

Rafat Village Profile



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Background

This report is part of a series of booklets, which contain compiled information about each city, village, and town in the Jerusalem Governorate. These booklets came as a result of a comprehensive study of all villages in Jerusalem 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 the Jerusalem 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 the Jerusalem 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 village profiles in Arabic and English are available online at <http://vprofile.arij.org>.

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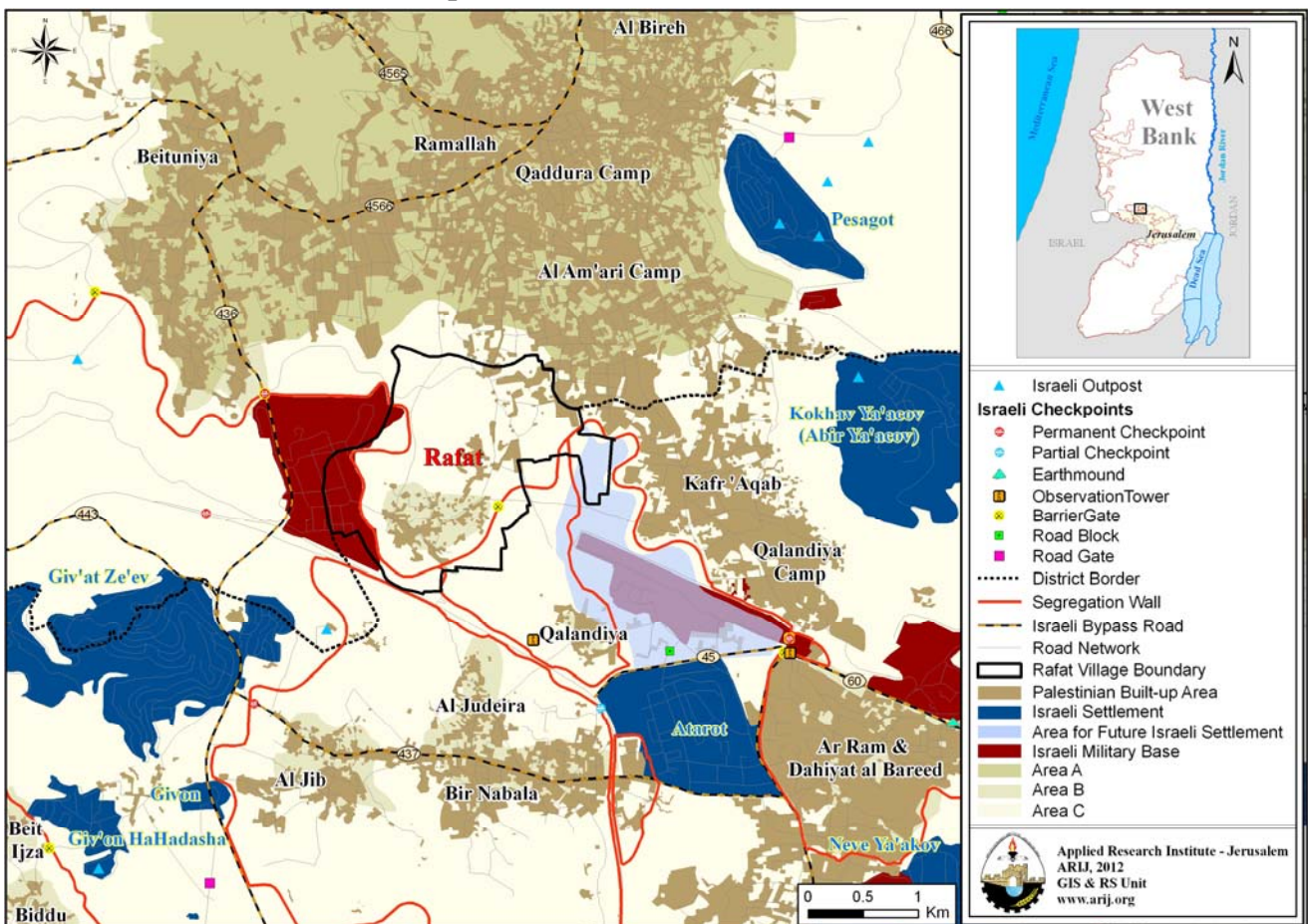
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Rafat Village Profile

Location and Physical Characteristics

Rafat is a Palestinian village in Jerusalem Governorate located (horizontally) 10.9km north-west of Jerusalem City. It is bordered by Qalandiya al Balad to the east, Al Judeira to the north, Ramallah city to the west, and Beituniya town (in Ramallah Governorate) to the south (ARIJ-GIS Unit, 2012) (See Map 1).

Map 1: Rafat location and borders



Source: ARIJ - GIS Unit, 2012

Rafat is located at an altitude of 753m above sea level with a mean annual rainfall of 572mm. The average annual temperature is 16 °C and the average annual humidity is approximately 60.4% (ARIJ-GIS Unit, 2012).

Since 1997, Rafat has been governed by a village council, which is currently administrated by 11 members appointed by the Palestinian National Authority in addition to 3 permanent employees. The

Village Council owns a permanent headquarters and a pick-up to serve the community, but does not possess a vehicle for the collection of solid waste (Rafat Village Council, 2010).

It is the responsibility of the Village Council to provide a number of services to the residents of Rafat, including (Rafat Village Council, 2010):

- Solid waste collection, road construction, pavement, and rehabilitation, and social development services.
- Implementing projects and case studies for the village.
- Organizing the processes of construction and license issuing.
- Protecting historical and archeological sites.
- Protecting governmental properties.

History

The name of 'Rafat' is said to have been adopted from the word 'rufat' ('the remains of the dead'), as there was a Roman cemetery in the village (Rafat Village Council, 2010).

The village was established over 700 years ago, and its original residents are thought to have been from Morocco (Rafat Village Council, 2010) (See photo below for Rafat village).

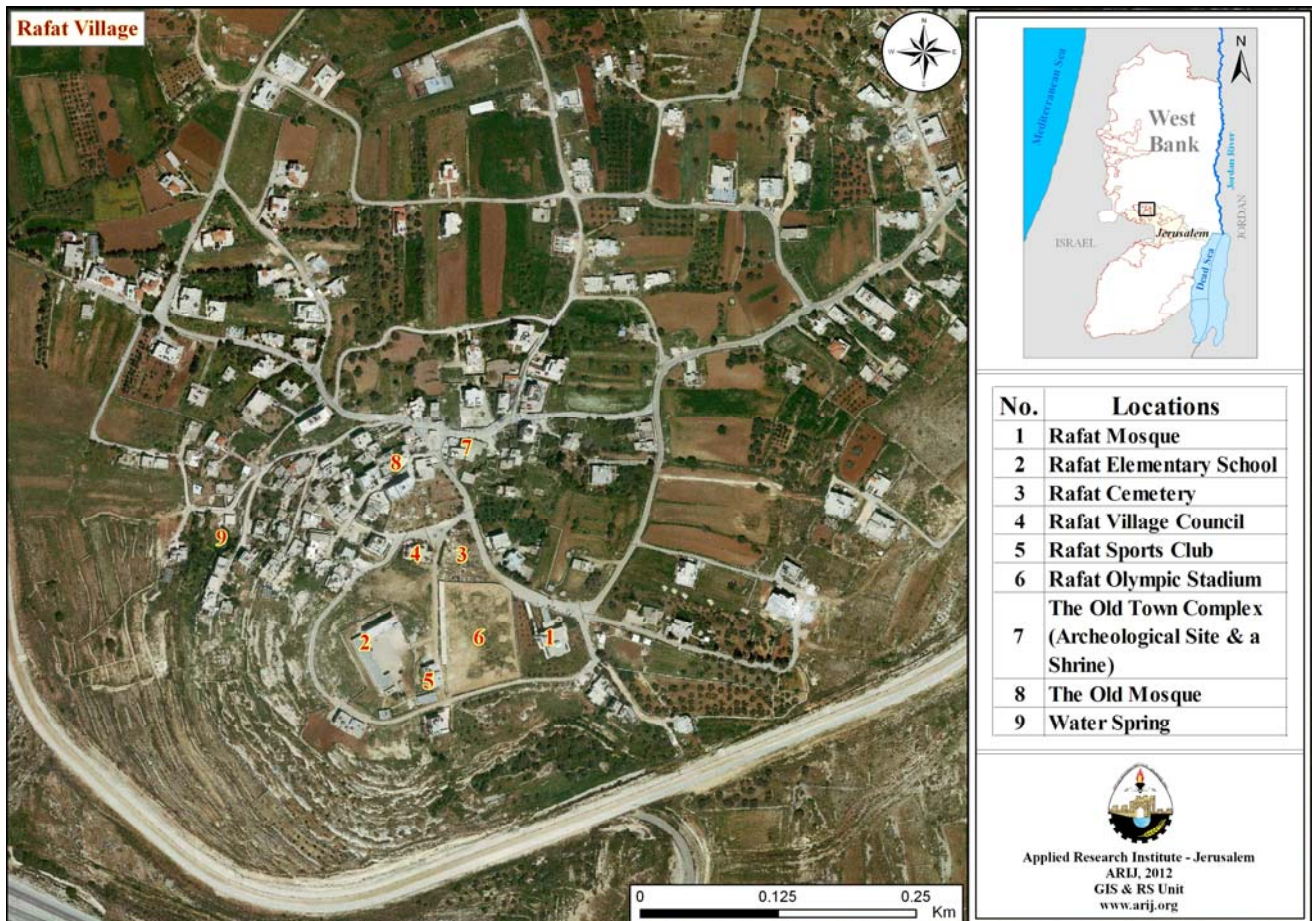
Photo 1: Rafat village



Religious and Archaeological Sites

There are two mosques in the village, Rafat and Sharhabeel ben Hasnah Mosques. The village has several sites of archaeological interest: an old mosque, the village old complex, water springs, ancient caves and tombs curved in rocks (Rafat Village Council, 2010) (See Map 2).

Map 2: Main locations in Rafat Village



Source: ARIJ - GIS Unit, 2012.

Population

According to the Palestinian Central Bureau of Statistics (PCBS), the total population of Rafat in 2007 was 2,141, of whom 1,085 were male and 1,056 female. There were 420 households living in 455 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 Rafat was as follows: 35.7% were less than 15 years old, 52.3% between 15 - 64 years old, and 3.1% 65 years of age or older. Data additionally showed that the sex ratio of males to females in the village is 102.7:100, meaning that males and females constituted 50.7% and 49.3% of the population respectively.

Families

Rafat residents are from several families, mainly the Taha, Omar, Muhammad, Hamdan, 'Alqam, Ash Sheikh, Deif Allah and Abu Hassan families (Rafat Village Council, 2010).

Education

According to the results of the PCBS Population, Housing and Establishment Census (2007), the illiteracy rate among Rafat population was approximately 7.4%, of whom 76.2% were females. Of the literate population, 10.6% could only read and write with no formal education 31.1% had elementary education, 28.8% had preparatory education, 12.3% had secondary education, and 9.8% completed higher education. Table 1 shows the educational level in the village of Rafat by sex and educational attainment in 2007.

Table 1: Rafat population (10 years of age and older) by sex and educational attainment, 2007

Sex	Illite- rate	Can read & write	Elem- entary	Prepa- ratory	Second- ary	Associate Diploma	Bach- elor	Higher Diploma	Master	PhD	Un- known	Total
M	25	82	227	217	95	24	45	-	6	1	-	722
F	80	68	212	190	79	35	24	-	3	-	-	691
T	105	150	439	407	174	59	69	-	9	1	-	1,413

Source: PCBS, 2009.

There are no schools or kindergartens in the village (Directorate of Education in Jerusalem, 2011).

Health Status

There is one health center available in Rafat village: a private dental clinic. Due to the absence of many required health services and in emergencies, residents of Rafat go to Ramallah Governmental Hospital in Ramallah city, 4km from Rafat (Rafat Village Council, 2010).

The health sector in the village faces serious obstacles and problems, mainly (Rafat Village Council, 2010):

1. The lack of an ambulance.
2. The lack of a governmental health clinic.
3. The lack of most health services in the village.

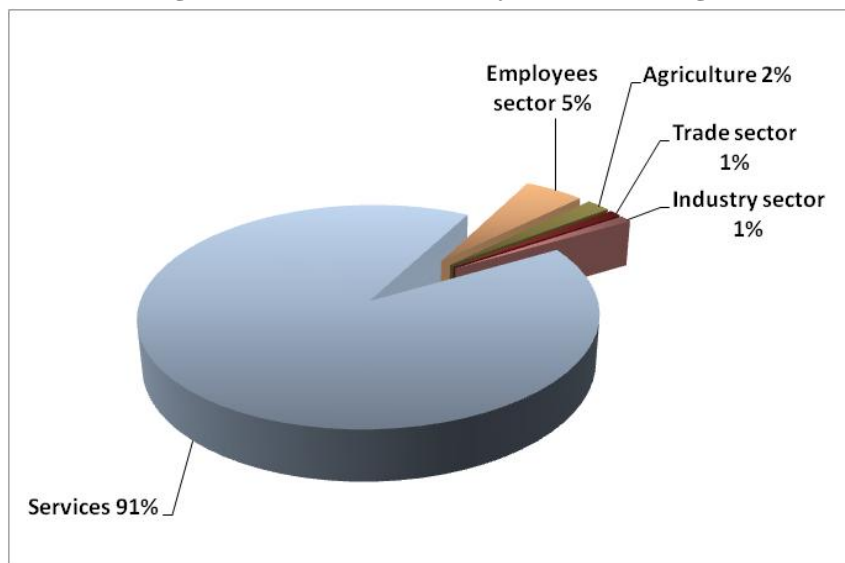
Economic Activities

The economy in Rafat is dependent on several economic sectors, mainly the services sector, which absorbs 91% of the workforce (Rafat Village Council, 2010) (See Figure1).

A field survey conducted by ARIJ in 2010 showed that the distribution of labor by economic activity in Rafat is as follows:

- Services sector (91%)
- Government or private employees sector (5%)
- Agriculture sector (2%)
- Trade sector (1%)
- Industry (1%)

Figure 1: Economic activity in Rafat village



Source: Rafat Village Council, 2010

In terms of commercial and industrial productions in Rafat village, there are 7 grocery stores, 6 different professional workshops (blacksmith, carpentry, etc.), a stone quarry and a stonecutter (Rafat Village Council, 2010).

The unemployment rate in Rafat has reached around 40%, and it was found that the social groups most affected in the village as a result of Israeli restrictions and procedures are (Rafat Village Council, 2010):

- Workers in the agriculture sector.

- Workers in the trade sector.
- Former workers in Israel.
- Workers in the employees sector.
- Workers in industry.
- Workers in the services sector.

Labor Force

According to the PCBS Population, Housing and Establishment Census (2007), 35.2% of Rafat's labor force was economically active, of whom 87.3% were employed, and 64.8% were not economically active, of whom 44% were students and 39.3% were housekeepers (See Table 2).

Table 2: Rafat population (10 years of age and older) by sex and employment status-2007

SEX	Economically Active				Not Economically Active						Un-known	Total
	Employed	Currently Un-employed	Un-employed (Never worked)	Total	Students	House-keeping	Unable to work	Not working & Not looking for work	Other	Total		
M	391	24	27	442	204	-	49	12	15	280	-	722
F	43	2	10	55	199	360	49	1	27	636	-	691
T	434	26	37	497	403	360	98	13	42	916	-	1,413

Source: PCBS, 2009.

Agricultural Sector

Rafat has a total area of around 3,392 dunums of which 1,435 are considered 'arable' land and 378 dunums are registered as 'residential' (See table 3 and map 3).

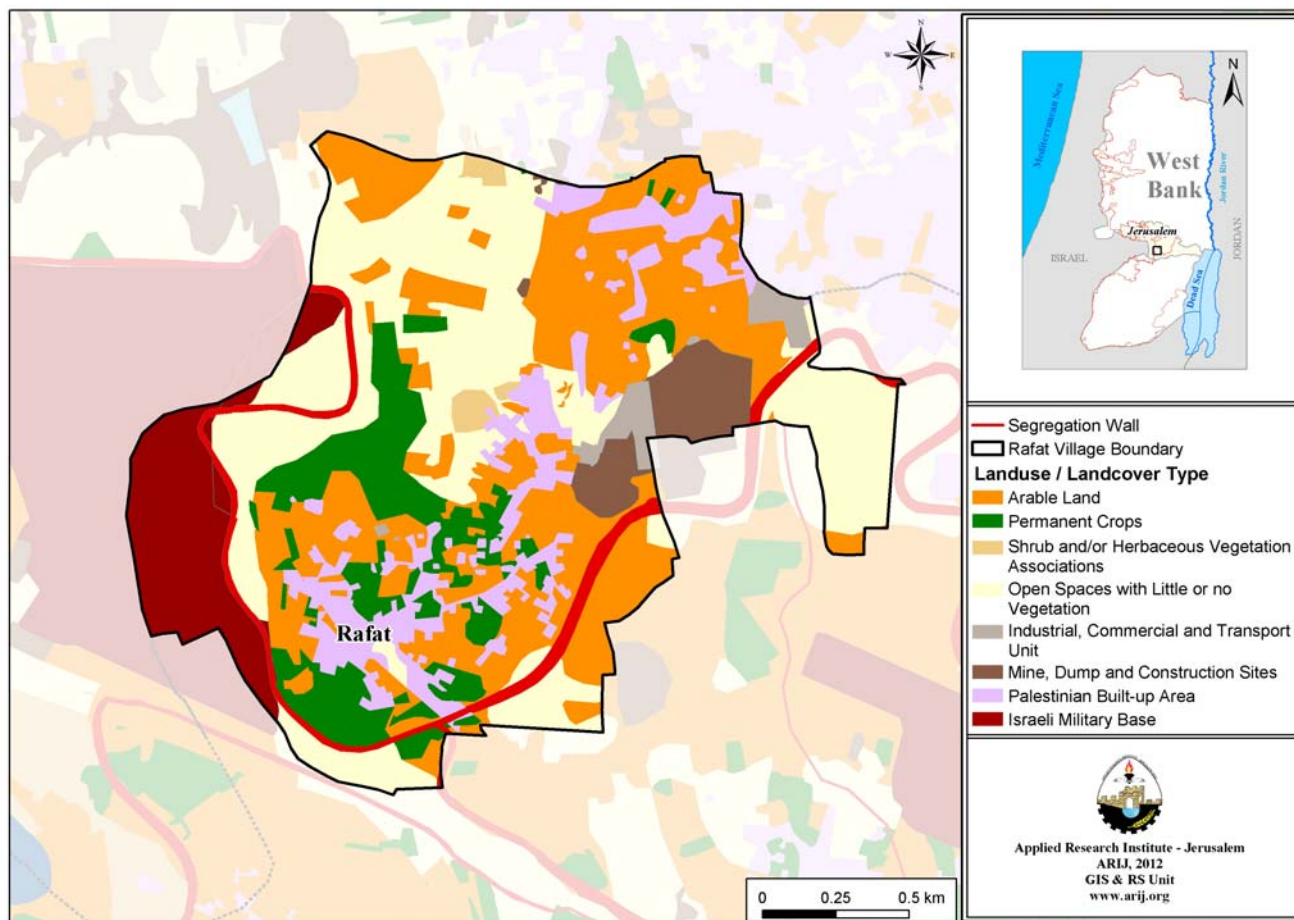
Table 3: Land use and land cover in Rafat village in 2010 (area in dunum)

Total Area	Built up Area	Agricultural area (1,435)				Inland water	Forests	Open Spaces	Area of Industrial, Commercial & Transport Unit	Area of Settlements, Military Bases & Wall Zone
		Permanent Crops	Green-houses	Range-lands	Arable lands					
3,392	378	384	0	33	1,018	0	0	967	208	404

Source: ARIJ – GIS Unit, 2012.

Agricultural production in Rafat depends mostly on rainwater. Irrigated fields are supplied through the public network and rainwater cisterns. The total area of land planted with rain-fed and irrigated vegetables in the area is around 7 dunums. The most common crop cultivated within this area is tomato (Palestinian Ministry of Agriculture - Jerusalem, 2010).

Map 3: Land use/land cover in Rafat village



Source: ARIJ - GIS Unit, 2012.

Table 4 shows the different types of fruit trees planted in the area. Rafat village is known for the cultivation of olives; there are 963 dunums of land cultivated with olive trees.

Table 4: Total area of fruit and olive trees in Rafat (dunum)

Fruit trees	Rainfed	Irrigated
Olives	963	0
Citrus	0	0
Stone-fruits	43	0
Pome fruits	0	0
Nuts	8	0
Other fruits	69	0
Total Area	1,083	0

Source: Palestinian Ministry of Agriculture - Jerusalem, 2010

In terms of field crops and forage in Rafat cereals, particularly wheat and barley, are the most cultivated covering an area of about 16 dunums, in addition to the cultivation of dry legumes such as lentils (See Table 5).

Table 5: Total area of field crops in Rafat village (dunum)

Fruit trees	Rainfed	Irrigated
Cereals	16	0
Bulbs	0	0
Dry legumes	5	0
Oil crops	0	0
Forage crops	2	0
Stimulating crops	0	0
Other crops	0	0
Total Area	23	0

Source: Palestinian Ministry of Agriculture - Jerusalem, 2010

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.

The field survey conducted by ARIJ shows that 2% of the residents in Rafat rear and keep domestic animals such as goats, sheep, broiler chickens, and bees (Rafat Village Council, 2010) (See Table 6).

Table 6: Livestock in Rafat village

Cows*	Sheep	Goats	Camels	Horses	Donkeys	Mules	Broilers	Layers	Bee Hives
0	510	215	0	0	0	0	2,000	0	110

*Including cows, bull calves, heifer calves and bulls

Source: Palestinian Ministry of Agriculture - Jerusalem, 2010

There are around 15 kilometers of agricultural roads in the village (Rafat Village Council, 2010), divided as follows:

Table 7: Agricultural roads in Rafat village and their lengths

Suitability of Agricultural Roads	Length (km)
For vehicles	5
For tractors and agricultural machinery only	3
For animals only	4
Unsuitable	3

Source: Rafat Village Council, 2010

The agricultural sector in the village faces some obstacles, mainly:

- The lack of capital.
- The lack of water sources.
- The lack of economic feasibility.
- The difficulties in accessing agricultural lands.

Institutions and Services

Rafat village has no governmental institutions but has a number of local institutions and associations that provide services to various sectors of society. These include (Rafat Village Council, 2010):

- **Rafat Village Council:** Founded in 1997 by the Ministry of Local Governorate with the goal of solving issues in the village and providing various services to its population.
- **Rafat Sports Club:** Founded in 2008 by the Ministry of Sports & Youth, the Club provides sports, social, and cultural activities to young people.

Infrastructure and Natural Resources

Electricity and Telecommunication Services

Rafat has been connected to a public electricity network since 1977. It is 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 this network (Rafat Village Council, 2010).

Rafat is connected to a telecommunication network and approximately 86% of the housing units within the village boundaries are connected to phone lines (Rafat Village Council, 2010).

Transportation Services

There are no means of transportation in Rafat village (Rafat Village Council, 2010). There are 2km of designated 'main' roads and 9km of 'secondary' roads (Rafat Village Council, 2010) (See Table 8).

Table 8: Roads in Rafat Village

Status of Internal Roads	Road Length (km)	
	Main	Sub
Paved & in good condition	2	4
Paved but in poor condition	-	3
Unpaved	-	2

Source: Rafat Village Council, 2010

Water Resources

Rafat is provided with water by Jerusalem Water Authority (for Ramallah and Al Bireh) through the public water network established in 1979. Approximately 100% of the housing units are connected to this network (Rafat Village Council, 2010). The quantity of water supplied to Rafat in 2010 through Jerusalem Water Authority was approximately 92,154 cubic meters/ year; therefore, the average rate of water supply per capita in Rafat is 106 liters per day (Jerusalem Water Authority, 2011). However no Rafat citizen consumes this amount of water due to water losses, which are recorded at around 26.5%. These losses happen at the main source, major transport lines, in the distribution network, and at the household level. Therefore, the rate of water consumption per capita in Rafat is 78 liters per day (Jerusalem Water Authority, 2011). Water supply for Rafat residents is low compared with the minimum quantity of 100 liters per capita per day proposed by the World Health Organisation (Rafat Village Council, 2010).

The water authority has adopted an upward rate for water costs whereby the price of water increases in tandem with the increase in the amount of water consumption. Table 9 shows the price of water by category of consumption.

Table 9: Water tariffs of Jerusalem Water Authority adopted in 01.01.2012 (one month bill cycle)

Consumption Category (m ³)	Domestic (NIS/m ³)	Industrial (NIS/m ³)	Tourist (NIS/m ³)	Commercial (NIS/m ³)	Public Institutions (NIS/m ³)
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

Source: Jerusalem Water Authority, 2012

There are 37 domestic harvesting cisterns located in the village, in addition to two water springs that are unused due to their need for rehabilitation (Rafat Village Council, 2010).

Sanitation

Rafat lacks a public sewerage network with most of the village residents using cesspits as their main means of wastewater disposal (Rafat Village Council, 2010).

Based on the estimated daily per capita water consumption, the estimated amount of wastewater generated per day is approximately 148 cubic meters, or 54,187 cubic meters annually. At the individual level in the village it is estimated that the per capita wastewater generation is 63 liters per day, depending on the consumption rate. 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 treatment either at the source or at the disposal sites and this poses a serious threat to both environmental and public health (ARIJ-WERU, 2012).

Solid Waste Management

Rafat Village Council is the official body responsible for managing the collection and disposal of solid waste generated by the citizens and establishments in the village. As the process of solid waste management is costly, a monthly fee (around 20 NIS/month) has been charged to each household served by domestic solid waste collection and transportation services; 90% of these fees are collected from the citizens (Rafat Village Council, 2010).

Most of the population in Rafat benefit from the solid waste services, whereby waste is collected from households, institutions, shops, and public squares in plastic bags and then transferred to 100 containers distributed throughout the village. The Village Council collects the solid waste once or twice a week, then transports it using a waste vehicle to Ramallah Municipality dumping site 2km from the village, where it is usually buried (Rafat Village Council, 2010).

The daily per capita rate of solid waste production in Rafat is 0.7kg. Thus the estimated amount of solid waste produced per day from Rafat residents is nearly 1.7 tons, or 607 tons per year (ARIJ-WERU, 2012).

Environmental Conditions

Like other villages and camps in the Governorate, Rafat experiences several environmental problems which must be addressed and solved. These problems can be identified as follows (Rafat Village Council, 2010):

Water Crisis

- Water cut-offs by Jerusalem Water Authority for long periods of time in summer in several neighborhoods of the village.
- High rate of water losses because the water network is old and in need of rehabilitation and renovation.
- Weak pumping of water through the network.

Wastewater Management

The absence of a public sewage network means that Rafat residents are forced to use unhygienic cesspits and endocrines for the disposal of wastewater, and/or 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. Additionally, the untreated wastewater collected from cesspits by sewage tankers is disposed of in open areas with no 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 Rafat 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. Nevertheless, Ramallah Municipality, in cooperation with Al Bireh and Beituniya Municipalities, is seeking to establish a regional landfill in accordance with approved international standards. However, the project faces many obstacles, including (Ramallah Municipality, 2011):
 1. Problems regarding purchasing and acquisition of land due to technical reasons related to its owners.
 2. Problems obtaining the necessary funding to purchase of land, despite the presence of a formal commitment from the Prime Minister and the Ministry of Finance for covering the price of lands.
 3. Inability to acquire approved lands due to their location in area C according to the Oslo Agreement.
- There is no system in the village and the governorate to separate hazardous waste from non-hazardous waste, so hazardous and industrial solid waste are collected with non-hazardous waste and transported to Ramallah Municipality landfill for burial.

Impact of the Israeli Occupation

Geopolitical Status of Rafat Village

According to the Oslo II Interim Agreement signed on 28th September 1995 between the Palestinian Liberation Organization (PLO) and Israel, Rafat village was divided into areas 'B' and 'C'. Approximately 436 dunums (12.8% of the total village area) were assigned as area 'B', where the Palestinian National Authority (PNA) has complete control over civil matters but Israel continues to have overriding responsibility for security. Area 'B' constitutes most of the inhabited Palestinian areas, including municipalities, villages, and some camps. Most of the village's population resides in area 'B' which constitutes a very small area in comparison to the total area of the village. Approximately 2,958 dunums (87.2% of the total village area) is classified as area 'C', where Israel retains full control over security and administration. In area 'C' Palestinian building and land management is prohibited unless through a permit given by the Israeli Civil Administration. Most of the lands lying within the area 'C' are agricultural and open spaces (Table 10).

Table 10: The geopolitical divisions of Rafat according to the Oslo II interim agreement in 1995

Area	Area in dunums	Percent of Total village area
Area A	0	0
Area B	436	12.8
Area C	2,958	87.2
Nature Reserve	0	0
Total	3,394	100

Source: ARIJ-GIS Unit, 2012

Rafat Village and the Israeli Occupation Practices

287dunums of land (8.5% of the total area of the village) have been confiscated from the village by the Israeli authorities for the construction of the Ofar military base. Additionally, Israel has confiscated more lands for the construction of the Segregation Wall.

According to the latest amendment to the Segregation Wall plan, published on the webpage of the Israeli Defense Ministry on 30th April, 2007, the Wall extends 5km over Rafat's lands and isolates 637 dunums, which comprises 18.7% of the village's total area. The isolated lands include Ofar military base which is established on the village territory in addition to open and agricultural areas in the village (Table 11).

Table 11: Land classification of isolated lands by the Segregation Wall in Rafat Village - Jerusalem Governorate

No.	Land classification	Area (dunums)
1	Israeli military base	287
2	Open space	311
3	Agricultural areas	10
4	Wall zone	29
Total		637

Source: ARIJ-GIS Unit, 2012

Palestinian Suffering in Rafat Caused by the Segregation Wall

When the Segregation Wall is completed the urbanized area of Rafat will become isolated from neighboring Palestinian villages and from Jerusalem city, as it will be surrounded by the Wall on the eastern, western and southern sides. The completed section of the Wall has isolated Rafat from its neighboring villages to the south (Al Judeira, Beit Hanina al Balad, Al Jib and Bir Nabala); these localities are surrounded by the Wall on all four sides.

Furthermore, the Wall has prevented urban expansion on the western and southern sides of the village, as it has been constructed close to the urbanized areas in the village. This has increased the total area of land confiscated from Rafat and minimized the area available for future urban expansion. Such practices

create new socio-geopolitical realities that are difficult to reverse, as they have led to a high population density in the village due to the lack of land for construction and expansion. This problem is exacerbated because construction can only take place within Area B, which constitutes only 12.8% of the village territory, leading the population to internal and vertical urban expansion.

The Segregation Wall & the ‘Greater Jerusalem’ Project Plan

The Segregation Wall surrounding Rafat from its northern, western and southern sides is part of the Israeli ‘Greater Jerusalem’ plan, which aims to change the geopolitical situation in the West Bank by isolating Jerusalem city from other West Bank Governorates.

The ‘Greater Jerusalem’ plan was first drafted in the early 1970s when the Israeli government launched its plan to expand the area of Israeli settlements located outside the municipal boundaries of Jerusalem. The plan aims to create links between these settlements and others located within Jerusalem city and isolates Palestinian communities located to the east of Jerusalem from the city, restricting their right to reside within the city’s boundaries. The ‘Greater Jerusalem’ plan includes the annexation of Israeli settlements surrounding Jerusalem city; these include Ma’ale Adummim settlement bloc (east of Jerusalem), Giv’at Ze’ev settlement bloc (north of Jerusalem) and Gush Etzion bloc (south of Jerusalem).

Ramallah City as a Substitute for Jerusalem City

Since the outbreak of the Second Intifada in September 2000, residents of Rafat and the surrounding villages have lost their link with Jerusalem City, previously the primary source of employment, education, and health services. Residents of Rafat have therefore started to use Ramallah City to fulfill these needs. Until 2002, residents were able to use Israeli bypass road no. 443 to access Ramallah; they have now been prohibited from using the road by Israeli authorities and must travel using indirect roads with poor infrastructure to Ramallah and to other villages, doubling the time taken to travel to Ramallah. This has caused many residents of Rafat to move to Ramallah to avoid delays and disruptions caused by Israeli obstacles to travel and routine mistreatment at Israeli checkpoints.

Israeli Military Orders Issued in Rafat Village

Israeli occupation authorities issued military order 52/05/T on 22nd March 2005 to confiscate 107.5 dunums from Rafat, Qalandiya, Bir Nabala and Al Judeira for the construction of the Segregation Wall.

Development Plans and Projects

Implemented Projects

Rafat village council has implemented several development projects in Rafat during the past five years (See Table 12).

Table 12: Implemented development plans and projects in Rafat during the last five years

Name of the Project	Type	Year	Donor
Rehabilitation, construction and pavement of main roads	Infrastructure	2005	Municipal Fund
Construction of internal roads	Infrastructure	2005	Municipal Fund
Construction of Rafat Sports Complex	Public Services	2006	KFW & UNDP
Sub-roads	Infrastructure	2008	CHF
Establishment of Rafat stadium	Public Services/ Entertainment	2009	Palestinian Government

Source: Rafat Village Council, 2010

Proposed Projects

Rafat Village Council, in cooperation with the civil society organizations in the village and the village residents, hopes to implement several projects in the coming years. The project ideas were developed during the PRA workshop 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. Finishing the sewage network.
2. Providing street lighting in the internal roads.
3. Constructing a high school for girls.
4. Providing basic necessary services.
5. Obtaining financial support from authorities and institutions.
6. Improving the services provided in the village.

Village Development Priorities and Needs

Rafat suffers from a significant shortage of infrastructure and services. Table 11 shows the development priorities and needs in the village according to the village council's feedback (Rafat Village Council, 2010).

Table 11: Development priorities and needs in Rafat

No.	Sector	Strongly Needed	Needed	Not a Priority	Notes
Infrastructural Needs					
1	Opening and Pavement of Roads		*		8km*
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	*			2 springs
6	Construction of Water Reservoirs		*		1,000 cubic meters
7	Construction of a Sewage Disposal Network		*		12km
8	Construction of a New Electricity Network		*		2km
9	Providing Containers for Solid Waste Collection		*		50 containers
10	Providing Vehicles for Collecting Solid Waste			*	
11	Providing a Sanitary Landfill			*	
Health Needs					
1	Building of New Clinics or Health Care Centres		*		1 health center
2	Rehabilitation of Old Clinics or Health Care Centres		*		1 health center
3	Purchasing of Medical Equipment and Tools		*		
Educational Needs					
1	Building of New Schools	*			elementary level
2	Rehabilitation of Old Schools		*		elementary level
3	Purchasing of New Equipment for Schools			*	
Agriculture Needs					
1	Rehabilitation of Agricultural Lands		*		200 dunums
2	Building Rainwater Harvesting Cisterns	*			100 cisterns
3	Construction of Barracks for Livestock			*	
4	Veterinary Services		*		
5	Seeds and Hay for Animals			*	
6	Construction of New Greenhouses			*	
7	Rehabilitation of Greenhouses			*	
8	Field Crops Seeds		*		
9	Plants and Agricultural Supplies		*		

*4km are main roads, 1km are sub roads and 3km are agricultural.

Source: Rafat Village Council, 2010.

References

- *Applied Research Institute - Jerusalem (ARIJ)*, 2012. Geographic Information Systems and Remote Sensing Unit Database. Bethlehem - Palestine.
- *Applied Research Institute - Jerusalem (ARIJ)*, 2012. Geographic Information Systems and Remote Sensing Unit; Land Use Analysis (2010) – Half Meter High Accuracy. Bethlehem - Palestine.
- *Applied Research Institute - Jerusalem (ARIJ)*. 2012. Water & Environment Research Unit Database (WERU). Bethlehem - Palestine.
- *Rafat Village Council*, 2010.
- Ministry of Education & Higher Education (MOHE) - Jerusalem, 2011. Directorate of Education; A database of schools (2010/2011). Jerusalem – Palestine.
- *Palestinian Central Bureau of Statistics*. 2009. Jerusalem, Palestine: General Census of Population and Housing Censuses, 2007.
- Palestinian Ministry of Agriculture (MOA), 2010. Directorate of Agriculture data (2009/2010). Jerusalem - Palestine.
- Jerusalem Water Authority (for Ramallah & Al Bireh areas) (2011). Detection showing the amount of water sold from 1/1/2010 till 31/12/2010. Ramallah – Palestine.
- Jerusalem Water Authority (2012). Jerusalem Water Authority's Website; Data Retrieved on the first of March. <http://www.jwu.org/newweb/atemplate.php?id=87>.
- Ramallah Municipality (2011). Ramallah Municipality Website; Data Retrieved on the first of March, 2012. <http://www.ramallah.ps/atemplate.aspx?id=1207>.