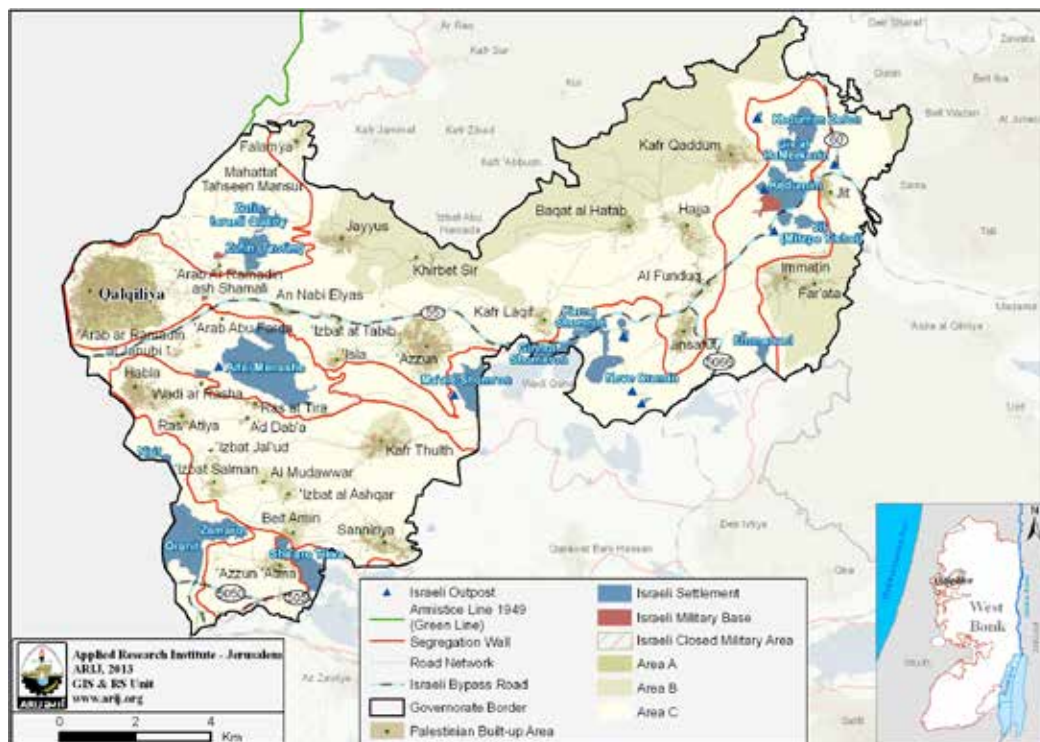


Locality Profiles and Needs Assessment in the Qalqiliya Governorate



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PART ONE
Introduction

This study comes as a result of a comprehensive analysis of all localities in the Qalqiliya Governorate. It aims at depicting the overall living conditions in the region along with presenting plans to assist in developing the local populations' welfare and livelihoods. This has been accomplished through the 'Village Profile and Needs Assessment in Nablus, Qalqiliya and Salfit'; a project funded by the Spanish Agency for International Cooperation for Development (AECID).

1.1. Project Description and Objectives:

The 'Village Profile and Needs Assessment in Nablus, Qalqiliya and Salfit' was designed to study, investigate, analyze and document the socio-economic conditions in each of the aforementioned regions. On the basis of this investigation, resultant programs and activities necessary to mitigate the impact of the current insecurity of these conditions were formulated and presented in this integrated report. In undertaking this, there has been a particular focus on water, environment, and agricultural issues in the region.

1.2. Project Activities

1.2.1. Data Collection

Demographic profiling: a consideration of border demarcations

During the methodological design of the project, the selection of regions and localities from which data would be retrieved was an essential consideration. All localities included within Nablus Governorate according to various set administrative boundaries were selected to be targeted for the study. There are three different historical administrative boundaries for the Palestinian territory:

- i. The borders drawn by the British Government in 1922 during the 'Mandate Period.'
- ii. The physical classifications adopted by the Palestinian National Authority (PNA) in 1994.
- iii. The 'Integrated Physical Classification System' developed by the Palestinian Ministry of Planning, the Ministry of Local Government, the Palestinian Central Bureau of Statistics (PCBS), and the Central Election Commission (CEC).

In all profiled localities the 'Integrated Physical Classification System' (IPCS) was chosen for boundary demarcation and subsequent data collection. This was done so on the grounds that these delineations are comparatively recent and are used in national data collection projects by bodies such as the PCBS, and are deemed the most suitable for a surveying project and research purposes reflective of the current Palestinian context.

In terms of land coverage, the Nablus Governorate spreads across 43,909 dunums of land classified as 'built up areas.' Up to 28,432 dunums of these are Palestinian built up areas, whilst the remaining 15,382 dunums are classified as Israeli settlements and Israeli Outpost (ARIJ – GIS Unit, 2013). According to the aforementioned Palestinian integrated physical classification system, the Nablus Governorate was divided into 64 localities, which are identified under 52 main administrative boundaries. These boundaries are further classified into three main administrative regions: those run by Municipal councils and Village councils. See Map 1 for a presentation of the different administrative boundaries by location and council.

Table 1: Name of surveyed localities by type, population number and administrative body

Locality	Population	Type	Administrative body
Ras at Tira & Ras 'Atiya and Wadi ar Rasha	1,629	Rural	Village Council
Falamya	614	Rural	Village Council
Kafr Qaddum	2,824	Rural	Village Council
Jit	2,133	Rural	Village Council
Jayyus & Sir	3,244	Rural	Municipality
Qalqiliya	40,530		Municipality
Immatin & Far'ata	2,942	Rural	Village Council
Jinsafut & Al Funduq	2,792	Rural	Village Council
Kafr Laqif	813	Rural	Village Council
An Nabi Elyas	1,137	Rural	Village Council
'Azzun & 'Izbat at Tabib and 'Isla	8,650	Urban	Municipality
Habla & Ad Dab'a	6,166	Urban	Municipality
Kafr Thulth	3,832	Rural	Municipality
Beit Amin	981	Rural	Village Council
Sanniriya	2,699	Rural	Village Council
'Azzun 'Atma	1,720	Rural	Village Council
Baqat al Hatab	1,596	Rural	Village Council
Hajja	2,086	Rural	Village Council
'Arab Ar Ramadin ash Shamali	79	Rural	Village Council
'Arab Abu Farda	112	Rural	Village Council
The Western 'Izab	1,379	Rural	Village Council
'Arab ar Ramadin al Janubi	215	Rural	Village Council

1.2.2 Data Analysis

The methodological approach of the village profiling project very much centers upon community participation, with a focus on the inclusion of marginalized persons and groups in data analysis. Therefore, data collection involved a community questionnaire being developed by Village Profiling staff, which was subsequently completed by locality officials on behalf of numerous different groups (women, youth, agricultural workers, housekeepers etc) in the Governorate localities, under the supervision of the project specialists.

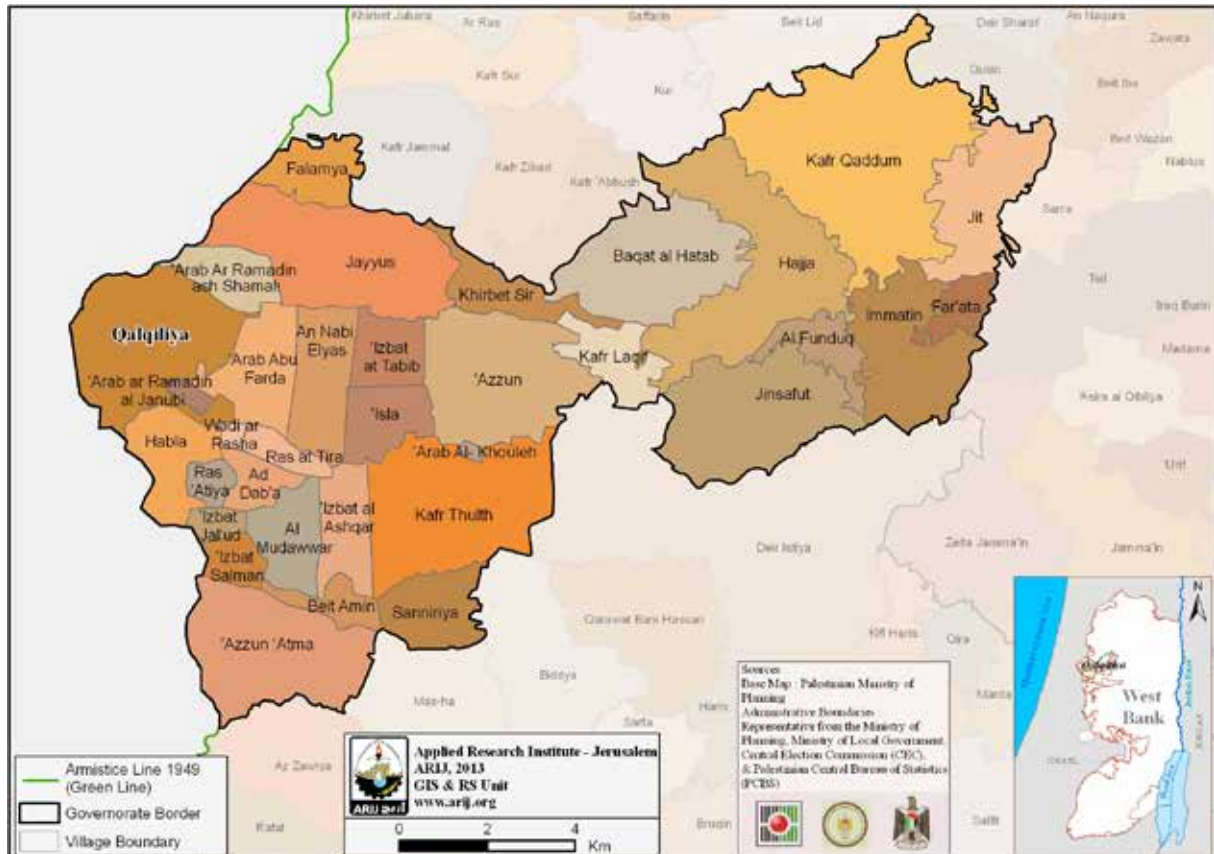
The data provided in the questionnaire dealt with profiling the needs of the different localities, by asking questions relating to economic, cultural, social and health issues. In addition to this, data from the Palestinian Central Bureau of Statistics (PCBS), the Ministry of Agriculture (MoA), the Ministry of Health (MoH) and the Ministry of Education and Higher Education (MEHE) and other related organizations has been analyzed and collated in one village profile, and includes data concerning demography, history, education, health, economy, natural resources, agriculture, geopolitical conditions, infrastructure, local institutions and services.

ARIJ's GIS (Geographic Information System) and Remote Sensing Unit developed explanatory maps for each locality in the Governorate. Each profile contains 3 maps; location, information, and a land use/land cover mapping.

22 locality profiles were developed; which include all localities in the Qalqiliya Governorate. Further

to this, there is a final project presentation to be produced, which will summarize and present the findings of all Village Profiling efforts in Qalqiliya. In addition, each profile contains a list of each locality's developmental needs and priorities. This report contains integrated information about the Qalqiliya Governorate, and needs for developmental project proposals (formulated as a response to the collected data) at a Governorate level. The completed profiles of all communities with their fact sheets and their needs for development matrices are available online at (<http://proxy.arij.org/vprofile/Qalqiliya>).

Map 1: Localities' administrative boundaries



Source: ARIJ - GIS Unit, 2013

1.2.3. Participatory Rapid Appraisal (PRA) Workshops

Many meetings, interviews and focus groups were conducted with farmers, local authorities and active institutions in the area in order to conduct a collective analysis, upon which all resultant development plans have been based.

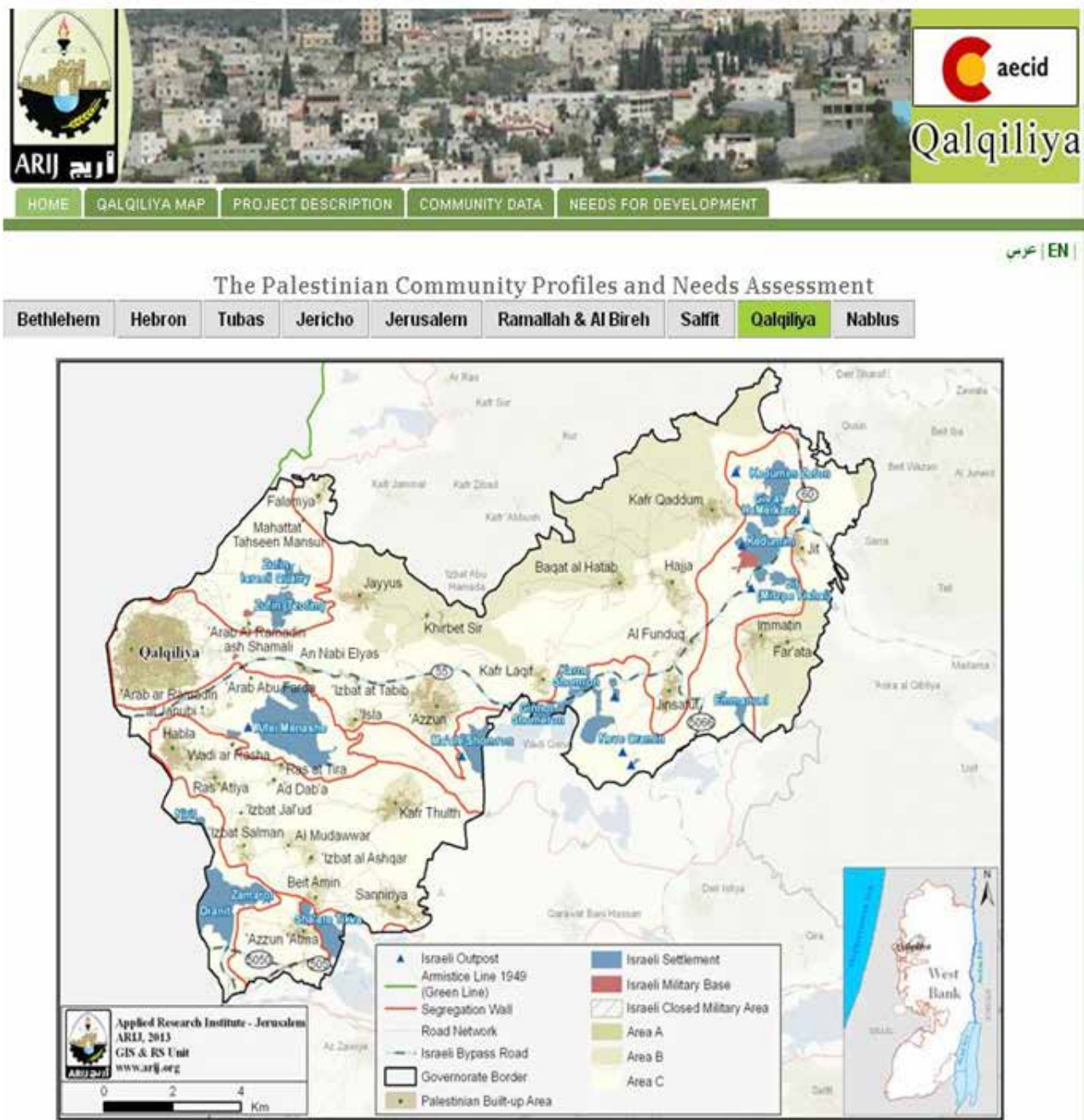
The aim of the Participatory Rapid Appraisal (PRA) approach was to learn from the communities and the key persons/institutions working within them regarding their knowledge, attitudes and practices concerning agriculture and the management of available natural resources. This was done with the focus of enabling local people to assess these issues, and allow them to make their own plans to address them.

22 PRAs took place in the villages' councils and municipalities. The 22 PRAs were conducted (one for each administrative locality) along with a Governorate level meeting to gain feedback from an authority perspective, involving the preparation of a needs assessment and development planning proposal in response to information gathered from previous workshops and meetings. A

final workshop was conducted at the end of the Qalqiliya village profiling. The collected data was documented and analyzed, and several developmental plans and projects were formulated. As a result 22 village profiles were developed and subsequently translated into both Arabic and English.

1.2.4. Internet Database

ARIJ's Computer and Information Technology (IT) unit developed an online resource for the Qalqiliya Governorate locality profiles in both Arabic and English. All data has been posted on the internet in an excellently organized and comprehensive database which is both easy to navigate and accessible to all. The profiles, maps, fact sheets, needs for development for every locality and integrated proposed project profiles for every locality can be found at the following website: (<http://proxy.arij.org/vprofile/Qalqiliya>)



PART TWO:
***Location, Physical Characteristics &
Socio-Economic Conditions in the Qalqiliya
Governorate***

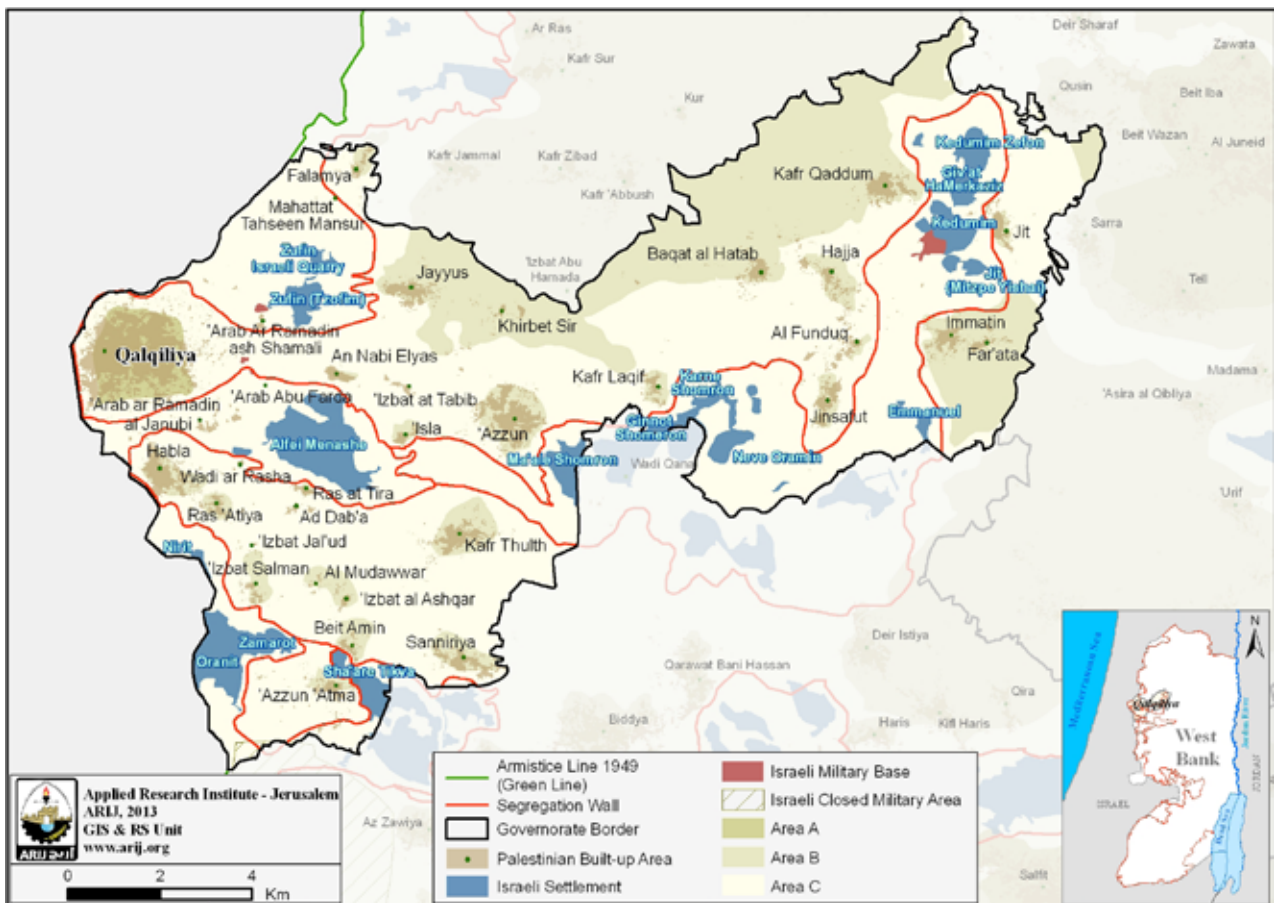
2.1. Location and Physical Characteristics

Qalqiliya Governorate is located along the western part of the West Bank. It is bordered by Tulkarm Governorate to the north, Nablus Governorate to the east, the Green Line (the 1949 Armistice Line) to the west and Salfit Governorate to the south. As a region, Qalqiliya covers a total land area of 166,380 dunums (166.38 km²); distinguished into eighteen major land use classes. These include Palestinian built up areas, Israeli settlements, closed military areas, military bases, open spaces, forests and construction sites (ARIJ – GIS Unit, 2013) (see map 2).

There are 34 localities in the Qalqiliya Governorate, broken down into 34 geographical and 22 administrative areas. Some localities are run by village councils (17) and others by Municipalities (5). It is noted that Palestinian built-up areas constitute 5.3 % of the total area of the Governorate.

Table 2 (below) provides the names of each locality, their status as ‘geographical’ or ‘administrative’ and those areas designated as refugee populations.

Map 2: Location and borders of the Qalqiliya Governorate



Source: ARIJ – GIS Unit, 2013a

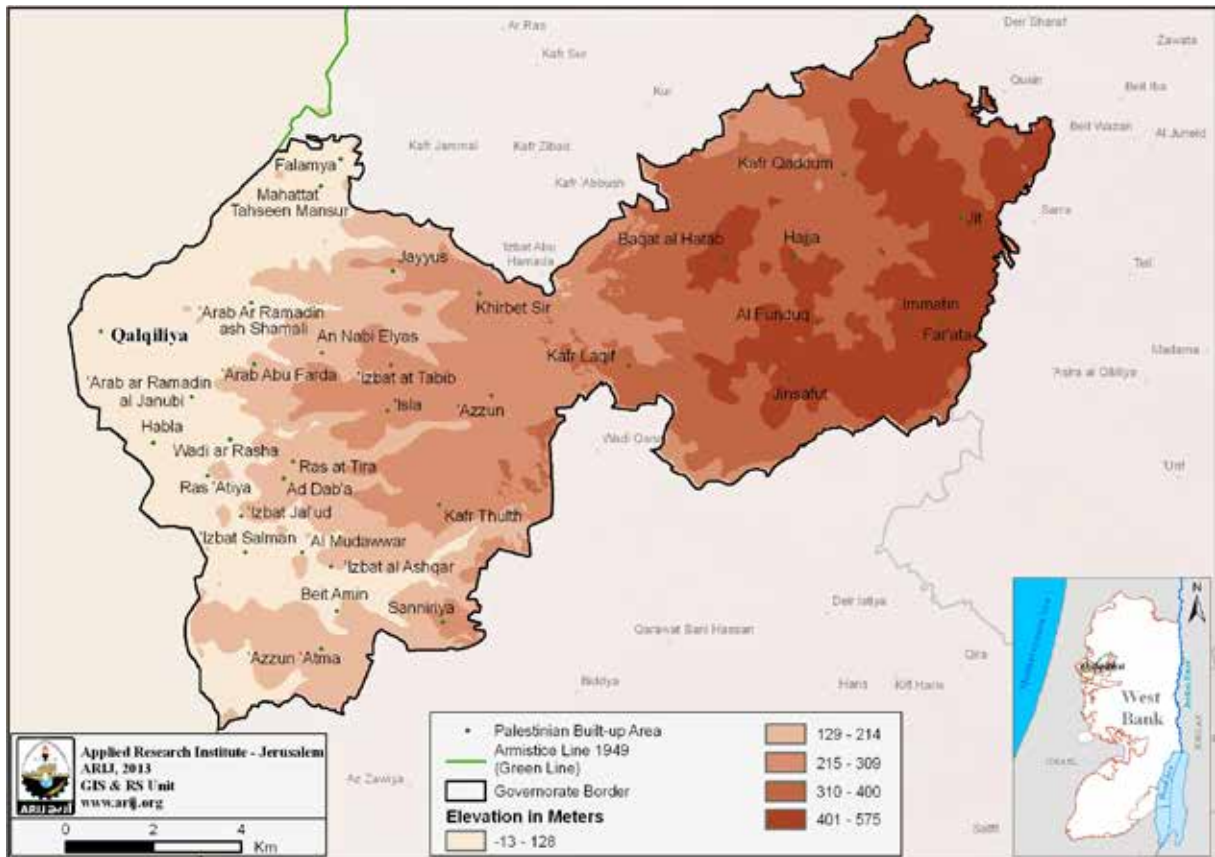
Table 2: Qalqiliya Governorate by geographical and administrative locality

Administrative Locality	Geographical Locality	Type of Administration
Ras at Tira & Ras 'Atiya and Wadi ar Rasha	Ras at Tira	Village Council
	Ras 'Atiya	
	Wadi ar Rasha	
Falamya		Village Council
Kafr Qaddum		Village Council
Jit		Village Council
Jayyus & Sir	Jayyus	Municipality
	Sir	
Qalqiliya		Municipality
Immatin & Far'ata	Immatin	Village Council
	Far'ata	
Jinsafut & Al Funduq	Jinsafut	Village Council
	Al Funduq	
Kafr Laqif		Village Council
An Nabi Elyas		Village Council
'Azzun & 'Izbat at Tabib and 'Isla	'Azzun	Municipality
	'Izbat at Tabib	
	'Isla	
Habla & Ad Dab'a	Habla	Municipality
	Ad Dab'a	
Kafr Thulth		Municipality
Beit Amin		Village Council
Sanniriya		Village Council
'Azzun 'Atma		Village Council
Baqat al Hatab		Village Council
Hajja		Village Council
'Arab Abu Farda		Village Council
The Western 'Izab	'Izbat Jal'ud	Village Council
	'Izbat Salman	
	'Izbat al Ashqar	
	Al Mudawwar	
'Arab Ar Ramadin ash Shamali		Village Council
'Arab ar Ramadin al Janubi		Village Council

Source: PCBS, 2009a.

Qalqiliya Governorate is further characterized by variation in its topography and altitude. It has an elevation varying between 518m above sea level in the west, and 57m above sea level toward the west and northwest (ARI – GIS Unit, 2011c) (see map 3).

Map 3: Topography of the Qalqiliya Governorate

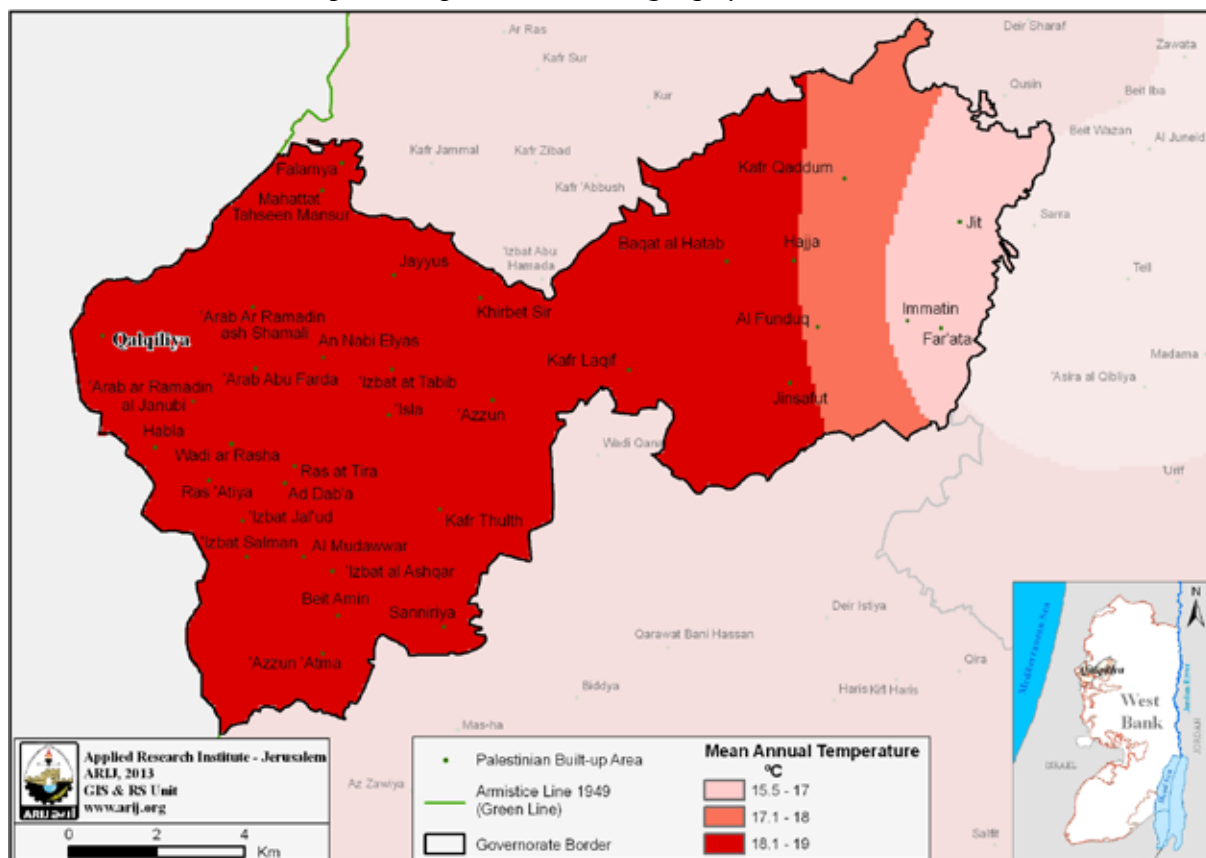


Source: ARI – GIS Unit, 2011c

Qalqiliya Governorate’s climate is determined as hot and dry in the summer, with the presence of mild winters. The mean average temperature across the region is 18.7 0C, with temperatures each annum ranging on average between 15 0C in January and 31 0C in August (ARIJ - GIS Unit, 2013) (see map 4). Furthermore, the region’s continuous warm weather and alluvial soil makes the area good for agricultural production, one of the contributing factors to its success in having the third largest area of agricultural lands amongst the West Bank Governorates.

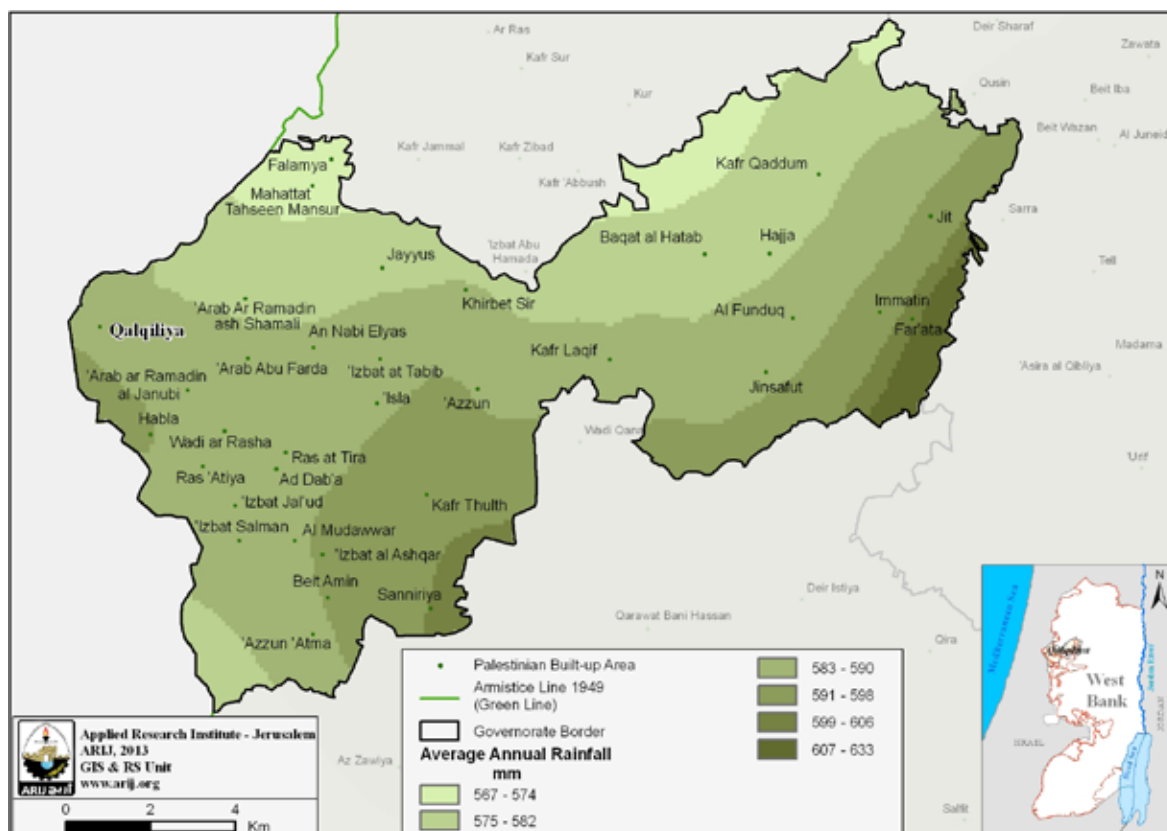
Summers in Qalqiliya Governorate are hot and dry, while the mean quantity of rainfall varies from year to year. The mean annual rainfall is 586mm, with an average humidity of 62% (ARIJ - GIS Unit, 2013) (see map 5). In 2013, the yearly rainfall substantially differed across different localities in Qalqiliya - there being the highest rainfall at 601mm in Far’ata village, whilst the lowest was calculated at 569 in Falamiya.

Map 4: Temperature in the Qalqiliya Governorate



Source: ARIJ - GIS Unit, 2011a

Map 5: Rainfall in the Qalqiliya Governorate



Source: ARIJ - GIS Unit, 2011a

2.2. Population

The total population of the Qalqiliya Governorate in 2007 was 88,574 people; forming approximately 3.9% of the total population of the West Bank¹.

Table 3 (below) shows the distribution of the population by sex and type of region (urban, rural and camp):

Table 3: Population in Qalqiliya by type of area and gender disaggregation (2007)

Location	Male	Female	Total Population
Rural Area	17,856	16,753	34,609
Urban Area	27,553	26,412	53,956
Camp Area	0	0	0
Total Area	45,409	43,165	88,574

Source: PCBS, 2009h.

Investigating the population census for the years 1997 and 2007, it appears that 26.7% of the population has increase from the year 1997; noting that the total population in the year 1997 was 72,007 people (PCBS, 1997, PCBS, 2009a.).

According to the PCBS's classification² for the types of the Palestinian localities in their 2007 statistical census, 60.92% of the Qalqiliya Governorate's population lives in urban areas, 39.07% in rural areas, whilst 0% inhabits refugee camps (see table 3).

The 2007 PCBS Census further identified that 41.6% of the population in the Qalqiliya Governorate were less than 15 years of age, with 54.4% in the age group 15-64, 3.1% were 65 years old and above and 0.9% were unaccounted for (PCBS, 2009f).

2.3. Labor Force

In terms of the economy, the Qalqiliya Governorate registered an unemployment rate of 13.8% in 2013 compared with an average of 18.6 % for the West Bank; with the labor force forming approximately 49.8% of the population. The average daily wage in 2013 was up to 82.2 NIS³. This however is lower than the average daily wage for the West Bank, which is calculated at 88.9 NIS (PCBS 2014a) (see table 4).

¹ Includes population counted during the period 1-16/12/2007 and uncounted population estimates according to a post enumeration survey.

²*An urban area is any locality whose population amounts to 10,000 persons or more. This applies to the entire Governorates' center regardless of their size. Additionally, it refers to all localities whose population varies from 4,000 to 9,999 persons- provided they have at least four of the following elements: a public electricity network, a public water network, a post office, a health center with a full-time physician and a school offering a general secondary education certificate.

*A rural area is any locality whose population is less than 4,000 persons or whose population varies from 4,000 to 9,999 persons lacks four of the aforementioned elements.

*A refugee camp is any locality referred to as a refugee camp and administrated by the United Nations Relief and Work Agency for Palestinian Refugee in the Near East (UNRWA).

³ Around \$24 at the time of the publication

Table 4: Labor Force Participation Rate, Unemployment Rate and Average Daily Wage in NIS for Wage Employees in the Nablus Governorate, 2013

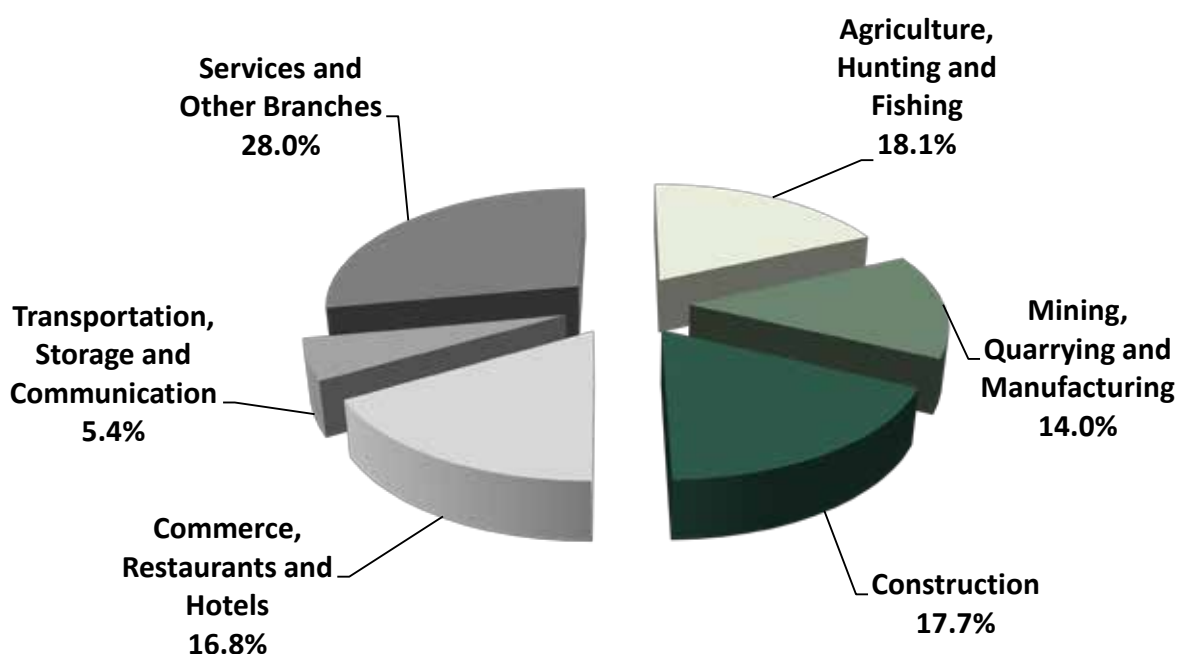
Governorate	Labor Force Participation Rate	Unemployment Rate	Average Daily Wage in NIS for Wage Employees
Qalqiliya	49.8	13.8	82.2*

*The workers in Israel and Settlements are not included.

Source: PCBS, 2014a.

The PCBS's annual report of labor force survey conducted for the year 2013 showed that the 'services and other branches' sector ranked first in the number of working persons in Qalqiliya (28%) followed by 'agriculture, hunting and fishing' with 18.1%, then 'construction' with 17.7%, and 'commerce, restaurants and hotels' ranked fourth at 16.8%. The 'mining, quarrying and manufacturing' sector ranked the fifth with 14%, and 'transportation, storage and communication activities' came sixth with 5.4% as listed in table 6 (PCBS, 2014a). (See figure 1 and table 5).

Figure 1: Labor force activity for Qalqiliya Governorate (% amongst employed persons)



Source: PCBS, 2014a.

Table 5: Percentage distribution of employed persons from the Qalqiliya Governorate by economic activity, 2013

Economic Activity	Governorate (%)	
	Qalqiliya	West Bank
Agriculture, Hunting and Fishing	18.1	11.5
Mining, Quarrying and Manufacturing	14.0	15.1
Construction	17.7	19.3
Commerce, Restaurants and Hotels	16.8	19.8
Transportation, Storage and Communication	5.4	5.6
Services and Other Branches	28.0	28.7
Total	100	100

Source: PCBS, 2014a.

According to the distribution of employed persons by employment sector during the first quarter of 2014, the private sector has the biggest share of employed persons in the Qalqiliya Governorate followed by the public sector, whilst 19.3% of the labor works in Israel and other Israeli settlements (see table 6).

Table 6: Percentage distribution of employed persons aged 15 years and above in the Qalqiliya Governorate by sector (ILO Standards), January - March, 2014

Governorate	Sector (%)				Total
	Public Sector	Private Sector	Other Sectors	Israel and Settlements	
Nablus	22.0	57.6	1.1	19.3	100
West Bank	15.9	65.7	1.8	16.6	100

Source: PCBS, 2014b.

The 2007 PCBS census in the Qalqiliya Governorate showed that 69% of the population were within the working age group (10 years and above). Of the 62,857 people within the working age range (10 years and above⁴), approximately 33.5% were economically active, 13.5% female and 86.5% male. Consequently, 66.1% were not economically active⁵ (outside the labor force) 66.4% female and 33.6% male (PCBS, 2009a). The largest groups within the non-economically active population were students and housekeepers, constituting 53.4% and 35.8% of that population respectively. Table 7 shows the labor force statistics in the Governorate (as of 2007).

Table 7: Qalqiliya population (10 years and above) by sex and employment status, 2007

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	15,569	1,375	1,259	18,203	11,366	35	1,746	283	517	13,947	184	32,334
F	2,503	97	233	2,833	10,797	14,823	1,730	67	180	27,597	93	30,523
T	18,072	1,472	1,492	21,036	22,163	14,858	3,476	350	697	41,544	277	62,857

Source: PCBS, 2009a.

2.4. Educational Status

According to the 2007 PCBS census, 6.0% of Qalqiliya residents were illiterate with women comprising a greater percentage (78.5%) of the illiterate population than their male counterparts (21.5%). 13.7% could read and write with no formal education qualifications, 26.1% had completed elementary education, 26.9% preparatory education, 16.7% completed their secondary education whilst only 10.4% had achieved a higher education and 0.2% are unknown/not stated. Table (8) shows the education status in the Qalqiliya Governorate by sex and educational attainment in 2007.

⁴ This includes students, not only labour force participants. Across the whole of the oPt, in 2010, just 4.8% of 10-17 year olds were registered as 'in the labour force' - making under-age workers a very small percentage of formal labour force activity in the country.

⁵ Including students

Table 8: Population (10 Years and above) in the Nablus Governorate by Sex and Educational Attainment, 2007

SEX	Illiterate	Can read & write	Elementary	Preparatory	Secondary	Associate Diploma	BSc.	Higher Diploma	MSc.	PhD	Unknown	Total
M	809	4,330	8,466	9,100	5,673	1,312	2,242	44	240	46	72	32,334
F	2,959	4,283	7,925	7,809	4,814	878	1,738	10	36	3	68	30,523
T	3,768	8,613	16,391	16,909	10,487	2,190	3,980	54	276	49	140	62,857

Source: PCBS, 2009a.

The Qalqiliya Governorate has just one educational directorate; with the governmental sector having the biggest share of schools there (forming approximately 88.6% of the total number of educational institutes).

The private sector also runs 7 schools; 6 of which are co-educational and 1 of which is exclusively for males (see table 9).

Table 9: Distribution of schools in the Qalqiliya Governorate by supervising authority and gender, 2012/2013

Supervising authority in the Qalqiliya Governorate	Male	Female	Co-education	Total
Government	29	25	24	78
UNRWA	2	1	0	3
Private	1	0	6	7
Grand Total	32	26	30	88

Source: MOEHE, 2013.

The Palestinian population is a youthful one (as of 2011 60.5% of the West Bank's population were classified as under 24 years of age, with this rising to 62.4% for the entire Palestinian territory)⁶, and this holds true for Qalqiliya. Amongst the students in the Governorate, 90.5% attend governmental schools, whilst 1.7% attends private schools and 7.8% UNRWA run schools. There is no big difference between the participation of females and males in the educational system; males constitute 49.9%, whilst females constitute 50.1% of students in the Qalqiliya Governorate (MOEHE, 2012) (see table 10).

Table 10: Distribution of students in the Qalqiliya Governorate by supervising authority and gender, 2012/2013

Supervising authority in the Qalqiliya Governorate	Male	Female	Total
Government	12,438	12,584	25,022
UNRWA	1,059	1,105	2,164
Private	307	160	467
Grand Total	13,804	13,849	27,653

Source: MOEHE, 2013.

In terms of class size, in the governmental sector there are on average 26.4 students per class, whereas in UNRWA run schools there are 36.7 students per class, and in the private sector there are 13.3 (MOEHE, 2013) (see table 11).

⁶ Source: Report by the Palestinian Central Bureau of Statistics; Palestinians at the end of 2011.

Table 11: Distribution of classes in the Qalqiliya Governorate by supervising authority and gender, 2012/2013

Supervising authority in the Qalqiliya Governorate	Male	Female	Co-education	Total
Government	394	393	162	1,499
UNRWA	28	31	0	59
Private	6	3	26	35
Grand Total	428	427	188	1,043

Source: MOEHE, 2013.

2.5. Health Status

As of 2012 there were 38 health care centers in the Qalqiliya Governorate; 55% of these being run by the governmental sector (see table 12). There is also one governmentally run general hospital, which holds 56 patient beds (MOH-PHIC, 2012) and one UNWRA run hospital with 63 beds. However, most of these are located in Qalqiliya city, and people from small and distant villages face great difficulties in reaching these health facilities.

Table 12: Distribution of Public Health Care Centers in Qalqiliya, 2012

Providers					Population per Centre
MoH	NGOs	UNRWA	PMMS	Total	
21	14	3	1	39	2,737

Source: MOH-PHIC, 2012.

As for medical staff in the Governorate, data is only available for the governmental sector. Table 13 shows the numbers of health care staff (2012) in the one MoH (Ministry of Health) run hospital.

Table 13: Number of health care staff in the Qalqiliya Governorate's Public Health Care Centers, 2012

Health care specialization	Number of health care staff
General physician	16
Specialist physician	15
Dentist	0
Pharmacist	3
Nurse	56
Midwife	8
Paramedic	21
Administration	57
Total	176

Source: MOH-PHIC, Annual Health Report, Palestine - 2012.

Statistics in 2012 showed that the Infant Mortality Rate (IMR) in the Qalqiliya Governorate has declined to 1.01%. The average IMR in the West Bank reached 1.04% in 2010, making Qalqiliya's rate below this regional average (see table 14).

Table 14: Infant mortality rate in the Qalqiliya Governorate (2012)

Live Births	Infant Deaths					Infant Mortality Rate %
	Male	%	Female	%	Total	
3,064	15	2.33	16	2.48	31	1.01

Source: MOH-PHIC, Annual Health Report, Palestine - 2012.

The final results of the PCBS's Population, Housing and Establishment Census of 2007 showed that the number of persons in the Qalqiliya Governorate who have at least one disability was 5,918. See table 15 for the number of people with special needs; disaggregated into type of difficulty.

Table 15: Number of people with special needs in the Qalqiliya Governorate by type of difficulty, 2007

Sex	Type of Difficulty					Total with Disability	Not Stated
	Communication	Cognition	Moving	Hearing	Visual		
Male	385	390	1,074	723	1,723	3,044	498
Female	320	345	1,227	752	1,757	2,874	511
Total	705	735	2,301	1,475	3,480	5,918	1,009

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

2.6. Poverty and food insecurity

To understand the causes behind deteriorating livelihood conditions in Qalqiliya, various economic, demographic, agricultural, nutritional, health, environmental and food security issues must be considered. The basic causes of food insecurity translate into underlying and immediate causes of poverty and food scarcity at the household level. These causes include limitations on food availability, negative effects on agricultural production and food trade/market supplies, insufficient economic access to food, and artificially high prices with few opportunities to secure employment. In addition, food insecurity causes higher household incomes, impaired food utilisation, poor water consumption (quality and quantity), poor sanitation, poor hygiene, a lack of access to health care, and a declining quality of diet.

A number of quantitative studies have been carried out in Palestine in order to determine the levels of food insecurity, its effects and associated causes across the country. However, to date there is limited data on food insecurity disaggregated at the locality level. FAO, WFP and PSCBS conducted a socio-economic and food security survey (SEFSec), in order to gauge changes in the living conditions of Palestinian households by monitoring socio-economic and food security indicators. The survey collects data related to a number of food security indicators, including food acquisition, dietary diversity, household food insecurity Access scale, income and consumption/expenditure patterns and coping mechanisms. This survey does not cover specific localities but it is disaggregated into regions (north, south, east and west of the West Bank).

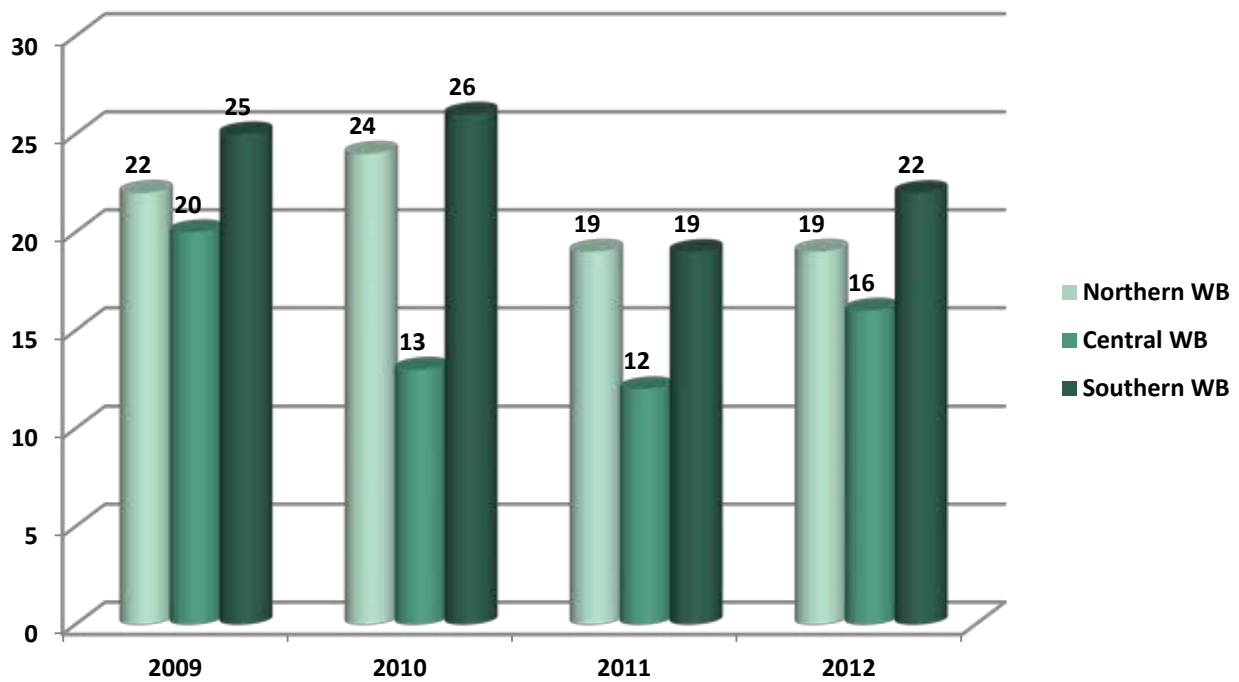
Looking at the West Bank as a whole, food insecurity dropped by 3% between 2009 and 2012 to 19%. However the northern West Bank (including Qalqiliya, Nablus, Jenin, Tulkarm, Tubas and Salfit governorates) continues to show the level of food insecurity at 19%, compared to 16% across the central region and 22% in the south. Although 2011 was a better year in terms of food security for all areas, levels rose again in 2012 (FAO/UNWRA/WFP/PCBS, 2012⁷). Food security estimates did not fluctuate in the northern West Bank. This is strongly resilience may be attributed to the northern

⁷ The latest SEFsec survey was in the year 2012.

West Bank households relying more on agricultural and livestock production (46% of West Bank households own agricultural land and 47% of those owning livestock are located in the North), and have access to a wider range of income sources (FAO/UNRWA/WFP/PCBS, 2012).

It must be noted that calculating food insecurity levels with aggregate data for the governorates gives an inaccurate picture of food security across the West Bank because of the extreme disparity in levels of affluence.

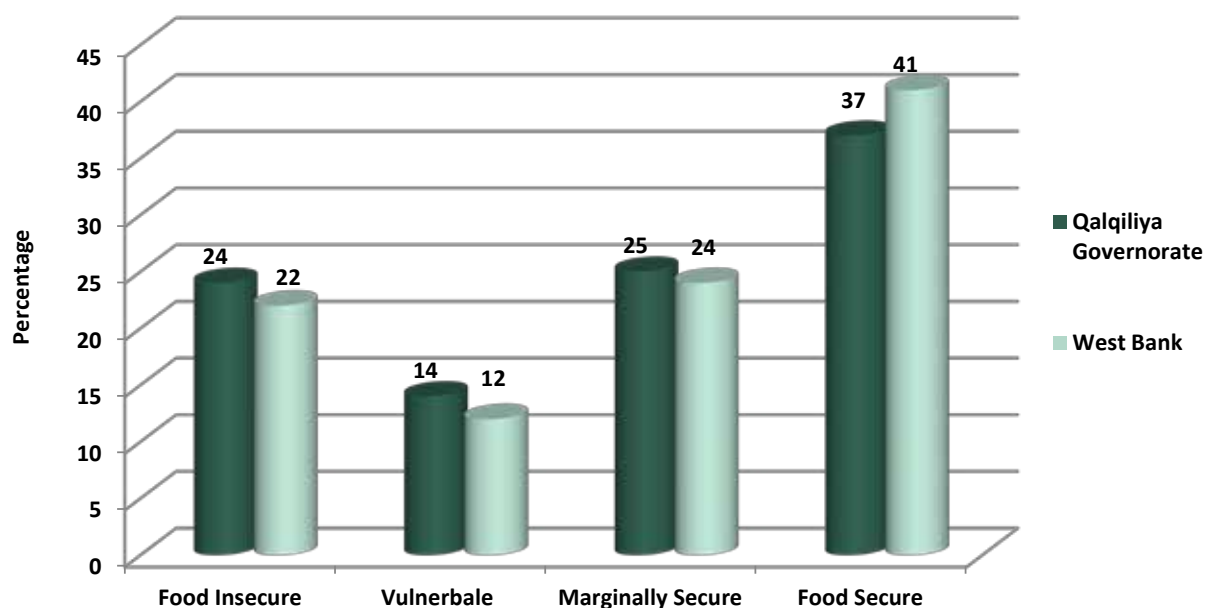
Figure 2: Food insecurity by geographical region in the West Bank, 2009 - 2012



Source: FAO/UNRWA/WFP/PCBS, 2012

Although the food insecurity figures have been updated for 2012 in the most recent SEFsec report, the other levels of food security at the regional level were last reported for 2010. Thus, as shown in figure 3, 24% of Qalqiliya governorate’s households were found to be food insecure in 2010, in comparison to 22% of households across the West Bank (WFP/FAO/PCBS, 2011). This figure represents nearly food insecure people, with a further people classified as ‘vulnerable to food insecurity’ (14%). Additionally, people are ‘marginally secure’ (25%) with just 37% of the governorate being classified as ‘food secure’ (see figure 3). Food insecure households in the Qalqiliya governorate are unable to secure sufficient income to meet their essential food and non-food requirements, mainly due to the lack of income-earning possibilities. This obliges families to decrease their intake of food items in terms of both quality and quantity.

Figure 3: Food security levels in the Qalqiliya governorate, 2010



Source: WFP/FAO/PCBS, 2011

The current geo-political restrictions, significant increases in food prices, shrinking incomes and high unemployment rates have jeopardized household economies and led to heavy indebtedness and changes in eating habits. Previously self-reliant families are progressively falling into the poverty trap and are unable to escape from their situation in the absence of job opportunities. Unemployment reached 13.8% in Qalqiliya in the year 2013 (in comparison to 18.6% for the West Bank), when the daily average wage was NIS 82.2 per day per capita, in comparison to the average of NIS 88.9 across the West Bank. These figures show that both unemployment and the daily wage are lower than the West Bank averages (PCBS, 2012a).

Furthermore, the PCBS's 2007 statistical census showed that Qalqiliya Governorate has a medium average family size (5.5 people per household) in comparison to other West Bank Governorates; the average of the West Bank at the same time was also 5.5 people per household. These medium-to-large families increase food consumption and household expenses. According to the WFP (World Food Program), in 2009, the Qalqiliya wealth index quintiles show that the poorest quintile comprised 15.7% of the total population of the governorate. This is in comparison to 19.5% across the West Bank (WFP/ARIJ, 2010). In addition, the percentage of households in the governorate with poor food consumption rate reached 7.3% in 2009, in comparison to 10.2% in the West Bank in the same year (WFP/ARIJ, 2010).

Increasing food prices have significantly worsened the food-security situation of households in the Qalqiliya Governorate, as a high share of household expenditures (49%) goes toward food (WFP/ARIJ, 2010). Between the years 2005-9, the percentage of change of average food prices in the West Bank was a staggering 44.5%; with the majority of households feeling this increase between 2007 and 2009 (WFP/ARIJ, 2010).

Palestinians are increasingly required to rely on negative coping mechanisms in their fight against poverty and instability, with the combination of decreased incomes and increased food prices forcing poorer households to change their food consumption patterns. Up to 50.8% of Qalqiliya Governorate residents reduced their food expenditures as a main coping strategy against food insecurity, forcing these families to buy fewer food items and to substitute normal foods with cheaper/less desirable

items. The strategy of food reduction, mainly regarding the quantity of meat purchased/consumed, was adopted by 51.5% of the Qalqiliya Governorate. Many households (44.2%) in Qalqiliya chose to consume less food as a coping strategy against food shortages and rising food prices (PCBS/WFP/FAO, 2009).

It is noted that even if such coping mechanisms are reversible (e.g., switching to less preferred but cheaper food, decreasing the amount of food consumed, forgoing health or education expenditures, and purchasing food on credit), they can have permanent effects on lives and livelihoods through poor health and nutritional problems. In addition, many Palestinians also have to rely upon international or national assistance in terms of food security solutions, given that humanitarian assistance is a crucial element of households' coping strategies. This intervention, however, does not always assist Palestinians in designing and implementing strategies to combat food insecurity in the long term. In 2009, research found that 23% of families in Qalqiliya received some form of livelihood assistance, with 60.8% of this assistance in the form of food aid (WFP/FAO/PCBS, 2009).

As a consequence of food insecurity, children are most adversely affected by malnutrition. Poor environmental conditions may increase infections and contribute to deficiencies in micronutrients. Additional factors include unemployment, the poor economic situation and changes in household food consumption patterns, with reduced amounts of animal products, vegetables, and fruit. This contributes to a decrease in the quantity of minerals and vitamins ingested. Such micronutrient deficiencies can contribute to delayed growth, stunting and wasting in young children. Statistics show that iron deficiency anaemia⁸ affected approximately 51.2% of children (under 3 years of age) and 30.5% of pregnant women (tested in their first antenatal appointment) in the Qalqiliya governorate in 2012, compared to 46.6% and 29.2%, respectively in the West Bank (MoH, 2013). The malnutrition statistics for the governorate are also of concern. In 2012, 0.7% of children were classified as 'underweight⁹', with 0.8% in the 'wasting¹⁰' children category. In addition, 0.6% was classified as 'stunted¹¹' in growth (WFP/FAO, 2009).

Additionally, Qalqiliya Governorate is facing water scarcity, especially during the summer. The Israeli privately owned and managed 'Mekorot' Water Company supplies a large quantity of drinking water to the governorate. The quantity of water purchased from this source for domestic use in Qalqiliya (2011) was approximately 0.6MCM (Million Cubic Meters). This was set at a cost of 2.4 NIS per cubic meter, making the cost of water high for many families and communities (PWA, 2011). All of these factors are limiting the wealth and livelihoods of the people, deepening the poverty of marginalized groups and increasing the vulnerability of Palestinian households.

8 Anaemia is a condition in which haemoglobin is less than normal; the recommended dietary allowances of iron are 15mg a day for women and 10mg for men.

9 'Weight for Age' of children under 5 years= > 2SD

10 'Weight for Height' of children under 5 years= > 2SD

11 'Height for Age' of children under 5 years= >2SD

PART THREE:
Agricultural & Environmental Status in
Qalqiliya Governorate

3.1. Land Use/ Land Cover

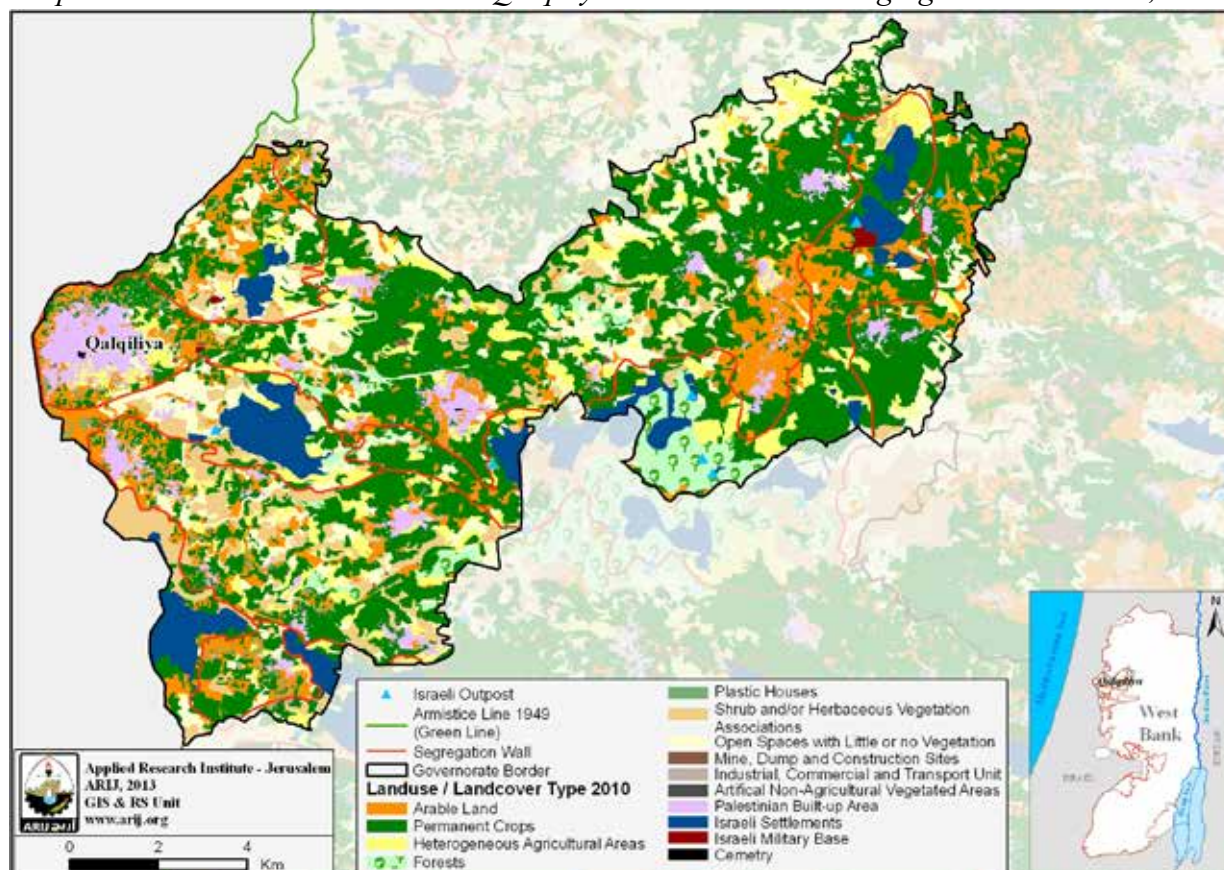
The Palestinian agricultural sector serves a population of approximately 3.8 million persons (PCBS, 2009a), acting both as an economic base and as the main source of food for many Palestinians. During the past eleven years, the agricultural sector in the occupied Palestinian territory has proven itself to be the most appropriate sector for dealing with emergencies erupting as a result of the extreme Israeli measures that were carried out against the Palestinian people during the Second Palestinian Intifada of 2000. Economic shocks from the Intifada, such as rising unemployment, restrictions in economic and labor markets and freedom of movement resulted in a widespread increase in both ‘poverty’ and ‘deep poverty’ levels in the region (Ajlumi, 2003). As a result, agricultural practices acted as a remedy to these problems, by aiding Palestinians to grow their own food and avoid falling into deeper poverty or suffering from food insecurity.

The PCBS and MoA conducted a recent (2011) survey, which resulted in calculating the total area of agricultural lands in the oPt as 1,207,061 dunums, of which 1,105,146 are found in the West Bank and 101,915 in the Gaza Strip. The type of survey undertaken was mainly based on a certain definition for the size of agricultural holdings, pertaining only to physical agricultural areas and not seasonal ones¹². Compared to the year 2008 when the total agricultural area for the oPt was registered at 1.854 million dunums, this research shows there have been a decrease of 646,939 dunums of agricultural lands. Compared to this however, ARIJ’s, ‘GIS Unit 2011’ analysis for agricultural areas in the year 2010, showed that the West Bank’s total agricultural area was 2,150,800 dunums (ARIJ, 2011a). This difference is due to the fact that PCBS and MoA surveyed the ‘actual’ agricultural lands (as according to the aforementioned methodological classification), whilst dismissing fragmented small size agricultural lands dominant in urban areas and in certain spaces where springs are located. ARIJ’s surveying discovered a high percentage of small and fragmented ownership (family cultivations) across the oPt. This means an additional 1,045,654 dunums of small land ownerships could be added to the PCBS and MoA’s official 2010 agriculture survey.

In Qalqiliya Governorate, as of 2012, 18% of the total labor force (male and female) work in agriculture, in comparison to the average across the West Bank at 12.8% (PCBS, 2013a). Agriculture is therefore clearly an important industry in Qalqiliya, given its dominance of the local labor force and role in providing food solutions for many needy families and communities there. The total area of the Qalqiliya Governorate is estimated to be 166,380 dunums, with nearly 103,813 dunums of agricultural land; of which 67,239 dunums are permanent crops, 21,440 are seasonal crops, 13,717 are heterogeneous agricultural areas and 1,417 are classified as ‘protected agriculture’ (ARIJ- GIS Unit, 2011) (see table 16 and map 6). The Palestinian National Authority (PNA) and key international players recognize the importance the agricultural sector plays in supporting both the Palestinian economy and individual livelihoods, and as such have recently formulated a National Development Plan for the years 2011-2013. This has the stated vision of, “Establishing the State and Building our Future”, where the agricultural sector has been defined as the ‘agriculture and rural development sector’, with allocated budgets (of total development expenditures) for the years 2011, 2012 and 2013 of US \$34.2, \$60.7, and \$83.0 million, respectively.

¹² The survey only registered land <half a dunum as agricultural holding for ‘irrigated lands’ and those with an area equal to one dunum <are considered to be a ‘rain-fed’ holding).

Map 6: Land use / Land cover in the Qalqiliya Governorate and Segregation Wall Route, 2010



Source: ARIJ – GIS Unit, 2013.

Table 16: Land Use/ Land Cover in the Qalqiliya Governorate, 2010

Type of land use/land coverage	Area (Dunums)*
Agricultural land	103,813
Artificial non-agricultural vegetated areas	3
Forests	5,835
Industrial, commercial and transport unit	471
Mine, dump and construction sites	251
Open spaces with little or no vegetation	22,375
Shrub and/or herbaceous vegetation associations	12,618
Cemetery	29
Israeli Military Base	300
Israeli Settlements	10,409
Palestinian Built-up Area	8,866
Wall zone	1,409
Total	166,380
Palestinian Built-up Area	28,432
Total	605,012

*Dunum = 1,000 m² = 0.1 Hectare

Source: ARIJ – GIS Unit, 2011a.

It is worth mentioning that the allocated budgets by government and/ or donors for agricultural development are very limited and do not respond to the real needs of this vital sector. For example, of the total expenditures in all sectors, donors have spent less than 1% in support of agriculture in Palestine. Even through the ‘Consolidated Appeal Process (CAP)’, the agricultural sector didn’t manage to receive more than 22% of the sector appealed budget for the year 2010. However, statistics have demonstrated that the agricultural sector in Qalqiliya is of high importance, in terms of economic performance, providing sustainable food solutions and for continuing the farming culture of many local communities. There is a need for Qalqiliya Governorate, as one of the largest agricultural producers in the Palestinian territory to be supported by both the PNA and relevant international groups in terms of sustaining the currently effective areas of the agricultural sector, whilst simultaneously developing weaker components. This will have a positive impact on the economy of the Qalqiliya, the livelihoods of many individuals and families, poverty and food security levels in the region.

In terms of adequate irrigation supply for crop production and other agricultural activities, the Qalqiliya does not suffers severe problems in the availability of needed irrigation methods and technologies. Of all the West Bank and Gaza Governorates, the Qalqiliya Governorate is considered more provinces in terms of the number of irrigation methods. Table 17 below details the number of plant and mixed holdings in the Governorate by main source of irrigation.

Table 17: Number of plant and mixed holdings in the Qalqiliya Governorate by main source of irrigation, 2010

Main Source of Irrigation	Number of plant and mixed holdings
Rainfed	2,961
Artesian wells	700
Streams and valleys	4
Dug well	0
Tanks, ponds and collective well	9
Springs	1
Public network	72
Tanks	15
Other sources	0
Not stated	66
More than 1 source of irrigation	690
Total	4,518

Source: PCBS, 2011b.

The size of agricultural holdings in the Qalqiliya also provides an interesting perspective on the state of the agricultural sector and its relationship with food security in the region. Data provided by the PCBS shows that the majority of agricultural holdings in the Qalqiliya are small in size so as to indicate a household or small community cooperative level of production (see table 18). This shows that many individuals and families in the Qalqiliya rely on their food consumption to come from self or local community level agricultural production.

Table 18: Area of Agricultural Holdings in the Qalqiliya Governorate, 2010.

Area Group of Holding (in Dunums)	Units of Agricultural Holdings
Up to 2.99	1,481
3 – 5.99	993
6 – 9.99	686
10 – 19.99	770
20 – 29.99	319
30 – 39.99	213
40 – 49.99	133
50 – 59.99	78
60 – 69.99	49
70 – 79.99	52
80 +	155
Total	4,929
Average of holding size	15.50

Source: PCBS. 2011b.

3.2. Agricultural Activities

Agriculture is one of the most important economic pillars in Palestine, as well as being considered an integral part of its history, culture and identity. Agriculture has become a symbol for the Palestinian people to protect their lands from confiscation, and it is the sector that hosts the refugee laborers from other sector during political conflicts and economic crisis. The Qalqiliya Governorate constitutes 4.64% of the value of agricultural production across the Palestinian territory (PCBS, 2009g).

In addition, the type of agriculture practiced in the Qalqiliya Governorate varies according to region, but in general, it can be divided into two groups, plant (both rain fed and irrigated), and livestock production.

3.2.1. Plant Production

The total cultivated area in Palestine is usually categorized into ‘Fruit Trees’, ‘Vegetables’, ‘Field Crops and Forages’. As of 2010, nearly 34% of the entire area of plant production was determined as ‘irrigated’.

According to the PCBS, the total area of plant production in the Qalqiliya Governorate in the agricultural year 2007/2008 reached 72,672 dunums with total plant production of 55,764 tons; generating a total value of US \$43,808 thousand. Compared to the year 1997/1998, we notice a decrease of approximately 2.16% of the total planted area, a 23.8% decrease in total production, and a 5.03% increase in the total production value (PCBS, 2009d).

As previously mentioned, agriculture in the Qalqiliya Governorate is mainly dependent on irrigated methods, which requires good water availability, water systems and competent water management plans; all of which are vulnerable to the joint Israeli/Palestinian control of water supplies (summarized as; Israeli control over quantity and Palestinian responsibility for management/distribution), and funding to maintain adequate water supply networks. Currently, irrigated agriculture covers approximately 12% of cultivated lands in the oPt and uses about two thirds of Palestinian water

resources whilst contributing a gross output of around \$500 million annually. To sustain this viable sector, coping plans and strategies should be developed to mitigate the impact of both negative Israeli and Palestinian water authority policy (encourage good governance in both parties involved in water management) and developing funding plans for better water systems, in terms of effective supply and distribution.

Fruit Trees Production

During the 2007/2008 season, the total cultivated area of fruit trees in the Qalqiliya Governorate reached 63,059 dunums, of which 7.1% were un-bearing. 6.6% of the areas cultivated with fruit trees in the Qalqiliya Governorate were irrigated. The total value of agricultural production for the year 2008 in Qalqiliya was US\$16,463,000; making up 6.23% of the total revenue produced from agricultural production during the same year. The value added¹³ of agriculture production in Qalqiliya stood at US\$41,317,000 for the years 2007/8, which equates to 4.7% of the Palestinian territory total value added cost during the agricultural year 2007/2008, which amounted to US\$876.2 million (PCBS, 2009g).

The total production of fruit trees reached 15,147 tons with a total value of US \$16,463,000. Olive production constituted most of the total fruit production, making up to 36% of the total area of fruit trees area in the Qalqiliya Governorate, followed by lemons at 18.56%. Compared to the year 1997/1998, one notices a 32.2% decrease in the total area of land being used for the cultivation of fruit trees¹⁴. In addition, the total amount of fruit being produced from cultivations in Qalqiliya has also noticeably declined from the year 1997/8; by 17585 tones. Furthermore, there has been a resultant decline in the value of fruit tree production in Qalqiliya ; from an annual total of US \$ 23,359,000 in 1997/8 to US \$16,463,000 by 08/09; representing a reduction of 29.5% (PCBS, 2009g).

As shown in table 19, olive and lemon trees are the most highly cultivated fruit trees in the Qalqiliya Governorate.

Table 19: Area, yield and production of fruit trees in the Qalqiliya Governorate by crop and type, 2007/2008

Crop	Bearing				Unbearing		Total Area	Production
	Rainfed		Irrigated		Rainfed	Irrigated		
	Area	Yield	Area	Yield	Area	Area		
Olive	54,596	100	-	-	1,891	-	57,487	5,460
Lemon	-	-	738	3,800	91	153	982	2,804
Valencia Orange	-	-	848	2,700	22	31	901	2,290
Shammoty Orange	-	-	619	2,500	6	105	730	1,548
Clement	-	-	381	2,100	30	15	426	800
Navel Orange	-	-	93	2,600	20	148	261	242
Guava	-	-	237	1,200	-	20	257	284

¹³ For the preparation of this report, value-added is calculated on the basis of agricultural year, which extends from 01/10/2007 until 30/09/2008 (PCBS,2009f)

¹⁴ This area was included in the land use land cover but under different classification as graded in the land use land cover table (16).

Crop	Bearing				Unbearing		Total Area	Production
	Rainfed		Irrigated		Rainfed Area	Irrigated Area		
	Area	Yield	Area	Yield				
Almond (Hard)	212	300	-	-	6	-	218	64
Almond (Soft)	70	250	-	-	120	-	190	18
Apricot	10	500	22	1,500	143	-	175	38
Plum	3	1,200	6	2,300	133	-	142	17
Poppy	-	-	34	2,700	-	89	123	92
Pomegranate	43	600	-	-	70	-	113	26
Grape	44	1,000	-	-	66	-	110	44
Akadenia	-	-	92	2,200	-	-	92	202
Francawy Orange	-	-	34	2,100	-	36	70	71
Bomaly	-	-	4	2,700	-	53	57	11
Mandarin	-	-	46	2,500	-	7	53	115
Aloe	53	1,500	-	-	-	-	53	80
Avocado	-	-	48	5,000	-	-	48	240
Mango	-	-	32	5,000	-	-	32	160
Custard apple	-	-	22	4,500	-	-	22	99
Apple	-	-	18	4,500	-	-	18	81
Grapefruit	-	-	5	2,800	-	13	18	14
Pican	-	-	7	900	10	-	17	6
Nectarine	-	-	10	1,000	-	-	10	10
Total	55,136		3,435		3,788	700	63,059	15,147

Area: Dunum, Yield: Kg/Dunum, Production: metric tons

Source: PCBS, 2009g.

Vegetable Production

Results from the agricultural year 2007/2008 indicated that approximately 5,973 dunums of cultivated land were used for vegetable production in Qalqiliya; comprising 3.21% of the total area of cultivated lands for vegetable production in the Palestinian territory. In addition, regionally, vegetable production is by far the smallest agricultural market in Qalqiliya, as it makes up just 8.3% of all cultivated agricultural produce in the Governorate (PCBS, 2009g). Of the cultivated areas used for vegetable production, 40% occurred on irrigated lands, with 15.3% occurred on rain-fed agricultural lands and 43.4% occurred on greenhouses. The total production of vegetables, for the year 2007/8 reached 39,206 tons with a total value of US\$26,372,000.

Compared to the year 1997/1998, one can see an decreased of 2% in the total area planted with vegetables, 13.5% decreased in the total area of greenhouses, a 1.6 % decreased in total production, and (approximately) an 46.6% increase in the total production value.

In terms of type of production, cucumber, tomatoes, and cauliflower are the main crops of vegetables produced, comprising 88.1% of the total vegetable areas in the Qalqiliya Governorate. Table 20 shows the vegetable production in the Qalqiliya Governorate.

Table 20: Area, yield and production of vegetables in the Qalqiliya Governorate by crop and type, 2007/2008

Crop	Production	Total Area	Surface tunnel		French tunnel		Plastic houses		Irrigated		Rainfed	
			Yield	Area	Yield	Area	Yield	Area	Yield	Area	Yield	Area
Cucumber	17,371	1,753	-	-	-	-	10,056	1,723	1,500	30	-	-
Tomato	14,300	842	-	-	-	-	20,000	663	6,000	172	1,200	7
Cauliflower	2,853	815	-	-	-	-	-	-	3,500	815	-	-
White Cabbage	2,125	607	-	-	-	-	-	-	3,500	607	-	-
Broad Bean (Green)	94	228	-	-	-	-	-	-	1,300	3	400	225
Okra	79	226	-	-	-	-	-	-	-	-	350	226
Peas	93	197	-	-	-	-	-	-	1,000	7	450	190
Eggplant	531	174	3,500	18	-	-	-	-	3,000	156	-	-
Squash	330	171	1,600	30	-	-	-	-	2,000	141	-	-
Snake Cucumber	84	164	-	-	-	-	-	-	800	5	500	159
Kidney Bean (Green)	358	143	-	-	-	-	2,500	85	2,500	58	-	-
Onion (Green)	71	115	-	-	-	-	-	-	800	45	500	70
Jew's Mallow	204	102	-	-	2,000	1	2,000	64	2,000	37	-	-
Maize	128	85	-	-	-	-	-	-	1,500	85	-	-
Hot Pepper	163	64	2,300	10	-	-	2,800	17	2,500	37	-	-
Paprika	164	63	-	-	-	-	2,500	40	2,800	23	-	-
Lettuce	53	35	-	-	-	-	-	-	1,500	35	-	-
Spinach	42	35	-	-	-	-	-	-	1,200	35	-	-
Cowpea	51	34	-	-	-	-	-	-	1,500	34	-	-
Chick Peas (Green)	11	30	-	-	-	-	-	-	-	-	350	30
Radish	32	27	-	-	-	-	-	-	1,200	26	700	1
Kidney Bean (Yellow)	23	23	-	-	-	-	-	-	1,000	23	-	-
Red Cabbage	26	17	-	-	-	-	-	-	1,500	17	-	-
Parsley	14	15	-	-	-	-	-	-	900	15	-	-
Garlic (Green)	2	5	-	-	-	-	-	-	-	-	400	5
Turnip	4	3	-	-	-	-	-	-	1,400	3	-	-
Total	39,206	5,973		58		1		2,592		2,409		913

Area: Dunum, Yield: Kg/Dunum, Production: metric tons

Source: PCBS, 2009g.

Field Crops and Forages Production

In the 2007/2008 ago-production season, all lands used for agricultural purposes are shown to be irrigated as opposed to rain-fed. This is due to the drought conditions experienced in the region, coupled with the lack of adequate drought mitigation technology required to harvest rain-fed technology. The total production of field crops and forages reached 1,411 tons with a total value of US \$973,000. By 2010, however, there is a small change in the area of rain-fed lands being used for agro-production - with 6,513.64 dunums being classified for this purpose (PCBS, 2011b).

Compared to the year 1997/1998, there was decrease of approximately 62.3% in the total area planted with field crops and forages; however, we notice decrease of approximately 46% in the total production, accompanied by a 31.9% decrease in the total production value.

Potato production made up 38.8% of the total field crops and forages area of Qalqiliya, with wheat being classified as the second largest produced crop, at 21.3% (see table 21).

Table 21: Area, yield and production of field crops and forages in the Qalqiliya Governorate by crop and type, 2007/2008

Crop	Rainfed		Irrigated		Total Area	Production
	Area	Yield	Area	Yield		
Wheat	1,506	200	-	-	1,506	301
Barley	754	175	-	-	754	132
Thyme	263	100	107	2,200	370	262
Vetch	321	60	-	-	321	19
Others Clover, Sern	266	120	-	-	266	32
Potato	10	1,500	190	2,800	200	547
Broad Bean	72	100	-	-	72	7
Dry Onion	58	1,500	-	-	58	87
Sesame	20	35	-	-	20	1
Chick Peas	18	70	-	-	18	1
Dry Garlic	14	1,000	-	-	14	14
Lentil	12	60	-	-	12	1
Broom Corn	9	35	-	-	9	0
Ment	-	-	5	900	5	5
Tobacco	5	100	-	-	5	1
Meramieh	5	120	-	-	5	1
Safflower	5	5	-	-	5	0
Total	3,338		302		3,640	1,411

Area: Dunum, Yield: Kg/Dunum, Production: metric tons

Source: PCBS. 2009g.

3.2.2. Livestock Production

The total production of livestock in the Qalqiliya Governorate during the agricultural year 2007/2008 reached 1,603 tons of meat (red and white), 6,485 tons of milk, 63 million eggs and 19 tons of honey (PCBS, 2009f).

The value of livestock production in the Qalqiliya Governorate during the agricultural year 2007/2008 registered approximately US \$19,546 thousand, having increased by 26% compared to the year 1997/1998 (PCBS, 1998). The contributions of different sectors from the total livestock production value of the Qalqiliya Governorate were as follows: 38.17% meat, 29.23% dairy, 29.38% eggs, 1.24% honey and 1.98% in the 'other livestock' category. It is noted that there is no fish production in Qalqiliya.

Compared to the year 1997/1998, there was a decrease of approximately 10.6% on the total production value of meat (red), an increase of 104.6% on the total production value of milk, and an increase of 52.4 % on the total egg production value. Additionally, there was an increase in the honey production value by 26.5% (PCBS, 1998).

Cattle Production

The total number of cattle in the Qalqiliya Governorate during the agricultural year 2007/2008 was 1,804 heads, with a total value of production (meat & milk) of approximately US \$4,109,000 (PCBS, 2009g). Compared to 1997/1998, there has been a 96.5% increase in the total number of cattle farmed in Qalqiliya. In terms of cattle value, however, there has been a 160.4% increase in the value of cattle since 1997/8 (PCBS, 1998; PCBS, 2009g). Cattle production, when compared to other agricultural activities, is a large industry in Qalqiliya, as it constitutes up to 54% of livestock production across the Governorate and 4.4% of the total cattle production in Palestine.

Table 22 compares the total number and type of cattle farmed in the Qalqiliya Governorate and the whole Palestinian Territory.

Table 22: Number of cattle by strain, sex and age in the Qalqiliya Governorate compared to the total in the Palestinian territory, 2007/2008

Type of cattle farmed in the Qalqiliya Governorate		Region	
		Qalqiliya	Palestinian territory
Local cattle	Cows	321	2,910
	Bull Calves	96	918
	Heifer Calves	47	638
	Bulls	23	185
	Total Local Cattle	487	4,651
Friesian cattle	Cows	664	16,504
	Bull Calves	404	7,141
	Heifer Calves	226	4,310
	Bulls	23	380
	Total Friesian Cattle	1,317	28,335
Total no. of cattle		1,804	32,986

Source: PCBS, 2009g.

Sheep and Goat Production

During the agricultural year 2007/2008 the total number of sheep and goats in the Qalqiliya Governorate reached 24,659 and 7,062 heads, respectively. The total value of the production of sheep and goats combined (meat and milk) reached approximately US \$7, 867, 000 in 2008 (PCBS, 2009g).

Compared to 1997/1998, the number of sheep and goats in the Qalqiliya governorate increased by 6%, in addition the value of meat and milk has increased by 63.6% and 59% respectively (PCBS, 1998).

See table 23 for types and numbers of goats and sheep in the Qalqiliya Governorate and in the Palestinian territory.

Table 23: Number of sheep and goats in the Qalqiliya Governorate compared to total heads across the Palestinian territory, 2007/2008

Governorate	Goats			Sheep		
	Local	Other	Total	Local	Other	Total
Qalqiliya	-	7,062	7,062	-	24,659	24,659
Palestinian territory	274,888	47,194	322,082	453,554	235,345	688,899

Source: PCBS. 2009f.

It is worth noting that sheep and goats numbers decreased by 27% and 48% in the year 2010 respectively, since the year 2007/08. The total number of sheep reached up 17,973 heads and the goats to 3,688 heads in the year 2010 (PCBS, 2011d).

Poultry Production

The total number of poultry in the Qalqiliya Governorate during the agricultural year 2007/2008 was 553,000 birds (comprising of 261,000 layers and 292,000 broilers); constituting just 1.82% of the total poultry production in the Palestinian territory. The total value of poultry production (meat & eggs) stood at approximately US\$6,940,000 (PCBS, 2009g).

Compared to the agricultural year 1997/98, the number of laying poultry has dramatically increased by 35.2%, but with broiler bird production decreased by 83% (PCBS, 1998; PCBS, 2011d). In addition, there was a decrease of approximately 18% on the total production value of poultry; both layers and broilers.

Table 24 compares the total number of layer and broiler birds in the Qalqiliya Governorate and the Palestinian territory for the agricultural year 2007/2008.

Table 24: Number of broilers and layers in the Qalqiliya Governorate compared to the total in the Palestinian territory, 2007/2008

Governorate	Poultry numbers in thousands	
	Layers	Broilers
Qalqiliya	261	292
Palestinian territory	2,695	27,682

Source: PCBS. 2009g.

It is worth noting that poultry numbers increased by 141% in the year 2010 since the year 2007/08. The total number of layers reached up 65, 995 birds and the broilers to 5,560,411 birds in the year 2010 (PCBS, 2011b).

Beehives Production

The total number of beehives in the Qalqiliya Governorate reached 6,231 in 2007/08 (PCBS, 2009g). However, in 2010, the total number of beehives in the Qalqiliya Governorate reached 3,403, which represents a 45.4% decrease since the agricultural year 2007/8.

Yet, the total production value of the beehive industry in Qalqiliya reached approximately US \$243,000; making up 8.46% of the total annual honey production value in the Palestinian territory for the year 2007/2008 (and 10.63% of West Bank production) (PCBS, 2009g) (see table 25). In 2007/8, compared to 1997/1998, there is shown to be 86% an increase in the number of beehives and 26.5% an increase in the total production value of beehives in the Qalqiliya Governorate (PCBS, 1998; PCBS, 2009g).

Table 25: Number of beehives in the Qalqiliya Governorate compared to the total for the Palestinian territory, 2007/08

Region	Beehives		
	Modern	Traditional	Total
Qalqiliya	6,231	--	6,231
Palestinian territory	63,782	2,951	66,733

Source: PCBS, 2009g

In terms of available agricultural data for Qalqiliya, the PCBS, in cooperation with the Palestinian Ministry of Agriculture (MoA), have produced a number of comprehensive yearly agricultural surveys for the Palestinian territory; up until the year 2007/8. These use a number of base-line measures with a combination of agricultural/ socio-economic indicators to report on the agricultural, food security and economic status of the Palestinian territory; disaggregating data at a regional and Governorate level as far as is possible.

3.3. Forests and nature reserves

The forested area in the Qalqiliya area is a rich base for biological diversity since it is a habitat for diverse types of forests including diverse plant and animal species. There are almost 5,835 dunums of forested area in Qalqiliya Governorate (ARIJ – GIS Unit, 2010) (see map 6), comprising 7.4% of total forested area in the entire West Bank. It is mainly concentrated in the south east of Qalqiliya. In addition, there is a large area of shrubs and herbaceous vegetation cover in the Qalqiliya governorate reaching up to 12,618 dunums. There are 5,763 dunums nature reserves in Qalqiliya governorate that were declared by Israel (ARIJ – GIS Unit, 2011) (see map 7).

The 7.4% forested area grows within two agro-ecosystems namely the semi-coastal (to the West of the governorate) and Central Highlands (to the East of the governorate) ecosystems, which supports the existence of diverse types of forested areas; especially that this area is considered a more humid environment and of a fertile soils. The special topographic and climatic conditions of the Qalqiliya governorate provide suitable environments for the growth of a variety of unique and endemic plant species. Of the main forest types that grow in Qalqiliya is the Natural Oak Forest which supports the growth of *Quercus Calliprinos*, *Pistacia Palaestina*, *Pistacia lentiscus*, *Phillyria media*, *Styrax officinalis*, *Laurus nobilis*, *Zizyphus spina-christi*, *Rhamnus alaternus*, *Rhamnus lycioides* subsp. *graeca* (*palaestinum*), *Ceratonia siliqua* and others. The Planted coniferous forest also exists in this area which is cultivated with *Pinus halapensis*, *Cupressus sempervirens*, *Eucalyptus* spp. and others. These forested areas supports the growth of several plants, such as *Euphorbia perelis* (الحلابلاب أو)

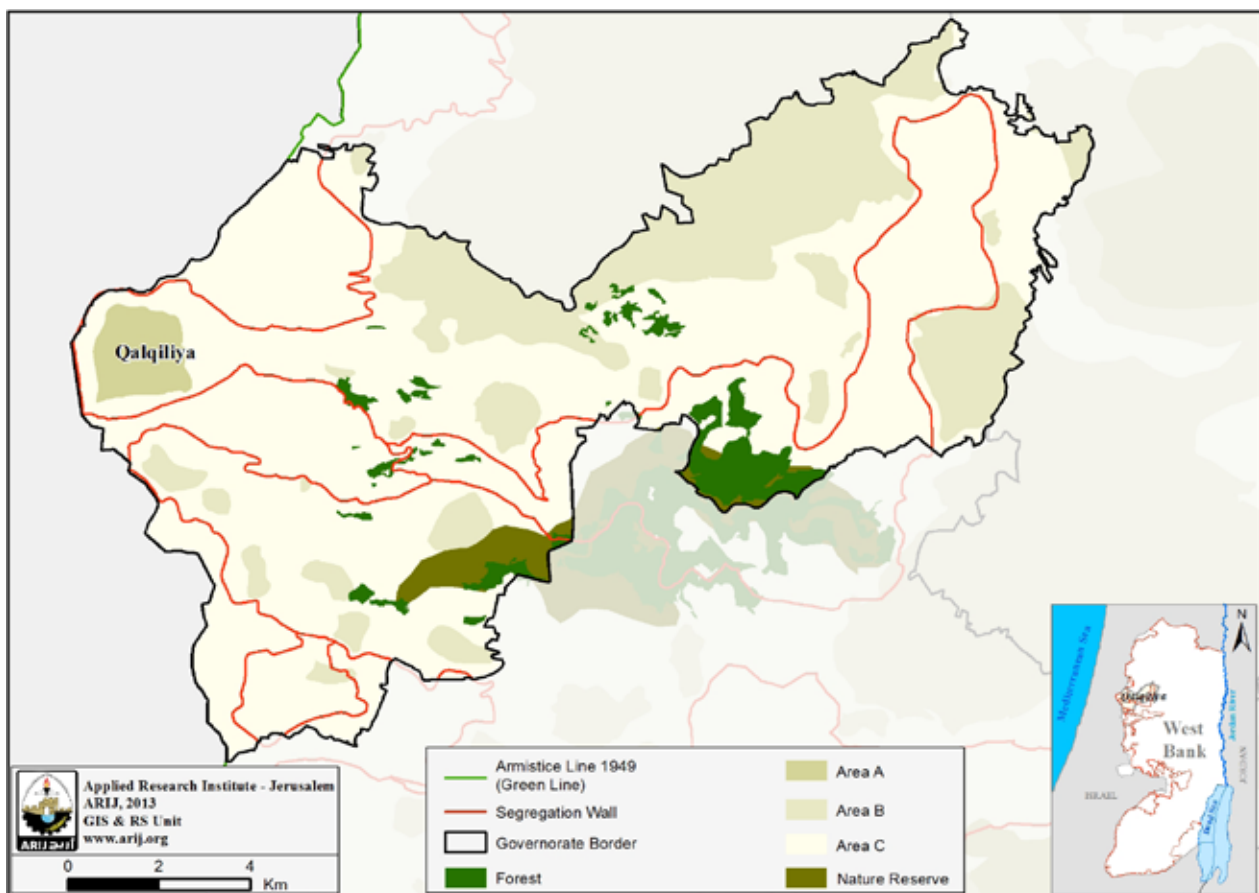
(الحلبوب), purple spurge; *Aclea acaulis* (خطمية عين البقرة), stemless hollyhock; *Senecio vernalis* (الببوسوم الربيعي), eastern groundsel; *Thymelaea hirsutum* (المنتان), spur flax; *Lupinus palaestinus* (الترمس البري), wild lupin; *Convolvulus lanatus* (الليلاب).

The animals in this area include *Sus scorfa* (الخنزير البري), wild boar; *Gazella gazella* (غزال الضبي), gazelle; *Hystrix indica* (النيص الهندي/الشهيم), Indian crested porcupine; *Sciurus anomalus* (سنجاب), squirrel; and *Hemidactylus turcicus turcicus* (البريصعة), Mediterranean house gecko.

According to a survey conducted by ARIJ (The Applied Research Institute-Jerusalem), the Semi-coastal environments recorded high number of plant families among the different ecosystems in the West Bank; where 89 plant families are growing in the semi coastal zone with Sparganiaceae family growing only in this ecosystem (ARIJ, 2007).

Up to 97.4% of Qalqiliya forested areas are located within geopolitical Area C, where the forests are under Israeli control and the MoA has no management authority (ARIJ – GIS Unit, 2011). It is worth noting that the Qalqiliya forests are well-known habitat for 22 endemic species such as *Capparis spinosa* (Capparaceae) and several endangered wild plants such as *Asparagus berytheus* (Liliaceae) and *Paliurus spina-christi* (Rhamnaceae), where rare species in the semi-coastal ecosystem form 27.9% of total rare species growing in the West Bank (ARIJ, 2007); hence need further management and conservation to sustain such a valuable natural resource.

Map 7: Forest and nature reserve areas in Qalqiliya Governorate

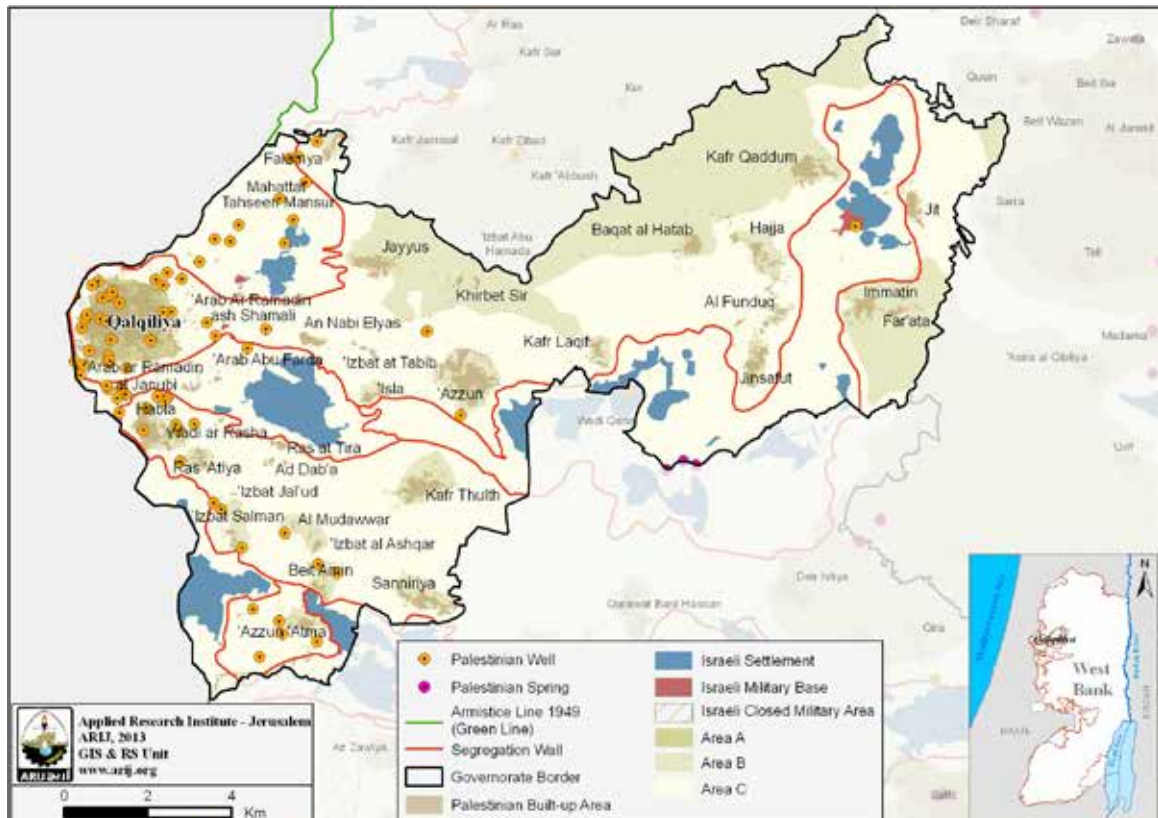


Source: ARIJ – GIS Unit, 2013.

3.4 Water Resources

The renewable water resources in Qalqiliya Governorate consist primarily of groundwater resources, all of which are located in the Western aquifer system. In 2011, around 10.3 MCM were produced from the Western Basin from the groundwater Palestinian wells located in Qalqiliya Governorate (PWA, 2012). From this amount 3.1 MCM are utilized for domestic purposes, and the remaining 7.2 MCM are utilized for agriculture purposes (PWA, 2012) (see map 8). There are no Palestinian Springs in Qalqiliya governorate. However, the Israeli water company Mekorot controls two wells located within Qalqiliya Governorate.

Map 8: Distribution of Ground Water Wells in Qalqiliya governorate

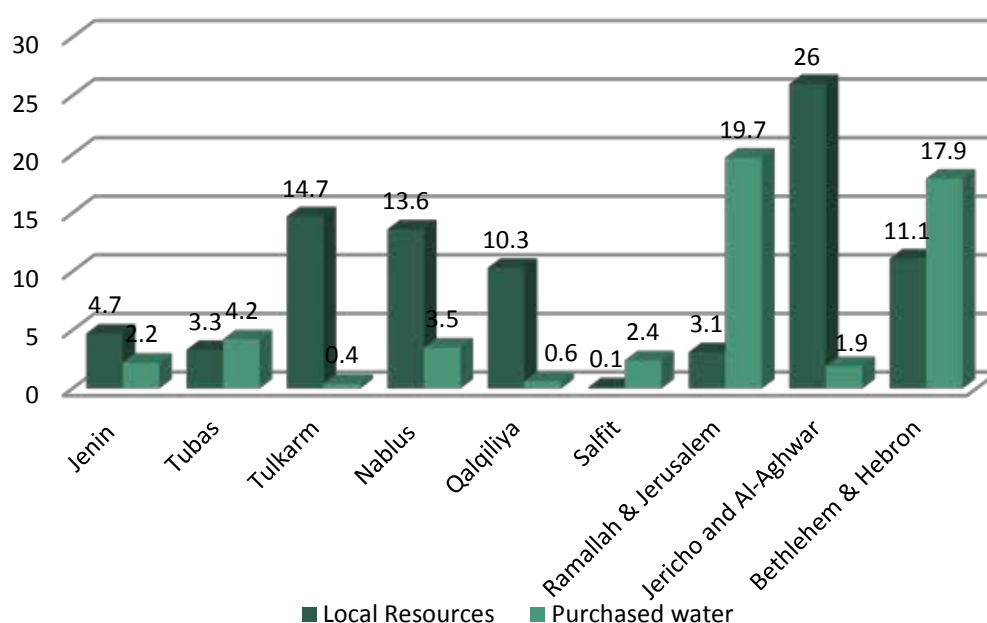


Source: ARIJ – GIS Unit, 2013.

Drinking water resources in the Qalqiliya governorate are divided into two main sources: (1) local resources mainly from wells, and (2) purchased resources from Mekorot, the Israeli National Water Company. The quantity of water purchased from Mekorot in Qalqiliya Governorate for domestic use in 2011 was 0.6 MCM, which represents about 5.5% of the total water resources of the governorate. This was set at a cost of 2.4 NIS/cubic meter (PWA, 2012).

Figure 4 shows the amount of domestic water from local resources and water purchased from Mekorot by each West Bank governorate. This includes water supplied to the Israeli side as per agreement (2.4 MCM), and it can be seen that Qalqiliya Governorate has (1.1% of the total purchases of the West Bank). This is because the governorate has good local groundwater resources (PWA, 2012).

Figure 4: Quantity of Domestic Water from local resources and water Purchased from Mekorot in West Bank governorates (MCM/year)



Source: PWA, 2012

There was a water deficit as the domestic water supply did not meet the needed quantity of water. Table 26 below shows the needed, available and consumed quantities and deficit of water in Qalqiliya Governorate in 2011.

Table 26: Needed, available and consumed quantities and deficit in Qalqiliya Governorate, 2011

Governorate	Needed Quantities of Water(1)	Water Supply for Domestic Sector	Deficit	Water Consumed	Actual Deficit
	MCM/year	MCM/year	MCM/year	MCM/year	MCM/year
Qalqiliya	5.5	4.7	0.8	3.4	2.1

(1) Needed quantity of water is calculated based on a water supply of 150 l/c.d

Source: PWA, 2012.

The water losses in Qalqiliya governorate in 2011 were 1.3 MCM, representing 27.6% of the supplied water in Qalqiliya governorate (PWA, 2012), the Governorate suffers from an actual deficit in domestic water supply, as the amount of consumed water was much less than the needed quantity.

The West Bank Water Department is responsible for the water supply services for 9 localities in Qalqiliya Governorate, where as the municipalities / village councils are responsible in 11 localities. The remaining three localities in the governorate have no water network. In 2011, the average per capita water consumption rate in Qalqiliya Governorate was 93 liter/capita/day, which was more than the average per capita allocation in the West Bank, which is 73 liter/capita/day (PWA, 2012). However, the consumption rate varies from one locality to another in the Governorate; in some villages such as Jit, Far'ata, Immatin, Arab al Khouleh, Kafr Thulth, Wadi Ar Rasha, Al Funduq, Jinsafut and Sanniriya this rate is less than 70 liter/capita/day, which is below the World Health Organization's (WHO) recommendation of minimum consumption of 100 liter/capita/day.

The population of Qalqiliya Governorate is distributed over 23 localities, 20 of them are served by

the water network and three localities with a total population around 2000 people are not served. However, in some localities such as Kafr Thulth, ‘Azzun Atma, Kafr Qaddum, Hajja and Al Izab Algharbi localities, the water network coverage in the served communities may not be complete (partial coverage). These un-served neighborhoods are dependent upon water tankers, rainwater collection systems, and agricultural wells (PWA, 2012). Rainwater collection systems are frequently used in the Governorate because the area receives a comparatively high amount of rainfall, reaching around 653.5 mm annually.

3.5. Waste Water

Practices for managing domestic wastewater in Qalqiliya Governorate are limited to the collection of wastewater by cesspits except for 5 localities out of 23 localities (approximately 48% of the population) are connected to wastewater collection networks (many of which are old and poorly-designed, causing frequent floods and leaks), whilst other communities discharge their wastewater into cesspits (without appropriate lining, which facilitates its infiltration into the soil) and open channels (ARIJ – WERD, 2013). Vacuum tanks are hardly used due to the high cost of this type of service. Therefore, wastewater is almost uncontrolled, and this causes serious environmental problems and health risks.

Approximately 4.7 MCM of wastewater is generated annually in Qalqiliya Governorate (PWA, 2012). However, wastewater generation could be significantly higher than the figures reported herein as these figures were calculated based on the total volume of municipal freshwater minus the total volume of unaccounted-for water and the result was multiplied by 80%. There are two collective wastewater treatment plants in Qalqiliya governorate, one in Hajja and the other in Sir Localities.

Hajja treatment plant was constructed in 2004, the daily flow to the plant is estimated at 40 m³ of wastewater originating from domestic and commercial sources (PWA, 2012); the plant is operating with moderate efficiency.

Sir treatment plant was constructed in 2006; the actual daily flow to the plant is 15 m³ (PWA, 2012), the plant is functioning well with moderate efficiency.

3.6. Solid Waste

Practices for managing solid waste in Qalqiliya governorate include the collection of waste, its transportation to Zahret El Finjan Landfill in Jenin Governorate or random dumpsites (either inside or outside the locality boundaries). Currently the collected solid waste in 16 localities in Qalqiliya governorate is transferred to Zahret El Finjan Sanitary Landfill. In four localities the collected solid waste is transferred into random dumping sites and in the remaining three localities the people are used to burn the collected solid waste beside their houses. Open burning of collected solid waste is practiced in all the uncontrolled dumping sites.

Across Qalqiliya Governorate, the responsibility for solid waste collection is split between several authorities. The Joint Service Council for ‘Service Planning and Development’ (JCspd), the village councils and municipalities.

Based on the solid waste generation rate¹⁵ and population number, it is estimated that Qalqiliya Governorate produces approximately 97 tons of domestic solid waste daily, which equates to 35,454 tons annually (ARIJ – WERD, 2013). Up to 5.7 tons solid waste are collected and dumped daily in

¹⁵ Per capita solid waste generation rate for rural localities is 0.7kg/day and for refugee camps and urban localities is 1.05 kg/day

open and uncontrolled dumping sites and the remaining quantity 93.3 tons are dumped in Zahret El Finjan Sanitary Landfill (ARIJ – WERD, 2013).

3.7 Environmental Conditions

Water Crisis

Israeli occupation forces control ground water resources and prevent Palestinians from drilling new wells and water networks or developing existing water infrastructure. Moreover, the Israeli water company Mekorot has a significant role in controlling West Bank water resources, as Mekorot controls two wells located within Qalqiliya Governorate. Mekorot wells essentially serve the Israeli settlements with low water prices, whilst selling Palestinians their own water at higher prices. The quantity of water supplied to the illegal Israeli settlements in the West Bank is massive when compared to the quantity supplied to the Palestinians. Israeli settlers' water consumption for household use is more than 350 liter/day, while the Palestinians in some localities in Qalqiliya Governorate do not consume more than 60 liter/day such as Jit and Sanniriya. And other localities such as Baqat al Hatab, Arab ar Ramadin ash Shamali and Arab Abu Farda they don't even have a water network (ARIJ –WERD 2013).

Wastewater Management

The absence of a public sewage network in most of the localities in Qalqiliya governorate means that most residents use cesspits for the disposal of wastewater, and/or discharge wastewater in streets and open areas these actions cause environmental damage, health problems, and the spread of epidemics and diseases in the area. The use of cesspits pollutes the groundwater and springs, making it inappropriate for human consumption. This is due to the fact that most cesspits are built without lining, which allows wastewater to seep into the ground and avoids the need to use sewage tankers.

Since the occupation of the West Bank in 1967, Israel has neglected development projects for water and sanitation in the Palestinian territory, although the Israeli authorities collect taxes from the Palestinians. The proceeds of these taxes are mostly invested in the interests of the occupation authorities and settlers; the Israeli state has broken agreements related to the protection of the environment and sustainable use of natural resources throughout the peace process. Although the Palestinian Authority has drawn up plans and strategies related to wastewater treatment, Israel has deliberately impeded the implementation of such water and sanitation projects (ARIJ, 2010).

Solid Waste Management

The obstacles created by the Israeli authorities for local and national institutions in providing good solid waste management services such as refusing to grant licenses to establish landfills because the appropriate land is within Area C and under Israeli control, hinder the development of the solid waste sector. 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 produces odors and distortion of the landscape.

PART FOUR:
Geo-Political Status in the Qalqiliya
Governorate

Qalqiliya in 1970, 1997 and 2012

Following the Israeli Attack on the Palestinian residential territory in the 1948 war¹⁶, an agreement was signed later on in 1949 to end the state of war between Israel and Arab countries nearby, of which, Jordan is a part of and hence it was known as the “1949 Armistice Agreement”, to which the 1949 Armistice Line, better known as the “Green Line” identify the marking line between areas under Israeli occupation and areas under Jordanian administration. The agreement states explicitly that the 1949 Armistice Line does not establish de jure (by law) recognized international boundaries. When the city of Qalqiliya came under the Israeli occupation in 1967, the Israeli Army issued a military order to wipe out Qalqiliya city and started a campaign to destroy it due to its proximity to Israeli controlled territory and thus, the Israeli Army destroyed around 60% of the residential houses in 23 days (An Najah University, 2001).¹⁷

With the signing of the 1995 Oslo Accord between the Palestinian Liberation Organization (PLO) and Israel, the West Bank territory came under “A”, “B” and “C” classification, to which, Qalqiliya city came under the Palestinian National Authority jurisdiction. In 2003, the Israeli Army started its so-called security fence, better known as the Segregation Wall in the occupied Palestinian territory and accordingly, encircled Qalqiliya city from all sides, restricting its Palestinian residents’ movement in and out of the city, threatening its overall sustainability.

The following maps 9,10 and 11 shows Qalqiliya city in the years 1970, 1997 and 2012.

Map (9): Qalqiliya Governorate location in the occupied State of Palestine



Source: *ARIJ – GIS Unit, 2013.*

¹⁶ in which Israel has exceeded its parameters as designated in the United Nations Security Council resolution 181

¹⁷ Qalqiliya and the 1967 War, An Najah University http://scholar.najah.edu/sites/default/files/all-thesis/Qalqiliya_and_june_1967_war_documental_study.pdf

Map 10: Qalqiliya 1997



Source: ARIJ – GIS Unit, 2013.

Map 11: Qalqiliya 2012



Source: ARIJ – GIS Unit, 2013.

Qalqiliya Governorate under the Oslo Accord

The Oslo II Interim Agreement signed in September 1995 between the Palestinian Liberation Organization (PLO) and Israel, concluded Israeli withdrawal from more areas of the West Bank and that occupied territory be divided into Areas “A”, “B” and “C”, which are designated as varying levels of control. Accordingly, the Israeli Army withdrew from lands classified as areas “A”, and the Palestinian National Authority assumed complete control. This marked the first time that a Palestinian government retained sovereignty over any Palestinian land. In area B, the Palestinians have full control over civil matters but Israel continues to have overriding responsibility for security. In area C, Israel retains full control over land, security, people and natural resources. This distribution of areas “A”, “B”, “C”, has scattered the occupied Palestinian territory and turned it into isolated cantons, which are physically separated from each other.

In the case of Qalqiliya governorate, 3619 dunums (3.6 km²) were classified as Area “A”, 39478 dunums (39.5km²) were classified as Area “B”, while 123283 dunums (123.3 km²) were classified as Area “C”. While the majority of the Palestinian population of Qalqiliya governorate live in Areas “A” and “B” (almost 90+%), the bulk of their agricultural lands, forests and open spaces remain in Area “C” where the Israeli Army still enjoy full control and administrative jurisdiction over the land. More than that, Qalqiliya governorate stands to have 382 dunums of its built-up area (4.3% of the total built-up area in the Governorate) West of the Segregation Wall beyond the Palestinian government reach, which threatens Palestinian residents’ access to governmental services (health, education, infrastructure security, etc.). Table 27 illustrates the areas distribution

Table 27: The Geopolitical Divisions of Qalqiliya Governorate according to Oslo II Interim Agreement signed in September 1995

Area	Area in dunums	%
Area A	3,619	2.3
Area B	39,478	23.7
Area C	123,283	74
Nature Reserves	0	0
TOTAL	166,380	100

Source: The Geo-Informatics Department, ARIJ - 2013

Map 12: Qalqiliya Governorate location in the Occupied Palestinian Territory



Source: ARIJ – GIS Unit, 2013

The Israeli Occupation Practices in Qalqiliya Governorate

Qalqiliya Governorate lies at the northwestern terrains of the West Bank. It has an area of 166.4 km² (166380 dunums) and home to +108,000 Palestinian inhabitants (PCBS, 2014). It is also the smallest among the Palestinian governorates in terms of area and lies near the 1949 Armistice line (the Green Line), which is why it is ranked among the most suffered and largely devastated governorates by the Israeli activities.

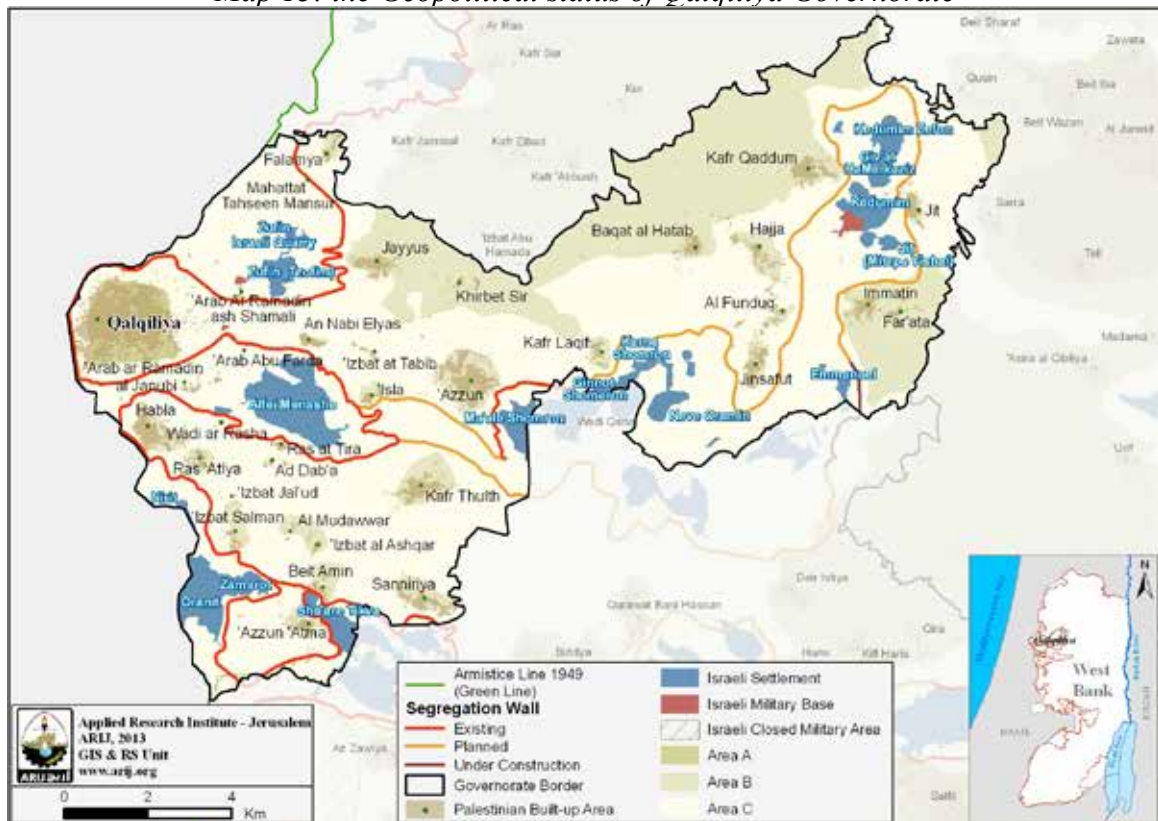
During the years of the second Intifada which started in September 2000, the Israeli authorities stepped up their belligerent occupation related activities in the occupied Palestinian territory, destroying Palestinian agriculture, confiscating lands, demolishing Palestinian houses, expanding settlements, erecting outposts, expanding and constructing bypass roads, imposing severe restrictions on Palestinians' freedom of movement and the construction of the Segregation Wall (map 13 shows Qalqiliya's Geopolitical status) . Table 28 indicates some of the Israeli violations in Qalqiliya Governorate between the years 2000-2013.

Table 28: Israeli violations in Qalqiliya Governorate during the years 2000-2013

Year	Land Confiscation (in Dunums)	No. of Uprooted Trees	No. of Demolished Houses	No. of Houses threatened of demolition
2000	1261	4575	0	8
2001	391	5160	0	1
2002	21864	3721	7	4
2003	4718	2622	9	31
2004	4269	8059	16	43
2005	1030	8405	1	4
2006	1460	0	9	0
2007	97	450	10	0
2008	663	1280	7	0
2009	0	530	0	27
2010	11	323	0	19
2011	131	1072	4	8
2012	1480	545	1	8
2013	0	353	0	10
Total	37374	37095	64	163
2009	1989	5697	5	169
2010	864	2496	25	69
2011	659	7697	39	4
2012	3987	1493	17	33
2013	851	6933	7	30
Jun-14	904	540	14	23
Total	79456	117060	331	452

Source: The Urbanization Monitoring Department Violations Database, ARIJ -2014

Map 13: the Geopolitical status of Qalqiliya Governorate



Source: ARIJ – GIS Unit, 2013

The Israeli Settlement Activities in Qalqiliya Governorate

The Israeli colonial plans and policies in the occupied Palestinian territory (oPt) are clearly reflected on land and people. The analysis of high precision aerial photos at the Applied Research Institute – Jerusalem (ARIJ) over the past 4 decades of Israeli occupation of Qalqiliya Governorate, 16 illegal Israeli settlements were established on confiscated and seized Palestinian lands in Qalqiliya Governorate. The total hold of these settlements stand today at more than 40 thousand Israeli settlers; on an area of 10402 dunums (10.4 km²) almost 6% of the governorate total area, (ARIJ, 2013) and 5.3% of the total Israeli settlements area in the occupied West Bank (total settlements area is 194,722 dunums); see table 29.

Table 29: Israeli Settlements in Qalqiliya Governorate.

No.	Settlement Name	Israeli Settlers population 2011	Area (Dunums)	Name of affected Palestinian village
1	Neve Oramin	262	559	Jinsafut
2	Alfei Menashe	7477	2841	Arab Abu Farda, Wadi Ar Rasha, An Nabi Elias, Isal , Ras At Tira and Izbat Al Ashqar
3	Zufin (Tzofim) Quarry	N.A	220	Qalqiliya, Arab Ar Ramadin Ash Shamali and Arab Abu Farda
4	Zufin (Tzofim)	1338	565	

5	Ma'ale Shomron	878	636	Azzun and Kafr Thuluth villages in Qalqiliya, Deir Istiya village in Salfit
6	Sha'are Tikva	5001	753	Azzun Atmeh and Mas-ha
7	Oranit	6990	1479	Azun Atmeh and Izbat Salman
8	Emmanuel	3229	163	Immatin and Al Funduq villages in Qalqiliya, Deir Istya in Salfit
9	Karne Shomron	7494	480	Kafr Laqef, Hajja and Jinsafut in Qalqiliya, Deir Istiya village in Salfit
10	Kedumim Zefon	3000	407	Kafr Qaddum
11	Giv'at HaMerkaziz	N.A.	608+.037	Kafr Qaddum
12	Kedumim	4201	754	Kafr Qaddum
13	Jit (Mitzpe Yishai)	N.A.	274	Kafr Qaddum and Jit
14	Nirit	N.A.	82	
15	Zamarot	720	461	Azzn Atmeh
16	Ginnot Shomeron	N.A.	119	
Total Area		40590	10402	

Source: The Geo-Informatics Department, ARIJ-2013

The settlements of Qalqiliya fall in four categories identified as: (1) Alfei Mensha settlement bloc which includes the settlements of Alfei Menashe, Nirit and Oranit settlement; (2) the Sha'are Tekva settlement bloc. Which includes the settlements of Zamarot and the Sha'are Tekva settlements; (3) The shomron Settlement block, which includes the settlements of Ma'ale Shomron, Karnei Shomron, Ginnot Shomron and Neve Oramin (4) the settlement of Immanuel; (5) the settlements of Kedumim, Kedumim Zefon, Giv'at HaMerkaziz and Mitzpe Yeshai; (7) Zufin (Tzofim) and Zufin (Tzofim) Quarry.

Furthermore, between 1996 and 2013, the Israeli settlers in the Qalqiliya Governorate established 4 locations, which became known as settlements' outposts¹⁸. The Israeli outposts' phenomena started back in the year 1996 by Israeli settlers who contrived to take control of hilltops in the occupied Palestinian territory. The outposts are located mostly within 1-4 miles distant from an existing settlement. The Israeli government did not provide those settlers with direct financial support rendering them to be illegal and unauthorized but simultaneously providing infrastructural support through the Israeli Army who would also provide them with security blanket to carry out their attacks against Palestinian lands. The aim of the outposts established by Israeli settlers, in an indirect manner of collaboration with the Israeli government, was best described in 1998 by the Israeli Agriculture Minister at that time and former Prime Minister Ariel Sharon; to take as much Palestinian land as possible before "losing them to Palestinians in negotiations".

"Everybody has to move, run and grab as many hilltops as they can to enlarge the settlements because everything we take now will stay ours ...everything we don't grab will go to them."

Ariel Sharon addressing a meeting of militants from the extreme rightwing Tsomet party, Agence France Presse, November 15, 1998.

¹⁸ Settlements' outposts is a technique improvised by Israeli officials in cooperation with the Israeli settlers; under which the latter seize hilltops and certain locations in close proximity to existing settlements in order to annex the location to the settlement – if it exist within the master plan area of the settlements - all of which under the direct protection of the Israeli Army

Table 30 lists the Israeli settlements' outposts that were established in the Qalqiliya Governorate.

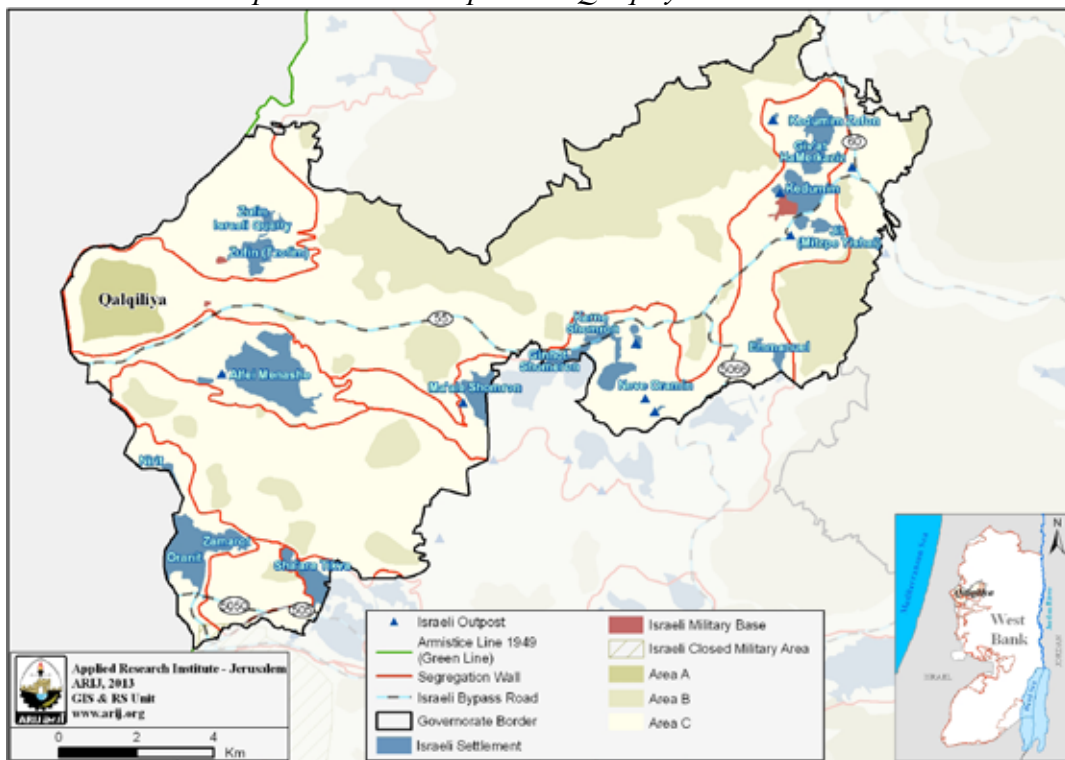
Table 30: Israeli Outposts in Qalqiliya Governorate

No.	Outpost Name	No. of Structures	Period
1	Alonei Shilo (Nof Kane Farm)	46	Jan-99
2	West Maale Shomron	1	Feb 2001 - Nov 2002
3	Neve Menachem south	4	Jan-02
4	West Alfei Menashe	3	Jan-04
5	Ramot Gilad	9	Jan-02
6	Shevut Ami	1	2007
7	North Kedumim	25	NA
8	Gilad Outpost	2	Dismantled By Ben Eliezer
9	Har Hemed	24	Jan-96
Total		115	

Source: The Geo-Informatics Department, ARIJ-2013

Over the years, the consecutive Israeli governments have also worked to link the established settlements with each other and consequently with Israel by creating a network of bypass roads throughout the West Bank territory that stretches in length to 810-820 Km (120 km²): Qalqiliya's share of which is 37 km in and around the governorate (see Map 14).

Map 14: Israeli Outposts in Qalqiliya Governorate



Source: ARIJ – GIS Unit, 2013.

The Israeli Segregation Wall in Qalqiliya Governorate

The Segregation Wall in Qalqiliya Governorate stretches along 88.6 kilometers (11.5% of total Segregation Wall length in the West Bank territory which stands at 774 km) piercing through 19 Palestinian villages in Qalqiliya Governorate (An Nabi Elias, Beit Amin, Isla, Habla, Falamyia,

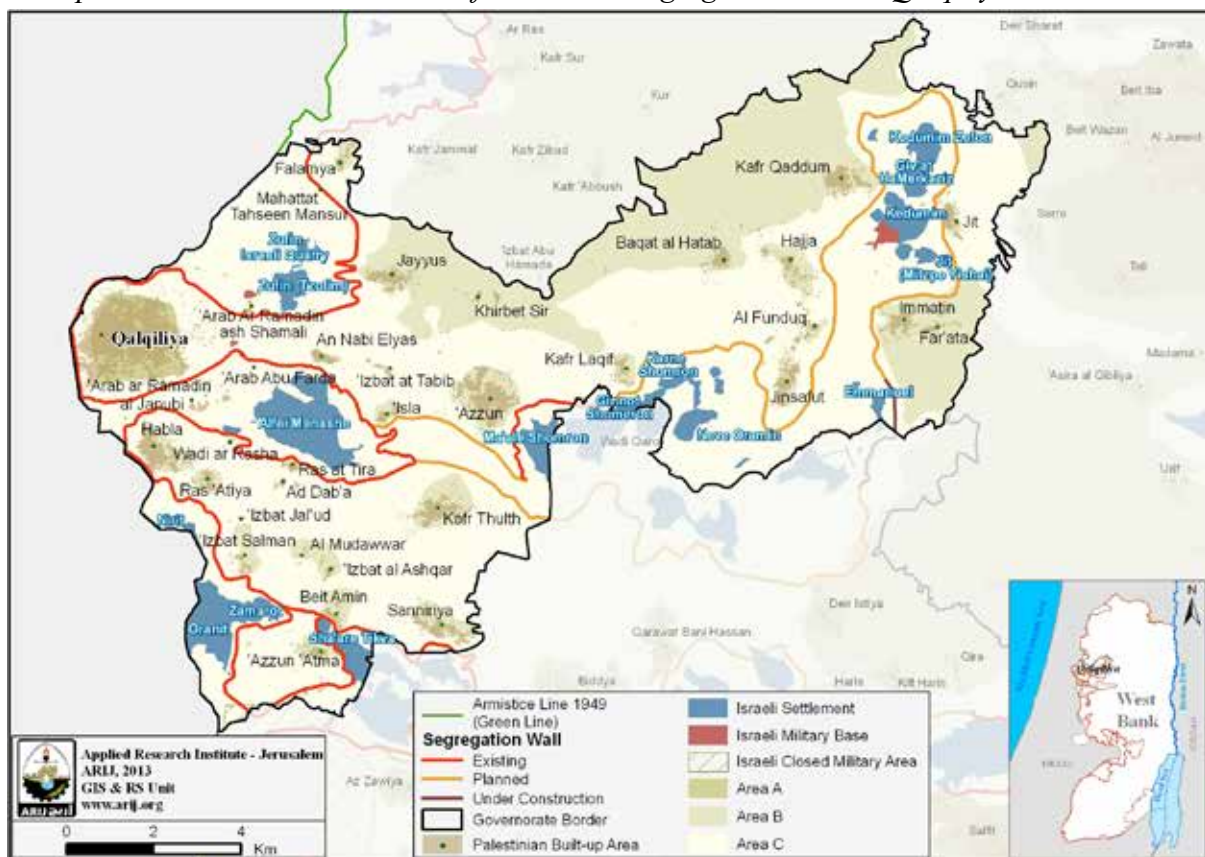
Jayyus, Izbat Salman, Izbat Jal'ud, Izbat Al Ashqar, Sanniryia, Ras Attiya, Ras At Tira, Qalqiliya city, Kafr Thuluth, Azzun Atmeh, Arab Ar Ramadeen Ash Shamali, Arab Ar Ramadeen Al Janubi, Arab Abu Farda, Wadi Ar Rasha) and isolating much of their agricultural land and open spaces behind it (in the western segregation zone), which in time, became inaccessible to the residents unless valid permits are issued by the Israeli Civil Administration allowing them to access their agricultural lands. On the other hand, the Israeli Segregation Wall in Qalqiliya governorate is routed to encompass all of 16 the Israeli settlements behind it as well as the outposts and the agricultural lands, the settlements areas' and other areas of land, isolating some 59124 dunums (35.5%) of Qalqiliya's Governorate total land area. The following table 31 and map 14 show the status of the Israeli Segregation Wall in Qalqiliya Governorate.

Table 31: Status of Israeli Segregation Wall in Qalqiliya Governorate

No.	Wall Type	Length (km)
1	Existing sections	53.5
2	Planned sections	33.9
3	Under construction	1.2
Total length		88.6

Source: The Geo-Informatics Department, ARIJ-2013

Map 15: The construction status of the Israeli Segregation Wall in Qalqiliya Governorate



Source: ARIJ – GIS Unit, 2013.

The Israeli Settlements' Plan in Qalqiliya Governorate

When Israel occupied the West Bank including East Jerusalem and the Gaza Strip back in 1967, it adopted a task with an aim to undermined the 1949 Armistice Line (the Green Line), a marking set

by the United Nation security Council to identify territory occupied by Israel in the 1967 war. Israel started doing so by imposing realities on the ground that are best accomplished by establishing Israeli settlements along the 1949 Armistice line, which in Qalqiliya’s case swamped the Palestinian governorate with settlements.

In 1990, the Israeli minister of housing at that time, Ariel Sharon, came up with the “Seven Stars plan”, which evolved around a scheme to establish a belt of Israeli settlements on the Israeli edge of the 1967 borders, starting from the north, and northwest of Jerusalem city and the Latrun area, passing by villages of west Ramallah and ending with north Qalqiliya area and Tulkarem outskirts. The plan aimed at creating three large and contiguous settlement blocs and later annexes them to Israel. The blocs were identified as: (1) Al Latrun bloc: which includes the establishment of four new settlements with Har Adar is the centre of this bloc. (2) West Ramallah bloc with Mevo Horon is the centre of the bloc and includes 12 existing Israeli settlements and the establishment of four new settlements. (3) a stretch of Israeli settlements in the area edging Al Muthalath and Kafr Qasem¹⁹ towns inside the 1948 lands and north of Qalqiliya. This plan redefines and shifts off the Green Line eastward to extend Israel’s (to be set) political boundary into the West Bank, and negotiates borders of possible future Palestinian state under the new imposed Israeli realities.

Today, these settlements blocs, which were part of Sharon’s Seven Stars plan straddle the Green Line, constitute the dilemma of the peace process and an immense obstacle to resolve the Palestinian - Israeli conflict of which along the Western West Bank border, in the north; Ariel settlements bloc, which include settlements in Qalqiliya, the Modi’in Illit settlements bloc, settlements bloc. of East Jerusalem and Ma’ale Adumim Settlements bloc in the central part of the West Bank and the Gush Etzion settlements bloc south of the West Bank and Qiryat Arba’ bloc, which set as a continuous source of tension with the Palestinians of Hebron city south of the West Bank (+202,000).

Expansion of Israeli settlements in Qalqiliya Governorate

A recent study conducted by the Applied Research Institute – Jerusalem (ARIJ) and based on the analysis of high precision aerial photos of August 2012 showed that Israel continues building in Israeli settlements and outposts in the occupied Palestinian territory.

The analysis showed that during the year 2012, out of the 196 illegal Israeli settlements illegally established on lands of the West Bank, settlement construction occurred in 151 illegal Israeli settlements (76% of total number of settlements) all over the West Bank, including East Jerusalem, with the construction of 1872 structures including 1018 building and 854 caravans (mobile homes). Qalqiliya Governorate ranked number 4 in highest number of buildings that were added to existing Israeli settlements in the Governorate and number 7 in highest number of caravans that were added to existing settlements and outposts in the Governorate (see Table 32).

Table 32: Buildings and caravans added to Israeli settlements in the Palestinian Governorates

Governorate	No. of Buildings	No. of Caravans	No. of Israeli settlements which had been expanded
Tubas	3	0	3
Tulkarem	11	12	4
Jenin	30	43	5
Qalqiliya	35	81	16

¹⁹ Israeli Colonial Projects

Hebron	40	130	22
Nablus	45	109	11
Bethlehem	117	51	15
Qalqiliya	160	52	14
Salfit	188	53	15
Ramallah	191	218	21
Jerusalem	198	105	25
Total	1018	854	151

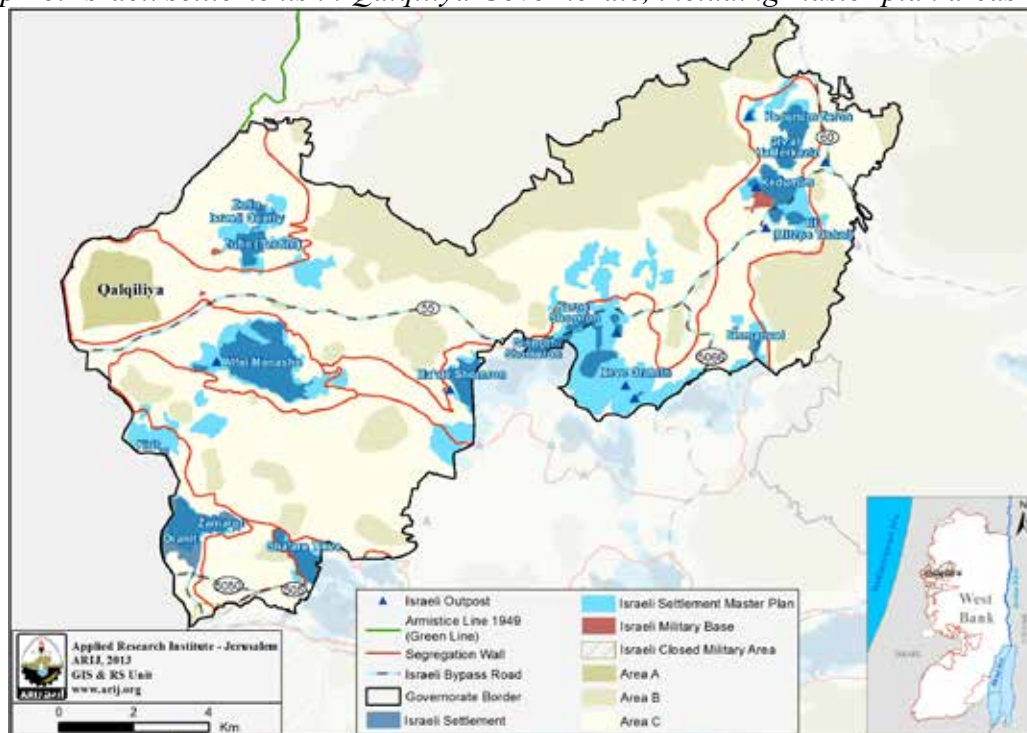
Source: The Geo-Informatics Department, ARIJ-2013

Israeli Settlements' Master Plans

The Israeli settlements in Qalqiliya governorate occupy today an area of 10402 dunums of lands. However, in 1991, the Israeli civil administration (ICA) operating in the occupied West Bank (WB) designated master plans for Israeli settlements spread throughout the WB, taking into consideration the allocation of additional land for the establishment of new settlements in the future and the expansion of the existing ones²⁰. The master plans issued by the ICA in 1991 stood at 486.137 dunums of land (486.1 km², 8.6% of the total area of the WB), which is seven times the size of Israeli settlements area existed until the year 1991 which stood at 69,000 dunums (69 km², 1.2% of the total area of the WB) of land. In case of Qalqiliya Governorate, the actual land area set for the existing settlements with future expansion sites (according to the master plans) is calculated at 23854 Dunums; which is almost two and a half times larger than Israeli settlements current area in Qalqiliya Governorate. It should be pointed out, that the additional land areas of the master plans are included within the isolated land area of Qalqiliya governorate behind the Segregation Wall.

The following map 16 shows the areas of Israeli settlement, including the master plans in Qalqiliya governorate.

Map 16: Israeli settlements in Qalqiliya Governorate, including master plan areas Zone



Source: ARIJ – GIS Unit, 2013.

20 Those settlements which existed until the year 1991, when the Israeli Civil Administration published the master plans.

Inflicting Social and Economic pressure

When the second Palestinian Intifada broke out in September 2000, the Israeli Army started to adopt measures aiming at restricting Palestinians' movement in and out of Qalqiliya and to their agricultural lands, all of which under security pretext. The adopted Israeli measures has implicitly contributed to weaken the social ties between families and relatives, but more than that it caused a serious threat to the livelihood of Qalqiliya's residents who are facing all kinds of obstacles accessing their workplaces or agricultural lands because of Israeli restrictions on movement and the established checkpoints in and around the governorate.

Prior to the Segregation Wall, agricultural productions represented some 22%²¹ of Qalqiliya's economy, as much of the produced was exported to West Bank and neighboring countries markets. With the Segregation Wall, residents increased their dependency on agriculture as a source for their livelihood, especially that some 6000 worker from the city of Qalqiliya and an additional 13,000 Palestinian workers²² from the rest of the Governorate were prevented from traveling over the 1949 Armistice Line (Green Line) to reach their employment because of the Segregation Wall and the closures.

The closure imposed on Qalqiliya city and Governorate and the construction of the Segregation Wall and the deteriorating purchase power of Qalqiliya's residents has caused 600 of the city's 1,800 commercial and industrial shops to shut down in the city, forcing more families to rely on agriculture as a substitute source of income; despite all existing obstacles to make it work. This in turn, has raised the number of Palestinian families dependent on their land for agricultural production today to 45% of the city's economy²³. Additionally, the Segregation Wall, the closures, the confiscation of land and the restrictions on movement and mobility for employment purposes and/ or marketing of agriculture products has caused unemployment in Qalqiliya to soar to unprecedented levels of 19.8%²⁴ in 2010.

Major Impacts of the Segregation Wall Plan in Qalqiliya Governorate

The construction of the Segregation Wall has negative impacts on the, political, economic, social as well as environmental aspects of Palestinians' lives. Following is a summary of these major impacts.

Political Impacts

- The Israeli Segregation Wall redraws the political boundary of Qalqiliya's governorate.
- The Segregation Wall redefines the demographic balance of the governorate with more than 35.5% of its area cut-off toward Israel.
- The Segregation Wall is creating new demographic facts that lead to forced internal migration among Palestinians who will lose their livelihoods.
- The Segregation Wall severs the organic ties between Qalqiliya and other Palestinian Governorates.

21 الآثار التي خلفها جدار الفصل العنصري الإسرائيلي على استدامة الأنظمة البيئية الزراعية في المناطق المتأثرة في محافظة قلقيلية

<http://www.wafainfo.ps/atemplate.aspx?id=4113>

التي-خلفها-جدار-الفصل-العنصري-الاسرائيلي-على-استدامة-الأنظمة-البيئية-الزراعية-في-محافظة-قلقيلية-المت-المناطق-المت

22 Case Studies: Community Hardships and personal Testimonies.

<http://stopthewall.org/downloads/pdf/book/casestudies.pdf>

23 Case Studies: Community Hardships and personal Testimonies.

<http://stopthewall.org/downloads/pdf/book/casestudies.pdf>

24 Press Release on Labour Force Survey 2010: Unemployment rate registered the highest in Tulkarm governorate among the West Bank Governorates, while Khan Younis Governorate registered the highest among Gaza Strip governorates

http://82.213.38.42/Portals/_pcbs/PressRelease/Labour_force_E2010.pdf

Economic Impacts

- The Segregation Plan has caused severe damages to the Palestinian agricultural sector and to the Palestinian farmers as a result of land confiscation and the constraints imposed on mobility and marketing.
- Israel maintains control over Palestinian trade and tourism.
- Unemployment as well as poverty levels increased to unprecedented levels.
- Increase in land prices and shortage of investment opportunities.

Social Impacts

- Thousands of Palestinian citizens have a hard time accessing the main urban centers where health, educational and social services are located.
- Harsh measures are imposed on Palestinians' mobility and movement; as transportation from or to the segregated areas are difficult. The Segregation Wall is cutting-off social relations between Palestinian citizens living on either sides of the Wall.
- Increase urbanization pressure and population density, which stood at 649 people per 1 Km² before the Segregation Wall and after which became 1007 people per 1 Km². (ARIJ-Geo-Informatics Department, 2013)
- The Segregation Wall places many Palestinian towns and villages in geographically disconnected and segregated enclaves and/ or a ghetto, as movement from and to these communities is subjected to Israeli restrictions.

Environmental Impacts

- Decline in the areas designated for landfills and wastewater treatment sites.
- Diminish areas designated as natural reservations, forests, pastures, open spaces and recreation areas.
- Loss of grazing areas and increase in desertification.
- Distort wildlife cycle and cuts-off different kinds of animals from their natural habitat particularly during migration seasons.
- The Segregation Plan is altering the Palestinian natural landscape.
- Many archeological and historical sites related to Palestinian cultural heritage will be segregated behind the wall.
- Loss of open space which poses a threat to the sustainability of the urban and rural areas as well as a threat to more losses of the natural resources and biodiversity.
- Isolate water resources; some 24 (out of 33 wells in Qalqiliya Governorate) wells behind the Segregation Wall, with a total annual extraction capacity of 1.9 million cubic meters, which will no longer be under Qalqiliya's control.

In addition to isolating 59124 dunums (59.1 Km²) of Palestinians' lands in Qalqiliya governorate, the Segregation Wall put many Palestinian communities in cantons (Arab Abu Farda, Ras At Tira, Arab Ar Ramadin Al Janubi, Kherbit Ad Dab'a , Wadi Ar Rasha, Arab Ar Ramadin Ash Shamali). The Palestinian residents of these communities are entrapped in enclaves inside the Segregation Wall with restrictions on their accesses and movement to their own residential areas and agricultural lands. The residents of these isolated and disrupted residential areas have a harsh time when it comes to their movement to areas segregated by the Wall in case they want to reach their homes or lands; thereby jeopardize their livelihood and other vital social, health and educational services as well. The following table 33 shows the land use/ land cover of area isolated behind the Segregation Wall in Qalqiliya Governorate.

Table 33: Land use / land cover of isolated areas in Qalqiliya Governorate.

Land Type	Area (Dunums)
Agricultural Lands	30860
Forests	3744
Artificial Surfaces	75
Open Spaces	12455
Israeli Military Base	279
Israeli Outpost	6
Israeli Settlements	10386
Palestinian Built-up Area	382
Wall zone	939
Total Area	59124

Source: The Geo-Informatics Department, ARIJ-2013

Entrance to the isolated agricultural lands is restricted only to those who are able to prove landownership authenticated by the Israeli civil administration; this means that only the owners who have their names listed in the ownership title deed (usually the eldest in the families) receive permits. Furthermore, issuance of permits by the Israeli civil administration is on seasonal basis; hence, Palestinian owners' find a hard time to manage their cultivated lands on their own especially that the permits do not include additional labor and/ or equipment.

The Israeli Various Obstructions (checkpoints) in Qalqiliya Governorate

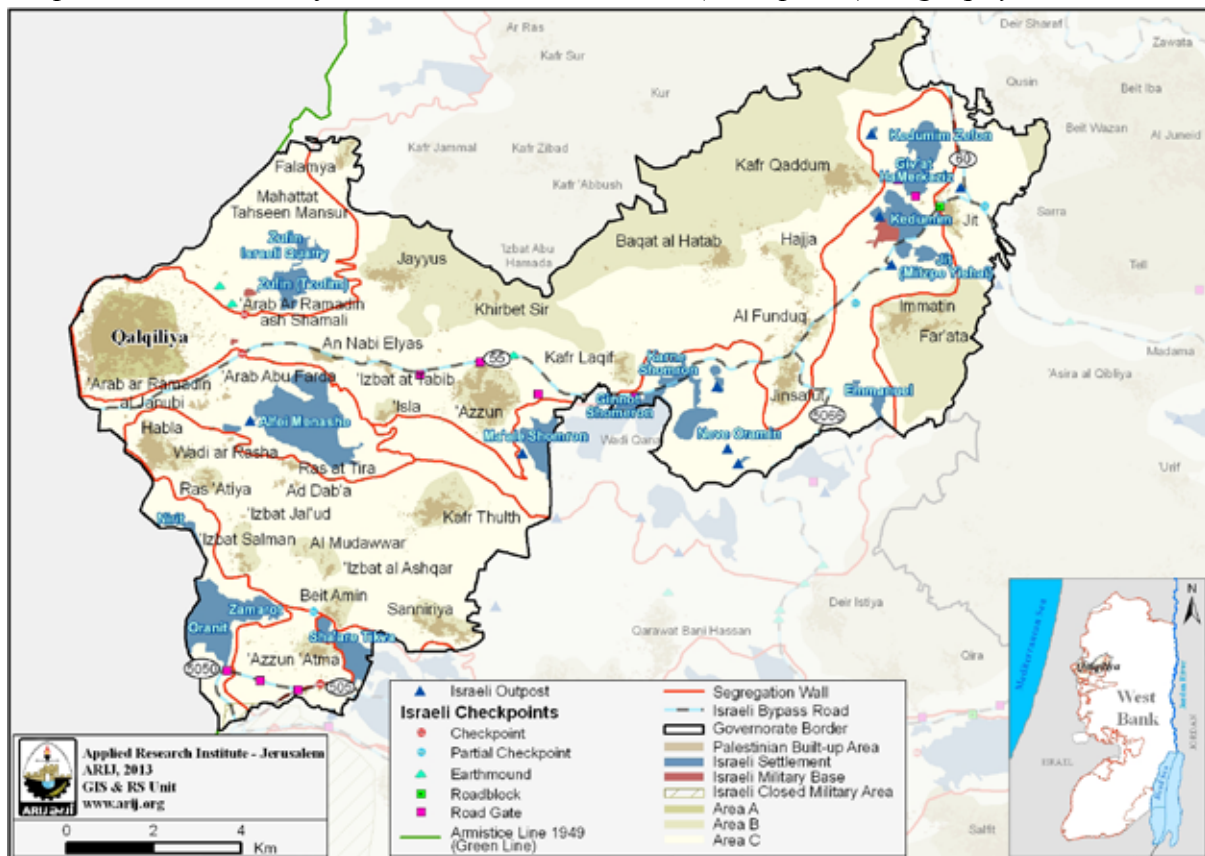
Residents of Qalqiliya governorate has more than one impediment in their life other than the Segregation Wall to restrict their movement, as the Israeli checkpoints placed tactfully in core locations to separate and restrict the Palestinian residents' movement toward each other and to other areas in the West Bank, also affect their lives. The Israeli checkpoints varies in their form but still are called the same; cubical cement roadblocks, earth mounds, manned checkpoints and agricultural gates, tunnels, secondary roads iron gates, all of which comes along with the Segregation Wall (see map 17). The following table (34) lists the number and various types of obstructions established by the Israeli Army to restrict and confine the movement of more than 100,000 Palestinian residents of Qalqiliya Governorate.

Table 34: Different kinds of Israeli obstructions in Qalqiliya Governorate

Type of Israeli Obstruction	Number
Earth mound	3
Closed Road Gate	5
Checkpoints	3
Green Line Checkpoint (1949 Armistice Line Checkpoint)	1
Agricultural Gate	14
Road Block	1
Partial Checkpoint	3
Tunnel	5
Watch Tower	5
Total	40

Source: OCHAOPT – Humanitarian ATLAS (West Bank Access Restrictions – Qalqiliya Governorate), December 2012

Map 17: Distribution of various Israeli obstructions (checkpoints) in Qalqiliya Governorate



Source: ARIJ – GIS Unit, 2013.

The Tunnel of Habla

Habla is a Palestinian village located to the south of Qalqiliya city and one of the first localities where the Israeli Segregation Wall started to shape back in 2003. The Segregation Wall enclosed the village in a canton and separated it from the rest of the West Bank. However, due to Israeli change of tactics, the Israeli Army decided to make of Habla village a controlled exit site for Qalqiliya’s city residents in order to access the central and southern West Bank districts. Accordingly, on August 31, 2004, the Israeli Army inaugurated “Habla tunnel” on 150 dunums of lands owned by the residents of Habla, to link Qalqiliya city to Habla village. Several iron gates on the secondary roads and agricultural gates to access the agricultural lands were also established, all of which operated by Israeli soldiers to control Palestinians’ movement.

Why dig a tunnel?

Surly, when the Israeli Army decided to construct Habla tunnel it did not consider the Palestinians’ interest, as facts on the ground shows that the Israelis had to make available an exit passage to residents of Qalqiliya city and that Habla village presented the best available option to build the tunnel. Other than that, the tunnel is constructed under an Israeli bypass road number 55 used by the Israeli settlers of the northern settlements cluster of Ariel settlements bloc to access inside Israel.

The International Legal Status of the Israeli Segregation Wall

The Israeli Segregation Wall violates virtually every existing humanitarian code, human rights and civilized laws; including the right to Self-Determination, the right to freedom of movement, the right to work, the right to medical treatment, the right to education, the right to an adequate standard of living and access to holy places. In July 2004, the international Court of Justice (ICJ) denounced in its landmark decision the Israeli Segregation Wall and all activities related to the Israeli occupation

from 1967 (settlements, bypass roads, houses demolishing, uprooting trees, land confiscation, etc. and now the Segregation Wall, which disrupts the territorial unity and contiguity) by upholding the Palestinian people's right to self-determination, which is denied by the Israeli occupation, and marked all practices of the Israeli State in the occupied Palestinian territory invalid. The Court based its decision on international laws, including the Fourth Geneva Convention, the Hague Regulations, various human rights treaties and the United Nations Security Council resolutions 242, 338 and others.

Recalling relevant United Nations resolutions affirming that actions taken by Israel, the occupying Power, to change the status and demographic composition of Occupied East Jerusalem have no legal validity and are null and void, Noting the agreements reached between the Government of Israel and the Palestine Liberation Organization in the context of the Middle East peace process, ICJ ruling on the Segregation Wall of July 9, 2004

Self-defense' or 'state of necessity' cannot be used as justification for violating the rights of the Palestinian people under international law and therefore Israel must cease construction of the Segregation Wall and compensate those landowners for the damages and all other states must refrain from supporting Israel in building the Segregation Wall under any circumstances. Moreover, the construction of the Segregation Wall is an explicit violation of all peace agreements signed between the Israelis and Palestinians and a breach to Oslo Interim Agreement which states that:

“Neither side shall initiate or take any step that will change the status of the West Bank and the Gaza Strip pending the outcome of the permanent status negotiations” (Article XXXI, clause 7).

Conclusion

Despite international denunciation, Israel is proceeding with its unilateral plans to build the Segregation Wall, isolating and confiscating large tracts of Palestinian lands in Qalqiliya as in the rest of the West Bank governorates. Today, the Palestinian communities in Qalqiliya Governorate are surrounded by a complex of Walls, settlements and roads that eliminate any future possibility for the Palestinian communities to expand and thus jeopardize sustainable development.

The imperativeness that Israel complies with the international legitimacy, laws and resolutions of the United Nations security Council; stresses the necessity to hold Israel accountable for its acts in the occupied Palestinian territory; calls for Israel's long time apathy of the international community's will to end and thus Israel be made to conform with the United Nations resolutions. Additionally, Settlement construction and expansion in light of the United Nations Security Council resolutions (UNSC), international laws, human rights and international covenants Israel's colonization activities in the occupied Palestinian territory violates numerous United Nations Security Council and General Assembly Resolutions, primarily resolution 242 (1967): UNSCR Resolution 242 of 1967, which calls for 'the withdrawal of all Israeli armed forces from territories occupied' in the 1967 war. The resolution effectively outlaws Israel's 40 years occupation of the West Bank (including East Jerusalem) and the Gaza Strip.

The principles of Resolution 242 are reiterated again in UNSCR 446 (1979) which ‘[d]etermines that the policy and practices of Israel in establishing settlements in the Palestinian and other Arab territories occupied since 1967 have no legal validity and constitute a serious obstruction to achieving a comprehensive, just and lasting peace in the Middle East’, also in UNSCR 452 (1979) which calls upon ‘the Government and people of Israel to cease, on an urgent basis, the establishment, construction and planning of settlements in the Arab territories occupied since 1967, including Jerusalem,’

PART FIVE:
General Needs Assessment in the Qalqiliya
Governorate

5.1. Development Priorities and Needs in the Qalqiliya Governorate

During ARIJ's field survey of the localities in Qalqiliya Governorate, a general needs assessment was conducted. As mentioned in the methodology section the locality needs were surveyed through collecting information about set of relevant indicators provided in a questionnaire sheet and filled by leaders of community. The survey showed that 91% of the localities in Qalqiliya Governorate are in need of paving and constructing new roads, 73% of the localities stated that they need new schools to cover the great number of students, and 59% of the localities are in need of clinics and healthcare centers. In addition, the water networks in Qalqiliya Governorate need a great deal of attention, as 32% of the localities stated that they need new water networks. As for the agricultural sector, 91% of the localities are in need of Rehabilitation of Agricultural Lands.

Table 35: Development Priorities and Needs in Qalqiliya Governorate, 2012/2013

Needs by sector	Strongly needed	Needed	Not a priority
Infrastructural needs (%)			
Opening and Pavement of Roads	91	4.5	4.5
Rehabilitation of Old Water Networks	41	14	45
Extending the water network to cover new built up areas	59	18	23
Construction of New Water Networks	32	9	59
Rehabilitation/construction of new wells or springs	36	5	59
Construction of Water Reservoirs	68	5	27
Construction of a Sewage Disposal Network	77	14	9
Construction of a New Electricity Network	27	14	59
Providing Containers for Solid Waste Collection	50	18	32
Providing Vehicles for Collecting Solid Waste	32	14	54
Providing a Sanitary Landfill	23	9	68
Health needs (%)			
Construction of New Clinics or Health Care Centers	59	14	27
Rehabilitation of Old Clinics or Health Care Centers	27	5	68
Purchasing of Medical Equipment and Tools	41	9	50
Educational needs (%)			
Construction of New Schools	73	5	22
Rehabilitation of Old Schools	54	14	32
Purchasing of New Equipment for Schools	68	9	23
Agricultural needs (%)			
Rehabilitation of Agricultural Lands	91	9	0
Building Rainwater Harvesting Cisterns	50	18	32
Construction of Barracks for Livestock	50	32	18
Veterinary Services	63	32	5
Seeds and Hay for Animals	73	18	9
Construction of New Greenhouses	46	18	36
Rehabilitation of Greenhouses	41	18	41
Field Crops Seeds	86	9	5
Plants and Agricultural Supplies	86	9	5

5.2. Participatory Rapid Appraisal (PRA)

The Participatory Rapid Appraisal is a qualitative research tool used to identify problems and formulate solutions. Its aim is to enable people to access an issue and make their own plans to address it.

PRA emphasizes the empowerment of local people. It enables them to assume an active role in analyzing their problems and potentials in order to come up with solutions.

The PRA approach was chosen for this study because it provides guidelines for the fast appraisal of a certain situation in the field, the main advantages being:

1. It involves a relatively short time in the field.
2. It focuses on a few specific topics.
3. It involves the community and their institutions.

In view of that, 22 PRAs were conducted at locality level, where community leaders, farmers, women associations' representatives, and local co-operatives' representatives (agricultural, environmental, societal...etc.) were in attendance. Another general workshop took place at Qalqiliya Governorate level, where the governmental bodies (including Qalqiliya Governorate Office's representatives, Qalqiliya Education and Higher Education, Agriculture and Health Directorates' representatives), and the relevant NGOs working in Qalqiliya attended. During the workshops a discussion among the attendees was opened to come out with a comprehensive vision and analysis for the gaps and needs of Qalqiliya Governorate as a whole entity.

During the PRA Workshops, each community presented us with its points of Strength, Weakness, Threats, Proposed Solutions, and Needs Priorities in relation to Agriculture, Water, and Environment. Upon these results the following needs and development projects were proposed at locality level.

PART SIX
Proposed Development Projects
(Agriculture, Water & Environment)
for the Qalqiliya Governorate

One objective of the “Village Profiles Needs Assessment in the Qalqiliya Governorate” project is to present development programs and activities to assist in developing the livelihood of the population in the Qalqiliya Governorate.

Based on the survey and the Participatory Rapid Appraisal (PRA) workshops conducted in the Qalqiliya Governorate and the consultation of the Agriculture Directorate of Qalqiliya, the following concept papers were developed addressing the major needs for livelihood development in the governorate with main focus on water, environment and agriculture interventions.

6.1 Proposed Project for Land rehabilitation

Project Title	Land Rehabilitation for Plant Production in Qalqiliya Governorate																																			
Project Duration	36 month																																			
Estimated Budget	<p>The total targeted area is around 800 dunums distributed over 6 localities in the Qalqiliya Governorate.</p> <p>Therefore, the total budget is estimated at around US \$1,600,000. However, of the total budget, 20 percent will be as beneficiaries' contribution.</p>																																			
Stakeholders	The project stakeholders will be the Ministry of Agriculture (MoA), the Ministry of Local Government (MoLG), Agriculture Directorate of Qalqiliya, UNDP, Local and international Agricultural Associations and the NGOs.																																			
Targeted Areas	<p>The project will target six localities in the Qalqiliya Governorate, as the following:</p> <table border="1"> <thead> <tr> <th>Community</th> <th>Dunum</th> <th>Springs</th> <th>Wells</th> </tr> </thead> <tbody> <tr> <td>Azzun ‘Atma</td> <td>100</td> <td>0</td> <td>5</td> </tr> <tr> <td>Azzun</td> <td>150</td> <td>0</td> <td>2</td> </tr> <tr> <td>Jayyus</td> <td>150</td> <td>0</td> <td>2</td> </tr> <tr> <td>Jit</td> <td>100</td> <td>2</td> <td>0</td> </tr> <tr> <td>Kufr Thulth</td> <td>150</td> <td>2</td> <td>9</td> </tr> <tr> <td>Qalqiliya</td> <td>150</td> <td>0</td> <td>42</td> </tr> <tr> <td>Total</td> <td>800</td> <td>4</td> <td>60</td> </tr> </tbody> </table> <p>These lands enjoy water resources whether springs or artesian wells water. But they need to improve water resources, irrigation mainlines and irrigation system.</p>				Community	Dunum	Springs	Wells	Azzun ‘Atma	100	0	5	Azzun	150	0	2	Jayyus	150	0	2	Jit	100	2	0	Kufr Thulth	150	2	9	Qalqiliya	150	0	42	Total	800	4	60
Community	Dunum	Springs	Wells																																	
Azzun ‘Atma	100	0	5																																	
Azzun	150	0	2																																	
Jayyus	150	0	2																																	
Jit	100	2	0																																	
Kufr Thulth	150	2	9																																	
Qalqiliya	150	0	42																																	
Total	800	4	60																																	
Beneficiaries	The project will target 160 families (approximately 960 individuals)																																			
Project Description	<p>The project will assist in the rehabilitation of approximately 800 dunums of irrigated lands distributed in the targeted areas. In addition, it will generate 11,200 working days for rehabilitating lands, water networks and improving water resources and planting them with suitable crops and trees.</p> <p>The rehabilitation process will include the use of suitable agricultural machines (very limited), terracing, building walls, plough the rehabilitated lands, increasing the amount of cultivated areas, protecting the land from the Israeli procedures of land confiscation, creating job opportunities and improving the livelihood of the targeted families.</p> <p>Also, the farmers will be supported to plant their lands with suitable</p>																																			

Project Description	vegetable and fruit trees crops. Especially, the crops those are still needed to be cultivated to reduce the gape in their demand supply chain and contribute in improving food security as well as increasing income generation for the project beneficiaries.
Project Objectives	<ol style="list-style-type: none"> 1. To increase the total cultivated area in the Qalqiliya Governorate. 2. To create job opportunities for both genders and thus decreasing the high unemployment rate in the area. 3. To improve the livelihood of the targeted families. 4. To reduce the effects of land degradation through land cultivation. 5. Planting the crops and fruits trees of high nutritive and commercial value to enhance food security and increasing the economic value of produced agricultural commodities.
Project Activities	<ul style="list-style-type: none"> • Announcing the launch of the project and collecting applications for land reclamation from land owners in the targeted localities. • Determining the targeted areas and beneficiaries according to the project selection criteria. • Preparing and announcing the implementation conditions and the bidding package. • Implementing the reclamation and rehabilitation of the targeted areas and providing the beneficiaries with the adequate extension. • Improving existing irrigation main pipes and drip irrigation systems to improve access to more water with better water use efficiency. • Cultivating the rehabilitated areas by the suitable vegetable crops and fruit trees • Building the capacities of the farmers • Supervising, monitoring and evaluating the implementation process. • Preparing the final reports and disseminating the results.
Expected Results	<ol style="list-style-type: none"> 1. Additional 800 dunums of irrigated Agricultural land rehabilitated and planted with fruit trees seedlings and vegetable crops. 2. Job opportunities created during and after the lifespan of the project. 3. Poverty alleviated through income increase. 4. Land degradation reduced. 5. Productivity of the agricultural lands increased and water used efficiently. 6. Self-sufficiency induced.

6.2 Proposed Project for greenhouses rehabilitation

Project Title	Greenhouses Rehabilitation for Plant Production in Qalqiliya Governorate																									
Project Duration	24 months																									
Estimated Budget	<p>The total targeted area is around 278 dunums of greenhouses distributed over 10 localities in the Qalqiliya Governorate.</p> <p>Therefore, the total budget is estimated at around US \$625,500. However, of the total budget, 20 percent will be as beneficiaries' contribution.</p>																									
Stakeholders	<p>The project stakeholders will be the Ministry of Agriculture (MoA), the Ministry of Local Government (MoLG), Agriculture Directorate of Qalqiliya, UNDP, Local and international Agricultural Associations and the NGOs.</p>																									
Targeted Areas	<p>The project will target ten localities in the Qalqiliya Governorate, as the following:</p> <table border="1" data-bbox="464 748 1426 1308"> <thead> <tr> <th>Community</th> <th>Greenhouses area for rehabilitation in dunums</th> </tr> </thead> <tbody> <tr> <td>Azzun 'Atma</td> <td>30</td> </tr> <tr> <td>Azzun</td> <td>25</td> </tr> <tr> <td>Beit Amin</td> <td>20</td> </tr> <tr> <td>Falamya</td> <td>30</td> </tr> <tr> <td>Habla</td> <td>25</td> </tr> <tr> <td>Jayyus</td> <td>40</td> </tr> <tr> <td>Kufr Thulth</td> <td>25</td> </tr> <tr> <td>Qalqiliya</td> <td>50</td> </tr> <tr> <td>Ras 'ATiya</td> <td>17</td> </tr> <tr> <td>Sanniriya</td> <td>16</td> </tr> <tr> <td>Total area (dunums)</td> <td>278</td> </tr> </tbody> </table> <p>These greenhouses already under cultivation and irrigated. Their production is poor as their owners couldn't update their old greenhouses due to limited access to money, which reducing their production capacities and water use efficiency as well.</p>		Community	Greenhouses area for rehabilitation in dunums	Azzun 'Atma	30	Azzun	25	Beit Amin	20	Falamya	30	Habla	25	Jayyus	40	Kufr Thulth	25	Qalqiliya	50	Ras 'ATiya	17	Sanniriya	16	Total area (dunums)	278
Community	Greenhouses area for rehabilitation in dunums																									
Azzun 'Atma	30																									
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Qalqiliya	50																									
Ras 'ATiya	17																									
Sanniriya	16																									
Total area (dunums)	278																									
Beneficiaries	The project will target 139 families (approximately 820 individuals)																									
Project Description	<p>The project will assist in the rehabilitation of approximately 278 dunums of irrigated greenhouses distributed in the targeted areas. The rehabilitation process will include the provision of plastic sheets, drip irrigation networks, fertilizing machines, irrigation main pipes and suitable seedlings of vegetables that are highly demanded in local market and have a potential for exporting the excess.</p> <p>The priority will be given for the greenhouses closed to the settlement activities, and affected by them. Also, the priority for the greenhouses located in Area C.</p>																									

Project Objectives	<ol style="list-style-type: none"> 1. To improve the production potential of greenhouses area in the Qalqiliya Governorate. 2. To increase the production capacities, and by that job opportunities will be created for both genders and thus decreasing the high unemployment rate in the area. 3. To improve the livelihood of the targeted families. 4. Planting the crops with high nutritive and commercial value to enhance food security and increasing the economic value of produced agricultural commodities.
Project Activities	<ul style="list-style-type: none"> • Announcing the launch of the project and collecting applications for land reclamation from land owners in the targeted localities. • Determining the targeted areas and beneficiaries according to the project selection criteria. • Preparing and announcing the implementation conditions and the bidding package. • Implementing the rehabilitation of greenhouses in the targeted areas and providing the beneficiaries with the adequate extension. • Improving existing irrigation main pipes and drip irrigation systems to improve access to more water with better water use efficiency. • Providing the plastic sheets to cover the greenhouses. • Assist farmers to cultivate the rehabilitated greenhouses • Building the capacities of the farmers • Supervising, monitoring and evaluating the implementation process. • Preparing the final reports and disseminating the results.
Expected Results	<ul style="list-style-type: none"> • 278 dunums of greenhouses rehabilitated and planted with suitable vegetable crops. • Job opportunities created during and after the lifespan of the project. • Poverty alleviated through income increase. • Plant production system enhanced and food Self-sufficiency induced. • Productivity of the agricultural lands increased and water used efficiently. • The production capacity and water use efficiency of the rehabilitated greenhouses improved by 40%.

References

- Abu A'yash, A, et-al. 2007. 'Surveillance and Classification of Palestinian Forest Trees.' Prepared for the Arab Organization for Agriculture Development. Ramallah. Palestine.
- Ajlumi, S. 2003. 'The Palestinian Economy and the Second Intifada.' *Journal of Palestinian Studies* Vol. 32, No. 3.'
- Applied Research Institute Jerusalem (ARIJ). 1995. 'Environmental Profile for the West Bank' Vol. 1: Qalqiliya District. June, 1995. Qalqiliya , Palestine.
- Applied Research Institute Jerusalem (ARIJ). 2004. 'Monitoring Israeli Colonizing Activities; Outposts- the unripe settlements' Available at: http://www.poica.org/editor/case_studies/view.php?recordID=337.
- Applied Research Institute Jerusalem (ARIJ). 2007. 'The Status of Environment in the West Bank and Gaza Strip.' Ghattas, R & Hazieneh, H. Chapter 10: Flora and Fauna. Bethlehem, West Bank.
- Applied Research Institute Jerusalem (ARIJ) – GIS Unit. 2008. 'Geo-informatics database.' Geo-information Department, ARIJ, Bethlehem, Palestine.
- Applied Research Institute - Jerusalem (ARIJ). 2010. 'Monthly Reports Database; Qalqiliya , Palestine' June, 2010.
- Applied Research Institute Jerusalem (ARIJ) – GIS Unit. 2011a. 'Geo-informatics Database.' Geo-information Department, ARIJ, Bethlehem, Palestine.
- Applied Research Institute Jerusalem (ARIJ) – GIS Unit. 2011b. 'Land-use, Land-Cover Analysis, year 2010 with high resolution/0.5metre pixels' Geo-information Department, ARIJ, Bethlehem, Palestine.
- Applied Research Institute Jerusalem (ARIJ) – GIS Unit. 2011c. 'Qalqiliya , Palestine; 2008 - 2010.' Geo-Informatics Department; Bethlehem, Palestine.
- Applied Research Institute Jerusalem (ARIJ) – GIS Unit. 2011d. 'The Geo-informatics Department Israeli Settlements Database'; Bethlehem, Palestine.
- Applied Research Institute Jerusalem (ARIJ) – GIS Unit. 2011e. 'The Geo-informatics Department Israeli Checkpoints Database '; Bethlehem, Palestine.
- Applied Research Institute Jerusalem (ARIJ) – UMD. 2011a. 'Israeli Violations in the occupied Palestinian Territory Database', ARIJ 1994-2011; Bethlehem, Palestine.
- Applied Research Institute Jerusalem (ARIJ) – UMD. 2011b. 'Settlements Database.' Urbanisation and Monitoring Department. Bethlehem, Palestine.
- Applied Research Institute - Jerusalem (ARIJ). 2012. 'Water and Environment Research Department Data Base.' Bethlehem. Palestine.
- Applied Research Institute Jerusalem (ARIJ) – WERU. 2012. 'Water and Environment Research Department database; selected indicators.' Bethlehem, Palestine.
- Applied Research Institute - Jerusalem (ARIJ) & Spanish Center for New water Technologies (CENTA), 2010. "A Proposed Environmentally Sound Wastewater Management System for the West Bank."
- Applied Research Institute – Jerusalem (ARIJ). Water and Environment Research Department (WERD) database 2013.
- Applied Research Institute – Jerusalem (ARIJ) (2010). The Applied Research Institute - Jerusalem (ARIJ) refutes the report of the Israeli occupation authorities, which accuses the Palestinians polluting the environment and water sources, 2010.
- Applied Research Institute - Jerusalem (ARIJ) & Spanish Center for New water Technologies (CENTA) 2010. "A Proposed Environmentally Sound Wastewater Management System for the West Bank."
- B'TSELEM. 2011. Dispossession & Exploitation. Israel's policy in the Jordan Valley & northern

Dead Sea.

- Bani Odeh, A. (2012, Jan 24). Data Sharing with ARIJ agricultural staff. (Ayed Abdul-Aziz, Interviewer).
- Bimonthly Publication of the Foundation for Middle East Peace (BPFMEP). 2004. 'Israel's Policy of "Creating Facts" wins over the Bush Administration.' Report on Israeli Settlement in the Occupied Territories (2004): May-June 2004.
- Available at : <http://www.fmep.org/reports/archive/vol.-14/no.-3/PDF>
- EWASH. 2011. Israel's violations of the International Covenant on Economic, Social and Cultural Rights with regard to the human rights to water and sanitation in the Occupied Palestinian Territory.
- Freedman, D; Myers, A.; Beck, A. 2003. 'Eerdmans Dictionary of the Bible.' Wm. B. Eerdmans Publishing.
- Group Christian Volunteers (GVC) & Food and Agriculture Organization (FAO). 2011. 'GVC/FAO Database; Water Availability in Area C' retrieved January 2012 from: <http://www.gvcfao-database.org/>.
- Haaretz News. 2010. 'Ministers back proposal to make Jerusalem a national priority zone.' Published- 24.10.10. Available at: <http://www.haaretz.com/news/national/ministers-back-proposal-to-make-jerusalem-a-national-priority-zone-1.320931>
- International Committee of the Red Cross (ICRC). 1949. 'Geneva ... Time of War (Fourth Geneva Convention)'. 12 August 1949.
- Joint Council for Service, Planning and Development (JCspd) & for Solid Waste Management in Qalqiliya and Jordan River Rift Valley (JJRRV). 2012. 'JCspd Data Base.' Qalqiliya city, Palestine.
- Ministry of Health (MoH) & the Palestinian Health Information Center (PHIC). 2010. 'Health Status in Palestine 2008' September 2008 – midyear 2009. Ramallah, Palestine.
- Ministry of Health (MoH) & the Palestinian Health Information Center (PHIC). 2011. Health Report. Palestine. First Quarter. July, 2011.
- Ministry of Higher Education (MOHE). 2012. 'Schools Statistics of 2011/2012.' Ramallah, Palestine.
- Ministry of Tourism & Antiquities (MoTA). 2012. Planning Unit Database for the year 2011. Ramallah. Palestine.
- Ministry of Tourism and Antiquities (MoTA). 2012. 'Personal contact between ARIJ and the MoTA for data-sharing purposes.'
- New York Times. 2011. 'No Chance of Peace.' May 18th 2011. Available at: <http://www.nytimes.com/roomfordebate/2010/09/01/negotiating-with-the-israeli-settlers/no-chance-of-peace-with-settlements-around>.
- Palestinian Central Bureau of Statistics (PCBS), World Food Programme (WFP) & Food and Agriculture Organization (FAO). 2010. 'Average Food Prices, 2005-2009'. Ramallah, Palestine: 2005 - 2009.
- Palestinian Central Bureau of Statistics (PCBS). 1997. 'Population Census' final results by locality- 1997.' Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 1998. Agricultural Statistics- 1997/98'. Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2009a. Census Final Results – Summary (Population, Buildings, Housing, Establishments) - Qalqiliya Governorate. Ramallah - Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2009b. 'Palestine in Figures 2008.' Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2009c. 'Palestinian Family Health Survey, 2008: Final Report.' Ramallah, Palestine.

- Palestinian Central Bureau of Statistics (PCBS). 2009d. 'Agricultural Statistics; various data' Ramallah, Palestine: December, 2009.
- Palestinian Central Bureau of Statistics (PCBS). 2009e. 'Population, Housing and Establishment Census 2007, Final Results - Housing Report – Qalqiliya Governorate.' Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2009f. 'Population, Housing and Establishment Census 2007. Main Indicators by Locality Type.' Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2009g. Agricultural Statistics- 2007/8' Dec. 2009; Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2009h. Population, Housing and Establishment Census 2007. Main Indicators by Locality Type. Ramallah – Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2011a. 'Palestinians at the end of the year.' Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2011b. 'Agricultural Census-2010.' Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2012a. 'Labor Force Survey, Annual Report of 2011' .Ramallah, Palestine.
- Palestinian Central Bureau of Statistics (PCBS). 2012b. 'Labor Force Survey: (October-December, 2011) Round (Q4/2011)). Press Conference on the Labor Survey Results'. Ramallah, Palestine.
- Palestinian Hydrology Group (PHG). 2011. "Water Master Plan for Qalqiliya".
- Palestinian National Authority (PNA). 2010. 'National Strategy for Solid Waste Management in the Palestinian territory (2010-2014).' Ramallah, Palestine.
- Palestinian Water Authority (PWA). 2007a. 'Water Quality in West Bank Report.' Ramallah, Palestine.
- Palestinian Water Authority (PWA). 2007b. 'Water Supply in the West Bank.' Ramallah, Palestine.
- Palestinian Water Authority (PWA). 2009a. 'The Palestinian Water and Wastewater sector, Basic needs and Development - Ongoing and proposed projects by Governorates.' Ramallah, Palestine.
- Palestinian Water Authority (PWA). 2009b. 'Water Supply and Consumption for the West Bank 2007.' Ramallah, Palestine.
- Palestinian Water Authority (PWA) (2012). Annual Water Status Report 2011. Ramallah-Palestine.
- Palestinian Water Authority (PWA). 2011. 'Water Information System.' Ramallah – Palestine.
- UNRWA/UNICEF. 2010. Food Security and Nutrition Survey of Herding Communities In Area C Joint UNRWA – UNICEF –WFP Household Survey.
- WFP/ FAO/ PCBS. 2009. Socio-Economic and Food Security Report West Bank. 2009.
- WFP/ARIJ. 2010. Socio-Economic and Food Security Atlas: in the occupied Palestinian territory. February, 2010Bethlehem. Palestine.
- WFP/ FAO/ PCBS. 2011. oPt 2010 Socio-Economic and Food Security Survey: West Bank and Gaza Strip, occupied Palestinian territory.
- WFP / FAO/PCBS/UNRWA. 2012. Socio-Economic and food security Survey: West Bank and Gaza Strip. Palestine.