

# Turmus'ayya Town Profile



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## Background

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

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

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

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

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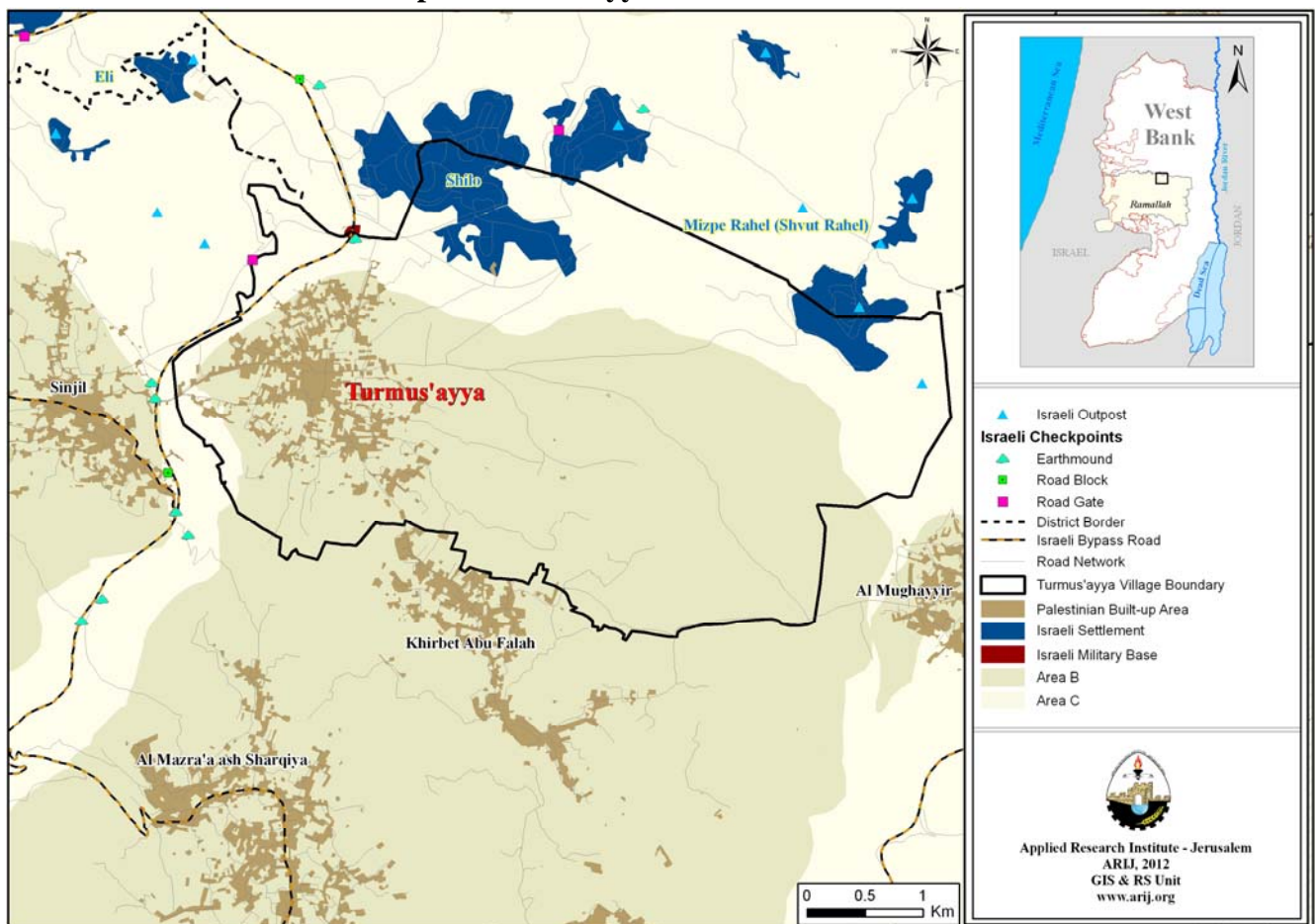
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# Turmus'ayya Town Profile

## Location and physical characteristics

Turmus'ayya is a Palestinian town in the Ramallah Governorate located (horizontally) 16.6 km northwest of Ramallah City. Turmus'ayya is bordered by Al Mughayyir to the east, Al Mazra'a ash Sharqiya to the north, Sinjil to the west, and Khirbet Abu Falah to the south (See map 1).

**Map 1: Turmus'ayya location and borders**



Source: ARIJ - GIS Unit, 2012.

Turmus'ayya is located at an altitude of 677 m above sea level with a mean annual rainfall of 462 mm. The average annual temperature is 17 ° C, and the average annual humidity is approximately 60% (ARIJ GIS, 2010).

In 2005 a Municipal Council has been established. It is administrated by 11 members appointed by the Palestinian National Authority with an additional employees working at the Council. Moreover, the municipal council owns a permanent headquarters, but does not own a vehicle for the collection of solid waste. The Council provides the residents of Turmus'ayya with a number of services, including:

1. Solid waste collection, road construction and restoration, street cleaning, and social development services.
2. Implementation of projects and studies for the town.
3. Organization of the construction and licensing processes.
4. Provide offices for governmental services (postal service, security).

## **History**

The village name is derived from the word Thormasia. The word is composed of three parts; Tur meaning mountain, Masha meaning the left over pulp from grapes squeezing and Ayya meaning ruins. The original families of Turmus'ayya come from majzeun from Bani Murra, and some from Al Batani and Al Jib villages.

**Photo 1: Turmus'ayya**

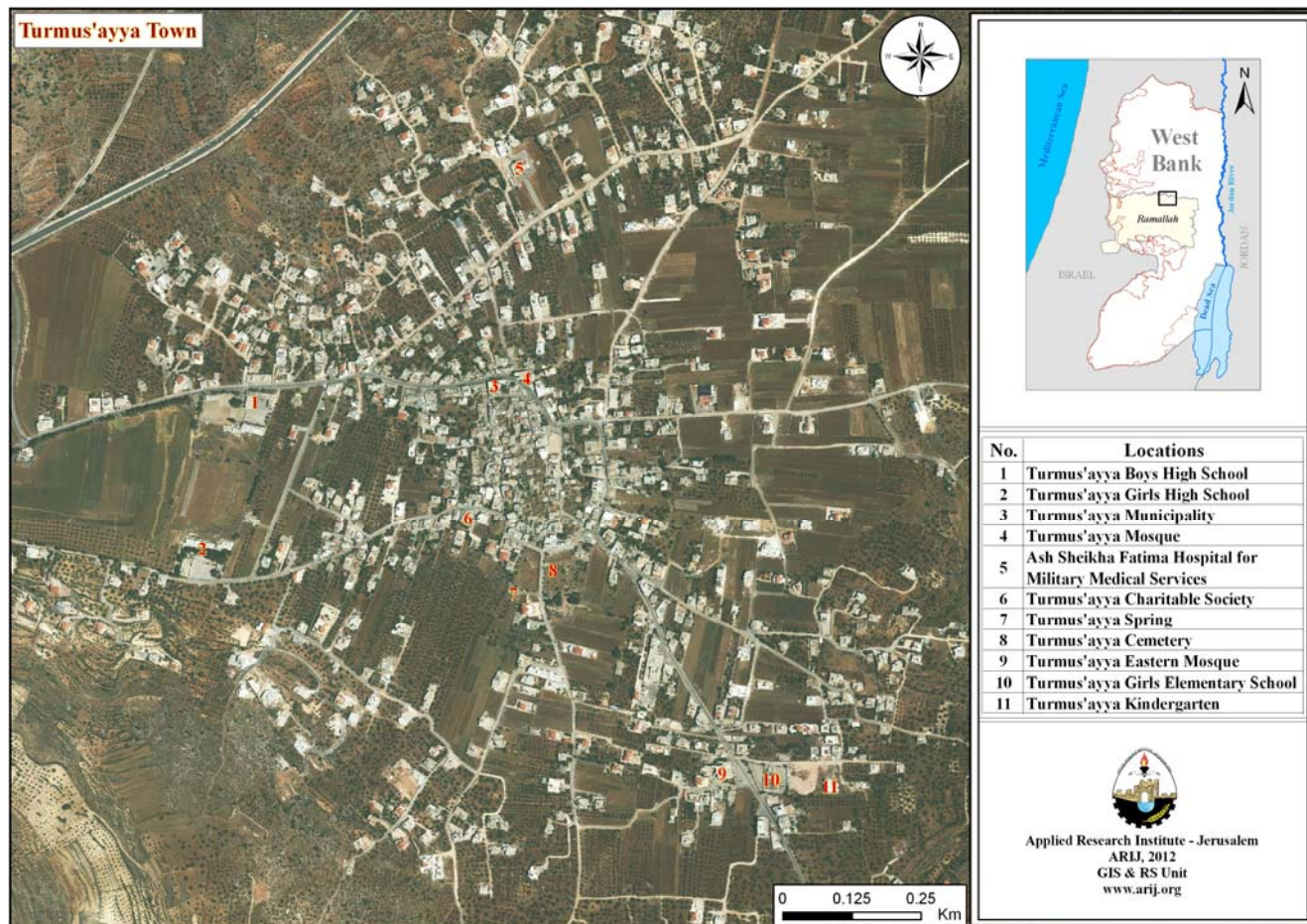


### **Religious and Archaeological Sites**

In terms of religious establishments, there are two mosques in the town; Al Farouq and Hamza Mosques. As for the archaeological sites, there are some, including Khirbet Abu Malloul which lies 4 km to the east, Khirbet Ammouriya which lies 1 km to the south and Khirbet Al Rafid and it lies 3 km to the south, etc (See Map 2).



Map 2: Main locations in Turmus'ayya Town



Source: ARIJ - GIS Unit, 2012.

## Demography and Population

According to the Palestinian Central Bureau of Statistics (PCBS), the total population of Turmus'ayya in 2007 was 3,512; of whom 1,711 were males and 1,801 were females. The Census also showed that there were 625 households and 935 housing units.

### Age Group and Gender

The General Census of Population and Housing carried out by PCBS in 2007 showed the distribution of age groups in Turmus'ayya was as follows: 41.4% were less than 15 years, 50.3% between 15 - 64 years, whilst 5.4% fell into the 65 years and older category. Data additionally, showed that the sex ratio of males to females in the town was 95:100,



meaning that males and females constituted 48.7% and 51.3% of the population, respectively.

### Families

There are many families forming the community of Turmus'ayya Town, including: Abu Awwad and Al Hamayel.

### Education

According to the results of the PCBS Population, Housing and Establishment Census-2007, the illiteracy rate among Turmus'ayya population was about 7.4%, of whom 86.3% were females. Of the literate population, 14.8% could only read and write, with no formal education, 25.3% had elementary education, 29% had preparatory education, 15.1% had secondary education, and 8.5% completed higher education. Table 1, shows the educational level in the town of Turmus'ayya, by sex, and educational attainment in 2007.

**Table 1: Turmus'ayya population (10 years and above) by sex and educational statement**

<b>S e x</b>	<b>Illite- rate</b>	<b>Can read and write</b>	<b>Elem- entary</b>	<b>Prep- aratory</b>	<b>Secon- dary</b>	<b>Assoc- iate Diploma</b>	<b>Bache- lor</b>	<b>Higher Diploma</b>	<b>Master</b>	<b>Docto- rate</b>	<b>Not stated</b>	<b>Total</b>
<b>M</b>	25	187	304	345	190	31	83	1	7	8	1	1,182
<b>F</b>	158	179	323	373	184	32	43	-	5	-	-	1,297
<b>T</b>	183	366	627	718	374	63	126	1	12	8	1	2,479

M: Male; F: Female; T: Total.

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

As for educational institutions and schools, in 2010/2011 only three governmental schools are registered in and are run by the Ministry of Education and Higher Education (see table 2).

The Ministry of Education and Higher Education revealed that for the scholastic year 2010/2011 there were 44 classes occupied by 1,062 male and female students, and there were 69 teachers. Classroom density was 24 students per class, and the average number of students per teacher was 15 students.

**Table 2: The Schools in Turmus'ayya by name, stage, sex, and supervising authority (2010/2011)**

School Name	Supervising Authority	Sex
Turmus'ayya Girls Secondary School	Governmental	Females
Turmus'ayya Boys Secondary School	Governmental	Males
Turmus'ayya Co-education Elementary School	Governmental	Co-education

**Source:** Ramallah directorate of education, 2011

There is a private kindergarten in the town that receives 116 children.

Students in Turmus'ayya suffer many difficulties in travelling to Turmus'ayya Boys Elementary School due to obstacles imposed by the activities of Israeli Occupation Forces, such as permanent and flyer checkpoints.

As for the education system, the available schools in the town lack a scientific stream class for secondary education, therefore students must travel to Sinjil (4 km far) to obtain secondary scientific education.

Other problems facing the education sector in the town include:

- 1- Classrooms need maintenance and rehabilitation.
- 2- The lack of sufficient classrooms and facilities.

## Health Sector

There are some health facilities in the town. These include a private general clinic, a medical laboratory, an x-ray center, two private pharmacies, a governmental health center, and a governmental hospital (Ash Sheikha Fatima Hospital for Military Medical Service).

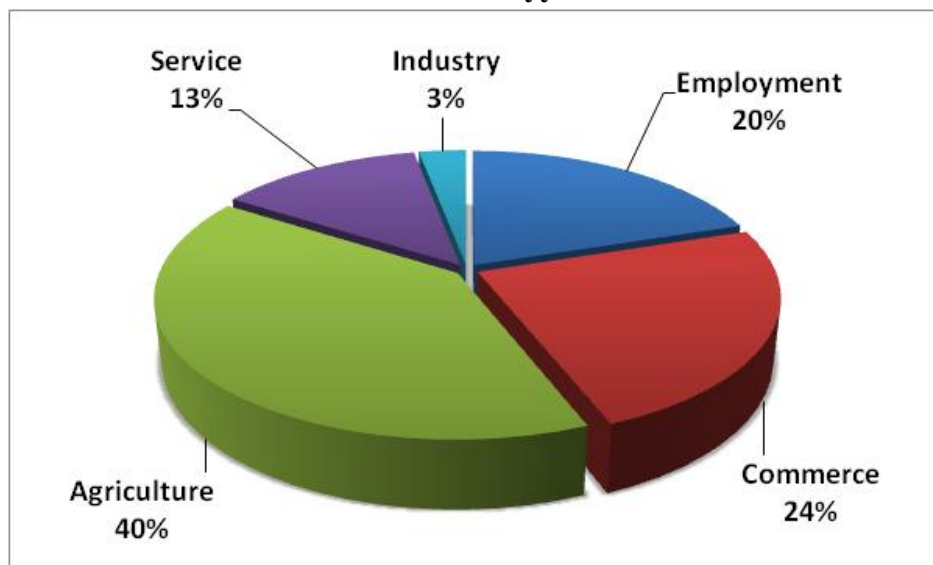
The health sector faces many problems. The lack of different medical specialization and the need to develop the hospital are the main problems.

## Economic Activities

The economy of the town depends on many sectors, with the employment sector being considered to be the most important; comprising 40% of labor force (Figure 1). Results of field survey showed the distribution of labor force among main economic sectors in the town as follows:

- Agricultural sector comprises 40% of total labor force
- Commerce sector comprises 24% of total labor force
- Employment sector comprises 20% of total labor force
- Service sector comprises 13% of total labor force
- Industry sector comprises 3% of total labor force

**Figure 1: The distribution of labor force among main economic activities in 'Turmus'ayya**



Source: Turmus'ayya Municipal Council, 2011

There are some industrial establishments such as carpentries. There are also 15 grocery shops, 3 vegetables and fruit shops, 3 butchers, a bakery, 5 stores and offices offering public different services, 2 stone quarries, 2 olive presses, a store for agricultural equipments, and 8 shops for occupational industries such as blacksmith.

Unemployment in Turmus'ayya reached to 9% in 2011, and the most affected groups of the community due to the Israeli occupation measures are people working in:

- 1- Agriculture
- 2- Services
- 3- Commerce
- 4- Industry

## Labor Force

According to the PCBS, Population, Housing and Establishment Census in 2007, 26.9% of the population was considered economically active of which 91.5% were employed, and 73.1% of the population were non-economically active of which 49.8% were students and 29% were housekeeping (Table 3).

**Table 3: Turmus'ayya population (10 years and above) by sex and employment status, 2007**

Sex	Economically active				Non-economically active							Total
	Employed	Currently Unemployed	Unemployed (never worked)	Total	Student	House-keeping	Unable to work	Not working & not looking for work	Others	Total	Not stated	
M	563	26	9	598	446	2	68	56	12	584	-	1,182
F	47	8	14	69	455	524	112	19	117	1,227	1	1,297
T	610	34	23	667	901	526	180	75	129	1,811	1	2,479

M: Male; F: Female; T: Total.

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

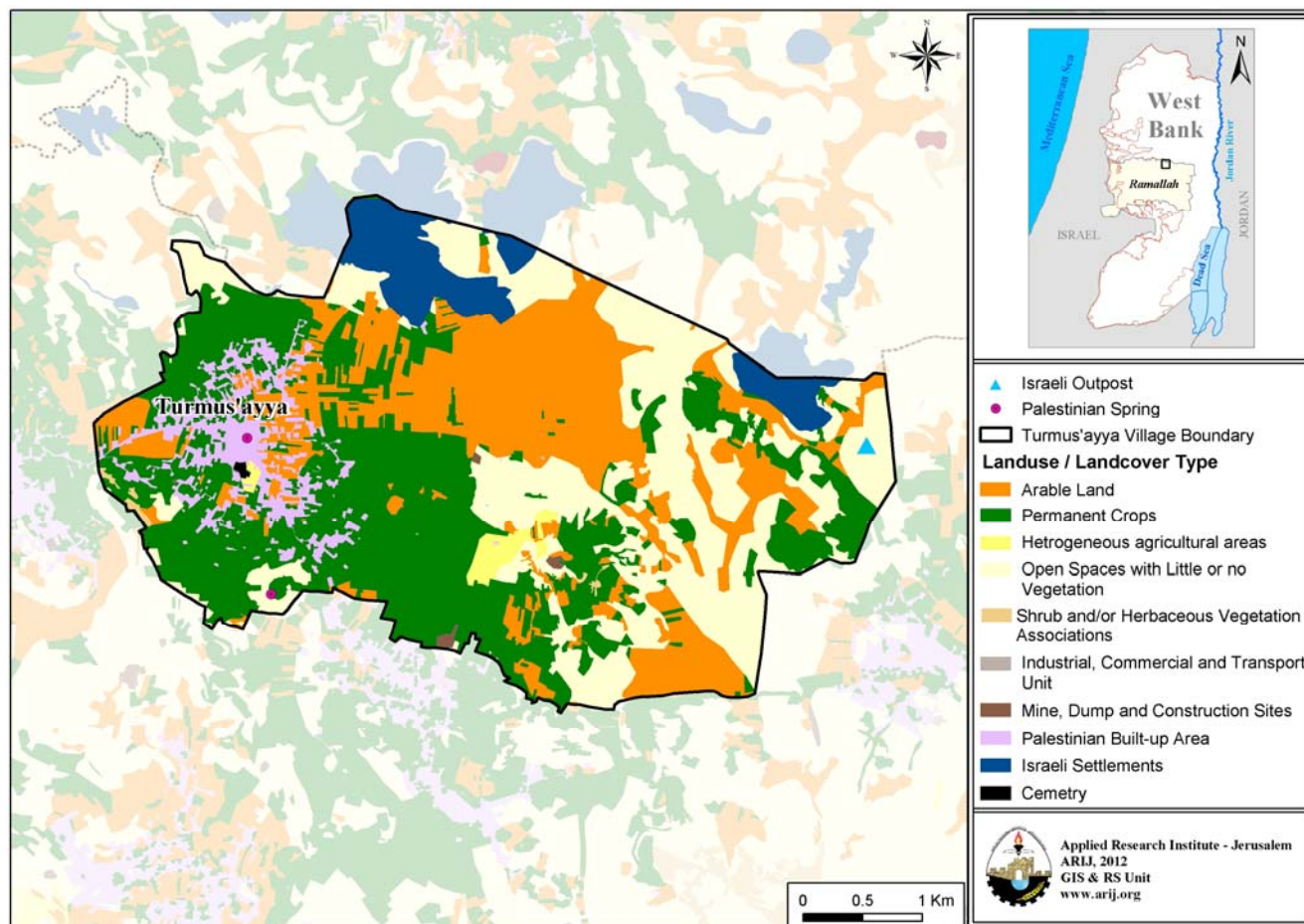
## Agricultural Sector

Turmus'ayya has a total area of around 18,139 dunums of which 11,313 are considered 'arable' land and 1,000 dunums are registered as 'residential' (See table 4 and map 3).

**Table 4: Land use and land cover in Turmus'ayya village in 2010 (area in dunum)**

Total Area	Built up Area	Agricultural area (1,284)				Inland water	Forests	Open Spaces	Area of Industrial, Commercial & Transport Unit	Area of Settlements, Military Bases & Wall Zone
		Permanent Crops	Green-houses	Range-lands	Arable lands					
18,139	1,000	6,477	0	40	4,796	0	0	4,701	46	1,079

Source: ARIJ – GIS Unit, 2012.

**Map 3: Land use and land cover of Turmus'ayya Town, 2010**

Source: ARIJ - GIS Unit, 2012.

Agriculture in Turmus'ayya is considered to be predominantly rain-fed agriculture. However, irrigated crops depend on public water network and on the household's water harvesting cisterns.

Table 5 shows the different types of rain-fed and irrigated open cultivated vegetables in Turmus'ayya. Snake cucumber and squash are considered the main cultivated vegetables in the town.

**Table 5: Total area of rain-fed and irrigated open cultivated vegetables in Turmus'ayya (area in dunums)**

Fruity vegetables		Leafy vegetables		Green legumes		Bulbs		Other vegetables		Total Area	
Rf.	Irr.	Rf.	Irr.	Rf.	Irr.	Rf.	Irr.	Rf.	Irr.	Rf.	Irr.
170	17	0	0	35	0	20	0	10	0	235	17

Rf.: Rain-fed; Irr.: Irrigated.

Source: Ministry of agriculture-Ramallah, 2009



Table 6 shows types and areas of cultivated fruit trees in town. Turmus'ayya is famous for olive trees, whereby 3,015 dunums are planted with olive crops (table 6).

**Table 6: Total area of horticulture and olive trees in Turmus'ayya (area in dunums)**

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.
3,015	0	0	0	55	0	29	0	140	0	171	0	3,410	0

Rf.: Rain-fed; Irr.: Irrigated.

Source: Ministry of agriculture-Ramallah, 2009

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

Field crops are also cultivated in Turmus'ayya, being the area cultivated with cereals the largest, covering 2,900 dunums. Most important cultivated cereals include wheat and barley. In addition, dry legumes are cultivated such as lentils and bakla (table 7).

**Table 7: Total area of horticulture and olive trees in Turmus'ayya (area in dunums)**

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.
2,900	0	48	0	195	0	5	0	160	0	0	0	4	0	3,312	0

Rf.: Rain-fed; Irr.: Irrigated.

Source: Ministry of agriculture-Ramallah, 2009

The field survey shows that 1% of the residents in Turmus'ayya are rearing and keeping domestic animals such as cows, sheep and goats (See Table 8).

**Table 8: Livestock in Turmus'ayya**

Cows*	Sheep	Goats	Camels	Horses	Donkeys	Mules	Broilers	Layers	Bee Hives
0	153	160	0	0	0	0	40,000	0	112

\*Including cows, bull calves, heifer calves and bulls

Source: Palestinian Ministry of Agriculture - Ramallah, 2009

There are only around 20 km of agricultural roads in town (table 9).

**Table 9: Agricultural Roads in Turmus'ayya and their Lengths**

Suitability of Agricultural Roads	Length (km)
For vehicles	8
For tractors and agricultural machinery only	5
For animals only	7
Unsuitable	-

Source: Turmus'ayya Municipal Council, 2011

## Institutions and Services

There are no governmental institutions or offices; however there is a police station in addition to local organizations and associations that provide services in many fields such as culture, sports, etc. Those local bodies include:

- **Turmus'ayya Municipal Council:** Established in 1996 by the Ministry of Local Governments so as to carry out public services to the town's residents.
- **Turmus'ayya Sports Club:** established in 1994 and it sponsors all cultural and sport activities for the youth.
- **Equestrian club:**
- **Turmus'ayya Charity Association:** Founded in 1980 by women of Turmus'ayya to provide voluntary activities in the town. The association also manages a kindergarten and a women union.

## Infrastructure and Natural Resources

### Electricity and Telecommunication Networks

Turmus'ayya has been provided with electricity network since 1980; served by Jerusalem Electricity Company, which is the main source of electricity in the town. The network is connected to all housing units (100%). However, Turmus'ayya suffers some problems concerning the electricity sector, mainly the weak electric current. There is a need to rehabilitate some parts of the low pressure electricity network, and to put in new electric generators.

As for the telecommunication services, around 90% of housing units in the town are connected to a telephone network (Turmus'ayya Municipal Council, 2010).

### Transportation Services:

There are 8 taxis in Turmus'ayya that transfer people from and to the town (Turmus'ayya Municipal Council, 2010). As for the road system, there are around 8 km of main roads, 19 km of secondary road and 20 km of agricultural roads (table 10).

**Table 10: Length, type and condition of road system in Turmus'ayya town**

No.	Condition of roads	Road length (km)	
		Main	Secondary
1	Good paved roads	3	2
2	Paved roads but in bad condition	5	7
3	Unpaved roads	-	10

Source: Turmus'ayya Municipal Council, 2011

### Water Resources:

Turmus'ayya is provided with water by Jerusalem Water Authority through the public water network established in 2011. Approximately 100% of the housing units are connected to this network. (Turmus'ayya Municipal Council, 2011). The quantity of water supplied to Turmus'ayya in 2010 was approximately 123,288 cubic meters/ year; therefore, the average rate of water supply per capita in Turmus'ayya is 96 liters per day (Jerusalem Water Authority, 2011). However, no Turmus'ayya citizen consumes this amount of water due to water losses, which are recorded at around 26.5%. These losses happen at the main source, major transport lines, in the distribution network, and at the household level (Jerusalem Water Authority, 2011). Therefore the rate of water consumption per capita in Turmus'ayya is 70.7 liters per day. The rate experienced by Turmus'ayya residents is low compared with the minimum quantity of 100 liters proposed by the World Health Organization.

To determine water costs, the water authority has adopted an upward rate where the price of water increases with increasing consumption. Table 11 shows the price of water by category of consumption.

**Table 11: Water tariffs of Jerusalem Water Authority adopted since 01.01.2012**

Consumption Category (m <sup>3</sup> )	Domestic (NIS/m <sup>3</sup> )	Industrial (NIS/m <sup>3</sup> )	Tourist (NIS/m <sup>3</sup> )	Commercial (NIS/m <sup>3</sup> )	Public Institutions (NIS/m <sup>3</sup> )
0 – 5	4.5	5.6	5.6	5.6	5.4

5.1 – 10	4.5	5.6	5.6	5.6	4.5
10.1 – 20	5.6	6.8	6.8	6.8	5.6
20.1 – 30	6.8	8.1	8.1	8.1	6.8
30.1+	9	9.9	10.8	9	9

**Source:** Jerusalem Water Authority, 2012

### **Sanitation:**

Turmus'ayya lacks a public sewage network; most of the population uses cesspits as main means for wastewater disposal.

Based on the estimated daily per capita water consumption, the estimated amount of wastewater generated per day is approximately 199 cubic meters, or 72,493 cubic meters annually. At the individual level in the town it is estimated that the per capita wastewater generation is 49.5 liters per day, depending on the consumption rate. The wastewater collected by cesspits is discharged by wastewater tankers directly to open areas or nearby valleys with no regard for the environment. There is no wastewater treatment either at the source or at the disposal sites and this poses a serious threat to both environmental and public health (ARIJ-WERU, 2012).

### **Solid Waste Management:**

The Joint Services Council for Solid Waste-7gruops 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.

Most of the population in Turmus'ayya benefit from the solid waste services, whereby waste is collected from households, institutions, shops, and public squares in plastic bags and then transferred to certain spots due to the lack of containers in the locality. The Joint Council collects the solid waste from the containers three times a week and transports it to the locality dumping site; 2km from the town.

The daily per capita rate of solid waste production in Turmus'ayya 1.05kg. Thus the estimated amount of solid waste produced per day from the Turmus'ayya residents is nearly 3.7 tons, or 1,346 tons per year.

## **Environmental Conditions**

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

### **Water Crisis**

- Water is cut off by the Jerusalem Water Department for long periods of time in several neighborhoods of the town for several reasons:
  - (1) Israeli control over Palestinian water resources causes problems in the organization of water pumping and distribution among populations. The West Bank Water Department distributes water to various areas on an interval basis because the amount of water available is not sufficient to supply everyone's needs simultaneously. Consequently, the West Bank Water Department purchases water from Israeli companies in order to satisfy residents' 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 means that Turmus'ayya residents are forced to use unhygienic cesspits for the disposal of wastewater, and/or discharge wastewater in the streets. This is particularly common in winter, as citizens cannot afford the high cost of sewage tankers during this period. These methods facilitate environmental damage, health problems, and the spread of epidemics and diseases in the village. This wastewater also contaminates the groundwater because most cesspits are built without lining, allowing wastewater to enter into the ground and avoiding the need to use sewage tankers. Moreover, the untreated wastewater collected from cesspits by sewage tankers is disposed of in open areas without concern for the damage it causes to the environment and to residents' health.

### **Solid Waste Management:**

- The lack of a central sanitary landfill to serve Turmus'ayya and the other neighboring communities in the governorate is due mainly to the obstacles created by the Israeli authorities for local and national institutions in granting licenses to establish such a landfill, because the appropriate land is within Area C and under Israeli control. Additionally, the implementation of such projects depends on



funding from donor countries. The lack of a sanitary landfill is a source of pollution to the groundwater and soil through the leachate produced from the solid waste, and produces bad odors and distortion of the landscape.

## Development Plans and Projects

### Implemented projects

The Municipal Council of Turmus'ayya has implemented several development projects in the last 5 years. For more details please see table 12.

**Table 12: Implemented development projects and plans in Turmus'ayya, 2011**

Name of the Project	Type	Year	Donor
Classrooms construction in Turmus'ayya Girls School	Construction	2008	A donation from an expatriate
Classrooms construction in Turmus'ayya Boys School	Construction	2008	A donation from an expatriate
Headquarters of Turmus'ayya Municipal Council	Construction	2009	A donation from an expatriate
Pavement of secondary roads	Transportation	2010	Municipal Fund
Pavement of secondary roads	Transportation	2011	Municipal Fund
Construction of a kindergarten	Construction	2010	Donations from the town's residents
Maintenance of Ash Sheikha Fatima Hospital	Construction	2011	Donations from the town's residents
Pavement of main road connecting to Turmus'ayya	Transportation	2011	Ministry of Finance
Water network	Water	2011	Palestinian Water Authority

**Source:** Turmus'ayya Municipal Council, 2011

### Proposed Projects

Turmus'ayya Municipal Council, in cooperation with the civil society organizations in the village and the village residents, looks forward to the implementation of several projects in the coming years. The project ideas were developed during the PRA workshop

that was conducted by ARIJ staff in the village. The projects are as follows, in order of priority, from the perspectives' of the participants in the workshop:

1. Establishing a sewage network (30 km).
2. Constructing a public reservoir (500 cubic meters).
3. Rehabilitating main and sub roads (around 19 km).
4. Constructing household and agricultural wells (70 wells).
5. Providing containers for waste collection.
6. Reclaiming agricultural lands.
7. Constructing an elementary school.

## Locality Development Priorities and Needs

The town suffers from a significant shortage in infrastructure and services. The following table shows the development priorities and needs in the village, according to the Turmus'ayya Municipal Council's perspective: .

**Table 13: Development Priorities and Needs in Turmus'ayya**

No.	Sector	Strongly needed	Needed	Not a priority	Notes
<b>Infrastructural Needs</b>					
1	Opening and pavement of roads	*			19 km^
2	Rehabilitation of old water networks			*	
3	Extending the water network to cover new built up areas		*		
4	Construction of new water networks			*	3 km
5	Rehabilitation/ Construction of new wells or springs			*	
6	Construction of water reservoirs		*		500 m <sup>3</sup>
7	Construction of a sewage disposal network		*		30 km
8	Construction of a new electricity network		*		15 km
9	Providing containers for solid waste collection		*		250 containers
10	Providing vehicles for collecting solid waste			*	
11	Providing a sanitary landfill	*			
<b>Health Needs</b>					
1	Building of new clinics or health care centres			*	
2	Rehabilitation of old clinics or health care centres			*	1 Clinic
3	Purchasing of medical equipment and tools	*			
<b>Educational Needs</b>					
1	Building of new schools	*			Elementary
2	Rehabilitation of old schools	*			

3	Purchasing of new equipment for schools	*			
<b>Agriculture Needs</b>					
1	Rehabilitation of agricultural lands	*			5,000 dunums
2	Building rainwater harvesting cisterns	*			
3	Construction of barracks for livestock				*
4	Veterinary services				*
5	Forage and hay for animals				*
6	Construction of new greenhouses			*	
7	Rehabilitation of greenhouses				*
8	Field crops seeds			*	
9	Plants and agricultural supplies			*	

^ 5 km main roads, 7 km secondary roads, and 7 km agricultural roads.

**Source:** Turmus'ayya Municipal Council, 2011

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