives), transit travelers, and domestic tourists are not included in the calculation. Thus, economic benefit shown here can be said to have been calculated very conservatively.

The overall estimated economic benefit generated by the implementation of proposed 6 priority projects is shown in Table 18.10.3.

Table 18.10.3 Economic Benefit Generated by Tourists in Hotels and Villas

Year	Economic Benefit (Hotel Tourist)	Economic Benefit (Holiday Villa Tourist)	Total Economic Benefit x Multiplier(2.087)
1997	0	0	0
1998	0	0	0
1999	97,814,164	94,637,639	401,646,913
2000	106,870,378	113,933,531	460,817,758
2001	117,782,428	123,480,981	503,516,735
2002	129,906,866	133,829,013	550,416,779
2003	143,385,677	145,044,799	601,954,403
2004	158,378,060	157,201,152	658,613,815
2005	175,063,856	168,405,201	716,819,922
2006	188,109,600	176,812,643	761,592,721
2007	202,255,812	185,639,818	809,538,180
2008	217,601,937	194,907,680	860,907,571
2009	234,256,754	204,638,231	915,973,834
2010	252,339,272	214,854,569	975,033,546
2011	271,979,707	225,580,946	1,038,409,083
2012	293,320,559	236,842,826	1,106,450,984
2013	316,517,796	248,666,944	1,179,540,552
2014	341,742,144	261,081,369	1,258,092,672
2015	369,185,084	274,314,279	1,342,983,171

Note: Unit: SP

Source: JICA Study Team

## (2) Cost

Based on the planned cost shown in Table 18.10.2, the initial cost for each project and the operation and maintenance cost for each project were used for the economic evaluation under the following assumptions:

- The effect of "Project F: Tourist-Friendly Syria" is assumed to contribute to the whole tourism industry in Syria including component projects. Thus, this cost was added when the total benefit of priority projects was calculated;
- Overall project management cost is distributed to each priority project;
- Project evaluation period is 16 years (up to 2015);
- In order to convert the financial cost to the economic cost, a factor of 0.9 was adopted primarily considering taxes;
- Price level: all estimation were made on the basis of price level in May 1998; and
- The official exchange rate in May 1998, US\$ 1.00= SP 45.00 was applied.

## (3) Benefit

The overall value of economic benefit from incremental hotel and holiday villa tourist-nights shown in Table 18.10.3 are distributed to each of the priority project sites by means of the percentage distribution figures for each site that have been developed on the basis of number of visitors to museum, tourist-nights distribution shown in the tour guide records, and the interview survey result conducted under this study.

The following is the percentages applied for the distribution of benefit:

- Damascus 30 %
- Hama 20 %
- Tartous 15 %
- Latakia 15 %
- Aleppo 20 %

#### (4) Economic Evaluation of the Priority Projects

With the benefit distributed and the project cost described above, each priority project was evaluated in terms of Economic Internal Rate of Return (EIRR).

The results are summarized in Table 18.10.4. In terms of EIRR, all priority projects show satisfactory values. The details of the economic analysis are shown in Table 18.10.5.

The package of 6 priority projects, as a whole, is feasible in terms of economic feasibility. The EIRR as a total was calculated at 22.62 percent, which is to justify the package of 6 priority projects.

Table 18.10.4 Summary of Economic Evaluation

	The Great Damascus Heritage	Old Hama of Norias	Historic Tartous- Arvad	Latakia Cultural Circuit	Aleppo the Silk Road	Tourist- Friendly in Syria	Total
EIRR	32.20 %	26.23 %	15.70 %	30.97 %	34.35 %	---	22.62 %

Source: JICA Study Team

Table 18.10.5 Economic Evaluation of Priority Projects

Year	The Great Damascus Heritage				Old Hama of Norias			
	Initial Cost (SP)	O M Cost (SP)	Benefit (SP)	Balance (SP)	Initial Cost (SP)	O M Cost (SP)	Benefit (SP)	Balance (SP)
1998			0	0			0	0
1999	37,910,585		120,494,074	82,583,489	21,070,771		80,329,383	59,258,611
2000	549,431,183	2,203,875	138,245,327	-413,389,731	433,875,553	6,289,875	92,163,552	-348,001,877
2001	140,462,318	49,950,000	151,055,020	-39,357,298	57,139,279	41,987,250	100,703,347	1,576,818
2002	12,890,702	60,511,500	165,125,034	91,722,832	11,927,995	47,596,500	110,083,356	50,558,861
2003	9,673,922	60,511,500	180,586,321	110,400,899	8,389,537	47,596,500	120,390,881	64,404,843
2004		60,511,500	197,584,145	137,072,645		47,596,500	131,722,763	84,126,263
2005		60,511,500	215,045,977	154,534,477		47,596,500	143,363,984	95,767,484
2006		60,511,500	228,477,816	167,966,316		47,596,500	152,318,544	104,722,044
2006		60,511,500	242,861,454	182,349,954		47,596,500	161,907,636	114,311,136
2008		60,511,500	258,272,271	197,760,771		47,596,500	172,181,514	124,585,014
2009		60,511,500	274,792,150	214,280,650		47,596,500	183,194,767	135,598,267
2010		60,511,500	292,510,064	231,998,564		47,596,500	195,006,709	147,410,209
2011		60,511,500	311,522,725	251,011,225		47,596,500	207,681,817	160,085,317
2012		60,511,500	331,935,295	271,423,795		47,596,500	221,290,197	173,693,697
2013		60,511,500	353,862,166	293,350,666		47,596,500	235,908,110	188,311,610
2014		60,511,500	377,427,801	316,916,301		47,596,500	251,618,534	204,022,034
2015		60,511,500	402,894,951	342,383,451		47,596,500	268,596,634	221,000,134
Total	750,368,711	899,314,875	4,242,692,592	2,593,009,006	532,403,136	714,628,125	2,828,461,728	1,581,430,467
EIRR (%)				32.20%				26.23%

Year	Historic Tartous-Arward				Latakia Cultural Circuit			
	Initial Cost (SP)	O M Cost (SP)	Benefit (SP)	Balance (SP)	Initial Cost (SP)	O M Cost (SP)	Benefit (SP)	Balance (SP)
1998			0	0			0	0
1999	26,646,204		60,247,037	33,600,833	16,286,045		60,247,037	-43,960,992
2000	469,250,085	10,102,500	69,122,664	-410,229,922	280,904,909	928,125	69,122,664	-212,710,370
2001	17,077,422	40,410,000	75,527,510	18,040,088	80,950,982	23,895,000	75,527,510	-29,318,472
2002	12,734,769	40,410,000	82,562,517	29,417,748	5,940,185	30,055,500	82,562,517	46,566,832
2003	6,944,565	40,410,000	90,293,161	-42,938,595	4,492,634	30,055,500	90,293,161	55,745,027
2004		40,410,000	98,792,072	58,382,072		30,055,500	98,792,072	68,736,572
2005		40,410,000	107,522,988	67,112,988		30,055,500	107,522,988	77,467,488
2006		40,410,000	114,238,908	73,828,908		30,055,500	114,238,908	84,183,408
2006		40,410,000	121,430,727	81,020,727		30,055,500	121,430,727	91,375,227
2008		40,410,000	129,136,136	88,726,136		30,055,500	129,136,136	99,080,636
2009		40,410,000	137,396,075	96,986,075		30,055,500	137,396,075	107,340,575
2010		40,410,000	146,255,032	105,845,032		30,055,500	146,255,032	116,199,532
2011		40,410,000	155,761,362	115,351,362		30,055,500	155,761,362	125,705,862
2012		40,410,000	165,967,648	125,557,648		30,055,500	165,967,648	135,912,148
2013		40,410,000	176,931,083	136,521,083		30,055,500	176,931,083	146,875,583
2014		40,410,000	188,713,901	148,303,901		30,055,500	188,713,901	158,658,401
2015		40,410,000	201,447,476	161,037,476		30,055,500	201,447,476	171,391,976
Total	532,653,047	616,252,500	2,121,346,296	972,440,749	388,574,755	445,600,125	2,121,346,296	1,287,171,416
EIRR (%)				15.70%				30.97%

Table 18.10.5 Economic Evaluation of Priority Projects (Continued)

Year	Aleppo the Silk Road				Tourist-Friendly Syria	
	Initial Cost (SP)	O.M Cost (SP)	Benefit (SP)	Balance (SP)	Initial Cost (SP)	O.M Cost (SP)
1998			0	0		
1999	15,951,809		80,329,383	64,377,573	26,742,922	
2000	424,432,361	1,346,625	92,163,552	-333,615,435	307,434,922	450,000
2001	9,967,025	37,678,500	100,703,347	53,057,822	3,558,922	5,400,000
2002	9,967,025	37,678,500	110,083,356	62,437,831	3,558,922	5,400,000
2003	6,750,245	37,678,500	120,390,881	75,962,136	3,558,922	5,400,000
2004		37,678,500	131,722,763	94,044,263		5,400,000
2005		37,678,500	143,363,984	105,685,484		5,400,000
2006		37,678,500	152,318,544	114,640,044		5,400,000
2006		37,678,500	161,907,636	124,229,136		5,400,000
2008		37,678,500	172,181,514	134,503,014		5,400,000
2009		37,678,500	183,194,767	145,516,267		5,400,000
2010		37,678,500	195,006,709	157,328,209		5,400,000
2011		37,678,500	207,681,817	170,003,317		5,400,000
2012		37,678,500	221,290,197	183,611,697		5,400,000
2013		37,678,500	235,908,110	198,229,610		5,400,000
2014		37,678,500	251,618,534	213,940,034		5,400,000
2015		37,678,500	268,596,634	230,918,134		5,400,000
Total	467,068,466	566,524,125	2,828,461,728	1,794,869,137	344,854,611	81,450,000

EIRR (%)

34.35%

Total			
Initial Cost (SP)	O.M Cost (SP)	Benefit (SP)	Balance (SP)
		0	0
144,608,337	0	401,646,913	257,038,576
2,465,329,014	21,321,000	460,817,758	-2,025,832,256
309,155,949	199,320,750	503,516,735	-4,959,964
57,019,599	221,652,000	550,416,779	271,745,180
39,809,826	221,652,000	601,954,403	340,492,577
	221,652,000	658,613,815	436,961,815
	221,652,000	716,819,922	495,167,922
	221,652,000	761,592,721	539,940,721
	221,652,000	809,538,180	587,886,180
	221,652,000	860,907,571	639,255,571
	221,652,000	915,973,834	694,321,834
	221,652,000	975,033,546	753,381,546
	221,652,000	1,038,409,083	816,757,083
	221,652,000	1,106,450,984	884,798,984
	221,652,000	1,179,540,552	957,888,552
	221,652,000	1,258,092,672	1,036,440,672
	221,652,000	1,342,983,171	1,121,331,171
3,015,922,725	3,323,769,750	14,142,308,639	7,802,616,164

22.62%



## **19 RELATED INFRASTRUCTURE PROJECTS**

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### **19.1 Rationale**

Good transportation conditions are essential for travel and tourism to grow. The following projects are indicated for the great relevance to tourism in Syria. They fall outside the scope of this study, but in some direct way address problems urgently needing solutions.

### **19.2 Airport Improvements**

#### **(1) Aleppo Airport Upgrading**

This is Syria's second most important international facility operating with one category II capable runway. To develop into Syria's second air gateway, and especially to attract more foreign carriers to open new routes into Aleppo, this airport will need to undergo significant modernization to process increased volumes of passengers and baggage efficiently and safely. The structure for the new passenger terminal building is already completed, and the transfer of operations from the existing terminal into the new one is expected by mid 1998. However, the airfield is not new and requires replacement or modernization of some facilities in addition to the new passenger terminal building. A general upgrading package of furnishings, equipment replacement and related works is proposed. The success of this airport depends not only on this package of physical improvements but also on DGCA efforts to encourage increased service by foreign carriers and by Syrian Airlines into Aleppo through both scheduled and charter services. Foreign financing sources for this work have not been secured.

Description of potential improvements:

- furniture, fixtures and equipment for fully outfitting the new terminal building;
- passenger boarding bridges for three gates;
- X-ray scanning equipment for passengers, carry-on, checked baggage;
- limited additional taxi way and apron work;
- provision of radar system compatible with category II operating standard;
- RVR (runway visibility range) equipment; and
- replacement of aging NDB, VOR-DME navigational equipment.

Estimated Project Cost:

- Total cost for the upgrading is estimated at around SP 1.5 billion (US\$ 30 million).

#### **(1) Damascus Airport Upgrading**

Most of the basic civilian facility at this airport has been in operation since the early to mid 1970s when European equipment was installed. As Syria's main international air gateway, Damascus Airport needs to provide safe operating conditions for commercial airline operations. Flights are often forced to divert to airports in Jordan, Lebanon and Cyprus when weather conditions and visibility are poor. In addition, some of its technical systems have

grown obsolete with age, and many of the public areas have aged and become unattractive, making a poor impression on arriving passengers; some of these areas require refurbishment. This package is intended to make the airport substantially safer than at present, and also to convert it into a functional and welcoming facility suitable for a growing tourist destination needing to improve its international image. Foreign financing sources for this work have not been secured.

**Description of potential improvements:**

- replacement of key elements of the aging radar system;
- equipment upgrade for runway 23R for category III landing conditions;
- equipment upgrade for runway 23L for category II landing conditions;
- installation of furniture, fixtures, X-ray scanning equipment, public address system, baggage distribution system in the terminal building;
- construction of two terminal finger extensions and passenger loading bridges for a total of 6 new aircraft gates;
- selected renovation work in the terminal building; and
- cargo handling equipment.

**Estimated Project Cost:**

- Total cost for the upgrading is estimated in the range of SP 2.3-3.0 billion (US\$ 50-60 million).

### **19.3 Latakia-Ariha Highway**

This planned mountain link is vital to conveniently connect the cities and tourist sites within the coastal zone to the northern zone and Aleppo city. The present road is not adequate for the largest touring coaches which are forced to travel at low speed. Completion of this highway will reinforce the emerging function of Aleppo as the country's northern core for tourism; it fully supports the Master Plan's strategy of developing Aleppo as a second gateway for tourism. In the interest of improving accessibility between the Coastal and Aleppo Zones, the MOT and tourism industry need to support the timely completion of this project without major delay. They also need to verify in the detailed design if feasibility has been studied for any observation points with sufficient parking for viewing panoramas of the Mediterranean Sea and possibly Salahdin Castle. At such points some space for commercial development must be provided for restaurant and other traveler services. Because financing for the project has not yet been finalized, there remains the possibility of co-financing among two or more different foreign sources.

**Description:**

- 93 kilometers in length with international standard highway design;
- approximately one third of length consisting of viaducts, tunnels, bridges;
- financing expected by Kuwaiti Bank and Arab Fund for Economic Development;
- expected completion of the feasibility study by a European consultant in mid 1998; and
- expected negotiation of financing arrangements during 1998.

**Estimated Project Cost:**

- Total cost for the project is estimated at SP 10-12 billion (US\$ 220-270 million).

## **20 IMPLEMENTATION OF ACTION PLAN**

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The economic evaluation of the six priority projects proved that the implementation of priority projects will bring considerable socio-economic benefit to Syria. However, it should be noted that the recommended Action Plan for the year 2005 consists of the short term tourism promotion initiatives, the 14 priority programs, the 6 priority projects and the 3 related infrastructure projects, and that the maximum benefit of the plan can only be achieved when all components are implemented. They are mutually complementary and should be considered as one package.

It is therefore all the more important that the Master Plan shall be authorized by the appropriate authority of Syrian government as soon as possible for all concerned to confirm that effort be made in all fronts and cooperation among those concerned be secured.

Among the 14 priority programs, the following programs need some time before becoming effective, and are needed to be started as soon as possible:

- P-1 Formal Creation of the Public and Private Joint Tourism Promotion Committee;
- P-2 Enhance media Exposure;
- P-9 Increase of Air Access;
- P-13 Further Incentives for Private Investment; and
- P-14 Creation of One-Stop Information Office in GCETP.

While other priority programs are also desirable to be implemented as early as possible, they should at least be implemented in coordination with the progress of the 6 priority projects. Figure 20.1.1 shows the overall implementation schedule of Action Plan for the year 2005.

Figure 20.1.1 Implementation Schedule of Action Plan (2005)

	1998	1999	2000	2001	2002	2003	2004	2005
Short Term Promotion Initiatives								
Priority Programs								
P-1 Joint Promotion Committee								
P-2 Media Exposure								
P-3 Promotion Materials								
P-4 Overseas Representative Offices								
P-5 CIQ Improvement								
P-6 Foreign Currency Exchange								
P-7 Inter-Ministerial Collaboration								
P-8 Staff Training								
P-9 Additional International Flights								
P-10 Syrian Air Services								
P-11 Organizational Improvement of MOT								
P-12 Public Awareness Program								
P-13 Incentives for Private Investment								
P-14 One-Stop Information Office								
Priority Projects								
1 The Great Damascus Heritage								
2 Old hama of Norias								
3 Historic Tartous-Arwad								
4 Latkia Cultural Circuit								
5 Aleppo the Silk Road								
6 Tourist-Friendly Syria								
Related Infrastructure Projects								
1 Damascus Airport Improvement								
2 Aleppo Airport Improvement								
3 Latakia-Ariha Highway								

Source: JICA Study Team

■ implementation  
 ▤ preparation, follow up or operation

JICA