

MINISTRY OF ENVIRONMENT NATIONAL SANITATION UTILITY

ONAS



SANITATION IN SMALL AGGLOMERATIONS

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> (ONAS) SWMED _ ENPI CBCMED

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•Sommair

ONAS PRESENTATION ONAS ACTIONS FUTURE PROGRAM









ONAS is a public institution of an industrial and commercial character, enjoys civil status and financial autonomy and is placed under the authority of the Ministry of the Environment

ONAS was established in 1974, and was entrusted with the mission of management of the sanitation sector.

Sanitation Indicator						
Number of municipalities supported (total 262)	151 (80% of urban population)					
Number of inhabitants connected to the sanitation network in the areas of intervention ONAS (in millions)	5,1					
National Branching ratio	76%					
connection rate in the onas intervention areas	87%					
length of the network in the areas of ONAS intervention (km)	13200					
number of wastewater treatment plants operating	95					
Treated wastewater(millions m3)	217					



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ONAS actions include the following fields:

Studies: These relate to sanitation master plans in cities and Governorates (regional administrative departments), feasibility studies, prospective studies and final design studies related to sewerage networks, pumping stations and wastewater treatment plants;

Works: These relate to the implementation of sanitation projects and supervision of the projects conducted by such other parties as public or private developers . . .;

Operation and maintenance (O & M) of sanitation networks and facilities: ONAS intervenes fully and directly in the zones annexed by decree to its action zones;

Technical assistance: ONAS provides technical assistance and guidance to local government and other public or private institutions or enterprises in the field of water pollution.

The first wastewater plant in Tunisia (1929) Cherguia (Tunis)

Wwt plant Chérguia-Tunis 60 000 m3/day (1958)



WWT Plant Tunis-Choutrana (1986)

111,000 m³/day

WWTP CHOUTRANA



station Sousse Sud Boue Activée – Lit Bactérien Stabilisation aérobie des boues



SAYADA (1993)

1 700 m³/day

and the second party of the







1-Introduction

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In Tunisia today, the citizen's right to sustainable development and a healthy environment is a key element of the strategy of economic development, particularly in rural areas.

It is in this sense that enormous efforts have been made to the development of basic infrastructure in rural areas, and through several national programs such as IRDP, Solidarity Fund and drinking water that has an important corollary in terms of wastewater discharge into the natural environment

And in addition to these efforts in the spirit of complementarity between economic development and environmental sanitation component is integrated into development programs in rural areas.

Introduction

The National Sanitation Utility (ONAS) was entrusted with a strategic study for the sanitation of rural zones, where wastewater has become a source of pollution as a result of an improvement in the rate of drinking water supply to these area in 2000

It has as objectives :

Characterize rural areas in terms of social and demographic

- lidentify possible solutions to technical, institutional Financial that can be applied to the local context in Tunisia
- Set a priority program of sanitation

In these zones :

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2 % are connected to the sewerage network;

23 % dispose of the wastewater in septic tanks;

75 % of the population dispose of wastewater in the wild

3 - Main indicators of rural area

Demographics aspect

- Total rural population: about 3.5 million inhabitants (35% of total population)
 - Dispersed rural population: about 1.9 million inhabitants
- Rural and semi-dispersed : about 1.6 million inhabitants spread over about 8000 localities



Distribution of the population grouped and dispersed in rural area

	<1000	1000 à 2000	2000 à 3000	3000 à 4000	>4000	total
Number of localities	7820	51	51	39	39	8000
population	1 190 000	49 000	87 000	82 000	192 000	1 600 000
housing / community	30	190	340	420	985	

3 - indicators of rural area Main

Currently the rate of drinking water is of the order of 88%, including:

Drinking water

-52% served by SONEDE

- 36% are served from fountains

The remaining 12% with their own resources

□ sanitation

The connection rate to sewerage in rural areas is currently around 4.8%



In summary it can be said of these indicators as follows: *:*

- Strong spatial dispersion for communities less than 1000 inhabitants.
- ➡ communities with more than 4000 inhabitants present a typology similar to that of urban areas.
- Imnities carrying enough coverage for drinking water supply
- Rate sewerage connection is weak

objective of the priority

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• The improvement of the lives of people in places dense about 4000 inhabitants and over, fueled by SONEDE.

- The elimination of pollution caused by the discharge of raw sewage into the receiving environment by putting the appropriate collection systems
- a preservation of natural resources (soil and water) through the wastewater treatment plants in existing or construction of new treatment units

Priority Programme (more than 4000 people)

Selection criteria and classification

- Importance of the population of about 4000 inhabitants and more.
- Environmental aspects (safety and sensitivity of the receiving environment)
- Proximity of existing treatment plant
- Connection **cost**

First actions of the program

- ONAS initiated the rural sanitation program since 2001 through a project interssent 8 localities namely:
- Chorfech(Ariana), chouigui(Manouba), Khanguet Hojjej , Beni Aiech , Oued Khatef, Sidi Jdidi et Ain Kmicha (Nabeul), et Bechimet Elgalb(Gabes) , comprising: :
- Laying 38 km of pipes

- The connection of 2220 housing
- The construction of three water treatment plant
- The cost is 4 million dinars

The program was designed to cover various regions of the country, and to encompass the experimentation of all possible sanitation (sewerage) modes, as well as to select appropriate and technically and economically proven cost-effective wastewater treatment plants, maximising the use of treated wastewater as an alternative resource to meet certain developmental needs in the rural zones concerned



	First package (AFD)	Second package	Total program
Number of zones	12	27	39
population	55000	137000	192000
Linear network	106	307	413
Number of connections	7360	19200	26580
Number of WWTP *	3	19	22
Project cost (million DT) * 17 area will be co	12,7 nnected to exist	41,5 ing STEP*	54,2



	†	Priority	Programme i Rural ar	n San ea	itation of		
Area	Population	Cost (milleDT)	Rang		Area	Population	Cost (mille DT)
Slougia	6000	1300	1		Zaucauina	1000	1000
Saheb Jebel	4000	700	2			4000	1000
Sidi Ismail	5400	1800	3			8000	3000
Nianou	5000	575	4	1		6200	2250
El Khetmine	4000	1200	5	1	Foussana	5760	1700
Knaies	4450	950	6	1	Amra	5200	1700
Borgine	4100	600	7		Oueled Chamek	5100	1600
Oued Zarga	7000	2150	8	1	Sedjnane	4870	1850
Foundek Jedid	5395	100	9	1 [Kantaret	4000	1250
Nakta	4800	1000	10		Thibor	1200	1050
Menzel Hor	4000	1300	11			4200	1650
Hamem Bourguiba		1100	Projet spécial		Sayala	4000	900
Total 4	EE44E	40775			Oued Larta	4200	600
package	55145	12775			Ellousa	4000	1500
(AFD)					Kettana	4000	900
Hazeg	8500	2000	13		Bougrara	4000	1450
Khazzanet	7500	2000	13		Hezoua	4900	1400
El Awebed	7000	1850	13		Mellloulech	4300	1750
Ellaba	4000	420	13		Hassi Ferid	4100	1500
Chatt Meriem	6600	2500	17		Jedeliene	4050	1300
Gazala	5250	1800	17		Belkhir	4000	1650
Sidi Makhlouf	5000	1350	19		Total 2	136730	41550
Arem	4000	680	19		package		

Rang

5 - Impact of the program on the rate of connection to wastewater

•Evolution of the rate of network connection in rural area

	COST (million DT)	population connected to sanitation network in rural areas (hab)	(Total population connected to network in rural areas(hab)	Rate connections
Current status	-	16800	16800	4.8%
First Action	4	1545	18345	5.3%
priority program First 1package (AFD)	12.7	5152	23497	7%
priority program second package	41.5	13440	36937	10.6%



6-Conclusion

□ The big question is:

How to manage the sanitation waste water plant to attend their sustainability ?

It is necessary to consider seriously how to put in place the institutional and financial framework that is needed to respond to this great and important question.











MRISSA WASTE WATER PLANT















THANK YOU FOR YOUR ATTENTION

