

Al Ma'sara Village Profile



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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>.

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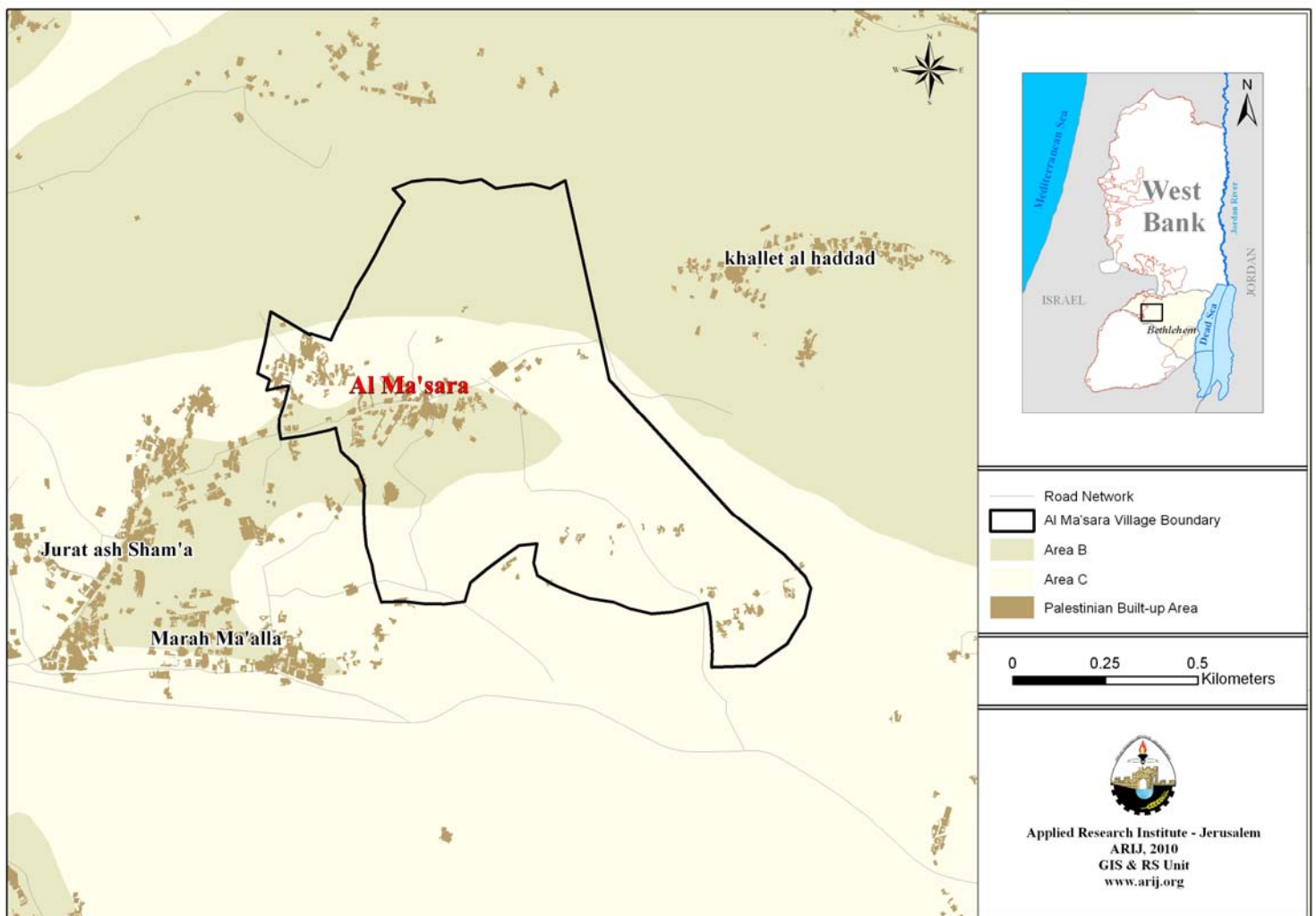
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Al Ma'sara Village Profile

Location and Physical Characteristics

Al Ma'sara is a Palestinian village in Bethlehem Governorate located 6.2km (horizontal distance) south-west of Bethlehem City. Al Ma'sara is bordered by Khaled Al Haddad village to the east, Wadi Rahhal village to the north, Jurat ash Sham'a village to the west, and Marah Ma'alla village to the south (See map 1).

Map 1: Al Ma'sara location and borders



Al Ma'sara is located at an altitude of 891m above sea level with a mean annual rainfall of 582mm. The average annual temperature is 16° C, and the average annual humidity is about 61 percent (ARIJ GIS, 2009).

Since 1996, Al Ma'sara has been governed by a village council which is currently administrated by seven members appointed by the Palestinian Authority. There are no employees working in the council. The village council has a permanent headquarters which it rents.

It is the responsibility of the village council to provide a number of services to the residents of Al Ma'sara, including:

1. Infrastructure services such as water and electricity,
2. Solid waste collection, road construction and restoration, street cleaning, and social development services.
3. Protection of religious and archaeological sites.
4. Implementation of projects and case studies for the village.

History

The name Al Ma'sara, which means 'a press,' came from the Roman Byzantine olive press that still remains in the village.

Al Ma'sara village dates back to 1930, and its residents originate from the tribes of Az Zawahra and At Ta'amra.

Photo of Al Ma'sara

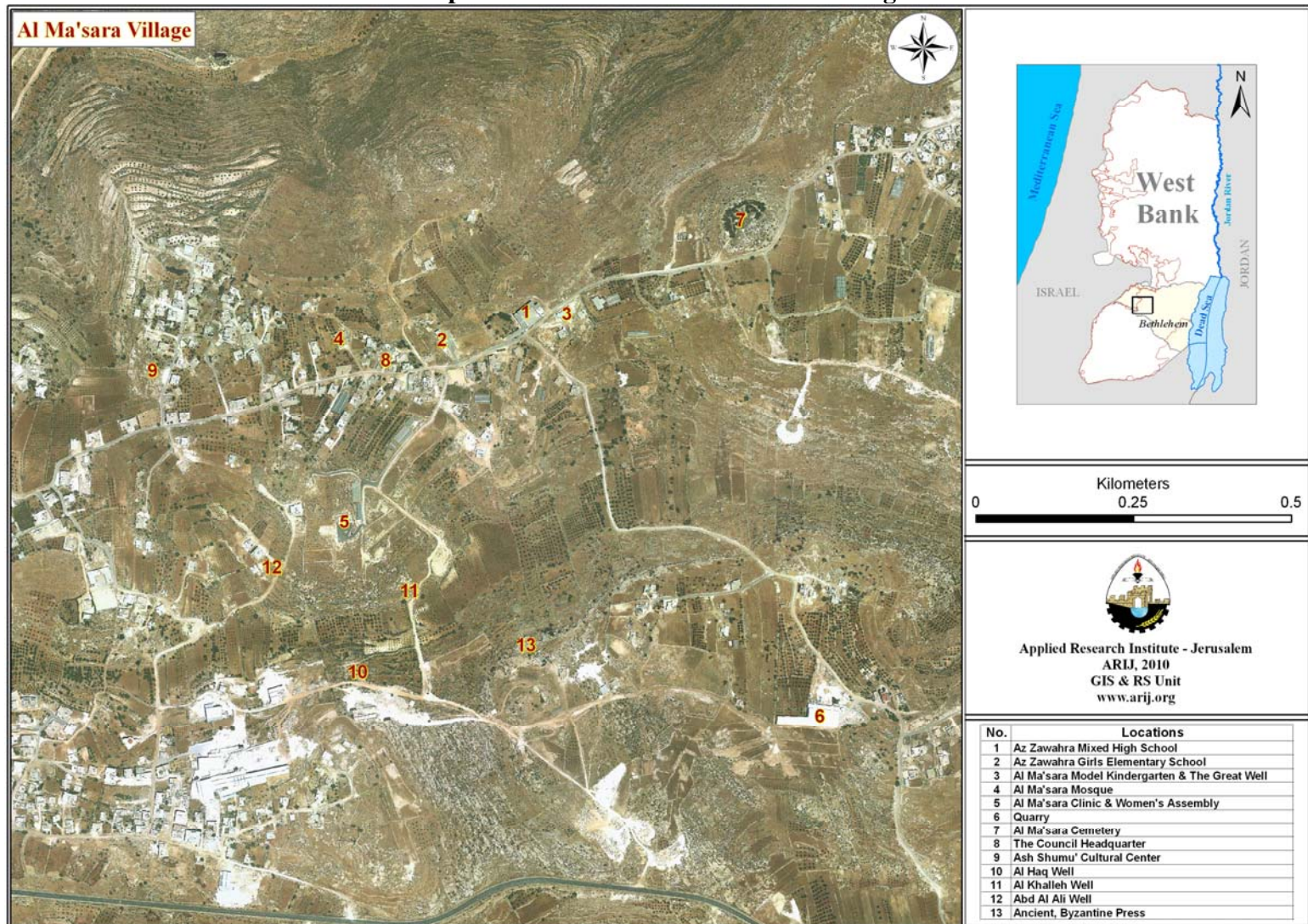


Religious and Archaeological Sites

In terms of religious establishments, there is only one mosque in Al Ma'sara: Al Ma'sara Mosque.

As for the archaeological sites in the village, there are the old city and the Roman press (See map 2).

Map 2: Main locations in Al Ma'sara village



Population

According to the Palestinian Central Bureau of Statistics (PCBS), the total population of Al Ma'sara in 2007 was 803; 429 of whom are males and 374 of whom are females. There are 129 households living in 136 housing units.

Age Groups and Gender

The General Census of Population and Housing carried out by PCBS in 2007 showed that the distribution of age groups in Al Ma'sara is as follows: 41.9 percent are less than 15 years, 53.3 percent are between 15 - 64 years, and 4.8 percent are 65 years and older. Data also showed that the sex ratio of males to females in the village is 114.7:100, meaning that males constitute 53.4 percent of the population, and females constitute 46.6 percent of the population.

Families

The inhabitants of Al Ma'sara village are composed of several families, mainly: 'Alaa' ed Deen, Brijieh, Abu Al 'Adas, and Salah.

Immigration

The field survey showed that five families, composed of 70 members, has left the village, since 2001.

Education

According to the results of the PCBS Population, Housing and Establishment Census-2007, the illiteracy rate among Al Ma'sara population is about 6.4 percent, of whom 76.5 percent are females. Of the literate population, 16.2 percent can read and write, 21.8 percent had elementary education, 27.7 percent had preparatory education, 20.4 percent had secondary education, and 12.8 percent completed higher education. Table 1, shows the educational level in the village of Al Ma'sara, by sex, and educational attainment in 2007.

Sex	Illiterate	Can read & write	Elementary	Preparatory	Secondary	Associate Diploma	Bachelor	Higher Diploma	Master	PhD	Total
M	8	42	66	69	57	7	35	-	2	-	289
F	26	39	43	69	45	3	15	1	1	-	244
T	34	81	109	138	102	10	50	1	3	-	533

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

In regards to the basic and secondary education institutions and schools in Al Ma'sara in the academic year 2008/2009, there are two public schools in the village, one for girls, and one mixed, both run by the Palestinian Ministry of Higher Education. There are no private schools in Al Ma'sara (See Table 2).

There are a total number of 337 students, 29 teachers, and 22 classes. It should be noted here that the average number of students per teacher in the schools is nearly 12, while the average number of students per class is approximately 15 (Directorate of Education in Bethlehem, 2009).

School Name	Supervising Authority	Sex
Az Zawahra Mixed High School	Government	Mixed
Az Zawahra Girls Elementary School	Government	Female

Source: Directorate of Education in Bethlehem, 2009

Furthermore, there is one kindergarten in Al Ma'sara; Al Ma'sara Model Kindergarten, which is privately run and has a total number of 50 children.

Health Status

There are a few health facilities available in Al Ma'sara village; a public health center and a private medical laboratory, but the village has no ambulance.

In emergency cases, residents of Al Ma'sara use Bethlehem hospitals and health centers, such as: Al Hussein Hospital, which is about 5.5km from the village.

Economic Activities

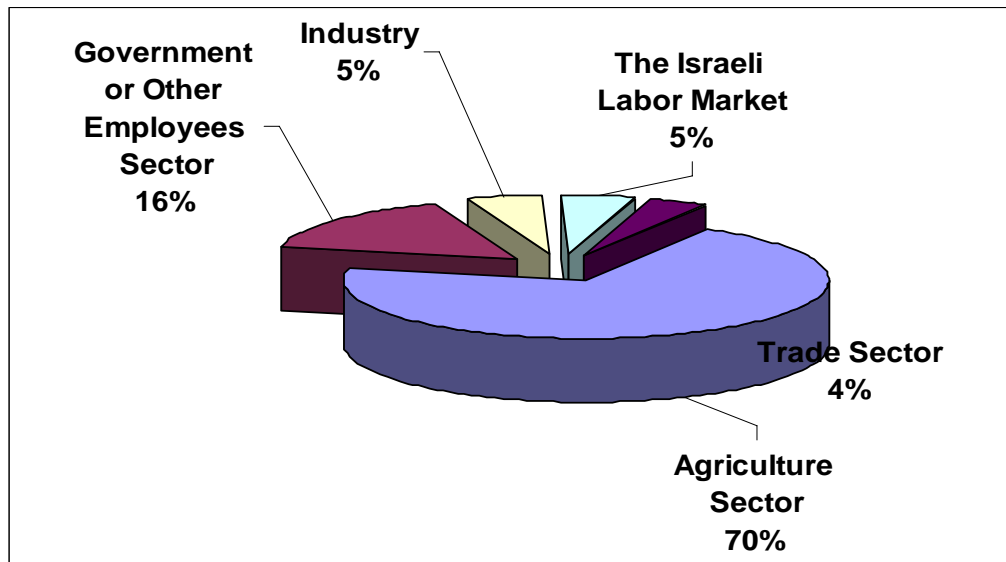
The economy in Al Ma'sara is dependent on several economic sectors, mainly: the agriculture sector, which absorbs 70 percent of the village workforce (See Figure1).

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

- Agriculture Sector (70%)

- Government or Other Employees Sector (16%)
- Industry (5%)
- Israeli Labor Market (5%)
- Trade Sector (4%)

Figure 1: Economic Activity in Al Ma'sara Village



There are a few businesses and industrial parks in Al Ma'sara, which are mainly stone and marble industries and four grocery stores.

As a result of the Israeli occupation and restrictions, the economic status of the population has severely declined, as many citizens have lost their jobs and have become unemployed, thus forcing them to work in the service sector agricultural activities, as a last resort for obtaining a minimum income.

The unemployment rate in Al Ma'sara has reached about 40 percent. It was found that the most vulnerable social groups in the town, as a result of Israeli actions, are:

1. Workers in the agricultural sector
2. Former workers in Israel
3. Workers in industry.

Labor Force

According to the PCBS Population, Housing and Establishment Census-2007, 32.3 percent of Al Ma'sara population was economically active, of whom 92.4 percent were employed, and 66.8 percent of whom were not economically active, 61.8 percent of whom were students, and 27.8 percent of whom were housekeepers (See table 3).

SEX	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	131	4	3	138	121	-	18	3	6	148	289
F	28	1	5	34	99	99	10	-	-	208	244
T	159	5	8	172	220	99	28	3	6	356	533

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

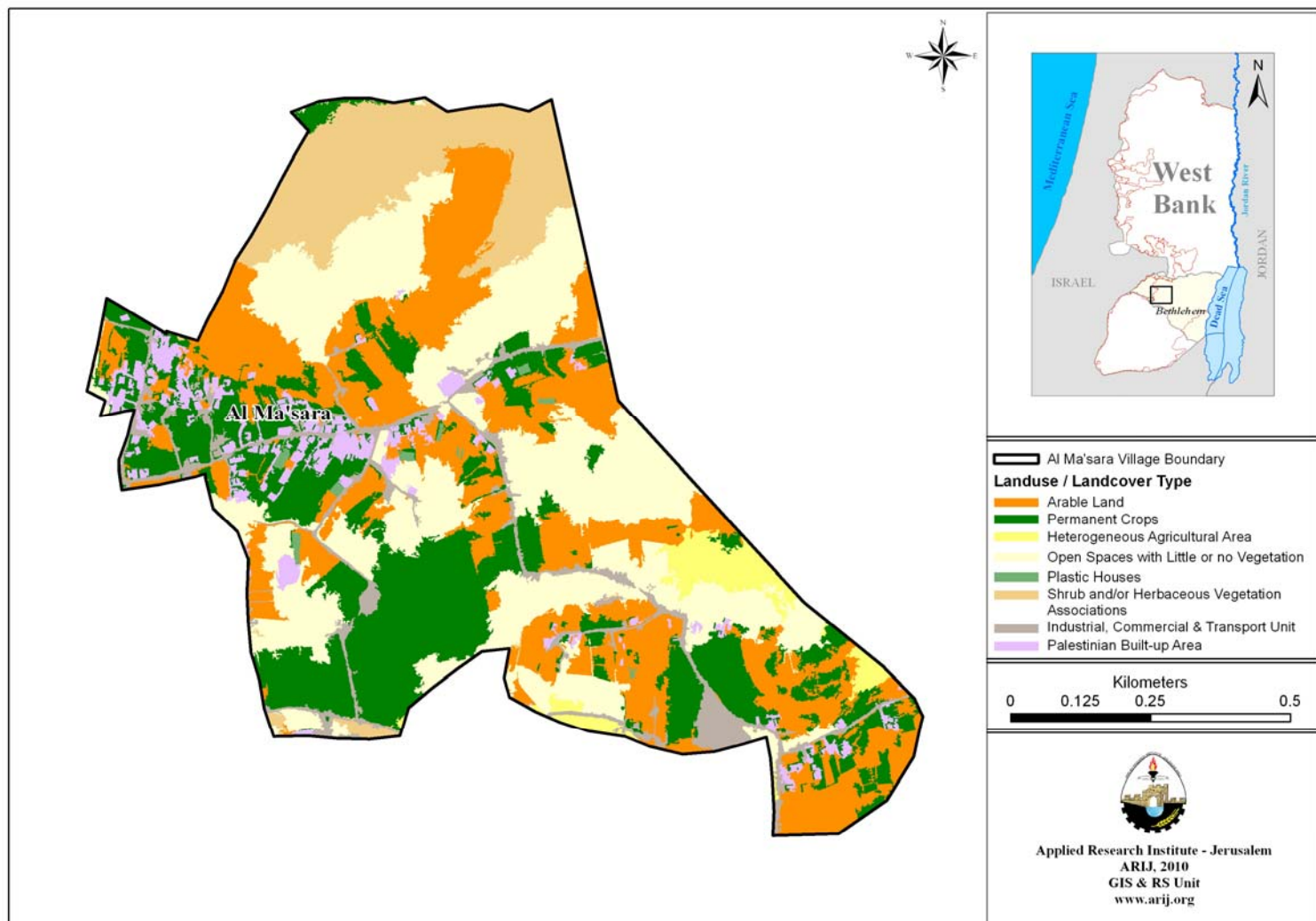
Agricultural Sector

Al Ma'sara lies on a total area of about 973 dunums of which 877 dunums are considered arable land, and 42 dunums are residential land (See table 4 and map 3).

Total Area	Built up Area	Arable Land (877)					Area of Industrial, Commercial & Transport Unit	Area of Settlements and Military Bases
		Seasonal Crops	Permanent Crops	Greenhouses	Forests	Open Spaces and Rangelands		
973	42	286	219	3	0	369	54	0

Source: GIS unit – ARIJ, 2008

Map 3: Land use/land cover and Segregation Wall in Al Ma'sara Village



Agricultural production in Al Ma'sara depends mostly on rainwater. As for irrigated fields, they depend on domestic harvesting cisterns.

Table 5 shows the different types of rain-fed and irrigated open-cultivated vegetables in Al Ma'sara. The most common crop cultivated within this area is tomato.

Fruity vegetables		Leafy vegetable		Green legumes		Bulbs		Other vegetables		Total area	
RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.	RF	Irr.
8	11	0	5.5	0	2.5	0	1	0	4	8	24

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2007

There are also 3 dunums of land on which there are greenhouses planted with different vegetables, mainly: cucumber and tomato.

Table 6 shows the different types of fruit trees planted in the area.

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.
150	0	0	0	6	0	0	0	50	0	165	0	371	0

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2007

As for the field crops and forage in Al Ma'sara, cereals, in particular, wheat and barley are the most cultivated covering an area of about 255 dunums, while dry legumes, such as chickpeas and lentils are the second most cultivated crops (See table 7).

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
255	0	0	0	18	0	0	0	24	0	0	0	0	0	297	0

Rf: Rain-fed, Irr: Irrigated

Source: Palestinian Ministry of Agriculture, 2007

The field survey shows that most of the residents in Al Ma'sara are rearing and keeping domestic animals such as sheep, goats, broiler chicken, and bees (See Table 8).

Cows*	Sheep	Goats	Camels	Horses	Donkeys	Mules	Broilers	Layers	Bee Hives
0	963	284	0	3	13	10	0	4,000	42

*Including cows, bull calves, heifer calves and bulls

Source: Palestinian Ministry of Agriculture, 2007

There are about 60 kilometers of agricultural roads in the village suitable for animals only.

Institutions and Services

Al Ma'sara has 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 Ma'sara 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.
- **Charitable Agricultural Society:** Founded in 2006 by the Ministry of Agriculture in order to assist and serve the farmers in the development of agriculture.
- **Cooperative Agriculture Society:** Founded in 1987 by the Ministry of Agriculture in order to assist and serve the farmers and help in the development of agriculture.
- **People's Committees:** Founded in 2006, to confront the racist Segregation Wall and the Israeli occupation.
- **Women Center:** Founded in 2006, aiming at providing training and guidance to all women and children in the village.
- **Sport Club:** Founded in 1994 by the Ministry of Youth and Sport, with the goal of providing all of Al Ma'sara's youth with various sport activities.
- **Ash Shumou' Center:** A cultural center founded in 2005 by the Ministry of Culture. The center provides cultural courses and lectures.

Infrastructure and Natural Resources

Electricity and Telecommunication Services:

Al Ma'sara has been connected to a public electricity network since 1979; served by Jerusalem Electricity Company, which is the main source of electricity in the village. Approximately 99.2 percent of the housing units in the village are connected to the network, while the remaining units (0.8%) are dependent on private generators for electricity (Central Bureau of Statistics, 2007).

Furthermore, Al Ma'sara is connected to a telecommunication network and approximately 12.9 percent of the housing units within the village boundaries are connected to phone lines.

Transportation Services:

Private cars and taxis are the two main means of transportation in Al Ma'sara. As for the road network in the village; there are a total of 10km of main road; 2km of which are paved and in good condition, 3km of which are paved but in bad condition, and 5km which are unpaved, and a total of 5km of secondary roads; 1km of which are paved and 4km of which are unpaved (Al Ma'sara village council, 2009).

Water Resources:

Al Ma'sara is provided with water by Palestinian Water Authority (PWA), through the public water network established in 1977, and about 99.2 percent of the housing units are connected to the water network, while the remaining units (0.8%) are dependent on rainwater harvesting cisterns (PCBS, 2007). The quantity of water supplied to Al Ma'sara in 2008 was about 21,300 cubic meters/year, therefore the estimated rate of water supply per capita is about 75.3 liters/day (PWA, 2008.)

Here it should be noted that many Al Ma'sara citizens do not in fact consume 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 Ma'sara is 46 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 Ma'sara are 20 rainwater harvesting cisterns (Al Ma'sara village council, 2009).

Sanitation:

Al Ma'sara lacks a public sewage network; most of the population uses cesspits as means for wastewater disposal. According to PCBS's Population and Housing Census in 2007 and PWA data, the majority of Al Ma'sara 's housing units (92.7%) use cesspits for wastewater disposal, while the rest of Al Ma'sara 's housing units (7.3%) don't have any mean for wastewater collection and disposal.

Based on the estimated daily per capita water consumption, the estimated amount of wastewater generated per day, is approximately 28.5 cubic meters, or 10402.5 cubic meters annually. At the individual level in the village, it is estimated that the per capita wastewater generation is approximately 36.8 liters per day. The wastewater collected by cesspits, are discharged by wastewater tankers directly to open areas or nearby valleys 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:

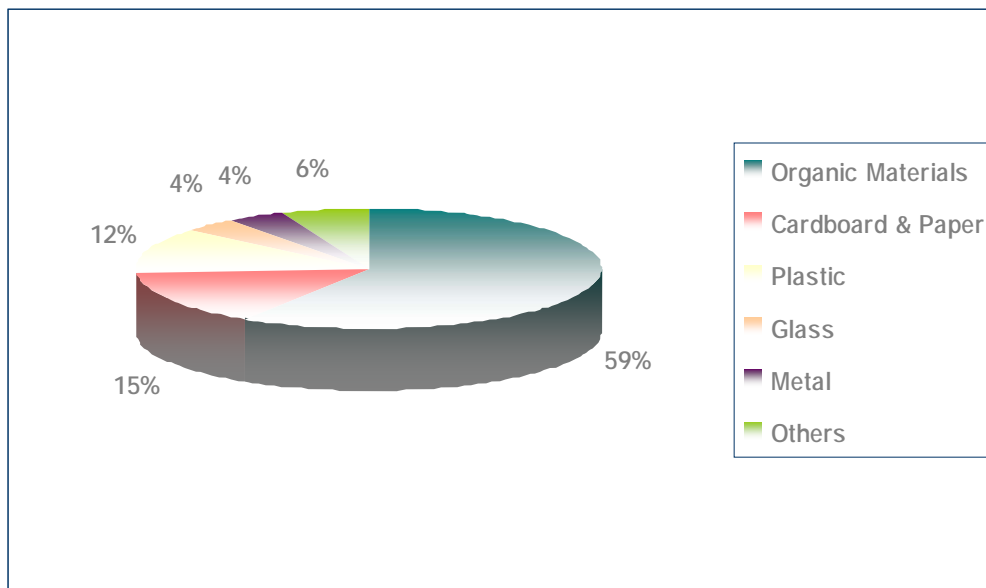
Joint Services Council for the Southern Countryside is considered the official body responsible for managing solid waste, i.e. solid waste collection and disposal, generated from the citizens and establishments in Al Ma'sara. Due to the fact that the process of solid waste management is costly, a monthly fee has been charged on the population, serviced by domestic solid waste collection and transportation services, which is about 12.5 NIS/month. However, the collected fees are not considered sufficient for a good management of solid waste. In general the solid waste management in Bethlehem

governorate and in other West Bank governorates is based on the voluntary contributions of donor countries.

Most of the population in Al Ma'sara benefit from the solid waste services, where waste is collected from households, institutions, shops, and public squares in plastic bags and then transferred to 11 containers, spread throughout the neighborhoods, with a capacity of 0.7 cubic meters each. The joint services council collects the solid waste from the containers two days a week and transports it to Dar Salah dumping site, 25km from Al Ma'sara. The common method for solid waste treatment in the dumping site is setting waste on fire or sometimes burying it. 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 Ma'sara is 0.7kg. Thus the estimated amount of solid waste produced per day from the Al Ma'sara residents is nearly 540kg, or 200 tons per year. The main component of household solid waste is composed of organic materials, followed by paper, cardboard, and then plastic, as shown in Figure 2 below.

Figure 2: The components of the household solid waste produced



Environmental Conditions

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

Water Crisis:

Water is cut off for long periods of time in summer and winter in several neighborhoods of the village for several reasons:

- (1) Israeli domination over Palestinian water resources; accordingly, supplying Palestinians communities with insufficient water quantities to cover their domestic needs.
- (2) High rate of water losses, because the water network is old, and in need of rehabilitation and renovation.

Wastewater Management:

The absence of a public sewage network, thus, the use of cesspits for the disposal of wastewater, and the discharge of wastewater in the streets, especially in winter, because the citizens can not afford the high cost of sewage tankers. All of this causes environmental damages, health problems, and the spread of epidemics and diseases in the village. The use of cesspits pollutes the groundwater and water collected in domestic cisterns (rainwater harvesting cisterns) as the wastewater mixes with water and contaminates it and thus makes it inappropriate for human consumption. This is 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 sewage tankers from time to time. Moreover, the untreated wastewater collected from cesspits by sewage tankers is disposed of in open areas without taking into account the damage it causes to the environment and the residents' health.

Solid Waste Management:

The lack of a central sanitary landfill to serve Al Ma'sara 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, because 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, and a source of pollution to the groundwater and soil through the leachate produced from the solid waste, and it also produces bad odors and distortion of 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.

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 Dar Salah landfill for disposal by burning.

Impact of the Israeli Occupation

According to Oslo Interim Agreement, signed in September 1995, between the Palestinian National Authority and the Israeli government, Al Ma'sara lands were classified into areas B and C; 363 dunums of which were classified as area B, in which public order falls under the Palestinian National Authority's responsibility, where Israeli has full control over security matters. It is worth mentioning that the majority of the population is concentrated in area B, which constitutes a small percentage of the total area of the village (37.3%). As for the remaining part of Al Ma'sara lands, 610 dunums (62.7 percent of the total area of the village), were classified as area C, an area that is under full control of the Israeli government. Since Israeli has control of this land, Palestinians are prevented from construction or benefiting from this land in any way possible, unless they get permission, which is extremely difficult, from the Israeli civilian administration in Bethlehem (Table 9).

Land Classification	Area (dunums)	% of the Total Area
Area A	0	0
Area B	363	37.3
Area C	610	62.7
Total Area	973	100

Source: GIS unit –ARIJ 2008

Since 2000, the Israeli occupation forces have uprooted 40 olive trees. Al Ma'sara village is also subjected to two mobile checkpoints that surround it (Al Ma'sara Village Council, 2009).

Development Plans and Projects

Implemented Projects

Al Ma'sara village council has implemented several development projects in Al Ma'sara, between 2006 and 2008, as shown in Table 10.

Name of the Project	Type	Year	Donor
Road Pavement Project	Infrastructure	2006	Palestinian Economic Council for Development and Reconstruction - PECNDAR
Construction of Classrooms for the Village School	Educational	2007	World Vision Organization
Construction of a Kindergarten	Educational	2008	Cooperative Housing Foundation

Source: Al Ma'sara Village Council, 2009

Proposed Projects

Al Ma'sara 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 viewpoint of the participants in the workshop:

1. Establishment of a Joint Service Council for the southern countryside.
2. Expansion of the south villages' structural schemes
3. Supporting agricultural production inputs, taking care of livestock, and construction of cooperative societies in the region.
4. Construction of rainwater harvesting cisterns and water reservoir.
5. Establishment of sewage network or wastewater treatment plant.
6. Providing the area with ground communications network.
7. Street Lighting.
8. Building youth and women's capacities in the area.
9. Finishing Wadi an Nis playing field.
10. Construction of a park in the area.

Locality Development Priorities and Needs

Al Ma'sara 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 point of view: (Al Ma'sara Village Council, 2009)

No.	Sector	Strongly Needed	Needed	Not a Priority	Notes
Infrastructural Needs					
1	Opening and Pavement of Roads	*			9km*
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	*			5 wells
6	Construction of Water Reservoirs	*			1,000m ³
7	Construction of a Sewage Disposal Network		*		15km
8	Construction of a New Electricity Network	*			2km
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			*	
2	Rehabilitation of Old Clinics or Health Care Centres			*	
3	Purchasing of Medical Equipment and Tools	*			
Educational Needs					
1	Building of New Schools	*			elementary
2	Rehabilitation of Old Schools	*			elementary & secondary
3	Purchasing of New Equipment for Schools	*			secondary
Agriculture Needs					
1	Rehabilitation of Agricultural Lands	*			500 dunums
2	Building Rainwater Harvesting Cisterns	*			6 cistern
3	Construction of Barracks for Livestock	*			7 barracks
4	Veterinary Services	*			
5	Seeds and Hay for Animals	*			
6	Construction of New Greenhouses	*			15 greenhouses
7	Rehabilitation of Greenhouses	*			
8	Field Crops Seeds	*			
9	Plants and Agricultural Supplies	*			

*3km is a main road, 1km internal road and 5km agricultural road.

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