ELABORATION OF A STRATEGIC SUSTAINABLE REGIONAL DEVELOPMENT PLAN (SSRDP) FOR THE CAZA OF TYRE

FINAL STRATEGY DOCUMENT

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CRI - Habib Debs - ECODIT - IAURIF
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BACKGROUND & METHODOLOGY

The general objective of this planning process will consist of identifying the main issues that are at stake and developing a vision for the sustainable economic and social development of the territory of the qada’ of Sour. This vision will be created with the UMOT through a participatory process, and will culminate in the drafting of a strategic plan that would guide and better balance the economic and social development of the territory in keeping with the preservation of its natural and cultural assets. The strategic plan will then be used as a guiding tool for providing an action plan that would identify the major opportunities for specific projects serving the main objectives and general development strategy, to be assessed in terms of program, environmental impact and cost estimate.

The strategic development process should more specifically target at:

- Promoting economic and social development by providing a coherent framework aiming at rationalizing and coordinating sectoral policies (the six themes defined by the TOR)
- Identifying and allowing for the preservation of the natural and cultural assets of the area, that constitute part of its main competitive advantages
- Promoting a participatory planning process in response to the need to balance profits and expenses for the State, communities, owners and users, with the effective participation of civil society. This means that the didactic dimension of this action is essential and should be a major concern at each step of the planning process.

Based on the terms of reference and the proposal submitted by the consortium, the study consists of two major components:

- A Strategic Sustainable Regional Development Plan; and
- A Strategic Environmental Assessment.

The two components were developed in parallel and the entire project extended over a total period of 21 months, following two extensions that were requested as a result of the time consuming approval process at the end of each phase.

METHODOLOGY

In line with the terms of reference, the project consisted of five missions for each component.

- **Mission 1** consisted of producing an inception reporting including baseline data and methodology;

- **Mission 2**, the diagnosis phase, included fieldwork in collaboration with municipal presidents and culminated in the development of a diagnostic report and SWOT analysis for the plans mentioned in the ToR;

- **Mission 3** focused on the development of a vision and objectives and the identification of priority sectors. Three draft visions were submitted during Workshop 3 and the participants were able to mine elements from each vision proposal and produce their own vision. The priority sectors were also discussed and approved by the stakeholders during the workshop;
Mission 4: Following the consensus over the priority sectors, the study team will propose a number of projects per sector. These projects will be discussed during Workshop four and priorities will be selected by the elected leaders and stakeholders in collaboration with the study team.

Mission 5: The study team will finalize the SSRDP and develop an action plan and project templates for each of the selected priority projects.

Project Management

The management of the project was assured by the following:

- Mr. Sami Feghali will act as Project Coordinator. He will be responsible of the administrative and financial follow up of the contract. He will assure the coordination between the consulting consortium, the CDR, and the UMoT.

- A Project Management Unit consisting of Mr. Sami Feghali, Mr. Ali Ezzeddine, Mr. Hassan Dbouk, and representatives of the consortium of consultants. This unit will be responsible for the technical follow up of the study, for issuing comments on the reports delivered by the consultant, and for officially approving the deliverables.

- A Steering Committee (SC) will be set up to supervise and approve the general orientation of the program and to ensure the appropriation of the final strategy by the various central government bodies. The committee will consist of central government representatives and will include a representative from the AFD (as observer) and a representative from PACA or any other consultant chosen by the UMoT (as observer). It will invite, if necessary, any other representative from local or central, public or private institutions or local NGOs when needed. The SC will meet each 2 months with additional ad hoc meetings as and when required and shall be chaired by one of the UMoT representatives. This Steering Committee will be set up by the Project Coordinator in coordination with the official UMoT representatives. It will focus on technical coordination inside the sector but will not be involved in day-to-day operations of the consultant.

Data Sources

The literature review revealed significant data gaps that could only be filled through field work. However, the scope of the study precluded an exhaustive approach that would sweep all Sour’s CFs and collect all the missing data. Instead, the study team developed an approach that rested the convergence of several additional sources of information, namely:

1. Topographic/land use maps, including:
   i. The topographic map of the Lebanese army in 1963;
   ii. The topographic map of the Lebanese army in 2002;
   iii. The land-use / Land-cover 2000 (CNRS / NPMLT) based on a satellite Image of 1998;
   iv. The land-use / Land-cover 2011 (CNRS) based on a satellite Image of 2005;
   v. The land-use / Land-cover 2013 based on a satellite photo of 2004/2011 (Google maps);
vi. The topography of the territory after extractions images from Google maps (2011);

2. DGU Master plans (validated or under validation), obtained from the General Directorate of Urban Planning;

3. National surveys such as the Census of Buildings and Establishments of 1997 and 2004 (CAS), the Agricultural Census of 2010 (MoA), the D-RASATI education survey executed by the MEHE (2011), etc.

4. More than 10 field visits undertaken by the team and covering the entire length and width of the qada’ in order to assess the situation of the qada’ from various aspects including: urban, cultural heritage, transport, social fabric, economy, environment, and water resources (refer to the list of interviews in the appendix).

5. Detailed questionnaire filled by the following 16 municipalities: Aaytit, Bazourieh, Birghlieh, Borj Rahhal, Boustan, Chhour, Deir Qanoun El Nahr, Dhayra, Jbal El Botm, Kneisseh, Maarakeh, Mahrouneh, Naqoura, Qana, Qleileh, and Srifa.

6. In-depth field visits to 9 villages, including interviews with around 6-10 stakeholders in each village. The villages included in the field work were: Aaytit, Bazourieh, Borj Rahhal, Chhour, Deir Qanoun El Nahr, Jouayya, Maarakeh, Qana, Srifa.

Diversification of sources allowed the study team to compensate for the lack of information or the difficulty of interpreting certain findings. Thus, the analysis involved the comparison and crosschecking of these various sources of information (maps, surveys, interviews, visits, etc.). For instance, the army maps identified the old urban cores and planted areas, while intersecting the different Land use / Land cover maps highlighted different interpretations, particularly in the identification of urban sprawl by the CNRS 1998 with respect to 2005.

Previously mapped data was corrected or supplemented as much as possible. Work to identify and map built-up areas at different dates allowed the identification of the dynamics of urban growth and urban sprawl of villas and luxury residences. The results that were obtained highlighted the dynamic aspects of agricultural activity as well as the transformations in various urban typologies.

**STAKEHOLDER MAPPING**

One of the tasks undertaken in this phase involved the mapping of the various stakeholders that make up the social and economic fabric of the qada’. This mapping will be used in subsequent phases of the study in order to identify ideal partners who may assist the team in the selection of projects to be proposed under each priority, as well as in the design of the proposed interventions.

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1 Following the distribution of the questionnaire to all of the qada's municipalities, visits by the study team to each of the qada's regions, two waves of phone calls to all municipalities, and several attempts by the UMoT and the study team, only 16 completed questionnaires were obtained.

2 The team had foreseen field visits to 14 municipalities. However, due to difficulties in obtaining the cooperation of the municipalities, only 9 visits were successfully undertaken within the time allowed by the study’s timetable.
STAKEHOLDER MAPPING

**GOV**
1. UNION OF MUNICIPALITIES OF TYRE (UMOT)
2. SOUR MUNICIPALITIES
3. SOUR PORT AUTHORITY
4. COUNCIL FOR DEVELOPMENT & RECONSTRUCTION (CDR)
5. DIRECTORATE GENERAL OF URBAN PLANNING (DGU)
6. DIRECTORATE GENERAL OF ARCHAEOLOGY (DGA)
7. MINISTRY OF INTERIOR AND MUNICIPALITIES
8. MINISTRY OF FINANCE
9. COUNCIL OF THE SOUTH
10. TYRE COAST NATURAL RESERVE

**AGR**
1. APICULTURE UNION
2. LOCAL DEVELOPMENT AGENCY (BEDIAS)
3. ASSOCIATION FOR THE DEVELOPMENT OF RURAL CAPACITIES
4. AGRICULTURAL COOPERATIVE UNION
5. ITALIAN COOPERATION LOCAL OFFICE
6. ASSOCIATION OF SOUTHERN FARMERS
7. JIHAD AL BINA'A AGRICULTURAL BRANCH
8. CITRUS & BANANA COOP
9. SYNDICATE OF FISHERMEN

**TRADE/INDUSTRY**
1. BUSINESS ASSOCIATION OF SOUR
2. CHAMBER OF COMMERCE OF SOUTH LEBANON
3. JABAL AMEL INDUSTRIALIST ASSOCIATION

**HEALTH**
1. JABAL AMEL HOSPITAL
2. SOUR GOVERNMENTAL HOSPITAL
3. AL INAYA HOSPITAL
4. HIRAM HOSPITAL
5. NAJM HOSPITAL

**EDU**
1. PUBLIC SCHOOLS
2. PRIVATE SCHOOLS
3. AL MUSAN PwD CENTER

**CSO**
1. TADAMON SPORTS CLUB
2. SOUR CULTURAL CENTER
3. MOUNTADA AL FIKR WAL ADAB
4. ISLAMIC CHARITY ASSOCIATION
5. SOUR CULTURAL AND SOCIAL ASSOCIATION
6. MAARAKE SPORTS ASSOCIATION
7. WOMEN'S AFFAIRS ASSOCIATION
8. UNIVERSITY STUDENT ASSOCIATION (TAYR DEBBA)
9. FAMILY PLANNING ASSOCIATION
10. AL MAHDI SCOUTS
11. AL IMDAD GERIATRIC CENTER
Balance between Urban, Agricultural and Natural Areas

Three remarkable features emerge from the analyzed territory: the city of Sour surrounded by its preserved agricultural plain, the north-east of qada’ with a high density of towns and villages in rapid spatial expansion, and the well preserved natural spaces of the south part of the qada’, which was not subject to the same demographic and economic growth than the other areas.

The city of Sour and its inclusion in the coastal plain: Remarkable land structure

The city of Sour has mainly developed along the historical East / West axis after reaching the natural limits of its constrained environment: the peninsula. The unregulated expansion of the main city of the qada’ is expressing an uncommon geometry in Lebanon. The presence of public lands to the south (Army, archaeological site, public beach and nature reserve), the narrowness of its own cadastral limits, as well as the presence of the Palestinian
camps caused the development of the urbanization linked to the city outside its boundary, on the territory of Borj-el-Chemali, Abbassieh and Ain Baal.

On the long term, comparing the Lebanese army maps of 1963 and 2002, the size of the arboriculture area (Citrus, Banana, Olive tree...) increased in the coastal plain, from the seashore to the first foothills. While expanding, the recognition of the high agricultural value of the plain of Sour could be one of the factors that helped to limit till now the urban sprawl between Sour and its surrounding towns, resulting in a green belt around the city of Sour.

The land property structure is constituted by very large parcels, which reflects a legacy of the quasi-feudal social system that persisted till the recent history of south Lebanon. The presence of these large parcels owned by one family could also be one of the factors that hindered the punctual construction in the plain's agricultural land by the major part of the inhabitants. However, many of these great parcels were subject to large land subdivision perimeters initiated by the owners. Large condominiums built by developers at the limits of the city reflect the urban pressure in these areas which remain the most attractive residential and commercial areas across the qada'.

This structure of land property could also explain the preservation of the sea shore from urban sprawl. Indeed, the littoral is till now generally free from any form of residential construction although some touristic establishments have been implemented (Ex: Tyros resort in Iskandrouna).

After having reported the location of the approved land subdivisions on the main map, it became obvious that the urban expansion inside the agricultural plain is already engaged, even if there are no buildings implemented yet. The addition of these land development entities results into a finger shape structure located mainly along the major roads around Sour, linking the city to Al Abbassieh, Jouaya and Qana. This heavily affects the future of the coastal plain and its landscape. Only 46% of these subdivided areas are already built, providing some 300 hectares of land immediately available for construction. These approved subdivisions can hardly be changed.

A strong urban extension in the North-east of the Qada'

Medium-sized towns and villages in the north-east of the qada' of Sour have undergone a rapid urbanization during the war and after the liberation of the south. All small towns and villages of the qada' of Sour have been impacted by the economic growth of the region. Between 1963 and 1998, the annual extention of urban agglomerations was 3.2% across the Qada' even if few municipalities as Mazrat Mechref, Hanounay, Jouaya or Wadi Jilo have an annual urban growth above 8%. Between 1998 and 2005, the annual urban growth of urban centers was about 4% across the qada'. Taking into account the urban sprawl in agricultural area, the urban annual growth reaches 6.8%.

The northeast part of the qada', despite disparities, particularly in the forms of urbanization is characterized by a large number of villages, that have known for most of them, an increase of built areas on the plateaus or along the main roads of the qada' (East/West axis due to the topography and links with the most important towns of the qada' of Bint Jbeil). This densely populated area is associated to two forms of agricultural practices:
Fields of large areas or terraces, revealing the presence of large agricultural ownerships. Olive trees in small areas closely related to the residential population of the village, providing a complementary revenue to these families. However, we can observe that natural spaces as valleys are preserved by urban extension, contributing to assert a balance between built, agricultural and natural areas. The analysis of actual transformations witnessed by the territory of the qada’ show that space consumption by urbanization is happening through different ways:

- The implantation of villas and luxurious houses (about 900 across the qada’), that is not necessarily related to the urban or rural fabrics and could be often found in agricultural areas. In 2011, they represent around 8.4% of the built-up area of the qada’. In Hanounay or Jouaya for example, subdivisions are especially dedicated to their implantation. As often planted with fruit trees, villas and luxurious residences sometimes contribute to the preservation of the green cover.

- Part of the urban sprawl is due to the population previously living in the old center that moved into new apartments outside the historic core due to changes in the lifestyles. This phenomenon is particularly visible along the principal roads as well as along the agricultural paths where most of the constructions were implemented.

- The rest of the urbanization is taking place within planed large private land subdivisions that were unequally filled, as a great number of them were created for land speculation purpose.

This first analysis of the forms of urbanization across the qada’ allowed us to make an initial assessment on the current urban dynamics. On one side, we noticed the radial growth of isolated villages of different sizes as example: Baflye, Tair Falsay or Debbal. On the other side, a majority of villages grew along road corridors creating linear conurbations: Tayr Debbe - Maaraké - Toura - Deir Qanoun en Nahr - Jennata - Maaroub - Barich; Hannaouy - Qana - Siddiqine and Jouaya - Mjadel - Chehabiye - Salaa - Deir Kifa. These urban corridors clearly appear on the map bellow representing the number of activities per 100 inhabitants in 2004:

The south: a more natural and less populated territory
As the third remarkable entity of the qada’, the southern part of the territory is mainly characterized by the preponderance of natural areas (Mediterranean forest or herbaceous vegetation). Preserved until the withdrawal of the occupying forces in 2000, this part of the territory was subject to much slower development than the rest of the qada’. Served

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3 Lebanon Atlas, 2007, the qada’ of Sour have the highest number of large land parcels in Lebanon.
by limited network of roads and located between 300 and 600m of altitude, these villages compose a kind of collar along the border.

Agricultural areas are proportionally larger than urban development. The interdependence between urban and agricultural areas is stronger and more visible. However the major part of this area is natural land cover.

Almost natural, this part of the territory counterbalances the urbanized and agricultural areas of the north of the qada’, contributing thus to the diversity of landscapes that constitutes the identity of South Lebanon.

**Forms of Housing and Urban Morphology**

The urban fabric results from the association of the following different building types that reflect the social diversity of households’ conditions and their social practices:

**Traditional house in dense town center**

These houses constitute the dense fabric of historic villages that used to house all the original families until the 1960s. They witnessed the move to larger and modern houses outside the old core on the one hand while a large part of the others were subject to the rural urban migration. The remaining population is constituted essentially by the ones that didn’t have the means to build elsewhere. The need of these households for more space resulted in the densification of existing fabric by adding additional floors. This led to the deterioration of the built heritage in the majority of these villages with few exceptions (cf. Heritage Part).

**Recent construction outside the old town**

These buildings are mainly composed by two or three floors where family members (usually two or three brothers) occupy different floors. This typology of houses is generally occupied by households of intermediate social category. They are implemented around the villages or more rarely within subdivided land.

**Commercial buildings along road / street-villages**

These buildings are located along the main roads and streets of the villages. They are mainly commercial or administrative buildings, and they reflect the economic activities of the inhabitants.
A major form of urbanization outside the old cores consists into the emergence of commercial floors along the primary roads linking villages fitted with or without residential units above. These shops are offering local services to the local residents and for the users of the major roads, notably the population of smaller neighboring villages.

**Condominiums**

This dense urban form (from 3 to 10 floors) is provided by developers at the outskirts of the city of Sour. They are usually grouped as a complex of buildings of identical forms and offering apartments of different standings. This "compact" typology has the advantage to be dense and constitute therefore a better alternative to urban sprawl within the agricultural plain.

**Isolated or grouped Villas**

In many villages, the Waqfs provide small apartments with a very low purchase value for the lowest income households. This leads them to build high-rises buildings, badly integrated into the rural or villages landscape where buildings are usually much lower.

**Isolated Villa - Saddiqine**

This recent form of housing is largely present in the qada’. It reflects the need of rich emigrants for secondary house in Lebanon. They are characterized by an extravagant style and size, occupying notably hilltops and usually surrounded by an extensive planted area. They can be completed by swimming pools, tennis and other facilities. This form of urbanization doesn’t follow a planned extension of these towns and villages and constitute an important cause of urban sprawl.

**Large buildings of social housing**

In many villages, the Waqfs provide small apartments with a very low purchase value for the lowest income households. This leads them to build high-rises buildings, badly integrated into the rural or villages landscape where buildings are usually much lower.
Large facilities buildings

Outside the Sour city center, large public or religious facilities are implemented near the villages or along the roads connecting them. They usually constitute a rupture with the scale of existing fabrics and contribute to the deterioration of rural and urban landscape.

Dynamic Urban and Agricultural Typomorphology

It is possible to compare the evolution of population densities in each municipality between 1998 and 2005 (ACS Population Data 1997 and 2004). In the following map, the municipalities where the land consumption average per capita has increased are shown in red (high) and orange (moderate). For example, the village of Maaraké consumed more land to accommodate fewer residents than Jouaya. A good indicator of this trend is the fact that the population of these villages increased with a rate of 2% while the extension of the urbanized area has grown by 4%.

The fact that the urban growth is also due to commercial constructions gives a partial explanation to this rapid extension.

Evolution of population densities of urban areas in 2004 compared to 1997

The development of urbanized areas is a direct threat for the preservation of agricultural land. However, we can notice that:

- While large parts of the agricultural plain were urbanized and subdivided, especially in Sour's suburbs, the planted areas have increased on the foothills.
- When large parcels are built on fertile land, notably in the coastal plain, the agricultural soil is excavated and transferred to other locations in order to be cultivated on terraces or flat land.
- Around villages, there is an intimate relation between residences and privately owned orchards and olive groves cultivated by each family as a primary or secondary
source of revenue. This helps to maintain a green belt around these villages.

- Large farms (open fields cultivation or terraces) are relatively spared by urbanization, and could be extended by the development of new terraces or irrigation.

A comparison between typical villages illustrates very different modes of urban development and correlation between built areas and agricultural land.

<table>
<thead>
<tr>
<th>Maaraké</th>
<th>Jouaya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface CF (Ha)</td>
<td>978,2</td>
</tr>
<tr>
<td>POP 1997</td>
<td>7097</td>
</tr>
<tr>
<td>Total housing 1997</td>
<td>1731</td>
</tr>
<tr>
<td>POP 2004</td>
<td>8891</td>
</tr>
<tr>
<td>Total housing 2004</td>
<td>3043</td>
</tr>
<tr>
<td>Urban Area 1963 (Ha)</td>
<td>15,21</td>
</tr>
<tr>
<td>Urban Area 1998 (Ha)</td>
<td>31,33</td>
</tr>
<tr>
<td>Urban Area 2005 (Ha)</td>
<td>160,93</td>
</tr>
<tr>
<td>Annual urban growth 1963-1998</td>
<td>2,15%</td>
</tr>
<tr>
<td>Annual urban growth 1998-2005</td>
<td>26,33%</td>
</tr>
<tr>
<td>Inhabit. / built area (ha) density 1997</td>
<td>226,5</td>
</tr>
<tr>
<td>Inhabit. / built area (ha) density 2004</td>
<td>55,2</td>
</tr>
<tr>
<td>Decreed urban plan</td>
<td>NO</td>
</tr>
<tr>
<td>Subdivision area (Ha)</td>
<td>2,3</td>
</tr>
<tr>
<td>Built subdivision area %</td>
<td>40,65%</td>
</tr>
<tr>
<td>Number of Villa (2011)</td>
<td>60</td>
</tr>
<tr>
<td>School / Health center</td>
<td>6 schools / 1910 pupils 2 Health center</td>
</tr>
<tr>
<td>Establishments 2004</td>
<td>270</td>
</tr>
<tr>
<td>Agricultural land CF %</td>
<td>40</td>
</tr>
<tr>
<td>Agricultural exploitation (2010)</td>
<td>545</td>
</tr>
<tr>
<td>Agricultural land surface (Ha)</td>
<td>390</td>
</tr>
<tr>
<td>Citrus production</td>
<td>24,0%</td>
</tr>
<tr>
<td>Olive tree land</td>
<td>47,6%</td>
</tr>
</tbody>
</table>

This comparison highlights the presence of a larger population in Jouaya with a smaller surface of urbanized area than in Maaraké. This confirms a higher building density which is paradoxically associated with a higher quality of urban space: presence of green belt around the village, more efficient control of urban development. This distinction reflects different social and economic contexts: a population whose income is strongly related to agriculture in Maaraké, revenue associated to money transfer and investments made by emigrated population in Jouaya. These could be identified according to three types: direct money transfers to the family, speculative investments in real estate and construction of a new house or villa for themselves.

**Dynamic Landuse in Maaraké and Jouaya**

The comparison between these two urban fabrics (see the following illustration) highlights the needs of better urban policies in Maaraké. While the old compact village and the green belt of Jouaya are relatively preserved (due to the containment of the urban areas in its decreed master plan), Maaraké shows a very important urban sprawl.

The space consumption dynamic in Maaraké could be slowed down by creating land subdivisions that are better controlled, sustainable and compact and where higher density is allowed. Thus, a pilot project on a publicly owned land providing a compact and green neighborhood with lower parcel prices and a social housing component could be proposed as a showcase project for introducing a more sustainable pattern of urbanization.
Legend
Urban Structure

Urban structure - Qada’ of Sour (Main roads, concentration of services and estimated population)

The urban structure plan above highlights a strong network of relationships between towns and villages, according to a hierarchy between the city of Sour, the major towns (Qana, Jouaya, Maarakeh, Al Abbassieh and Chehabieh) and smaller towns or villages. This hierarchy reflects higher level of services and activities associated to each of them.

Urban Policies and Sustainable Development

The map below shows the municipalities covered by a master plan validated by the Directorate General of Urban Planning (orange color). Approved land subdivisions are represented in purple color and green color indicates the municipalities that still have not been covered by a master plan.

Public policies could play a better role in order to rationalize the vocation and use of the different parts of the territory. The National Master Plan (NPMPLT) provides general guidelines in coherence with the resources of each region in Lebanon. However, these guidelines are general and need to be differentiated into more specific and detailed strategies related to each territory. Furthermore, the decree that have validated this document specified that it could only apply to areas not previously covered by a master plan. This limits considerably the impact of the NPMPLT on the Qada’.

While revealing a will to protect the agricultural land, the analysis of local master plans shows the tendency to a strong liberalism with the implementation of such a policy: we observe the implementation of unjustified isolated new urban areas within the agricultural plain as well as an unjustified general increase of the allowed building density within the protected agricultural perimeter (rise of the FAR from 5 to 10 % in the new master plan of Sour).

The review of these documents also shows:
- A lack of coherence between the different master plans developed separately by different municipalities or groups of municipalities.
- These master plans don’t take generally into account the quality of soil (pedology) to define the perimeters of protected agricultural area.
- The master plan prepared for the coastline illustrates the will of the DGU for implementing an effective protection strategy regarding this highly coveted seafront area. However, this scheme has not been approved at this date because of a strong opposition of municipalities and landowners.
- Land subdivision practice is widespread in the qada’. They can be classified in two categories:

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• The first corresponds to a form of real estate speculation and concerns a large natural area away from towns and villages (ex: Iskandrouna)
• The second succeeded to channel part of the urbanization around Sour and the major villages. However, many of the buildings built in these subdivisions are vacant, also reflecting speculative strategies.

This practice of land subdivisions nevertheless contrasts with the unbridled expansions around villages and along the major roads. Subdivisions provide a better organization of parcels that are more efficiently served by different infrastructure networks. However, land value is higher and parcels are not affordable to the majority of the population.
A Rich Heritage to Protect and Enhance

Built Heritage

Remaining stone houses in historical center of villages: Alike in main Lebanese regions, vernacular architecture in historical center of villages has largely suffered from rapid urbanization, worsened by periods of war, occupation and reconstruction. Remaining stone houses in several villages (Cf. Built, natural and cultural heritage map), mainly uninhabited, are lost amongst the modern urban fabric (add of floors on the top, adjacent extensions) and suffer lack of protection measures (specific urban zoning) and restoration works.

Preserved traditional urban clusters:
- **Derdghaya and Alma el Chaab**, where emigration of Christian inhabitants started for economic reasons before the civil war broke up, still possess a traditional urban core with small public spaces and narrow pathways amid preserved vernacular stone houses of one to two floors, some with vaulted rooms composing the ground floor. Architectural details are well preserved, including wooden crafts for windows and doors. Their status of preservation varies and several have benefited from recent private restoration works, including Saint George’s church in Derdghaya and Mar Elias Greek-Catholic Church in Alma el Chaab, officially protected⁴.
- **Qana** historical center presents value with stone houses are disseminated in the Christian area, two rehabilitated Churches and an ancient well and olive press still in use.
- Largely destroyed by 2006 bombing, **Chamaa fortified village** is quasi inhabited. Located within the castle walls, some vernacular houses of historical value constitute a traditional core. The citadel is officially protected by the DGA⁵, and restrictions are set for the surroundings in Chamaa master plan⁶. However, recent additions and anarchic reconstruction initiatives did not respect the plots limits, neither the fabric typology. In 2011 the CDR and DGA launched a project for the rehabilitation and development of Chamaa fortified village, funded by the Italian government. Following an assessment, a bid has been launched for the works and conservation measures. The rehabilitation of some private houses might request expropriation.

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⁴ Order DGA 46 of 25/07/1997
⁵ Order DGA 4 of 25/07/2002: any type of work or cadastral revision must be submitted to the approval of DGA and CSU
⁶ DGU: Chamaa master plan, adopted in 2007
The Cultural Heritage and Urban Development project in Sour old city (CHUD TYRE)
The Cultural Heritage and Urban Development (CHUD) project, launched in 2001 in 5 Lebanese cities aims at protecting, rehabilitating and enhancing cultural heritage as a key asset to drive local economic development. It is implemented by the Council for Development and Reconstruction (CDR) with funding of the World Bank, French Agency for Development, Italian and French governments. Investments in Sour reached an amount of 12 million Euros in 2003, and 21 million Euros in 2010.

The preliminary architectural, urban and socioeconomic study of the city of Sour, realized in 2002, advocated for the integration into one coherent plan of the city three main components: the old town, the modern extensions as well as the two main archaeological sites. Within the Urban component of the project, 24 projects were suggested to be located in the historical town together with new guidelines for the area.

This area of about 13 ha is characterized by its traditional fabric, mainly dating from Mamelouk and Ottman periods, that keeps certain homogeneity. Its 3600 inhabitants, divided among Muslim and Christian neighborhoods, consist in their majority of original Sour residents, with low income (85% of the working population has a monthly income below 500$).

Among them the fishermen community constitutes around 25% of the old city inhabitants. 62% are tenants, with old rents, while the majority of owners live in Beirut.

The first implementation phase (2004-2009), focused on the East Coast: rehabilitation of the Corniche, several public buildings: “City House” dedicated to social, educative and cultural activities, DGA office, municipal library and a Center of underwater archeology. The second phase (2009-2012) included the rehabilitation of the fishing port area (enlargement and equipment of pontoons, reconstruction of the fishermen’s syndicate building and fish market, rehabilitation of Menshieh Square and facades), the market (Bawabé gateway), the archeological sites and urban roads in the frame of an ambitious mobility plan (cf. Mobility chapter). Coming works are planning to extend the coastline rehabilitation, improve the connections between the port and the Souks and create additional parking facilities.

A main CHUD project outcome resides in the multiplication of private restoration initiatives, both for secondary housing and touristic purposes (restaurants and cafés, Bed & Breakfast) in the Christian part of the old city. This process, added to an important endogenous and exogenous demand (foreign expatriates, summer rent) increases the value of property in this part of the old city.

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7 Pierre el-Khoury, Urban conservation and design studies for Tyre old city, Preliminary report, 2001
Secondly the port area gathers administrative, security and judiciary services due to Sour’s position as the administrative and regional centre of the cada. The location of the prison (and the tribunal) facing Manshieh square, is inadequate. This concentration also results in important traffic congestion at peak hours due to the occupation of parking places by the civil servants (daily migrants) at the expenses of service users and residents. On the other hand, local authorities (municipality and union) do not own their own headquarters and have to rent offices outside of the historical center.

**Cultural and historical heritage**
The qada’ of Sour enjoys a rich historical and cultural heritage standing in the Phoenician, Arab, Roman, Christians and Muslims legacies (Cf. Built, natural and cultural heritage map).

The city of Sour has two exceptional archeological sites, registered by the world heritage sites set by UNESCO since 1984. Al Bass site is surrounded by Al Bass Palestinian refugees’ camp and some high buildings are present around the City site. CHUD project seeks to protect (fencing), organize (infrastructures works and conservation measures) and enhance them (museology, development of touristic trails). The underwater antic harbors, excavated by several Lebanese and French archeological missions since 2004 and accessible from the shore, represent an exceptional asset.\(^8\)

Several villages of the region enjoy the presence of historical sites of cultural and historical value\(^9\) such as crusaders castles (Deir Kifa and Chamaa) and towers (Borj el Chemali, Naqoura), religious sites (churches, mausoleum, Cana Grotto and Jars...) and numerous archeological and historical monuments and remains (funeral caves, sarcophagi and niches, ancient villages, temples, wine and olive press...). Except main religious sites, including Qana grotto under supervision of Tourism and Culture Ministries, most of those sites suffer from neglecting (even vandalism), lack of protection measures and hazardous urbanization or quarries at their immediate vicinity.\(^10\) Some are inaccessible. Protection, rehabilitation and signage are requested in order to turn them into touristic products. Several private initiatives (tourism companies and NGOs) offer religious trails and “fortresses trails” in South Lebanon (including castles in Beaufort, Tebnine and Doubiyyé).

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\(^8\) Ministère de la culture, «L'histoire de Tyr au témoignage de l'archéologie», Actes du séminaire international Tyr 2011, Baal Hors-série VIII.

\(^9\) T-NET assessment

\(^10\) Borj el Chemali tower has been rehabilitated by its private owner. Der Kifa Municipality started to protect the Mar Maroon castle, most religious sites are maintained by communities / Waqfs.
Due to its location and history, the qada’ of Sour owns an exceptional natural heritage that needs to be protected and enhanced.

The 22km long seashore, including the white cliffs of Bayada and Naqoura counts among Lebanon’s outstanding coastal sites. Still preserved from urbanization, the southern part of the Sour coastline offers a quasi-continuous walking path. This applies to the former railway “right of way” as well, which can match a soft moving trail. The old railway tunnel, well preserved, could also offer an alternative to the coastline walking path. Existing public and private beaches, as well as the coastal path are highly frequented by locals and visitors, especially in summer. Some restaurants and other facilities (private marinas) encroach upon the public maritime domain in Sour, Qlailé and Naqoura.

Water-related heritage represents a key element of Sour’s regional identity: the region counts an important number of water springs, wells, mills, cisterns, basins and old quarries, with some presenting a historical and/or religious value. Ras al Ain site, (including 4 springs and aqueduct attributed to Solomon and to the Roman period, a chalcolithic site, remains of a water mill, 75 tombs) is protected by the DGA\textsuperscript{11} but are in bad condition. The presence of the aqueduct remains on densely urbanized public lands, presents an opportunity for an important rehabilitation initiative.

Sour and Naqoura picturesque fishing ports host traditional fishing activities that should be preserved and supported both for their socio-economic important role and strong touristic appeal.

\textsuperscript{11} Decree 15282 of 15/03/57
Picturesque valleys (Litani, Aaziyé) also count among the Qada’s remarkable areas due to their natural, touristic appeal, landscape, and agricultural features. They present an opportunity for the development of ecotourism and sightseeing activities (presence of panoramic view points). This asset is altered by weakly controlled seasonal and/or permanent occupation of the shores by restaurants, and fringe development on the top of the hills.

The NPMPLT recommendations for those areas, including the creation of a regional park of the southern seafront (Parc régional du littoral sud), represent an opportunity to protect and valorize this unique asset. The suggested perimeter might be extended to include the remarkable unspoiled natural areas of the south-East part of the Qada’ (For more analysis, please refer to the green plan section).
Built, Cultural and Natural heritage
Tyre Caza 2014

Built Heritage
- Tyre old city (CHUD)
- Remains
- Urban ensembles

Cultural Heritage (T-NET)
- Towers & fortresses
- Religious sites
- Archeological & historical sites
- Underwater remains

Natural Heritage
- Forests
- Water related heritage
- Cliffs, beaches and natural coast
- Remarkable Valleys
- Quasi continuous path on old railway and aqueduct
- Natural Regional Park (SDATL proposal)
- High concentration of interest
White Plan SWOT

Challenge 1: Protection of agricultural land
The identity of the territory, its landscapes and its economy, are largely linked to the agricultural activity.

However, with an annual urban growth rate of 4%, similar to that observed between 1998 and 2005, it is possible to determine that 20 years are enough to double the surface of the urbanized area of the qada’. As illustrated in this image, this trend threatens the existence of the coastal plain and agricultural area around the villages.

Although the plain seems today almost untouched by the urban sprawl, the actual urban regulation has already approved part of this extension.

The pertinent use of existing planning tools (DGU master plans, land subdivision procedures...) backed by a better local governance and policies at the scale of the qada’ could still however allow for a preservation of a large part of the agricultural land and the permanence of this economic sector.

Challenge 2: Improve control of the urbanization process in terms of density and sustainability
The recent mutations related to the form of urbanization are consuming more and more available space for urban extension. Furthermore, the quality of urban space linked to this extension is deteriorating and threatens the identity of these towns and villages.

Requalification of the public spaces, highlighting the urban heritage, preserving the balance between urban cores, agricultural fields and natural spaces (for example keeping green separation between towns and villages), allow for a more sustainable environment and a preservation of the identity of Sour’s suburbs, and the other municipal territories.

Challenge 3: Develop in a sustainable way the potential of the existing natural and cultural heritage
The preserved seafront of the qada’ including the old city and the harbor of Sour and its exceptional archeological fields represents a major asset with respect to all the other regions of Lebanon. Its preservation and the protection of many other natural and cultural sites are a real challenge since the stakes are high for real estate sector and tourism development in that area.

Besides, the various conflicts that have affected the southern part of the qada' have
paradoxically preserved it from excessive development. This exceptional destiny is an opportunity to develop this area’s potential in a more sustainable manner than the rest of the qada’.

Policies defined at the level of the UMOT could be developed through projects such as a regional park with a binding agreement ("charter") adopted by the different municipalities engaging themselves into sustainable policies and practices can allow for conciliating between tourism development and environmental protection.
<table>
<thead>
<tr>
<th></th>
<th>STRENGTH</th>
<th>WEAKNESS</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
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<tbody>
<tr>
<td><strong>THE CITY OF SOUR AND ITS PLAIN</strong></td>
<td>• Fertile and still preserved agricultural plain</td>
<td>• Chaotic urbanization outside the old city</td>
<td>• A better governance and policies for limiting the depletion of agricultural land, cultural and natural resources</td>
<td>• Urban sprawl in agricultural plain</td>
</tr>
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<td></td>
<td>• Attractive old city with exceptional archeological sites</td>
<td>• Bad traffic conditions</td>
<td>• Improvement in terms of building density and quality of public space</td>
<td>• Loss of the remaining part of the urban cultural heritage by urban densification</td>
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<td></td>
<td>• Natural reserve and exceptional large public beach</td>
<td>• Lack of sustainable public spaces outside the old city</td>
<td>• Promotion of pilot projects illustrating sustainable ways of conciliating economic development and protection of natural and cultural resources</td>
<td>• Loss of population and identity of the Old city</td>
</tr>
<tr>
<td></td>
<td>• Urban compactness</td>
<td>• Land and real estate speculation</td>
<td>• •</td>
<td>• Saturation of the mobility network</td>
</tr>
<tr>
<td></td>
<td>• Remarkable landscape identity (city located between a large agricultural belt and Mediterranean shore)</td>
<td>• •</td>
<td>• •</td>
<td>• •</td>
</tr>
<tr>
<td><strong>THE QADA’S SOUTH AND ITS COAST</strong></td>
<td>• Exceptionally preserved seashore and hinterland</td>
<td>• Border proximity</td>
<td>• Improvement of the frequentation of beaches, cultural and religious sites</td>
<td>• Construction of unsuitable tourism projects</td>
</tr>
<tr>
<td></td>
<td>• Numerous archeological and religious sites of medium importance</td>
<td>• Strong military presence</td>
<td>• Realization of the channel 800 irrigation project</td>
<td>• Loss of population in the existing villages</td>
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<tr>
<td></td>
<td>• •</td>
<td>• Permanent threat on security</td>
<td>• Highlighting the old railway site into a trail linking natural sites and beaches</td>
<td>• Degradation of natural and cultural heritage sites</td>
</tr>
<tr>
<td><strong>THE QADA’S NORTHEASTERN VILLAGES</strong></td>
<td>• Positive local economy and distinctive “savoir-faire” between villages</td>
<td>• High rate of space consumption by low density urban sprawl</td>
<td>• Realization of the channel 800 irrigation project</td>
<td>• Extension of green belt between villages</td>
</tr>
<tr>
<td></td>
<td>• Presence of large productive agricultural domain</td>
<td>• Unequal social and economic development between villages</td>
<td>• Development of summer and weekend tourism</td>
<td>• Urban sprawl on agricultural land</td>
</tr>
<tr>
<td></td>
<td>• •</td>
<td>• Lack of public spaces for youth</td>
<td>• Development of terrace agriculture</td>
<td>• •</td>
</tr>
</tbody>
</table>
MOBILITY PLAN

The regional road system and traffics

Main points

- There is a huge need of a better intra-regional road network in order to avoid a systematic connection by the coastal road. Some transversal routes have to be founded based on some upgraded existing roads or new trunks and bridges.
- The new expressway will deeply improve the regional road system by offering a bypass of the city of Sour for all the trips from and to the north (Saïda and Beirut).

There is a shared observation of the lack of cross road to interconnect the villages of the qada’ of Sour. Most of the regional traffic must go by the coastal road and so there is a heavy pressure on this main axe chiefly when it crosses the Sour city area. A better mesh road network between the villages can rely on the development of the existing rural road network but the problem is that potential improvements are confronted with the very low municipality budgets.

The new expressway is an opportunity for the qada’ of Sour, not only for a better national accessibility but also as a spine for the regional road network. It may help the different regional traffics not to enter in Sour’s city network.

Concerning traffics, the economic activity in the sour region is mainly based on agriculture. Therefore agricultural trips occur very early in the morning to transport the production to the wholesalers of the Sour herbs market or to directly Beirut. Those movements do not impact the general traffic. The daily road traffic is obviously produced by commuters to Sour city center and to the northern cities, Saïda and Beirut. Part of the traffic is also produced by schools and people who are in the obligation to join Sour city services. Sour residents and people from surrounding villages need to access to the souk, the central market and the shops. However, small towns like Jouaya or Qana propose now their own shopping offer.
Tyre Casa road network
The new expressway project

Main points
- An opportunity for the regional mobility.
- Some complementary issues to be dealt with: connections with the existing road system, impacts on the local traffics, impacts on the existing and future urbanization.

The new expressway is an opportunity for the regional trips as well as the national ones. However, this project must take into account the impacts on the existing roads to which it will be connected. The performance of this new infrastructure in serving the Sour region will depend also on the quality of the interchanges and connection trunks.

Three interchanges are planned:

- **A northern one at the crossing with the existing small road of Hammadieh.** This interchange can be considered as the north gate to the city of Sour. It can also serve as a connecting point from the northern part of the qada’ including Abbassieh and Jouaya. However, the current road serving this future interchange, as connecting trunk, won’t be able to support the new traffic; this problem must be taken into consideration.

- **A middle one at the crossing with Borj Ech Chemali Road.** This interchange is problematic for many reasons. First, the road to Jouaya and Bint Jbeil is often congested when it crosses the Borj Ech Chemali town mainly by the fact that this urban area is very dense. There is an antagonism between the needs of the regional traffics and the local commercial and craft activities. Without any complementary road equipment, the situation will be worse with the new expressway because of adding trips. Secondly, locating an interchange in that area will have a strong impact on the urbanization and on the local life and commercial activity.

- **A southern one at the end of the expressway, at the Qana crossroad place.** This interchange can be considered as the south gate to the city of Sour and the connecting point from the southern part of the qada’ including Qana and Naqoura. This interchange should be very well designed to allow the local traffic and connections as well as the expressway entrances. The road design must take into account the transition of speeds between an expressway and an ordinary highway.
ELABORATION OF A STRATEGIC SUSTAINABLE REGIONAL DEVELOPMENT PLAN (SSRDP) FOR THE CAZA OF TYRE:
STRATEGY DOCUMENT
February 2015

Noth Interchange
- The “North Tyre Gate”
- Connecting point from the northern part of the qada’ including Abbassieh and Jouaya
- Question of the upgrade of the local roads

Middle Interchange
- Probably bad impacts on the current Borj Ech Chemali road: Traffics, local activities and urban quality
- Questionning his opportunity

South Interchange
- The “South Tyre Gate”
- End of the expressway
- Connecting point from the southern part of the qada’ including Qana and Naqoura
- Question of speed transition and superposition, at the crossroad, of regional and local traffics
Sour’s Urban Road Network

Main points
- Traffic jams occur during the peak hour mostly at the main urban crossroads, especially El Bass one.
- The whole local street network is almost entirely dedicated for the cars, forgetting public transport, pedestrians and bikes (soft traffics).
- Car parking issues are equally due to lack of parking lots and lack of parking policies.

The traffic jams are mostly due to dysfunctions of the main urban crossroads. The case of El Bass crossroad is particularly evident. This place concentrates many activities and functions: city gate, commercial place, station for buses and taxis. At the peak hour, the flow capacity of the El Bass roundabout falls down drastically and this causes congestion with long car queues.

The new expressway will certainly reduce the traffic pressure on the El Bass crossroad as well as on the whole coastal road at the level of Sour but things should be done also concerning the road design of the main Sour urban arterial roads and crossroads as well as concerning the bus and taxi management. In general, the whole city road network needs to be improved in terms of quality, taking care, for example, of pedestrians and commercial activities.

The inner street network of Sour can be hierarchized at three levels:

- The main accesses, for example: Hafez El Assad street, Senegal Street,
- The streets of the modern town, for example: AbouDeib street, Al Kouds street,
- The alleys of the old city.

For each of them, different solutions should be found out for a better urban organization and efficiency.

Car parking remains an issue despite the improvements due to the CHUD project. Car parking issues are equally due to lack of parking lots, in the city center as well as in the peripheral places, and lack of parking policies. Parking solutions and policies must be thought in a largest manner including also traffic management, urban public transport policies and soft traffic promotion.

There are many lacks in the public transport system in the region of Sour, whether internal to the city, to get there from the villages or go north to Saida and Beirut.

At the level of the Casa, the absence of regular shuttle services requires people to use their private car or informal transport systems. There is no bus-stop in the villages, and drop-off is directly done on request.

Gaps are also important in the system of internal public transport to the city of Sour. In the absence of a public transport service organized by the community, the informal transport alone does not meet the demand. This informal transport also contributes to road congestion because vans and taxis-services park along the streets. The passenger connections between local, regional and national services is done around the crossroad of El Bass, largely contributing to its congestion.
The Port in the Urban Project

Main points
- A fishing port part of the cultural heritage, to be preserved and well integrated.
- A commercial port, with a very low activity and no perspective of development.
- A project of marina, in place of the commercial port, seems to be interesting at long term for the city attractiveness and compatible with the preservation of the fishing port as well as the development of urban heritage of the old City.

The fishing port of Sour is part of the cultural heritage of the city. It now has 185 boats and 600 to 700 fishermen work there. Fishermen are Christians and Muslims and this traditional activity contributes significantly to inter-community dialogue. The fishing port has been taken in account in the CHUD project.

The commercial port of Sour is composed of a single dock with a quay of about 120 meters long. It proposes also a logistic area of about 0.4 ha and administrative buildings. His current activity is about one ship per month with traffic of used cars coming from Germany by Cyprus. It delivers about 4.500 cars a year. This activity is decreasing.

The current port of Sour does not have any potential for development as a commercial port: it is too small to accommodate traffic and modern boats, the constraints of underwater archeology don’t allow extension of the sea and finally its location in the heart of the old town heavily constrains its land access. Sharing this, the port authority has stopped looking to increase its activities and look for a new market.

There is a project to turn the current commercial port into a marina. This project has been conducted by a government decree and led to a feasibility study (Sogreha and Dar al Handasa January 2008). The study proposes the creation of a new marina at the place of the current dock, with an extension of the wharf.
embarkment separating the basin of the entrance channel to the fishing port. The solution adopted was budgeted at $15 million investment.

Obviously, the new marina will be dedicated to sailing and yachting and will not be able to receive cruise vessels because of the dimensions of the port and the difficulties of access from the sea. The port of Sour will not become a tourist port with big flow of tourists. The solution of a marina is nevertheless very interesting: it seems to be compatible with the preservation of the fishing port and can also help the development of urban heritage of the old City. (However there are no potential users at short term for a marina).

However, this project should integrate some complements concerning the restructuring of the quays and of existing buildings. It should also be placed in relationship with the surrounding public space and with the old town.
## Mobility Plan SWOT

### SWOT Analysis Table – Mobility Plan

<table>
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<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
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<tbody>
<tr>
<td><strong>National and regional accessibility</strong></td>
<td>• The National Coastal road, main link to the north and Beirut  &lt;br/&gt; • An existing network of regional roads providing quite good connections from Tyr to the different villages and towns  &lt;br/&gt; • The new expressway project</td>
<td>• A lack of regional transversal roads, so most of routes need to go by the coastal road  &lt;br/&gt; • Most of the regional and national traffics go through the Sour’s urban network</td>
<td>• The new expressway will deeply improve the regional road system and the connection to the north</td>
</tr>
<tr>
<td><strong>Sour’s urban network</strong></td>
<td>• A very interesting network of narrow streets in the old city  &lt;br/&gt; • A modern network of avenues  &lt;br/&gt; • Some good recent road developments</td>
<td>• Traffic jams during the peak hour especially at the main urban crossroads.  &lt;br/&gt; • A street network entirely dedicated for the cars, forgetting public transport and soft traffics.  &lt;br/&gt; • Car parking issues</td>
<td>• Commercial and touristic considerations for the old city  &lt;br/&gt; • New localization for urban and administrative services</td>
</tr>
<tr>
<td><strong>Public transport system</strong></td>
<td>• Many offers: coaches, vans, taxi services</td>
<td>• Most of services are informal  &lt;br/&gt; • Bad quality of services: infrastructures (lack of shelters), vehicles, timetables, etc</td>
<td>• The perspective of a main bus station (hub) offering good connections between national, regional and local services</td>
</tr>
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<td></td>
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<td></td>
<td>• The question of a public authority in capacity to manage the different services as well as the hub</td>
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<td>• How to integrate informal drivers</td>
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The question of a public authority in capacity to manage traffic and parking issues and as well to promote alternatives modes of transport.
GREEN PLAN

Natural areas extend over 70% of the qada’ of Sour including forests, scrubland, river banks and estuary, beaches and agricultural fields. Not surprisingly, the National Land Use Master Plan of the Lebanese Territories described Sour as a region with remarkable natural and agricultural attributes and with one of Lebanon’s most productive agricultural plains.

The qada’ of Sour has an exceptional beach stretch (about 30 km long) and offers a traditional agricultural system in its coastal zone. The beach stretch harbors three important ecological sites in terms of flora, fauna, birds, micro-organisms and habitats (nesting sites for marine turtles):
1. Tyre Coast Nature Reserve
2. Mhaylib beach
3. Qoleileh-Mansouri beach

The qada’ also offers remarkable natural landscapes including sand beaches, sand dunes, river beds, plains, estuaries and cliffs.

- **Sand beaches**: 44 per cent of Sour’s coastline is composed of sand beaches, a recreational treasure and priority for conservation.

- **Sand dunes**: created by natural wind and marine currents. Coastal sand dunes are of great ecological importance and provide a habitat for several special plants. Dunes are mainly located in the core area of the Tyre Coast Nature Reserve.
o **River beds**: are dynamic ecosystems that result from seasonal water activity. Qasmieh River provides the qada’ with wide (up to 500 m) beds used for agriculture and recreation services.

o **Plains**: One of Lebanon’s largest coastal and fertile plains (42 km²) is located in Sour.

o **Cliff**: located in Ras El Bayada (Iskandarouna). The over-hanging cliff consists of limestone rock produced by basal marine erosion.

**Anthropogenic pressure and urban sprawl are degrading natural landscapes and ecosystems.**

**Threats to the Environment**

**Solid Waste and Littering**

- Lack of solid waste management systems and widespread dumping practices have resulted in 52 waste yards across the qada’.
- Littering is also widespread. Plastic bags litter roads, agricultural fields and residential communities. Bulky items such as tires, appliances, electronics and furniture are dumped in isolated areas.
- The Ain Baal Facility (initially funded by USAID in 2005 and then upgraded by the EU in 2009) receives and treats municipal waste from 19 municipalities and four villages. The remaining 44 municipalities practice open dumping and burning.

- Solid waste infrastructure (bins, containers, trucks, etc.) are insufficient and in decay. Their physical condition is poor and their number and distribution is inadequate. Large waste containers are often replaced by 200liter waste containers. The current number of compactor trucks in operation (six) is inadequate to service all the Municipalities in the qada’. Consequently, the Ain Baal solid waste facility is underutilized. The plant was designed to treat 150t/d but currently it operates at less-than-full capacity principally due to technical inefficiencies (bag opening, sorting, polishing).

**Urban pressure/sprawl and coastline developments**

There is a high demand for coastal lands. The absence of sound and sustainable urban regulation may in the future lead to the uncontrolled development of the coastal zone (e.g., resorts, breakwaters, and oversized marinas). The qada’ of Sour currently has four marinas (port of Sour, fishermen harbor, Sour Resthouse Touristic Complex and Lahed port). There has been no new development in recent years. War and instability in South Lebanon have so far discouraged large scale investments. Security and stability in South Lebanon will in the future inevitably attract new developments in the coastal zone. If unplanned or unregulated, such development will reduce public access to the public maritime domain, and may cause coastal degradation and soil erosion.
Sand Extraction
The beaches of Sour are famed for their white sand. Marine sand dredging is widespread and the resulting sand is used in the construction sector for backfilling and/or beach replenishment. Overall, Sour has suffered from illegal sand mining for decades. Recently, the Municipality of Sour objected to a request by Sour’s famed “Resthouse” (a publicly-owned resort that is rented out to operators) to the Ministry of Public Works and Transport to dredge accumulated sand inside the marina.

Refugee Settlements
Palestinian refugees live in three formal camps (Al Bass, Burj El Chemali, Al Rashidieh) and three informal settlements (Jall El Bahr, Maashouk, Shabriha) within the boundaries of the qada’. Al Rashidiyeh and Jall El Bahr have encroached on natural areas (beach) while the others have consumed lands that should be protected for their environmental, agricultural and/or archaeological heritage. In the absence of basic infrastructure and services including sewer systems and proper solid waste management practices, those camps may cause potentially significant and irreversible impacts on Sour’s natural environment.

Earthquakes
Sour is vulnerable to earthquakes. According to the First Deliverable (D1) for Mission 1 under Component II - Strategic Environmental Assessment (SEA) and to the geology and faults map, the qada’ is transected by many faults that pose significant earthquake risk.

Between 2001 and 2010, the National Centre for Geophysical Research recorded 29 earthquakes equal to or higher than 3.5 Magnitude on Richter’s scale; of those, 24 earthquakes were recorded in 2008, one of the most tectonically active years.
The initiative of responding to emergency and disaster risk management in the qada' of Sour

The Union of Tyre Municipalities (UMOT) initiated in July 2012 with the collaboration of Swiss Agency for Development and Cooperation a program for Disaster Risk Management. The program aimed to develop a rapid response and emergency management plan for the qada' of Sour. Its main objectives are:

- Prepare UMOT to respond to disasters and to provide assistance to the affected people
- Empower communities and vulnerable groups in high risk areas with resources and capacities to be better prepared for disasters and to respond and recover from disasters
- Develop a reliable and integrated multi-sector knowledge, information, communication and coordination system for disaster risk management
## Green Plan SWOT

### SWOT Analysis Table – Green Plan

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional beach stretch (ca. 30 km)</td>
<td>“Master Plan of South Coastal Areas” poorly enforced</td>
<td>Expand and improve the operation of the Ain Baal solid waste facility; opportunities for replication?</td>
<td>Lack of solid waste management and planning and widespread dumping and littering</td>
</tr>
<tr>
<td>Distinct natural landscapes</td>
<td>The absence of preventive measures to protect coastal beach</td>
<td>Conservation of Sour’s green belt and agricultural production</td>
<td>Linear/ribbon construction in coastal zone and in agricultural lands</td>
</tr>
<tr>
<td>Coastal Nature Reserve since 1998 (Law no. 708)</td>
<td>Lack of environmental / tourism and entertainment services</td>
<td>Potential to transform Sour’s littoral and beaches into a tourism gateway/attraction (e.g., coastal trail along railway track)</td>
<td>Tectonic/earthquake risk</td>
</tr>
<tr>
<td>Large (ca. 42 km²) and fertile coastal plain</td>
<td>Lack of environmental awareness and responsibility</td>
<td>“South Coastal Regional Park” (recommended by the National Land Use Master Plan) was endorsed by the COM (Decree No. 2366/2009); Sour can learn from Higher Metn Regional Parc (Charte du territoire)</td>
<td>Illegal quarrying</td>
</tr>
<tr>
<td>Extensive shrubland and garrigue cover (ca. 124 km²)</td>
<td></td>
<td>Classify Al Bayada Cliff as a natural site under the protection of the Ministry of Environment</td>
<td>Further encroachment of refugee settlements on natural/cultural areas/heritage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Likelihood of future encroachments on the public maritime domain in case of peace and stability in Lebanon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Oil spill and pollution from future exploration and drilling works in Lebanese territorial waters.</td>
</tr>
</tbody>
</table>
BLUE PLAN

Water is one of Sour’s most precious resources. While significant investments are being made to treat and manage water (surface and underground), very little is done to preserve it insofar as pollution prevention. The most important water source in the qada’ of Sour is Ras El Ain Spring, which have an estimated water flow of 16 m³/s and the related reservoirs. There are 7 reservoirs in Ras El Ain:

- 2 used to irrigate the southern part of Sour coastal plains
- 1 used for potable water distribution by Sour Water Treatment Plant
- 4 located near Rachidiye Palestinian Camp and not used.

Water for Irrigation Use

- The agriculture sector consumes about 74% of water resources in the qada’ of Sour.
- Irrigated agriculture covers 1,916 ha.

<table>
<thead>
<tr>
<th>Surface Water</th>
<th>Underground Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litani River Channel</td>
<td>Ras El Ain Spring and Reservoirs</td>
</tr>
<tr>
<td>El Qasmieh Permanent River</td>
<td></td>
</tr>
<tr>
<td>3 seasonal water streams Wadi Abou Zeble, Wadi El Izziy and Wadi Marj Hine</td>
<td>El Rachidiye Spring</td>
</tr>
<tr>
<td></td>
<td>Ain Abou Abdallah</td>
</tr>
<tr>
<td></td>
<td>Wadi Jilo Wells</td>
</tr>
<tr>
<td></td>
<td>Yanouh Wells</td>
</tr>
</tbody>
</table>

- The main irrigation scheme in the qada’ is the Qasmieh-Ras El Ain (QRA) - also known as Litani River Channel - an open irrigation channel executed in 1942 and rehabilitated in 1999. The Litani River Authority operates the QRA. Two main water sources nourish the QRA irrigation scheme: Litani River and Ras El Ain spring. The coastal plains of Sour are irrigated by Phase 1 of the QRA scheme:
  - Qasmieh sector consists of two channels one in Saida (28 km length) and another one in Sour (8 km length).
  - Ras El Ain sector consists of two channels one to the north (4 km length) and another one to the south (7 km length).

QRA irrigation channel, Ain Abou Abdallah

- The National Water Sector Strategy (2010) recognizes two planned irrigation projects in the qada’ of Sour: The QRA Phase 2 will irrigate 2,100 ha and Conveyor 800 will irrigate 14,700 ha.

Water for Domestic Use

- Tyre Water Treatment Plant (TWTP) distributes water for domestic use in the qada’ of Sour. The plant, which is operated by the South Water and Wastewater Establishment, receives water from the nearby reservoirs and spring of Ras El Ain.

- The water distribution network covers approximately the entire territory of the qada’. It is composed of distribution pipes, pumping stations and local reservoirs for water distribution to villages.
- At the height of the summer season, water rationing becomes inevitable and villages often must rely on private wells to satisfy water demand.

Pumping water from Yanouh Wells at Wadi Jilo Pumping Station

Sand filter, Tyre Water Treatment Plant

- The National Water Sector Strategy (2010) has proposed several projects to increase water supply in the qada’ for domestic and industrial end-users:
  - Khardali Dam (120 MCM)
  - Kfarsir Dam (15 MCM)
  - Chohour hilllake (0.5 MCM).
Wastewater Treatment

- Currently, only six villages (Mhaiylib, Aabassieh, Sour, Borj El Chemali, Ain Baal, Maarake and Batoulay) are serviced by wastewater collection networks. Users in other villages collect wastewater in septic tanks (often poorly constructed).

1. The European Investment Bank funded the construction of wastewater networks (US$ 6.5 million) and a Wastewater Treatment Plant (WWTP) for domestic/municipal wastewater. Located in Aabassieh, this €31 million WWTP will serve an estimated 300,000 people. The corresponding wastewater networks are under construction.

2. WWTP construction is managed by the Council for Development and Reconstruction (CDR).13

- The plant will treat sewage to the secondary level using UV technology for disinfection. It will be built in three phases:
  - Phase I: 36,000 m³/day
  - Phase II: 72,000 m³/day
  - Phase III: 117,000 m³/day
- The sewer network and the 500m sea outfall are currently under construction.
- CDR is now building Phase I and the WWTP is expected to come inline in 2016.

13 The contractor is OTV. The design consultant is Cabinet Merlin/RELK&P. The civil contractor is Danach (sub-contracted by OTV).

Threats to Water

Human activities and agricultural practices exert strong pressures on both the quantity and quality of water in Sour. Key threats are as follow:

Pollution

Wastewater generation from households and industries and leachate produced from open dumps are polluting water sources. Most of open dumps and septic tanks are located in permeable limestone formations (Cenomanien), which are vulnerable to water contamination. Water can infiltrate easily from surface to the underground. The evacuation of septic tanks is also a source of pollution on surface water. Pumped sewage is illegally discharged in water streams.

Coastal Flooding

Coastal plains are vulnerable to floods during winter and high rainfall events. The most exposed area is the northern part of the qada’ where the natural course of two natural seasonal water streams (Wadi Al Izzaie, Wadi Abou Zeble) was modified by excessive and unplanned urbanization. In winter, the streams swell causing floodwater to inundate storage and ground levels of nearby buildings. Flooding and inundation is exacerbated by channels blocked due to the accumulation of bulky waste, tires, and garbage. Flooding degrades coastal ecosystems and damages infrastructure.
Blue Plan SWOT

SWOT Analysis Table – Blue Plan

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>OPPORTUNITIES</th>
<th>THREATS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Surface water resources (1 perennial river and 3 seasonal streams)</td>
<td>• Incomplete record and monitoring of water resources</td>
<td>• Reduce underground water contamination from wastewater discharge in septic tanks</td>
<td>• Groundwater pollution from wastewater</td>
</tr>
<tr>
<td>• Significant underground water resources (mainly Ras El Ain)</td>
<td>• Extensive reliance on septic tanks in non-sewered communities (73% according to CAS 2004)</td>
<td>• Treated Sewage Effluent (TSE) reuse for irrigation (up to 30,000 m³/year)</td>
<td>• Coastal flooding caused by the blockage of natural streams</td>
</tr>
<tr>
<td>• Qasmieh-Ras El Ain Phase 1 irrigation scheme completed (5,000 ha)</td>
<td></td>
<td>• Irrigation schemes (Canal 800 and Qasmieh-Ras El Ain Phase 2) and dams (Khardali, Kfarsir, Chohour) listed in the National Water Sector Strategy</td>
<td>• Climate change (reduced and/or erratic rainfall, drought)</td>
</tr>
<tr>
<td>• Water distribution network covers at least 62 villages in the qada' (MoEW, 2008)</td>
<td></td>
<td>• Hill-lakes to store surface water on Wadi El Izziye</td>
<td>• Demographic growth and increased pressure on water resources</td>
</tr>
<tr>
<td>• Aabbassieh WWTP (2nd treatment level) to serve up to 300,000 residents (under construction)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SOCIAL COHESION PLAN

Demographics

Population growing faster than national rate
In 2010, the qada’ of Sour was home to around 260,000 people, in comparison to only around 200,000 in 1997. This entails an average annual population growth rate of 2%, compared to only around 1% for Lebanon in general.

The faster population growth in the qada’ is mainly due to differences in fertility rates between Beirut and Mount Lebanon on the one hand and the rest of the country on the other. It may also be related to the Israeli withdrawal of 2000 and degrading security situation in Beirut.

Differentials in population growth between Greater Sour and the remainder of the qada’
The greater Sour agglomeration continues to attract population movements from the rural areas of the qada’. Indeed, it is estimated that Greater Sour accounts for around 45% of the total population of the qada’. This rapid densification has serious repercussions in terms of increased demand for infrastructure and services.

Significant migration with mixed effects
The qada’ has witnessed several waves of internal and external migration spurred by both security and economic reasons. Internal migration within the qada’ has caused a rapid urbanization of the greater Sour agglomeration, as a result of population movements from the southern parts of the qada’ and neighboring qada’s (Bint Jbeil) toward the city of Sour.

External migration is a phenomenon that affects most of the qada’, with many of its towns reporting immigrants in Africa, Germany, the United States, and the Gulf. The effects of this massive migration are multifaceted and mixed. Positive effects include a continuing connection between the qada’s residents and its immigrants, who did not cut all ties to their native towns but have built vacation homes, sending remittances to support their relatives, and exhibiting an eagerness to participate in their native towns’ development.

On the other hand, in the absence of a clear development strategy and solid profitable projects that may attract immigrant investment, immigration funds have flowed almost exclusively toward real estate development. The result has been a speculative bubble that has raised land prices, leading many land owners toward reassigning parcels away from agriculture toward real estate development.

Share of immigrants out of permanent residents in select towns of the qada’ of Sour (percent)

Source: Field work questionnaires (2013)

Palestinian population
Around 60,000 Palestinian refugees reside in three camps and three informal gatherings.

14 The 2010 population was estimated based on the registered population according to the Ministry of Interior and Municipalities (MoIM).
within the boundaries of the Greater Sour agglomeration. They represent 23% of the total population of the qada’, one of the highest shares in the country.

Interestingly, around 30% of Burj El Shemali camp residents were granted the Lebanese nationality because they originate from the seven villages which were included within the scope of the naturalization decree of 199416.

Significant migration is noted among Palestinian refugees targeting countries such as Germany, Denmark, Sweden, England, Belgium, as well as Gulf countries.

Distribution of Palestinian population by camp/gathering (2013)

<table>
<thead>
<tr>
<th>Camp</th>
<th>Number of households</th>
<th>Population size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Bass</td>
<td>1200</td>
<td>10000</td>
</tr>
<tr>
<td>Buj El Chemali</td>
<td>3920</td>
<td>19600</td>
</tr>
<tr>
<td>Al Rashidieh</td>
<td>4200</td>
<td>21000</td>
</tr>
<tr>
<td>Jall El Bahr</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Maashouk</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>Shabriha</td>
<td>220</td>
<td>3500</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>56900</td>
</tr>
</tbody>
</table>

Influx of Syrian refugees places additional stress on infrastructure and services
Around 27,000 Syrian refugees reside in the qada’ of Sour17, although some estimates suggest an influx of around 55,000. This sudden population surge that represents around 10% of current residents inevitably places an added strain on public services which are already stressed and deficient. Based on national evidence18, the highest impact of the refugee crisis as rated by the host community falls on electricity, cost of goods and services (both rated 2/2), education, solid waste, and sanitation (rated 1.88/2).

Expectations for the next decade
If the same population growth rate is maintained, the population of the qada’ is expected to reach 316,000 in 2020. This represents an addition of around 5,500 residents per year, around half of whom will live in Greater Sour.

16 These are counted as part of the camp’s total residents.

Housing

Supply and demand of housing units

Despite considerable difficulties which rendered a comparison between the number of residential units in 1997 and 2004 impossible in most cases\(^1\), the analysis clearly showed an increase in the number of primary residential units across the qada’ in general. This increase is explained by the liberation of 2000 which led to the return of many families to their villages of origin, in addition to the tendency of many households which tended to share a residential unit pre-2000 to separate into individual homes following the Israeli withdrawal. Moreover, several housing projects funded by awqaf and targeting households with limited income were noted in the qada’. As of 2004, around 6% of total housing units were secondary and 13% were vacant. It is expected that real estate speculation may have increased the vacancy rates especially in the Greater Sour area. Finally, the size distribution in 2004 showed that around 70% of housing units in the qada’ were smaller than 150 m\(^2\) in size\(^2\).

Rapidly increasing real estate prices

The rush of immigrant funds toward real estate investment has led to a hike in real estate prices across the qada’. Price increases are especially sharp in Greater Sour.

Indeed, the most recent survey undertaken in the second wave evaluation of the CHUD project showed a 68% increase in the sale price of housing units in downtown Sour over a four-year span. However, rental prices witnessed a much shyer increase (11%) in the same time span\(^3\). A comparison of the share of rental/owned housing units shows a share of 8% in Sour, compared to 13% in Saida, and 6% in Nabatiyeh\(^2\), possibly reflecting the differences in urbanization among the three qada’s.

Inadequate housing conditions in Palestinian camps and informal Lebanese neighborhoods

Construction in Palestinian camps currently takes place following the issuance of ‘renovation permits’ by the Lebanese army. These permits are often used for construction and not only for renovation. This uncontrolled and chaotic construction has further undermined the quality of housing and burdened the already weak infrastructure of the camps. Starting in 2010, the UNRWA launched a project to renovate dwellings with corrugated roofing in Palestinian camps. The first phase targeted 735 units in all the camps. The project excludes gatherings in which housing quality tends to be even worse than in camps.

Lebanese informal neighborhoods such as masaken suffer from the same deteriorating housing conditions as Palestinian refugees.

A high share of informal housing in the qada’

Based on the sample of municipalities from which information was successfully collected (refer to the introduction), it appears that informal construction is not uncommon in the qada’. Indeed, the most prevalent type consists of unlicensed construction on land owned by the concerned parties (e.g. Maarake, Bazouriye, Dhayra). In many cases, such illegal construction is due to unresolved inheritance issues within a certain family (e.g. Kneisseh). Finally, construction on public lands may reach 20-30% of total housing units in some cases (e.g. Qlaile, Borj Rahhal, and Naqoura).

---

\(^1\) The reason for these difficulties lies in the fact that the official census of buildings and establishments of 2004 contains a very high share of undetermined units, which prevents a comparison of the number of units by type (primary, secondary, etc.) between the two waves of 1997 and 2004. The comparison was therefore limited to CFs in which the share of undetermined units is 20% or less.

\(^2\) Ibid.


Major Services

Relatively low educational achievement
The qada’ scores relatively low on educational achievement. Thus, illiteracy rates are relatively high, reaching 17% (compared to 13% nationally), with higher rates for women (23% versus 17% nationally). Moreover, only around 7% of the qada’s population have a university degree, compared to a 12% national average.

A significant reliance on public schools
There is a total of 50,680 school students in the qada’, half of whom attend private schools, while 39% attend public schools, and 11% UNRWA schools. This shows a relatively high reliance on public schools in the qada’, with 39% of Sour’s students attending public schools versus a 29% share nationally. Indeed, Sour has the seventh highest public school attendance rate in Lebanon.

Public schools students are served by 72 public schools, including nine primary schools, 49 intermediate schools, and 14 secondary schools. As for school size, Sour seems to house relatively large schools. Indeed, only 19% of its schools enrolled less than 100 students (compared to a 27% national average), whereas 14% of its schools enrolled 500 students or more (compared to a 7% national average). Finally, the student/class ratio increased slightly from 13 in 1997 to 15.8 in 2011, a ratio that remains relatively low compared to private school standards and indicates a sufficient total supply of schools.

Sufficient access to schools but deficient quality
The school distribution shows an adequate presence of schools across all cycles. Indeed, a quick look at the distribution of the two cycles that are most vulnerable to shortages (kindergarten and secondary) shows a
significantly higher concentration of schools in the northern part of the qada', concomitant to the higher concentration of residents.

Moreover, based on the completed questionnaires and the interviews conducted in several municipalities, physical access to education only becomes a problem at the university level, with many stakeholders complaining of the remote distance from regional universities. However, as is the case across the country, poverty makes it difficult for many young people to enroll, especially in the secondary cycle, as their enrolment would cost their families not only the registration fees but also their financial contribution when they forego gainful employment in order to pursue their education.

Unlike access, quality of education was raised as an issue by most stakeholders who complained of the low quality of educational services as a result of ill-trained teachers and ill-equipped schools. This problem is in no way unique to the qada' of Sour but is rather shared by most underprivileged public schools which lack the necessary equipment to effectively implement the new curricula.

**Almost inexistent recreational facilities**
The qada’ suffers from a semi-unanimous absence of leisure and sports facilities. Thus, few of the qada's villages have public libraries, public parks, or cultural centers. Even the agglomeration of Sour lacks cultural facilities that are attractive to its youth such as a movie theater, vibrant cultural clubs and event venues, a large public library, a public park, etc.

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**Palestinian refugees’ access to education**
As for all services, access to education differs significantly between official camps and informal gatherings. Thus, Jal El Bahr children attend the schools of Al Bass camp and have to cross the dangerous Eastern highway in order to reach that camp.

<table>
<thead>
<tr>
<th>Camp/gathering</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Bass</td>
<td>3 schools (all levels)+1 technical college+1 sewing school</td>
</tr>
<tr>
<td>Borj El Shemali</td>
<td>3 schools (2 in-camp and 1 outside)</td>
</tr>
<tr>
<td>Al Rashidieh</td>
<td>3 schools</td>
</tr>
<tr>
<td>Jall El Bahr</td>
<td>Al Bass schools</td>
</tr>
<tr>
<td>Maashouk</td>
<td>1 school</td>
</tr>
<tr>
<td>Shabriha</td>
<td>1 elementary school</td>
</tr>
</tbody>
</table>
Distribution of Kindergarten and Secondary schools across the qada'
Deficient access to primary health care facilities

Sour counts a sufficient number of hospital beds to cover the needs of the qada'. Moreover, a new 55-bed public hospital will be built to serve the city (works set to begin in November 2015). However, stakeholder interviews revealed that many of the qada’s residents seek healthcare services in Saida and Beirut when they can afford to do so.

Unlike in-patient services, to which access is ensured despite quality complaints, outpatient services seem to witness a serious shortage across most of the qada’.

Indeed, the small number of available primary health care facilities, both public and private, leaves many villages without practical access to basic health services. The situation is exacerbated in the south of the qada’ with only two public social development centers in Naqoura and Zebqine.

Moreover, both public and private healthcare centers are only open until 2 pm and are unable to handle all medical and surgical emergencies. In other words, any urgent cases that occur after hours (e.g. heart attack, stroke, car accident) across the qada’ can only be addressed in Sour. Finally, there is a shortage of civil defense centers to transport emergencies to Sour.

Health access of Palestinian refugees

There is a clear difference in the availability of health services between formal camps which are serviced by UNRWA and Red Crescent clinics and informal camps which are served by mobile clinics which visit twice per week and offer minimal service (no medicine) and no obstetrics/gynecology services. Moreover, all refugees suffer from a lack of services for long term illnesses.
Social Cohesion SWOT

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>THREATS</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strong sense of belonging to villages and region</td>
<td>• High concentration of population in Greater Sour</td>
<td>• Sudden influx of Syrian refugees burdening the infrastructure</td>
<td>• Presence of public lands</td>
</tr>
<tr>
<td>• Strong ties to immigrants</td>
<td>• Deserted southern part of the qada’</td>
<td>• Sharp increase in property prices</td>
<td>• Presence of natural habitats</td>
</tr>
<tr>
<td>• Sufficient access to schools</td>
<td>• High share of informal construction</td>
<td>• Geopolitical threat in the southern part of the qada’</td>
<td>• Presence of cultural heritage</td>
</tr>
<tr>
<td>• High share of youth</td>
<td>• Inadequate housing conditions in Palestinian gatherings and informal Lebanese neighborhoods</td>
<td>• Underemployment of Palestinian and Lebanese labor force</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Insufficient school equipment &amp; low quality of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Almost inexistent recreational facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Insufficient &amp; deficient PHC facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Relatively weak emergency services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Low quality of in-patient services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ECONOMIC DEVELOPMENT PLAN

Economy of the Qada’

The three primary pillars of the qada’s economy are agriculture, trade, and immigrant remittances.

An overwhelming preponderance of low added value micro enterprises

In line with the trend across the country, almost all of the qada’s 9000 establishments employ less than 5 workers (97%).

There has been an exacerbation of this trend since 1997. Indeed, while the total number of enterprises has increased from 7567 in 1997, the number of establishments that employ 5 workers or more has decreased, with the decrease affecting the industrial sector to a significant extent, followed by the trade sector.

Establishments by size in the qada’ of Sour (1997-2004)

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 workers</td>
<td>6945</td>
<td>8735</td>
</tr>
<tr>
<td>5 workers or more</td>
<td>338</td>
<td>241</td>
</tr>
<tr>
<td>Other</td>
<td>284</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>7567</td>
<td>9035</td>
</tr>
</tbody>
</table>

A certain concentration of microenterprises is an essential component of any healthy economy, as such enterprises constitute an avenue of social mobility for low income residents.

However, micro enterprises tend to be informal (>85% are not registered), characterized by low business-to-business exchange, generate a low added value, and typically create a small number of low skill, low wage, informal job opportunities.

An increasing centralization of economic activity

The distribution of enterprises employing 10 or more employees shows a heavy concentration of such enterprises in the greater Sour region, with very few manufacturing enterprises located in north Eastern and eastern parts of the qada’.

Distribution of enterprises by size and sector in the qada’ of Sour

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28 The data of the 2004 census of buildings and establishments was difficult to aggregate due to uncertainty about the exact number of establishments by size and sub-sector.
30 Ibid.
31 All the quantitative analysis regarding the number of establishments, their size, and their sectoral distribution is limited to the census of establishments of 2004, the latest such official census to have been implemented by the Central Administration for Statistics in Lebanon.
32 CAS. 2004. Ibid.
This trend to centralization seems to have increased across time. A comparison of the ratio of the number of establishments to population size between the two establishment censuses of 1997 and 2004 shows an increasing centralization of economic activity toward the greater Sour agglomeration and the two main axes that stem from the city of Sour. Indeed, the number of establishments per 100 population has decreased in southern towns such as Aaziye, Zebqine, and Jbal El Botm, central towns such as Jouaya and Quadi Jilo, and even northern towns such as Maaroub and Deir Kifa.

A lack of economic diversity
Around 60% of the economic establishments in the qada’ are trade enterprises, out of which are 1093 car showrooms (12%). Manufacturing enterprises represent only 9% of the total in addition to 468 agrofood establishments (5%). A distribution that is so heavily skewed toward trade enterprises is associated with a low economic added value and low demand for skilled labor, especially since the great majority of these enterprises sell final consumption goods, with minimal business-to-business exchange.

There is therefore a need for increasing the share of manufacturing enterprises, especially in the agrofood subsector in view of the preponderant role of agriculture in the economy of the qada’.

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Palestinian Labor
In camps located among agricultural lands (e.g. Rashidieh), the majority of Palestinian refugees work in crop farming, while in camps located close to the main highway (e.g. Al Bass), a majority works as taxi/bus drivers as well as in car repairs and other technical jobs (carpentry, plumbing, etc.). In Jal El Bahr, the poorest and most precarious Palestinian gathering, most men work as fishermen.

Underemployment is high with most being daily workers who end up working only 10-15 days per month. A low employment rate is registered among women who, when employed, tend to work as teachers (UNRWA schools), in NGOs, or as shop assistants.

Young adolescents are employed in technical jobs or recruited and trained by Palestinian factions.

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**Agriculture**

Agriculture is the cornerstone of the qada’s economy. Indeed, the qada’ is endowed with one of the largest and most fertile coastal plains in the country, a fact that seems to be fully appreciated by the local population which continues to consider agriculture as a valuable and lucrative investment. Thus, the analysis of land use maps has shown an expansion of agricultural lands in the qada’ since 1963, especially in green coastal belt. Moreover, 20% of the qada’s workers work in agriculture, compared to only 8% in Lebanon in general.

**The sector relies mainly on four major crops**

More than 85% of the qada’s agricultural land is assigned to four major types of crops, namely: olives, citrus, bananas and other exotic fruits, and tobacco and other industrial crops.

**Distribution of agricultural land (SAU34) by type of crop**

<table>
<thead>
<tr>
<th>Qada’ of Sour</th>
<th>Hothouse</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grains</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td>Legumes</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>Leafy vegetables</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Fruit vegetables</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Medicinal/industrial crops</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Citrus</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Olives</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Exotic fruits and other fruit trees</td>
<td>11%</td>
</tr>
</tbody>
</table>

Bananas are planted on the coast at an altitude of zero to 150 meters. Banana plantations are typically large exploitations in which the owner contracts with a Damman who may a) lease the parcel and handle the entire process from planting to tending to harvesting or b) pay for an estimated yield of fruit and intervene only at the time of harvest.

Once the fruit is harvested, 10% is channeled to the local market (hisbeh), while the vast majority is picked up by an oligarchy of around 10 wholesalers who control almost the entire marketing chain as well as the price of the crop. Bananas are then either exported to Syria and Jordan35 or sold to fermenting plants which then channel it to the Lebanese market.

**Value chain of banana production**

Citrus trees are planted at an altitude of zero to 400 meters. The marketing of citrus became problematic after the spread of citrus orchards along the Syrian coastline and the increasing competition from Egyptian citrus. Currently, only 30% of the harvested citrus is exported (mainly to the Gulf) while 50% is consumed nationally and 20% is wasted.

It is thought that citrus orchards are increasingly replaced by banana orchards because the latter is a yearly crop which may

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34 SAU stands for Surface Agricole Utilisée.
35 Syria and Jordan are the only two countries in the region which impose a tax on bananas with an exemption for Lebanese bananas.
easily be abandoned in favor of real estate development.

Value chain of citrus production

Avocados and mangoes are increasingly grown in the qada’ and constitute a more profitable alternative. Indeed, they are sold at competitive prices and unlike citrus, are the subject of high and increasing global demand.

Olives are the major non-irrigated crop in the qada’, covering around 41 thousand dunums. The lack of a marketing strategy that includes common packaging, labeling, and distribution is a major obstacle in the olives/olive oil sector. Moreover, the lack of regulations imposing a label that distinguishes between different grades of oil places good quality olive oil at a disadvantage.

Tobacco culture remains a stable source of income for many households in the non-irrigated hills of the qada’, occupying a total of around 14,720 dunums of land. This is a highly labor-intensive type of culture which typically consumes the efforts of all family members around the year and often closes up other avenues of income generation for younger generations who often do not have the opportunity to further their education.

Moreover, although it provides a guaranteed income, it usually prevents households from exceeding that income either through supplementary work or through the introduction of other crops which may turn out to be much more lucrative.

High untapped potential of animal farming

Animal farming is performed on a limited scale in the qada’ with only 506 running farms the vast majority of which are small in scale. Indeed, the qada’ counts around 1,800 cows, 2,800 sheep, 19,000 goats, and 285,000 chickens, a relatively small number in view of the vast unused lands in the Southern part of the qada’. In addition, the high domestic demand for dairy and meat products makes animal farming a potentially promising agricultural sector. Obstacles to the growth of this sector include the prices of animal feed and the lack of grazing areas in the northern parts of the qada’.

The qada’ currently houses around 8,500 hives and as is the case for olives, major obstacles include the need for centralized packaging and labeling and central regulations regarding composition and quality.

Shy beginnings of organic farming

Finally, organic farming has started on a small scale in the qada’. However, each farmer produces a limited number of crops and production is not sufficient to cover the entire year. In addition, there are no packaging and labeling capabilities and no direct access to consumers, which diverts the major part of the profit to the wholesaler. The presence of an active cooperative and a permanent venue for

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36 Interview with Mr. Ali Dbouk, Director of the Citrus and Banana Cooperative of Sour.

marketing products would significantly contribute to the progress of this sector.

**Production cost and distribution are the two major obstacles**

The increasing price of land because of real estate speculation constitutes a major element that increases the cost of agricultural production. Another factor shared by all the Lebanese productive sectors is the high cost of energy in the absence of 24-hour electrical supply. These two factors are difficult to control and inevitably curb the competitiveness of Lebanese agricultural products in regional and international markets.

Another obstacle, which may be easier to address, is the transition of products to the market. Currently, wholesalers control the price of produce while the market risk is borne almost entirely by the farmer. Indeed, fruits are taken to the hisbeh (local market) and the farmer only gets paid if the produce is sold, in the absence of any contract or paperwork proving the amount sold and the price of sale.

These obstacles clearly call for some form of market regulation and for increased direct and year-round contact between farmers and consumers.

Finally, many parts of the qada' suffer from a shortage of irrigation water especially during the summer.

**Lack of agricultural support facilities**

For a qada’ that is so heavily reliant on agriculture, Sour lacks a sufficient number of support services such as cooperatives, agricultural extension offices, veterinary services, agricultural pharmacies, refrigeration/fermentation warehouses, etc.
Trade

Trade has always been a part of Sour’s history and traditions and is currently an essential link in the qada’s economy and the key to ensuring successful transition of manufacturing and agricultural products to national and international markets.

Indeed, as has been seen in the previous section, the agricultural sector is currently shackled by the oligarchical and unregulated nature of the two trade links that control the production and marketing of agricultural products, namely: 1) the supply of agricultural production inputs (animal feed, drugs, etc.), and 2) the access of agricultural products to markets.

Local markets are distributed across the qada’, with their size increasing in proportion to the number of residents. The greater Sour agglomeration houses vibrant markets (Sour, Abbassieh, Ain Baal, etc.), in addition to lively hinterland markets across the qada’ (Deir Qanoun El Nahr, Maarake, Chehabiye, Qlaile, etc.).

Moreover, the Jabal Amel region has traditionally hosted a number of regional rotating markets that span the entire week. Even today, markets are held in some part of the qada’ every day of the week (figure).

Finally, Sour’s hisbeh is the outlet for most of the qada’s non-exported produce. However, this produce market which is rented out by the municipality remains largely unregulated.

Indeed, farmers place their produce on a commission basis and paid a set non-negotiable price (minus 10% commission) on whatever produce is sold. The relationship is essentially paperless, with no contracts governing the trade and no invoices proving the amounts sold or the prices charged. These proceedings in which the farmer remains voiceless and powerless leave no room for fair trade in free market exchange and no ability to vary price based on quality.

Cycle of weekly regional markets

- Monday: Tayr Debba
- Tuesday: Maarake
- Wednesday: Marjayoun
- Thursday: Bint Jbeil
- Friday: Abbassieh
- Saturday: Jouayya
- Sunday: Borj Rahhal Qana, Srifa

Qana, Srifa
Tourism

Despite the presence of significant tourism potential all along the qada's coastline and in several cultural sites inside the hinterland, tourism services remain largely concentrated in and around the city of Sour. Indeed, 36% of business establishments in Sour are related to tourism. The precarious security situation in the southern part of the qada' drives funds away from touristic activities and toward non-productive “safer” investments such as land purchases.

Contradictory tourism indicators

The current status of the sector in the city of Sour seems to be ambiguous with positive and negative indicators coexisting side by side. Indeed, the number of Lebanese visitors who reside in other regions increased from around 20% of total visitors in 2009 to around 40% in 2013. However, this higher volume of visitors is not translating into higher economic activity for tourism establishments. Indeed, both the average number of tables and chairs and the average area of hotel and tourism establishments decreased by more than half during the same period.

Moreover, there is a decrease in the average number of employees per tourism establishment. Indeed, while the number of employee/establishment remained around 1.3 in non H&T establishments, it dropped from around 3.4 to around 1.5 in H&T establishments.

Touristic Port in Sour

A feasibility study was commissioned by the CDR and conducted by Dar El Handassah in 2007/2008. The study weighed three alternatives for the development of a touristic port in Sour. There was never a question of whether a touristic port was needed to begin with. Moreover, although the decision matrix seems to favor the first alternative (rehabilitating and redeveloping the current port), the second more costly alternative (extending the current port) was selected as per CDR approval decree No.1232-dated 09/July/2007. The project is expected to cost around 15 million USD and remains blocked by the DGA due to its potential impact on underwater archeological sites.

If developed, the port would not be able to harbor large cruise ships but rather smaller boats and yachts. The question becomes whether Sour currently provides the attractions and services that may constitute a magnet for yachters. It is the expert teams opinion that the touristic port’s development should rather be inscribed in a longer term strategic vision and is conditioned by a significant development of the qada’s economy, an enhancement of the cleanliness and protection of the coast, and the development of touristic services such as archeological and leisure diving, fishing, and other marine activities.

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39 CRI and World Bank, ibid. p. 73.
40 CRI and World Bank, ibid. p. 71.
41 CRI and World Bank, ibid. p. 72.
# Economic Development SWOT

## SWOT Analysis Table – Economic Development Plan

<table>
<thead>
<tr>
<th>STRENGTHS</th>
<th>WEAKNESSES</th>
<th>THREATS</th>
<th>OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Immigrant remittances are a stabilizing factor in the local economy</td>
<td>• Low population density in the southern part of the qada’</td>
<td>• High competition by regional and international agricultural products</td>
<td>• High share of youth</td>
</tr>
<tr>
<td>• Large expanse of agricultural land</td>
<td>• Immigrant funds feeding into real estate speculation and increasing land prices</td>
<td>• Solid waste defacing public areas</td>
<td>• Palestinian and Syrian labor may be a source of needed expertise and skills</td>
</tr>
<tr>
<td>• Agriculture tradition and pride in land</td>
<td>• Predominance of MSEs with low added value activities and low demand for skilled labor</td>
<td>• Institutional problems at the municipal and union levels</td>
<td>• Immigrant funds may be invested in productive projects</td>
</tr>
<tr>
<td>• Presence of a cycle of weekly local markets in the region</td>
<td>• Lack of economic diversity</td>
<td>• Security threats</td>
<td>• Economic diversification will strengthen the local economy and create job opportunities</td>
</tr>
<tr>
<td>• Significant natural and cultural assets</td>
<td>• High production costs (energy, land prices, etc.)</td>
<td></td>
<td>• Future irrigation projects will increase the potential for more profitable irrigated agriculture</td>
</tr>
<tr>
<td>• Archaeological heritage in old Sour</td>
<td>• Unregulated and primitive local markets and oligarchy of wholesalers</td>
<td></td>
<td>• Introduction of new crops will increase the profitability of agricultural activities</td>
</tr>
<tr>
<td>• A pristine coast with agricultural and touristic potential</td>
<td>• Lack of agricultural extension/support facilities</td>
<td></td>
<td>• High potential for animal farming in the southern part of the qada’</td>
</tr>
<tr>
<td>• A number of highly enthusiastic municipal councils and civil society leaders</td>
<td>• Lack of industrial tradition and low-skilled workforce</td>
<td></td>
<td>• Potential for agrofood industry</td>
</tr>
<tr>
<td>• Absence of standards in production processes</td>
<td></td>
<td></td>
<td>• Potential for modern fishing techniques</td>
</tr>
</tbody>
</table>
STRATEGIC ASSETS & THREATS

The diagnostic report reveals a qada’ with considerable natural, social, and cultural assets that can form a solid basis for sustainable economic development. Among a long list of assets, the following stand out as unique to the qada’ of Sour and should therefore be strategically exploited to allow the qada’ take a place of prominence both regionally and nationally.

1. A wealth of green spaces across the qada’, including the green belt that surrounds the Greater Sour agglomeration is unique in a country where all other cities have expanded in “oil stain” fashion, eating up all the agricultural spaces around them.

2. A pristine coast that remains largely uninterrupted and well preserved from erosion and pollution especially in its southern part, a unique feature in Lebanon.

3. Rich water sources in Ras El Ain which, in addition to their historical and mystical characteristics, constitute a strategic economic asset for the area. These water resources will be further enriched by upcoming irrigation projects.

4. The old city of Sour, rich in cultural heritage and prone to take a prominent role on the national and regional maps of tourism destinations, once solid social and service foundations are laid.

5. An immigrant community that remains attached to its native qada’ and represents a ready source of financing and expertise, allowing it to become a solid partner in development, if the right investment climate is created and productive choices are made.

6. A promising agricultural sector which needs to be diversified and extended across a value chain that includes all other economic sectors (services, trade, agroindustry, etc.)

The above six strategic assets may be banked upon and used as solid pillars for a sustainable and diversified economy. They remain however vulnerable to a number of threats which, if not properly addressed, will undermine the qada’s ability to achieve real progress:

1. Destruction of the green belt by irresponsible urbanization signified by a number of allotments and expected urban pressure. The risks are magnified by the low density of current construction which consumes more land to house less population.

2. Real estate speculation tied to immigration funds, artificially inflating the price of land and acting as an economic impediment and a social burden on the poor population.

3. Solid waste contaminating the coast, scenery, cultural sites, and water sources, and standing in the way of touristic development.

4. Weak marketing of agricultural products including the absence of extension services especially in the inner parts of the qada’ and weak sectoral ties to national, regional, and international markets.

5. A weak institutional capacity at the local government level which, despite a number of enterprising mayors and stakeholders, may not have the ability to act as an effective engine of development.
Finally, the development of the strategy was guided by a number of principles that will ensure that the economic and social development of the qada’ results in an increase in the social and economic welfare enjoyed by the residents of the qada’. These principles are:

1. Ensuring balanced economic development across the entire qada’;
2. Respecting the specific characteristics and the identity of the various sub-regions of the qada’;
3. Favoring productive investment that generates economic added value and creates jobs.

The remainder of the report will present the objectives which were approved in phase II, organized by strategy component or plan; followed by vision proposals for the qada’, and the set of priority sectors, as proposed by the study team.

In 2035, the qada’ of Sour is Lebanon’s seashore and its orchard. It enjoys a balanced development that increases economic efficiency and raises productivity. This development relies on the sustainable use of natural resources (land, water, and agricultural soil) and on the valorization of cultural and historical heritage. This kind of successful and balanced development is made possible by rationalized land use and urban expansion and economic activities that abide by environmental guidelines. The cities and towns of the qada’ are lively and serviced by appropriate infrastructure networks and public spaces. The qada’ has become a cultural and touristic pole that holds a unique place in Lebanon and the region as well as an agricultural and nutritional reservoir.
OBJECTIVES & PROPOSED PROJECTS

Overarching Concerns

While the institutional set up does not figure as part of this strategy’s scope, the weakness of institutional capacity on the level of the UMoT and the various municipal governments of the qada’ cannot be overlooked by this strategy document because a technically and politically effective team in the UMoT is a sine qua non condition for the implementation of this strategy. Indeed, weak institutional capacity was identified as one of the major threats that will hinder the development of the qada’

As such, the strategy will propose two measures which do not belong under any of the six major components of the strategy but should rather be viewed as overarching steps that will ensure the effective implementation of the strategy document.

1. Establishing the Sour Environment and Development Observatory (SEDO). Following the 15-year successful example of the Tripoli Environment & Development Observatory (TEDO), such an institution would serve as a data consolidation, analysis, and planning tool for the UMoT. The observatory’s functions would include:
   - Monitoring the state of the environment and development of the qada’ by observing the trends in certain predefined indicators;
   - Identifying hot spots that require special attention;
   - Improving the planning and management capacity of the UMoT;
   - Developing a geographic information system;
   - Analyzing information and displaying it for more effective public communication; and
   - Disseminating and sharing the gathered information.

This unit will act as the nucleus of a future technical and planning department equipped with the necessary staff and tools and politically empowered to act as an engine of development in the qada’, under the leadership of UMoT council members.

2. Disseminating the SSRDP document. In order to ensure the role of the SSRDP as a reference document that will guide all future efforts/projects intended for the qada’ of Sour, this document needs to be communicated as widely as possible. The CDR is urged to disseminate the strategy document (in both languages) to all concerned agencies at the central government level (DGU, DGA, Ministry of Environment, Ministry of Public Health, Ministry of Tourism, Ministry of Agriculture, etc.), in addition to posting it on their official website. The UMoT is also urged to post the document on their own website and to disseminate it to all member municipalities, all interested local NGOs, CSOs, and potential donors including immigrants.
<table>
<thead>
<tr>
<th>MISSION</th>
<th>OBJECTIVE</th>
<th>PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUILD THE CAPACITIES OF THE UMoT TO ACT AS AN ENGINE OF DEVELOPMENT AND ESTABLISH THE SSRDP AS THE BLUEPRINT FOR THE QADA’S DEVELOPMENT</td>
<td>Implement an institutional capacity building effort at the level of the UMoT</td>
<td>Establish the Sour Environment and Development Observatory (SEDO).</td>
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<tr>
<td></td>
<td>Establish the SSRDP document as the primary guiding document for all national and local development initiatives in the qada’ of Sour</td>
<td>Disseminate the SSRDP document both locally and nationally</td>
</tr>
</tbody>
</table>

Once the above projects have been implemented, the UMoT will have a unit that is able to implement the strategy, champion its projects, secure funding and partners, and monitor the results of the implemented projects. Only then, will the qada’ of Sour be able to begin its journey on the path to development, building on the projects proposed under each of the six components below.
Urban Component

The urban dimension of the diagnosis led to the identification of three remarkable features: the lively and populated villages of the North-East interlocked with their agricultural gardens, the compact city of Sour surrounded by its still conserved agricultural plain, and the preserved natural environment of the south with its small stone villages.

1. The urban sprawl undermines the current balance of the territory especially in the Northwestern part of the qada’, where agricultural and natural areas are threatened by uncontrolled urban extension along East-West streets. Accordingly, the urban structure of this territory is not clear and comprehensible. Public spaces of the intermediate towns are characterized by a lack of equipment (playground, local market, etc.) and their low attractiveness in terms of quality spaces. The UMoT municipalities lack the knowledge and the land use regulatory tools necessary for implementing concrete actions.

2. The Southern part of the qada’ is now preserved from intensive agriculture and extensive urbanization and it is an opportunity for its future in terms of agriculture, tourism, and built heritage issues. Coastal protection, reducing the impact of future tourism development, and emphasizing the links between ancient villages and the natural coast appear to be urgent priorities.

3. If the green belt surrounding Sour is threatened in the long-term by sizeable subdivisions that have already been decreed, the presence of public lands and exceptional sites such as the sandy beach, the natural reserve, and the archaeological sites are an opportunity for the coherency of the urban area and its compact form. However, the urban area of Sour seems to be exclusively turned to the old town, especially in terms of administrative functions. Unlike the city of Sour, the urban area (including Borj El Chemali) has not yet found its place on the scale of the qada’ in terms of functions, parks, accessibility, public transportation, connection with the highway, etc.

This strategic document proposes to address the above challenges through the following strategic objectives:

1. **Preserve the coherence and variety of each component of the territory** by controlling the urban sprawl.

2. **Develop the tourism and heritage potential of Sour**, notably in the Southern part of the qada’.

3. **Preserve the identity and population of the old city of Sour** and rebalance its administrative functions.
<table>
<thead>
<tr>
<th>MISSION</th>
<th>STRATEGIC OBJECTIVES</th>
<th>INTERMEDIATE OBJECTIVES</th>
<th>PROJECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAINTAIN AND HIGHLIGHT THE PHYSICAL IDENTITY OF THE QADA’, PRESERVING THE BALANCE BETWEEN ITS THREE REMARKABLE FEATURES: - THE COMPACT CITY OF SOUR SURROUNDED BY THE CONSERVED AGRICULTURAL PLAIN, - THE LIVELY AND POPULATED VILLAGES OF THE NORTH-EAST INTERLOCKED WITH THEIR AGRICULTURAL GARDENS, - THE PRESERVED NATURAL ENVIRONMENT OF THE SOUTH WITH ITS SMALL STONE VILLAGES.</td>
<td>Preserve the coherence and variety of each component of the territory by controlling the urban sprawl</td>
<td>Reinforce the role and density of the satellite towns, Contain urban sprawl to preserve agricultural land, and provide parcels at affordable prices thereby limiting land speculation</td>
<td>URBAN 1 Upgrade the public space, urban furniture and public lighting notably in the core of the satellite towns</td>
</tr>
<tr>
<td></td>
<td>Develop the touristic and heritage attractiveness, notably in the Southern part of the qada’</td>
<td>Protect and highlight the incomparable quality of the coast</td>
<td>URBAN 2 Launch public land subdivisions to increase the offer of reasonably priced housing, develop the satellite towns, and spare agricultural lands and remarkable sites.</td>
</tr>
<tr>
<td></td>
<td>Preserve the identity and population of the old city of Sour and rebalance its administrative functions</td>
<td>Reinforce the symbolic role of the old city</td>
<td>PLANN 1 Propose a charter for developing and implementing the orientations of the strategic plan.</td>
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<td></td>
<td>Improve links and functional distribution between the City and the qada’</td>
<td>Improve links and functional distribution between the City and the qada’</td>
<td>PLANN 2 Develop a reference guide among municipalities specifying best practices for interventions on public space</td>
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<td></td>
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<td>PLANN 3 Develop a database and cartography services at the UMOT</td>
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**URBAN 1**: Upgrade the public space, urban furniture and public lighting notably in the core of the satellite towns.

**URBAN 2**: Launch public land subdivisions to increase the offer of reasonably priced housing, develop the satellite towns, and spare agricultural lands and remarkable sites.

**PLANN 1**: Propose a charter for developing and implementing the orientations of the strategic plan.

**PLANN 2**: Develop a reference guide among municipalities specifying best practices for interventions on public space.

**PLANN 3**: Develop a database and cartography services at the UMOT.

**COAST 1**: Implement sustainable models of seaside beaches and “green” resorts linked to the coastal villages and to the SCT without infringing on the public maritime domain.

**HINTER 1**: Create visitor itineraries linking the major cultural sites of the hinterland.

**HINTER 2**: Highlight and rehabilitate the built heritage of the historic villages and promote a bed and breakfast network.

**SOUR 1**: Rehabilitate the Serail square located next to the Old Port and rebalance the administrative functions between the Serail and a new administrative centrality (public facilities district in the South of the city).

**SOUR 2**: Upgrade and extend the public park linking the natural reserve, the sandy beach and the public facilities district located in the South of the city.

**SOUR 3**: Insert the old aqueduct (East/West) into a green network structuring the eastern extension of the city towards Borj El Chemali.

**SOUR 4**: Create a peripheral parking for more than 450 cars with a shuttle service.
STRATEGIC OBJECTIVE 1
Preserve the coherence and variety of each component of the territory by controlling the urban sprawl

URBAN 1 Improve the public space and services in key locations, notably in the core of the satellite towns

To reinforce the attractiveness of the satellite towns and villages, as well as in heritage fabrics, and to update the quality of the public space and to highlight the local identity, this project proposes:

- the rehabilitation of the traditional city center public spaces using the reference technical guide of best practices (cf. PLANN2);
- developing new services as local market network, playgrounds or house of crafts;
- landscaping the roads and towns centers;
- highlighting town entrance and limits.

URBAN 2 Launch land subdivisions on publicly owned land outside agricultural areas and near to the satellite towns

Focalized on the first rank cities (Abbassiyé, Maaräké, Jouaya, Qana,...), this project have the triple ambition to help containing the urban sprawl by strengthening the development of the satellite towns rather than Sour suburbs, to limit land speculation by increasing the offer of buildable land at lower price, and to preserve environmental resources of the towns and villages (agricultural land, urban and natural heritage). After the identification of public lands to be primarily urbanized (rocky soil for example), the idea is to promote a model of sustainable urbanization by the application of concepts such as compact urbanization, good living conditions and standards of services, accessible price, green mobility and, in its modus-operandi, with land made available by public actors (municipalities) and serviced (infrastructure) by institutional donors.

Urban sprawl is considered as a threat for agricultural and natural lands. To contain the chaotic urban extension, prioritized urban area should be clearly identified for new dense urban development in sloped areas (allowing for views) with a rocky soil, outside of immediate farmlands around villages (conservation of familial olives culture), and most of the time already accessible by existing roads.

These prioritized future urban districts are indicated as hatched in green on the strategic plan, are a good opportunity for the Qada’ to promote a more coherent urban structure and strengthen villages identity. As pilot projects, these future urban areas will provide a more sustainable alternative to the existing uncontrolled and low density sprawl.

PLANN 1 Propose a charter for developing and implementing the orientations of the strategic plan.

To reinforce the decentralized competencies and to develop planning skills on the level of the UMoT, a regional master plan could be consensually prepared between the municipalities of the UMoT. The implementation of this plan could be achieved with partners such as the PACA (France). This Intermediate master plan document would regulate the development orientations in terms of land use in relation with the SDATL (2004). This territorial tool is to be shared and respected by all the UMoT members through their mutual commitment (a charter would be signed by all member municipalities) and would reflect their own municipal spatial orientations as well as major guidelines at the scale of the qada’.
The SSRDP strategic plan of the Qada’ takes into consideration the orientations of the national planning document (SDATL2004). Referring to the diagnostic phase, it provides more detailed spatial orientations targeting a more sustainable development, and proposes to implement local projects according to the present action plan.

- At a first stage, the measures proposed by the Strategic Plan could be discussed and consensually adopted by the municipalities as a charter document materializing this consensus between the presidents of the municipalities.
- At a second stage, the provisions of the strategic plan could be reflected by the local land use plan usually prepared by the DGU.

PLANN 2 Develop a reference guide among municipalities specifying best practices for interventions on the public space.

Improving the built environment in towns, village cores, and remarkable sites, improving their functionality and building/strengthening the visual identity of the qada’ appears as an important target to sustain a shared vision by UMoT municipality members. A reference guide for public and private interventions on public spaces (landscape components, urban furniture, signage, traffic regulation, pedestrian security, bike lanes, etc.) could be developed. This would also help to promote local craftsmanship (production of benches, pavement materials, urban furniture, etc.) and could be associated to other projects defined within this study concerning the labeling of local agricultural and industrial products.

PLANN 3 Develop database and cartography services

The implementation of a technical service centralizing data from municipalities (social, geological, ACS, army, UNIFIL...) will support the UMoT capacities to manage its territory, identify orientation and prioritize investments. This service will be:

- hosted by the UMoT with yearly updated database;
- consultable by all members of the UMoT, helping to promote a shared vision;
- a first step to the creation of a planning service within the UMoT, local institutions and other partners (University, NGO...).

STRATEGIC OBJECTIVE 2
DEVELOP THE TOURISTIC AND HERITAGE ATTRACTIVENESS, NOTABLY IN THE SOUTHERN PART OF THE QADA’

COAST 1 Implement sustainable models of seaside beaches resorts linked to the villages close to the sea shore

The aim of this project is to promote an ecological tourism based on the natural richness of the coast (especially in the Southern part of the qada’) and to provide a sustainable economic and environmental model of beach resorts as an alternative to unbridled land speculative strategies. It would propose the creation of an ecotourism structure (bungalow, beach houses, etc.) built at a significant setback with respect to the sea shore and closely linked to the coastal villages (small rocky stairs, pedestrian tracks) where lodges and bread and breakfast facilities could be provided by the inhabitants in or close to the village (see Chouf Cedar Reserve).

HINTERLAND 1 Create thematic visitor itineraries (historic, religious and natural sites,
etc.) linking the major remarkable sites of the hinterland

As developed in the COAST1 project, a tourism guide referencing the major natural and cultural sites of the hinterland could be developed. It could also be linked to the Natural Park defined in the SDATL, as it has been done in the Chouf natural reserve. Adapted way-finding signage, the implementation of access roads, landscaped parking lots, and pedestrian paths to these places of interest, explanatory plans and texts will contribute to attract visitors and highlight these major cultural sites. This visitor itinerary could be developed in coordination the PLANN2 project, participate in local economic growth, and induce the creation of various amenities in the neighboring villages.

HINTERLAND 2 Highlight and rehabilitate the built heritage of the historic villages and promote a bed and breakfast network

Many villages like Doghdghaya and Chamaa include an important architectural and urban heritage, still inhabited or no more occupied. The implementation of heritage oriented lodges or bed and breakfast networks would contribute to the economic development of these villages. This would also induce the participation of local craftsmanship in the buildings rehabilitation. The association with the Hinterland 1 project would also allow for developing a guides network and cultural animation activities by local actors, enhancing the traditions and heritage of the qada’.

STRATEGIC OBJECTIVE 3
Preserve the identity and population of the old city of SOUR and rebalance its administrative functions

SOUR 1 Rehabilitate the Serail and its square located next to the Old Port

To avoid the traffic congestion in the recently rehabilitated old city and harbor district, the municipality expressed its intention to rebalance the distribution of public administration facilities in the old city by moving the court, the jail, and others technical services outside the old city. The rehabilitation of the Serail building and its small urban square, through a restoration program involving the owners and occupants, will contribute to compensate for the loss of activity and animation that would be induced, helping to maintain the presence of the actual residents, shops and activities in the Old city and slow down the "museification" process in this neighborhood.

SOUR 2 Create a public park linking the natural reserve, the sandy beach and the public facilities district located at the south of the city

To reinforce the link between several major landmarks located at the south of the city (the animated Corniche and sandy beach, the archeological site, the public facilities area, the orchards of the agricultural belt and the nature reserve), it is proposed to create a park at the heart of the public land located at the south east of the city, by extending the landscape structure of the existing garden and already planted trees. A large playground would be developed between the surrounding schools and the Lebanese University buildings, while the publicly owned land around this park (already accommodating several miscellaneous public buildings), would be destined to house future public and social facilities (such as the social center of the Imam Sadr Foundation). Creating a master plan for the coherent development of this area will allow to constitute an administrative pole (Qaemaquamiah) destined to the whole qada’,
thus allowing to contain properly the functions and services displaced from the old Serail.

**SOUR 3** Highlight the old aqueduct (east/west) and integrate it within a green network of trees alignments structuring the eastern extension towards Borj-El-Chemali

The old aqueduct itinerary coincides with the historical axis of extension of the city to the east. In order to structure the urban fabric constituting this extension towards Bourj-el-Chemali, a green network could be implemented in the existing public space to improve and structure the urban environment in this area. The fact that the land is publicly owned in that district allows for envisaging a program of re-housing of the occupants of illegal constructions built along the aqueduct and rehabilitate and landscape this archeological monument as a major landmark and promenade structuring the eastern suburb of the city.
**Mobility Component**

**The regional road system**

The new expressway under construction is an opportunity for regional trips as well as national ones. However, it is not sufficient and must be completed by new or improved connections to the main local axes.

It is therefore necessary to **create and improve the connection to the new expressway** from the regional main roads, by efficient interchanges and new junction trunks and **manage a well-designed terminal junction** between the expressway and the coastal road.

Simultaneously, it is therefore necessary to design **transversal roads to link main cities and villages**, through the upgrade of existing roads or the construction of new trunks and bridges, thereby allowing direct routes and avoiding the coastal road.

**Sour’s street network**

The current urban street network is worse, polluted and taken up by cars. It is harmful for the quality of life, the touristic attractiveness. To reach the conditions of a more sustainable and efficient urban mobility, it is therefore necessary to **improve the local street network** for public transport, pedestrians, and cyclists and propose a good balance between the necessity of traffic and parking on the one hand, and local life and **soft traffics** on the other. It includes the implementation of an **efficient car parking policy**.

A main project, in its urban dimensions, can be the **redevelopment of the coastal road**, within the limits of the city of Sour, into an avenue.

**The public transport system**

The public transport system within the region of Sour presents important failures. In the absence of a public transport service organized by the community, informal transport alone cannot meet the demand. Moreover, informal transport contributes to road congestion because minibuses and taxis-services park along the streets. The objectives concerning the urban and intercity public transport system are therefore to gradually move from an informal public transport system (taxi services, van) to an organized system. The implementation of an **efficient organization of public transports at the qada’ level** must include (and be based on) the construction of a new **modern central bus station**.

This strategic document proposes to address the above challenges through the following strategic objectives:

1. **Enhance the regional and national accessibility of the Region of Sour** by developing a complete project for the whole regional road system, including the new expressway

2. **Enhance the urban quality of the city of Sour** and promote sustainable urban mobility with a complete project for streets and public road spaces

3. **Enhance mobility for all by promoting public transport** at the urban and regional levels
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Develop a competitive and resource-efficient mobility system for the Region of Sour,</td>
<td>Enhance the regional and national accessibility of the Region of Sour by developing a complete project for the whole regional road system, including the new expressway</td>
<td>Organize the connections to the new expressway from the regional main roads and protect the urban network of Sour from transit traffics</td>
<td>REGTRANS 1 Create a main interchange for the Sour urban area.</td>
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<td></td>
<td>Enhance the urban quality of the City of Sour and promote a sustainable urban mobility with a complete project for streets and public road spaces</td>
<td>Develop a hierarchized organization of the regional road network</td>
<td>REGTRANS 2 Create a well-designed terminal transition between the new expressway and the coastal road</td>
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<td>Enhance the mobility for all by promoting the public transports at the urban and regional levels</td>
<td>Improve the street network of Sour for public transport, pedestrians, and cyclists. Promote a new balance between the necessity of car traffic on one hand, and local life + soft traffics on the other hand,</td>
<td>REGTRANS 3 Avoid any direct entrance to the expressway from the local or regional roads.</td>
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<td>Create infrastructures for the public transport and develop gradually a new system for its organization</td>
<td>Free up road public spaces by a better car parking policy</td>
<td>REGTRANS 4 Improve some transversal routes to link main cities and villages</td>
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<td>Promote soft mobility</td>
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<td>CITYTRANS 1 Liberate the narrow alleys of the old town from car traffic</td>
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<td>CITYTRANS 2 Improve the efficiency of the main urban crossroads</td>
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<td>CITYTRANS 3 Redevelop the coastal road, in its Sour part, into an urban avenue</td>
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<td>CITYTRANS 4 Implement a comprehensive urban parking policy</td>
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<td>CITYTRANS 5 Implement a complete cycling plan</td>
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<td>CITYTRANS 6 Implement a pedestrian plan including safety, comfort and information actions</td>
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<td>PUBTRANS 1 Create a central bus station</td>
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<td>PUBTRANS 2 Implement bus-stop shelters in the whole region</td>
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<td>PUBTRANS 3 Develop an efficient organization of public transport led by local authorities</td>
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</table>
**STRATEGIC OBJECTIVE 1**

**ENHANCE THE REGIONAL AND NATIONAL ACCESSIBILITY OF THE REGION OF SOUR**

**REGRTRANS 1** Create a main interchange for the Sour urban area

The main interchange for the Sour urban area must take place approximatively at the cross between the expressway and the narrow road between Bass and Abbassye.

Three new junction trunks are built to reach this main interchange 1) from the coastal road 2) from Abbassye 3) from the Jouaya road at the east of Borj Chemali.

These new trunks are designed to avoid lateral direct entrances but allow some crossings from urban areas to another

**REGRTRANS 2** Create a well-designed terminal transition between the new expressway and the coastal road.

The point is to complete the expressway project and to include an efficient urban interchange with Qana Road.

**REGRTRANS 3** Avoid any direct entrance to the expressway from the local or regional roads.

All the connections between the expressway and the local and regional roads must be done through the two interchanges described above. The interchange planned at the crossing between the expressway and the Borj Chemali road mustn’t be implemented because it will overload an already congested shopping street. Any direct, formal or informal, connection is to be proscribed in order to protect the fluidity of the global road system.

**REGRTRANS 4** Improve some transversal routes to link main cities and villages

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**STRATEGIC OBJECTIVE 2**

**ENHANCE THE URBAN QUALITY OF THE CITY OF SOUR AND PROMOTE A SUSTAINABLE URBAN MOBILITY**

**CITYTRANS 1** Liberate the narrow alleys of the old town from any car or motorized vehicle.

It is not only a question of transport but also of attractiveness and patrimonial preservation. Strong rules must be counterbalanced by the provision of parking spaces for residents in the nearest parking lots.

**CITYTRANS 2** Improve the efficiency of the main urban crossroads.

Studies must be done for each main crossroad in order to figure out the best solutions for the traffic fluidity as well as for the pedestrian and cyclist comfort and the urban quality.

**CITYTRANS 3** Redevelop the coastal road, in its Sour part, into an urban avenue.

The transit is transferred on the expressway and the traffic decrease is an occasion to transform this former road into a modern and urban...
avenue. It should take part of a larger urban project.

**CITYTRANS 4** Implement a comprehensive urban parking policy including the creation of new parking lots, a pricing hierarchy, and efficient surveillance

**CITYTRANS 5** Implement a complete cycling plan

This plan must include a cycling network but also information and promotion. A study should define its components and highlight the different steps of implementation.

**CITYTRANS 6** Implement a pedestrian plan including safety, comfort and information actions

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**Strategic Objective 3**

**Enhance mobility for all by promoting the public transports at the urban and regional levels**

**PUBTRANS 1** Create a central bus station

This main bus station could take place close to the junction between the coastal road and the Jouaya Road. It should concentrate the three levels of service: 1) local shuttles to the old town and others important urban places; 2) regional services; 3) national lines to Sidon and Beirut.

**PUBTRANS 2** Implement bus-stop shelters in the whole region to improve the get-on and drop-off conditions
PUBTRANS 3 Develop an efficient organization of public transport led by local authorities

Gradually move, with the help of the public authorities, from an informal system (taxi services, van) to an organized system (shuttles, city buses). The new system should be led by local authorities, in partnership with the central government and private stakeholders.
Environment Component

Based on the diagnosis of the strength and weaknesses of the qada’s environmental resources, the following issues may be prioritized:

1. The qada’ of Sour is a region with remarkable and unique natural and agricultural attributes. The qada’ offers one of Lebanon’s most productive agricultural plains (Qasmieh measuring approximately 42 km²), as well as an exceptional beach stretch most of which is still pristine (about 30 km long). At least 4 km of Sour’s beaches are protected by law.

2. Unplanned urban sprawl and speculation are threatening the natural heritage of the qada’ of Sour. Urban expansion is occurring at the expense of arable lands, sand beaches, natural views, fertile soils, as well as ecosystems and habitats.

3. Another significant source of environmental degradation is poor solid waste management services. The continued lack of a proper qada’-wide SWM plan has resulted in the spread of open dumpsites (52), some dangerously close to water sources. Additionally, littering is pandemic in the qada’ of Sour, mostly along roadsides but also on beaches and agricultural lands, further degrading the natural landscape. Existing infrastructure for SWM are either lacking or obsolete (litter bins, containers, collection trucks, disposal sites and/or treatment facilities). In particular, out of 220 tons of waste generated per day in the qada’ of Sour, only 90 tons (from 23 villages) are treated at the substandard Ain Baal treatment plant. The remaining 44 villages practice open-dumping and burning, in scattered locations throughout the qada’.

The above issues may be addressed through the following strategic objectives:

1. Develop and implement an Integrated Solid Waste Management Plan for the qada’ of Sour that can be aligned with future GOL policies for solid waste management and programs.
2. Protect landscapes and notable green spaces.
3. Promote and sustain ecotourism services in the qada’.
<table>
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</table>
| **MAINTAIN THE BALANCE BETWEEN THE DEMANDS OF URBAN AND ECONOMIC DEVELOPMENT AND ENVIRONMENTAL PROTECTION** | Develop and implement an Integrated Solid Waste Management Plan for the qada’ of Sour that can be aligned with future GOL policies for solid waste management\(^{42}\) and programs (Waste-to-Energy facility in Zahrani) | Promote and implement solid waste programs that will:  
- Reduce waste production (through behavior change)  
- Increase waste diversion through recycling,  
- Close and remediate the Ras el Ain dumpsite, and  
- Stop littering in public areas | **WASTE 1** Design, implement, and sustain a long-term anti-littering campaign to reduce litter in Sour (roads, fields, and beaches) |
| | Protect landscapes and notable green spaces | Conserve and protect the pristine beach stretches, coastal agricultural lands, marine ecosystem and biodiversity from new developments urban sprawl and pollution | **GREEN 1** Establish the "Parc Naturel Regional du Littoral Sud de Tyr" recommended by the National Land Use Master Plan for Sour (COM Decree No.2366/2009) |
| | | | **GREEN 2** Establish Naqoura Marine Protected Area recommended by MOE and IUCN (based on Lebanon’s Marine Protected Area Strategy, 2012) |
| | | | **WASTE 2** Upgrade, restructure and expand the land of the existing Ain Baal Treatment Plant based on a detailed environmental audit to assess future needs and technologies (ECODIT conducted a rapid audit to assess its performance) |
| | | | **WASTE 3** Design, build and operate up to 2 waste transfer stations to serve villages not covered by the Ain Baal Facility (mainly southern and eastern districts of the qada’), fully equipped with sorting equipment / drop-off centers |
| | | | **WASTE 4** Supply and install solid waste infrastructure including waste containers and collection trucks based on detailed needs assessment |

\(^{42}\) Council of Ministers Decision 55 dated 1/9/2010 and Decision No. 1 dated 12/01/2015
<table>
<thead>
<tr>
<th>Promote and sustain ecotourism services in the qada’</th>
<th>Improve conservation management in Tyre Coast Nature Reserve (TCNR)</th>
<th><strong>GREEN 3:</strong> Designate (1) Ras Al Bayyada Cliff and (2) Ras El Ain Springs &amp; Reservoirs as Natural Sites protected by MOE</th>
</tr>
</thead>
</table>
| ECO 1 Update the TCNR’s existing Management Plan (dated 2005). The updated plan would address a number of technical and administrative issues including:  
- TCNR staffing requirement  
- Fencing of core area  
- Rehabilitation and operation of TCNR visitors center  
- Signage and waste bins in public beach  
- TCNR website and social media | ECO 2 Design and implement a training program for farmers on the transformation from conventional agriculture to bio-farming in Ras el Ain (TCNR agricultural area). | ECO 3 Delineate, map and market a coastal trail linking coastal villages, monuments and historical sites in the qada’ of Sour (with tourism map) |
**Strategic Objective 1: Restructure the Waste Management System in the Qada’**

**WASTE 1** Launch an anti-littering campaign

The aim of this campaign is to raise public awareness of solid waste issues and practices.

**WASTE 2** Upgrade, restructure and expand the land of the existing Ain Baal treatment plant based on a detailed environmental audit (ECODIT conducted a rapid audit to assess its performance)

The Ain Baal treatment plant was designed to receive and treat 150T of commingled municipal solid waste per day. It is currently receiving less than 100T per day. As part of a quick environmental audit conducted by ECODIT in April 2014, it was determined that the facility can reach its full design capacity of 150T per day after implementing some technical upgrades and operational adjustments. The aim of this project therefore is to complete the audit by designing the necessary upgrades and revamping its operations. Upgrades will include structural and non-structural changes to the current facility. The objective will be to restructure the facility, increase capacity, expand the land, produce medium-grade urban compost, and increase the recovery of recyclables.

**WASTE 3** Design, Build & Operate two new waste transfer stations to serve the villages not covered by Ain Baal Facility (mainly South of the qada’) – with sorting equipment / drop-off centers

Waste transfer stations are facilities where municipal solid waste is unloaded from collection vehicles and briefly held while it is reloaded onto larger long-distance transport vehicles for shipment to landfills or other treatment or disposal facilities. By combining the loads of several collection trucks into a single shipment, communities can save money on the labor and operating costs of transporting the waste to a distant disposal site. They can also reduce the total number of vehicular trips traveling to and from the disposal site.

**WASTE 4** Purchase of solid waste infrastructure

A number of vehicles and equipment are needed to manage collection and transport of the solid waste produced from the villages of the qada’. Vehicles and equipment include: bins, containers, collection trucks, street sweepers etc.

**Strategic Objective 2: Protect Landscapes and Notable Green Spaces**

**GREEN 1** Establish the “Parc Naturel Regional du Littoral Sud de Tyr” recommended by the National Land Use Master Plan for Sour (COM Decree No.2366/2009)

The “Parc Naturel Regional du Littoral Sud de Tyr” was recommended by the National Land Use Master Plan for Lebanon in 2005 and endorsed by the COM in 2009 (by Decree No. 2366/2009). The proposed park will help promote the conservation of Sour’s pristine coastline. Such a park project would require the participation and collaboration of multiple stakeholders including municipalities (Naqoura, Iskandarouna, Mansouri, Qleile, Aaziyeh, Sour, etc.), business groups, farmer groups, and water and energy utilities. The park would have its own set of management objectives, and it would develop and promote environmental guidelines to influence urban construction, economic activities, and the protection of the natural environment. The park could also design a coastal trail that would showcase Sour’s coastline and heritage; such a trail would require detailed reconnaissance, delineation,
testing, and signage and could attract thousands of visitors each year. The park would help reconcile Sour’s development and conservation goals.

**GREEN 2** Establish Naqoura Marine Protected Area recommended by MOE and IUCN (based on Lebanon’s Marine Protected Area Strategy, 2012)

A key management strategy to address many issues affecting marine and coastal ecosystems and resources is the implementation of marine protected areas (MPAs). A marine protected area is a coastal or offshore marine area that is managed to protect natural and/or cultural resources. Naqoura is a MPA selected site. It is unique for vermetid platforms of relatively small size; rocks and coralligeneous concretions at shallow depths; crevices and overhangs common; soft bottom areas of small sizes occasionally present in patches. The site provides nurseries, spawning and feeding grounds.

**GREEN 3** Classify two sites Ras Al Bayyada Cliff and Ras El Ain Springs & Reservoirs in the qada’ of Sour as Natural Sites protected by MOE. The Ministry can protect outstanding natural sites by ministerial Decisions, stipulating that MOE and DGUP will jointly develop permitting standards for the construction and operation of facilities within a 500-meter protection radius (buffer zone) from the protected site.
**Strategic Objective 3: Promote and sustain ecotourism services in the qada’**

**ECO 1 Update the TCNR’s existing Management Plan**

The current management plan of TCNR is obsolete (2005) and has not been revised or updated since. A new management plan would help the Reserve comply with international treaties and obligations (Convention on Biological Diversity CBD, African-Eurasian Migratory Waterbird Agreement AEWA, Convention on Wetlands of International Importance RAMSAR), as well as clearly describe the management needs of the reserve. For example, the plan will:

- Evaluate the current situation and identify issues and options impacting the reserve
- Review/update the reserve’s long-term conservation objectives
- Formulate appropriate strategies and management actions to achieve those objectives
- Describe the TCNR and explain how it will be managed, and why.
- Describe roles and responsibilities of the management team
- Propose a marketing strategy and business plan to reach financial sustainability

The new management plan would need to be approved by the Ministry of Environment and can be used to support TCNR during its grant applications.

**ECO 2 Design and implement a training program for farmers on the transformation from conventional agriculture to bio-farming in Ras el Ain.**

The TCNR includes about 2 km² of agriculture areas that was planned by the existing Management Plan (2005) for organic farming. Currently, conventional agriculture is prevalent inside TCNR which relies heavily on agro-chemicals and traditional irrigation practices such as flood irrigation or low-efficiency sprinklers. This project aims to transform agriculture practices in this section of TCNR from conventional to bio-farming. The marketing strategy and business plan of TCNR can lean on this area to generate additional revenues to support local farmers. Organic produce would be labeled to increase visibility and marketability. Bio-farming (i.e., organic agriculture) will also reduce the impact of agricultural activities on the reserve biophysical environment.

**ECO 3 Delineate, map and market a coastal trail linking coastal villages, monuments and historical sites in the qada’ of Sour.**

Sour Coastal Trail (SCT) will be a continuous trail that provides hikers with a unique walking experience close to the sea. It is designed to foster appreciation of the scenic and natural landscape of Sour coastal area. The SCT will be located within the right-of-way of the old railway between Sour and Naqoura all along the coastline stretch with an approximate distance of 25 km. The trail will link existing natural and heritage landmarks all together (TCNR, Sour old city, Ras El Ain Reservoirs, Mansourí Beach, etc.). SCT will also accommodate a variety of additional hospitality services such as guesthouses.

This project would also research and develop an ecotourism map for Sour showing major points of interest on land (trails, natural reserve, sites) and in the sea (archaeology, marine species), as well as lodging services and facilities.
**Water Component**

Based on the diagnosis of the strength and weaknesses of the qada’s environmental resources, the following issues may be prioritized:

1. Water is one of Sour’s most precious resources. It is divided between surface and underground water. Major surface water resources include the Litani River Channel, El Qasmieh River, and 3 seasonal water streams (Wadi Abou Zeble, Wadi El Izziyie and Wadi Marj Hine). Major underground water resources including the Ras El Ain spring and reservoirs, El Rachidiye spring, and Ain Abou Abdallah (in addition to important wells such as Wadi Jilo and Yanouh wells).

2. The most important water source in the qada’ of Sour is Ras El Ain Spring, which has an estimated water flow of 16 m³/s and 7 man-made reservoirs:
   - 2 are used for irrigation in the southern part of Sour coastal plains
   - 1 are used for potable water distribution by Sour Water Treatment Plant
   - 4 are located near Rachidiye camp for Palestinian refugees.

3. Irrigated agriculture covers 1,916 ha of the qada’. The agricultural sector consumes 61% of the water resources and it is the largest water consumer (NWSS, 2010)

4. Approximately 88 per cent of households are connected to the public water network and very few (5%) are equipped with private wells (CAS, 2004). In summer, water rationing is widespread which increases reliance on private wells and/or communal wells in villages. Also in 2004, only 27 per cent of buildings in the qada’ were connected to sewage networks which implies a significant and continued reliance on septic tanks (CAS, 2004)

5. The most significant pressures and sources of pollution on Sour’s water resources include:
   - Haphazard urbanization
   - Faulty septic tanks
   - Conventional irrigation systems
   - Excessive and/or unregulated use of agro-chemicals
   - Accumulation of waste (bulky items, tires) in seasonal water streams

6. The National Water Sector Strategy (NWSS 2010) recognizes two irrigation projects in the qada’ of Sour: The Qasmieh-Ras El Ain Phase 2 that will irrigate 2,100 ha and Conveyor 800 that will irrigate 14,700 ha. The Strategy has also proposed projects to increase water supply for the qada’ (Khardali Dam 120 MCM, Kfarsir Dam 15 MCM, and Chohour hill-lake (0.5 MCM)

The above issues may be addressed through the following strategic objectives:

1. **Prepare Sour for infrastructure projects proposed by the National Water Sector Strategy (2012)**

2. **Enhance water production without depleting the resource base or resorting to groundwater abstraction.**

3. **Improve wastewater services and the management of future STP facilities.**
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<tr>
<td>Promote Integrated Water Resource Management in the Qada’ by Strengthening the Institutional, Technical and Operational Capacity of the South Lebanon Water and Wastewater Establishment (SLWWE).</td>
<td>Prepare Sour for infrastructure projects proposed by the National Water Sector Strategy (2012)</td>
<td>Work closely with the MOEW and SLWWE to advance works related to proposed dams and hill lakes and to Canal 800 in Sour according to the NWSS</td>
<td>NWSS 1 Secure funding with MOEW to achieve the proposed hill-lake in Kfarsir and dam in Khardali with all related infrastructure</td>
</tr>
<tr>
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<td>Enhance water production without depleting the resource base or resorting to groundwater abstraction</td>
<td>Enhance water quality monitoring in the qada’ of Sour (groundwater, seawater, and surface water)</td>
<td>WATER 1 Prepare a comprehensive water quality monitoring program that addresses all water resources in the qada’, communicate relevant results to the public (grid water, bathing water), and equip municipalities (coast guard boats) to protect marine habitats.</td>
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<td>Valorize and highlight the importance of the water basin and aqueduct of Ras El Ain to ensure long-term protection</td>
<td>WATER 2: Prepare an in-depth hydro-geological study and characterization of the Ras El Ain water basin</td>
</tr>
<tr>
<td></td>
<td>Improve wastewater services and the management of future STP facilities</td>
<td>Prepare SLWWE for the future operation of STP (handover procedures, O&amp;M training, etc.)</td>
<td>SEWAGE 1 Facilitate knowledge transfer between the SLWWE and the Operator of the future Aabbassiyeh STP to ensure full handover after expiry of O&amp;M contract</td>
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<td>Encourage the TSE reuse from Aabbassiyeh STP in irrigation through demonstration projects</td>
<td>SEWAGE 2 Explore the feasibility of TSE reuse for irrigation including required design modifications and continuous monitoring</td>
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<td>Complete the construction of main sewage networks in non-sewered communities as well as collectors to the future Aabbassiyeh STP</td>
<td>SEWAGE 3 Connect individual households and buildings to main sewage collectors while preventing the inflow of industrial effluents.</td>
</tr>
</tbody>
</table>
STRATEGIC OBJECTIVE 1
PREPARE SOUR FOR INFRASTRUCTURE PROJECTS PROPOSED BY THE NATIONAL WATER SECTOR STRATEGY (2012)

The Ministry of Water and Energy (MOEW) prepared in 2010 a National Water Sector Strategy (NWSS). The strategy was endorsed by the Council of Ministers on March 9, 2012. The strategy presents a detailed road map for improving water conditions and service delivery in the country. For South Lebanon, the NWSS identified two projects under surface storage initiative: (1) a hill-lake in Kfarsir and (2) a dam in Khardali. This project aims to increase the surface water resources for domestic supply and irrigation in the qada’ of Sour.

NWSS 2 Prepare Sour for Canal 800 by incentivizing drip irrigation in areas to-be serviced by Canal 800; facilitate demonstration projects

Canal 800 is an irrigation scheme proposed by the NWSS. It will extend from Qaraoun to Aita Chaab. It will transport 108 MCM of water per year from the Qaraoun Lake to irrigate 15000ha of agricultural lands in the qada’ of Sour. The aim of this project is to use efficient methods that conserve water resource. Drip irrigation is one of the methods being used as an alternative to sprinkler irrigation. Drip irrigation consists of perforated tubes placed along the floor or buried near the roots of plants, which deposit water directly to the plant roots. The result will be a decrease in the amount of water evaporated while irrigating arable lands and increased access to irrigation by farmers.

ENHANCE WATER PRODUCTION WITHOUT DEPLETING THE RESOURCE BASE OR RESORTING TO GROUNDWATER ABSTRACTION

WATER 1 Prepare a comprehensive water quality monitoring program that addresses all water resources in the qada’ of Sour and communicate relevant results to the public (grid water, bathing water)

Water data collected by SLWWE are needed to periodically assess water quality in the qada’ of Sour. Without data, SLWWE simply cannot know where pollution problems exist or where they need to focus to control pollution. Enhancing the process of water quality monitoring aims to characterize water resources (groundwater, beach, and surface water), identify changes or trends in water quality and quantity over time and specify emerging water quality problems.

WATER 2: Prepare an in-depth hydro-geological study and characterization of the Ras El Ain water basin

Fresh groundwater is a precious resource which can be seriously affected by the industrial or agricultural activities. The purpose of Ras El Ain hydro-geological study is to delineate the water basin of this resource, define the potential impacts of development on the ground water and interrelated surface water resources and to outline monitoring measures to ensure that the quantitative and qualitative integrity of the ground water resource is maintained for future use.

WATER 3: Rehabilitate the ancient aqueduct and water mills in Ras El Ain and ensure their long-term protection
**IMPROVE WASTEWATER SERVICES AND THE MANAGEMENT OF FUTURE STP FACILITIES**

**SEWAGE 1** Facilitate knowledge transfer between the SLWWE and the Operator of the future Aabbassiyyeh STP to ensure full handover after expiry of O&M contract.

Once the Aabbassiyyeh STP is completed (expected in 2016), the contractor will assume full O&M responsibilities under the terms and conditions of its contract with the CDR, for a period of three years counting from the date of operation (i.e., when the sewage reaches the plant). After this period, the Contractor must handover all O&M responsibilities to the SLWWE to continue the operation and maintenance service. Currently, the Establishment does not have the human and technical resources to run the STP and will unlikely acquire those resources after three years, unless the Establishment receives significant assistance including knowledge transfer and O&M training. The capacity of the Establishment should be built up gradually. Cost recovery remains a serious threat to the future operation of the STP so long as wastewater fees are negligible to absent.

**SEWAGE 2** Explore the feasibility of TSE reuse for irrigation including required design modifications and continuous monitoring.

The Aabbasiyyeh STP will produce Treated Sewage Effluent (TSE) that will be discharged into the sea through outfalls extending into the sea. TSE is a precious resource for Water Demand Management; it should be recovered and reused in irrigation. The project recommends a detailed Feasibility Study of TSE reuse, including diversion channels and/or storage ponds. Based on the results of the feasibility study, the project would then aim to design and implement several demonstration projects for TSE reuse in irrigation based on international best practices.

**SEWAGE 3** Connect individual households and buildings to main sewage collectors while preventing the inflow of industrial effluents.

In order to benefit from the construction of main sewer collectors as well as Aabbasiyyeh STP, houses should be connected to those collectors through the execution of lateral house connections. This project aims to connect households and buildings to the public sewer network and reduce pollution from improper discharge of wastewater. This project will also aim to prevent the intrusion of industrial wastewater into the municipal sewer as such effect would overload the Aabbasiyyeh STP and may lead to malfunction.
Social Component

The qada’ of Sour is a tight-knit web of communities with a definite sense of identity and belonging and with vivid ties to its immigrants. The qada’ shares the social problems that plague the country in general and whose solution is largely at the national level. However, three of the weaknesses which were identified in the diagnostic report may successfully be tackled at the qada’ and town levels. These issues are the following:

1. Relatively weak emergency services:
   The qada’ of Sour suffers from a lack of adequate medical transport services, resulting in the loss of precious time in transferring trauma cases and medical emergencies to the hospitals of Sour, Saida, or Beirut. Moreover, Sour is a qada’ which lives under the constant strategic threat of an Israeli attack. This makes it absolutely necessary to develop an emergency response plan for the qada’ as a whole so that its health system may respond readily and effectively in security emergencies.

2. Deficient PHC facilities:
   Many of the region’s dispensaries and health centers lack equipment and human resources. Moreover, they have a closing time of 2 p.m., leaving the qada’s population without any health care services in the afternoons and evenings, short of going to Sour’s hospitals and burdening emergency rooms with non-emergency cases.

3. Almost inexistent recreational facilities:
   Despite its high potential for becoming a cultural hub, the qada’ of Sour in general and the city of Sour in particular are relatively lacking in recreational and public spaces where the youth of the qada’ can meet for educational, athletic, or recreational purposes.

This strategy documents proposes to address the above challenges through the following strategic objectives:

1. Revitalize the role of Greater Sour as a cultural and social hub for the qada’, the region, and potentially the country
2. Upgrade and strengthen health services across the qada’, with a focus on emergency and primary health care services
3. Mobilize the youth of the qada’ by developing recreational services throughout the territory in coordination with schools and youth clubs.
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<td>Work toward strengthening the emergency services in the qada’ and promoting a lively diverse community with active and engaged youth.</td>
<td>Upgrade and strengthen health services</td>
<td>Strengthen the ability of the health services network to respond to emergency situations</td>
<td>HEALTH 1 Develop an emergency response plan for the qada’</td>
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<td>HEALTH 2 Upgrade, equip, and staff an emergency vehicle fleet to transport urgent cases to hospitals</td>
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<td>Mobilize the youth of the qada’</td>
<td>Expand recreational opportunities for qada’ residents</td>
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**STRATEGIC OBJECTIVE 1**

**UPGRADE AND STRENGTHEN HEALTH SERVICES**

**HEALTH 1** Develop an emergency response plan for the qada'

Under the guidance of a consultant and in collaboration with the relevant central government agencies and local stakeholders, the UMoT will develop an emergency response plan that will take effect in case of large-scale security or weather-related emergencies. This plan will trigger the formation of a control center which will coordinate rescue, emergency response, and relief efforts.

**HEALTH 2** Upgrade, equip, and staff an emergency vehicle fleet to transport urgent cases to hospitals

This project will begin with a census of emergency vehicles throughout the qada' to assess adequacy of numbers, equipment, and operating staff. The resulting gaps will be filled with the aim of securing an emergency vehicle fleet that is capable of transporting medical and surgical emergency cases from any part of the qada' to the nearest adequate hospital within a reasonable time frame.

**HEALTH 3** Designate one of the qada's hospitals as a trauma center and upgrade it accordingly

In order to economize the use of limited resources, one of the qada's hospitals needs to be designated as a trauma center. The designated hospital will then be reviewed for gaps in equipment, staffing, and training. These gaps will be addressed to enable that hospital to act as a referral center for all trauma cases thereby increasing the chances of survival of these cases and relieving other hospitals who may direct their resources toward other specialties.

**HEALTH 4** Implement a rotation plan among the qada's dispensaries to ensure the availability of health services in remote areas during evening hours

Unlike the greater Sour area where hospital emergency rooms are available to handle after-hour medical complaints, the remainder of the qada's cities and towns rely on dispensaries which close their doors after 2 p.m. and many of which suffer from lack of equipment. This project consists of conducting a census of the qada's dispensaries, filling any pressing equipment needs and devising a rotating schedule that ensures that one dispensary is open during evening hours within an acceptable geographic radius.

**STRATEGIC OBJECTIVE 2**

**MOBILIZE THE YOUTH OF THE QADA’**

**REC 1** Establish Mountada Sour, a sports and culture multiplex for all the youth of the qada'

This project consists of developing an indoor-outdoor public space open to all the qada’s residents, which would host sports and cultural events such as concerts, plays, and films. It would also provide the youth with a space to research, study, have fun, and engage each other. Moreover, the Mountada would be led by a committee including all the major stakeholders of the qada' (political entities, religious entities, businesses, etc.) and would provide a forum for regional businesses through the opportunity to operate kiosks on site.

**REC 2** Appoint a Cultural Liaison to enrich the cultural life of the qada’

The city of Sour will appoint a cultural liaison whose mission will be to bring cultural events to Sour. Such events would include, plays staged in Beirut and other cities, local bands, film festivals, etc. Moreover, art residencies,
whereby the city would offer accommodation to various artists who would produce works of art that are relevant to Sour could also be arranged.

**REC 3** Develop two public recreational gardens in the qada’s hinterland

Because most mass recreational opportunities are only available to residents of the greater Sour area, it is imperative to locate one or two recreational gardens in the inner parts of the qada’ in order to provide the children of these areas with opportunities to play. Thus, funding should be assigned to the development of such gardens and their equipment with safe equipment (swings, slides, etc.). These venues should be located in municipalities which can afford to maintain them in the foreseeable future.

**REC 4** Coordinate with local schools to involve students in volunteer activities

Increase young people’s involvement in their communities and their environment by establishing a rotation of school activities including beach cleaning, cleaning of archaeological sites, etc.

**REC 5** Coordinate with local schools to provide short training sessions and field trips within the qada’

Expose children to training activities and field trips that are directly related to the cultural and natural heritage of Sour, such as farm field trips, short agricultural classes, snorkeling and fishing classes, etc.
Economic Component

Not unlike the Lebanese economy as a whole, the economy of the qada' of Sour consists overwhelmingly of primitive micro and small enterprises catering only to final consumers and unable to create employment opportunities. Moreover, immigrant funds, which constitute a major source of wealth for the qada', are currently being channeled into real estate speculation instead of productive high added value projects. The diagnostic report identified several issues that may successfully be addressed by this strategy:

1. **High untapped agricultural potential:**
   
   The qada’ enjoys a large expanse of agricultural land and a deep-seated agricultural tradition that could become a lever for the qada's economy if extension services are expanded and marketing outlets for agricultural products are created.

2. **Unregulated local markets:**
   
   The qada's local markets are unregulated and lacking in standards. Moreover, an oligarchy of wholesalers imposes unfair exchange conditions that place all the risk on the farmers and strips them of any real negotiating leverage.

3. **Real estate speculation:**
   
   In the absence of productive investment opportunities, immigrant funds are currently channeled into real estate speculation that drives up land prices to unreasonable levels and acts as an impediment to productive job-creating investments.

   This strategy aims to revitalize the qada’s economy using agriculture as the major lever and linking it with the other economic sectors including industry, trade, and tourism.

   1. **Develop agriculture into a key economic lever** and interlink it with the other economic sectors.
   
   2. **Develop the qada’s agro-industry** in order to generate added value and jobs from agriculture.
   
   3. **Streamline trade practices toward a more effective marketing of the qada’s products** and regulate the relationship between producers and consumers.
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<td>Develop agriculture into a key economic lever</td>
<td>Reorient agricultural production based on scientific evidence</td>
<td>AGRI 1 Rehabilitate and expand the Sour LARI (Lebanese Agricultural Research Institute)</td>
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<td>Restore the negotiation leverage of Sour’s farmers</td>
<td>AGRI 2 Provide training and consultations in agricultural skills to established and young farmers</td>
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<td>Expand the fishing industry in coordination with the Union of Fish Farmers</td>
<td>AGRI 3 Diversify coastal crops</td>
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<td>Expand animal production in the qada’</td>
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<td>Provide an outlet for citrus products through manufacturing</td>
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<td>Increase the marketability of Sour’s products</td>
<td>AGRI 6 Establish a pilot fish farm</td>
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<td>Step up the production of dairy products taking advantage of the established farm</td>
<td>AGRI 7 Establish a pilot dairy and cattle flesh farm</td>
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<td>Streamline trade practices toward a more effective marketing of the qada’s products</td>
<td>Establish the image of the qada’ as the Orchard of Lebanon</td>
<td>MANU 1 Establish a juice production facility</td>
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<td>MANU 2 Establish a modern olive press, bottling, and labeling facility</td>
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ELABORATION OF A STRATEGIC SUSTAINABLE REGIONAL DEVELOPMENT PLAN (SSRDP) FOR THE CAZA OF TYRE:
STRATEGY DOCUMENT
February 2015

STRATEGIC OBJECTIVE 1
DEVELOP AGRICULTURE INTO A KEY ECONOMIC LEVER

AGRI 1 Rehabilitate and expand the Sour LARI (Lebanese Agricultural Research Institute)

This project aims to expand the Sour LARI to include:

1. A Center for Semi-Tropical Crops (CSTC) that consecrates the qada' of Sour as Lebanon's center of expertise in these types of cultures.
2. A training center that supports the qada's farmers.
3. A tissue culture laboratory that contributes to research and advancement in agricultural techniques.

AGRI 2 Build the capacities and agricultural skills of the qada’s farmers

This mission will be placed under the purview of the rehabilitated and empowered LARI and will build the capacities of the qada’s established and new farmers through two main avenues:

1. Providing short and practical training courses that aim to build the technical capacities of the qada’s farmers;
2. Establishing avenues for year-round consultations and awareness-raising through information bulletins, pamphlets, etc.

AGRI 3 Diversify coastal crops

Work toward the gradual and partial replacement of traditional crops such as citrus by semi-tropical crops which are in higher demand in national and regional markets. Coordinate with the Ministry of Agriculture toward increasing Lebanese exports of these crops and establishing the qada' of Sour as the center for their production.

AGRI 4 Establish a banana storage, refrigeration, and packaging facility

The ultimate aim of this project is to increase the bargaining power of banana farmers by:

1. Allowing them to store their products until they can obtain a satisfactory price from wholesalers; and
2. Increasing their sale price by packaging their products and branding them.
3. Create jobs for the youth of the qada’.

AGRI 5 Establish a citrus storage, refrigeration, and packaging facility

The ultimate aim of this project is to increase the bargaining power of citrus farmers by:

1. Allowing them to store their products until they can obtain a satisfactory price from wholesalers; and
2. Increasing their sale price by packaging their products and branding them.
3. Create jobs for the youth of the qada’.

AGRI 6 Establish a pilot fish farm

The qada’ of Sour is home to the cleanest shore and seawater of the country, an asset that can be responsibly exploited, in coordination with the Syndicate of Fishermen, in order to:

1. Increase the fish production of the qada' thereby serving a national market that currently imports fish from the gulf countries;
2. Stabilize the income of the qada’s fishermen by providing additional income during the low fishing season.

AGRI 7 Establish a pilot dairy and cattle flesh farm
This project aims to establish a pilot farm that may be replicated and expanded if successful. This project will target the following objectives:

1. Make use of the large expanses of unexploited land in the inner South of the qada'
2. Benefit from the increasing demand for cattle flesh and dairy products in the country
3. Create jobs for the youth of the qada'

**STRATEGIC OBJECTIVE 2**

**DEVELOP THE QADA’S AGRO-INDUSTRY IN ORDER TO GENERATE ADDED VALUE AND JOBS FROM AGRICULTURE**

**MANU 1 Establish a juice production facility**

The establishment of a facility that transforms Sour’s citrus into both fresh juice and juice concentrate will help farmers decrease the amount of wastage that currently plagues the citrus sector in the region. Moreover, by expanding the value chain of citrus production, this facility will contribute to the region's economy by generating added value and job opportunities.

**MANU 2 Establish a modern olive press, bottling, and labeling facility**

The aim of this project is to increase the marketing capacity of the olive oil industry by producing marketable and exportable high-quality olive oil and creating a brand for Sour’s olive oil. This project needs to be accompanied by an effort to get the MoA to issue an olive oil classification and certification system in order to curb competition by lower quality mass market oils.

**MANU 3 Coordinate the packaging, labeling, and distribution of honey**

Assist the Apiculture Union in developing a marketing strategy for the qada's honey, including a common label and distribution channels. Work to get the MoA to issue a classification and certification system for honey production.

**STRATEGIC OBJECTIVE 3**

**STREAMLINE TRADE PRACTICES TOWARD A MORE EFFECTIVE MARKETING OF THE QADA’S PRODUCTS**

**TRADE 1 Develop a marketing and branding campaign**

In order to increase the marketability of its products, the qada’ needs to develop a distinguishable identity for its products. Consultants will be hired to work with the concerned stakeholders in the qada’ in order to develop a marketing strategy for the qada’ as a tourism destination and for its agricultural and agro-food products. A common brand will also be developed in order to increase the visibility of the qada’s products.

**TRADE 2 Regulate the local market (hisbeh)**

In order to ensure a proper venue for merchandise exchange in the qada’ where standards of hygiene, equal opportunity, and fair trade are respected, the municipality of Sour, in coordination with the UMoT and a technical consultant, need to develop procedures that become mandatory for all those who are active in the local market (hisbeh).

**TRADE 3 Expand the cycle of farmers markets in order to bypass agents**

There is a long-standing and effective cycle of local markets that span the area of Sour and Bint Jbeil. In order to increase the opportunities for direct contact between farmers and customers, without the need for intermediaries, it is proposed to increase the number of weekly
markets in order to cover the entire area of the qada’ on every weekday, with a view toward attracting residents from nearby qada’s (nabatiyeh, Bint Jbeil, Zahrani).