# 'Ein Siniya Village Profile



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## Background

This report is part of a series of booklets, which contain compiled information about each city, town, and village in the Ramallah Governorate. These booklets came as a result of a comprehensive study of all localities in Ramallah Governorate, which aims at depicting the overall living conditions in the governorate and presenting developmental plans to assist in developing the livelihood of the population in the area. It was accomplished through the "Village Profiles and Needs Assessment;" the project funded by the Spanish Agency for International Cooperation for Development (AECID).

The "Village Profiles and Needs Assessment" was designed to study, investigate, analyze and document the socio-economic conditions and the needed programs and activities to mitigate the impact of the current unsecure political, economic and social conditions in Ramallah Governorate.

The project's objectives are to survey, analyze, and document the available natural, human, socioeconomic and environmental resources, and the existing limitations and needs assessment for the development of the rural and marginalized areas in Ramallah Governorate. In addition, the project aims at preparing strategic developmental programs and activities to mitigate the impact of the current political, social, and economic instability with the focus on the agricultural sector.

All locality profiles in Arabic and English are available online at <u>http://vprofile.arij.org</u>.

**Ramallah Governorate** 

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# 'Ein Siniya Village Profile

### **Location and Physical Characteristics**

'Ein Siniya is a Palestinian village in the Ramallah Governorate located (horizontally) 8km east of Ramallah City. 'Ein Siniya is bordered by Yabrud and 'Ein Yabrud villages to the east, 'Atara and Silwad villages to the north, Jifna and Bir Zeit villages to the west, and Jifna and Dura al Qar' villages to the south (See map 1).



Map 1: 'Ein Siniya location and borders

Source: ARIJ - GIS Unit, 2012.

'Ein Siniya is located at an altitude of 647m above sea level with a mean annual rainfall of 601mm. The average annual temperature is 15.5°C, and the average annual humidity is approximately 60.4% (ARIJ GIS Unit, 2012).

Since 1996, 'Ein Siniya has been governed by a village council, which is currently administrated by 7 members appointed by the Palestinian National Authority. Moreover,

the village council owns a permanent headquarters a vehicle for the collection of solid waste.

It is the responsibility of the village council to provide a number of services to the residents of 'Ein Siniya, including:

- 1. Infrastructure services, such as water provision and management.
- 2. Solid waste collection, road construction and restoration, streets cleaning and social services.
- 3. Provision of transportations.
- 4. Provision of a sewage network.
- 5. Provision of children's kindergartens.

### History

'Ein Siniya village's name derives from two words; ; "'Ein," meaning 'spring,' and "Siniya," meaning the 'moon'- "al qamar in Arabic"- thus, the village's name was originally "'Ein al Qamar." However the name was updated due to the term, "Sin," meaning God of Babel and Ashuri, thus, the crusaders called the village 'Ein Siniya during their period of rule in the region. Its residents are the native citizens of the village (See photo below for 'Ein Siniya village). ('Ein Siniya Village Council, 2011).



Photos of 'Ein Siniya

### **Religious and Archaeological Sites**

In terms of religious establishments, there is only one mosque in the village; 'Ein Siniya Mosque. As for the archaeological sites, there are a few, mainly Khirbet Shattah (See Map 2). ('Ein Siniya Village Council, 2011).



#### Map 2: Main locations in 'Ein Siniya Village

Source: ARIJ - GIS Unit, 2012.

### Population

According to the Palestinian Central Bureau of Statistics (PCBS), the total population of 'Ein Siniya in 2007 was 668; of whom 328 were male and 340, female. There were also registered 136 households living in 169 housing units.

#### Age Groups and Gender

The General Census of Population and Housing carried out by PCBS in 2007 showed the distribution of age groups in 'Ein Siniya was as follows: 35.2% were less than 15 years,

57.9% between 15 - 64 years, whilst 6% fell into the are 65 years and older category. Data additionally showed that the sex ratio of males to females in the village is 105:100, meaning that males and females constitute 49.1% and 50.9% of the population respectively.

#### Families

'Ein Siniya residents are composed of several families, mainly: Ma'alla, Khater, Abu al Hajj, Dar Ali, Abu ash Sheikh, Bazrooq, Mousa and Al Hallaq ('Ein Siniya Village Council, 2011).

### Education

According to the results of the PCBS Population, Housing and Establishment Census-2007, the illiteracy rate among 'Ein Siniya population was approximately 7.6%, of whom 73.7% were female. Of the literate population, 5.4% could only read and write, with no formal education 20.2% had elementary education, 28.7% had preparatory education, 20.4% had secondary education, and 17.6% completed higher education. Table 1, shows the educational level in the village of 'Ein Siniya, by sex, and educational attainment in 2007.

Table 1: 'Ein Siniya population (10 years and above) by sex and educational attainment

S E x	Illiterate	Can read & write	Elementary	Preparatory	Secondary	Associate Diploma	Bachelor	Higher Diploma	Maste r	PhD	Unknown	Total
Μ	10	13	44	74	51	26	21	-	2	1	-	242
F	28	14	57	69	51	20	16	-	1	1	-	257
Т	38	27	101	143	102	46	37	-	3	2	-	499

Source: PCBS, 2009. Population, Housing and Establishment Census-2007, Final Results

With regards to the basic and secondary education institutions and schools in 'Ein Siniya in the academic year 2010/2011, there is only one governmental co-educated school in the village; 'Ein Siniya co-educated Elementary School which is run by the Palestinian Ministry of Higher Education, moreover, there is no kindergartens in the village (Directorate of Education in Ramallah, 2011).

In the village there are 182 students, 16 teachers, and 10 classes (Directorate of Education in Ramallah, 2011). It should be noted here that the average number of students per teacher in the school is nearly 11, while the average number of students per class is approximately 18.

However, due to the lack of secondary level schools for males and females in the village, students of 'Ein Siniya village head to Bir Zeit village's schools or to Ramallah Governorate's schools; 5km and 10km in distance from the village, respectively, in order to complete their secondary education.

Moreover, the educational sector in the village suffers some obstacles, mainly: the insufficient number of students in classes.

### Health Status

There is no kind of health facilities or services available in 'Ein Siniya village, thus, residents of 'Ein Siniva head either to a health center in Dura al Qar' village or to Ramallah health center in Ramallah city; 2km and 10km in distance from the locality, respectively, in order to receive medical attention and services ('Ein Siniya Village Council, 2010).

### **Economic Activities**

The economy in 'Ein Siniya is dependent on several economic sectors, mainly: the agriculture sector which absorbs 60% of the village workforce (See Figure 1).

The results of a field survey for the distribution of labor by economic activity in 'Ein Siniya are as follows:

- Agriculture Sector (60%). •
- Government or Private Employees Sector (25%).
- Industry (10%).
- Trade Sector (5%).



#### Figure 1: Economic Activity in 'Ein Siniya Village

Source:'Ein Siniya Village Council, 2011

In term of industrial productions in 'Ein Siniya village, there are some industrial facilities, including a cans factory, also, there are 5 groceries in the village, one services store, one professional workshop and an olive oil-press. Moreover, the unemployment rate in 'Ein Siniya has reached around 10% ('Ein Siniya Village Council, 2011).

#### Labor Force

According to the PCBS Population, Housing and Establishment Census-2007, 32.3% of 'Ein Siniya labor force was economically active, of whom 84.5% were employed, 67.3% were not economically active, 47.9% were students, and 33% were housekeepers (See table 2).

 Table 2: 'Ein Siniya population (10 years and above) by sex and employment status-2007

s	·	Economica	lly Active		·	Ν						
E X	Employed	Currently Unemployed	Unemployed (Never worked)	Total	Students	House- keeping	Unable to work	Not working & Not looking for work	Other	Total	Un- known	Total
Μ	112	12	7	131	82	-	14	12	2	110	1	242
F	24	3	3	30	79	111	27	4	5	226	1	257
Т	136	15	10	161	161	111	41	16	7	336	2	499

Source: PCBS, March 2009. Population, Housing and Establishment Census-2007, Final Results

### **Agricultural Sector**

'Ein Siniya has a total area of around 3,197 dunums of which 2,782 are considered 'arable' land and 187 dunums are registered as 'residential' (See table 3and map 3).

Total Area	Built	A		Inland	Forests	Open	Area of Industrial,	Area of Settlements, Military		
	up Area	Permanent Crops	Green- houses	Range- lands	Arable lands	water	1010303	Spaces	Commercial & Transport Unit	Bases & Wall Zone
3,197	187	2,057	0	0	725	1	0	203	24	0

 Table 3: Land use and land cover in 'Ein Siniya village in 2010 (area in dunum)

Source: ARIJ – GIS Unit, 2012.



#### Map 3: Land use/land cover and Segregation Wall in 'Ein Siniya Village

Source: ARIJ - GIS Unit, 2012.

Agricultural production in 'Ein Siniya depends mostly on rainwater. As for irrigated fields, these depend on the public water network and domestic harvesting cisterns.

Table 4 shows the different types of rain-fed and irrigated open-cultivated vegetables in 'Ein Siniya. The most commonly cultivated crop within this area is tomatoes.

 Table 4: Total
 area of rain-fed and irrigated open cultivated vegetables in 'Ein Siniya

 village(dunum)

	Fruity vegetables		Leafy vegetable		Green legumes		Bulbs		Other vegetables		Total Area	
RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	
20	47	0	13	10	0	3	0	8	7	41	67	

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2009

Also, located in the village are 6 dunums of land on which there are greenhouses planted with different vegetables; mainly cucumbers.

Table 5 shows the different types of fruit trees planted in the area. 'Ein Siniya is famous for olive trees; there being a total of 1,013 dunums planted with olive crops.

Olives		Citrus		Stone-		Pome		Nuts		Other		Total Area	
				fruits	5	fruits	ts		fruits				
Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.
1,013.5	0	0	0	16	0	0	0	21	0	30	0	1,080.5	0

Table 5: Total area of fruit and olive trees in 'Ein Siniya Village(dunum)

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2009

The difference between the two sets of results obtained from the Ministry of Agriculture and by ARIJ's GIS Unit in sizes of agricultural areas is explained by the fact that the Ministry of Agriculture and the Palestinian Central Bureau of Statistics (2010) conducted a survey which used a definition of agricultural areas based on land ownership. Therefore, the areas included in the survey were those of actual holdings of agricultural areas instead of seasonal ones. The survey did not consider fragmented and small seasonal cultivated areas in residential and agricultural areas. ARIJ's survey, however, indicated the existence of a high proportion of small and fragmented holdings (home gardens) throughout the occupied Palestinian territories, thus accounting for the larger area of agricultural holdings calculated by ARIJ.

As for the field crops and forage in 'Ein Siniya, cereals (in particular wheat and barley) are the most cultivated covering an area of about 60 dunums, whilst dry legumes, such as lentils and balkah, are the second most cultivated crop (See table 6).

	Table 6: Total area of field crops in 'Ein Siniya village(dunum)														
Cereals		Bulbs		Dry		Oil		Forage		Stimulating		Other		Total	
				legumes crops		crops crops		crops			Area				
Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr
60	0	18	0	30	0	0	0	25	0	0	0	0	0	133	0

#### Table 6: Total area of field crops in 'Ein Siniya village(dunum)

Rf: Rain-fed, Irr: Irrigated Source: Palestinian Ministry of Agriculture, 2009

The field survey shows that some of the residents in 'Ein Siniya rear and keep domestic animals such as cows, sheep, goats and broiler chicken (See Table 7).

#### Table 7: Livestock in 'Ein Siniya village

Cows*	Sheep	Goats	Camels	Horses	Donkeys	Mules	Broilers	Layers	Bee Hives
0	90	177	0	0	0	0	20,000	0	0

\*Including cows, bull calves, heifer calves and bulls Source: Palestinian Ministry of Agriculture, 2009

There are also around 5 kilometers of agricultural roads in the village, divided as follows:

Table 8: Agricultural Roads in Elli Siniya vinage and their Lengths							
Suitability of Agricultural Roads	Length (km)						
For vehicles	5						
For tractors and agricultural machinery only	-						
For animals only	-						
Unsuitable	-						

Table 8: Agricultural Roads in 'Ein Siniya Village and their Lengths

Source: 'Ein Siniya Village Council, 2011

### **Institutions and Services**

'Ein Siniya village has no governmental institutions; however, it has a number of local institutions that provide services to various sectors of society, in the areas of culture and services, including ('Ein Siniya Village Council, 2011):

- 'Ein Siniya Village Council: Founded in 1996 by the Ministry of Local Government with the goal of taking care of all the issues in the village and providing various services to its population.
- The Cooperative Society for Olive Oil-pressing: Founded in 1964 with the purpose of pressing olive oil.

### **Infrastructure and Natural Resources**

#### **Electricity and Telecommunication Services:**

'Ein Siniya has been connected to a public electricity network since 1964; served by Jerusalem Electricity Company, which is the main source of electricity in the village. Approximately 100% of the housing units in the village are connected to the network. However, the village residents suffer some problems concerning electricity, mainly ('Ein Siniya Village Council, 2010):

- 1. The weak electric current.
- 2. The network, as well as its structural the columns and lines, are in need of renovation.
- 3. The network's need for development and expansion.

Furthermore, 'Ein Siniya is connected to a telecommunication network and approximately 100% of the housing units within the village boundaries are connected to phone lines ('Ein Siniya Village Council, 2010).

#### **Transportation Services:**

There are 3 taxis that are considered the main means of transportation in 'Ein Siniya village ('Ein Siniya Village Council, 2010). As for the road network in the village; there are a

total of 3km of main roads and a total of 1km of secondary roads (See table 9) ('Ein Siniya Village Council, 2011).

Table 9: Roads in	'Ein Siniya village
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Status of Internal Roads	Road Length (km)			
Status of Internal Roads	Main	Sub		
1. Paved & in good condition	3	1		
2. Paved but in poor condition	-	-		
3. Unpaved	-	-		

Source:'Ein Siniya Village Council, 2011

#### Water Resources:

'Ein Siniya is provided with water by Jerusalem Water Authority through the public water network established in 1972. Approximately 100% of the housing units are connected to this network. ('Ein Siniya'Village Council, 2011). The quantity of water supplied to 'Ein Siniya in 2010 was approximately 27,115 cubic meters/ year; therefore, the average rate of water supply per capita in 'Ein Siniya'is 111.2 liters per day (Jerusalem Water Authority, 2011). Additionally, there are 5 public springs in the village used for agricultural projects. ('Ein Siniya'Village Council, 2011)

To determine water costs, the water authority has adopted an upward rate where the price of water increases with increasing consumption. Table 10 shows the price of water by category of consumption.

Consumption Category (m <sup>3</sup> )	Domestic (NIS/m <sup>3</sup> )	Industrial (NIS/m <sup>3</sup> )	Tourist (NIS/m <sup>3</sup> )	Commercial (NIS/m <sup>3</sup> )	Public Institutions (NIS/m <sup>3</sup> )
0 – 5	4.5	5.6	5.6	5.6	5.4
5.1 - 10	4.5	5.6	5.6	5.6	4.5
10.1 - 20	5.6	6.8	6.8	6.8	5.6
20.1 - 30	6.8	8.1	8.1	8.1	6.8
30.1+	9	9.9	10.8	9	9

 Table 10: Water tariffs of Jerusalem Water Authority adopted since 01.01.2012

Source: Jerusalem Water Authority, 2012

However, there are no rainwater harvesting cisterns in the village. Each cubic meter of water from the public network costs 5 NIS ('Ein Siniya Village Council, 2011).

#### Sanitation:

'Ein Siniya has a public sewerage network; only 7% of the housing units are connected to the network, while the rest of the village residents use cesspits for the disposal of waste water ('Ein Siniya Village Council, 2011).

Based on the estimated daily per capita water consumption, the estimated amount of wastewater generated per day is approximately 44 cubic meters, or 16,000 cubic meters annually. At the individual level in the village it is estimated that the per capita wastewater generation is 57 liters per day, depending on the consumption rate. The estimated amount of wastewater collected through the sewerage network is approximately 14,880 cubic meters annually. Also, approximately 1,120 cubic meters of wastewater is being collected by cesspits and discharged by wastewater tankers. The wastewater collected by cesspits is discharged by wastewater tankers directly to open areas or nearby valleys with no regard for the environment. There is no wastewater to both environmental and public health (ARIJ-WERU, 2012).

#### Solid Waste Management:

The Joint Services Council is considered the official body responsible for managing solid waste, i.e. solid waste collection and disposal, generated from the citizens and establishments in the village, which is currently represented by solid waste collection and disposal. Due to the fact that the process of solid waste management is costly, a monthly fee has been charged on the population serviced by domestic solid waste collection and transportation services which is about 20 NIS/month. However, the collected fees are not considered sufficient for a good management of solid waste; only 60% of these fees are collected from the citizens ('Ein Siniya Village Council, 2011).

Most of the population in 'Ein Siniya benefit from the solid waste services, whereby waste is collected from households, institutions, shops, and public squares in plastic bags and then transferred to 160 containers spread throughout the neighborhoods. 'Ein Siniya Village Council then collects the solid waste from the containers twice a week and transports it through a waste vehicle to a dumping site joined with neighboring localities; 7km in distance from the locality. The common method for solid waste treatment in this dumping site is setting waste on fire and burying it ('Ein Siniya Village Council, 2011

The daily per capita rate of solid waste production in 'Ein Siniya is 0.7kg. Thus the estimated amount of solid waste produced per day from the 'Ein Siniya residents is nearly 0.5 tons, or 171 tons per year. ('Ein Siniya Village Council, 2011).

#### **Environmental Conditions**

Like other towns and villages in the governorate, 'Ein Siniya 'experiences several environmental problems which must be addressed and solved. These problems can be identified as follows:

#### Wastewater Management

• The absence of a public sewage network in some neighborhoods (93%) forces the village residents to use unhygienic cesspits for the disposal of wastewater, and to discharge wastewater in the streets. This is particularly common in winter, as citizens cannot afford the high cost of sewage tankers during this period. These methods facilitate environmental damage, health problems, and the spread of epidemics and diseases in the village. This wastewater also contaminates the groundwater because most cesspits are built without lining, allowing wastewater to enter into the ground and avoiding the need to use sewage tankers. Moreover, the untreated wastewater collected from cesspits by sewage tankers is disposed of in open areas without concern for the damage it causes to the environment and to residents' health.

#### Solid Waste Management:

The lack of a central sanitary landfill to serve 'Ein Siniya and the other neighboring communities in the governorate is due mainly to the obstacles created by the Israeli authorities for local and national institutions in granting licenses to establish such a landfill, because the appropriate land is within Area C and under Israeli control. Additionally, the implementation of such projects depends on funding from donor countries. The lack of a sanitary landfill is a source of pollution to the groundwater and soil through the leachate produced from the solid waste, and produces bad odors and distortion of the landscape.

### **Development Plans and Projects**

#### **Implemented Projects**

'Ein Siniya village council has implemented several development projects in 'Ein Siniya, during the last five years (See Table 11).

# Table 11: Implemented Development Plans and Projects in 'Ein Siniya During the Last Five Years

Name of the Project	Туре	Year	Donor
Changing the whole internal network	Infrastructure (water)	2005	Ministry of Finance
Changing the water main lines	Infrastructure (water)	2005	USAID
Establishment of a water reservoir with a capacity of 1000m <sup>3</sup>	Infrastructure (water)	2011	USAID
Roads construction	Infrastructure (roads)	2010	Ministry of Finance
Providing street lightings	Infrastructure (electricity)	2010	Ministry of Finance
Source: 'Ein Siniya Village Council, 2011			

### **Proposed Projects**

'Ein Siniya Village Council, in cooperation with the civil society organizations in the village and the village residents, looks forward to the implementation of several projects in the coming years. The project ideas were developed during the PRA workshop that was conducted by ARIJ staff in the village. The projects are as follows, in order of priority, from the perspectives' of the participants in the workshop:

- 1. Providing institutional support to help establish an ideal farming society in the village.
- 2. Fencing around 80 dunums of agricultural lands that are being threatened by wild animals such as pigs and stray dogs.
- 3. Providing a tractor, with all its necessary equipments to help farmers in plowing works, transferring water and trees and taking care of their lands.
- 4. Financing small agricultural development projects to serve poor families in the village, such as sheep, poultry, bees and other projects.
- 5. Establishing household agricultural cisterns to serve the citizens in purposes of irrigation and drinking (10 cisterns).
- 6. Constructing an additional building for the school that includes a library, a scientific laboratory, an educational guide room and a housekeeping room and a gymnasium.
- 7. Renovating all old houses in the village and constructing retaining walls around them to protect and preserve them.

### **Locality Development Priorities and Needs**

'Ein Siniya suffers from a significant shortage of infrastructure and services. Table 12 shows the development priorities and needs in the village, according to the village council's feedback ('Ein Siniya Village Council, 2011).

No.	G (						
	Sector	Strongly Needed	Needed	Not a Priority	Notes		
	Infrastructural Needs						
1	Opening and Pavement of Roads	*			6.5km*		
2	Rehabilitation of Old Water Networks			*			
3	Extending the Water Network to Cover New Built up Areas			*			
4	Construction of New Water Networks			*			
5	Rehabilitation/ Construction of New Wells or Springs	*			3 springs		
6	Construction of Water Reservoirs			*			
7	Construction of a Sewage Disposal Network	*			4km		
8	Construction of a New Electricity Network	*			2km		
9	Providing Containers for Solid Waste Collection	*			50 containers		
10	Providing Vehicles for Collecting Solid Waste	*			1		
11	Providing a Sanitary Landfill	*					
	Health Needs						
1	Building of New Clinics or Health Care Centres	*			health clinic		
2	Rehabilitation of Old Clinics or Health Care Centres			*			
3	Purchasing of Medical Equipment and Tools			*			
	Educational Needs						
1	Building of New Schools	*			secondary level		
2	Rehabilitation of Old Schools			*			
3	Purchasing of New Equipment for Schools	*			preparatory level		
	Agriculture Needs						
1	Rehabilitation of Agricultural Lands	*			50 dunums		
2	Building Rainwater Harvesting Cisterns	*			15 cistern		
3	Construction of Barracks for Livestock			*			
4	Veterinary Services			*			
5	Seeds and Hay for Animals			*			
6	Construction of New Greenhouses	*			3 greenhouses		
7	Rehabilitation of Greenhouses			*			
8	Field Crops Seeds	*					
9	Plants and Agricultural Supplies	*					

#### Table 12: Development Priorities and Needs in 'Ein Siniya

\* 2km are main roads, 1.5km are sub roads and 3km are agricultural roads.

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