

Project Title: Establishment of Shared Gardens	Country: Tunisia Municipality: Raoued	Funds requested: 460,000 Dollars
Direct/Indirect Beneficiaries <div style="border: 1px solid black; padding: 5px;"> Local communities Municipality Job seekers Refugees from Africa southern desert </div>	Target Area: <div style="border: 1px solid black; padding: 5px;"> Sidi Amor, Raoued city </div>	
GOALS: <ol style="list-style-type: none"> 1. Developing and highlighting a national and regional pilot site (North Africa). 2. Linking between water, energy, food, forest and biodiversity systems in Sidi Amor hill in Raoued 3. Entrepreneurship / job creation, a comprehensive program for local sectors and capacity building in many areas 		

SITUATION AND PROBLEM IDENTIFICATION

Context for the development of the log frame:

The natural ecosystem of Djebel Sidi Amor offers a remarkable peri-urban landscape, both in terms of landscape and biodiversity. Unfortunately, anthropic and climatic effects have led to a progressive degradation of the ecosystem, threatening it with extinction, as is the case with the land burnt or eroded by quarries.

The initiative of the municipality of Raoued in partnership with the ministries concerned (environment, State domains, agriculture), civil society actors (GDA Sidi Amor, etc.) and scientific research institutions (INRGREF, INAT, etc.) aims to undertake a project to restore this vulnerable natural ecosystem by combining two approaches: (i) the Nexus approach (Water, Energy, Food) and (ii) the sustainable economic development of the forest site for the benefit of the local population (Raoued).

The working hypotheses and the needs of the target actors

Water, energy, food, forestry and biodiversity systems are highly interconnected and essential for rural livelihoods and food and nutrition security. These systems are under extreme stress from climate change and other human-induced pressures. The restoration of Sidi Amor hill could be an example of a Quadripartite Nexus "Water, Energy, Food, Forest".

Conventional institutional approaches do not take into account the integrated nature of water, energy, food, forestry and biodiversity systems, nor do they take into account inter-sectoral synergies. The population of Raoued and vulnerable groups suffer the most negative consequences of this degradation.

The Sidi Amor hill could be a pilot site for Tunisia and North Africa in terms of wastewater productivity, inclusion of its users, and the development of inclusive and equitable food systems with all local stakeholders in water, energy, food, forests and biodiversity.

General objective

This initiative aims to develop a national and regional (North Africa) pilot site highlighting the interconnection of water, energy, food, forest and biodiversity systems in the Sidi Amor hill in Raoued.

The initiative starts with a Proof of Concept around the Sidi Amor mausoleum and progressively generates a series of results through 3 components: restoration of the degraded site, entrepreneurship/job creation and a cross-cutting programme of local capacity building in Raoued.

Specific objectives:

The initiative will be facilitated by the Municipality of Raoued in partnership with relevant ministries and piloted by a broad-based Citizen Science Consortium aiming to achieve gains in the water, energy, food, forestry and biodiversity systems in Sidi Amor Hill.

The general objective will be achieved through two outcomes / specific objectives:

The population of Raoued appropriates the Sidi Amor hill through the pilot site of the mausoleum and contributes to the preservation of the forest space according to the quadripartite Nexus approach (Water - Energy - Food - Forest).

The socio-economic situation of the population of Raoued is improved thanks to the generalisation of the PoC of the mausoleum to the whole hill: the integrated agro-forestry development of the Sidi Amor hill according to the Nexus (Water - Energy - Food, Forest)

TARGETED AREA AND BENEFICIARIES

Raoued, Tunisia

Local communities and municipality.

METHODOLOGY

1. Installation of a rainwater harvesting tank.
2. Connection of the site to the Sidi Amor Water Pump in partnership with the Ministry of Agriculture.
3. Selection of a pilot group of beneficiaries among the neighbors of Sidi Amor hill (based on output).
4. Training workshop on distillation techniques.
5. Raising awareness on the economic opportunities of peri-urban agroforestry.
6. Bringing together agroforestry research actors, local civil society actors and relevant support structures
7. Citizen consultation for the regularization of the land situation of the hill.
8. Development of a recreational trail + community gardens in the forest.
9. Development of business plans for the economic valorization of forest resources.
10. Establishing urban park.
11. The social integration of the inhabitants of the region in agriculture (urban gardens and their training in the field of extracting forest products).
12. Economic inclusion: marketing products with points of sale built with environmentally friendly ecological characteristics and relying on alternative energy.
13. Establishing a station to generate electric power from solar energy so that it can be used in the operation and preparation of the waste water treatment plant, as well as in public enlightenment.
14. The completion of underground tanks to collect rainwater at the project site.
15. Living lab: establishing living labs with the presence of a technology pole and a large number of universities near the site.

The logical framework for the program is well-detailed in the following table:

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General objective: impact				
The Sidi Amor hill in the municipality of Raoued is a pole of excellence in the <i>Water - Energy - Food nexus</i> in Tunisia and North Africa.				
Specific objectives	Indicators	Means of verification	Activities and stages	Calendar
Outcome 1				
The population of Raoued appropriates the Sidi Amor hill through the pilot site of the mausoleum and contributes to the preservation of the forest space according to the quadripartite Nexus approach (Water - Energy - Food - Forest)				
Output 1.1 Securing and developing the Sidi Amor mausoleum as a cultural and spiritual community space. (PoC Proof of Concept)	Development report - site report.	Closure of the project validated by the steering committee.	<ul style="list-style-type: none"> - Activity 1.1.1: Mausoleum security plan + mausoleum garden development plan. - Activity 1.1.2 (Water): Installation of a rainwater harvesting tank. - Activity 1.1.3 (Energy): Development works + development of renewable energy. - Activity 1.1.4 (Food): Development of mausoleum gardens + community garden/vegetable garden. - Activity 1.1.5: Connection of the site to the Sidi Amor Water Pump in partnership with the Ministry of Agriculture 	February - March 2023

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<p>Output 1.2 Study on the surrounding population of the Sidi Amor hill (Peri-urban forest) and the opportunities for socio-economic integration.</p>	<p>Quantitative and qualitative survey made available to the general public.</p>	<p>Peer-reviewed study by the general academic public.</p>	<ul style="list-style-type: none"> - Activity 1.2.1: Quantitative/qualitative survey of surrounding neighbourhoods. - Activity 1.2.3: Qualitative focus group with a representative group of the population. 	<p>February - March 2023</p>
<p>Output 1.3 Training of a target group on the techniques of valorisation of forest / medicinal and aromatic plants.</p>	<p>Training report + evaluation results</p>	<p>The report and evaluation are validated by the project steering committee.</p>	<ul style="list-style-type: none"> - Activity 1.3.1: Selection of a pilot group of beneficiaries among the neighbours of Sidi Amor hill (based on output 1.2). - Activity 1.3.2: Training workshop on distillation techniques - Activity 1.3.3: Training/awareness-raising workshop on the economic opportunities of peri-urban agroforestry 	
<p>Outcome 2 The socio-economic situation of the population of Raoued is improved thanks to the generalisation of the mausoleum pilot to the whole hill: the integrated agro-forestry development of Sidi Amor hill according to the Nexus (Water - Energy - Food, Forest)</p>				
<p>Output 2.1</p> <ul style="list-style-type: none"> • Creation of a scientific and citizen consortium, facilitated by the municipality, aiming at the 	<p>A consortium protocol is established</p>	<p>Consortium announced</p>	<ul style="list-style-type: none"> - Activity 2.1.1: Bringing together agroforestry research actors, local civil society actors and relevant support structures - Development of a 2023 action plan 	<p>January - February 2023</p>

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nexus



valorisation of the Sidi Amor hill as a peri-urban agro-forestry site.				
Output 2.2 <ul style="list-style-type: none"> Regularisation of the land situation of the hill / Implementation of a sustainable management method for the Sidi Amor forest. 	A convention/agreement clarifying the land status of the hill is signed.	Convention signed and ratified	<ul style="list-style-type: none"> Activity 2.2.1: Citizen consultation meeting for the regularisation of the land situation of the hill Activity 2.2.2: Development of an advocacy plan Activity 2.2.3: Implementation of advocacy (media, central institutions, etc.) 	May - September 2023
Output 2.3 Development of a recreational trail + community gardens in the forest.	<ul style="list-style-type: none"> Designed and created course 	<ul style="list-style-type: none"> First peri-urban forest trail inaugurated. 	<ul style="list-style-type: none"> Activity 2.3.1: Tender for the development of a peri-urban forest walking route Activity 2.3.2: Optimising the use of wastewater for irrigation and forest protection. Activity 2.3.3: Development of community shared gardens in the forest. 	Nov / Dec 2023
Output.2.4 Creation of jobs / outlets around agroforestry and food security for the local population	<ul style="list-style-type: none"> Local projects are implemented around the development of forest resources 	<ul style="list-style-type: none"> Business plans developed, small businesses / production 	<ul style="list-style-type: none"> Activity 2.4.1: Development of business plans for the economic valorisation of forest resources Activity 2.4.2: Selection of beneficiaries by the municipality (partnership with the National Agency for Self-Employment) 	

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nexus



	(distillation, essential oils, etc.)	cooperatives created.	- Activity 2.4.3: Training for beneficiaries / support in the creation of social and solidarity enterprises.	
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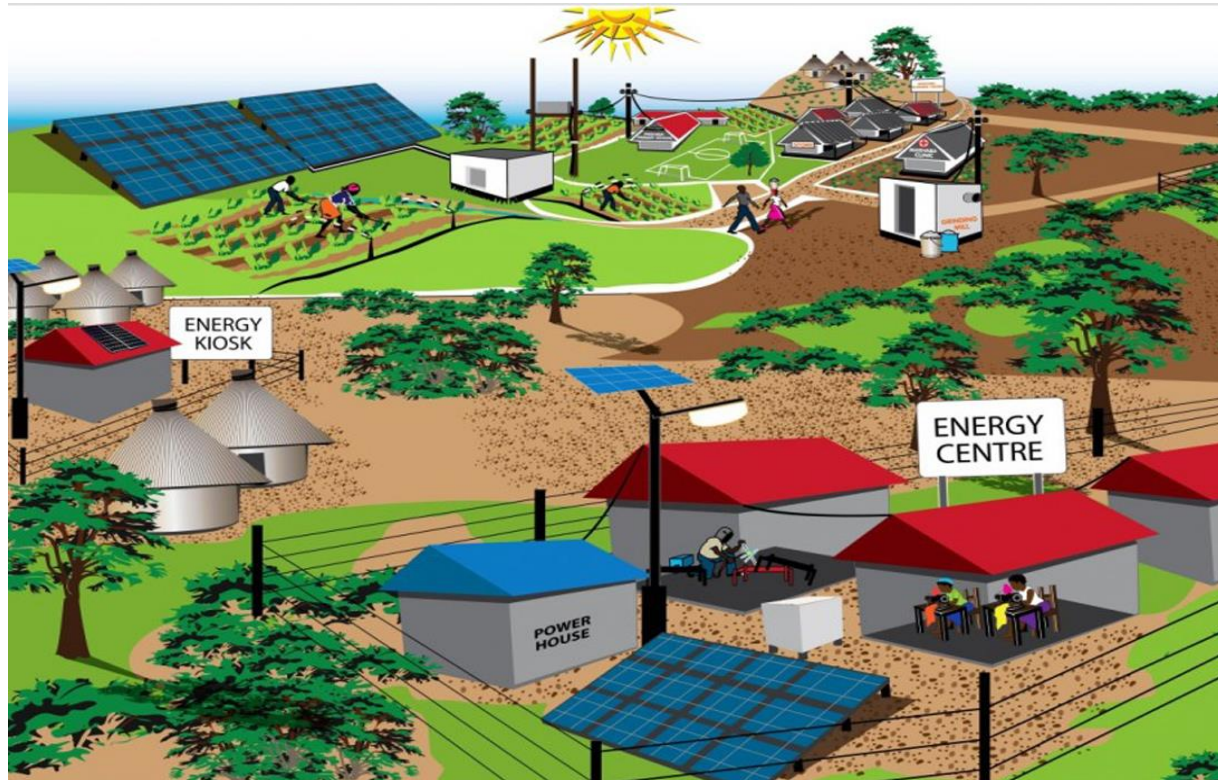


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EXPECTED RESULTS

1. Securing and developing the Sidi Amor mausoleum as a cultural and spiritual community space.
2. Study on the surrounding population of the Sidi Amor hill (Peri-urban forest) and the opportunities for socio-economic integration.
3. Training of a target group on the techniques of valorization of forest / medicinal and aromatic plants.
4. Creation of a scientific and citizen consortium, facilitated by the municipality, aiming at the valorization of the Sidi Amor hill as a peri-urban agro-forestry site.
5. Regularization of the land situation of the hill / Implementation of a sustainable management method for the Sidi Amor forest.
6. Optimizing the use of wastewater for irrigation and forest protection.
7. Creation of jobs / outlets around agroforestry and food security for the local population
8. Reducing CO₂ emissions in Raoued municipality by increasing the green areas and trees cover.
9. Increasing the green planted areas.
10. The ability to generate power.
11. Reducing the unemployment rate.
12. Effective reuse of wastewater in the agricultural areas.

Feasibility Study

Project Component	Estimated cost (USD)
Study cost	30,000
Infrastructure	85,000
Energy costs	60,000
Water supply costs	40,000
Agricultural and forest rehabilitation	185,000
Waste recycling costs	60,000
Total cost	460,000