

Marj al Ghazal 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 Jericho Governorate. These booklets came as a result of a comprehensive study of all localities in Jericho 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 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 Jericho 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 special emphasize on agriculture, environment and water.

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

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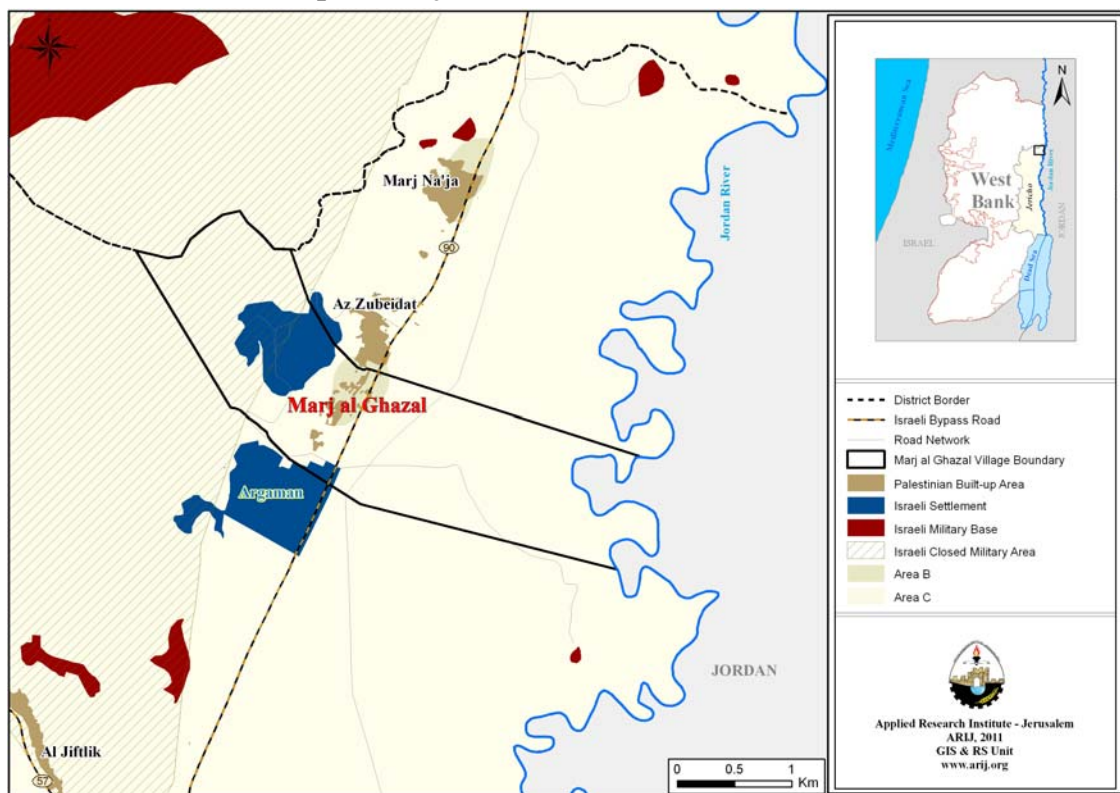
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Marj al Ghazal Village Profile

Location and Physical Characteristics

Marj al Ghazal is a Palestinian village in Jericho Governorate located (horizontally) 34.8km north of Jericho City. Marj al Ghazal is bordered by the Jordan River to the east, Az Zubeidat village to the north, and Al Jiftlik village to the west and south (ARIJ – GIS Unit, 2011) (See map 1).

Map 1: Marj al Ghazal location and borders



Source: ARIJ – GIS Unit, 2011.

Marj al Ghazal is located at an altitude of 280m below sea level with a mean annual rainfall of 192.4mm. The average annual temperature is 23 °C, and the average annual humidity is approximately 48% (ARIJ – GIS Unit, 2011).

Since 1995, Marj al Ghazal has been governed by a village council, which is currently administrated by 5 members appointed by the Palestinian National Authority. However, the Village Council does not own a permanent headquarters or a vehicle for the collection of solid waste (Marj al Ghazal Village Council, 2011).

It is the responsibility of the village council to provide a number of services to the residents of Marj al Ghazal, including (Marj al Ghazal Village Council, 2011):

1. Establishing and maintaining the water network.
2. Establishing an electricity network and/or the provision of generators.
3. Solid waste collection and social development services.
4. Implementing projects and case studies for the village.

History

Marj al Ghazal village's name comes in relation to "a ruin" called Khirbet Marj al Ghazal that was located in Deir Natif village; from which Marj al Ghazal residents emigrated in 1948 (Marj al Ghazal Village Council, 2011).

The establishment of the village dates back to the year 1995, with its residents origins being traced to Deir Natif and Beer as Sabe' villages (Marj al Ghazal Village Council, 2011) (See photo below for Marj al Ghazal village).

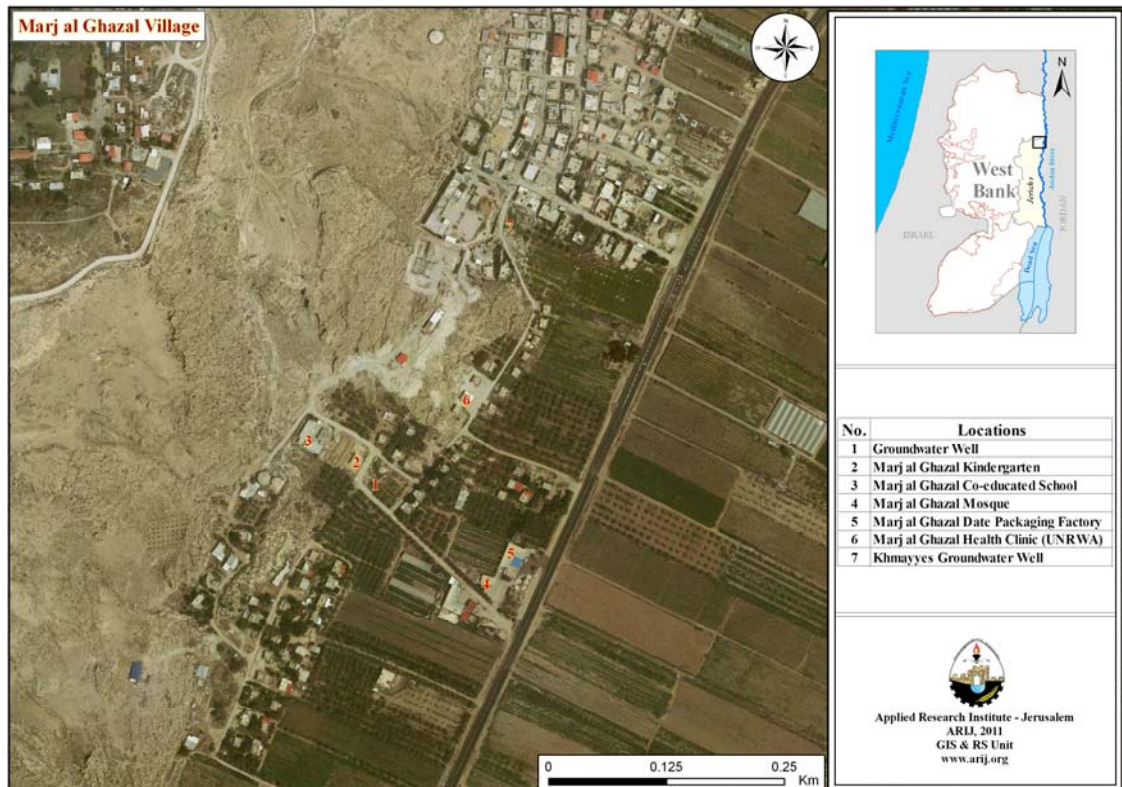
Photo 1: General view of Marj al Ghazal village's lands



Religious and Archaeological Sites

In terms of religious establishments, there is only one mosque in the village; Marj al Ghazal Mosque. As for archaeological sites, to this day, none have been discovered (Marj al Ghazal Village Council, 2011) (See Map 2).

Map 2: Main locations in Marj al Ghazal Village



Source: ARIJ – GIS Unit, 2011.

Population

According to the Palestinian Central Bureau of Statistics (PCBS), the total population of Marj al Ghazal in 2007 was 193; of whom 92 were male and 101, female. There were additionally registered to be 43 households living in 50 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 Marj al Ghazal was as follows: 44.6% were less than 15 years, 52.3% between 15 - 64 years, whilst 3.1% fell in the 65 years and older category.

Data additionally showed that the sex ratio of males to females in the village is 91.1:100, meaning that males and females constituted 47.7% and 52.3% of the population, respectively.

Families

Marj al Ghazal residents are composed of several families, mainly: 'Aal Khamis and Abu Jarrar families (Marj al Ghazal Village Council, 2011).

Education

According to the results of the PCBS Population, Housing and Establishment Census-2007, the illiteracy rate among Marj al Ghazal population was approximately 6.7%, of whom 88.8% were females. Of the literate population, 15.7% could only read and write, with no formal education 22.4% had elementary education, 36.6% had preparatory education, 16.4% had secondary education, and 2.2% completed higher education. Table 1, shows the educational level in the village of Marj al Ghazal, by sex, and educational attainment in 2007.

Table 1: Marj al Ghazal population (10 years and above) by sex and educational attainment, 2007

S E x	Illite- rate	Can read & write	Elem- entary	Prepa- ratory	Second- ary	Associate Diploma	Bach- elor	Higher Diploma	Master	PhD	Un- known	Total
M	1	5	15	26	12	2	1	-	-	-	-	62
F	8	16	15	23	10	-	-	-	-	-	-	72
T	9	21	30	49	22	2	1	-	-	-	-	134

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

With regards to the basic and secondary education institutions and schools in Marj al Ghazal in the academic year 2010/2011, there is only one public school in the village; Marj al Ghazal Co-educated Elementary School which is run by the Palestinian Ministry of Education and Higher Education (MoEHE). There are however no Kindergartens in the village (Directorate of Education in Jericho, 2011).

In the village there are also 67 students, 16 teachers, and 10 classes (Directorate of Education in Jericho, 2011). It should be noted here that the average number of students per teacher in the school is nearly 4, whilst the average number of students per class is approximately 7.

Health Status

There are very few health centers available in Marj al Ghazal village; with only one physician clinic run by UNRWA. However, in the absence of required health services and in emergency cases, residents of Marj al Ghazal head to the Medical Relief Center in Al Jiftlik village or to Jericho Governmental Hospital in Jericho city; 6km and 45km in distance from the village, respectively (Marj al Ghazal Village Council, 2011).

Nevertheless, the health sector in the village suffers many obstacles and problems, including:

1. The lack of first aid.
2. The lack of an ambulance in the village.
3. The absence of a permanent clinic.
4. The lack of a hospital in the village.

Economic Activities

The economy in Marj al Ghazal, according to the filed survey conducted by ARIJ in 2011, is dependent on one main economic sector; the agricultural sector, which absorbs 100% of the village's workforce.

In terms of commercial and industrial productions in Marj al Ghazal village, there are no facilities in the village. There is only one local grocery store (Marj al Ghazal Village Council, 2011).

Moreover, the unemployment rate in Marj al Ghazal has reached a concerning 50% (Marj al Ghazal Village Council, 2011).

Labor Force

According to the PCBS's Population, Housing and Establishment Census-2007, 60.4% of Marj al Ghazal labor force were economically active, of whom 97.5% were employed, and 39.6% were not economically active; of whom 47.2% were students and 39.6% were housekeepers (See table 2).

Table 2: Marj al Ghazal population (10 years and above) by sex and employment status

SEX	Economically Active				Not Economically Active						Un-known	Total
	Employed	Currently Unemployed	Unemployed (Never worked)	Total	Students	House-keeping	Unable to work	Not working & Not looking for work	Other	Total		
M	41	2	-	43	15	-	1	2	1	19	-	62
F	38	-	-	38	10	21	3	-	-	34	-	72
T	79	2	-	81	25	21	4	2	1	53	-	134

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

Agricultural Sector

Marj al Ghazal lies on a total area of approximately 4,917 dunums of which 4,334 dunums are considered 'arable' land, and 72 dunums are classified as 'residential' lands (See table 3 and map 3).

Table 3: Land use and land cover in Marj al Ghazal in 2010 (area in dunum)

Total Area	Built-up Area	Agricultural area (26,032 dunums)				Inland water	Forests	Open Space	Area of Industrial, Commercial & Transport Unit	Area of Settlements & Military Bases
		Permanent Crops	Green-houses	Range-lands	Arable lands					
4,917	72	291	16	3,449	578	2	0	0	0	509

Source: ARIJ – GIS unit, 2011

Agricultural production in Marj al Ghazal depends mostly on springs and groundwater wells. Also, the village residents cultivate different kinds of vegetables, mainly cucumbers and tomatoes (See table 4).

Table 4: Total area of cultivated lands in Marj al Ghazal village (dunum)

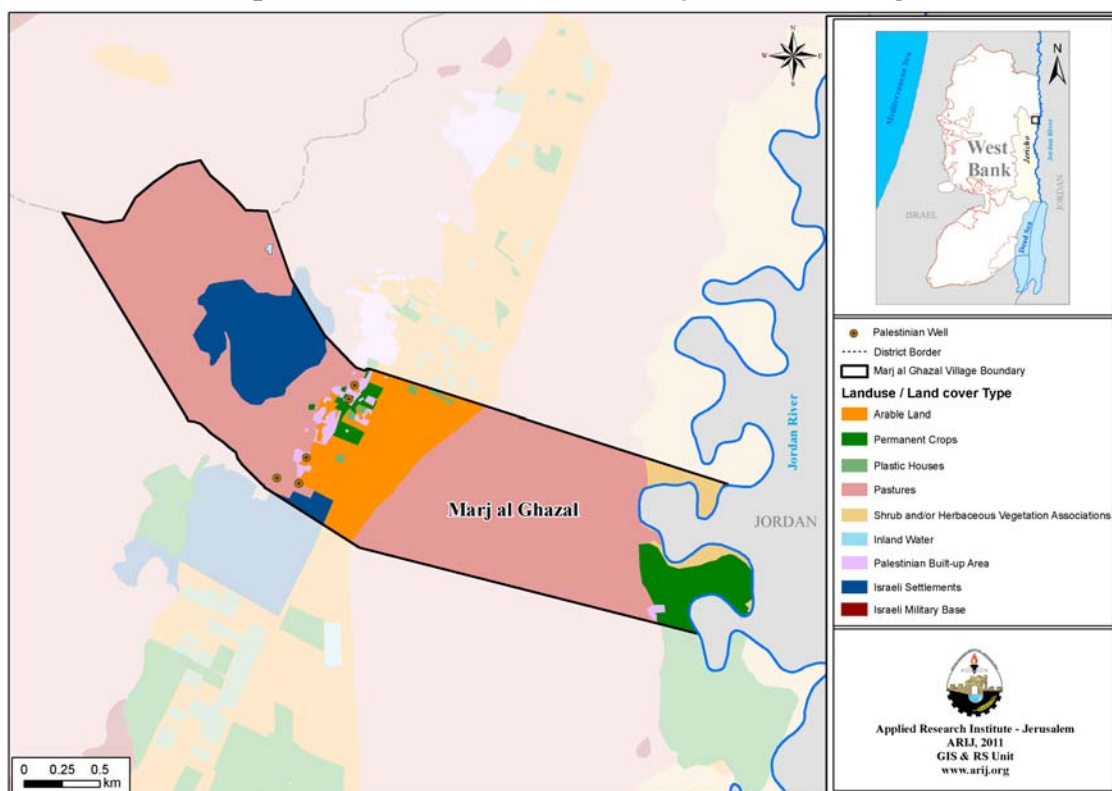
Vegetables	Citrus	Grapes	Palm		Banana	Total area
			area	No. of trees		
357	0	0	119.5	2,479	0	476.5

Source: Jericho & Al Aghwar Directorate of Agriculture – Jericho, 2011

The difference in the two sets of results of agricultural areas, obtained from the Ministry of Agriculture and by ARIJ's GIS Unit, is explained by the fact that the Ministry of Agriculture, who in combination with the Palestinian Central Bureau of Statistics (2011) conducted a survey considering a definition of agricultural areas based on the size of ownership. Thus, 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 which contains some springs. ARIJ's survey however indicated the existence of a high proportion of small and

fragmented holdings (home gardens) throughout the occupied Palestinian territories. This illustrates the bigger area of agricultural holdings calculated by ARIJ.

Map 3: Land use/land cover in Marj al Ghazal village



Source: ARIJ - GIS Unit, 2011.

The field survey shows that only 7% of the residents in Marj al Ghazal rear and keep domestic animals such as cows, sheep and bees (See Table 5).

Table 5: Livestock in Al 'Auja town

Cows*	Sheep	Camels	Poultry	Bee Hives
13	18,704	96	183,000	99

* Including cows, bull calves, heifer calves and bulls

Source: Jericho & Al Aghwar Directorate of Agriculture – Jericho, 2011

There are additionally around 5 kilometers of agricultural roads in the village, suitable only for the use of tractors and agricultural machinery (Marj al Ghazal Village Council, 2011).

However, the agriculture sector in the village suffers many obstacles and problems, mainly: the lack of capital for agricultural inputs (Marj al Ghazal Village Council, 2011).

Institutions and Services

Marj al Ghazal village has no governmental institutions, and only one local institution that provide services to various segments of society in different areas, which is: Marj al Ghazal Village Council that was founded in 1995 by the Palestinian National Authority with the goal of taking care of all the issues in the village and providing various services to its population (Marj al Ghazal Village Council, 2011).

Infrastructure and Natural Resources

Electricity and Telecommunication Services:

Marj al Ghazal has been connected to a public electricity network since 1994; served by Al Qatariya 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 (Marj al Ghazal Village Council, 2011).

However, it is noted that Marj al Ghazal is not connected to a telecommunication network (Marj al Ghazal Village Council, 2011).

Transportation Services

There are 3 public buses considered to be the main means of transportation in Marj al Ghazal village (Marj al Ghazal Village Council, 2011). As for the road network in the village; there is a total of 1.3km of 'main' roads and 1.55km of 'secondary' roads (Marj al Ghazal Village Council, 2011) (See Table 6).

Table 6: Roads in Marj al Ghazal village

Status of Internal Roads	Road Length (km)	
	Main	Sub
Paved & in good condition	0.3	-
Paved but in poor condition	0.7	1.2
Unpaved	0.3	0.35

Source: Marj al Ghazal Village Council, 2011

Water Resources

Marj al Ghazal is provided with water by Mekorot Israeli Company, through the public water network established in 1997. Approximately, 100% of the housing units are connected to this water network (Marj al Ghazal Village Council, 2011).

Based on the results of the project implemented by the Food and Agriculture Organization (FAO) and the Italian Group of Civil Volunteers (GVC)¹, which aims to promote and support farmers who are suffering from difficult living conditions in the Jordan Valley, the average rate of water supply per capita in Marj al Ghazal village is recorded to be an estimated 167 liters per day. The quantity of water supplied to Marj al Ghazal in 2011 was about 2,100 cubic meters/ month. Here it should be noted that no Marj al Ghazal citizen in fact consumes this amount of water due to water losses, which are approximately 10%. The losses happen at the main source, major transport lines, distribution network, and at the household level, thus the rate of water consumption per capita in Marj al Ghazal is 150 liters per day (GVC & FAO, 2011).

Moreover, located in the village are 2 underground wells used for agricultural purposes, such as the cultivation of palm trees. The quantity of water extracted from the wells in 2009 was around 556,500 cubic meters/ year (GVC & FAO, 2011).

Sanitation

Marj al Ghazal lacks a public sewerage network with most of the village residents using cesspits as their main means of waste -water disposal (Marj al Ghazal Village Council, 2011).

Based on the estimated daily per capita water consumption, the calculated amount of wastewater generated per day, is approximately 44.1 cubic meters, or 16,097 cubic meters annually. At the individual level, it is estimated that the per capita wastewater generation is around 105 liters per day (ARIJ – WERU, 2012). 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 which poses a serious threat to both environment and public health.

Solid Waste Management

The Joint Services Council for Development & Planning in Jericho & Al Aghwar Governorate is considered the official body responsible for managing solid waste, i.e. solid waste collection and disposal, generated from the citizens and establishments in the village. This service 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 (around 18 NIS/month) has been charged on the population serviced by domestic solid waste collection and transportation services. However, the collected fees are not considered

¹ The project was implemented in cooperation with the Palestinian Hydrology Group (PHG) and the Union of Agricultural Work Committees (UAWC), with the support of the Palestinian Water Authority and the Palestinian Ministry of Agriculture, and funded by the Italian Cooperation.

sufficient for a good management of solid waste; especially given that only 60% of these fees are collected from the citizens (Marj al Ghazal Village Council, 2011).

Most of the population in Marj al Ghazal benefit from solid waste services, whereby waste is collected from households, institutions, shops, and public squares in plastic bags. The Council collects the solid waste twice a week and transports it through a waste vehicle owned by the Joint Council to Tuflan² Israeli dumping site which is located on Jericho Governorate lands; 7km away from the village. The common method for solid waste treatment in this dumping site is through setting waste on fire and burying it (Marj al Ghazal Village Council, 2011). 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 (Marj al Ghazal Village Council, 2011).

The daily per capita rate of solid waste production in Marj al Ghazal is 0.7kg. Thus the estimated amount of solid waste produced per day from Marj al Ghazal residents is nearly 0.1 tons, or 50 tons per year (ARIJ – WERU, 2012).

Environmental Conditions

Like other villages and camps in the governorate, Marj al Ghazal experiences several environmental problems which must be addressed and solved. These problems can be identified as follows:

Water Crisis

The depletion of the groundwater sources through 'Mekorot' Israeli wells, which were given a monopoly on the excavation, restoration, distribution and selling of water, whilst Palestinians have been forbidden from constructing new wells and/or restoring existing ones. In many cases, as is the case in Marj al Ghazal village, the local authority relies heavily on the purchase of water from the private Israeli owned Mekorot Company to provide the village with a water supply. The Company, through the wells it owns, extracts large quantities of ground water, where it pumps the bulk of this water for the benefit of the illegal Israeli settlements, as settlers, mainly those in the Jordan Valley area, use huge amounts of water (ARIJ, 2011).

² Tovlan landfill is located north of Yafit settlement in the Jericho Governorate. The landfill was established in the nineties as a private project; its design did not include the necessary infrastructure to prevent leakage of leachate resulting from the waste, which pollutes the groundwater, or to prevent the emission of greenhouse gases. Currently, the landfill serves Israeli settlements located in the Jericho & Al Aghwar Governorate, in addition to Ariel settlement and Barqan industrial zone (B'TSELEM, 2011). Tovlan landfill is considered a main source of the Palestinian environmental pollution, as the Israeli factories dispose their hazardous waste into the landfill; taking into consideration that there is no current plan for the rehabilitation or expansion of the landfill.

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, thus making 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 from time to time the need to use sewage tankers. 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 residents' health.

Impact of the Israeli Occupation

According to the Oslo II Interim Agreement signed on 28th September 1995 between the Palestinian Liberation Organization (PLO) and Israel, Marj al Ghazal village was divided into areas "B" and "C". Approximately 197 dunums (4% 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. It is worth mentioning that most of the town's population resides in area "B" which constitutes a very small area in comparison to the total area of the town. On the other hand, approximately 4,720 dunums (96% of the total village area) were classified as area "C", where Israel retains full control over security and administration related to the territory. 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 area "C" are agricultural and open spaces (table 7).

Table 7: The geopolitical divisions of Marj al Ghazal village according to the Oslo II Interim Agreement in 1995

Area	Area in dunums	Percent of Total town area
Area A	0	0
Area B	197	4
Area C	4,720	96
Nature Reserve	0	0
Total	4,917	100

Source: Source: ARIJ-GIS Unit, 2011

Marj al Ghazal Village and the Israeli Occupation

Israel confiscated lands in Marj al Ghazal village to construct the Israeli settlement 'Argaman' in addition to the construction of Israeli bypass road no. 90 so as to connect this settlement with other ones.

The Israeli government confiscated 2,749 dunums of the village's lands (4.4% of the total village area) for the construction of 7 Israeli settlements, which are currently inhabited by more than 2000 Israeli settler (Table 8). It should be noted that the real threat of bypass roads lies in the buffer zone formed by the Israeli Occupation Forces (IOF) along these roads, extending to approximately 75 m on both sides of the road.

Table 8: Israeli Settlements constructed over Marj al Ghazal village's lands

Settlement Name	Year of construction	Area confiscated	Population of settlers
Argaman	1970	509	166

Source: ARIJ-GIS Unit, 2011

Development Plans and Projects

Implemented Projects

Marj al Ghazal village council had not implemented any development projects in Marj al Ghazal during the past five years (Marj al Ghazal Village Council, 2011).

Proposed Projects

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

1. Restoring the main line of the artesian well in the village.
2. Providing a permanent integrated health center with the provision of a permanent ambulance.
3. Providing 10 containers (each 1 cup in size) for the collection of solid waste.
4. Providing a tractor and a crane for fruit picking.
5. Creating small development projects.
6. Rehabilitating the main water network; 2km.
7. Paving and expanding the internal roads; 3km.
8. Establishing domestic wastewater treatment units.

Village Development Priorities and Needs

Marj al Ghazal suffers from a significant shortage of infrastructure and services. Table 9 shows the development priorities and needs in the village, according to the village council's feedback (Marj al Ghazal Village Council, 2011).

Table 9: Development Priorities and Needs in Marj al Ghazal

No.	Sector	Strongly Needed	Needed	Not a Priority	Notes
Infrastructural Needs					
1	Opening and Pavement of Roads	*			7.85km*
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 artesian wells
6	Construction of Water Reservoirs			*	
7	Construction of a Sewage Disposal Network	*			2km
8	Construction of a New Electricity Network			*	
9	Providing Containers for Solid Waste Collection	*			8 containers
10	Providing Vehicles for Collecting Solid Waste			*	
11	Providing a Sanitary Landfill			*	
Health Needs					
1	Building of New Clinics or Health Care Centres	*			one health center
2	Rehabilitation of Old Clinics or Health Care Centres			*	
3	Purchasing of Medical Equipment and Tools	*			
Educational Needs					
1	Building of New Schools			*	
2	Rehabilitation of Old Schools			*	
3	Purchasing of New Equipment for Schools	*			
Agriculture Needs					
1	Rehabilitation of Agricultural Lands	*			20 dunums
2	Building Rainwater Harvesting Cisterns			*	
3	Construction of Barracks for Livestock	*			10 barracks
4	Veterinary Services	*			
5	Seeds and Hay for Animals	*			20 tons per year
6	Construction of New Greenhouses			*	
7	Rehabilitation of Greenhouses	*			3 greenhouses
8	Field Crops Seeds	*			
9	Plants and Agricultural Supplies	*			

*1.3km is main roads, 1.55km is sub roads and 5km are agricultural roads.

Source: Marj al Ghazal Village Council, 2011

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