

Al Khader Town Profile



Prepared by



The Applied Research Institute – Jerusalem

Funded by



Spanish Cooperation



Azahar Program

2010

Acknowledgments

ARIJ hereby expresses its deep gratitude to the Spanish agency for International Cooperation for Development (AECID) for their funding of this project through the Azahar Program.

ARIJ is grateful to the Palestinian officials in the ministries, municipalities, joint services councils, village committees and councils, and the Palestinian Central Bureau of Statistics (PCBS) for their assistance and cooperation with the project team members during the data collection process.

ARIJ also thanks all the staff who worked throughout the past couple of years towards the accomplishment of this work.

Background

This booklet is part of a series of booklets, which contain compiled information about each city, town, and village in Bethlehem Governorate. These booklets came as a result of a comprehensive study of all localities in Bethlehem 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 Azahar Needs Assessment;" the project funded by the Spanish Agency for International Cooperation for Development (AECID) and the Azahar Program.

The "Village Profiles and Azahar 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 Bethlehem Governorate with particular focus on the Azahar program objectives and activities concerning water, environment, and agriculture.

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 Bethlehem 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 <http://proxy.arij.org/vprofile>.

Table of Content

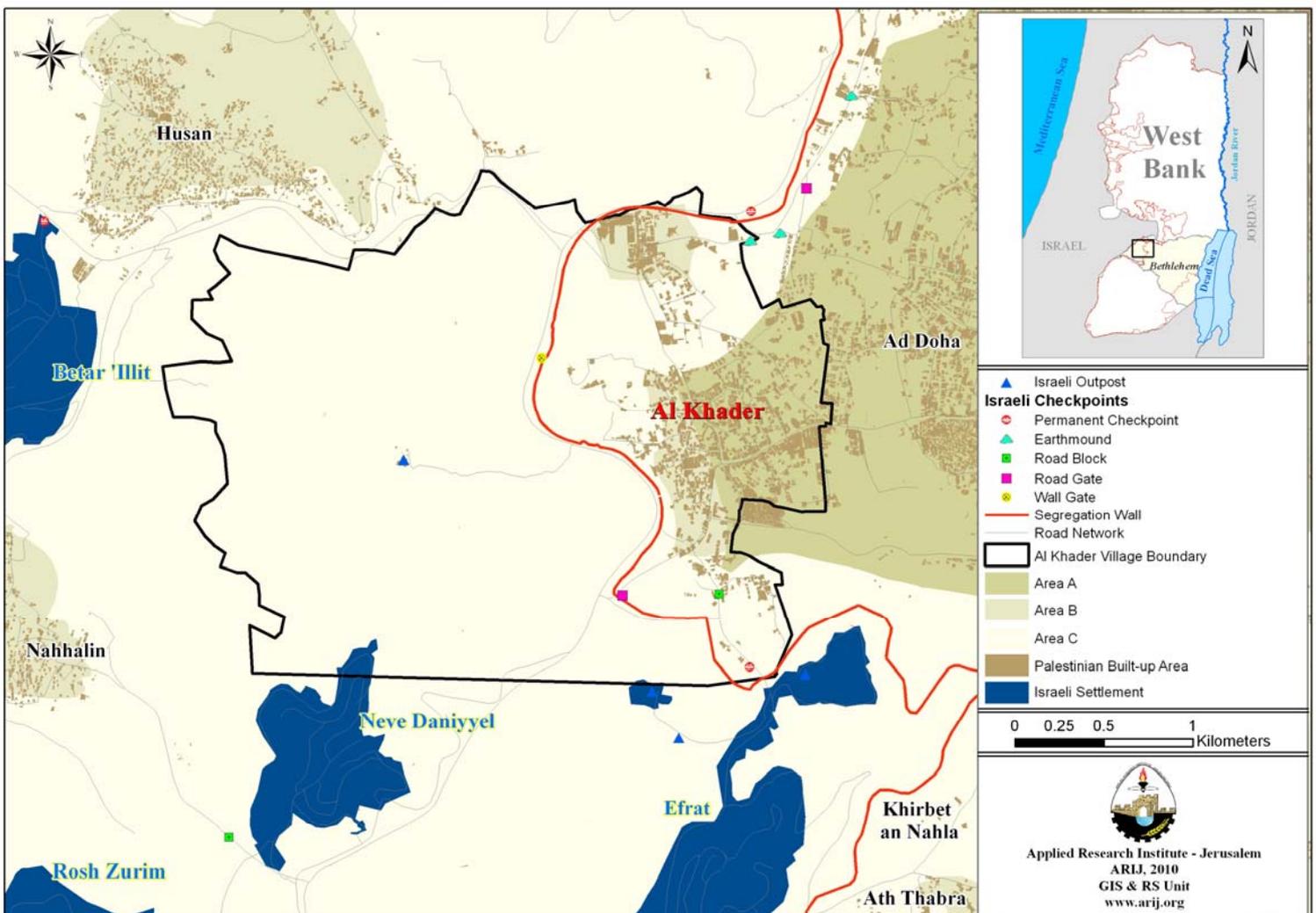
<i>Location and Physical Characteristics</i> _____	4
<i>History</i> _____	5
<i>Religious and Archaeological Sites</i> _____	6
<i>Population</i> _____	8
<i>Education</i> _____	8
<i>Health Status</i> _____	9
<i>Economic Activities</i> _____	10
<i>Agricultural Sector</i> _____	11
<i>Institutions and Services</i> _____	14
<i>Infrastructure and Natural Resources</i> _____	14
<i>Environmental Conditions</i> _____	17
<i>Impact of the Israeli Occupation</i> _____	20
<i>Development Plans and Projects</i> _____	23
<i>Implemented Projects</i> _____	23
<i>Locality Development Priorities and Needs</i> _____	25
<i>References</i> _____	26

Al Khader Town Profile

Location and Physical Characteristics

Al Khader is a Palestinian town in Bethlehem Governorate located at 4km (horizontal distance) west of Bethlehem City. Al Khader is bordered by Al Duheisha camp to the east, Beit Jala city to the north, Battir and Husan villages to the west, and Wadi an Nis village to the south (See map 1).

Map 1: Al Khader location and borders



Al Khader is located at an altitude of 839m above sea level with a mean annual rainfall of 684mm. The average annual temperature is 16 ° C, and the average annual humidity is about 61 percent (ARIJ GIS, 2009).

Since 1997, Al Khader has been governed by a municipal council, which is currently administrated by 13 members appointed by the Palestinian Authority. There are also 22 employees working in the council. The municipality owns a permanent headquarters, a vehicle to collect solid waste, and a private car.

It is the responsibility of the Municipality to provide a number of services to the residents of Al Khader, including:

1. Infrastructure services such as water and electricity.
2. Solid waste collection, road construction and restoration, street cleaning, and social development services.
3. Implementation of projects and case studies for the village.
4. Organization of the construction and licensing process.
5. Protection of historic and archeological sites in the village.

History

Al Khader town was named after Al Khader monastery which is located in the old town. The town dates back to 1700AD, and its residents originate from Al Walaja village.

Photos of Al Khader



AL Khader Town



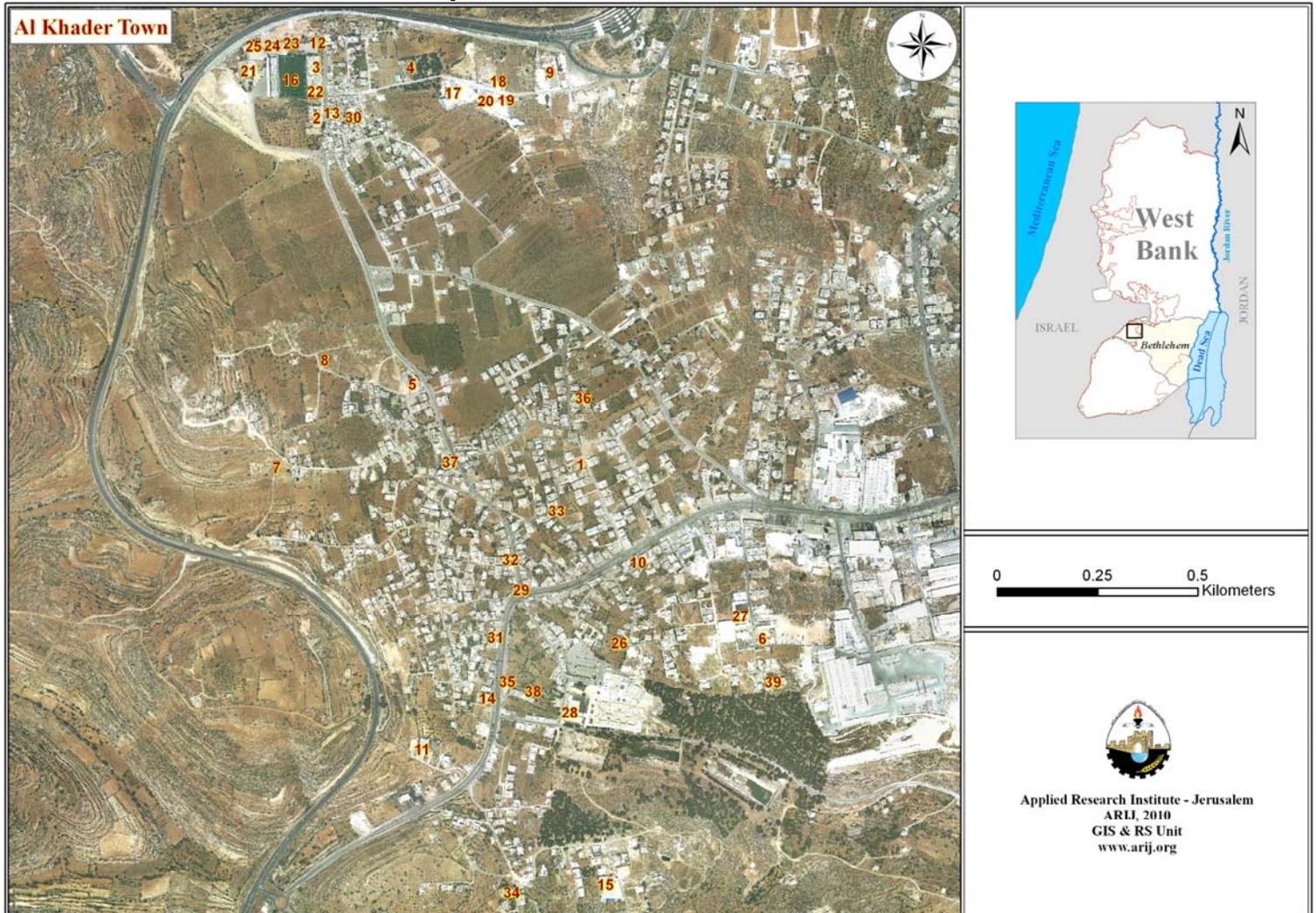
Al Khader Gate

Religious and Archaeological Sites

In terms of religious establishments, there are six mosques: Al Khader Great Mosque, An Naser Mosque, Ash Shuhada' Mosque, Diya' Mosque, Omar Ben Al 'Ass Mosque, and As Sahabi Mosque, and one church; Al Khader Monastery (See Map 2).

As for the archaeological sites in Al Khader town, there are several, mainly: Al Khader Monestary, Murad Castle, Al Khader Gate, and Al Bobariya which is an archeological ruin that is qualified in terms of tourism.

Map 2: Main locations in Al Khader Town



No.	Locations	No.	Locations	No.	Locations
1	Al Khader Municipality	14	Al Hakim Pharmaceutical Co.	27	Quarries Union in Al Khader
2	Al Khader Church	15	Zuhour Al Amal School	28	Murad Castle
3	Al Khader Rehabilitation Center & Kindergarten	16	Al Khader International Playground & Al Khader Club	29	Al Khader Gate
4	Al Khader Cemetery	17	Abu Rafeeq Stone Quarry	30	Civil Association (Al Bubariya)
5	Al Khader Great Mosque & An Hour Kindergarten	18	Al Furdeis Stone Quarry	31	Health Center
6	Al Husani Factory for Granite	19	'Aref Hamdi 'Aref Stone Quarry	32	Ash Shuhada' Mosque
7	Al Khader Children's Park	20	Al Aqsa Co. for Marble	33	'Umar Ben Al 'Ass Mosque
8	Ash Shuhada' Cemetery	21	Al Khader Boys High School	34	Diya' Mosque
9	As Salam Stone Factory	22	Al Qahira Elementary School	35	Producing and Marketing Grapes Association
10	Al Yamamah Hospital	23	Al Amal Preparatory School	36	Women's Club Association
11	Al Khader Boys Elementary School	24	That an litakain School	37	Agricultural Association
12	Al Khader Girls High School	25	Sa'ed Al 'Ass School	38	Ras Al 'Ad Spring
13	An Ilaser Mosque	26	Solomon's Pools Contracting Company	39	Kaskas Gas Station

Population

According to the Palestinian Central Bureau of Statistics (PCBS), the total population of Al Khader in 2007 was 9,774; of whom 5,056 are males and 4,718 are females. There are 1,722 households living in 1,901 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 Al Khader is as follows: 41.1 percent are less than 15 years, 55.1 percent are between 15 - 64 years, 2.6 percent are 65 years and older. Data also showed that the sex ratio of males to females in the town is 107.2:100, meaning that males constitute 51.7 percent of the population, and females constitute 48.3 percent of the population.

Families

Al Khader residents are composed of several families, mainly: Salah, Sbeih, Issa, Mousa, Ghneim, and Da'doo'.

Education

According to the results of the PCBS Population, Housing and Establishment Census-2007, the illiteracy rate among Al Khader population is about 3.8 percent, of whom 82 percent are females. Of the literate population, 13.3 percent can read and write, 27.1 percent had elementary education, 33.5 percent had preparatory education, 17.3 percent had secondary education, and 8.6 percent completed higher education. Table 1, shows the educational level in the town of Al Khader, by sex, and educational attainment in 2007.

Sex	Illiterate	Can read & write	Elementary	Preparatory	Secondary	Associate Diploma	Bachelor	Higher Diploma	Master	PhD	Total
M	45	426	927	1159	602	106	166	10	20	8	3476
F	205	421	797	976	503	65	163	2	7	-	3146
T	250	847	1724	2135	1105	171	329	12	27	8	6622

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

In regards to the basic and secondary education institutions and schools in Al Khader in the academic year 2008/2009, there are seven public schools in the town; four for boys,

and three for girls; all are run by the Palestinian Ministry of Higher Education, in addition to one private mixed school (see Table 2) (Directorate of Education in Bethlehem, 2009).

In the village there are 2347 students, 101 teachers, and 72 classes (Directorate of Education in Bethlehem, 2009). It should be noted here that the average number of students per teacher in the school is nearly 23, while the average number of students per class is approximately 33.

School Name	Supervising Authority	Sex
The Martyr Sa'ed Al Ass Boys Elementary School	Government	Male
Qahirat Al Gidar - Al Qahira Boys Elementary School		
Al Khader Boys High School		
Al Khader Boys Elementary School	Government	Female
Bawabet Al Amal Elementary School		
Al Khader Girls High School		
That An Nitakayn Girls Elementary School	Private	Mixed
Zuhoor Al Amal High School		

Source: Directorate of Education in Bethlehem, 2009

Furthermore, there are three kindergartens in Al Khader; two are run by a charitable organization and one is privately run. The total number of children in the three kindergartens is 355. Table 3 shows the kindergartens according to their names and supervising authority.

Kindergarten Name	No. of Children	Supervising Authority
An Noor Kindergarten	135	Charitable Organization
Zuhoor Al Amal Kindergarten	150	Private
Al Khader Kindergarten	70	Charitable Organization

Source: Al Khader Municipality, 2010

Health Status

There are some health facilities available in Al Khader town; a health center for the Red Crescent, which has a laboratory for medical tests, a physician clinic and a dentist clinic. Al Khader town has also three private physician clinics and four private dentists' clinics, a governmental childhood and motherhood center, one private physiotherapy medical center, and Al Yamamah hospital. There are also three pharmacies and an ambulance for Al Yamamah hospital.

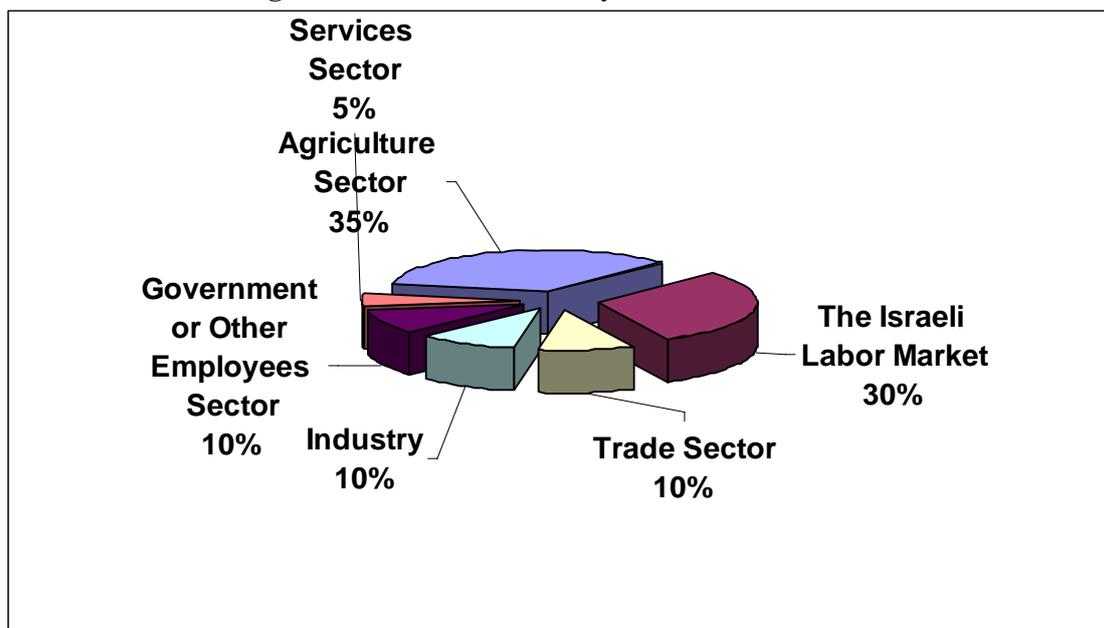
Economic Activities

The economy in Al Khader is dependent on several economic sectors, mainly: the agriculture sector, which absorbs 35 percent of the town workforce, followed by the Israeli labor market (See Figure1).

The results of a field survey for the distribution of labor by economic activity in Al Khader are the following:

- Agriculture Sector (35%)
- Israeli Labor Market (30%)
- Government or Private Employees Sector (10%)
- Trade Sector (10%)
- Industry (10%)
- Service Sector (5%).

Figure 1: Economic Activity in Al Khader Town



Al Khader is considered an industrial town; it is characterized by the presence of stone and marble quarries, brick and tile factories, in addition to one bakery, 3 butcheries, 60 groceries, 60 different service stores, 60 workshops (Blacksmith, carpentry, and aluminum), and 60 grocery stores.

The unemployment rate in Al Khader has reached about 20 percent, and the economical groups most affected by the Israeli restrictions were:

1. Workers in the agriculture sector.
2. Workers in the service sector.
3. Workers in the trade sector.

Labor Force

According to the PCBS Population, Housing and Establishment Census-2007, 34.9 percent of Al Khader labor force was economically active, of whom 84.8 percent were employed, 64.6 percent were not economically active, 53.7 percent were students, and 35.2 percent were housekeepers (See table 4).

S E X	Economically Active				Not Economically Active						Total
	Employed	Currently Unemployed	Unemployed (Never worked)	Total	Students	House-keeping	Unable to work	Not working & Not looking for work	Other	Total	
M	1,715	216	90	2021	1,121	7	196	27	80	1,431	3,476
F	243	17	28	288	1,176	1,502	145	2	25	2,850	3,146
T	1,958	233	118	2309	2,297	1,509	341	29	105	4,281	6,622

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

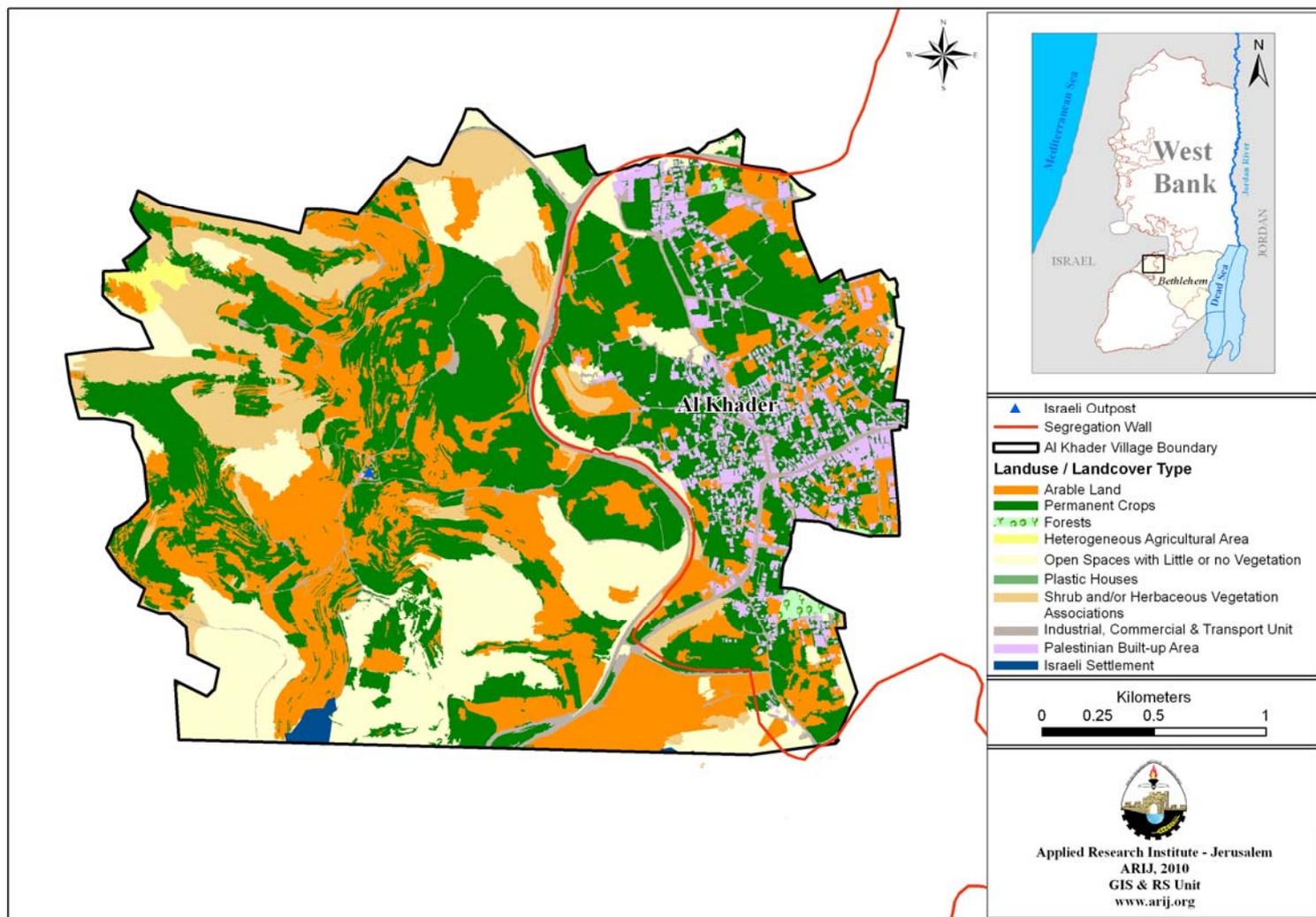
Agricultural Sector

Al Khader lies on a total area of about 8,280 dunums of which 7,376 dunums are considered arable land, and 462 dunums are residential land (See table 5 and map 3).

Total Area	Built up Area	Arable Land [7,376]					Area of Industrial, Commercial & Transport Unit	Area of Settlements and Military Bases
		Seasonal Crops	Permanent Crops	Greenhouses	Forests	Open Spaces and Rangelands		
8,280	462	2,104	3,008	1	29	2,234	413	29

Source: GIS unit – ARIJ, 2008

Map 3: Land use/land cover and Segregation Wall in Al Khader Village



Agricultural production in Al Khader depends mostly on rainwater. As for irrigated fields, they depend on springs and domestic harvesting cisterns.

Table 6 shows the different types of rain-fed and irrigated open-cultivated vegetables in Al Khader. The most common crop cultivated within this area is tomato.

Table 6: Total area of rain-fed and irrigated open cultivated vegetables in Al Khader town(dunum)

Fruity vegetables		Leafy vegetable		Green legumes		Bulbs		Other vegetables		Total area	
RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.
50	37	0	8	1	3	0	2	0	6	51	56

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2007

There is also one dunum of land on which there are greenhouses planted with different vegetables, mainly: cucumber and tomato.

There are some types of aromatic medical plants in the village, such as thyme and mint planted on a total area of 3.5 dunums, fed by the public water network.

Table 7 shows the different types of fruit trees planted in the area. Al Khader is famous for grapes vines; there is a total of 4,200 dunums planted with grape trees.

Olives		Citrus		Stone-fruits		Pome fruits		Nuts		Other fruits		Total area	
Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.	Rf	Irr.
132	0	0	0	83	0	21	0	3	0	4,165	250	4,404	250

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2007

As for the field crops and forage in Al Khader, cereals, in particular wheat and barley are the most cultivated covering an area of about 100 dunums, while dry legumes, such as chickpeas and lentils are the next most cultivated crop (See table 8).

Cereals		Bulbs		Dry legumes		Oil crops		Forage crops		Stimulating crops		Other crops		Total area	
Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr	Rf	Irr
100	0	0	0	29	0	0	0	31	0	0	0	0	0	160	0

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2007

The field survey shows that most of the residents in Al Khader are rearing and keeping domestic animals such as sheep, goats, broiler chicken, and bees (See Table 9).

Cows*	Sheep	Goats	Camels	Horses	Donkeys	Mules	Broilers	Layers	Bee Hives
0	1,202	424	0	4	17	19	0	20,000	200

*Including cows, bull calves, heifer calves and bulls

Source: Palestinian Ministry of Agriculture, 2007

There are about 25 kilometers of agricultural roads in the town suitable for tractors and agriculture machinery.

Institutions and Services

Al Khader has an office for the Ministry of Agriculture in addition to a number of local institutions and associations that provide services to various segments of society: children, youth, and women. The services are in the areas of culture, sports and others, including: (Al Khader Municipality, 2010)

- **Al Khader Municipality:** Founded in 1997 by the Ministry of Local Government with the goal of taking care of all the issues in the town and providing various services to its population.
- **Al Khader Sport Club:** Founded in 1964, with the interest of all the youth cultural and sport activities in the village.
- **Women Club:** Founded in 1989, and is interested in all women's affairs and needs.
- **Agriculture Society:** Founded in 1981, in order to assist and serve the farmers and help in the development of agriculture.
- **Grapes Production and Marketing Society:** Founded in 1999.
- **Civil Charitable Society:** Founded in 1997. It provides medical and charitable services to the town residents.
- **Child Welfare Association:** Founded in 1985 by the Arab Society, with the goal of providing caring services to the child.
- **Savings and Credit Association:** Founded in 2009.

Infrastructure and Natural Resources

Electricity and Telecommunication Services:

Al Khader has been connected to a public electricity network since 1972; served by Jerusalem Electricity Company, which is the main source of electricity in the town. Approximately 99.4 percent of the housing units in the town are connected to the network, and 0.2 percent are dependent on private generators for electricity, while the source of electricity is unknown for the remaining units (0.4%) (Central Bureau of Statistics, 2007).

Furthermore, Al Khader is connected to a telecommunication network and approximately 44.1 percent of the housing units within the town boundaries are connected to phone lines (Central Bureau of Statistics, 2007).

Transportation Services:

Buses and taxis are the two main means of transportation in Al Khader; there are 7 buses and one taxi office in Al Khader town (Al Khader Municipality, 2010). As for the road network in the town; there is a total of 14km of roads; a total of 6km of which are main, paved and in good condition, , and a total of 8km of which are secondary, paved and in bad condition (Al Khader Municipality, 2010).

Water Resources:

Al Khader is provided with water by the Palestinian Water Authority (PWA), through the public water network established in 1976. Approximately, 86.9 percent of the housing units are connected to the water network, 10.2 percent are dependent on rainwater harvesting cisterns, 0.5 percent are dependent on springs, 1.6 percent are dependent on tanks, 0.3 percent are dependent on other sources for water, while the source of water supply is unknown for the remaining units (0.5%) (Central Bureau of Statistics, 2007).

Based on the PWA estimations, the rate of water supply per capita, in the communities provided with water, is about 100 liters per day, but this rate varies from one community to another. The quantity of water supplied to Al Khader in 2006 was about 293,000 cubic meters/year. The estimated rate of water supply per capita is about 134 liters/day (PWA, 2006).

Here it should be noted that no Al Khader citizen in fact consumes this amount of water due to water losses, which are about 39 percent. The losses happen at the main source, major transport lines, distribution network, and at the household level (PWA, 2008), thus the rate of water consumption per capita in Al Khader is 82 liters per day. This is a low rate compared with the minimum quantity proposed by the World Health Organization, which is 100 liters per capita per day.

Also, located in Al Khader are 500 rainwater harvesting cisterns. Al Khader has also one spring known as Salih spring.

Sanitation:

Al Khader town has a 6km in length public sewerage network, established between the years 1999-2003. The end of the network is connected to Ad Doha private sewage network, where waste water is pumped from Bir Onah pumping station to West Jerusalem private sewerage network. According to PCBS's Population and Housing Census in 2007 and PWA data, the majority of Al Khader's housing units (54.5%) use the sewerage network as a major mean for wastewater disposal, 44.6 percent of housing units uses the cesspits, and 0.5 percent of the housing units have no mean for wastewater disposal, while it is unknown for the remaining units (0.4%).

Based on the estimated daily per capita water consumption, the estimated amount of wastewater generated per day, is approximately 641 cubic meters, or 234 thousand cubic

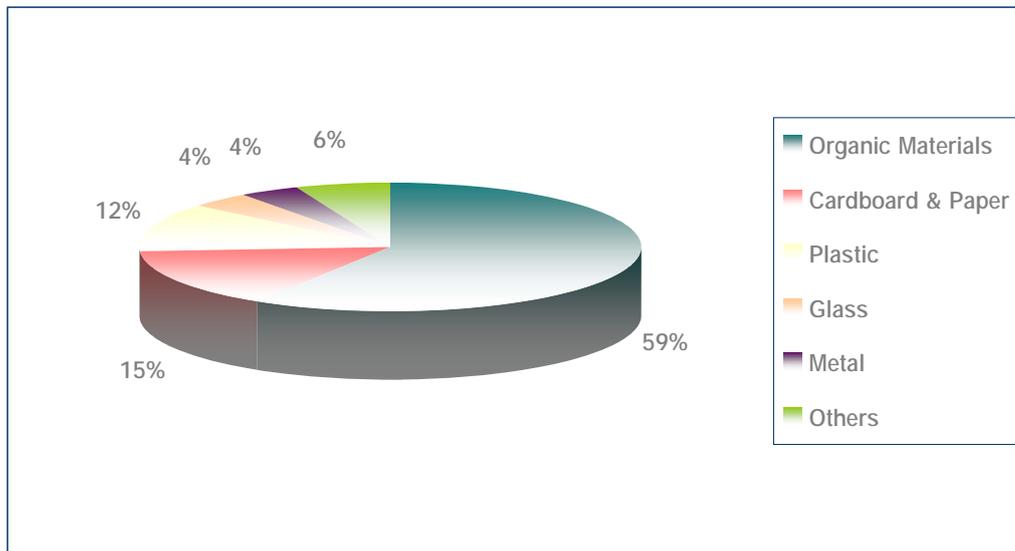
meters annually. At the individual level in the town, it is estimated that the per capita wastewater generation is approximately 66 liters per day. The estimated quantity of wastewater collected through the sewerage network per day, is about 349 cubic meters per day, or 127 thousand cubic meters annually. The wastewater resulting from the cesspits, which is about 104 thousand cubic meters annually, are discharged by wastewater tankers directly to open areas, without any regard for the environment. Here it should be noted that there is no wastewater treatment either at the source or at the disposal sites and this poses a serious threat to the environment and the public health.

Solid Waste Management:

Al Khader Municipality 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 town, 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 240 NIS/year per household and 480 NIS/year for commercial store. However, the collected fees are not considered sufficient for a good management of solid waste.

Most of the population in Al Khader benefit from the solid waste services, where waste is collected from households, institutions, shops, and public squares in plastic bags and then and then transferred to 100 containers with a capacity of 1.1 cubic meter each, spread throughout the neighborhoods. The municipality collects the solid waste from the containers six days a week and transports it to Al 'Eizariya dumping site. The common method for solid waste treatment in this dumping site is setting waste on fire or sometimes burying it. In the future, the solid waste will be disposed in Al Maniya landfill that will be established in Bethlehem governorate. It should be mentioned here that household waste, industrial, and medical solid waste are collected together and dumped into the same landfill, with the absence of any special system for separation and/or collection. The largest volume of solid waste is household waste which makes up around 45-50 percent of total capacity of solid waste.

The daily per capita rate of solid waste production in Al Khader is 0.7kg. Thus the estimated amount of solid waste produced per day from the Al Khader residents is nearly 6841kg, or 2498 tons per year. The main component of household solid waste is composed of organic materials, followed by paper and cardboard, and then by plastic, as shown in the figure below:

Figure 2: The components of the household solid waste produced

Environmental Conditions

Like other cities and villages in the governorate, Al Khader experiences several environmental problems which must be addressed and solved; these problems can be identified as follows:

Water Crisis:

Lack of drinking water available for the town residents, for several reasons:

- (1) Israeli domination over Palestinian water resources; which makes PWA dependent largely on water purchase from the Israeli company Mecerot to supply the Palestinian cities and villages, representing an obstacle in the organization of water pumping and distribution among populations. PWA distributes water to various areas at an interval-basis because the amount of water available is not sufficient for everyone at the same time.
- (2) High rate of water losses although PWA rehabilitated and renovated part of the network, built new reservoirs, and upgraded the water meters. However, the practices of citizens such as, creating illegal connections, water theft, and damaging water meters increase the proportion of water losses.

Wastewater Management:

The absence of a public sewage network in some neighborhoods, thus the use of cesspits for the disposal of wastewater, and the discharge of wastewater in the streets because the citizens can not afford the high cost of sewerage tankers, causes environmental and health problems, and the spread of epidemics and diseases in the town. Moreover, the use of cesspits pollutes the groundwater, due to the fact that most cesspits are built without lining, which allows wastewater to enter into the ground and avoids the need to use sewerage tankers from time to time. Thus, we find that the use of cesspits has already caused pollution of Salih spring water that is located in the town, as indicated by the results of water quality analysis that are available in the Palestinian Water Authority records (see Table 10) which shows that the concentration of nitrate ranges between 58 and 146mg/liter, thus, exceeding the allowable limit in drinking water (45mg/L). It should be noted that the high concentration of nitrates refers to water mixing with wastewater that is leaking from non-endocrine cesspits into the groundwater parcel. According to the results of biological test analysis carried out by the Palestinian Ministry of Health on a regular basis, it shows that Salih water spring is contaminated with fecal coli-form bacteria, making it unfit for domestic use. The concentration of fecal coli-form bacteria in water samples analyzed in February 2000 was more than 991 colonies/100ml, and the concentration of fecal coli-form bacteria in water samples analyzed in March 2008, was 20 colonies/100ml (Ministry of Health, 2008). The Applied Research Institute - Jerusalem (ARIJ) analyzed a water sample from this spring in 2002. The results also showed that the spring water is contaminated with fecal coliform bacteria, with a concentration of 1,150 colony/100ml. The existence of these bacteria is considered a conclusive evidence of the mixing of spring water with wastewater.

	TDS	Cl	NO ₃	Na	Ca	Mg	K	HCO ₃	SO ₄
Maximum Value (mg/L)	871	131	146	60	116	96	4	514	62
Average (mg/L)	722	102	111	60	116	96	4	514	62
Minimum Value (mg/L)	572	57	58	60	116	96	4	514	62
Number of Samples	2	4	4	1	1	1	1	1	1
Source: (Palestinian Water Authority, 2000)									

There is an absence of wastewater treatment as a result of industrial facilities at the source, where it is either discharged directly into a public sewerage network or collected in cesspits.

The haphazard disposal of untreated waste water from Israeli settlements, such as Efrat settlement which discharge its waste water into Al Khader territory, leads to the contamination of vast areas of the Palestinian agricultural land, thus, becoming a source of unpleasant odors, epidemics and insect gathering. In addition, the groundwater has become contaminated as this settlement is located on the groundwater basin feeding area.

Taking a stand, the Applied Research Institute - Jerusalem (ARIJ) targeted Al Khader to build small scale wastewater treatment units at the household level in order to replace the

cesspits, due to the suffering of the residents of the town from the pollution caused by the absence of a good environmental management of wastewater. In 2008, 12 wastewater treatment units were established to serve 12 households in the village, within the activities of "Establishment of small scale wastewater treatment plants in the rural areas of Bethlehem and Hebron Governorates" project, funded by the Mennonite Central Committee, which targets 18 villages including Al Khader town.

Solid Waste Management:

The lack of a central sanitary landfill to serve Al Khader and the other communities in the governorate is due mainly to the obstacles created by the Israeli authorities for local and national institutions, such as the difficulty to obtain licenses to establish such a landfill, as the appropriate land is within Area C, under the Israeli control. In addition, the implementation of such projects depends on funding from donor countries. Thus, the lack of a sanitary landfill is a hazard risk for the health, a source of pollution to the groundwater and soil through the leachate produced from the solid waste, and it also produces bad odors and distorts the landscape. It should be noted here that a sanitary landfill is currently under construction in Al Maniya area, south of Bethlehem governorate, to serve Bethlehem and Hebron governorates

The insufficient and inefficient solid waste collection arrangement, since the municipality depends on one vehicle to collect solid waste and transfer it, leads to the accumulation of solid waste in streets and around containers.

There is an absence of a system in the village and the governorate in general that separates hazardous waste from non-hazardous waste, consequently hazardous solid waste is collected with non-hazardous waste and transported to Al 'Eizariya landfill for disposal by burning.

Other problems:

- Environmental pollution caused by the dust of stone quarries, which exist inside the town and surrounding communities, negatively affects the health of citizens in the neighborhoods through air pollution caused by the large amounts of dust. Moreover, these quarries discharge their liquid and solid waste, randomly, in nearby roads and agricultural lands, all due to the absence of the rule of law and the inadequacy of the executive branch.
- The excessive use of agricultural pesticides and fertilizers, thus contributing to the pollution of groundwater.

Impact of the Israeli Occupation

According to Oslo Interim Agreement signed in 1995 between the Palestinian National Authority and Israel, Al Khader territories were divided into three areas; A, B and C, as shown in table 11.

Land Classification	Area (dunum)	% of the Total Area
Area A	745	9
Area B	457	5.5
Area C	7,078	85.5
Total Area	8,280	100

Source: GIS unit –ARIJ 2009

It should be noted here that more than 90 percent of the Al Khader population resides in areas A & B, which constitute only 14.5 percent of the total area of Al Khader village, as shown in the table above. Area C on the other hand, which fall under Israeli full control, constitutes 85.5 percent of the total area of the village, where the Palestinian population density is low due to the Israeli restrictions in those areas, which limits the Palestinians opportunities to build, expand, and develop.

Following the Israeli occupation of the West Bank and Gaza Strip in 1967, the Israeli authorities confiscated large areas of Al Khader lands for the construction of several Israeli settlements and bypass roads, in order to connect the settlements to each other. The first Israeli settlements that Israel has built on the town territory was Efrat settlement. Table 12 shows the Israeli settlements established on Al Khader town territory.

Settlement	Year of Establishment	Settlers (2008)	Total Area of Settlement (dunum)	Seized land of Al Khader Town for the Construction of Efrat Settlement
Efrat	1979	8200	2180	2
Neve Daniyyel	1982	1760	584	27
Total		15697	6329	29

Source: GIS & Urbanization units –ARIJ 2009

In addition to the Israeli settlements, the settlers established a number of Israeli outposts on Al Khader territory in 2002; North of Neve Daniyyel (Table 13).

Original Settlement	Outpost	No. of Caravans	Date of Establishment
Neve Daniyyel	North of Neve Daniyyel	12	January, 2002

Source: GIS & Urbanization units –ARIJ 2009

The Segregation Wall

The Israeli racist discrimination plan aims at creating a negative and destructive impact on Al Khader town. According to the updated Segregation Wall plan published on the web page of the Israeli Ministry of Defense in April 2007; a 4.35km section of the Segregation Wall will extend on Al Khader lands; thus isolating 5620 dunums of the town's territory in the western isolation area (68% of the total area of the town). The majority of this land is agricultural land, forests, and open areas, which constitute a source of income for many Palestinian families in the town (see Table 14).

Item	Total Area (in Dunums)	Percentage of isolated area in Al Khader town
Arable Land	4107	68
Forests & Open Areas	1290	
Palestinian Built-up Area	2	
Israeli Settlements	29	
Artificial Surfaces	192	
Total	5620	

Source: ARIJ database- GIS, 2008

Al Khader Crossing

On November 21, 2005, the Israeli Occupation Army issued a new military order # (210/05/T) to confiscate 85 dunums from Beit Jala, Battir village, and Al Khader town, west of Bethlehem city, for the construction of a tunnel and a crossing for the Palestinians traveling between Bethlehem city and the western countryside villages, which is controlled by the Israelis. Currently, Israel is still working on building the crossing and the tunnel in their specified locations as stated in the military order. The military order, alongside the racist Segregation Wall in Al Khader town, aims at establishing a border checkpoint between the western countryside villages of Bethlehem Governorate (Battir, Husan, Nahhalin, Al Jab'a, and Wadi Fukin, in addition to Khallet 'Afana, Khallet al Balluta, and Khallet Sakariya) and the city of Bethlehem and its vital centers, and at diverting the Palestinian traffic away from the Israeli bypass road number 60 in order to keep it for the sole use of Israelis. Consequently, Israel is applying the system of separation between the Palestinians and the Israelis and depriving the Palestinians of their right of contiguity.

Military orders issued in Al Khader town

During the years 2001 and 2009, The Israeli Occupation Forces issued 12 military orders against Al Khader town in order to confiscate large areas for various military purposes, including seven orders for the construction of the racist Segregation Wall in the region. The military orders are:

1. On August 29, 2001, the Israeli occupation forces issued military order # (25/01/T) to confiscate a piece of land for military purposes.
2. On January 13, 2005, the Israeli occupation forces issued military order # (93/01) to confiscate a total area of 7.5 dunums from Al Khader town territory for the construction of a section of the racist Segregation Wall.
3. On July 19, 2005, the Israeli occupation forces issued military order # (135/05/T) to confiscate a total area of 448 dunums from Al Khader town territory for the construction of a section of the racist Segregation Wall.
4. On August 22, 2005, the Israeli occupation forces issued military order # (157/05/T) to confiscate a total area of 21 dunums from Al Khader town territories and Beit Jala city for the construction of the tunnel road.
5. On October 3, 2005, the Israeli occupation forces issued military order # (18/05/T) to confiscate 0.4 dunums from Al Khader town for the construction of an iron gate.
6. On November 2, 2005, the Israeli occupation forces issued military order # (201/05/T) to confiscate a total area of 94.3 dunums from Al Khader town and Beit Jala city territories for the construction of a section of the racist Segregation Wall.
7. On August 8, 2004, the Israeli occupation forces issued military order # (21/99/T) to confiscate a total area of 4.7 dunums from Al Khader town territory for the construction of a section of the racist Segregation Wall.
8. On November 21, 2005, the Israeli occupation forces issued military order # (210/05/T) to confiscate a total area of 85 dunums from Al Khader, Battir, and Beit Jala territories for the construction of Al Khader crossing.
9. On February 19, 2006, the Israeli occupation forces issued military order # (24/06/T) to confiscate a total area of 170 dunums from Al Khader town and Beit Jala city territories for the construction of the racist Segregation Wall and a side road along the wall.
10. On July 25, 2006, the Israeli occupation forces issued military order # (69/06/T) to confiscate a total area of 152 dunums from Al Khader, Beit Fajjar, and Beit Ummar territories for the construction of a section of the racist Segregation Wall and the establishment of Umm Salamuna crossing, south of Bethlehem city.
11. On March 3, 2006, the Israeli occupation forces issued military order # (77/06/T) to confiscate a total area of 102 dunums from Al Khader and Artas village territories for the construction of a section of the racist Segregation Wall.
12. On July 29, 2007, the Israeli occupation forces issued military order # (29/07/T) to confiscate a total area of 321.9 dunums from Al Khader and Artas village territories for the construction of a new section of the racist Segregation Wall.

The Israeli occupation forces have also handed many Palestinian families in Al Khader town military orders of demolition and of halting construction of any houses under the pretext of illegal construction, as they claim that the houses are located in area C, which is under Israeli full control, according to Oslo Agreement signed in 1995. Thus, every Palestinian who wants to build a house or a room to an existing house must be subjected to long, complicated, and expensive application processes, which usually are rejected by

the Israeli Civil Administration because the Palestinians do not meet the necessary conditions for building in those areas, according to the Israeli claims.

Israeli settlement plan in Al Khader and the surrounding villages' territories

In the second week of February 2009, the Military Court in the Israeli Civil Administration rejected eight out of nine objections that were submitted by Palestinian residents of Artas, Al Khader, and Khallet an Nahla, as a protest against the decision of the Civil Administration and the Custodian of Absentee Property in 2004, which announced more than 1700 dunums of Al-Khader land as Israeli government property. The targeted Palestinian territories are located within the structural plan of Efrat Israeli settlement, which is included in the settlement scheme for the construction of 2500 housing units on the eighth hill of Efrat, which was named "Giv'at Haetem Neighborhood," and which has received preliminary approval.

According to the Israeli scheme of the racist Segregation Wall in 2004, the Settlement Neighborhood location came within Efrat settlement scheme and within the area to be annexed to Israel. However, in 2005, the Israeli army made some changes in several sections of the segregation wall in the West Bank; one of them was the settlement scheme region 'Givat Haetem Neighborhood', which was cut out of the wall scheme. Nevertheless, the rise of the Israeli Extreme Right to power in Israel put life and hope in the hearts of the Israeli Right and Israeli settlers as it revived their expansion plans, since it appears that the Israeli military court decision came as a confirmation to the Custodian of Absentee Property decision of declaring the targeted territories as governmental properties. All of this is considered only a prelude to the reintegration of the targeted area behind the racist Segregation Wall that was dislodged outside the wall in the past.

Israeli Bypass Roads in Al Khader

The two Israeli bypass roads; no. 375 and no. 60, cut through Al Khader town land and extend for 6.25km on its territory.

Development Plans and Projects

Implemented Projects

Al Khader municipality has implemented several development projects in Al Khader, during the years 2004 to 2009, as shown in Table 15.

Table 15: Implemented Development Plans and Projects in Al Khader (2004-2009)

Name of the Project	Type	Year	Donor
Pavement of internal roads	Infrastructure	2004 - 2009	Ministry of Finance
Construction of schools	Construction/Educational	2005	Catholic Relief Services
Establishment of Al Khader international stadium	Construction	2005	unknown
Streetlights	Infrastructure	2007	Al Khader Municipality
Restoration of municipality building	Restoration	2004	Palestinian Economic Council for Development and Reconstruction (PECDAR)
Establishment of a sewage network	Infrastructure	2004	United Nations Development Program
Health units		2004	United Nations Development Program
Save the children project		2009	Save the Children Organization
Source: Al Khader Municipality, 2010			

Proposed Projects

Al Khader municipality, in cooperation with the civil society organizations in the town and the town 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 town. The projects are as follows, in order of priority, from the viewpoint of the participants in the workshop:

1. Reclaiming of agricultural lands and the construction of a fence around them.
2. Construction of agricultural wells.
3. Providing the farmers with seedlings, seeds and pesticides.
4. Establishment of greenhouses.
5. Restoration of the water reservoir in the town.
6. Expanding the sewage network.
7. Exempting the agricultural machinery from customs.
8. Monitoring the markets and opening new ones.
9. Establishment of women associations and other associations to support the farmers.
10. Establishment of a sidewalk on the bypass road 60.

Locality Development Priorities and Needs

Al Khader suffers from a significant shortage of infrastructure and services. Table 16 shows the development priorities and needs in the town, according to the municipality's point of view (Al Khader Municipality, 2010).

Table 16: Development Priorities and Needs in Al Khader					
No.	Sector	Strongly Needed	Needed	Not a Priority	Notes
Infrastructural Needs					
1	Opening and Pavement of Roads	*			13km*
2	Rehabilitation of Old Water Networks	*			3km
3	Extending the Water Network to Cover New Built up Areas		*		1km
4	Construction of New Water Networks		*		1km
5	Rehabilitation/ Construction of New Wells or Springs		*		2 springs
6	Construction of Water Reservoirs	*			5,000m ³
7	Construction of a Sewage Disposal Network	*			4km
8	Construction of a New Electricity Network	*			1km
9	Providing Containers for Solid Waste Collection			*	
10	Providing Vehicles for Collecting Solid Waste			*	
11	Providing a Sanitary Landfill			*	
Health Needs					
1	Building of New Clinics or Health Care Centres	*			1 clinic
2	Rehabilitation of Old Clinics or Health Care Centres			*	
3	Purchasing of Medical Equipment and Tools			*	
Educational Needs					
1	Building of New Schools	*			elementary & secondary
2	Rehabilitation of Old Schools	*			elementary & secondary
3	Purchasing of New Equipment for Schools	*			elementary & secondary schools
Agriculture Needs					
1	Rehabilitation of Agricultural Lands	*			7,000 dunums
2	Building Rainwater Harvesting Cisterns	*			3 cistern
3	Construction of Barracks for Livestock	*			5 barracks
4	Veterinary Services	*			
5	Seeds and Hay for Animals	*			
6	Construction of New Greenhouses	*			25 greenhouses
7	Rehabilitation of Greenhouses	*			15 greenhouses
8	Field Crops Seeds	*			
9	Plants and Agricultural Supplies	*			

*2km is a main road, 1.5km internal road and 9.5km agricultural road

References:

- *Al Khader Municipality*. 2010.
- *Applied Research Institute - Jerusalem (ARIJ)*. (2008 - 2009). Bethlehem, Palestine: Geographic Information Systems and Remote Sensing unit Database, 2009.
- *Applied Research Institute - Jerusalem (ARIJ)*. 2009. Bethlehem, Palestine: Urbanization Unit Database, 2009.
- *Directorate of Education - Bethlehem*. 2008/2009. Bethlehem, Palestine: A database of schools.
- *Ministry of Health - Central Public Health Laboratory*. 2008. Ramallah, Palestine: Report of the analysis of water samples – Bethlehem Governorate.
- *Palestinian Central Bureau of Statistics*. 2009. Ramallah, Palestine: General Census of Population and Housing Censuses, 2007.
- *Palestinian Ministry of Agriculture (MOA)*. 2007/2008. Bethlehem, Palestine: Directorate of Agriculture data.
- *Palestinian Water Authority*. 2000. Ramallah, Palestine: Quality of drinking water in the West Bank.
- *Palestinian Water Authority*. 2007. Ramallah, Palestine: Quantities of Water Supply in the West Bank Governorates, 2006.
- *Palestinian Water Authority*. 2009. Ramallah, Palestine: Quantities of Water Supply in the West Bank Governorates, 2008.