

## Action Fiche for Syrian Arab Republic/

### 1. IDENTIFICATION

Title/Number	Baniyas Water and Wastewater Project		
Total cost	Total Cost of the project EUR 35 000 000 <ul style="list-style-type: none"><li>• EU contribution EUR 5 000 000</li><li>• Beneficiary contribution EUR 12 500 000</li><li>• EIB contribution EUR 17 500 000</li></ul>		
Aid method / Method of implementation	Project approach - <i>Decentralised management</i>		
DAC-code	14020	Sector	Water Supply and Sanitation

### 2. RATIONALE

#### 2.1. Sector context

Syria faces important environmental challenges that affect living conditions, health and economic productivity of the population. The incidence of environment-related diseases is high and the costs of environmental degradation have been recently estimated by the World Bank at 2.3% of GDP. The renewable water resources of Syria are estimated at 10-18 billion m<sup>3</sup>/year. These resources are now almost fully exploited. Estimates suggest an annual growth in water demand of around 2% over the next 20 years, which will result in deficits over large areas of the country. Syria's large irrigation network accounts for 89% of the water use, while only 7% is used for domestic purposes and 4% for industrial, commercial and tourist purposes. Drinking water consumption per capita ranges between 82 litres/day in rural areas and 176 litres/day in urban areas. Thus, adopting integrated approaches to water and waste water management -whilst taking into account future needs- will be required to effectively meet these challenges.

Baniyas City (approximately 50 000 inhabitants) and the surrounding villages on the Syrian coast are examples of those areas suffering from health and environmental problems linked to water supply networks and sewage water collection systems. They have been identified as the "most critical [pollution] hot spot" by the Horizon 2020-Mediterranean Hot Spot Investment Programme. In particular, they face the following main problems:

- **Water supply & distribution.** The current supply networks suffer from heavy water losses and leakages (an estimated 30% of pumped freshwater is lost according to recent tests).
- **Wastewater collection & treatment.** Baniyas City has a combined storm-water/wastewater collection system, frequently resulting in overflows during winter and associated environmental and health problems. The surrounding villages have either very basic networks or no networks at all, relying solely on septic tanks for the disposal of their wastewater. No sewage treatment facilities are in place, and untreated sewage is discharged directly into the Mediterranean

Sea or reaches the sea through rivers. These problems become particularly acute during summer seasons.

All concerned authorities, at the central and local level, have expressed much interest in supporting small wastewater treatment plants and constructing/upgrading water supply networks and sewage water collection systems outside the main cities and big urban agglomerations. The city of Baniyas has a development plan in place which projects the infrastructure needs over the next generation. The plan identifies an area to be developed by 2025 and to be expanded by 2040.

## 2.2. Lessons learnt

The EU has been active during the last years in the water and sanitation sector in Syria. The EU-Syria Country Strategy Paper 2007-2013 addresses water scarcity and contamination as a serious problem. Since 2003, the EU has been working on water supply and sanitation in two Palestinian refugee camps South of Damascus. One of the major lessons learnt during the course of these projects is the need to ensure a strong coordination mechanism between relevant institutions and authorities. Indeed, there is a high level of fragmentation, with overlapping functions and responsibilities of different ministries and stakeholders.

Specific studies have been carried out since 2005 (*see Annex*) regarding the wastewater sector in Baniyas and the adjacent villages. Amongst them, the Concept Note of the Horizon 2020 - Mediterranean Hot Spot Investment Programme<sup>5</sup> identified Baniyas as "the most critical [pollution] hot spot" in Syria. It concluded, like the other studies, that a wastewater treatment plant should be constructed for Baniyas City and the surrounding villages, and that the industrial wastewater treatment plant at Baniyas Refinery should be rehabilitated.

## 2.3. Complementary actions

The project will boost synergies and complementarity with the following initiatives in the water and wastewater sector in Syria:

- **European Commission & European Investment Bank (EIB) bilateral projects:** The European Commission-EIB "Damascus Rural Water and Sanitation Project" (EUR 45 million loan EIB contribution and interest rate subsidy from EU) aims at enhancing the supply of drinking water, as well as the collection and treatment of wastewater of 14 cities South of Damascus. The EIB has also been asked by the Syrian authorities in 2008 to co-finance a number of new wastewater treatment plants in rural areas of Aleppo Governorate (Aleppo Rural Water and Wastewater project).
- **Regional projects:** The EU-funded "Sustainable Water Management and Depollution of the Mediterranean" (EUR 22 million) that started in late 2009 aims at actively promoting the extensive dissemination of sustainable water management policies and practices in the region in the context of increasing water scarcity, combined pressure on water resources from a wide range of users, and desertification processes, in connection with climate change.

---

<sup>5</sup> Horizon 2020 – Elaboration of a Mediterranean Hot Spot Investment Programme, October 2007, EIB

- **Other donors' initiatives:** Kreditanstalt für Wiederaufbau (**KfW**) is currently developing wastewater management programmes in rural Damascus with water supply and wastewater projects in a number of other municipalities to follow. **JICA** has assisted in the design and operation of wastewater treatment plants in Damascus and has provided policy development support for this sector in all Governorates.

## **2.4. Donor coordination**

Donor coordination in Syria falls under the responsibility of the State Planning Commission (SPC). Due to the relative absence of activity in the area in recent years, the EU Delegation organised informal Donor Coordination meetings to avoid the overlap and to boost synergies between donor activities. In 2009, the SPC launched official aid coordination meetings with international donors, grouped by major areas of assistance, including the water and infrastructure sector. It is envisaged that such meetings will continue in the future and will possibly be supplemented with thematic working groups. The Baniyas Water and Wastewater project will be compliant with the EU Backbone Strategy in terms of ownership thereby facilitating communication and efficiency with the beneficiary. Given the size of the Project and EU commitment to ongoing assistance, it is considered that the EU would be in a position to play a leading coordination role, in line with the Paris Declaration principles, the European Consensus on Development as well as the EU Code of Conduct on Complementarity and Division of Labour in Development Policy.

The project will coordinate with and consult the Project Task Forces of other EU ongoing projects in Syria in order to seek advice, take stock of lessons learned and to harmonise proposals and approaches, whenever appropriate. A number of regular stakeholder meetings have already taken place with the participation of the EIB, European Commission, MoHC, Tartous Governorate, Tartous Water Company, Baniyas Municipality and other stakeholders.

## **3. DESCRIPTION**

### **3.1. Objectives**

The overall objective is to develop sustainable integrated water resources management along the coastal area to reduce the pollution affecting the Mediterranean Sea, while improving the health and environmental conditions of the population of Baniyas and its surrounding villages. The project purpose is to provide the population of these areas with the necessary infrastructure to ensure an efficient and environmentally sound drinking water supply and wastewater management system. The Baniyas Water and Wastewater Project may be part of a large programme -currently under appraisal by EIB in coordination with the Syrian authorities-. The enlarged programme would cover additional water and wastewater infrastructure around Baniyas in the Province of Tartous. The estimated total costs of the enlarged programme, in which the Baniyas Water and Wastewater Project is included, is currently at around EUR 50-60 million. In any case, the amount of the EU contribution remains unchanged (EUR 5 million).

### 3.2. Expected results and main activities

The expected results are the following:

- Water supply and distribution system in Baniyas and 25 surrounding villages in place
- Wastewater collection systems in Baniyas and the 25 villages
- Wastewater Treatment Plant for Baniyas City constructed
- Protection of Sea Water from land-based pollution, resulting in improved economic situation through new tourism and recreation areas on the coast
- Enhanced Water Quality
- Enhanced Public Health through tackling challenge of contamination of drinking water

The project is structured around the following actions:

#### **Component 1. Development of Baniyas city water supply and distribution system**

*Result 1: Rehabilitation and extension of the network for the 2025 development area.*

*Result 2: Extension of the network for the 2040 development area.*

#### **Component 2. Development of water supply and distribution systems for the villages**

*Result 1: Rehabilitation/construction of water supply systems in the villages.*

*Result 2: Extension of the network for the 2025 development area.*

*Result 3: Extension of the network for the 2040 development area.*

#### **Component 3. Baniyas Wastewater collection system.**

*Result 1: Disconnection and development/rehabilitation of storm water system, development of new separate wastewater collection system for the 2025 development area.*

*Result 2: Extension of the network for the 2040 development area*

#### **Component 4. Development of wastewater collection networks in seven villages**

*Result 1: Construction of wastewater collection network and possibly decentralized treatment plants for existing development areas and main collectors from the villages to Baniyas city.*

*Result 2: Extension of the networks for the 2025 development areas*

*Result 3: Extension of the networks for the 2040 development area*

## **Component 5. Wastewater treatment and reuse (160,000 population equivalent)**

*Result 1: Construction of wastewater treatment facilities to treat the wastewater generated up to 2025 (160,000 p.e.).*

*Result 2: Expansion of the treatment plant to treat the wastewater generated up to 2040.*

*Result 3: The reuse of treated wastewater in agricultural areas and fields.*

### **3.3. Risks and assumptions**

#### Main Risks

- Delays and complications in tendering, contracting and decision taking
- No experience in the operation of wastewater treatment plants in the Tartous Governorate where the project is located and where water supply and sanitation issues are managed by the General Establishment for Water and Wastewater in Tartous.
- Lack of sufficient institutional capacity at the Water Authority
- Lower cost coverage and revenues than forecasted

#### Risk Mitigation Strategies

- Training and capacity building through technical assistance (TA)
- A design built operation (DBO) contract for the waste water treatment plant (WWTP) shall be signed with an operation period of 3 or more years
- Updating and adoption of new water and wastewater tariffs by the Government

### **3.4. Crosscutting Issues**

The project fosters a number of EU cross-cutting issues. Most importantly, it will have a significant positive impact on environmental sustainability. Ground water and coastal zone environment will be significantly improved as a result of increased treatment of municipal sewage. Air quality will also be improved and unpleasant smells will be reduced.

By ensuring the participation of all major stakeholders in the sector, including consumer associations and the media through inclusive consultation mechanisms, the project will contribute to enhancing public sector accountability and governance. It will also increase the access of the population to safe drinking water, which constitutes a basic human right and contribute to the Millennium Development Goal (MDG) 7.

### **3.5. Stakeholders**

The following are the main stakeholders of the project:

- The **Ministry of Housing and Construction (MoHC)** and its **General Establishment for Water and Wastewater in Tartous**, which are the two public authorities in charge of the design and construction of water supply networks and wastewater treatment plants.
- The **Ministry of Local Administration (MoLA)**, the **Governorate of Tartous** and the **Municipality of Banias**, which are responsible for town development and for providing services related to wastewater/storm water collection networks.
- The **Ministry of State for Environmental Affairs (MoSEA)** and its Directorate of Environmental Affairs in Tartous Governorate are the two public authorities responsible for environmental protection and management in the project area.

The final beneficiaries of the project will be the population of Banias City and the 25 surrounding villages. Due to shortcoming in the beneficiaries' institutional capacity, technical assistance in project management will be needed. All stakeholders have been fully involved and consulted at different levels at all stages.

## **4. IMPLEMENTATION ISSUES**

### **4.1. Method of implementation**

The programme will be implemented under decentralised management mode. The EU Contribution amounts to EUR 5 million in parallel to the disbursement of an EIB loan in support of the investment project. The contracting authority is the Syrian Ministry of Housing and Construction (MoHC), following the procedures set out in 4.2 below, except for the provision included in the contribution for audit, monitoring and evaluation, for which the European Commission will be the contracting authority. Payment will be made directly by the European Commission to the contracting authority, as reimbursement of expenditures deemed eligible on the basis of conditions to be detailed in the Financing Agreement.

### **4.2. Procurement and grant award procedures**

#### **(1) Contracts**

All contracts implementing the financing agreement and benefitting from both the EU and the EIB contribution will be awarded and implemented by the Beneficiary in accordance with the EIB applicable rules and procedures (including EIB's prior non-objection at various steps of the tender and award process), except for the provision included in the EU contribution for audit, monitoring and evaluation, which will be awarded and implemented in accordance with the procedures and standard documents laid down and published by the European Commission for the implementation of external operations, in force at the time of the launch of the procedure in question.

EIB is currently undergoing a compliance assessment for the respect of the requirements of Article 56 of the Financial Regulation, which should be completed by the end of the year. Until then, the European Commission has already an extensive experience of working with the EIB, which as an EU body gives a reasonable

assurance that the requirements of the FR will be respected. In addition, the programme is not expected to begin before the assessment has been completed.

The Commission controls ex post the contracting procedures, based on a confirmation to be received from the EIB.

Participation in the award of contracts for the provision included in the EU contribution for audit, monitoring and evaluation in the present action shall be open to all natural and legal persons covered by the ENPI Regulation.. Further extensions of this participation to other natural or legal persons by the concerned authorising officer shall be subject to the conditions provided for in article, 21(7) of ENPI Regulation.

#### 4.3. Indicative budget and calendar

The total project cost is estimated at EUR 35 million, of which a EUR 17.5 million shall be financed from the EIB through a loan to Syria, EUR 12.5 million by the Government of Syria and EUR 5 million from the EU.

The indicative breakdown of the budget is:

**Operational fund**                                 **EUR 30 000 000**

**EU contribution**                                 **EUR 5 000 000**

(including a provision of EUR 200 000 for audit, monitoring and evaluation)

**Total**   **EUR 35 000 000**

The Government will provide working spaces, offices and manpower, and salaries of the Syrian staff as in kind contribution to the project. The total cost of EUR 35 million will also cover the engineering and supervision costs as well as the construction costs for Banias water supply and distribution systems, the water supply and distribution systems for the surrounding villages, the Banias wastewater collection system, the wastewater collection networks for the villages and the Banias wastewater treatment plant.

Stakeholder	Amount (million EUR)	Contribution (%)	Type of contribution
EIB	17.5	50%	Loan
Syrian Government	12.5	36%	Investment cost
EU	5	14%	Support to the investment project

The project will have an indicative duration of 84 months following the signature of the financing agreement. The operational implementation phase is 60 months and the remaining 24 months are allocated for the closure phase. A design phase is included

in the operational implementation phase and its duration depends on the stage of preparation of the individual projects.

#### **4.4. Performance monitoring**

The performance of each component benefiting from the EU financing will be monitored and evaluated through predefined milestones, periodic visits and regular reporting by the European Commission. In order to establish synergies, EIB internal monitoring reporting will be used as an input for the European Commission performance monitoring.

The Ministry of Housing and Construction (MoHC) will provide the European Commission with relevant reports and lists of payments related to the implementation of each component benefiting from the EU financing in this project. The timing and format of these reports and lists will be detailed in the financing agreement. The lists of payments will be subsequently the subject of control and verification by an international audit firm to be contracted by the Commission. For this purpose, a control and verification plan will be established on the basis of agreed-upon procedures.

The audit firm will draw up reports in accordance with agreed-upon procedures and will submit them to the Commission. Full co-operation between the audit firm, the EIB and the Ministry of Housing and Construction (MoHC) is deemed necessary. For this purpose, the Ministry of Housing and Construction (MoHC) will designate a contact person in charge of facilitating the control and verification tasks of the audit firm.

#### **4.5. Evaluation and audit**

The evaluation and the audit of the project shall be done in accordance to the requirements and under the control of the Ministry of Housing and Construction (MoHC) and the European Commission. In parallel with that indicated in 4.4, the European Commission reserves the right to perform project-specific monitoring, evaluation and audits directly at its own cost. In particular, the Commission will carry out an overall assessment and evaluation of the project. The European Commission will prepare the terms of reference and select the service providers for audit, monitoring and evaluation missions. The European Commission will communicate all audit and evaluation reports to the beneficiary. The Ministry of Housing and Construction (MoHC) will put at the disposal of the audit, monitoring and evaluation missions all the requested supporting documents.

#### **4.6. Communication and visibility**

The visibility of each action will comply with the "Communication and Visibility Manual for EU External Actions" in force at the time of the implementation. The MoHC shall ensure that the project implementation and outputs will be distributed to all concerned stakeholders and through the national media.