

## QUESTIONNAIRE FOR SEMI-STRUCTURED INTERVIEWS TO FARMERS

Date		Interviewer		Parcel code	
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### Parcel location

GDA		GPS coordinates	
Parcel area		GDA sector	
Sector toponym		Parcel toponym	

Parcel access Status of accesses	Asphalt road		Carriageable farm track		Narrow farm track	
Distance from asphalt road			Distance from power grid			

### Farmer data

Surname		Name		Sex		Age	
Owner?		Sharecropper		Manager			
Telephone							

Agricultural training	
Distance from home	

Other parcels owned or cultivated at el-Hamma		
GDA	Areas	Role

Decisions making for parcel management				Yes		No	
On water rounds?		On the varieties to cull/to introduce?			About sales?		
On farm works?		On the introduction of tree or horticultural crops?			About purchasing?		

Parcel management mode	
Owner	
Family help	By:
Workers	Days or months/year:
Sharecropper	
Main activities	
Said activities	

Interest in increasing work hours and farm rents	Yes		No	
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Farmer's limits and suggestions				
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## The Parcel

Type	Ancient oasis		Modern oasis		New	
Origin	Inherited		Sold		Donated	
Land regime	Private property				Family property	

N° palms		Of which male pollinators				
Palms Age	Homogeneous		Heterogeneous		Main age	

Palms varieties	N°	Average production/palm	Sucker presence

Interest in increasing the number of traditional varieties	Yes		No	
Wich ones?				
Why?				
Famer's comments				

Fruit trees	Variety	N°	Origin	Production destination	Sale circle	Average price 2018
Olive trees						
Pomegranates						
Vineyards						
Apricot trees						
Peach trees						
Figs						
Citrus trees						

Interest in increasing the number of traditional varieties or or start growing them?	Yes		No	
Wich ones?				
Famer's comments				

Vegetables	Variety	Areas cultivated	Origin seed	Production destination	Sale circle	Average price 2018
Chilli						
Melon						
Okra						
Corète						
Swiss chard						
Carrot						
Salad						
Onion						

Forage	Variety	Areas cultivated	Origin seed	Production destination	Sale circle	Average price 2018
Alfalfa						

Interest in increasing the number of common varieties	Yes		No	
Wich ones?				
Famer's comments				

Livestock	N°
Sheep	
Goats	
Cattle	
Cattle	

Lodging in the parcel	Yes		No	
Livestock fed with fodder grown in the plot	Yes		No	
Fertilized plot with manure from your own livestock	Yes		No	

Interest in increasing the number of common varieties				
Famer's comments				

### Irrigation

Water origin	National well		Private well		Collective-private well	
Water price						

Water turn duration (hours, minutes)					
Average distance between 2 water turns (days)	Summer		Autumn/winter/spring		
Possibility to choose the frequency of the water turn	Yes			No	
Number of water rounds purchased each year					
Farmer considerations about approximating water shifts and reducing the duration of each one					

Irrigation method	Submersion		Others	
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Water supply channels in the parcel	Channels buried in soil		Cemented channels		PVC channels	
State of the water supply chain	Good		Bad			

Side water supply channels	Cemented channels		PVC channels	
State of the water supply chain	Good		Bad	

Basin in the plot	Yes		No	
Interest in making a basin	Yes		No	
Localized irrigation	Yes		No	
Interest in localized irrigation	Yes		No	
Farmer considerations about the possibility to access to national subsidies to realise water saving interventions.				
Farmer Perceived Water Quality				
Good		Slightly salty		Salty

### Drainage

Visibly hydromorphic soil Drains in the parcel	Yes		No	
	Yes		No	
Drains type	Open space		A canali interrati	
Drain status	Good		Bad	

### Mechanization

Mechanization	Yes		No	
Owned instruments				
Rented instruments				
Desired instruments				

### Current soil management

Soil filling			Yes		No	
Total	One time each..... year				Partial	1/..... per year
Filling sand	Cm		Price		Origin	
Filling fertilizer	q/ha		Price		Origin	
Use of compost			Yes		No	
Interest in compost use in the oasi			Yes		No	
Reasons for non-use						

Mineral fertilizer			Yes		No	
Ammonium Nitrate	Kg/ha	Period	Fertilized crops			
DAP (Biamonic Phosphate						
NP 18-46)						
Others						

Reasons for non-use
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Green manure	Yes		No	
Total	1 time each.....years	Partial	1/..... per year	
Depth				

Weeds management	Yes		No	
Frequency	Each.....year			
Inactive biomass cleaning	Yes		No	
Cleaning evaluation	Good		Medium	
			Bad	

Phytosanitary control	Means of fighting
Main disease	
Main pest	
Farmer considerations	

### Wild boar

Visible damages	Yes		No	
Nature of damages				
Protective fences	Yes		No	
Protection level for the farmer	Satisfying		No-satisfying	
Solutions proposed by farmer				

### Estimate of main expenses (DT)

Water	
Fertilization	
Pollination	
Harvesting of bunches of dates	
Phytosanitary control	
Labor wages	
Others	

### Sale of dates

Variety	Sale way					No Sale		
	For palm (collector)	Total harvest + sale	Total harvest + conservation sale	Staggered harvest + sale	Average price 2018	Quantity	Price	Other

**Sale of other products**

Products	Sale			No Sale		
	To a collector: local market	Direct to local market	Direct to national market	Quantity	Price	Other
Vegetables						
Forage						
Fruits						
Livestock						
Milk						
Wool						

**Supply**

	Supply			No Supply			
	From parcel	Local market	National market	Quantity	High price	Rare	Transport
Organic fertilizer							
Mineral fertilizer							
Seeds							
Pest control products							
Equipment							
Forages concentrates							