



## **Faculty of Engineering**

**Master Program in Urban Planning & Landscape Architecture**

# **Colonization and Ever-Shifting Borders:**

**A case from the West Bank, Palestine**

الاستعمار والحدود المتغيرة : حالة دراسية من الضفة الغربية

**Submitted by:**

**Maisa Antari**

**Supervisor:**

**Dr. Salem Thawaba**

**2015**



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Submitted by:

**Maisa Antari**

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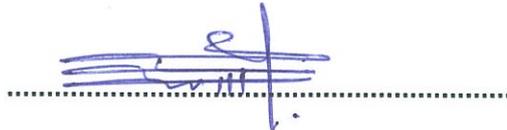
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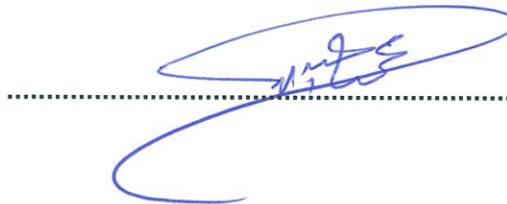
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## ABSTRACT

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In Palestine, the West Bank border was formed and appointed on maps in 1949, yet it has unique characteristics of being virtual and elastic due to its continuous shifting. The geographical border in the region can be shifted to meet Israeli policies and strategies. Colonies, checkpoints, military areas, security zones, and the Apartheid Segregation Wall represent the driving forces behind border elasticity and dynamics. Such borders were drawn on maps, but nobody can identify them on the ground. This study aims to shed light on the chronological border shifting by Israelis, which led to a change in the current situation of the borders on the ground in order to correspond to the Israeli hidden agendas and behaviors behind the border movement.

A detailed and extensive literature study was conducted to deeply understand the history behind borders shaping concept, included studying of some colonial policies in demarcating borders between the indigenous people and the colonialism power in two regions around the world: Africa (Southern and Western Africa) and North America. A comprehensive literature studies about the West Bank and the Israeli actions after 1967 were reviewed. The research mainly focuses on an area of 30\*30 Kilometers square, in which borders were excessively shredded by what are known as Ariel and Kedumim fingers. And by using the Geographic Information System (GIS) as the main tool for analysis, many geographical layers showed the changing and shifting of borders on the ground.

The outcomes of the research are maps and statistics that show how the borders were shifted and what were the reasons behind this border shifting, in which the study concludes that borders were shifted and are still shifting due to Israeli economy, Israeli domination, and Israeli apartheid agendas.

**Key Words:** Colonization, Borders, Ever-shifting, West Bank, Israeli spatial transformations, Armistice line

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## مستخلص

حدود الضفة الغربية بفلسطين هي حدود تشكلت وحددت على الخرائط عام 1949 ، الا أن هذه الحدود تمتاز بميزات فريدة ، فهي حدود افتراضية ومرنة ، وهذا يعود لتحولها وتغيرها المستمر. الحدود الجغرافية في المنطقة تتحول بسهولة لتلبية وتنفيذ السياسات والاستراتيجيات الإسرائيلية. المستعمرات، نقاط التفتيش ، المناطق العسكرية ، المناطق الأمنية ، و جدار الفصل العنصري، تمثل القوى الدافعة وراء حركة هذه الحدود. حدود الضفة الغربية هي حدود رسمت وحددت على الخرائط ولكن على أرض الواقع لا يمكن تمييزها.

تهدف هذه الدراسة لتسليط الضوء على تغير وتحول الحدود عبر الزمن ، والذي أدى الى تغير وضع الحدود على الأرض لتستجيب لأجندة وأهداف اسرائيلية خفية وراء حركة هذه الحدود.

دراسة أدبية وافية ومفصلة أجريت لفهم تاريخ ظاهرة تشكل الحدود، شملت دراسة بعض السياسات الاستعمارية التي اتخذت في ترسيم الحدود بين السكان الأصليين والقوة الاستعمارية في منطقتين حول العالم وهما: أفريقيا (جنوب وغرب أفريقيا)، وأمريكا الشمالية ، ثم دراسة شاملة لمنطقة الضفة الغربية والأحداث الاسرائيلية الجارية فيها، والتي ادت الى اعادة تشكيل حدودها. ركز البحث على منطقة للدراسة وهي عبارة عن منطقة 30\*30 كيلومتر مربع، ضمت قلقيلية وسلفيت كمدن فلسطينية رئيسية بالإضافة للعديد من القرى الفلسطينية . في هذه المنطقة تمزقت حدود الضفة الغربية بشكل واضح ومفرط نتيجة لما يعرف بإصبعي أرانيل وكدوميم . وباستخدام نظم المعلومات الجغرافية (GIS) والذي يعتبر الأداة الاساسية المستخدمة في التحليل، رسمت طبقات مختلفة تظهر تغير وتحول الحدود على أرض الواقع.

نتائج البحث عبارة عن سلسلة من الخرائط ، والاحصائيات التي توضح كيف ولماذا تحولت الحدود. وقد خلصت الدراسة الى أن الحدود تحولت وما زالت تتحول تبعاً لأهداف اقتصادية وهيمنة وأجندة عنصرية اسرائيلية.

## ***Dedication***

*To my father; the man who always taught me to reach to the highest levels of achievements,*

*To my mother, the woman who always supported me and is the reason behind my successes,*

*To all of those who accompanied me through the journey of thesis; my husband and children,*

*To my country Palestine,*

***I dedicate this work***

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*Thank God for the power, energy, and patience provided to me to work on this thesis;*

*Thank you mother for praying for me all the time.*

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***Thank you all.***

***Maisa Antari***

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## **Abbreviations**

<b>PLO</b>	Palestine Liberation Organization
<b>48 Land</b>	The 1948 occupied land
<b>ARIJ</b>	Applied Research Institute- Jerusalem
<b>MoLG</b>	Ministry of Local Government
<b>PASSIA</b>	Palestinian Academic Society for the study of International Affairs
<b>OCHA</b>	The United Nations Office for the Coordination of Humanitarian Affairs.
<b>PA</b>	Palestinian Authority
<b>PHG</b>	Palestinian Hydrology Group
<b>PSBC</b>	Palstinian Bureau of Statistics
<b>B'Tselem</b>	The Israeli Information Center for Human Rights in the Occupied Territories
<b>HWE</b>	House of Water and Environment
<b>MOP</b>	Ministry of Planning

# CHAPTER 1

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## Introduction

*"Palestine is a country with identified borders, while Israel is a country with no borders. The first borders were created to prelude the creation of the second; This was at the beginning of the twentieth century, in its end, Palestine borders shrunk to almost no where, while Israel became like a pandemic in the region" (Abu Sitta, 2004).*

*Ben Gurion, a Zionist leader and the main founder of Israel stated: "The Jewish state borders should be flexible and absolutely indeterminate; it should rely on historical moments, regional, and international circumstances".*

## **1.1 Research Problem and Questions**

The West Bank border was formed and appointed on maps as a result of the Armistice agreement signed between the Jordanian side and the Israeli side in April 1949, under the United Nations (UN) auspices. As international efforts to demarcate permanent borders through peace processes between Israel and Arabs failed, Israel was careful to make the borders instable, as Ben Gurion stated: *" There is no need to run after peace. The Armistice is enough for us. If we pursue peace, the Arabs will demand a price of us-borders or refugees or both. Let us wait a few years"* (PASSIA, 2014).

The West Bank was under the Jordanian jurisdiction from 1949 until 1967; later on, the borders started to shift as a result of the Israeli spatial transformations. Colonies, checkpoints, military areas, security zones, and the Apartheid Segregation Wall are all Israeli driving forces behind the border dynamic shifts.

The negotiation process between Palestinians and Israelis in 1993 resulted in Oslo Agreement, which was directed to return the 1967 borders through an interim period of five years to the Palestinian Authority (Abdul-Hadi, 1996); something has not been achieved yet. On the contrary, confiscation of Palestinian land, imposing Israeli domination, establishing new colonies, expansion of existing colonies, building "Israeli use only" roads, increasing checkpoints, increasing military areas, and the construction of the Apartheid Wall represent the most factors pouring into shredding the borders.

All of the mentioned above colonial actions, have been making the borders in a continuous dynamic change, forming new borders all the time. A systematic process in changing the border is adopted by the Israeli colonization; this process includes confiscating a site, change the site into a military zone, then into a small colony, this small colony is turned into a larger colony. After that large colonies are linked with surrounding colonies through bypass roads to form colonial blocks. Finally, the Apartheid Segregation Wall has included the entire colonial blocks, in which Israelis consider as part of Israel. This research is dealing with the process of border shifting through time.

This research investigates the chronological border shifting, reasons and factors behind this shifting, and how Israeli colonial actions have constantly drawn the new border. The research focuses on answering and illustrating two main questions which are:

- How has the West Bank border been chronologically shifted?
- What are the factors, reasons, and Israeli hidden agenda behind shifting of the West Bank border?

So, the main objective of the research is to answer about these two main questions.

## 1.2 Research Methodology

To achieve the main objective of the research, a detailed and deep literature review was conducted for relevant themes such as: literature about borders concepts , colonization and borders. In addition to cases around the world that have the largest impact in colonial history which are: North America and Africa (Southern and Western Africa), with concentration on colonial policies in drawing borders between indigenous people and colonists in the two regions, later on reviewing the Palestinian history and reshaping of borders across the different eras that led to the formation of the West Bank borders in 1949.

To investigate border shifting in the West Bank after 1967 and the factors behind it, the following approach is adopted in this research:

Description and spatial analysis of an area of 30\*30 Kilometers square, includes Qalqiliya and Salfit as main Palestinian cities. This area was identified for a thorough study, as the border was clearly and excessively shredded. The data collected for this study area were of two types:

1- **Statistical data**, which included the following:

- Demographic data about the Palestinian population and Israeli colonists in the study area
- Land use, which included data about agricultural land, built up areas, colonies, bypass roads, and the Apartheid Segregation Wall.
- Land tenure and classification by Israelis
- Confiscated land.

- Natural characteristics of the study area: topography and natural resources (natural reserves, water, agricultural land, petroleum, and natural gas)

2- **Spatial data**, which represents geographical information about physical objects and features in the study area; the data included:

- Aerial photos in different time periods
- Historical maps from the British Mandate period prior to 1948
- Maps from different research centers
- Documents representing land, colonies, bypass roads, the Apartheid Wall, Palestinian communities, borders, and natural resources.

### **Sources of data:**

A wide range of sources were used to collect data, since much of the data needed for the study were collected from official organizations including the Palestinians Bureau of Statistics (PCBS), the Ministry of Local Government (MoLG), the Ministry of State (The Information Center Concerning Affairs of Colonization and Annexation Wall), the Land Authority, Ministry of Planning (MOP), Palestinian Hydrology Group (PHG), and Department of Geography at Birzeit University, some data were collected through research centers including: the Applied Research Institute-Jerusalem (ARIJ), Palestinian Academic Society for the Study of International Affairs (PASSIA), the Israeli Information Center for Human Rights in the Occupied Territories (B'Tselem), and the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

Other needed data were collected from reports, books, articles, publications, documents, and websites.

### Analysis tools

Geographic Information System (GIS) was used to analyze the spatial data. Maps were grouped according to different chronological periods. On the other hand, statistical data were analyzed, grouped, and classified using tables (tabular data), in which they were directly linked to the spatial data.

The study area was chronologically analyzed by using (ArcMap 10.1). Different layers were created by digitizing and Geo-referencing the spatial features of the study area and these features included: road networks, colonies, borders, land classifications, Apartheid Segregation Wall. The maps showed the changes in the physical settings, growth and expansion of Israeli actions. All of the above maps clearly indicated how the border is shifting. Another series of maps were produced: maps of demographic situation, land use, land ownership, natural resources, and Israeli plans indicating the reasons behind border shifting. **Figure 1.1** shows the research methodology.

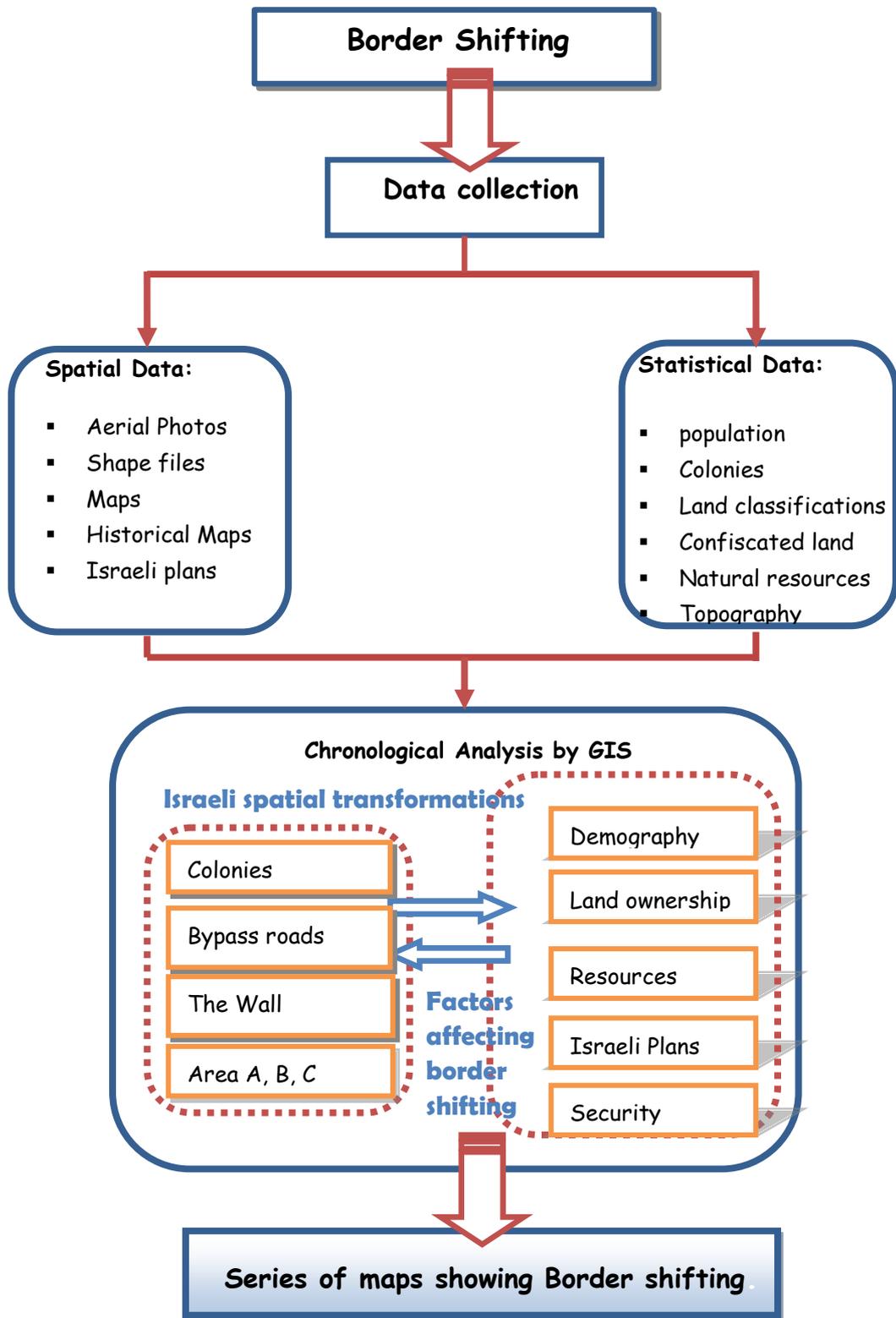


Figure 1.1: Research Methodology Chart

### 1.3 Importance of the research:

This research is valuable for researchers, planners, Palestinian negotiators, and all communities, as it raises awareness among people in local and international communities about the hidden agenda of Israeli colonization. As the study identifies the physical settings of change on the ground according to Israeli plans, it will help planners and decision makers to form policies and plans to reverse the effects of Israeli plans in changing the status quo of the border. It will also make planners and decision makers aware of the obstacles facing the development of the study area as a result of: the continuous border shifting, the increase in land confiscation, limited land of development, and yet provide solutions for the obstacles. The study will give the chance for other scholars to be aware of what is going on the ground regarding Israeli planning mechanism, particularly such studies from Palestinian point of view are rare within the scholar community. This research will be a source to encourage conducting other studies such as: studying the impact of border shifting on Palestinian people and urban growth.

### 1.4 Limitations and restrictions

Some limitations and restrictions confronted the researcher in the study, and affected the direction of the research. These limitations are summarized as follow:

- **Lack of data**, especially Aerial photos of the study area in different eras, in specific between the 1970s and the 1980s, which led to the reliance on historical data and different documents in analyzing and mapping the physical change of the study area in these eras.

- **Lack of updated data** for the years 2014-2015, such as number of settlers in the study area, data about the effect of the agriculture factor on the national income, the modification of the Apartheid Wall's route, and other data. Data were taken according to its latest update (last updates of data).
- **Scarcity of references** and published articles that addressed the borders issue, especially from Palestinian point of view.
- **Time restrictions.** This study can be more comprehensive if more time was provided to deeply study all border areas where the border is clearly shifting, but as a result of the academic limited time of the researcher, the focus was on a specific area of the West Bank borders as a pilot study.

## 1.5 Research structure

The research constitutes of five chapters presenting the information clearly and in sequence order for readers. The chapters are as follow:

- **Chapter one:** An introduction that is considered as a background to introduce the rest of the chapters. This chapter represents the main problem, objectives, limitations, and methodology of the research.
- **Chapter two:** A literature review including relevant themes starting with the definition of colonization and its policies in imposing the drawing and the control of borders between native people and colonists in some cases around the world including: North America and some cities in Africa, in addition to deeply discussing the colonization in Palestine and the reshaping of borders.
- **Chapter three:** Represents the study site, in which it shows comprehensive data and maps about the West Bank, the Israeli actions in the region after

1967, the colonies plans, bypass roads, Area C<sup>1</sup>, and the Apartheid Segregation Wall.

- **Chapter four:** Analysis, discussion and results. This chapter analyzes the collected data according to the research methodology; the focus on an area of 30\*30 Kilometers square, Israeli actions, colonies, bypass roads, Apartheid Segregation Wall, and areas A,B, and C. Influential factors on border shifting, demography, land use, land ownership, natural resources, Israeli plans, and security factors were analyzed using GIS software. The results were represented through maps, tables and charts.
- **Chapter five:** Conclusion and Recommendations. This chapter provides an overview of the research outputs according to the researcher analysis, and some recommendations that the researcher recommends through this research.

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<sup>1</sup> After Oslo II agreement in 1995, the West Bank was classified into Area A, B, and C, Area C is under Israeli control in security and civil aspects, while Area A subject to Palestinian Authority in civil and security aspects, and Area B is under Israeli control in security but under Palestinian Authority control in civil matters.

# **CHAPTER 2**

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## **Literature Review**

## 2.1 Colonization and its Implications

The domination, cultural imposition, and exploitation are three main characteristics associated with colonialism (Butt, 2013). Daniel Butt defined the three concepts in his article; Firstly, domination which means subjecting of one person by another, while Ronal Horvath (1972, p.47) defined domination as "the control by individuals or groups over a territory and/or a behavior of other individuals or groups". This type of domination ignores self-determination and imposes rules in political jurisdiction. Secondly, cultural imposition which means the seeking to impose the colonial's culture onto colonized people as colonizers believe in their culture's superiority. Thirdly, exploitation that took several meanings like: slave trading, looting of natural resources and cultural property, and establishing exploitive trade (Butt, 2013).

European colonization of North America had a prominent role in the colonial history. After nearly a century of failed attempts, Europeans could establish permanent settlements in North America at the beginning of the seventeenth century (Cox & Albala, 2009). Alfred (2009) refers to the colonization of North America as a theoretical framework to better understand complexities of the relationship between indigenous people and Europeans; these relationships evolved as both indigenous and Europeans had been in contact, and later on sustained in building new realities for both sides. He defines colonialism as the "development of policies and institutions by settler governments towards indigenous people". Colonial governments developed religious and secular justifications for their presence in North America based on the "Terra Nullis" theory which means the "empty land"; colonization governments claimed that North America was not inhabited by humans before the advent of Europeans (Alfred, 2009).

Colonial governments policies had many effects on the indigenous people from social and economic aspects. Economically, for example; European powers in North America firstly focused on controlling and seizing indigenous lands to support its industries that relies on extracting resources to make profits, but later on they depended on globalized corporations in their industry. Colonial states usually aim to undermine the economic autonomy for first nations which was based on harvesting and fishing from rivers or seas; then colonial states became shareholders in the Commercial Fisheries founded by non-indigenous capitalists with efforts from the colonial state. This explains the political economy dependency aspect which colonial enterprises aim to achieve (Alfred, 2009). Socially, Hugh Brody is an anthropologist wrote about casual linkages between colonization aspects and social and cultural harms for first nations. He mentions in his evaluation that resource extraction activities and white settlements in indigenous homelands disrupted the traditional patterns of economic life and caused environmental effects, this in turn what caused the social suffering for first nations (Brody, 1981).

European colonization of Africa, which emerged in the late of nineteenth century is another example, which has the largest share of the European colonization history. Colonial projects have an important aspect in urban planning, as British and French colonial authorities adopted different spatial development policies in urban planning in Africa; British colonial authorities based on racial segregation, while French colonial authorities based on cultural and socioeconomic segregation. This means that even though these two colonial powers had different racial philosophies, they shared common objectives in cultural, political, social, and ideological aspects that were achieved through segregated spaces (Njoh, 2008).

The British colonial approach in urban planning was appeared in many African countries, such as South Africa, Tanzania, Nigeria. Racial mindset appeared when white people occupied the highest rungs and best areas, while black occupied the lowest. This was clear in the planning scheme of Mtwara Harbor town in Tanzania; an area in southeast Africa, it was developed in the colonization era (Njoh, 2008). So urban segregation was a model used by British colonial authorities in southern , east, and central Africa (Simon, 1988).

On the other hand, Njoh (2008) focused in his article on urban planning policies in Conakry, the capital of Guinea, to shed the light on cultural segregation policies the French colonial authorities adopted claiming the improve of cultural values and living standards of the city. These policies included many apartheid laws such as: restrictive regulations and building codes for certain areas, which in turn excluded the African from these areas.

The spatial organization of the segregated city is shown in the diagram that was drawn by the professor R.J Davies (**Figure 2.1**). This diagram represented a model of the colonial African city that was evolved to be officially recognized Apartheid city from 1950 onwards (Davies, 1981).

The segregated city included central business district (CBD) under white domination, separation of residential areas from industrial areas, racial segregated residential areas; areas for whites which divided according to socio-economic situation, others for coloureds<sup>1</sup>, and certain areas for blacks. Also, there were mixing areas included coloureds and Indians could live adjacent to white people, this was possible until 1950

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<sup>1</sup> Coloureds: are descended from the intermarriage of white settlers, African natives, and Asian slaves who were brought to Africa from the Dutch colonies of Asia in the eighteenth and nineteenth centuries.

when the Group Areas Act was issued, which had been applied in the Apartheid city (Simon, 1988).

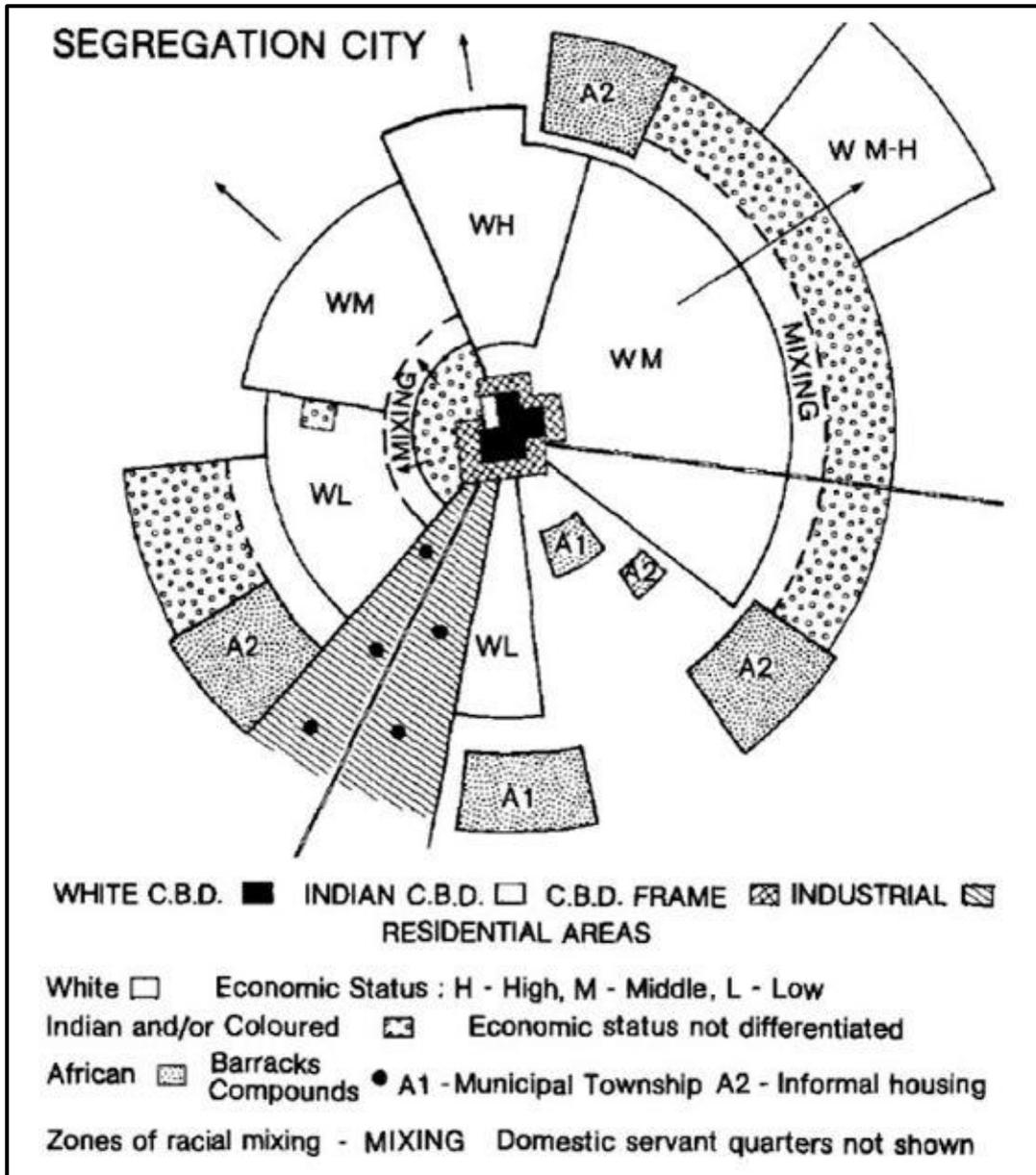


Figure 2.1: The diagram of segregated city (Davies, 1981)

The main concern of the apartheid era in South Africa was physically represented by separating blacks away from white people, keeping blacks close to their workplace to easily deal with them and keep them away when necessary (Mccusker & Amudzulit,

2007). In this, the idea of forming borders between indigenous and invaders have been put into practice.

The spatial organization of the apartheid South African city is shown in (Figure 2.2).

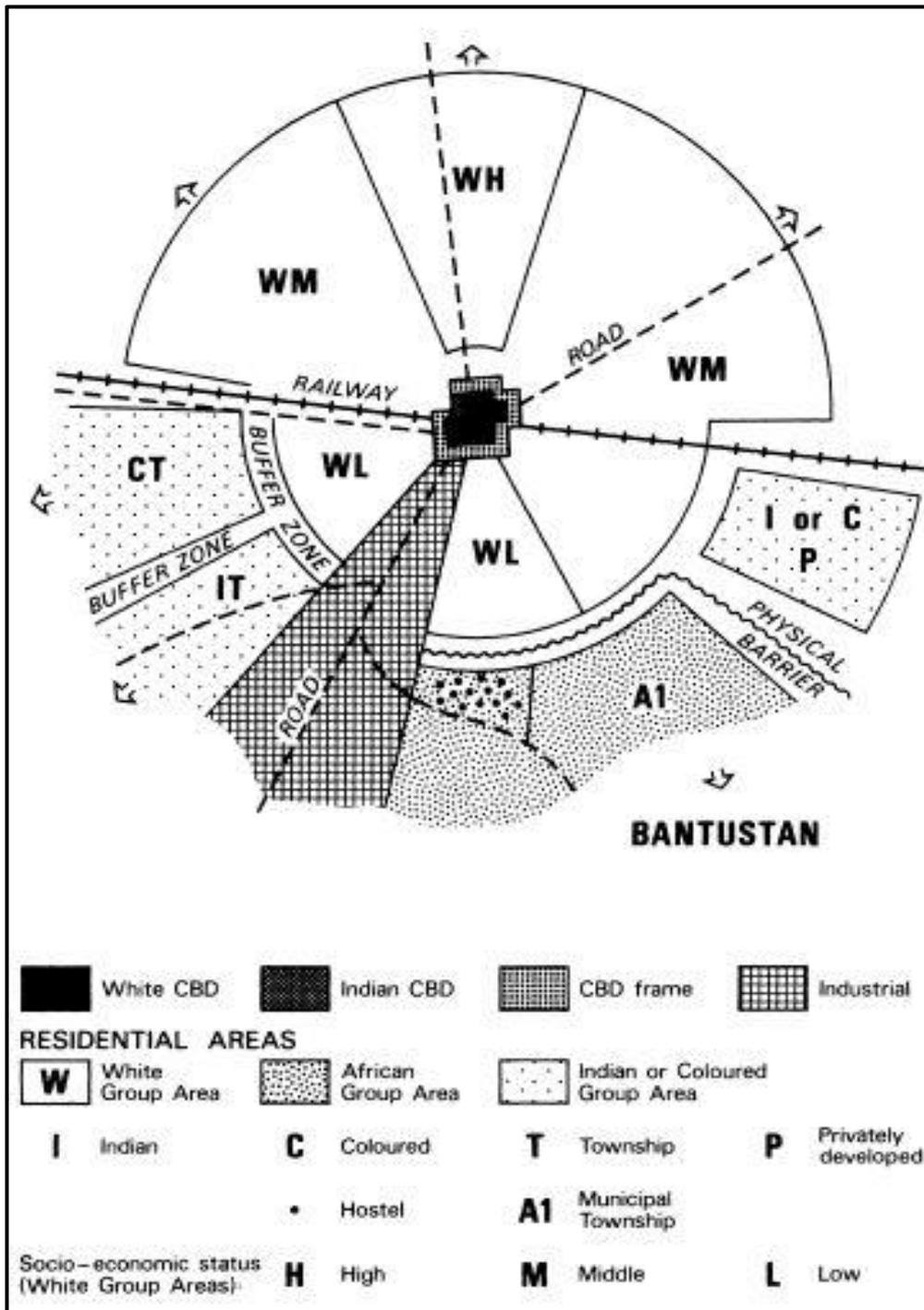


Figure 2.2 : Diagram of Apartheid city (Davies, 1981)

The urban structure of the apartheid city aimed to put blacks in certain areas called Bantustans, and townships<sup>1</sup> far as possible from the central business district (CBD) of the town, which was controlled by white. Then other residential areas designed for coloured or Indian people under the so-called Group Areas Act. The separation between racial groups was supported by natural buffer zones and artificial barriers such as roads and railways. This urban structure led to the required social formation for white domination (Davies, 1981; Simon, 1988). Overcrowded and poor townships located at the outskirts of the city, reserved for Africans (black), whose cheap labour was required for working in white areas, while white people lived near the recreational facilities and educational centers, and coloured (Asians) lived in townships with medium lifestyle and adjacent to the commercial areas (Njoh, 2008).

In Western Africa, health concerns of Europeans was the main factor in adopting the racial residential segregation policies, as it was seen that Africans are the vectors of deadly diseases like Malaria, so the separation of Europeans from the indigenous people was to separate them from diseases. While in the case of Nigeria, racial residential segregation was adopted in planning European towns and settlements that were at least 440 yards away from indigenous people using green belts. The 440 yards represents distance in which the anopheles mosquito couldn't cross (Alfred, 2009). Here, "a green belt", refers to the soft meaning of segregation and the idea of separation between locals and colonizers.

European colonial authorities also used topography to separate rulers from ruled people, through occupying higher locations as a sign of power and domination; this

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<sup>1</sup> Townships: this term usually refers to the (often underdeveloped) urban living areas that, from the late 19th century until the end of Apartheid, were reserved for non-whites (black Africans, Coloureds and Indians). Townships were usually built on the periphery of towns and cities.

segregation facilitated control and surveillance over colonized people (Njoh, 2008). Choosing higher lands for colonies, also represents another type of segregation and represents a different type of forming borders.

## **2.2 Zionist Colonization of Palestine**

The fierce attack to colonize Africa in the 1880's stimulated the Zionist's colonization of Palestine under the so-called "Jewish Nationalism", as some Jews believed they had the right to create a Jewish state and separate its existence in a territory of its own; this was emanated from an alleged religious beliefs. They had found that colonization would be the instrument of building this state, as other European nations did in expanding their empires into Asia and Africa. Jews firstly preferred to immigrate to the United States of America or to Argentina escaping from the "anti-Jewish" practices in some European societies, as a prelude to build a state in Palestine (Sayegh, 1965).

Sporadic efforts of the Zionist movement (1882-1897) failed to implant a Zionist settler-community in Palestine. Theodor Herzl, the founder of the Zionist movement, was leading the first Zionist Congress, that was held in Basle in August 1897, defined the ultimate objective of Zionism in creating a settler-state in Palestine. From its essential features, Zionist colonization of Palestine was not compatible to the existence of the indigenous people in the required territory; the first step to achieve the Zionist movement objective was to obtain as much of Palestine as possible (Sayegh, 1965; Pappé, 2006).

Prior to the first World War, over thirty years of action and immigration, the Zionist colonization of Palestine failed to make any progress and Jews were still under 8% of

the total population of Palestine, possessing no more than 2.5% of the land. The war produced an alliance between the British Imperialism and the Zionist colonization (Sayegh, 1965). From that, the British Government gave pledges to the Zionist movement through Balfour Declaration in November 2nd, 1917, to establish a national homeland for Jews in Palestine (Tyler, 2001). Palestine was ruled by the British Mandate after 400 years of ottoman rule (Pappe, 1992); the thirty years of British colonization of Palestine (1917,1947), opened the doors of Palestine to Zionist colonizers, whose size grew 12 times more than what it was in 1917 (Sayegh, 1965).

The British Mandate facilitated Zionism colonization to loot the Arabs' lands under the control of military forces or through the purchase of land from some feudal Lebanese and Syrian families (غازي، 2003) or through real estate companies like 'Keren Kayemeth'<sup>1</sup> and 'Keren Hayesod'<sup>2</sup> institutions. Jews concentrated on the coastal plain and valleys. Many of the land was considered either state or waste land, and were possessed by the Jews either through leasing or working in them (Tyler, 2001). The Zionist movement controlled the land through military forces, when it failed to possess land through diplomacy. The Hagana refers to the paramilitary Jewish Organization established in 1920 to protect Jewish colonies; later on it became the military arm of the Jewish Agency which was considered as the Zionist governing body in Palestine. It also contributed to the implementation of the Zionist colonization plans, and to controlling over Palestine as a whole, in addition to its ethnic cleansing of the indigenous people (Pappe,2006).

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<sup>1</sup>'Keren Kayemeth': is a United Israel Appeal -The Foundation Fund- , which means the central fundraising organization, was founded in 1920 to support the Zionist movement and then has become registered corporation of the Jewish state -Israel- , it operates with 45 countries around the world.

<sup>2</sup>'Keren Hayesod (KKL): means the Jewish National Fund JNF, was established in 1901 to buy land in Palestine for Jewish settlement. It is a non- profit organization, it is a quasi- governmental. Also it has worked on developing land, and establishing dams, reservoirs, and parks.

The British government carried out a survey of the Palestinian land which was prepared in December 1945 and January 1946 (Tyler, 2001); also their idea of "village files" meant the mapping of villages (Pappe, 2006). The British Mandate paved the way of Zionists to expel Arabs from Palestine and to establish a Zionist settler- state in 1948 (Sayegh, 1965).

In February 1947, the Palestinian cause was entrusted to the United Nations, resulting in the issuance of the Partition Resolution 181, that divided Palestine into two states, one for Jews and one for Arabs, in which Jerusalem and its surrounding villages were classified as an international administered area (**Figure 2.3**). UN commission awarded 55.5% of the total area of Palestine to the Jews who looked at the resolution as an international recognition of the Jewish state (Khalidi 1997; Pappé 2006). Arabs rejected the unbalanced and unfair partition resolution as Jews whom most of them were newly immigrants constituted less than third of the population and only owned less than



*Figure 2.3: The United Nations Partition Plan of 1947 (Source: Palestine Remembered)*

7% of the land. On the other hand, Palestinians owned the vast bulk of the land and constituted more than two thirds of the population. Another issue is that the UN partition resolution appointed the best lands for the Jewish state, including the fertile

coastal plains from Jaffa to Haifa and the plains from Haifa to Baysan. While other Palestinian towns were included to the Arab state according to UN partition such as Qalqiliya, Tulkarem, Lud, Ramla, Majdal, Ber Al Sabi', and Gaza, which were isolated from their most fertile economic hinterlands. These hinterlands were included within the Jewish state. In addition, in the north, lands reaches Tiberias Lake and the Jordan River, which means the control of water resources in Palestine by the Jewish State (Khalidi, 1997); while in the south, the Negev was also included to the Jewish State. All of this, was not enough for them, as Ben Gurion who is a well known leader of the Zionist movement wrote to the senior officer in 1947 about the need of occupying as much of Palestine as possible, and that he hopes to have all of it (Pappe, 2006). This was the first time where Palestine was introduced to any type of borders that divides areas between indigenous and colonizers.

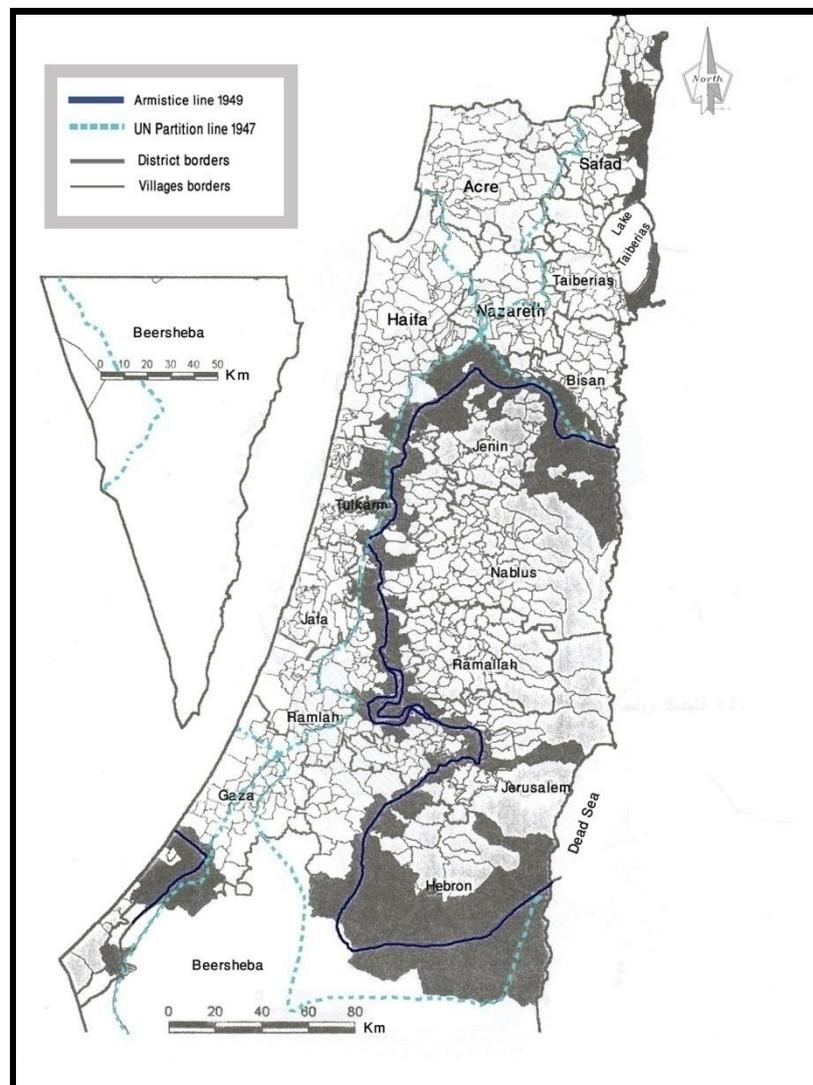
Israel exceeded its proportion of 55% and occupied 78% of Palestine's land in the war that was ignited in 1948 (غازي، 2003) which is called "Al-Nakbah"<sup>1</sup> for Palestinians. The Jewish Agency declared the establishment of Israel, the Jewish State, on 14 May 1948 immediately after the British left. (Pappe, 2006).

The war resulted in the Armistice Agreements in 1949 between Israel and Egypt, Syria, Lebanon, and Jordan, under the United Nations auspices (United Nations, 2001). Geographically and in the armistice agreements between Israel and Jordan, the area immediately located to the west of the Jordan River, later knows as the West Bank, was given to the Kingdom of Jordan, while Gaza Strip was subjected to the Egyptian administration, and other areas of Palestine were included in the newly

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<sup>1</sup> Al-Nakbah: In Arabic نكبة means: "disaster , catastrophe", it is the Palestinian term related to the events of 1948, when a large number of Palestinians were displaced (estimated 700,000 person) and hundreds of Palestinian villages were destroyed.

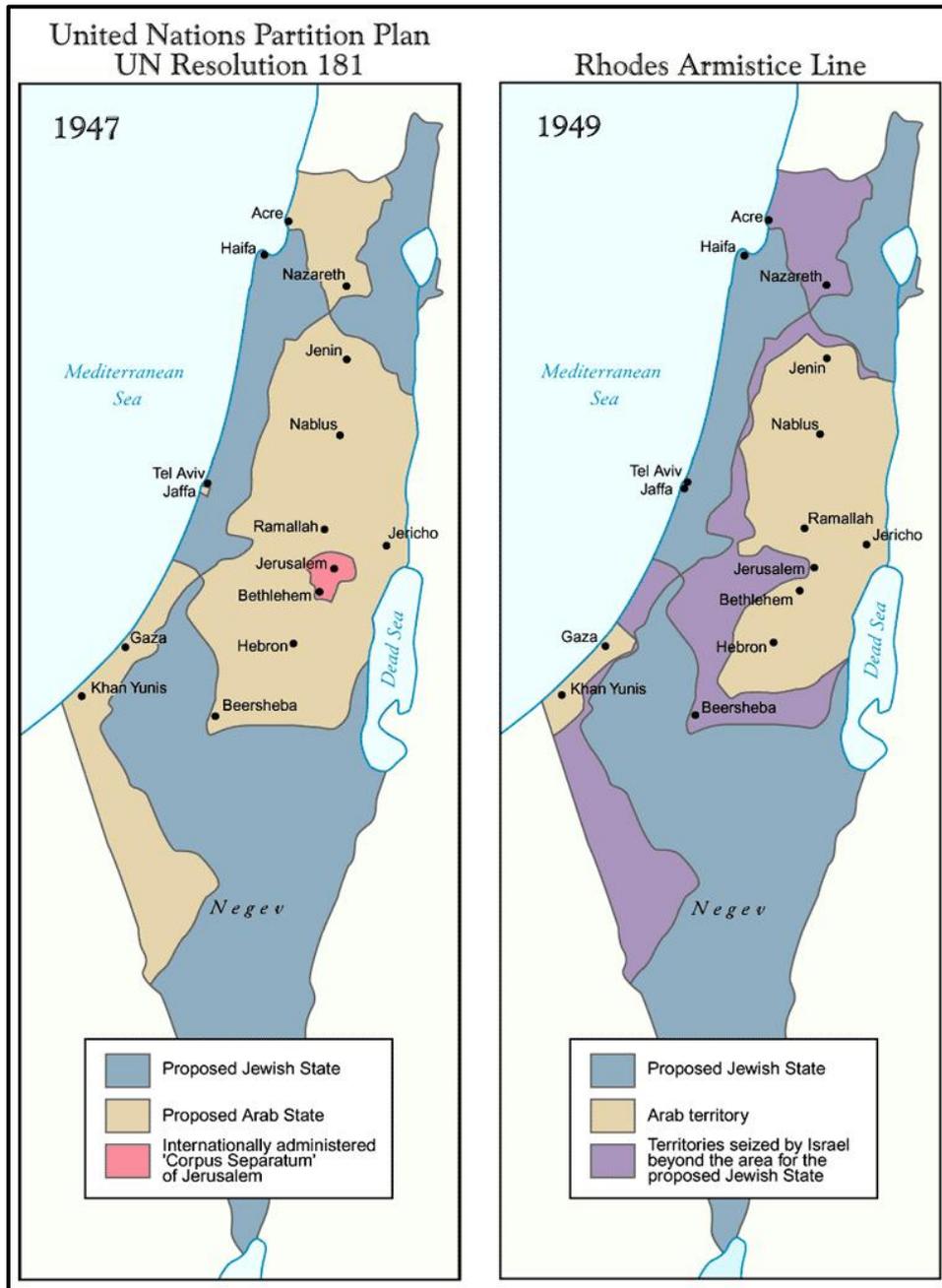
established Jewish State (Coon, 1992). The two parties disagreed on the demarcation of the Armistice Line on the ceasefire line in some areas, which led to two armistices lines, in which the areas in between were called "no man's land", neither under Israeli or Jordanian control, which was later on settled by Jews (United Nations, 2001). As a result of the Armistice Line, villages' houses in many cases were cut off from their fields or wells, while some houses remained inside the Armistice Line with fields outside or vice versa, in addition to leaving some villages without water. In total, 105 villages became fragmented (أبو ستة، 2004) (**Figure 2.4**).



**Figure 2.4:** Shaded Areas show fragmentation of Palestinian villages by Armistice line and UN partition, Source: (أبو ستة، 2004)

By 1949, a new type of border line was formed in Palestine, entitled the Armistice Line. "The purpose of the armistice was not to establish or recognize any territorial, custodial or other rights, claims, or interests of any party", it was only a step in order to restore peace in Palestine (United Nations, 2001) . Arabs insisted that these agreements do not eliminate the right of return of Palestinians who were displaced from their homes, and at the same time do not give Israel the right to exploit their lands during their absence. Israel did not comply to these rejections and considered the Armistice Line as an international recognized line and yet colonized and seized all Arabs lands, through the establishment of armed colonies distributed at strategic points on the line imposing its sovereignty over Arabs lands (أبو ستة، 2004) .

(**Figure 2.5**) represents a comparison between the border of Arab state according to the UN resolution 181 in 1947 and the Armistice line in 1949.



**Figure 2.5 :** UN Partition Plan and Armistice Line (PASSIA, [http://www.passia.org/palestine\\_facts/MAPS/1947-un-partition-plan-reso.html](http://www.passia.org/palestine_facts/MAPS/1947-un-partition-plan-reso.html))

On January 1950, Israel declared Jerusalem as its capital, controlling the western part of the city, in which Jordan moved to control East Jerusalem including the Old City (United Nations, 2001).

In the 1967 war, Israel occupied the West Bank and Gaza Strip, where East Jerusalem was immediately annexed to the 1948 Occupied Land. The United Nations issued the 242 resolution that demands the withdrawal of Israel from the recently occupied Arab lands, while Israel began to impose new borders in the area.

Discussions between Israel and Palestinians began for the first time in Madrid Peace Conference in 1991 (Coon, 1992). Israel and the Palestinian Liberation Organization (PLO) signed a Declaration of Principles in 1993, followed by the interim agreement (Oslo II) in 1995, that defined three zones in the West Bank excluding East Jerusalem, these zones are: areas A, B, and C <sup>1</sup> (Coon, 1999).

## **2.3 Borders**

### **2.3.1 Borders concepts**

According to Houtum (2005), there are natural and non-natural borders, in which the distinction between them has become classic. The classic distinction was connected at the beginning of the twentieth century with another classic distinction between "good" and "bad" borders. Generally, good borders were those that are made by nature, and were seen as natural as its physiographic variations include mountains, seas, and deserts, while bad borders were seen as borders that were made by human "artificial".

Colonialism, culture, and economics are complex factors, that determine the nature of the relation between people along these artificial borders (Matray, 2005). During the first half of the twentieth century, most of border studies were concentrated on the nature of borders and if it was good or bad from military terms perspectives. After the

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<sup>1</sup> Area A: subjected to Palestinian Authority jurisdiction, Area B: subjected to PA control for civil matters and to Israeli control in security matters, and Area C: completely under Israeli control in security and civil matters.

First and Second World Wars, border studies were conducted to overly emphasize on disputes and changes in boundaries in the times of military occupation and wars. And now the attention has changed from boundary studies which focused in the early 1960's on demarcation of boundaries and territorial lines, to the more complex studies that take into account the socio-spatial differences in space (Houtum, 2005).

In the nineteenth century, new borders were imposed on Africa and Asia by the European expansion, and at the end of the World Wars in the twentieth century, world leaders sought to separate various people around the globe by drawing artificial lines and boundaries. An example of that is the division of the Middle East after World War I, with arbitrary boundaries. Many natives considered these boundaries as arbitrary but after independence, they became legitimate (Matray, 2005).

The artificial arbitrary borders had an impact on the history of the humanity, as such borders have continued to form the modern world. The discord over artificial borders reflected fundamental conflicts about sovereignty, ethnicity, and religion as in Northern Ireland (Matray, 2005)

Scott Bollens (1998) wrote about contested or polarized cities, and the public policy and urban strategies impact on the magnitude of the conflict. Mostly, ethnic identity and nationalism were considered the main reasons of pressure for the territorial separation or autonomy; these cities can be battle fields between ethnic groups as each group declares the city as its own. The religious symbolism or economic centrality of a city would lead to an increase in the violent actions and interethnic tension. An example of these cities is Belfast (Northern Ireland), that represents the conflict between Irish and British nationalist and Catholic and Protestant religions; the city has been violent since 1969. The urban arena is severely segregated as the

intercommunity hostilities led to the building of 15 "peace lines" including: iron fences and steel palisade structures, that then shifted to permanent steel or brick walls, and then to environmental barriers or buffers. Johannesburg (South Africa) is another example of contested cities; its urban landscape was characterized through racially segregated zones, townships, informal settlements, and shantytowns that were created in response to the apartheid policy in South Africa.

Yiftachel (1992) explained how governments can be pushing a situation towards political stability or conflicts, through its policies to deal with urban environment which appears in the government policies and affecting land competition, power disparities, and socioeconomic gaps.

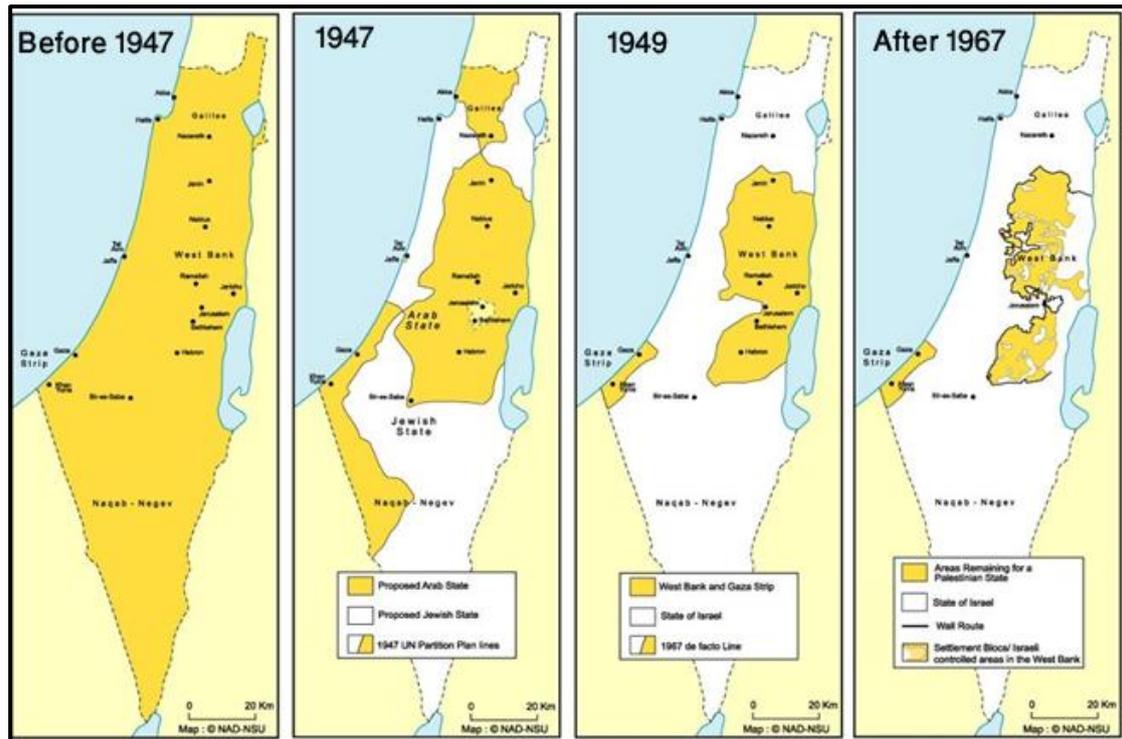
Urban territorial policies seek to enforce control and power (Sack, 1986) in which most of techniques used in territorial control aim to change the spatial distribution of ethnic groups and territorial boundaries amidst ethnic tension ( Coakley , 1992).

### **2.3.2 Reshaping of Palestine Borders**

Salman Abu Sitta (2004) wrote about the Palestine borders as being the most borders used to satisfy the colonization's ambitions in history. He described the demarcation of the borders like a knife cutting the cake in preparation for devour; when a part is eaten, the border is shifted to a new place in preparation for the next bite.

Palestine underwent and is still going through colonization (as previously mentioned) that led to reshaping its borders. **(Figure 2.6)** explains the changes on Palestine borders through the different consecutive historical periods; borders before 1947

which represent borders of historical Palestine, the borders given to Arab Palestinians according to the United Nations' resolution issued in 1947, the borders that was formed by drawing the Armistice Line in 1949, and the re-shaping and re-formation of the West Bank borders after 1967 due to the Israeli colonial policies, plans, and activities , that will be represented in chapter three.



**Figure 2.6:** Reshaping of Palestine borders

(Source: Available at <http://israelandpalestine.org/map-of-israel-and-palestine/>, 2005)

Eyal Wiesman (2007) talked in his book (Hollow Land) about the elastic geography of the occupied territories, and how the linear border splintered into many of temporary, deployable, and removable borders such as: barriers, blockades, closures, checkpoints, closed military areas, security zones, and killing zones that shrink and expand the land constantly. These Israeli actions stealthily creep along surrounding Palestinian villages.

## 2.4 Conclusion

This chapter provided a literature review of the European colonization policies in Northern America and west and South Africa. The European colonization policies are similar to the Israeli policies implemented in Palestine and even exceeded the colonial policies in North America and Africa. For instance, policies like: controlling over land, exploitation of resources and natural resources, fighting against indigenous people implemented in by the European colonizers are similar to the policies used by the Israeli colonization in Palestine by confiscating land, controlling over natural resources, and create a social, political, and economic impact on Palestinians. These policies occurred after 1948 when Israelis controlled over the land and expelled Palestinians from their homeland, and continued to take place in 1967 as Israelis controlled over more land and resources in the West Bank.

The Israeli apartheid policies in Palestine are also similar to those in South Africa; for instance, South Africans were isolated in separated areas, same as Palestinians who are fragmented today, and live in geographically separated areas by colonies, colonial blocks, bypass roads, and the Apartheid wall that only allows Palestinians to enter the 1948 Occupied territories through permits.

Colonization around the world had objectives to colonize the land and loot its resources, and eventually leave. In Palestine, the situation is different, as Israeli colonization came but never left.

Israeli colonization that occupied Palestine after the 1948 war, was against the existence of indigenous people and declared the establishment of the Jewish State that is called Israel. But the state that was created does not have clear borders yet. Any

country in the world is defined through its borders on the ground; if the Armistice line (1967 borders) is Israel's borders with the West Bank as known internationally, then why didn't Israel comply to this border? This border is not fixed and is shifting constantly due to continual land confiscating and building colonies beyond the armistice line. There are colonies in some areas and colonial blocks in other areas; outposts were founded and then expanded to colonies, and military checkpoints are moving from one place to another. The Apartheid Wall which means another annexation of Palestinian land and reshaping of the border, is not only ignoring the armistice line but also fragmenting it. The map of the West Bank is constantly changing according to political decisions.

In the negotiation processes between Palestinians and Israelis, that began in 1993 through Oslo Agreement and did not stop until now, the border theme has always been postponed and no decision was reached in this regard.

All of the mentioned above reasons are behind the constant shift and change in borders leading us to many questions of what are Israel's plans, agendas, aims? And whether they have a clear expansion strategy ? will be illustrated in this study.

# CHAPTER 3

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**West Bank : Reshaping the  
border by Israeli polices, plans  
and spatial transformations**

### 3.1 West Bank: Topography and population

The area of the West Bank including East Jerusalem is 5,628 Kilometers square, which forms 21.2% of Historical Palestine. The area is mostly constituted of rugged and a chain of mountains extending from the North to the South of the West Bank, but it is barren from the East side, while 27% of the area is considered arable. The highest elevation in the area is located at the top of Nabi Younis Mountain in the Hebron Governorate, in which it reaches up to 1,030 meters above the sea level; on the contrary, the lowest point is located at the shoreline of the Dead Sea, in which it reaches up to -408 meters under the sea level <sup>1</sup>, (**Figure 3.1**).



*Figure 3.1 : West Bank Topography (Source: Arij,2009)*

<sup>1</sup> Available at ([http://en.wikipedia.org/wiki/West\\_Bank](http://en.wikipedia.org/wiki/West_Bank)) [Accessed: 10 April 2015]

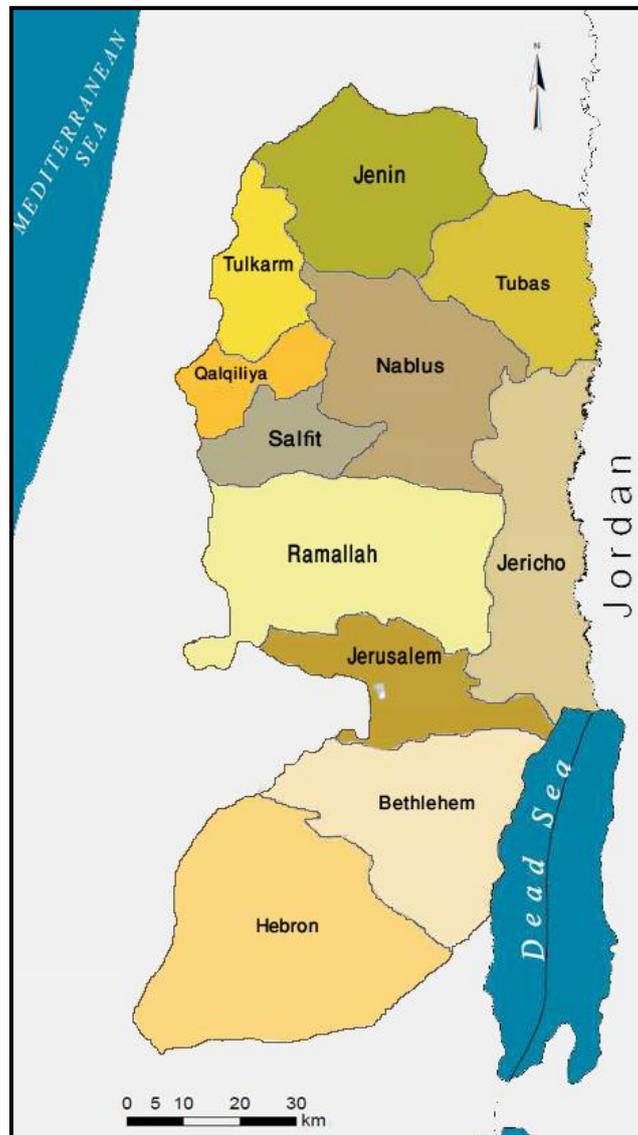
According to the Palestinian Central Bureau of Statistics (PCBS), The Palestinian population in Historic Palestine which is located between the Mediterranean Sea and the Jordan River was 5.8 Million by the end of 2012, in which 2.7 Million live in the West Bank. The population density was 475 capita/ Kilometers square; while 38.4% of the population were less than 15 years old, 3.3% of the population was over 65 years. The PCBS shows that 30% of Palestinian population (754,263) residing in the West Bank were refugees who were expelled from their villages, cities, or towns in 1948 (PCBS, 2013).

**Table 1.1** represents number of Palestinians living in the West Bank during different periods. It shows a decline in the percentage of population between 2006 and 2009 due to the decline of fertility rate from 5.6 births in 1997 to 4.1 births in 2007 (PCBS, 2010), and the increase of number of immigrants outside of Palestine due to the poor conditions after 2000 (PCBS, 2009).

*Table 1.1: Palestinian population in the West Bank (Source: PCBS,2010; PCBS,2009, 2014;U.S Census Bureau, 2014)*

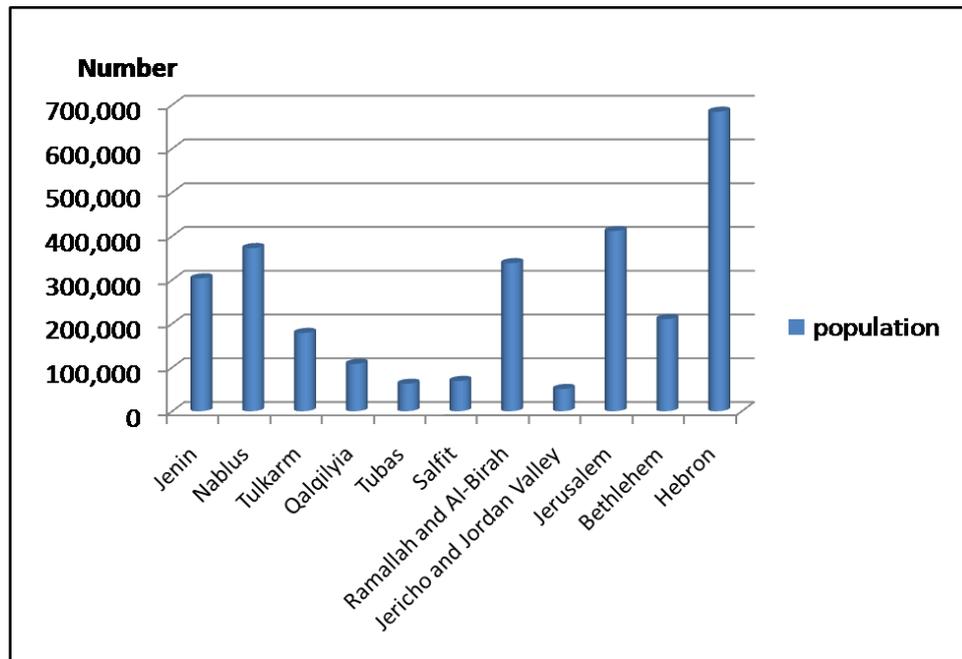
Year	Population (million) in West Bank
1970	0.69
1980	0.90
1990	1.25
2000	1.98
2004	2.20
2006	2.5
2008	2.41
2009	2.48
2010	2.52
2014	2.79

The West Bank was divided into 11 governorates under the Palestinian National Authority control, while it was divided into 7 districts before that by Israeli authorities. The arrangement of the governorates from North to South are as follow:  
*In the North:* Jenin, Nablus, Qalqilya, Salfit, and Tubas. *In the middle of the West Bank:* Ramallah and Al-Birah, Jerusalem, and Jericho and the Jordan Valley. *In the South:* Hebron and Bethlehem, **Figure 3.2** .



**Figure 3.2 :** West Bank Governorates (Source: OCHA, 2009)

**Figure 3.3** represents the number of population per governorate in the West Bank.



*Figure 3.3 : The number of Palestinian population in the West Bank in 2014( PCBS,2014)*

## 3.2 Policies and Plans affected the Reshaping of West Bank Border

### 3.2.1 Historical Background

According to Ottoman land code in 1858, there were many categories for land tenure such as: Mulk: that refers to the privately owned land, Miri: refers to cultivated lands owned by the state, but any person may guarantee ownership if he cultivates the land; if Miri lands were left uncultivated for more than three years then it's called Mahlul, Mewat: uncultivated or uninhabited lands, used for village expansion, but cultivators could use it with state permission, Matraka: land used for public purposes (roads...etc), Waqf: land intended for religious activities, and Musha': a land owned by a group of villagers in which each family is responsible of farming a part of the

land, and farming would happen alternately between families. Most lands were not registered during the Ottoman rule to avoid taxes (Gilbar, 1990).

In the British colonization period (1917-1947) most of the land was registered as Mawat, Meri, and Matruk. Matruk lands were sometimes registered under the name of Mandate officials who facilitated the transfer of land to Jews and Jewish agencies (Gilbar, 1990). The Jordanian Authorities (1948-1967) managed the state land that was assigned in the Ottoman and the British period according to the legislations issued in these two periods, not only that, but the Jordanians also issued a law that allows them to confiscate lands for public use (roads, infrastructure, and other uses) which was later on used by the Israeli Authorities (B'Tselem, 2002). Land tenure system law which was enacted by Ottomans and continued in the British and Jordanian periods became vulnerable to manipulation by Jews to expand their state's borders in Palestine.

RJ5 and S15 were two plans developed in 1942 by the British Mandate, where RJ5 was planned for Jerusalem (Jerusalem Regional Plan), and S15 was entitled (Samaria Plan). According to these plans, building in certain areas was restricted and subjected to special permissions, these plans restricted the rural development, but encouraged urbanization in urban centers where most Jews particularly in the coastal areas settled (Coon, 1992), (**Figure 3.4**). These plans used by Israel later on to limit the development and expansion of the Palestinian communities ( this will be shown in chapter 4).

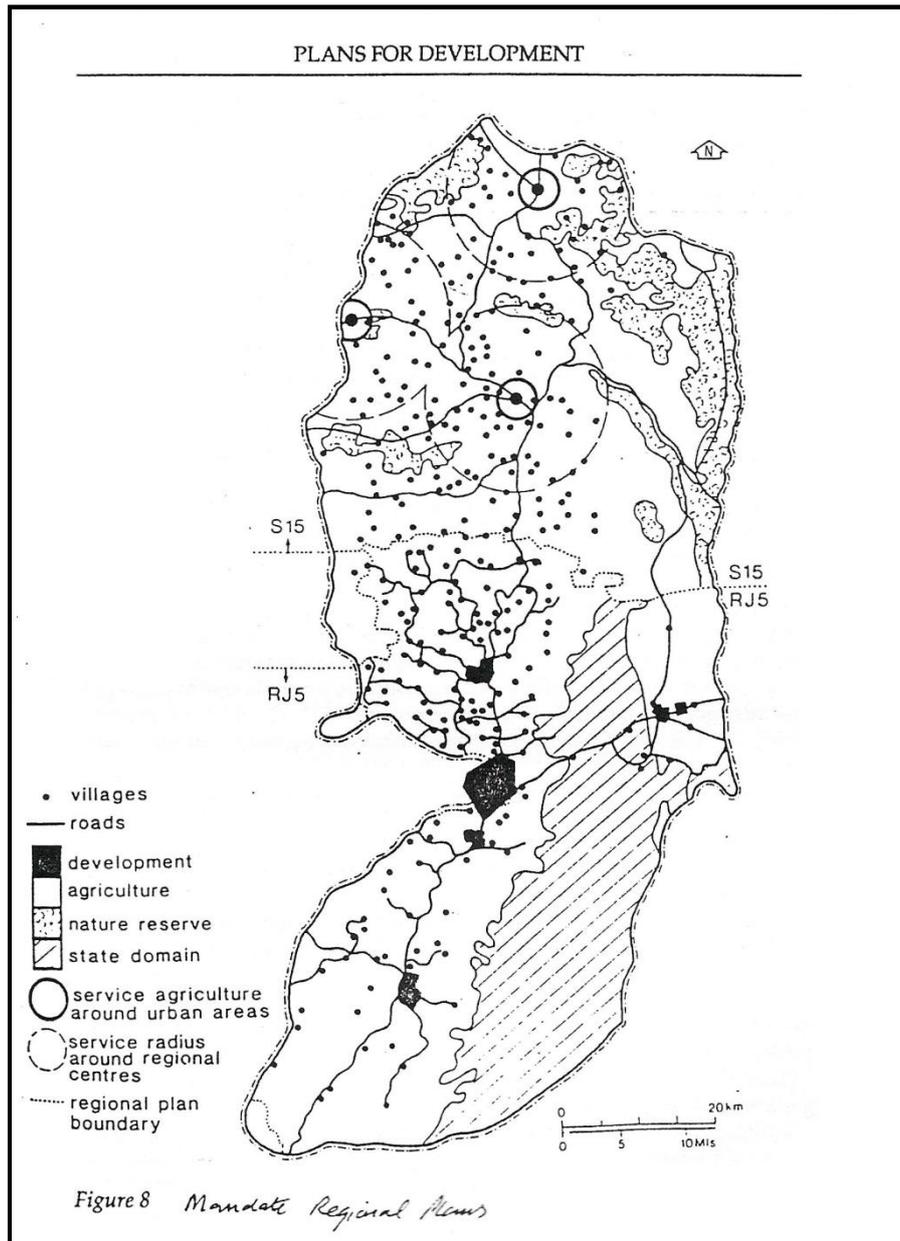


Figure 3.4 : British Mandate Regional Plans (Coon, 1992)

### 3.2.2 The Israeli Colonization Period 1967- till now

When the West Bank underwent the Israeli colonization after 1967, the Israeli Authorities started using different policies to confiscate the land under many excuses such as: military use and confiscating lands classified as a state land or for public use. In addition to that, they controlled absentee properties, in this case taking advantage

of the land legislations and policies issued during the Ottoman and Jordanian period; many privately owned land were confiscated according to the mentioned above excuses (B'Tselem, 2002). The confiscated land, later on, were used to construct colonies and supply it with special roads in order to impose facts on the ground which ultimately caused to a shift and formation of the border in the area.

- **Land confiscation for Military needs**

Israel controlled lands from 1967 to 1979 under the pretext of military purposes, arguing that the International Law allows the use of private land temporarily for imperative and urgent military purposes in the occupied territories. Later, Israel used the confiscated land to build colonies; during that time, Israel confiscated almost 47,000 Dunums \*. Also this method used to annex areas around colonies known as "special security zones", and in 2002 used for the establishment of Segregation Wall (B'Tselem, 2010). (Land that were classified as firing military zones will be clarified later).

- **Declaration of land as State Land**

Israel enacted many of land laws to circumvent the Ottoman Land Code (1858) and the British Land Ordinance in 1928 (settlement of Title), in order to give Israel the right of disposition Mawat and Miri lands and its claims over wide areas as state lands (COHRE, 2005)

913,000 dunums were registered as state lands in the period of 1979 to 1992, in addition to some 600,000 dunums considered as state land during the British and Jordanian periods; which means confiscation of some 1.5 million dunums or 26.7% of

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\* 1 donum = 1000 m<sup>2</sup>

the West Bank until 1992. In 1992, and when the Oslo Peace Process began along with the second Rabin government<sup>1</sup> coming to power, Israel suspended declarations of state land, which was resumed in 1997 when Benjamin Netanyahu from the Likud Party ran the office for the first time, Israel adopted a new procedure; declaration of land as survey land to determine its ownership, which was the first stage before declaring the land as state land. Data collected about the amount of land declared as state land between 2003-2009 is equal to 5,114 dunums ( B'Tselem, 2010). (Land that were classified as state land will be clarified later).

### **3.2.2 Israeli colonies plans after 1967**

Prime Minister Golda Meir stated in September 1972: "The frontier is where Jews live, not where there is a line on the map" (Aronson, 1987, P.14)

Israel started to establish colonies in the West Bank, and the construction phase of these colonies started between 1967 to 1992. The aim of establishing colonies was to draw Israel's borders and to strengthen the control on the West Bank; this period drew the current map of colonies in the West Bank. Several plans were developed during that phase (Shalhat, 2010).

#### **3.2.2.1 Allon Plan**

Allon Plan was the first attempt to formulate the future borders of Israel. The Plan (which was later revised), was submitted by one of the government's ministers in 1967 at the time when Israel carried out the 1967 War (Lein, 2002) . Despite the

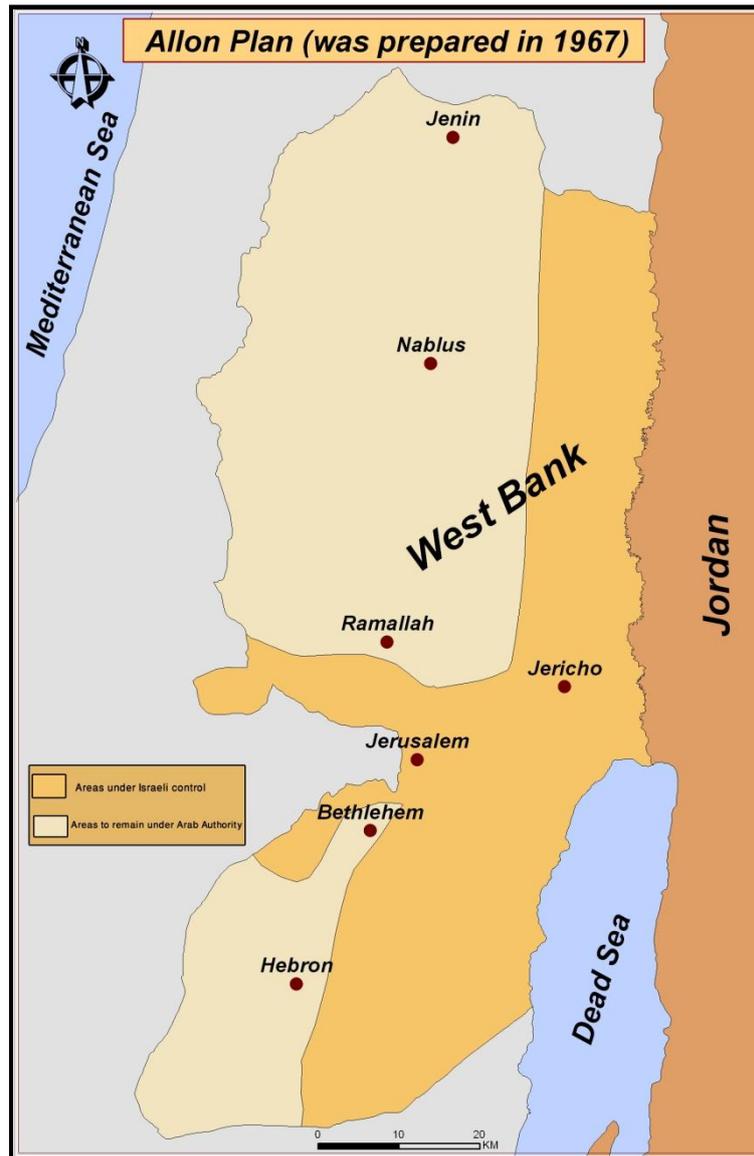
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<sup>1</sup> Rabin Government: was led by Yitzhak Rabin who was Israeli Minister, representative for the Labor Party. The first Rabin government was between 1974-1977, and the second was from 1992 until 1995, when he was assassinated.

preparation of this plan by the Labour Minister Yigal Allon, it was not formally adopted by the government. In 1969, the Israeli government orally accepted the plan without any written agreement, which expresses Israel's policy of colonization (COHRE, 2005).

Allon plan presented a proposal for the problematic borders between Israel and Jordan; the plan included the eastern part of the West Bank located between the Jordan River and eastern slopes of the West Bank. It also proposed getting a belt of land along the Jordan River; and was amounted to 12-15 Kilometers in the north of the West Bank from the east to the west, and was widened in the south to 18-25 Kilometers including Hebron (Lein 2002, COHRE 2005).

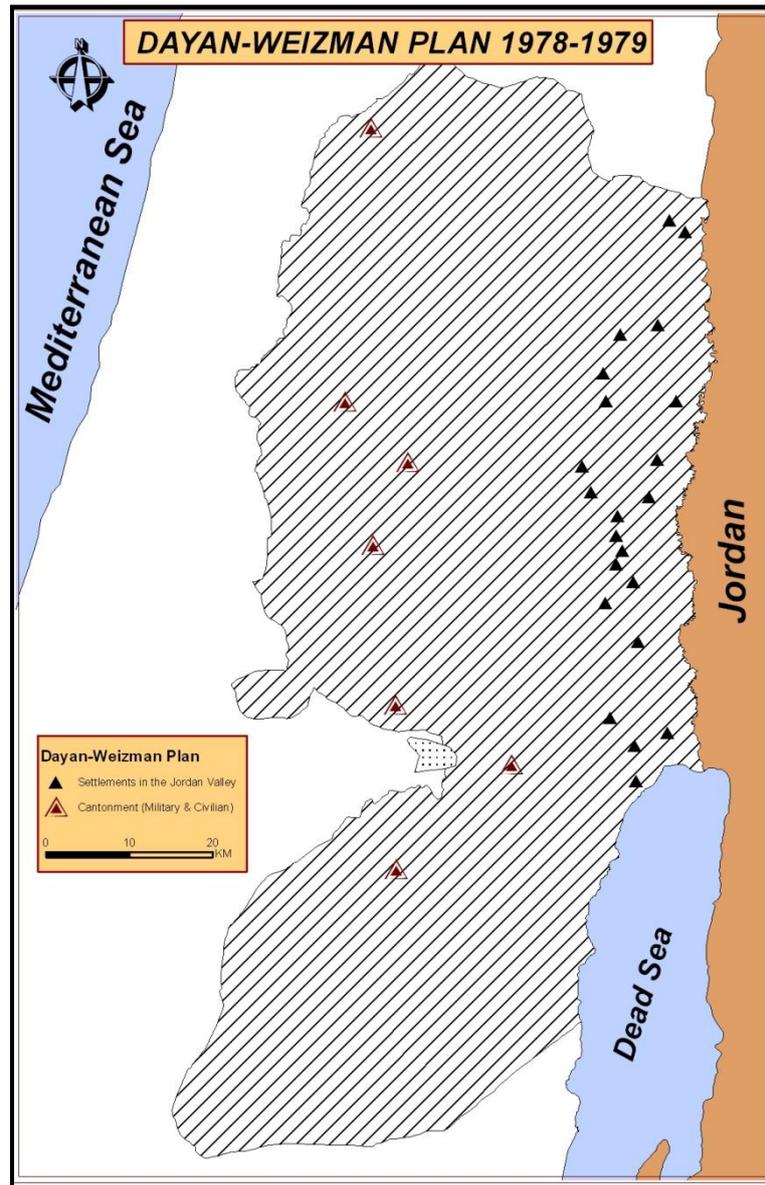
By Allon plan, about 40% of the West Bank would be annexed to Israel (CHORE, 2005). The boundaries of the plan were related to the demographic and topographic features in the region, which is characterized by low density of population and suitable lands for cultivation (Lein, 2002) (**Figure 3.5**).



*Figure 3.5: Allon Plan (Source: Benvenisti, 1988)*

### 3.2.2.2 The Dayan - Weizman Plan

The Israeli Defense Minister Moshe Dayan prepared a plan that was submitted in 1973, as he favored adopting an approach that facilitates the control over land. The plan proposed 10 points for building colonies and encouraged expansion in specific areas such as Jerusalem, northern of the West Bank, and southern of Gaza Strip (COHRE, 2005) (**Figure 3.6**).

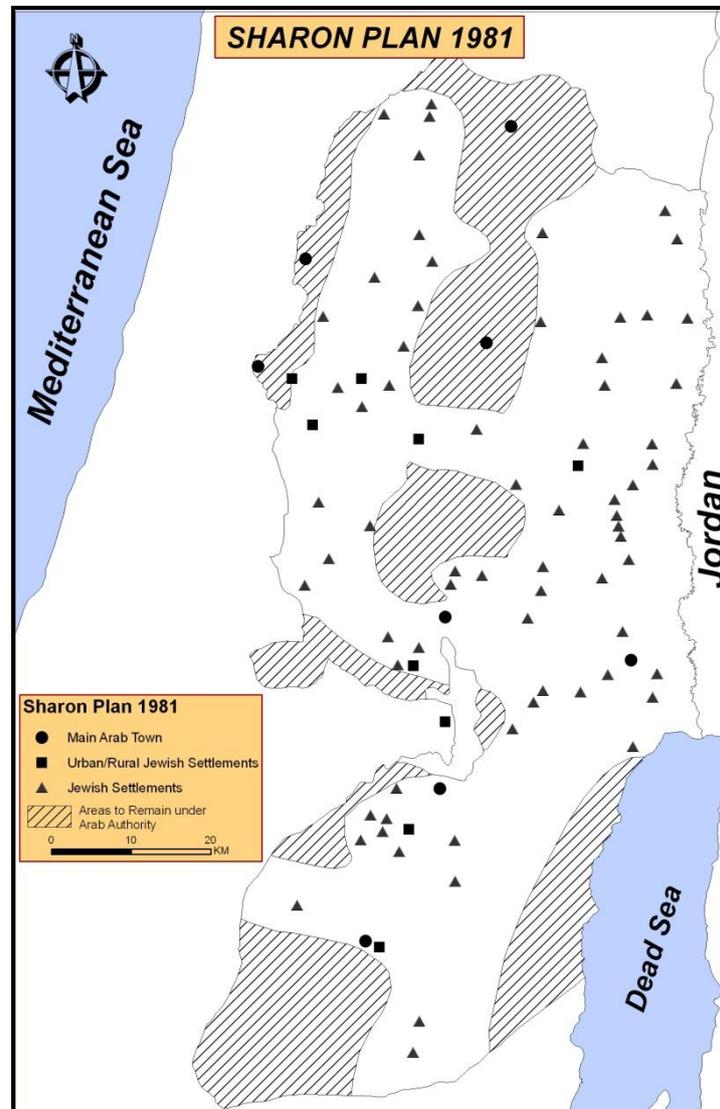


*Figure 3.6: Dayan - Weizman Plan (Source: Benvenisti, 1988)*

### 3.2.2.3 Sharon Plan

In 1977, the Likud government came into power. Ariel Sharon, who was the Minister of Agriculture, submitted a plan entitled "A vision of Israel at Century's End". Sharon proposed building colonies among Palestinian communities to impose further restrictions on Palestinian development and to destroy territorial contiguity. The plan suggested establishing 50 new colonies over a period of 15 years along establishing

highways and roads that would link these colonies with Jerusalem and the 1948 Occupied Land. In 1980, maps of this plan were published, identifying three quarters of the West Bank to be under Israeli control (COHRE, 2005) (**Figure 3.7**).

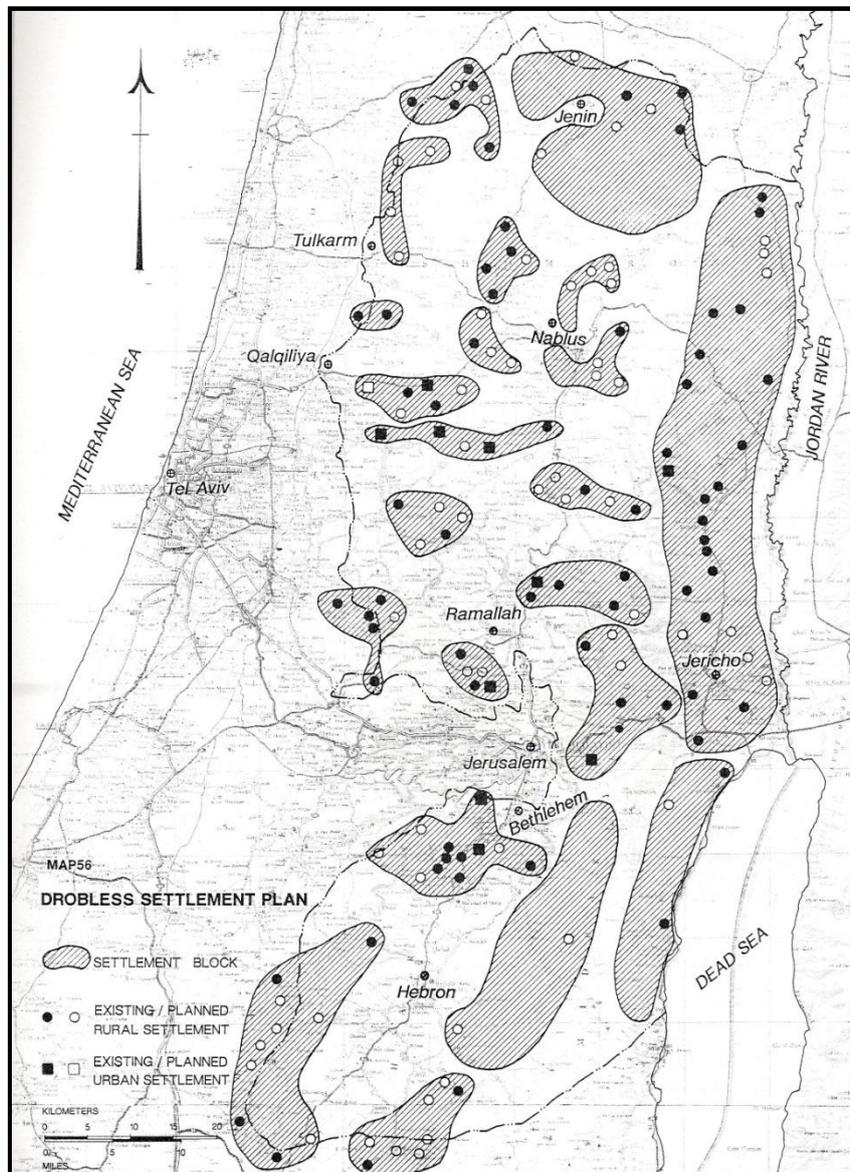


*Figure 3.7 : Sharon Plan (Source: Benvenisti, 1988)*

#### 3.2.2.4 Droblless Plan

The plan was prepared in 1978 by Matityahu Droblless, the head of the Settlement Department in the World Zionist Organization, and was revised in 1981. Droblless plan proposed establishing colonies between and around Palestinian communities,

with concentration on the mountain ridge. Its purpose was the fragmentation of the Palestinian communities (COHRE, 2005) (**Figure 3.8**).

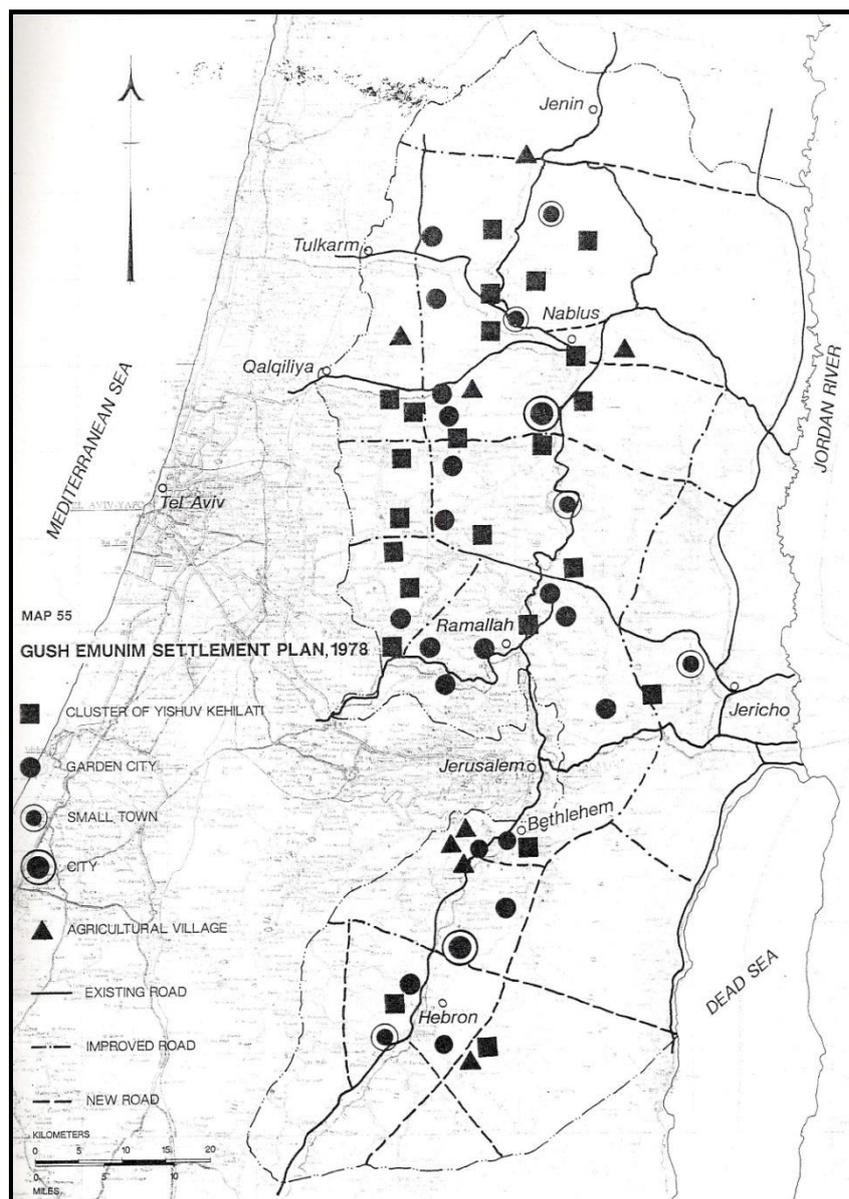


*Figure 3.8 : Drobless Plan (Source: Benvenisti, 1988)*

### 3.2.2.5 Gush Emunim Plan

Gush Emunim which means the Block of the Faithful, was founded in 1974 with relation to the right wing circles that always seek achieving what so-called "the Land

of Israel". This movement focused on settlement in the central mountain strip of the West Bank, which includes most of the Palestinian population. The movement did not get a permission from the government to establish colonies, and sometimes would conduct activities against the government's policy to force it to recognize these colonies (Lein, 2002) (**Figure 3.9**).



*Figure 3.9 : Gush Emunim Plan (Source: Benvenisti, 1988)*

### 3.2.2.6 The seven Stars Plan

Ariel Sharon was the architect of this plan that was developed in 1990, and the government approved it. The plan focused on strengthening the control on the border area (pre-1967 borders), and to concentrate Jewish colonies between Palestinian areas that have high density on both sides of the Armistice Line. The plan proposed establishing 7 colonies from northern Jerusalem along 80 Kilometers strip inside the 1948 Occupied Land (COHRE, 2005).

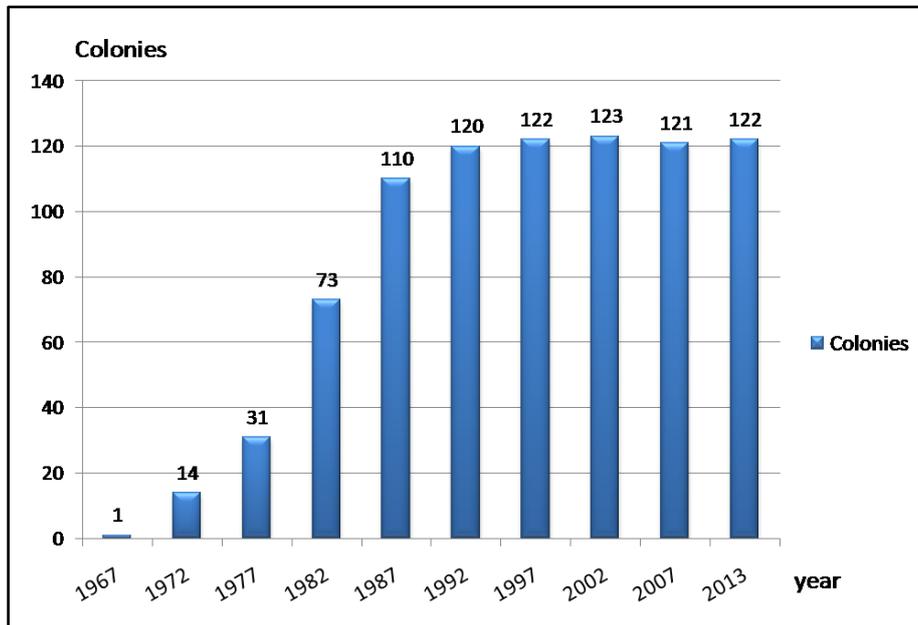
The plan impacted and forced the armistice line to go in line with colonies expansion. The Palestinian geographer Khalil Tufakji said that: "This plan is aimed to build seven large colonies extending from Latroun area in the south to Um Al Fahem in the north inside the 1948 Occupied land, in order to redraw the Armistice line" (Thompson, 1996). Modi'in Illit is one of these seven colonies, which later on was joined to colonies that were built in the West Bank as Kiryat Sefer and neighboring colonies (ARIJ, 1997), ( The map of this Plan hasn't been published).

## 3.2.3 Israeli spatial transformations

### 3.2.3.1 Colonies

Since 1967, Israeli Authorities adopted the policy of building colonies, covering and spreading all over the West Bank. The first colony in the West Bank was established late 1967 called "Kfar Etzion", and by the end of 1968 they established about 30 other colonies, inhabited by 5,000 settlers, most of them in the east part of the West Bank depending on Allon Plan which already mentioned (PASSIA, 2006). **Figure 3.10** presents the number of colonies in the West Bank from 1967 until 2013.

According to PCBS, there were 148 colonies in the West Bank by the end of 2013, in which 26 colonies are located in Jerusalem governorate.



*Figure 3.10 : Colonies in the West Bank ( excluding East Jerusalem),  
( Source: B'Tselem,2010; PCBS, 2014)*

The PCBS data shows that the number of Israeli colonists in the West Bank was 580,801 at the end of 2013 (PCBS, 2014), (**Figure 3.11, 3.12, 3.13**). The number of colonists increased by more than 40 times during the period of 1972 until 2013. 50% of the total colonists in the West Bank are located in Jerusalem governorate totaling 281,684 in which 206,705 live in East Jerusalem (J1)<sup>1</sup>.

<sup>1</sup> J1 : those parts of Jerusalem which were annexed by Israeli authorities in 1967 to be part of Israel.

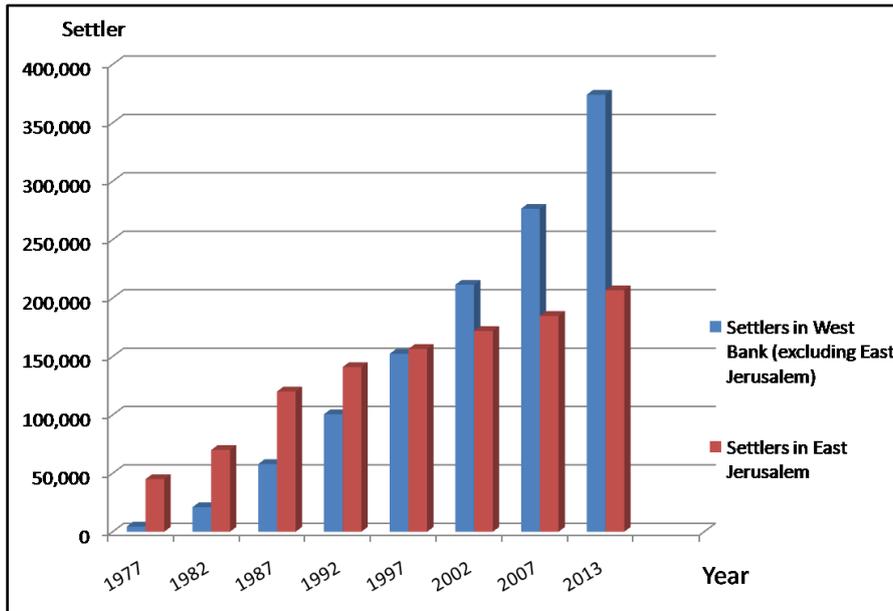


Figure 3.11 : Number of Colonists in West Bank and East Jerusalem)

(Source: B'Tselem, 2010; PCBS, 2014)

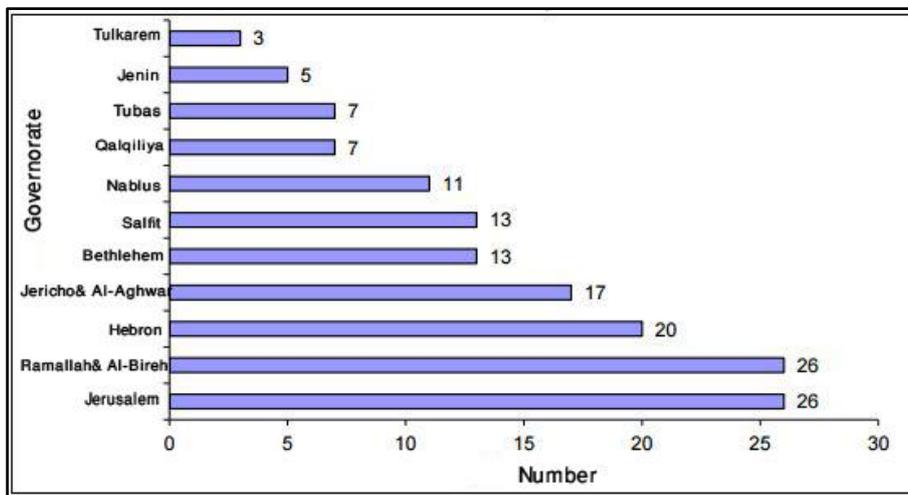
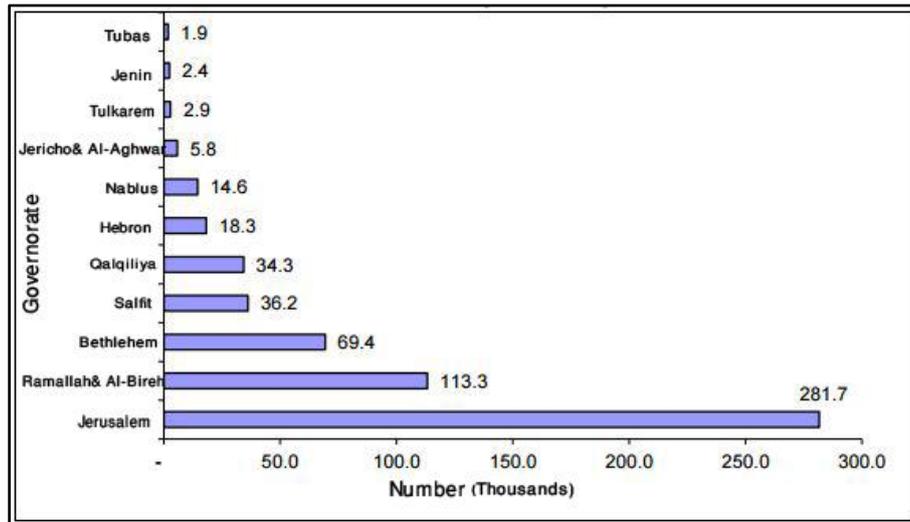


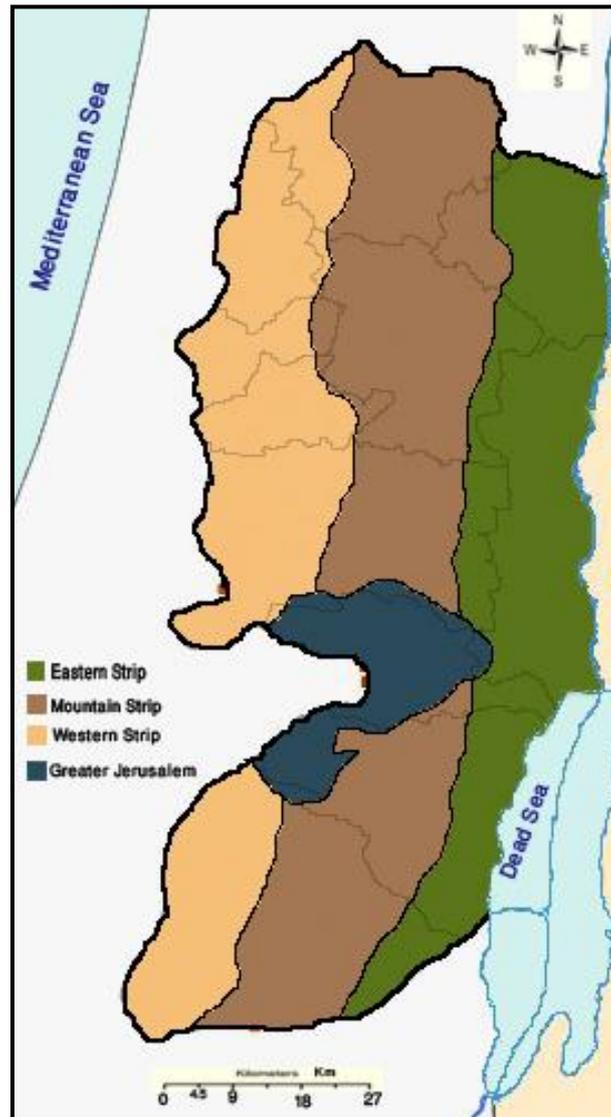
Figure 3.12 : Number of colonies in West Bank by governorate, (PCBS, 2014)



*Figure 3.13 : Number of colonists in Israeli colonies by governorate, (PCBS, 2014 )*

#### **A- Geographic distribution of Israeli colonies**

The colonies in the West Bank were distributed into three strips: Eastern strip, Mountain strip, and western strip extending from the North to the South, including Jerusalem district, the core of the West Bank, which known as Greater Jerusalem by Israelis ( B'Tselem, 2002) (**Figure 3.14**).



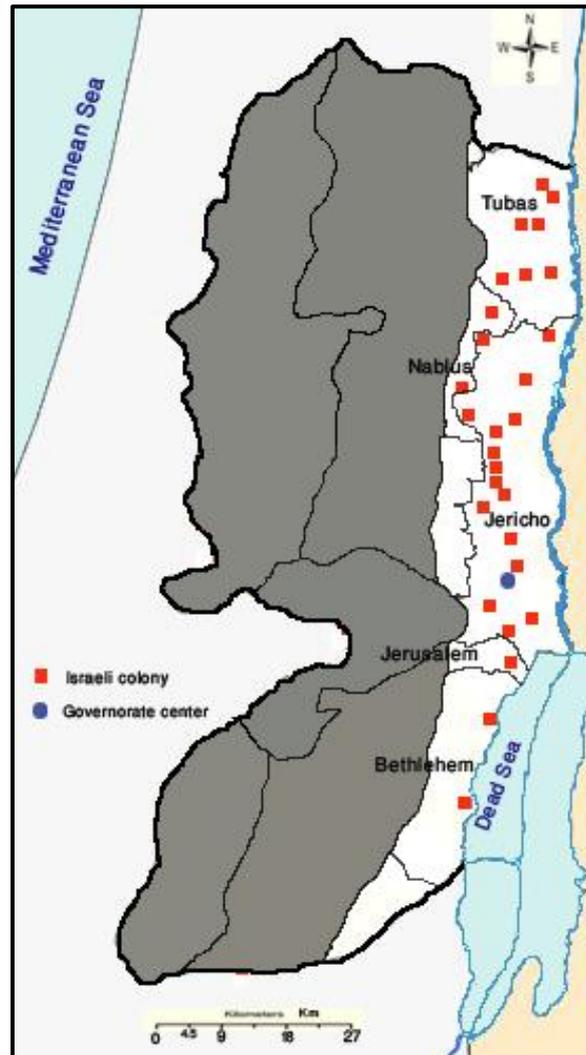
*Figure 3.14 : Geographic distribution of Israeli colonies in West Bank*

*(Source: B'Tselem, 2002, Edited)*

### **1- Eastern strip**

According to (PCBS, 2014) this strip includes 28 colonies. The establishment of colonies in this sector began in the early period of the age of the Israeli colonization of the West Bank after 1967, Pursuant to Allon Plan, 12 colonies were established from 1967-1974, 8 colonies in the period between 1975-1978, and the remaining eight colonies were established in the years from 1979-1986. The distribution of these

colonies are as follow, 7 colonies in Tubas governorate, 2 colonies in Nablus governorate, 16 colonies in Jericho governorate, one colony in Jerusalem governorate, and 2 colonies in Bethlehem . The number of colonists in this strip totaled 6,274, representing 1.1% of all colonists in the West Bank. All of them live in rural colonies mostly in kibbutz<sup>1</sup> and moshav<sup>2</sup> (PCBS, 2014) (**Figure 3.15**).



*Figure 3.15 : Distribution of colonies in Eastern Strip (Source: Done based on PCBS,2014)*

<sup>1</sup> Kibbutz: is a collective community (a combination of socialism and Zionism), that based on agriculture. The first kibbutz founded in 1909.

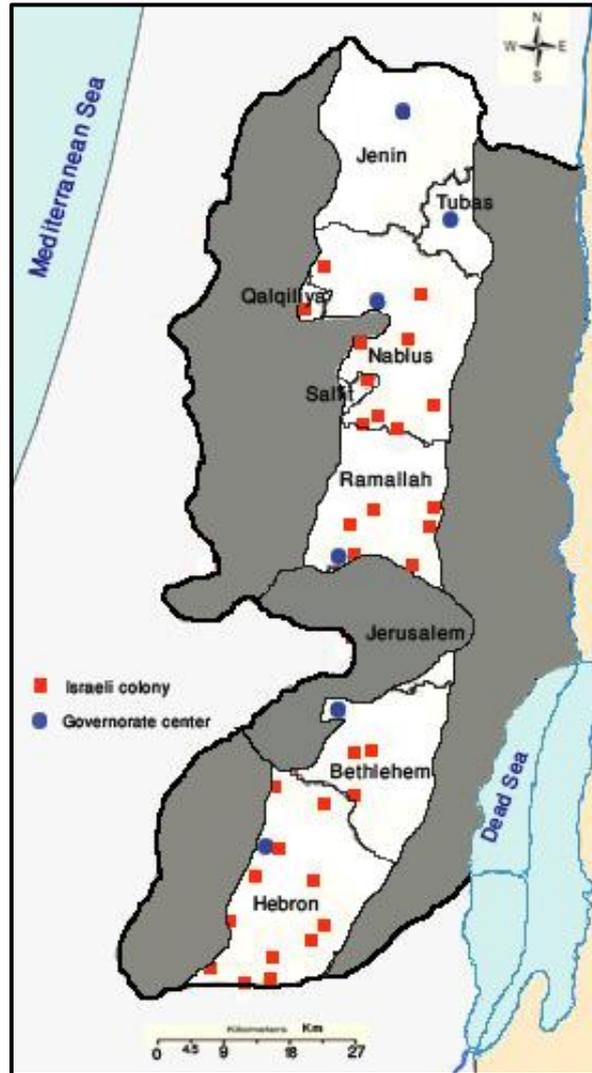
<sup>2</sup> Moshav: is a type of cooperative agricultural community, similar to kibbutz in community labor , but the farms in moshav tended to be owned individually.

## 2- Mountain strip

The mountain Strip is located along the central mountain ridge extending from the north to the south. The main objective of establishing colonies in this strip is to control the main artery of transportation (Route 60), that connects the main Palestinian cities in the West Bank together, through establishing colonies blocks preventing Palestinians from constructing nearby roads, development of urban communication on both sides, in addition to encircle Palestinian urban expansion and development of cities, especially in major cities situated along this strip like: Jenin, Nablus, Ramallah, and Hebron (B'tselem, 2011; PCBS, 2012).

According to (PCBS, 2014), the Mountain Strip includes 31 colonies distributed as follow: 8 colonies in Nablus governorate, one in Qalqiliya, one in Salfit, 6 in Ramallah and Al-Bireh governorate, 3 in Bethlehem, and 12 colonies in Hebron. The number of colonists in this strip is 52,017 colonists, which constitutes 8.9% of colonists in the West Bank.

The establishment of colonies in the strip began at a late period as only one colony was established between 1967 and 1974. While 10 colonies were established between 1975 and 1978, 22 colonies were established between 1979 and 1986, and the remaining two colonies were established between the years 1987 and 1990 (**Figure 3.16**).

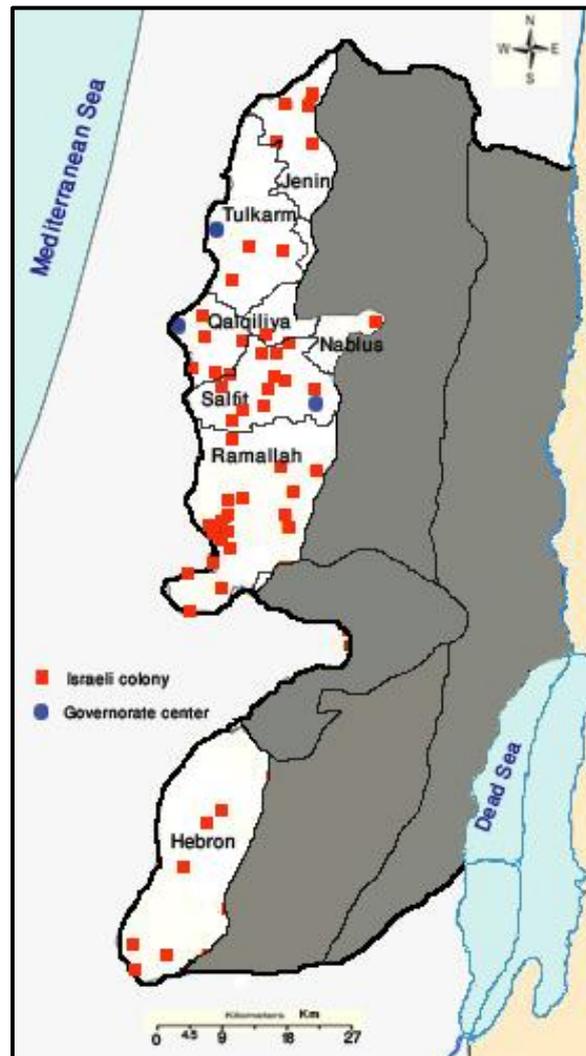


*Figure 3.16 : Distribution of colonies in Mountain Strip (Source: Done based on PCBS,2014)*

### 3- Western Strip

This strip extends from the north to the south, its width is ranging from 10 to 20 Kilometers. The proximity of the strip from the Armistice Line and the Israeli urban centers in the 1948 Occupied Land, increased the demand of Israeli settlers to live in this strip's colonies (B'Tselem, 2002). The Western Hill Strip includes 52 colonies, distributed as follow: 5 colonies in Jenin, 3 in Tulkarem, one in Nablus, 6 in Qalqiliya, 12 in Salfit, 19 in Ramallah and Al-Bireh, and 6 colonies in Hebron. The number of Israeli colonists living in this strip is 171,772 representing 29.6% of the

total number of colonists in the West Bank (PCBS,2014). While 22 colonies in this strip are communal rural colonies, 12 are urban colonies, 4 are moshav, 3 are collective moshav\*, 11 colonies come from an unknown type (PCBS, 2014), (**Figure 3.17**).



*Figure 3.17 : Distribution of colonies in Western Strip (Source: Done based on PCBS,2014)*

#### 4- Greater Jerusalem

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\* Collective moshav: is a type of cooperative village, whose organizational principles place it between the kibbutz and the moshav on the scale of cooperation.

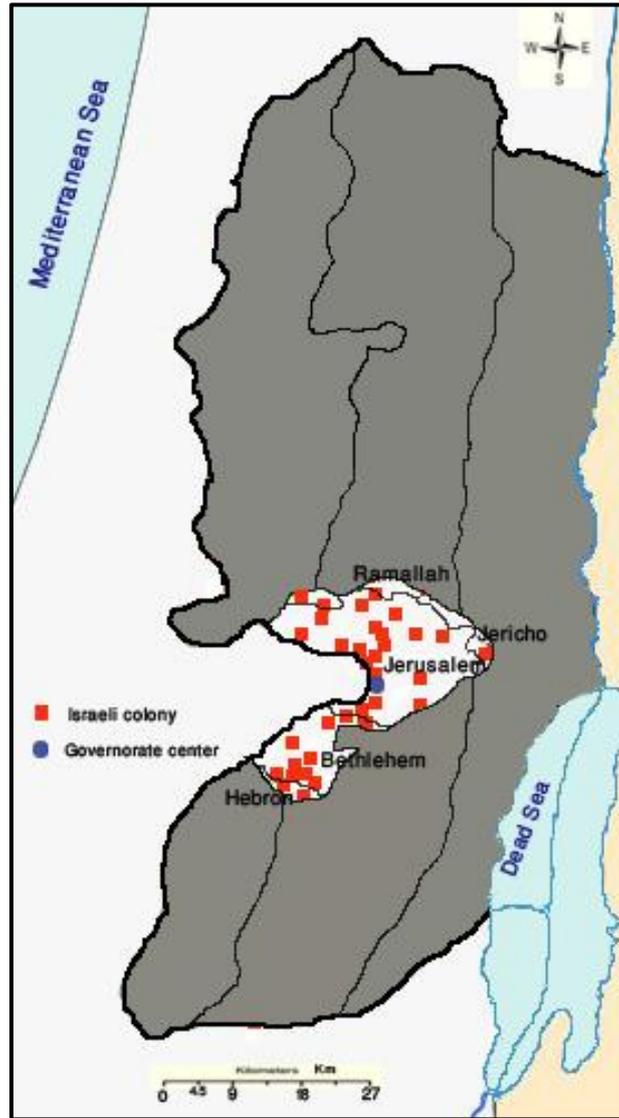
Greater Jerusalem includes, Jerusalem City and colonies that were established around it, then annexed into the Jerusalem Municipality boundaries. This sector includes 37 colonies according to (PCBS, 2014) and were distributed as follow: 25 colonies in Jerusalem governorate, in which 16 colonies are in East Jerusalem J1, one in Ramallah and Al-Bireh, one in Jericho and the Jordan Valley, 8 colonies in Bethlehem, and 2 colonies in Hebron.

There are 350,738 colonists living in this sector, representing 60.4% from the total colonists living in the West Bank.

The big colonization wave in Jerusalem began in the early periods of colonizing the West Bank. Colonies were built during the period of 1967 to 1970 in which 9 colonies were initially built, followed by 5 during the years of 1971 to 1974, followed by another 8 built between the years of 1975 and 1978. Building colonies didn't stop in the period of 1979 to 1998, on the contrary, 21 colonies were established in that period (PCBS, 2012).

While 28 colonies in this sector are urban, in which all colonies in East Jerusalem (J1) which amount 22 colonies are from this type. The rest are; 6 communal rural colonies, and 3 are Kibutz (PCBS, 2003).

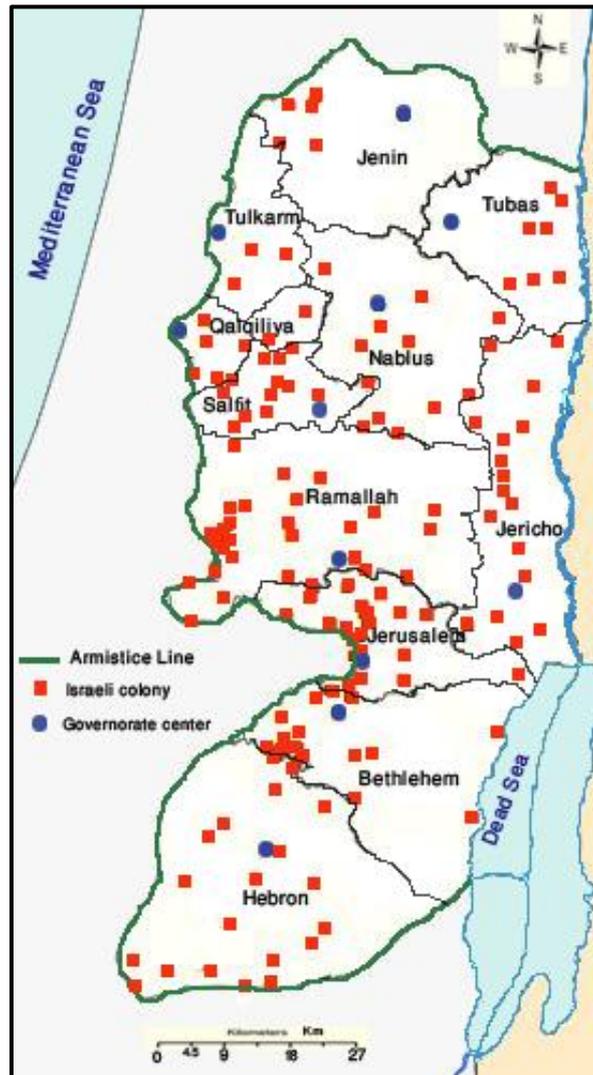
The main reason for building colonies in Jerusalem is the Judaization of the eastern part of the city. The colonization authority issued an order to annex East Jerusalem to Israel in 1967 to establish the Greater Jerusalem that extends from Ramallah to Hebron and from Jericho to Beit Shemesh in the 1948 Occupied Land (B'Tselem, 2002), (**Figure 3.18**).



*Figure 3.18 : Distribution of Colonies in Greater Jerusalem*

*(Source: Done based on PCBS, 2014)*

The **Figure 3.19** shows the distribution of the Israeli colonies in all strips and Greater Jerusalem in the West Bank .



*Figure 3.19 : Distribution of colonies in the all strips in the West Bank ( Source: Done based on PCBS, 2014)*

There are some common characteristics between colonies in each strip such as: topography, economic structure, demography of settlers, distance from the Armistice Line, and the distance from the Palestinian communities and the main roads. For instance, from a topography point of view, we find that the eastern sector is characterized by low attitudes and difficult terrains accompanied with high temperatures and lack of rainfall, and the central mountains' sector is characterized by high attitudes and relatively cold temperatures accompanied with density in rain falls,

and the western sector is characterized to have slopes that falls towards the western coast (B'Tselem, 2002).

From a demographic and economic structure point of view, settlers in the eastern strip economically depend on agriculture through Kibbutz and cooperative Moshav, however, the central mountains that is run by Gush Imunim religious groups lack a local economic base and work in the urban centers inside Israel, while the western strip settlers come from the middle class who are mostly secular, in addition Jews coming from a low social and economic class who generally work in urban areas like Tel Aviv and Jerusalem. From the distance from the Armistice line point of view, the western strip is the closest followed by the central mountains and lastly the eastern strip which is the furthest.

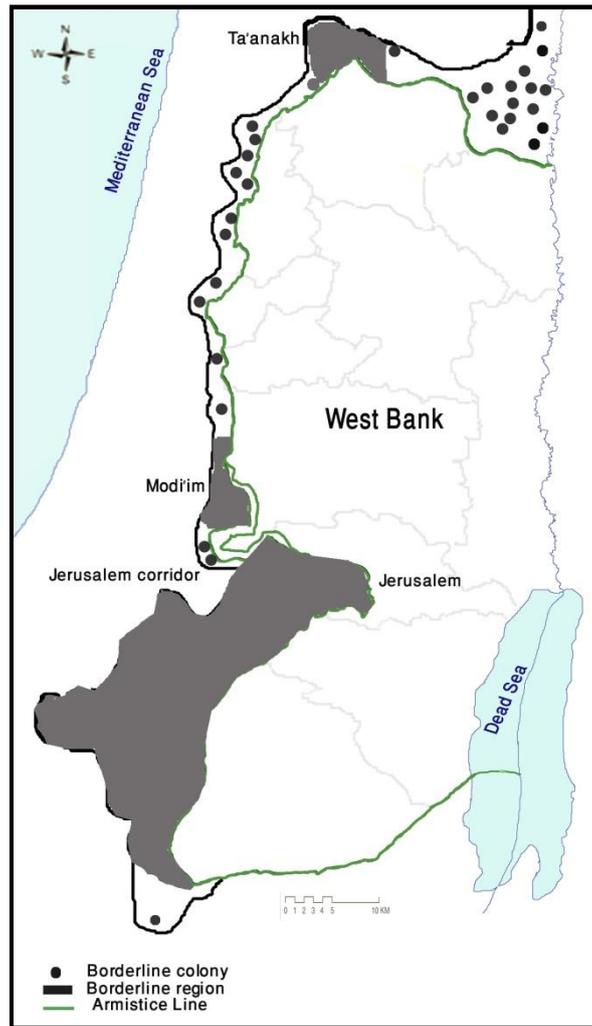
From the distance from the Palestinian communities point of view, colonies in the eastern strip are the furthest away from the Palestinian communities due to the low density of Palestinian communities in that strip; these colonies are concentrated along Road 90 that runs from the north to the south. The high Palestinian population density in the central mountain strip around road 60, caused a concentration of colonies along the road that is spread out between Palestinian communities, on the other hand, in the western strip, there is only middle sized Palestinian cities and vast farmland which caused a rapid growth of colonies in that area and also a rapid formation of colonial blocks stretching from the east to road 60 in the middle of the West Bank. The composition of the Greater Jerusalem was based on the idea of creating Jerusalem as a metropolis, this idea was embodied in a master plan was prepared in 1994 (B'Tselem, 2002). It is noticeable and according to this distribution that settlers' density was in the area of Jerusalem, then the western sector, the central mountains, and lastly in the eastern sector.

## **B- Border colonies**

The characteristics of border colonies in the early stages of the Israeli colonization of Palestine was on the shape of military forming strongholds for the army, later on agriculture colonies occupied by "Nahal" units appeared. Later on, these borders were transformed to be permanent colonies. After 1967, most border colonies were established in an uninhabited areas or areas with little population. Many colonies were built for agricultural or industrial purposes, later on these colonies became permanent. The border colonies also form a new and comprehensive type through the prominence urban features in the border regions as in Jerusalem environs and Ariel colony.

Intra-regional border colonies appeared as a new phenomenon that wasn't previously presented in order to surround Arab communities and impose control over new areas (Efrat, 1988) (**Figure 3.20**).

The Armistice Line was considered a weak defense line for Israelis due to four main reasons: its large length in relation to the area encircled by, its twisted demarcation in a difficult terrain, the existence of many valleys that facilitates the entry of infiltrators inside the line, high Palestinian population density on both sides of the line, and few and sparse density of Israeli colonists near the line compared to the Palestinian population. After 1967, Israeli colonization ignored the existence of this line and began establishing colonies along it (Efrat, 2006).



*Figure 3.20 : Israeli Border Colonies and Regions inside the Armistice*

*Line 1948 – 1966 (Efrat, 1988)*

In 1990, the "Axis of the Hills" plan was submitted by the Israeli Ministry of Housing to absorb Jewish immigrants, but the real aim behind the plan was to create new demographic, political, and economic realities. Israeli colonization has been aimed to intensify Israeli colonists along the Armistice Line and as a result Judaize the area. This will be clear when the demographic composition is reversed from 82% Palestinians and 18% Jews to 36% Palestinians and 64% Jews according to the plan.

The plan was designed to a narrow strip of land with a length of 80 Kilometers along the Armistice Line, starting from Al Latron area north of Jerusalem until Um Al Fahem in the north. There are 7 Arab Palestinian communities on the left side of the Armistice Line and these are: Um Al Fahem, Baqa Al Gharbeyya, Tayibe, Qulunswa, Al -Tira, Jaljulya, and Kfar Qasem. According to the plan, 4 Israeli centers will be established along the left side of the Line; Modi'in in the south of the strip and Rosh Ha'ayin, Ya'ir, and Qazir Harish in the north. These large centers will be connected with the sub-centers and rural settlements through Highway 6, that extends from Nazareth in the north to Bir-Al Sabi' in the south (Efrat, 2006) (Figure 3.21).

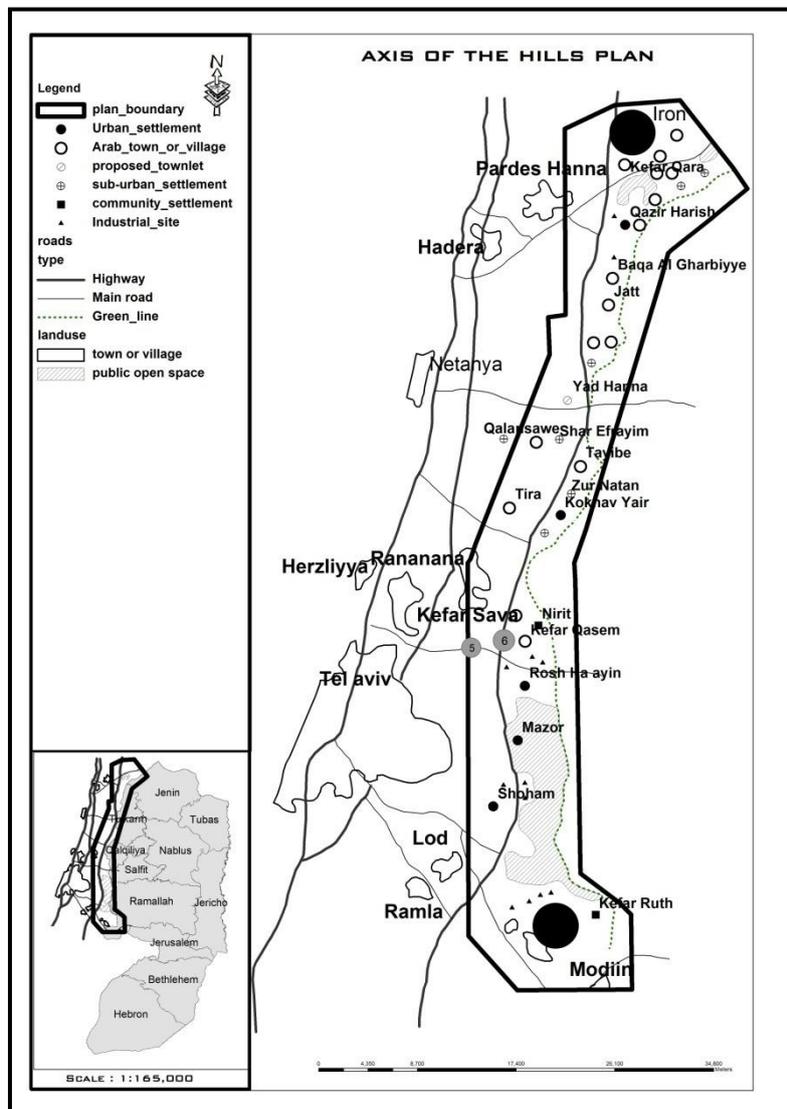


Figure 3.21 : The "Axis of the Hills " Plan (Efrat,2006)

This strip of land includes Palestinian towns with high density included 150,000 Arabs and 40,000 Jews. As a result, the Israeli decision was to settle 350,000 Jews in this area by the year 2005 (Efrat, 2006).

### 3.2.3.2 Bypass Roads

At the beginning of the colonies wave in the West Bank, Israeli colonization proceeded in setting up a new network of bypass roads connecting all colonies with each other and with the 1948 occupied Land (Israel), without passing through Palestinian communities. Even though the establishment of the bypass roads were to ease the movement between colonies, and make colonies in the West Bank more attractive for Israelis, it was a way to get around Palestinian communities, restrict their development and connection with surrounding villages through the establishment of borders and barriers between them (ARIJ, 2008) (Figure 3.22), (Figure 3.23).

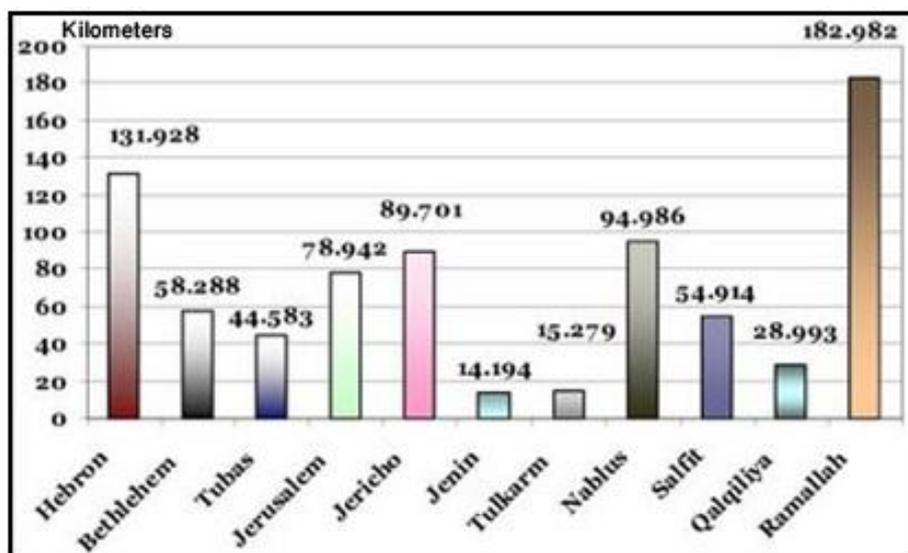
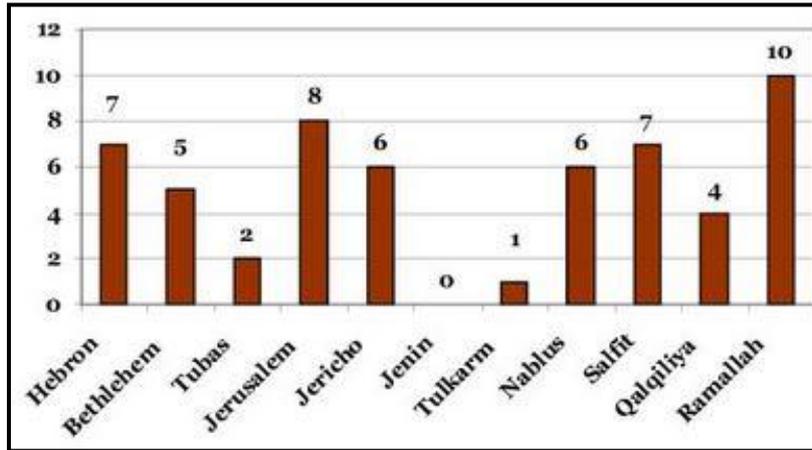


Figure 3.22 : The total length of the Israeli bypass roads in the West Bank (ARIJ, 2008)

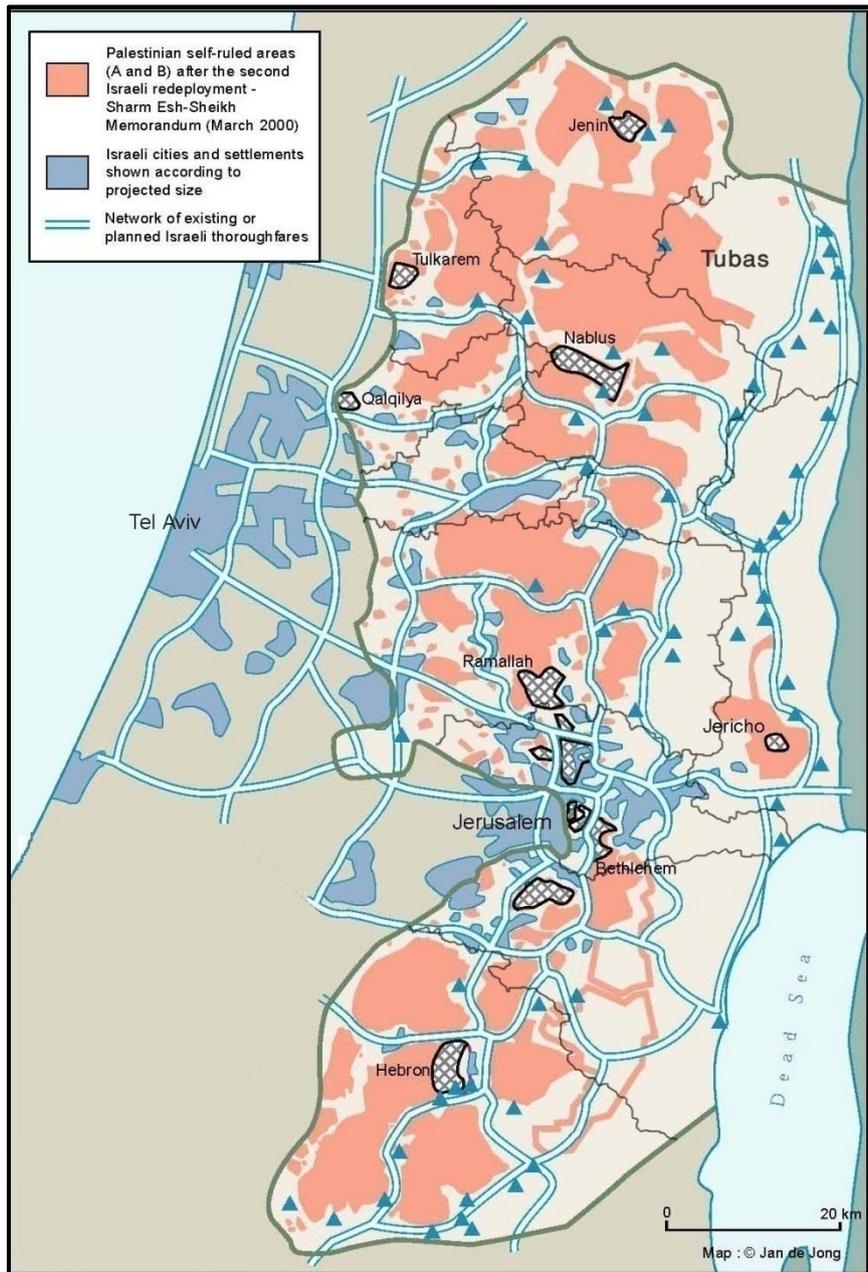


*Figure 3.23 : The total number of bypass roads in the West Bank by Governorate (ARIJ, 2008)*

The idea of the bypass roads system was emerged in the late 1970's and discussed in the "Settlement Master Plan" for the years 1983 to 1986. Under this plan, one of the main objectives of these bypass roads was to "bypass the Arab population centers". Israeli colonization restricted the movement of Palestinians on these roads through the creation of a network of checkpoints, concrete blocks, and iron gates (B'Tselem, 2004).

Although, the construction of the bypass roads started since 1970, it only emerged after signing the Oslo Agreement in 1993 in which it indicated the roads used by Israelis in the West Bank. Israeli colonization worked to intensify the establishment of the bypass roads, so in 1995 the construction of the Israeli bypass roads reached its peak (ARIJ, 2008).

According to (ARIJ, 2008) the total of Israeli bypass roads in the West Bank is 794.79 Kilometers, which led to the confiscation of more than 80 Kilometers square of the Palestinian territories in which most of the land is agricultural (**Figure 3.24**).

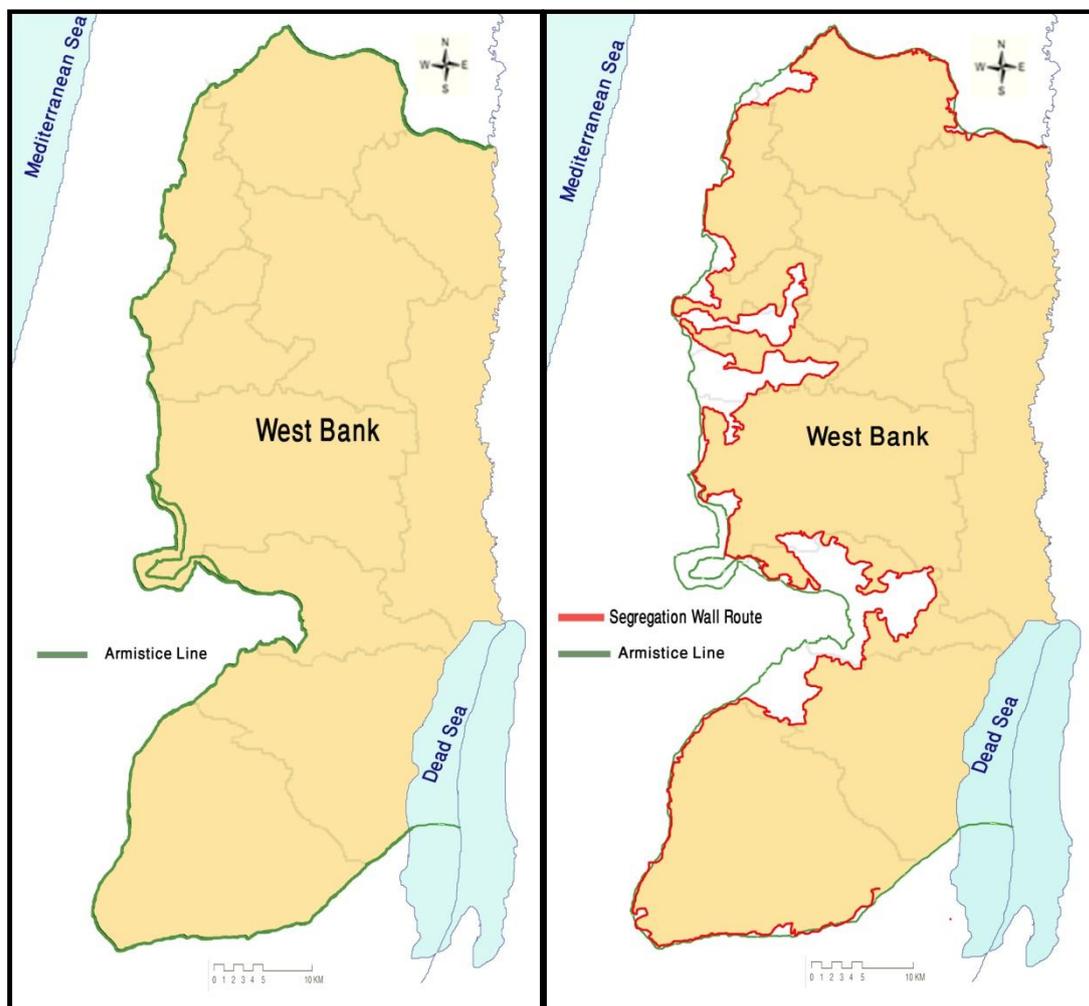


*Figure 3.24 : Israeli bypass roads network in the West Bank (Passia,2000)*

B'Tselem report showed that Israeli bypass roads were classified into three categories: completely prohibited roads, in which Palestinians are completely prevented from using, partially prohibited roads, in which Palestinians should have permits to use such roads, and restricted use roads, in which Palestinians have to abide to the Israeli traffic law imposed by Israeli police (B'Tselem, 2004).

### 3.2.3.3 Segregation Wall

In June 2002, Israeli authorities issued an order to establish a physical barrier working as a separator between Palestinians in the West Bank and Israelis inside the 1948 Occupied Land. The Segregation Wall extends from the north to the south along the western strip of the West Bank. As, few of its parts were built along the Armistice Line, other parts and in most locations exceeded the Armistice Line into the West Bank (OCHA, 2009), (**Figure 3.25**).



A- West Bank Border before Segregation Wall

B- West Bank Border after Segregation Wall

**Figure 3.25** : West Bank Border before and after Segregation Wall (Source: Done based on OCHA,2009)

The Segregation Wall includes parts that were completely built, while others are still under construction. The length of the Wall is 709 Kilometers, which is more than twice the length of the Armistice Line (the West Bank border), that is totaling 320 Kilometers. After the construction is completed, 85% of the wall will be within the West Bank, and only 15% of its length will be located on the Armistice Line (OCHA, 2009).

90% of the wall length consists of electronic fences and barbed wire fences, surrounded by paved roads for cars resulting in an exclusion area of a width ranging from 40 to 100 meters. 10% of the wall is concrete with 8 to 12 meters tall including military watchtowers (ARIJ, 2009).

After completing the construction of the wall, it will cut and isolate 670,921 Dunums, which represents 11.9% of the West Bank total area. Until 2012, 62.1% of the wall was completely built, 8% is under construction, while 29.9% is designed without any construction yet.

The construction of the Wall imposed restriction of movements on Palestinians living near its route; people should have permits to access their homes or agricultural lands through gates in the wall (B'Tselem, 2012), (**Figure 3.26**).

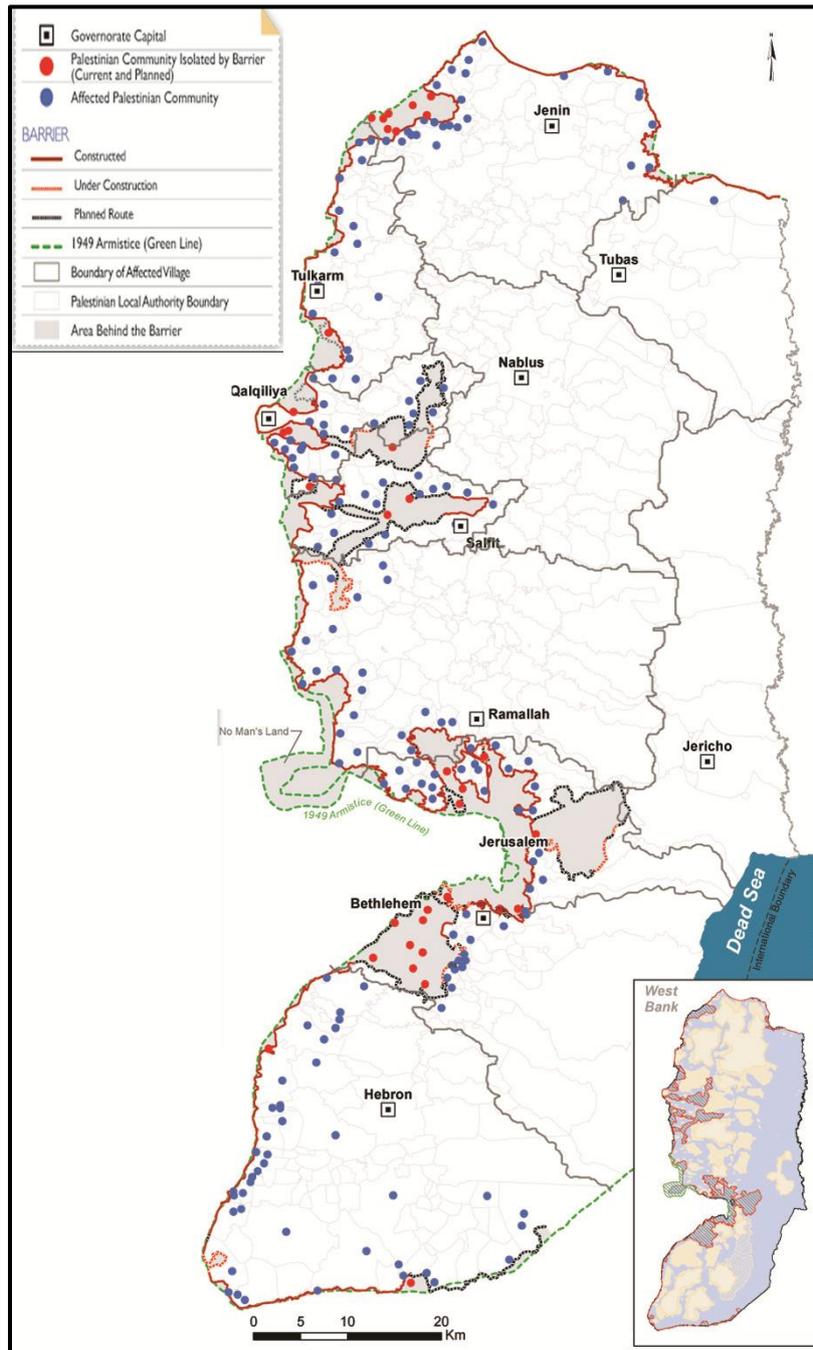


Figure 3.26 : Palestinian communities isolated and affected by Segregation Wall (B'Tselem,2012)

The following **Table 3.2** represents the number of Palestinian communities surrounded completely or partially by the wall, and the number of colonies located to the east or west side of the Wall.

*Table 3.2 : The number of Palestinian communities and Israeli colonies west and east Segregation Wall (B'Tselem, 2012)*

	<b>Palestinian communities surrounded by the Wall</b>	<b>Number of Residents</b>	<b>Israeli colonies</b>	<b>Number of colonists</b>
<b>West of the Wall</b>	17	27,520	48	187,840
<b>East of the Wall</b>	54	247,800	69	57,330
<b>East Jerusalem</b>	21	222,500	12	192,918
<b>Total</b>	92	497,820	129	438,088

#### **3.2.3.4 Area A, B, C (Oslo agreement)**

According to Oslo Agreement II in 1995 between the PLO and the Israeli side, the West Bank was classified into three categories: Area A constitutes of 18% of the West Bank area, Area B constitutes of 22% of the West Bank, and Area C covers 60% of the West Bank. This land classification was created according to demographics but not geographic reasons. Areas A and B include city centers and their surroundings, where high Palestinians population density occur, while Area C surrounds Areas A and B, including all Israeli colonies, This led to create 165 Palestinian isolated areas "islands", with no territorial contiguity (PASSIA, 2012), (**Figure 3.27**).

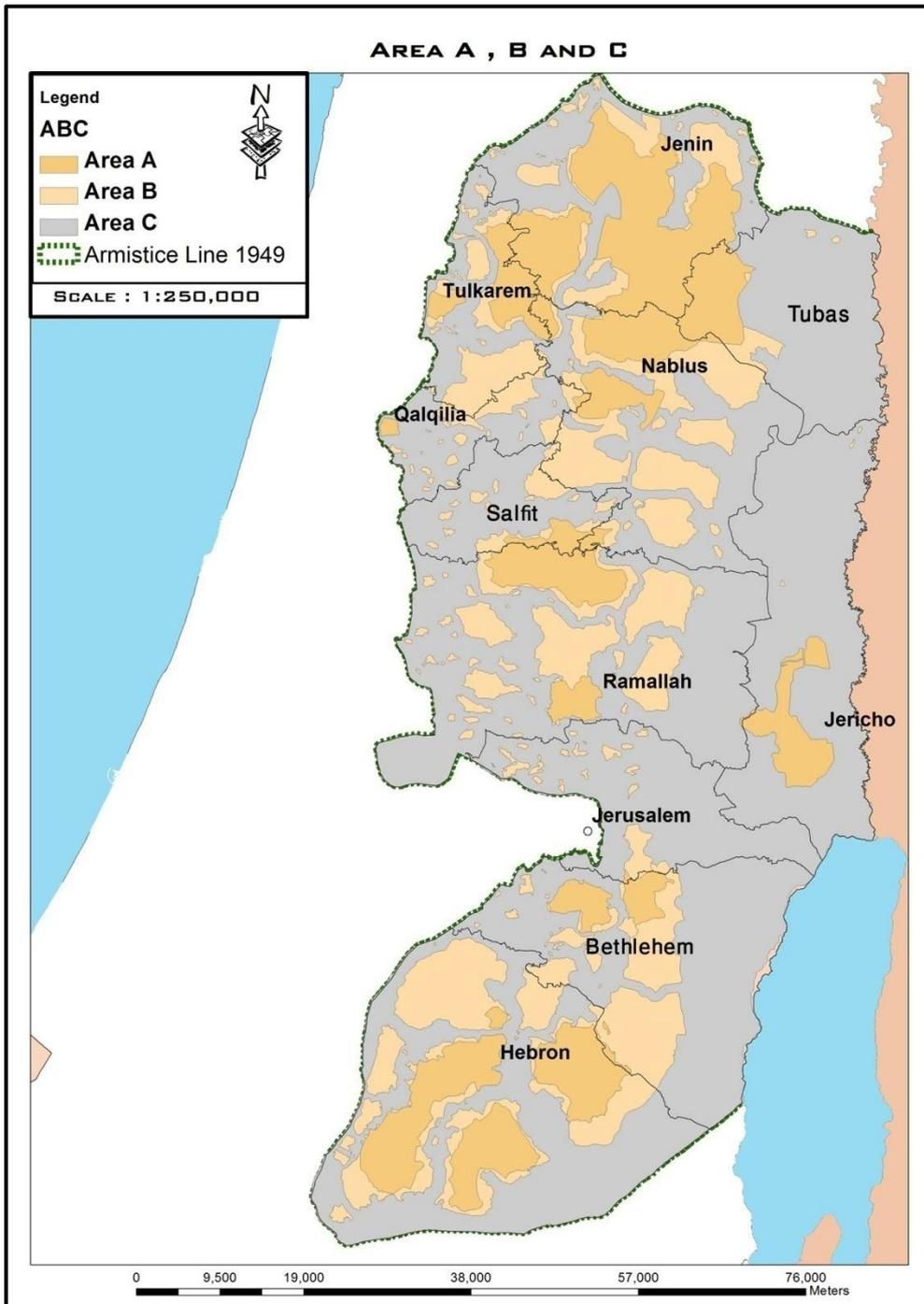


Figure 3.27 : Area A,B, and C in the West Bank (Source: Birzeit University database, 2014)

Area C includes some classifications: state land, firing zones, and natural reserves and national parks. 36.5% of Area C is classified as state land, some of them were declared based on the British and Jordanian rules, while the rest were declared by the

Israeli colonization through manipulating and distorting explanations of these rules. After signing Oslo agreement in 1993, the declaration of "state lands" was stopped in the West Bank. So in 1997, Israeli colonization began a new procedure, as it classified the lands that hadn't undergone into "state land" category to "survey lands"<sup>1</sup>, which constitute 20% of Area C, as a step to keeping them as government property. While 30% of Area C are known as military firing zones, most of them are located in Jordan Valley, and these zones include 38 communities for Palestinians, in which they are prohibited from building and development. Also 14% of Area C have been declared as natural reserves and national parks, in which Palestinians are also prohibited from construction in these areas (B'Tselem, 2013) (**Figure 3.28**).

151 Palestinian communities exist in Area C completely, while 122 exist partially, where about 320,000 Palestinians live in these communities (Hjouj, 2015). Palestinian residents are forbidden from building and development in 70% of Area C, and 29% with heavily restrictions, which means displacement policy for Palestinians (OCHA, 2011).

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<sup>1</sup> Survey land: means the lands that had not undergone the process of registration or declaration as state lands.

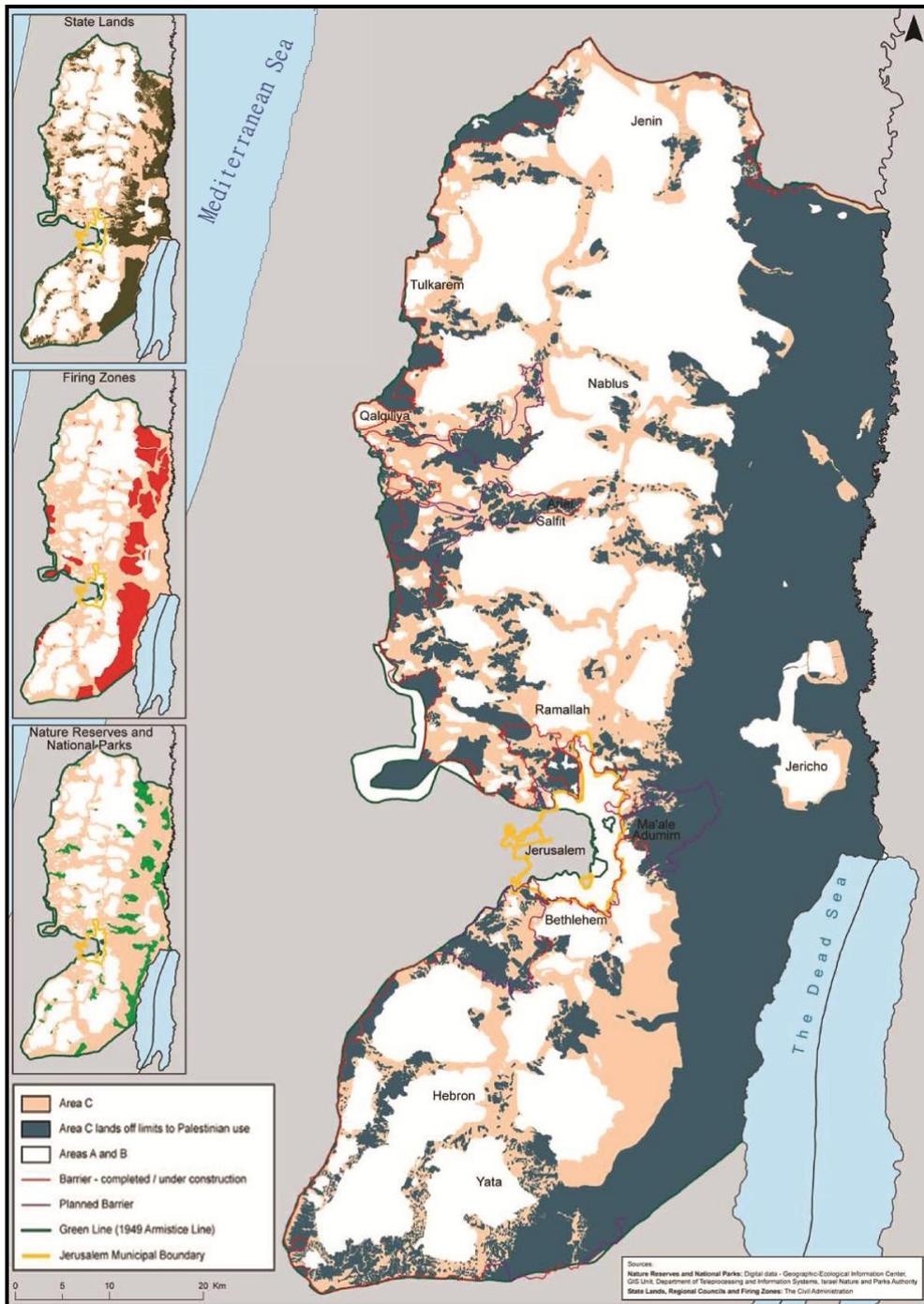


Figure 3.28 : Area C and its classifications in the West Bank (B'Tselem, 2013)

### 3.3 Conclusion

This chapter provided a general view about the policies and regulations used and adopted throughout the different historical eras (Ottoman Empire, British Mandate, and Jordanian ruling). These policies and regulations were manipulated by the colonial Israeli governments such as: The Ottoman Land code in 1858 which allowed Israeli governments to confiscate thousands of privately- owned acres of land and classify it as state land, public use land, or military use land.

This chapter also explained a set of colonial Israeli policies and plans playing a major role in drawing the real borders in the ground, in addition to explaining the Israeli spatial transformations such as: colonies, bypass roads, Apartheid Wall, and areas A,B, and C. These elements were represented in a general framework to be explained in details in chapter 4. Chapter 4 will focus in details on the study area which is a region of 30\*30 Kilometers Square. In this area, the 1967 border (Armistice Line) has been clearly and excessively shredded by the Israeli colonization activities that disconnected the geographical contiguity among Palestinian communities resulting in a great impact on Palestinian citizens. **Figure 3.29** shows the area that has been selected to be the study area.

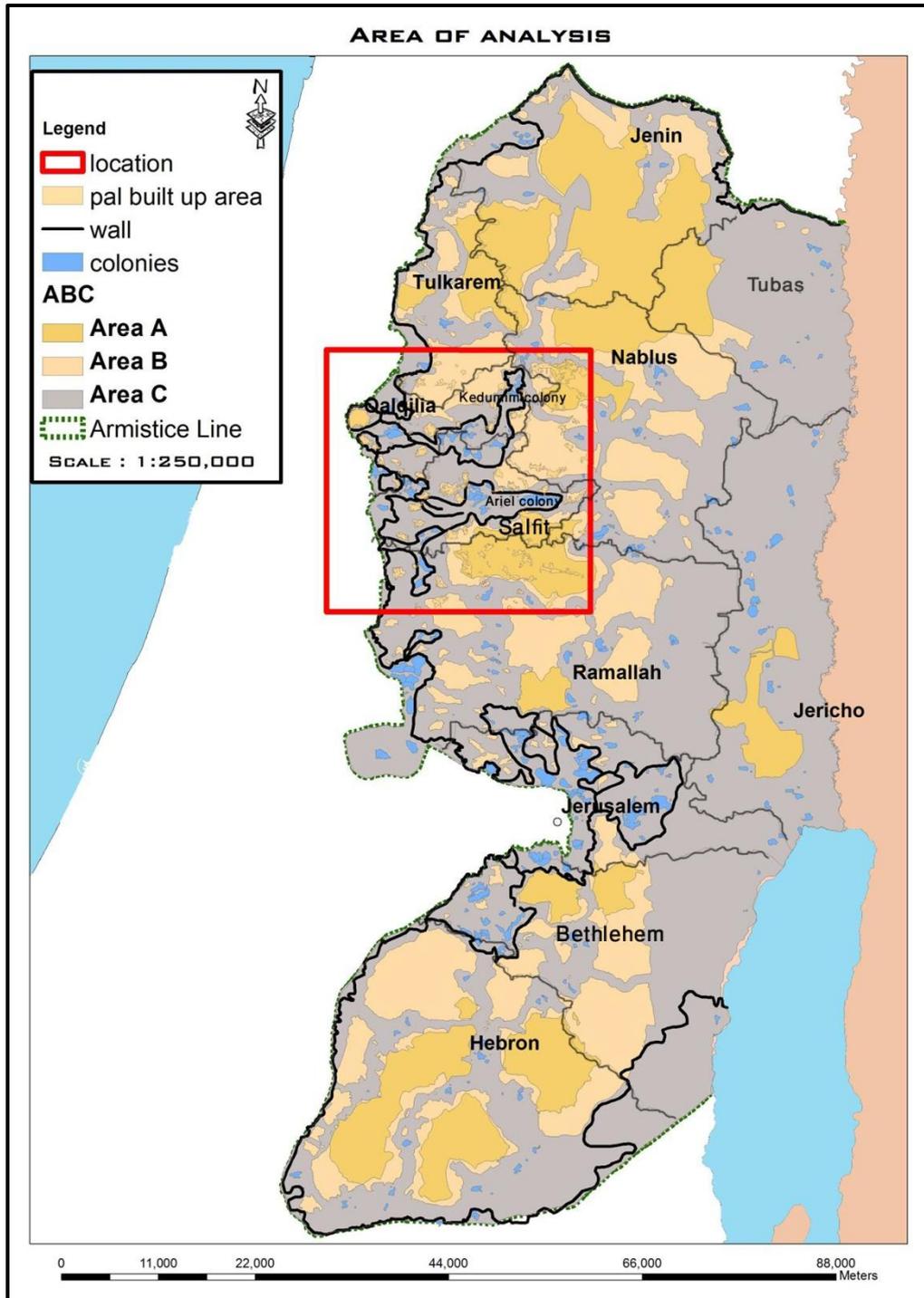


Figure 3.29 : The study area (Source: Birzeit University database, 2015)

# CHAPTER 4

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**Study Area: Analysis,  
Discussion and Results**

#### **4.1 Introduction:**

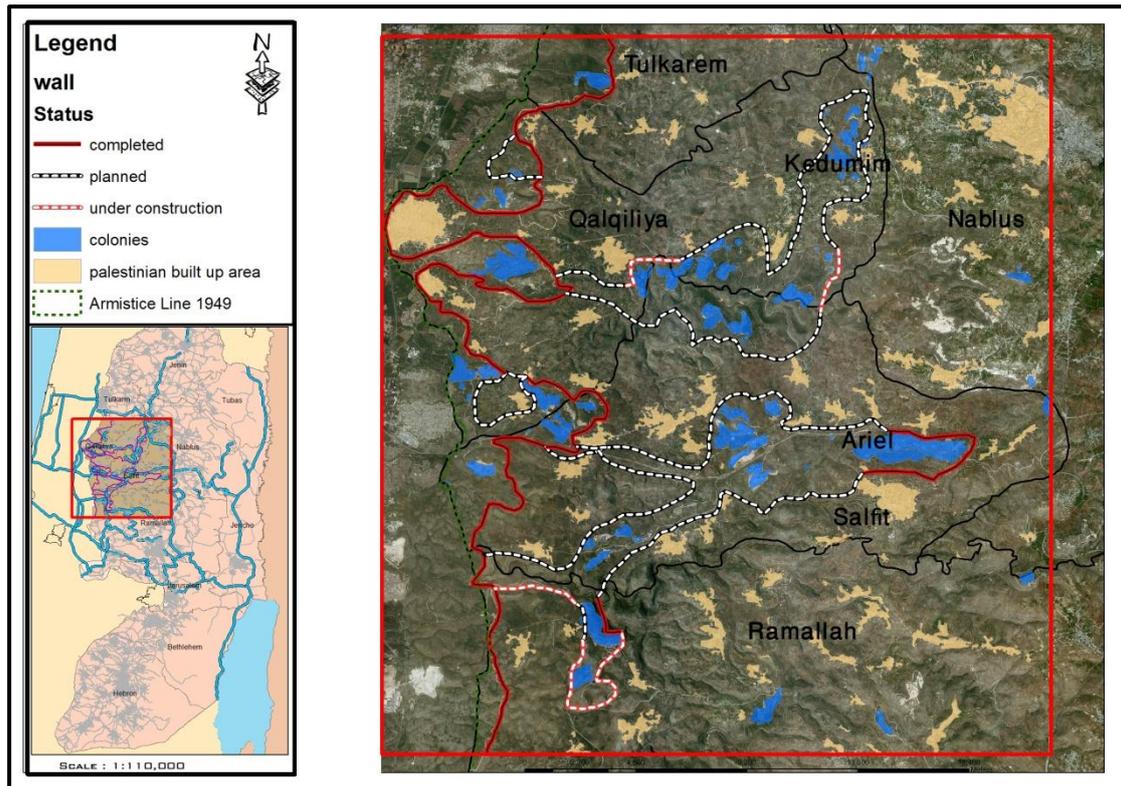
This chapter represents an analysis of the study area assigned in the third chapter to make it the focus of chronologically analyzing the movement and changes in the border. In this chapter a study and analysis for: the historical changes in the administrative borders of the area, the spatial changes caused by the Israeli policies and procedures in the area after 1967, and the effects and reasons assisted in shifting and moving the border. The analysis also includes a discussion of the shifting factors, policies, and Israeli plans. The results are displayed in the form of maps clarifying the sequence of the Israeli actions and its aggravation in the area, which caused a continuous shifting of the border from 1967 until now. The maps also revealed the purposed of the Israeli plans behind continuously shifting the border.

Geographic Information System (GIS) was used in this chapter to conduct the spatial analysis of the study area. The maps in this chapter were produced by the researcher using this system and through relying on data collected by governmental institutions and reliable resources. By using the GIS system, drawing of many layers were produced such as: layers for land classification and uses, layers for the Israeli plans in the area, and layers for demographic distribution. These layers were discussed and analyzed. The researcher used a descriptive and analytical approach; historical and spatial analysis in this chapter was used to reveal the chronological shifting and changes of the border, its factors and causes.

#### **4.2 Definition of Study area:**

The study area includes Qalqiliya and Salfit as major Palestinian cities and centers of governorates, and many Palestinian communities. It includes Ariel and Kedumim as oldest Israeli colonies, after adopting the Wall Plan in 2006, they have become

colonial blocks, named Ariel and Kedumim fingers. The study area stretched from the west borders of the West Bank until the middle, and located within the central mountains and western hills of the West Bank. **Figure 4.1** An Aerial Photo of the study area, showing the Israeli colonies, the segregation Wall, and the Palestinian built up areas.



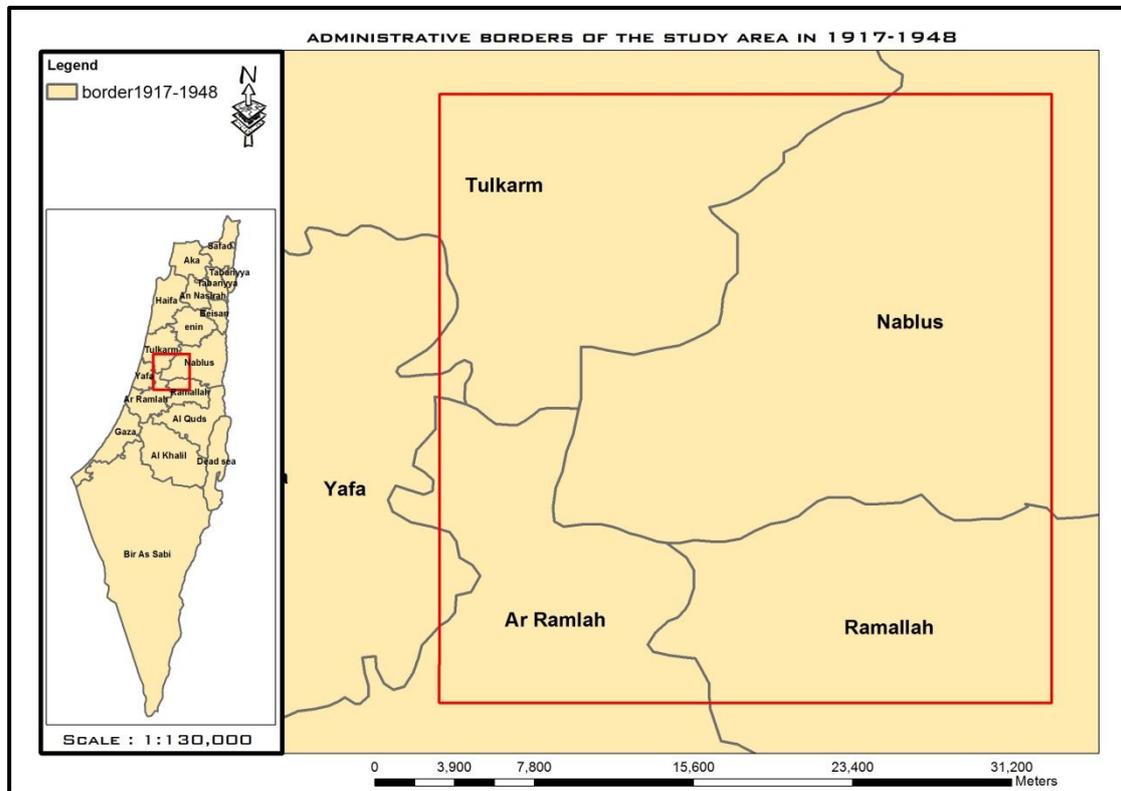
*Figure 4.1: An Aerial photo of the study area (Source: Done based on Aerial photo and shapfiles from MoLG, 2014)*

### 4.3 Historical changes of the administrative borders

#### *Prior to 1967*

The study area includes Palestinian communities and villages that were subjected to the British Mandate from 1917-1947, which divided Palestine to districts and brigades (الدباغ, 1991), some Palestinian communities in the study area located within Tulkraem

district, while others located within Nablus, Ramallah, and Ar-Ramlah districts. The administrative division and administrative borders of the study area in the British Mandate era are represented in **Figure 4.2**.

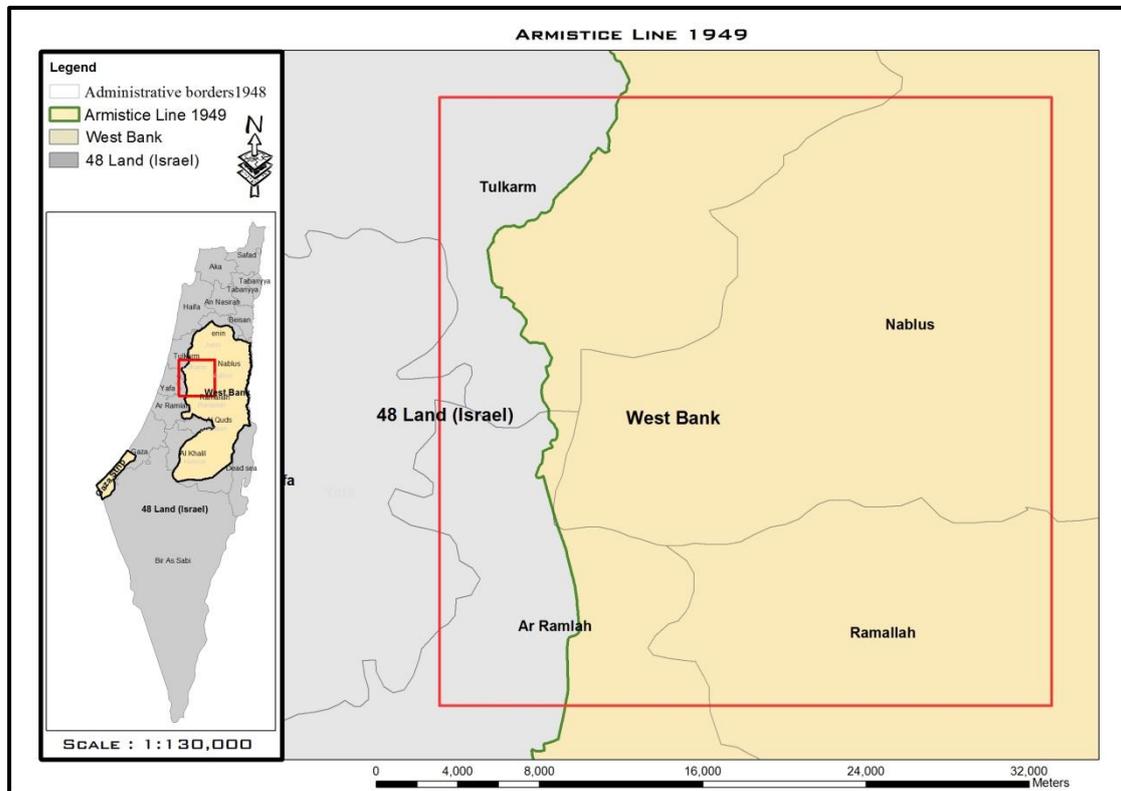


*Figure 4.2: Administrative borders of the study area between 1917- 1947 (Source: Done based on Wafa,2011)*

The area was divided multiple of times by the British Authorities; for example in 1938 Nablus, Jenin, and Tulkarem followed Haifa's brigade area, but these areas were separated to follow Nablus brigade in 1939 for the purposes of controlling the area and assisting in formulating a National Home for Jews, who- at that time- were concentrated in Haifa area (البديري، 2002، الغنيمات، 2012).

After the Nakbah in 1948, the Armistice Line between Palestinians and Israelis was drawn on maps in 1949. The study area is subjected to two regions: The West Bank to

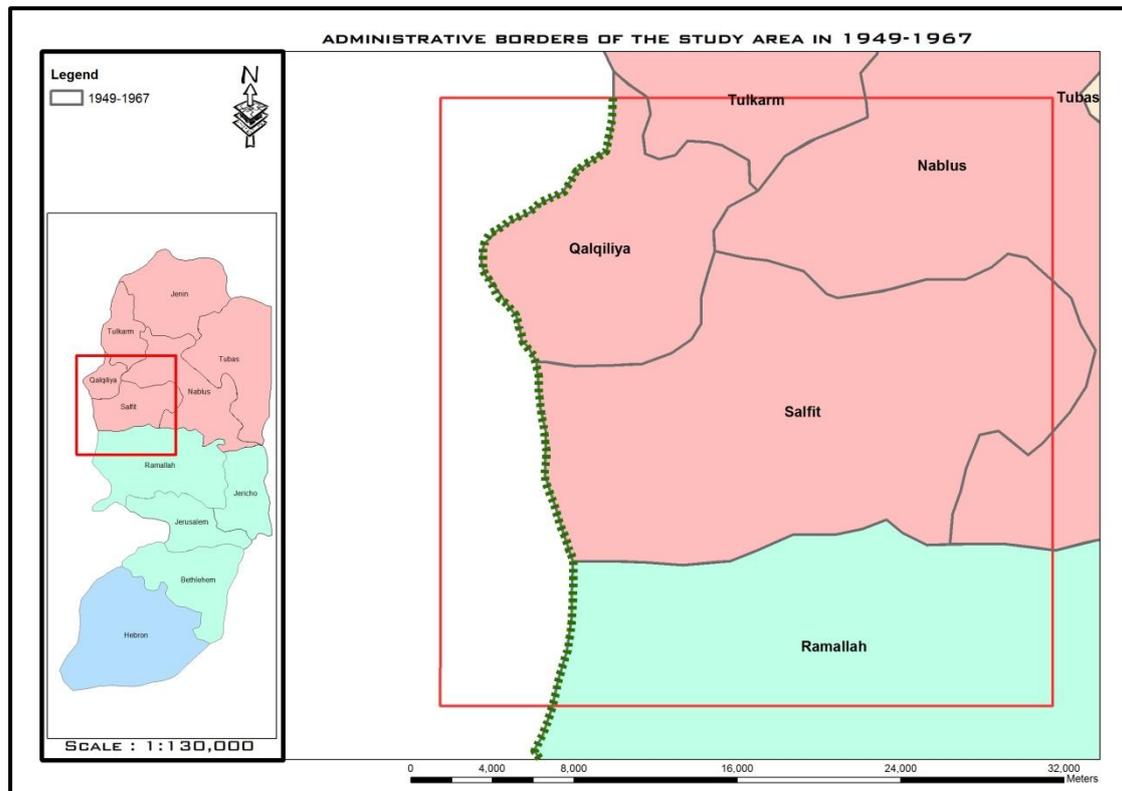
the right of the Armistice Line, and territories under Israeli control to the left side, called as "The 48 Land" by Palestinians, and Israel by Israelis. **Figure 4.3** represents this distinguish.



*Figure 4.3: Demarcating of Armistice Line on the map in 1949 (Source: Done based on Wafa, 2011)*

The administrative borders of the study area changed between 1949 and 1967 according to the Jordanian rule of the West Bank. Jordanians divided the West Bank into three governorates: Nablus, Jerusalem, and Hebron, which included brigades and districts (بشناق، 2003). The study area is located within Nablus and Jerusalem governorates, which was divided into Qalqilya, Salfit, and Tulkarem as districts, Nablus brigade within Nablus governorate, and Ramallah brigade in Jerusalem governorate as shown in **Figure 4.4**. The purpose behind this administrative division was to control over these areas by the central authority of the state using security and

administrative powers given to governors who were- in the first place- appointed and assigned on duty using this central authority's power (بشناق، 2003).

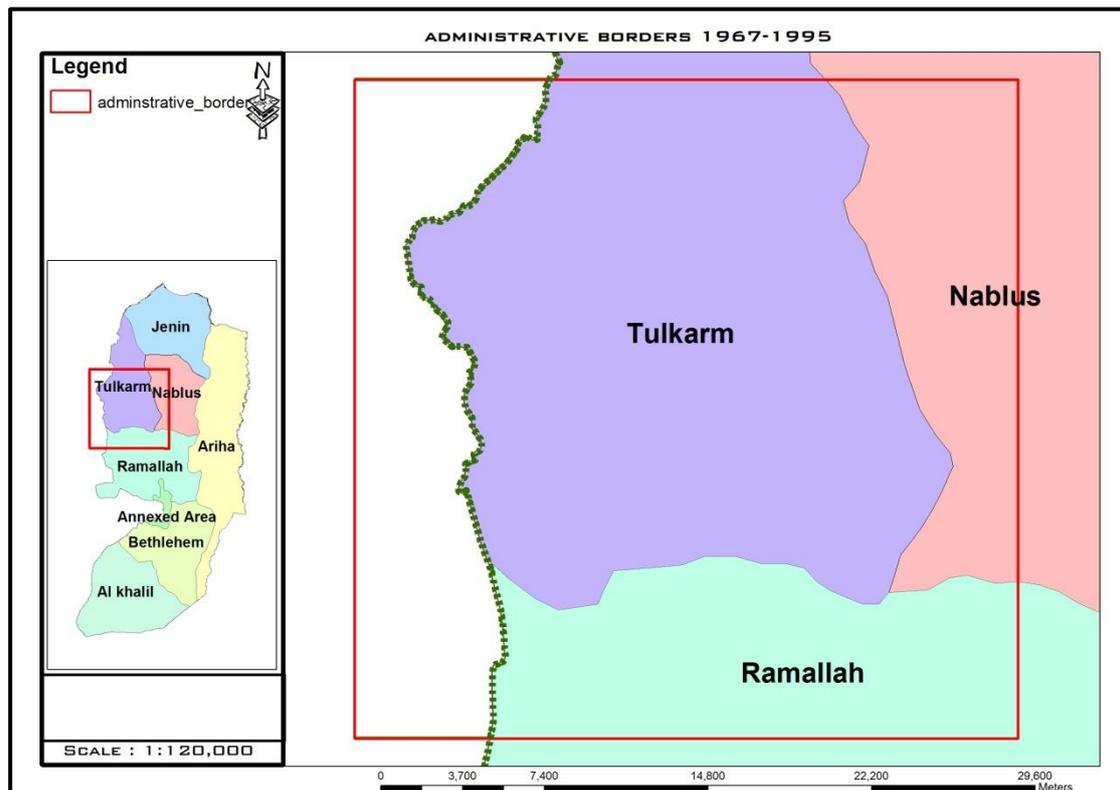


*Figure 4.4: Administrative borders of the study area between 1949- 1967 (Source: Done based on Wafa, 2011)*

### *After 1967*

After the 1967 war, the West Bank became under Israeli control, as the powers transformed to Israeli military officers. In 1981 the civil administrative was formed, and the West Bank was divided into seven Districts: Jenin, Nablus, Tulkarem, Ramallah, Jericho, Bethlehem, and Hebron, while East Jerusalem had been annexed to the 48 land (Rishmawi, 1988). By this division some districts were annexed to others to become administratively one district such as: Qalqiliya and Salfit districts were annexed to Tulkarem district, and Tubas district was divided; some areas

annexed to Jenin district, others to Nablus and Jericho districts <sup>1</sup>. The Israeli purpose of these administrative divisions is to impose the military, security, and administrative control over these districts (بشناق، 2003). **Figure 4.5** shows the new administrative boundaries generated by this Israeli division.



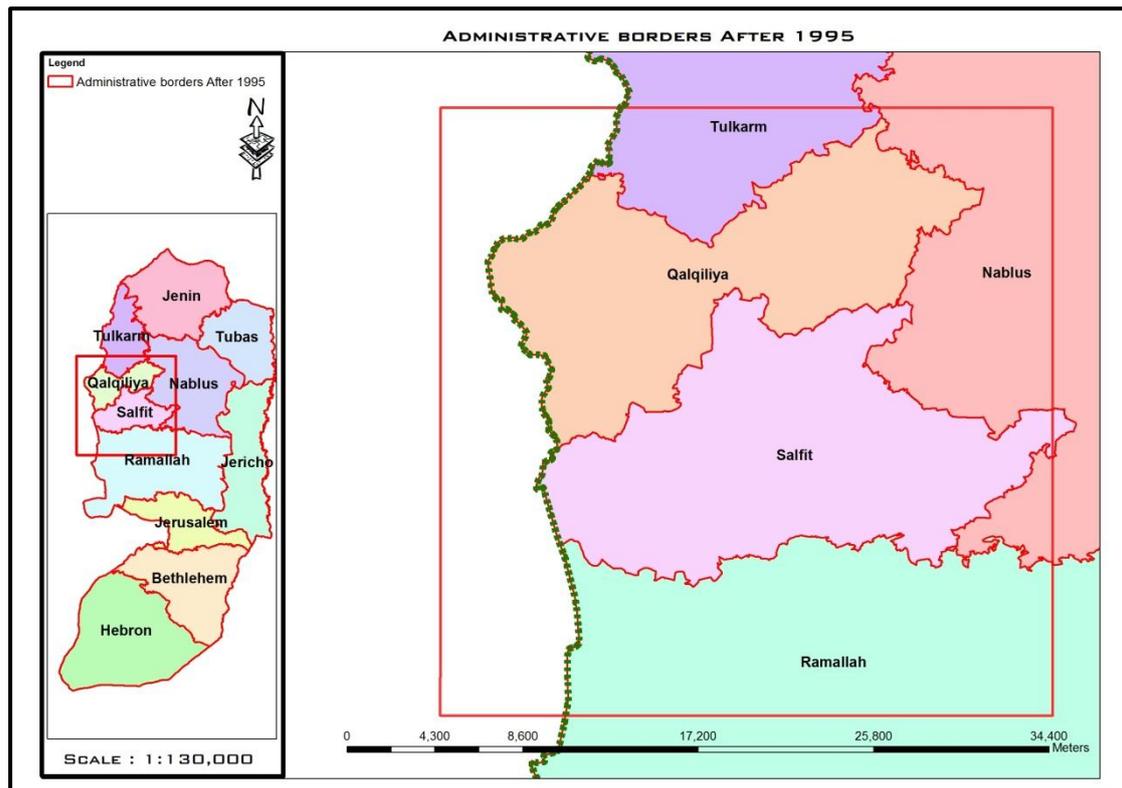
**Figure 4.5:** Administrative borders of the Study area between 1967- 1995 (Source: Done based on ARIJ, Available at <http://www.poica.org/upload/images/>)

After Oslo agreement in 1993 and the advent of the Palestinian Authority to lead Palestinians in 1995, new governorates were adopted as independent governorates which are: Salfit governorate in 1995 (Salfit Municipality, 2015), Qalqiliya governorate in 1996 <sup>2</sup>, and Tubas in 2007 <sup>1</sup>. **Figure 4.6** shows the new administrative boundaries of the study area.

<sup>1</sup> Data collected from administrative affairs department in Qalqiliya, Salfit and Tubas Municipalities.

<sup>2</sup> Qalqiliya Municipality, 2012. Available at (<http://www.qalqiliamun.ps/>) [Accessed 4 April 2015]

The Palestinian Authority (PA) kept all laws and legislations that were applicable prior to the Jordanian rule before 1967, in which the following administrative divisions existed: Governorates, Brigades, Districts, and Areas. Practically, the PA did not commit to the administrative divisions established by the legislations, but took one level of it which is the governorates (بشناق، 2003).



*Figure 4.6: Administrative borders of the Study area after 1995 (Source: Done based on (ARIJ, 1995))*

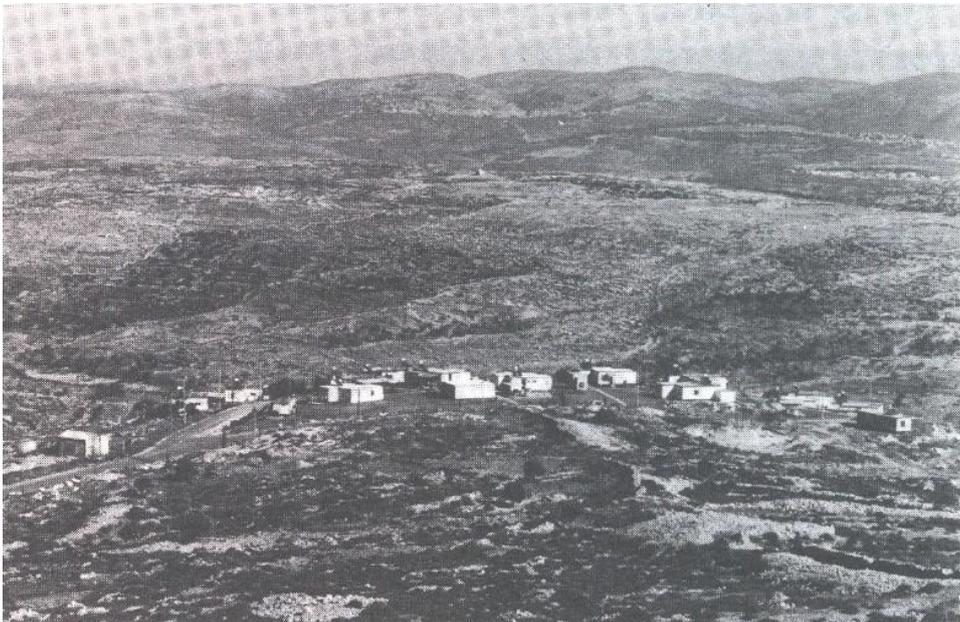
## 4.4 Border Shifting by Israeli spatial transformations

### 4.4.1 Israeli Colonies

The study area includes colonies, military outposts, and other colonial sites. Kedumim colony is the first colony to be established in the area. It was established in 1975 by a group of Gush Emunim, which was called Elon Moreh. It attempted in the 1974 to

<sup>1</sup> Available at (<http://www.tubas.plo.ps/>) [Accessed 7 April 2015]

establish a colony on the ruins of the train station (Ottoman period), but were prevented from entering Nablus. This group was conceived to settle in the Northern West Bank hills to control the Palestinian densely populated regions (as mentioned in Gush Emunim Plan). After several attempts, temporary community constituting of 25 families were permitted to settle in an army camp near Kufr-Qadum Village. This small community was expanded to become the current colony called Kedumim, literally means ancient (B'Tselem, 2002), (**Figure 4.7**).



*Figure 4.7 : The beginning of settlement in Kedumim*

(Source: <http://www.acpr.org.il/english-nativ/10-issue/haetzni-10.htm>)

Ariel colony was then established in 1978 by a group led by Ron Nachman, on a cultivated land for Palestinian villagers and on a rocky land used for grazing. This land was seized under the pretext of military needs and state land. This land was chosen by Moshe Dayan, the Defense Minister (Dayan Plan in chapter one). Ariel is located on a strategic point, at the central of the mountain region in the West Bank, between the Mediterranean Sea and the Jordan Valley. It is situated 20 Kilometers

eastern of Tel Aviv and the coastal plain. Highway 5 connects Ariel with Tel Aviv, and the 505 road which is the extension of Highway 5 connects Ariel with the Jordan Valley eastward (Ariel Municipality; B'Tselem, 2012), (**Figure 4.8**).

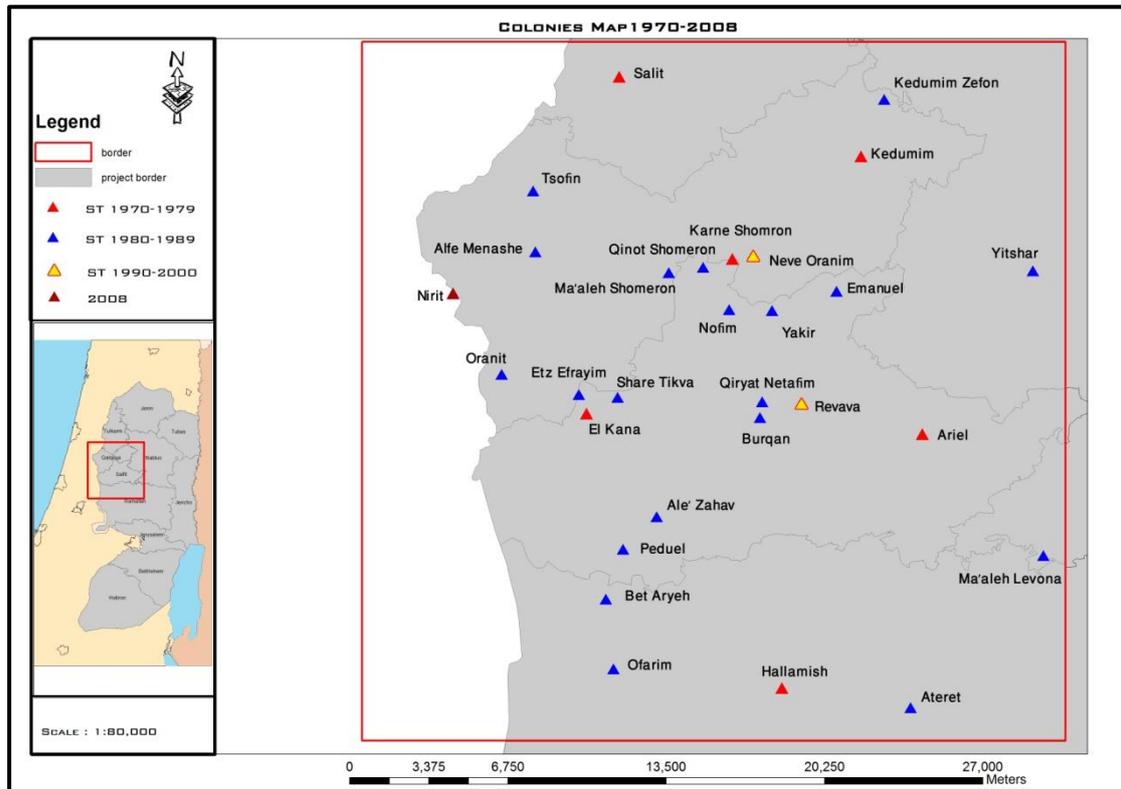


*Figure 4.8 : Aerial photo of Ariel colony (Source: ARIJ, 2005)*

Later on, Ariel colony expanded to be administrated by a local council, then in 1998 it was declared as a city administrated by a Municipality. After the year 2000 Ariel with several nearby colonies was called Ariel block.

Ariel colony is the second largest colonial block in the West Bank after Ma'ale Adumin (Eastern of Jeusalem). Ariel block consists of 26 Israeli colonies that were established on lands confiscated from the surrounding Palestinian villages. Most of these colonies were established in the late 1970's and early 1980's (ARIJ, 2006).

**Figure 4.9** shows the chronological establishment of the Israeli colonies in the study area.



*Figure 4.9 : Colonies in the Study area from 1970 - 2010 (Source: Done based on MoLG Database, 2014)*

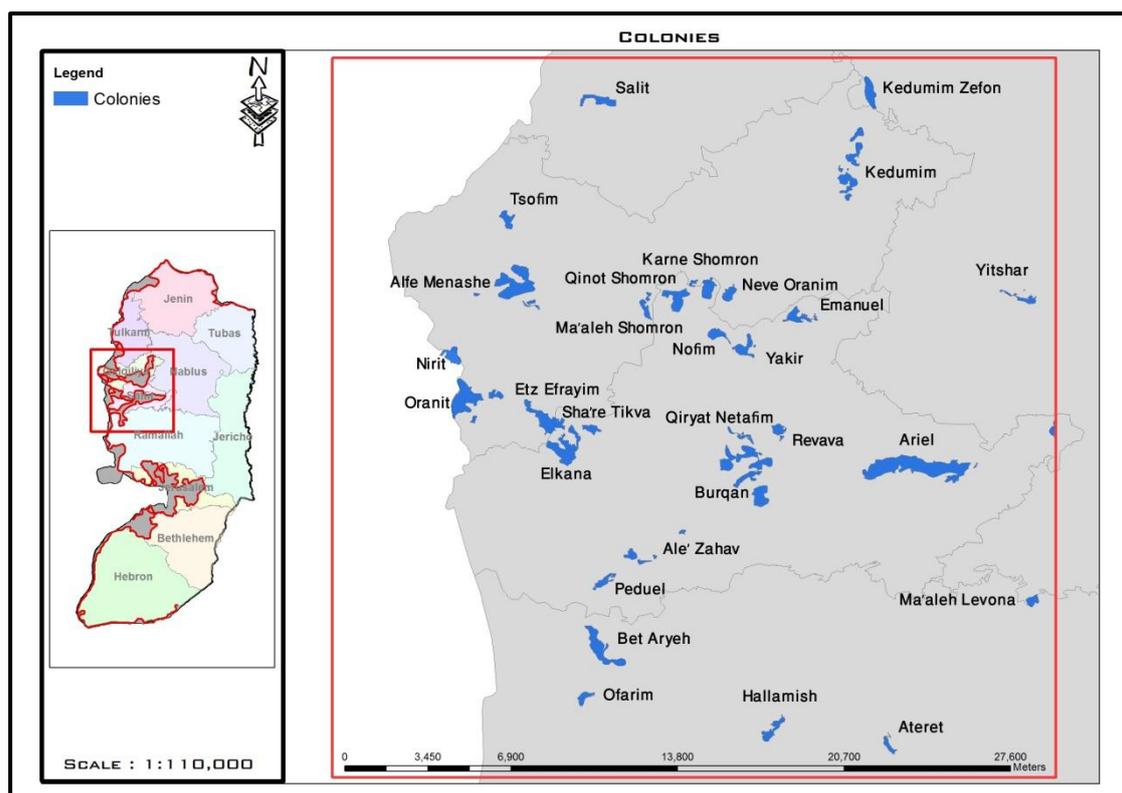
These colonies were the first step for the West Bank border shifting and erasing the Armistice Line. New borders were demarcated around these colonies with buffer zones Palestinians are prohibited to reach. Every colony in the study area was established as an outpost then expanded to become a colony, then a part of a colonial block, finally to become part of Israel as Israelis say; Ehud Olmert, the former Israeli Prime Minister, stated in March 14, 2006 in Ha'aretz newspaper: *"I want to be clear on this, the Ariel block will be an inseparable part of the state of Israel under any situation."*

Also Shaul Mofaz, Israel's Defense Minister, stated in Ha'aretz in February 17, 2006:

*"When speaking of the permanent borders, the future borders of Israel, the settlement blocks and the Jordan Rift Valley are included within them"*

Other colonies were established in the seventies as Karne Shomron, El Qana, Hallamish, and Sal'it. In the 1980's 20 colonies were established in the study area. Four colonies were established in the 1990's which are: Revava, Neve Oranim, Ariel West Park Industrial, and Industrial Zone (near Peduel).

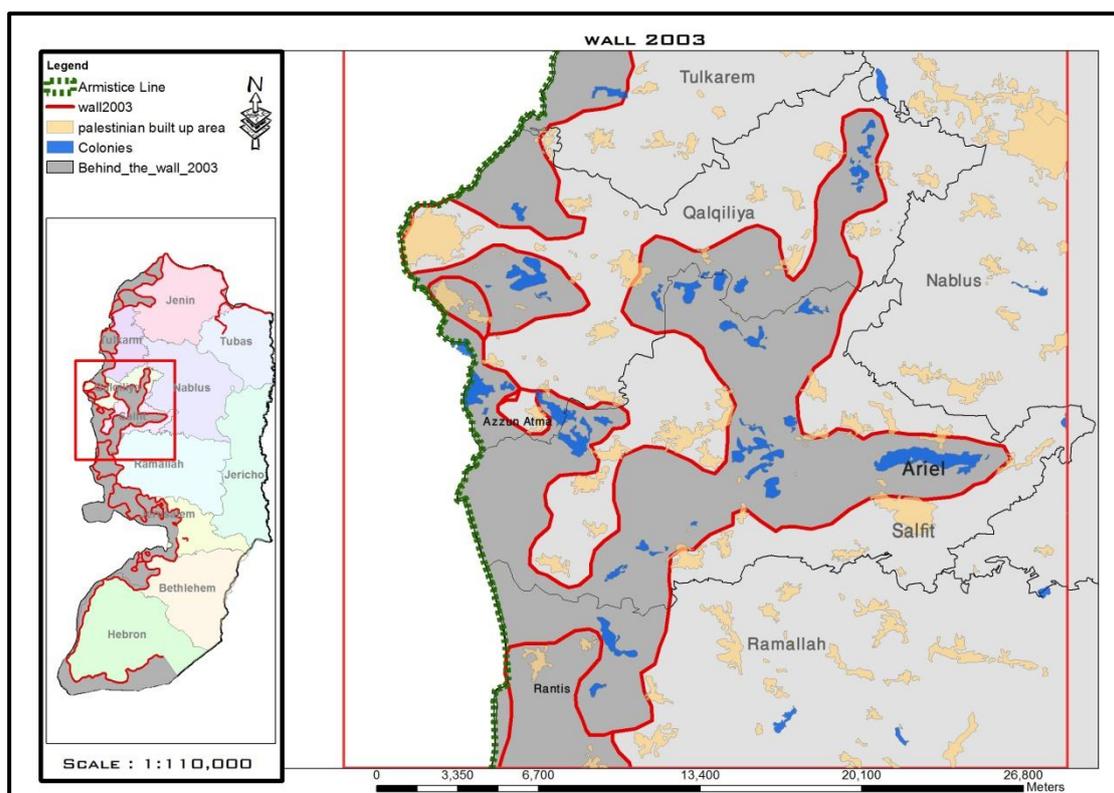
**Figure 4.10** represents the built up areas of colonies in the study area, which are demarcating new borders between Palestinians and Israelis.



*Figure 4.10 : The Built up areas of the Colonies in the Study area (Source: Done based on MoLG Database, 2014)*

#### 4.4.2 The Segregation Wall - The Expansion Wall

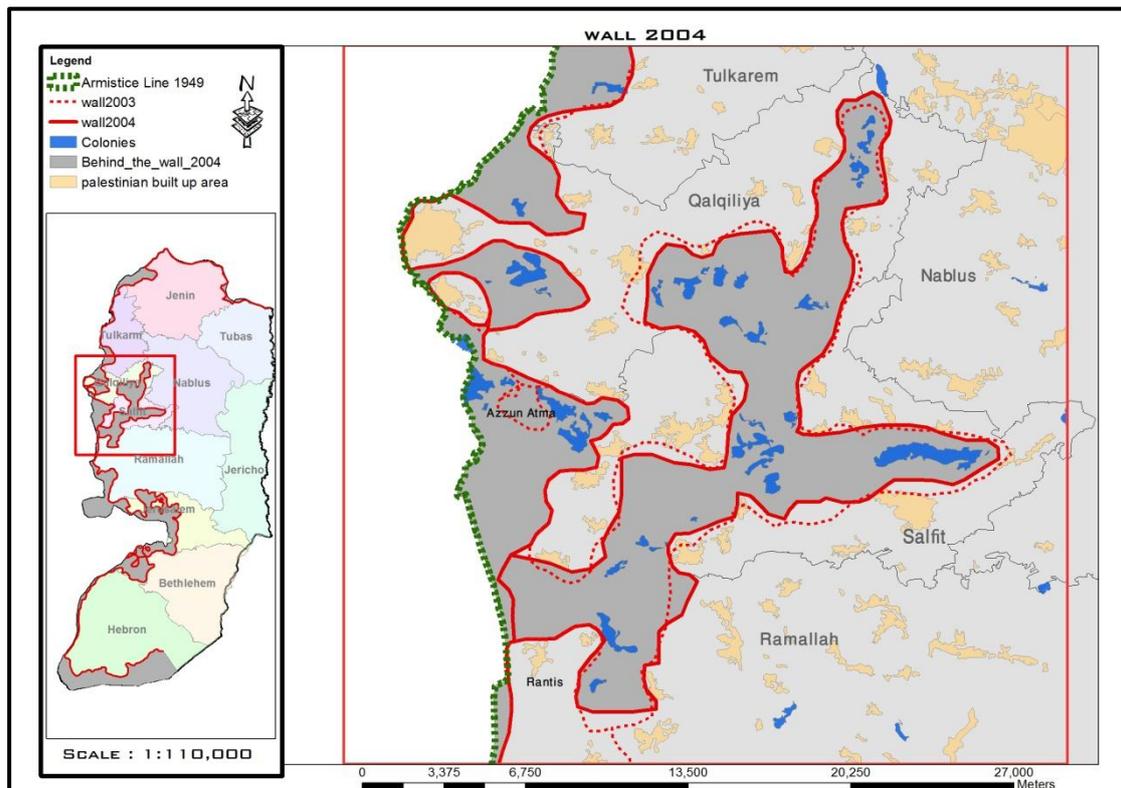
The route of the Expansion Wall the Israeli Government began to establish in 2002, it has been subjected to many changes according to different plans; Plan 2003, Plan 2004, Plan 2005, and Plan 2006. **Figure 4.11** represents the wall plan in the study area according to Plan 2003. According to this plan, the route of the wall extends 22 Kilometers inside the West Bank forming one finger named Ariel finger; this finger includes most of the colonies in the study area, and annexed a vast amount of land around these colonies, to form geographical contiguity among these colonies and connecting them with Tel Aviv. This plan of the Wall route shifted the West Bank border (Armistice Line) in the study area and re-demarcated it, forming new borders between Palestinians and Israelis. The isolated area behind this Wall route is 256.78 Kilometers square of the West Bank area.



*Figure 4.11: The Plan of the Wall in 2003 in the Study area (Source: Done based on OCHA,2003)*

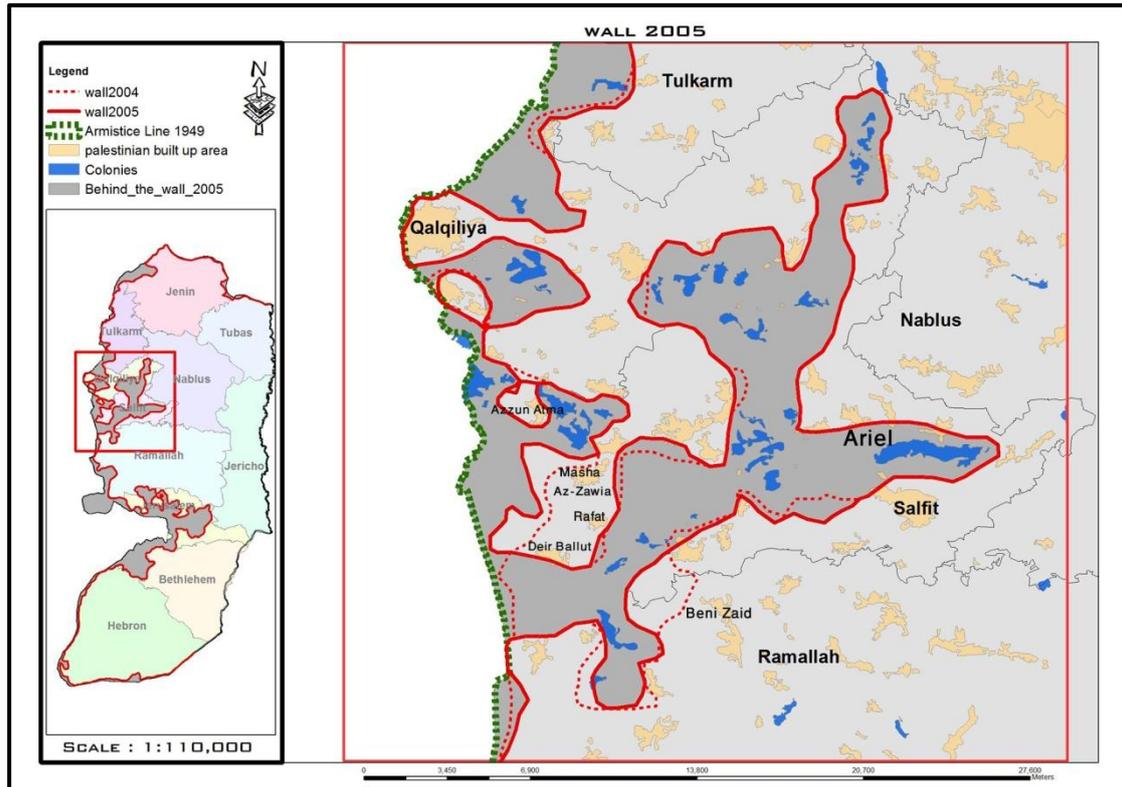
**Figure 4.12** represents the updated plan of the Segregation Wall in 2004. Some projected paths of the wall were removed, and the isolated land was reduced in some areas like the areas near and southern of Rantis village and the isolated land within the Ariel finger, while other areas were isolated like the areas around Azzun Atma.

The United Nations General Assembly issued a decision to stop building the Wall in 2003 and called the International Court of Justice and Israel to demolish the parts of the Wall built inside the West Bank, as well as compensating affected citizens(OCHA, 2009). Israeli Authorities did not comply to the decision, yet applied more modification on the Wall's route in some areas which caused an increase on the restriction of Palestinians.



*Figure 4.12: The updated Plan of the Wall in 2004 in the Study area (Source: Done based on OCHA,2004))*

**Figure 4.13** represents the plan of the Israeli Segregation Wall which was updated in February 2005 to stretch to 114 Kilometers around Ariel block, in addition to the inclusion of 120,000 Dunums inside of it. About 18% of these lands are colonies (ARIJ, 2006).



*Figure 4.13 : Ariel Bloc (Ariel Finger) according to Wall Plan in 2005*

*(Source: Done based on OCHA,2005)*

Some projected paths of the Wall route in plan 2004 were modified in plan 2005 in some areas such as the areas near Deir Ballout, Az Zawia, Rafat and Masha villages located in Salfit governorate, other areas western of Beni Zaid village located in Ramallah. According to the plan 2005 Azzunn Atma village became an enclave area.

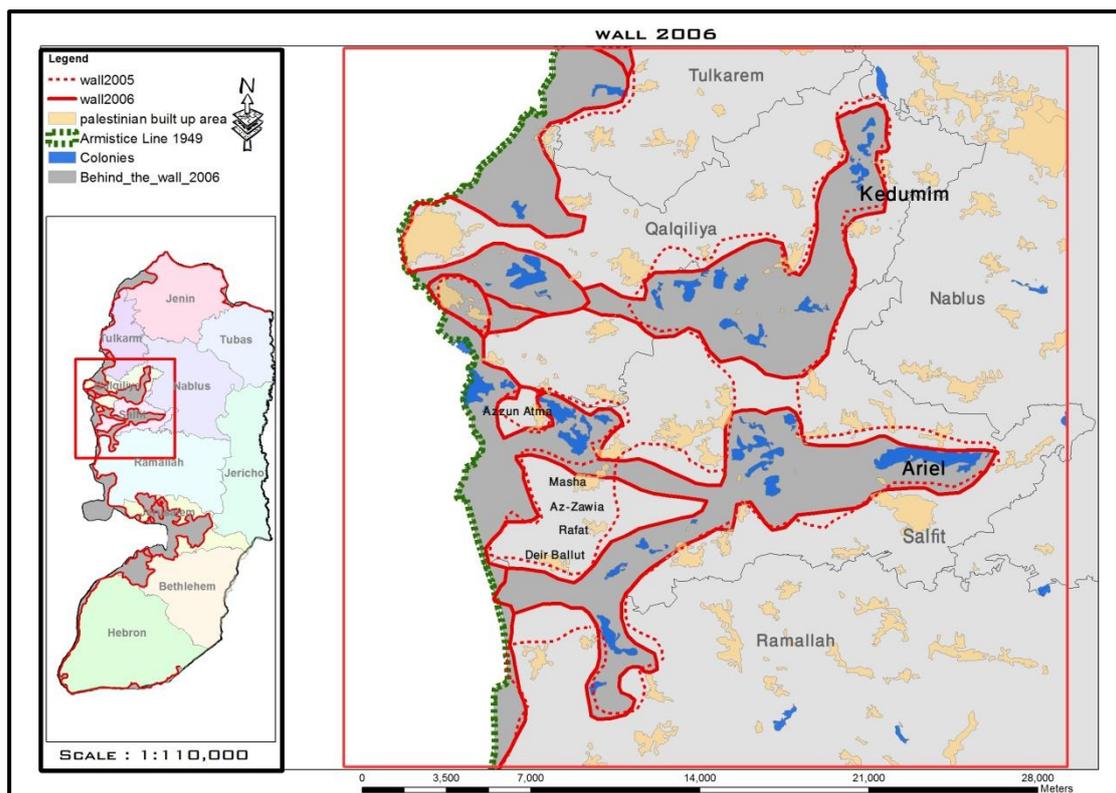
**Table 4.1** shows the land cover in the Ariel finger according to the wall plan in 2005.

**Table 4.1:** Land use in Ariel Finger according to the Wall Plan in 2005

(Source:ARIJ,2006)

Land use- Land cover	Area (Dunams)	% of the total area
Colonies- Built- up area	21600	18%
Agricultural areas	46800	39%
Forested areas	13200	11%
Areas with shrubs	13200	11%
Open spaces	25200	21%
<b>Total</b>	<b>120000</b>	<b>100%</b>

In April 30th, 2006, the Segregation Wall plan was updated and the Ariel finger was divided into two fingers: Ariel finger and Kedumim finger (**Figure 4.14**).



**Figure 4.14 :** The Plan of the Wall according to Plan 2006 (Source: Done based on (OCHA,2006))

Regardless of the modification of the Wall route in some areas in 2006, in comparison to 2005 scheme, there was an increase in the Wall's length and its curvy route, which caused an increase in the isolation of Palestinian communities from each another, as well as an increase in checkpoints, security gates, and checking outposts. For instance, this impact of isolation appears in the case of: Dair Ballout, Masha, Al Zawya, Rafat, Azzoun Atmeh.

- **Ariel Finger :**

According to the updated Plan of the Wall in 2006, the Ariel finger deeply extends in 22 Kilometers to the eastside of the Armistice Line and inside the West Bank. The Ariel finger includes 14 Israeli colonies, with more than 24,000 colonists living in them, in addition to three industrial zones. The total area of the finger is 57.5 Kilometers square, while the length of the Segregation Wall is about 81.5 Kilometers (ARIJ,2006).

**Table 4.2** represents colonies inside the Ariel Finger, in addition to the year of establishing each colony, their areas in 2004, and the name of the Palestinian governorate, in which lands were confiscated for the colonies' establishment.

*Table 4.2 : Colonies inside Ariel Finger (Source: Arij, 2006)*

Colony Name	Year of establishment	Governorate	Area in Dunams (2004)
Ariel	1978	Salfit	5200
Beit Arye	1981	Ramallah	1420
Barqan industrial Zone	1981	Salfit	1420
Barqan	1981	Salfit	649
Ofarim	1988	Ramallah	545
Peduel	1984	Salfit	540
Har Alei Zahav	1983	Salfit	489
Revava	1991	Salfit	399
Kiryat Netafim	1982	Salfit	387
Alei Zahav (Yoezer)	1982	Salfit	352
South West Ariel	2003	Salfit	100
Industrial Zone (Near Peduel)	1991	Salfit	246
Ariel West Park Industrial	1991	Salfit	1906
West (Ariel West Park Industrial)	NA	Salfit	9

The Ariel block has been linked to the nearby colonies that were annexed after April 2006, as indicated in **Table 4.3**. They were linked with Israel through bypass road 5, in which Palestinians are prohibited from using.

*Table 4.3 : Colonies added to Ariel Finger after 2006 (Source: ARIJ, 2006)*

Colony Name	Governorate	Date of establishment	Area in Dunams
Benot Orot Yisra'el	Salfit	1989	158
Elkana	Salfit	1977	1513
Etz Efrayim	Salfit	1985	566
Oranit	Qalqiliya	1983	1289
Shaare Tikva	Qalqiliya	1982	1063
Zamarot	Qalqiliya	1985	310
Mazor Atiqa (Israeli Quarry)	Salfit	1986	688

- **Kedumim Finger :**

Referring to the 2006 wall plan, the Kedumim finger includes 12 Israeli colonies as shown in (**Table 4.4**). The colonies include more than 19,000 colonists, and annexes 45.5 Kilometers square inside of it. The length of the wall around them is about 51.5 Kilometers. The Kedumim finger has been linked with Israel through Alfe Menashe colony, located southeast of Qalqiliya city.

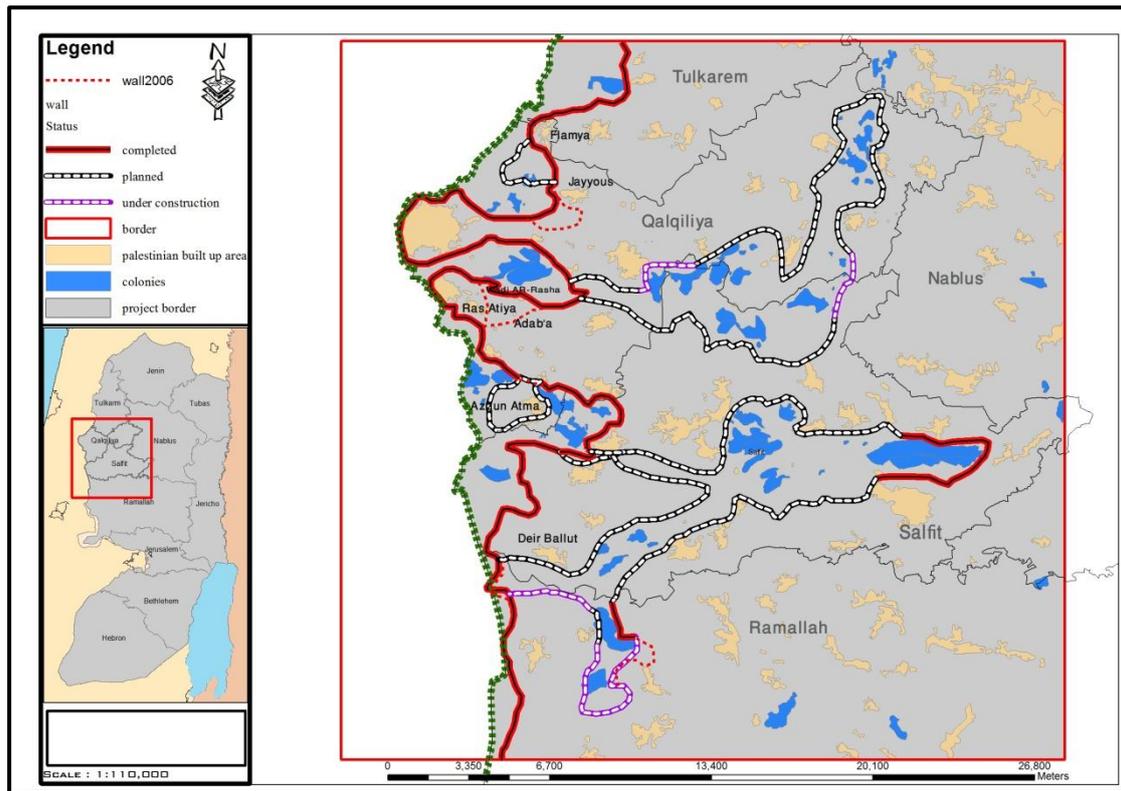
Reshaping the wall route through the division of Ariel finger into two fingers (Ariel and Kedumim fingers), has increased the total length of the wall around these fingers from 120 Kilometers to 133 Kilometers (Arij, 2006). In September 2007, a new route of the wall was published on an official Israeli website; the new changes increased the total area of the land isolated behind the wall.

*Table 4.4 : Colonies inside Kedumim Finger (Source: ARIJ, 2006)*

Colony Name	Date of establishment	Governorate	Area in 2004 (Dunams)
Ginnot Shomron	1985	Salfit	1047
Immanuel	1981	Qalqilyia	1045
Karne Shomron	1978	Qalqilyia	1024
Nofim	1986	Salfit	641
Kedumim	1975	Qalqilyia	986
Ma'ale Shamron	1980	Qalqilyia	752
Giv'at HaMerkaziz	NA	Qalqilyia	543
Neve Oramin	1991	Qalqilyia	538
Kedumim Zefon	1982	Qalqilyia	318
Yakir	1981	Salfit	701
Jit	NA	Qalqilyia	
Alfe Menashe	1981	Qalqilyia	2905

**Figure 4.15** shows the existing situation of the Wall in the study area in 2012. The construction of the Wall was completed in all areas that are close to the Armistice Line, also around Ariel colony northern of Salfit, and eastern of Beit Arye colony located to the northwest of Ramallah. Some sections were under construction, while in other areas, the construction did not start yet.

In addition to that, there is a buffer zone along the wall from the Palestinian side ranging from 150-200 meters. In this buffer zone Palestinians are prohibited from construction, making the areas inaccessible.



**Figure 4.15** : The existing situation of the Segregation Wall in 2012 (Source: Done based on Information Center Concerning Affairs of Colonization and Annexation Wall, 2012; OCHA,2014 )

In the existing situation of the Wall, some modification happened to its route that was proposed in 2006 plan as some parts of the Wall were decoded and rebuilt in some areas, such as: redirecting a part of the Wall route to the western and southern side of Jayoous village located northern of Qalqiliya in 2009<sup>1</sup>, and redirecting the Wall route according to a decision taken by the Israeli High Court of Justice to the southern areas of Qalqiliya (Wadi AR-Rasha, Ras Atiya and Adab'a) in 2010 (OCHA, 2014). These redirections took place in small areas and was not taken as a response of the Palestinian residents' demand who constantly appeal to the Israeli Court to remove the Wall off the whole villages' lands. According to the Wall route in 2012 there are some

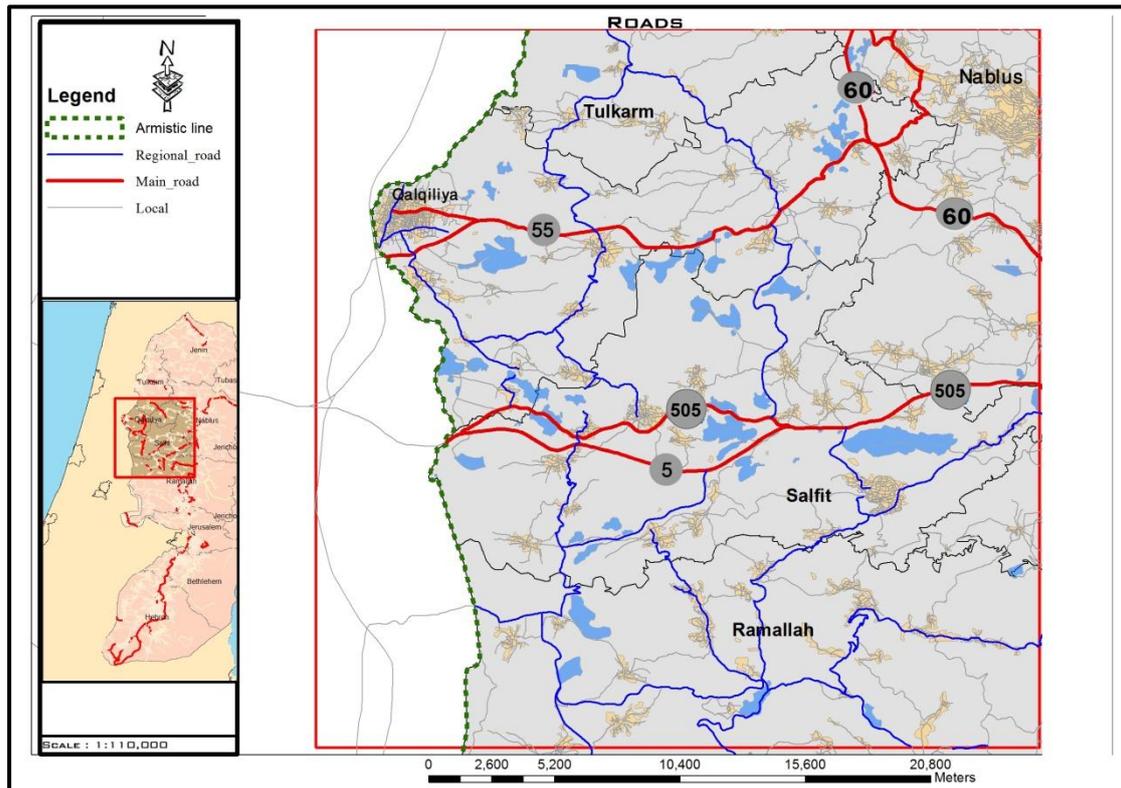
<sup>1</sup> Available at (<http://www.poica.org/preview.php?Article=1848>) [Accessed 22 April 2015]

planned parts of the Wall to be re-directed such as; a part located west Jayyous (in Qalqiliya) and south Falmya (in Tulkarem), and a part located north Azzun Atma village.

It is obvious and according to maps, that all new modification in the Wall's route works on excluding and isolating the Palestinian communities outside the requested borders by Israelis and annexing as non-inhabited land- by Palestinians- as possible, in addition to isolating and excluding Palestinian communities from one another and disconnecting the geographical contiguity between them, the contiguity between Israeli colonies increased.

#### **4.4.3 Bypass Roads**

The study area includes main roads, regional, and local roads as shown in **(Figure 4.16)**. Road 60 is one of the main roads that exists in the study area, it is a fast and ancient road that was established prior to 1967. It has been considered as the main artery of the West Bank, it also extends from the north to the south, linking the following Palestinian governorates: Jenin, Nablus, Ramallah, Jerusalem, Bethlehem, and Hebron.

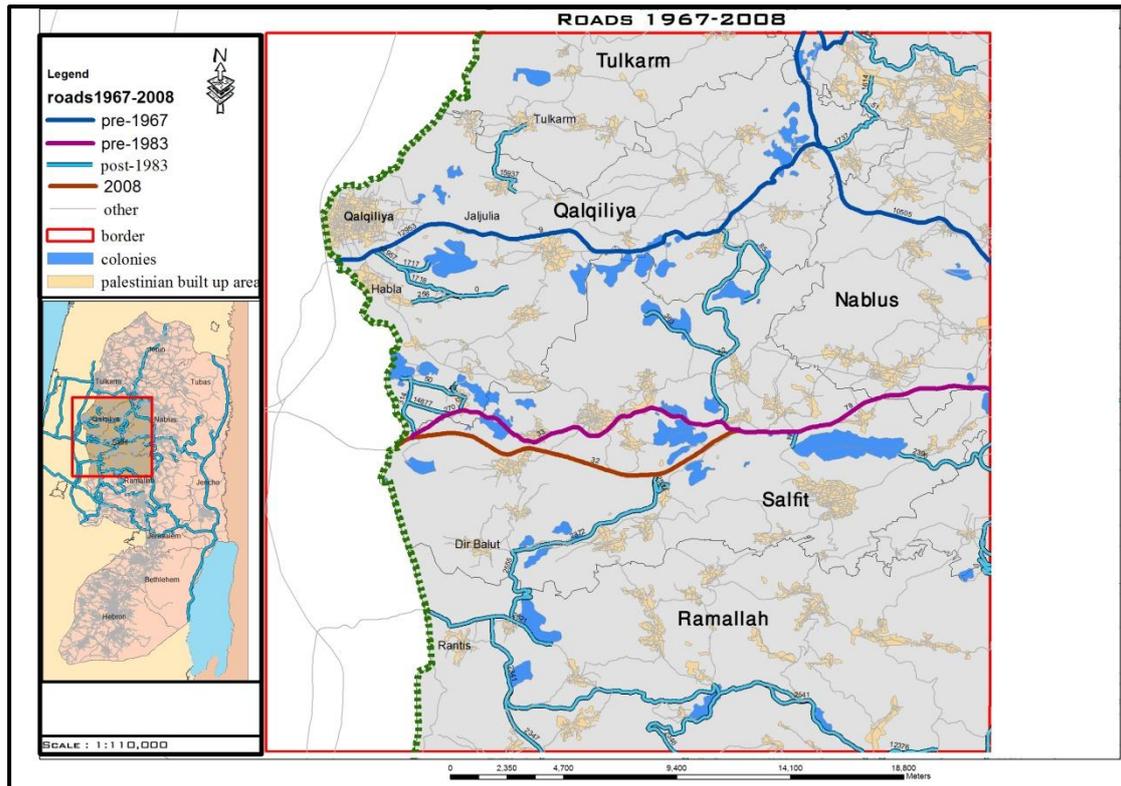


**Figure 4.16 :** Classification of Roads in the Study area (Source: Done based on Information Center concerning Affairs of Colonization and Annexation Wall, 2012)

The study area includes two main roads that extend from the west to the east and intersect with road 60. One of them connects Qalqiliya city with Nablus, that was established prior to 1967. The other road is road 505 that was established by Israeli authorities to connect colonies in the West Bank with Tel Aviv, as it was established prior to 1983 after the establishment of Ariel and other colonies.

The regional roads contain many axes, and extends from the north to the south, and others from the east to the west. In addition to local roads network that serves inside a village or a city.

The main roads have been expanded after 1967 and their routes have been changed to serve Israeli objectives and to connect Israeli colonies together. After Oslo Agreement, the term "bypass roads" clearly appeared, as some of these roads are for Israeli use only, in which Palestinians are prevented from using, and other roads puts restrictions on Palestinian traffic (**Figure 4.17**).



*Figure 4.17 : Roads before and after 1967 (Source: Done based on (Benvenisti, 1988) and*

*[http://en.wikipedia.org/wiki/Highway\\_5](http://en.wikipedia.org/wiki/Highway_5) )*

**Figure 4.18** represents the bypass roads where Palestinian vehicles are prevented or restricted to use due to some barriers like: checkpoints and road gates. Some roads were replaced by tunnels for Palestinian use.

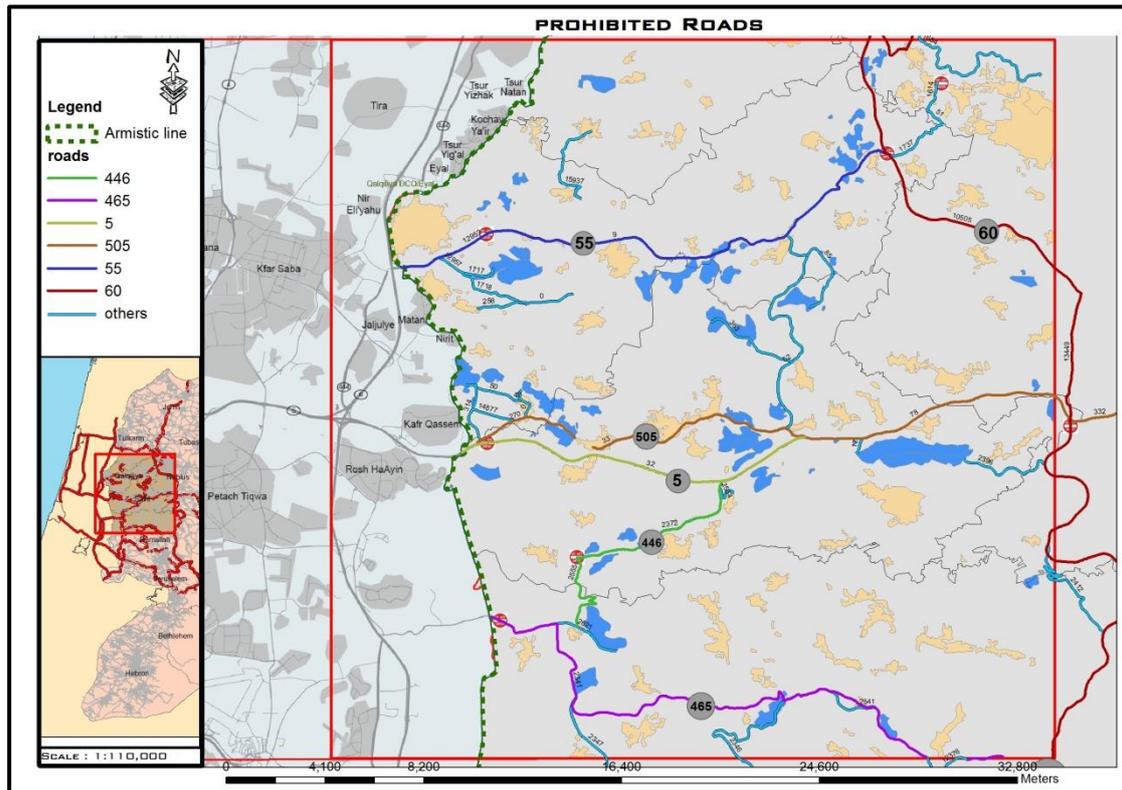


Figure 4.18: Bypass roads in the study area (Source: Done based on (OCHA, 2012))

Every bypass road considered for Israeli use only has a buffer zone on each side; the buffer zones range from 50-75 meters (OCHA,2008).

**Table 4.5** represents details about the bypass roads in the study area, its classifications, lengths, and the type of restriction on Palestinians.

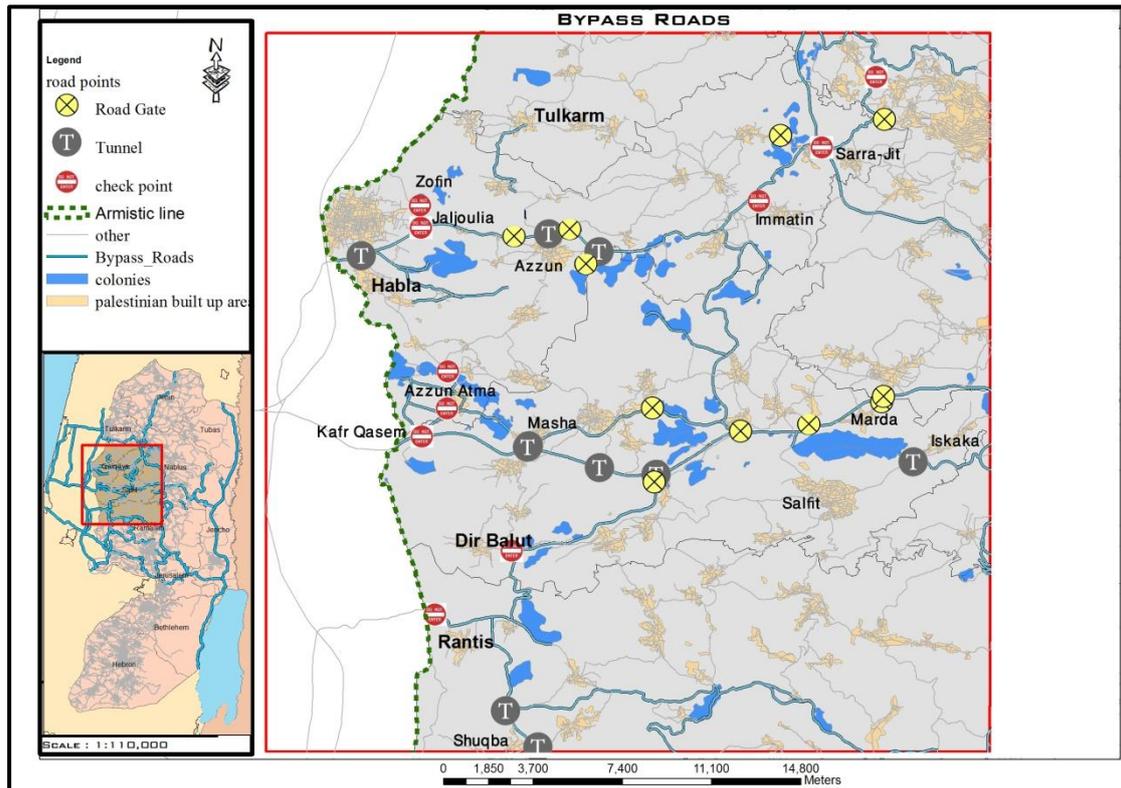
*Table 4.5 : Bypass Roads in the study area for Israeli use only (OCHA,2008)*

Road name	Type	From	To	Length (Km)	Restriction
<b>Road 60</b>	Main	Jit intersection, west of Nablus	Huwwara intersection, south of Nablus	12 (from 163 km total length)	Partial
<b>Road 55</b>	Main	Check point in the wall, south of Qualqiliya	Armistice Line	4	Complete
<b>Road 505</b>	Main	Mashah village, west Salfit city	Armistice line	6	Complete
<b>Road 505</b>	Main	Ma'aleh Ephraim Intersection (west Mashah)	Za'tara check point	16	Restricted
<b>Road 505- 5 (Highway)</b>	Main	Za'tara check point	Armistice line	31	Restricted
<b>Ariel – Salfit</b>	Regional	Road 505, north of Ariel	Northern entrance to Salfit	3	Complete
<b>Road 60</b>	Main	Jit intersection, west of Nablus	Dotan intersection, west of Qabatya	30	Restricted
<b>Road 446</b>	Regional	Road 5 (Highway)	Deir Balut check point	8	Complete
<b>Road 465</b>	Regional	Route 60, north of Ofra	Armistice Line ,north of Rantis village	31	Restricted

**Table 4.6** and **Figure 4.19** represent the obstacles of movement on roads for Palestinians, and the total and location of these obstacles in the study area.

*Table 4.6 : Obstacles to movement on roads, and Tunnels*

	<b>Total</b>	<b>Location</b>
<b>Chickpoints</b>	10	Rantis (Ramallah), Azzun Atma ,Zufin, Jaljoulia (Qalqiliya), Deir Ballut (Salfit), Sarra-Jit , Immatin (Nablus)
<b>Road Gates</b>	11	505 street (Salfit- Ariel), 55 street (east Qalqiliya), Azzoun,
<b>Tunnels</b>	9	Qalqiliya-Habla, Azzun-Khirbet Sir, Masha-Azawiya, Bidya-Rafat, Azzun-Kafer laqif, Iskaka-Salfit, Shuqba-Shabtin, Rantis- Deir Abu Mash'al



*Figure 4.19: Bypass Roads and Obstacles to movement (Source: Done based on OCHA, 2012)*

**Figure 4.20** represents the road network in the study area, and how the bypass roads have linked with the road networks inside the 48 Land (Israel).

From the figure, we can spot two main Highways; Highway 6 that extends from the north to the south and from the west along to the Armistice Line. The construction of this road took place in the late 1990's with a length of 140 Kilometers<sup>1</sup>. Road 55 in the West Bank was linked with Highway 6 at the southern part of Qaqiliya crossing the West Bank border towards Israel. The last point Palestinian are permitted to reach before the linkage of road 55 with Highway 6 is Jaljoulia checkpoint. Palestinians are prohibited from crossing this checkpoint, With the exception of certain Palestinian groups living in isolated Palestinian communities behind the wall.

<sup>1</sup> Available at [http://en.wikipedia.org/wiki/Highway\\_6\\_%28Israel%29](http://en.wikipedia.org/wiki/Highway_6_%28Israel%29) [Accessed: 27 April 2015]

Road 465 located northern of Rantis is also linked with Highway 6 and crossing the West Bank border. The last point that Palestinians are permitted to reach on this road is Rantis checkpoint, that is located in the wall, permanently closed except for those Palestinians who have entry permits to Israel.

Highway 5 starts from the Mediterranean Coast northern of Tel Aviv, but after crossing the West Bank it extended to about 20 Kilometers inside the West Bank before it merges with road 505 which is northern to Ariel block reaching the Jordan Valley. In the beginning, Highway 5 only reached to the West Bank border, but in the late 1990's until 2008<sup>1</sup>, the section that extends from the Armistice Line to road 505 (Ariel junction) was paved.

Referring to this analysis, the bypass roads and Highways play as a main factor in shifting the border over the time between Palestinians and Israelis through allocating Israeli use only roads, preventing and restricting Palestinians to use them by placing checkpoints and road gates. Then the roads were replaced by tunnels and underpasses for Palestinians use only to segregate them, and guarantee easily passing of Israeli settlers from Israel to colonies inside the West Bank.

The construction of these new roads and tunnels led to more confiscation of Palestinian land. The bypass roads erased the Armistice Line and formed new borders between Palestinians and Israelis. Through these bypass roads, Israeli colonists enjoy territorial contiguity and fast and direct highways that connect colonies in the West Bank with Tel Aviv, and connects all colonies with each other. On the other hand, Palestinians live in isolated enclaves linked by bad infrastructure, roads, and tunnels that are under full Israeli control.

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<sup>1</sup> Available at [http://en.wikipedia.org/wiki/Highway\\_5\\_%28Israel%29](http://en.wikipedia.org/wiki/Highway_5_%28Israel%29) [Accessed:20 April 2015]

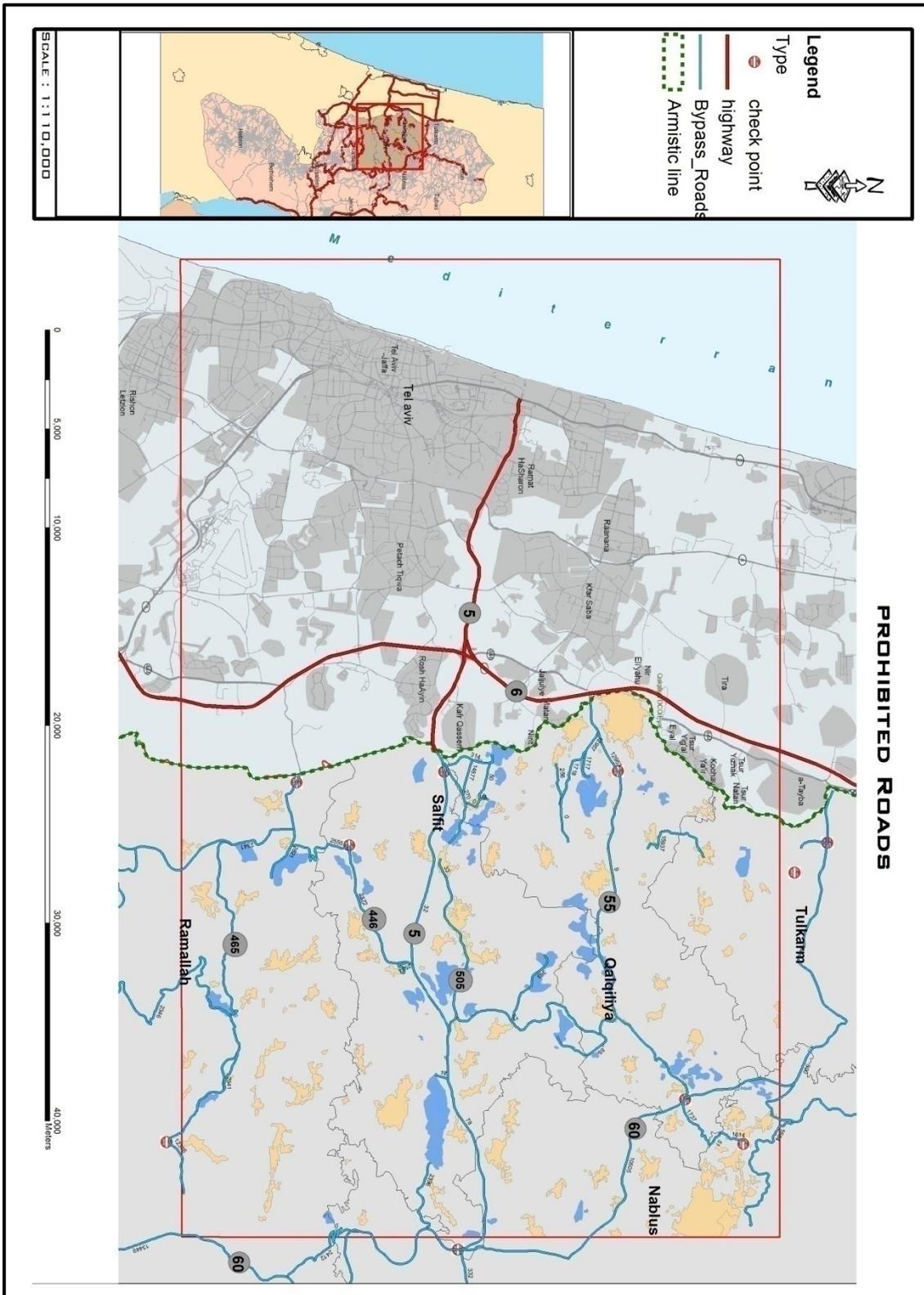
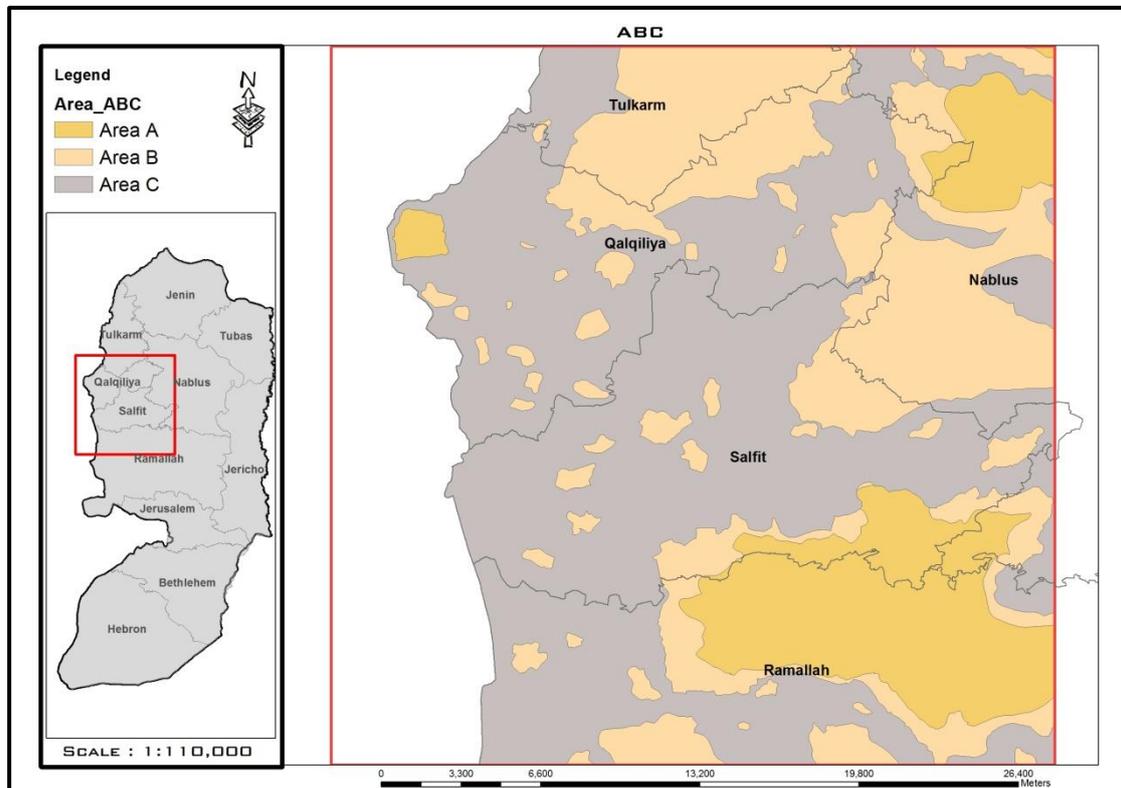


Figure 4.20 :Bypass roads in the West Bank linking with Highways inside the 48 Land (Done based on OCHA, 2012)

#### 4.4.4 Area A, B, C

The study area was classified to Area A, B, C according to Oslo II agreement in 1995 between the PLO and the Israeli side, these land classifications led to reshaping the borders. **Figure 4.21** represents the distribution of the study area into area A, B, and C which is totaled to 118.929 Kilometers square, 219.481 Kilometers square, and 394.515 Kilometers square respectively. Area C constitutes 53.8% of the study area, while area B constitutes 29.9%, and Area A constitutes 16.2%.

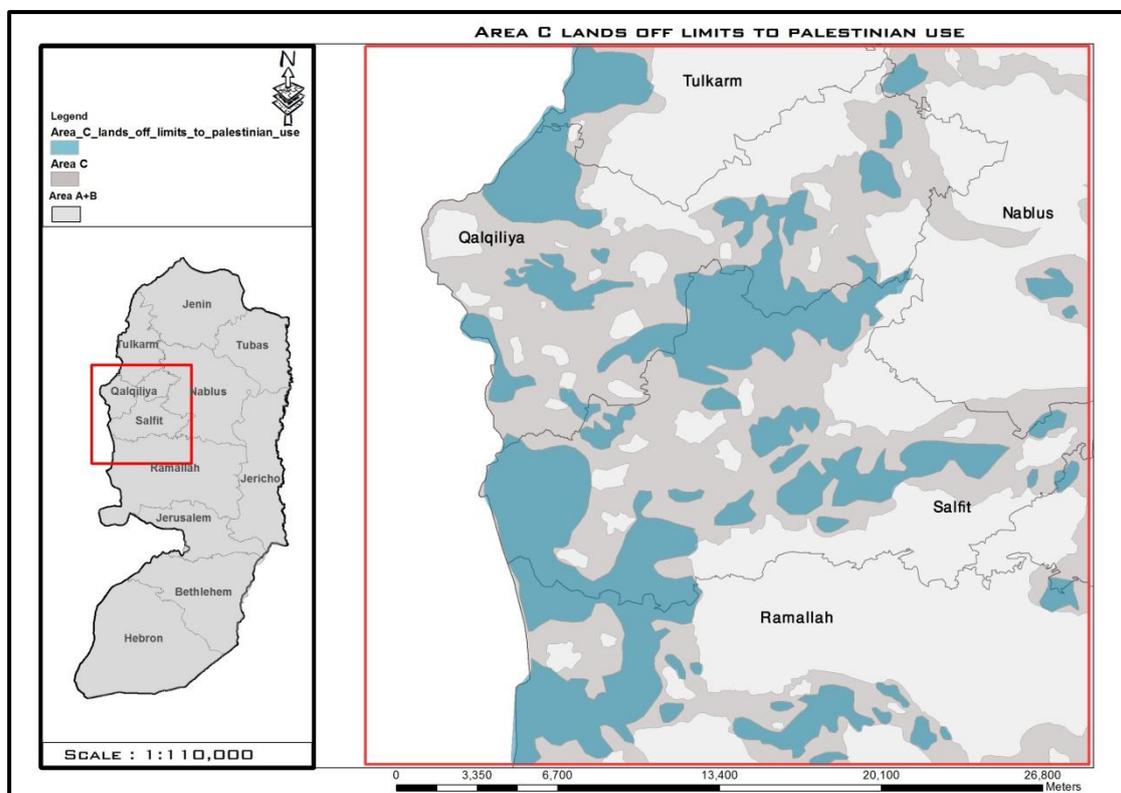


*Figure 4.21 : Distribution of Area A, B, and C in the study area (Source: Done based on Birzeit University database, 2014)*

**Figure 4.22** shows Area C lands that are under the jurisdiction of the local and regional councils of the Israeli colonies, and off limit to Palestinian use; these lands

including Israeli colonies and vast area around them, natural reserves, areas classified as state land or military zones by Israeli Authority, (These land classifications will be clarified later ).

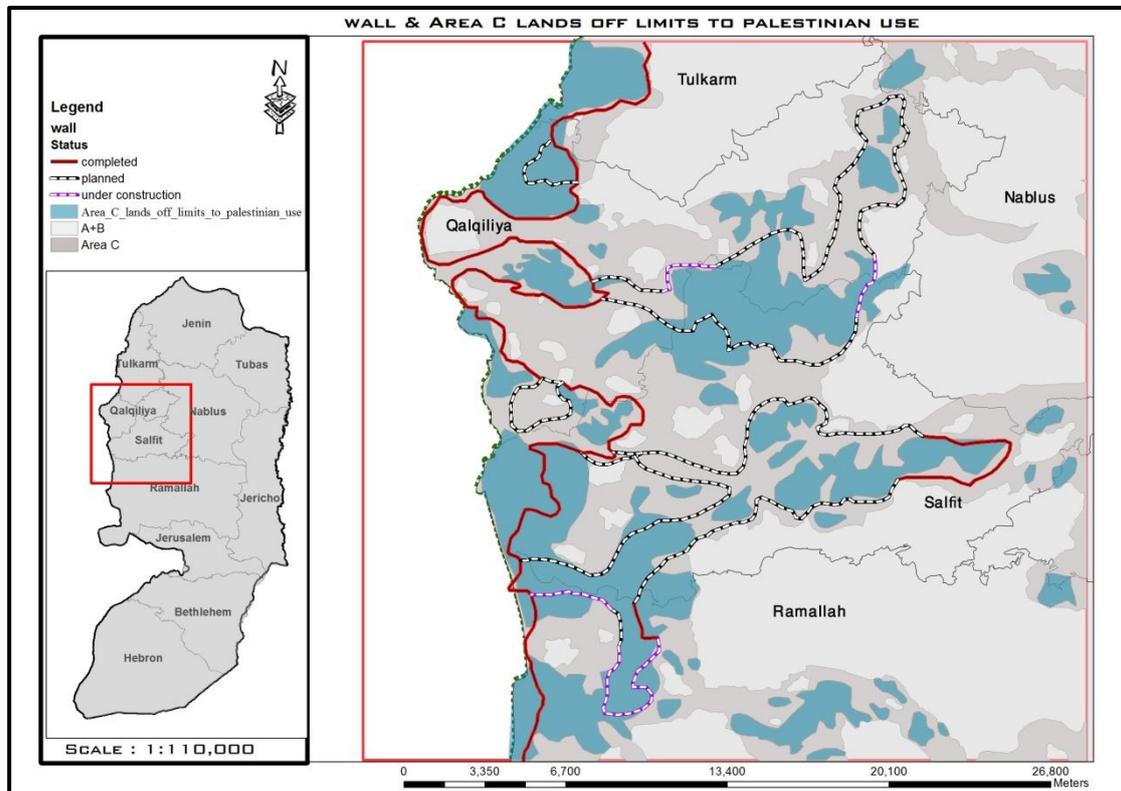
This classification of land made new borders between Palestinian and Israelis; these borders expanded the original borders produced previously by the colonies. Area C was put according to the presence of colonies and its linkages, leading to the isolation of Palestinian communities, this contributed to reshaping the borders.



*Figure 4.22 : Colonies and Area C lands off limits to Palestinian use (Done based on (B'Tselem, 2013))*

The relation between Area C lands that are off limits to Palestinian use and the Segregation Wall is represented in (Figure 4.23). Most of these Area C lands in the study area will be included behind the wall after its completion. There are other areas in Area C that Palestinians are prohibited to reach, such areas have not yet been

included behind the wall. This means that the wall route and according to its latest plan does not demarcate the final border between Palestinians and Israelis. The wall plan might be modified in the future to annex more lands around it.



*Figure 4.23 : The Wall and Area C lands off limits to Palestinian use (Done based on B'Tselem, 2013)*

## 4.5 Factors affecting the border shifting

### 4.5.1 The demographic situation

According to statistics, Israeli colonists in the study area form 72,692 colonists, while Palestinian population is estimated to 261,689 as presented in **Figure 4.24** (PCBS, 2011; Ministry of State Database).

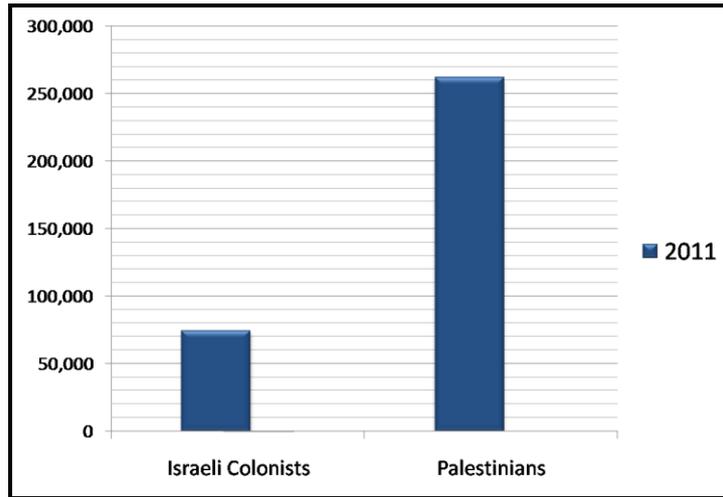


Figure 4.24 : The number of Israeli Colonists and Palestinian population in the study area

Figure 4.25 represents the colonists growth in the study area between the years 1982 and 2011; the figure shows an excessive increase in colonists numbers between the periods of 1982 to 1992 and 1992 to 2011. The fast growth of Israeli colonists is caused due to mass immigration waves of Jews from abroad.

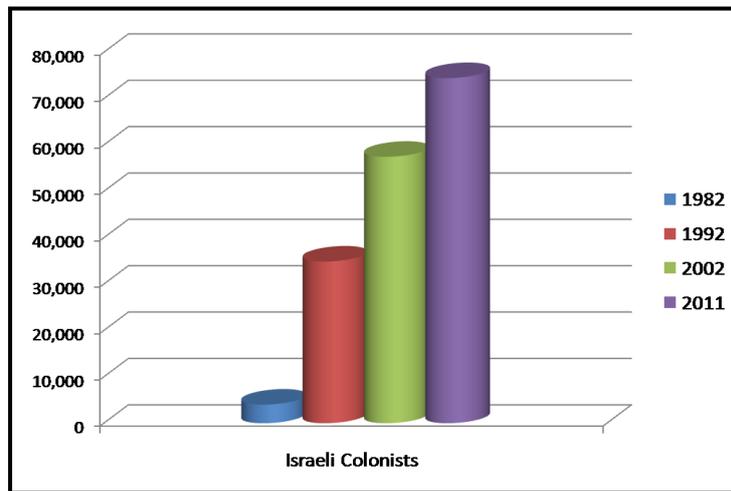
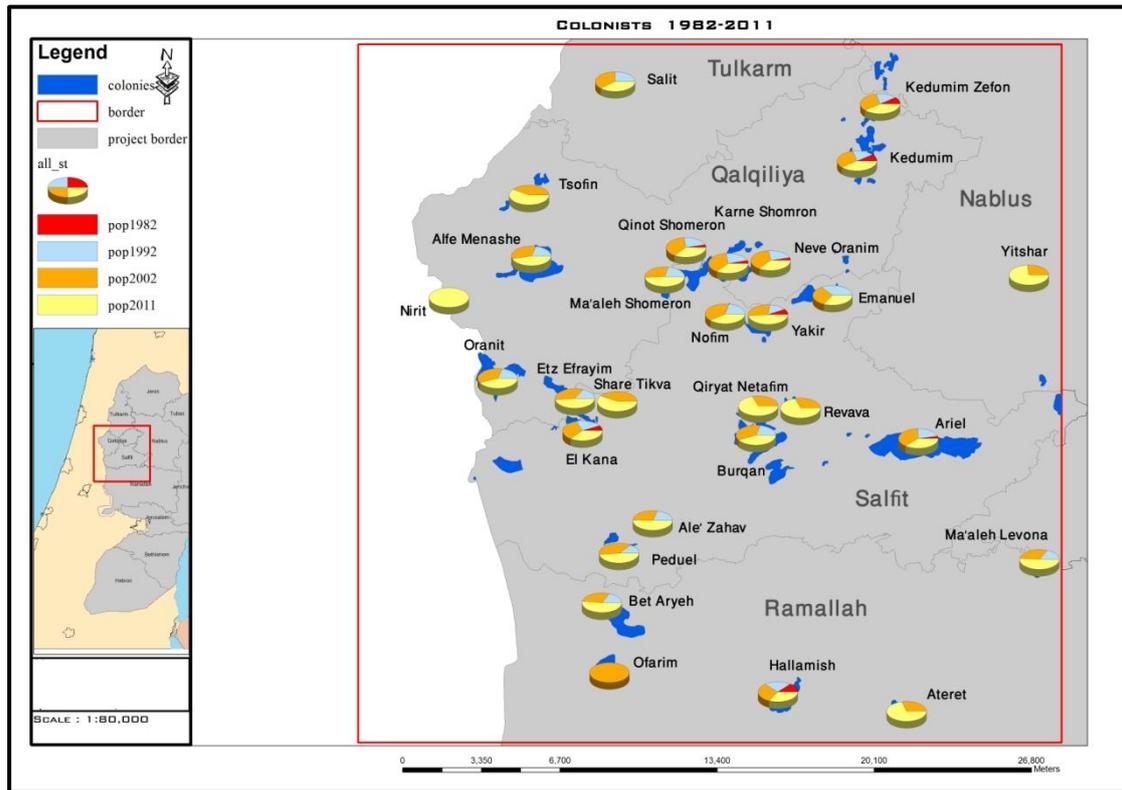


Figure 4.25 : Growth of Israeli colonists in the Study area from 1982-2011

Figure 4.26 and Table 4.7 represent the growth of Israeli colonists in the study area in the period between 1982 and 2011. According to the table, some colonies experienced a significant inflation in its colonists numbers between 1982 and 1992. For instance, Ariel colony had 1,340 colonists in 1982, a number that increased 10

times by 1992 to reach 10,400 colonists. This increase in colonists numbers is due to the mass immigration of Jews that began in 1989 from the Former Soviet Union to colonies in the West Bank, particularly Ariel that had a good and cheap life to attract immigrants. The immigration continued and was followed by a series of immigration waves through the 1990's and 2000's, mostly are from other countries like the United States of America, Canada, South Africa, and the United Kingdom. These immigration waves had almost doubled the number of colonists to reach 17,849 in 2011.



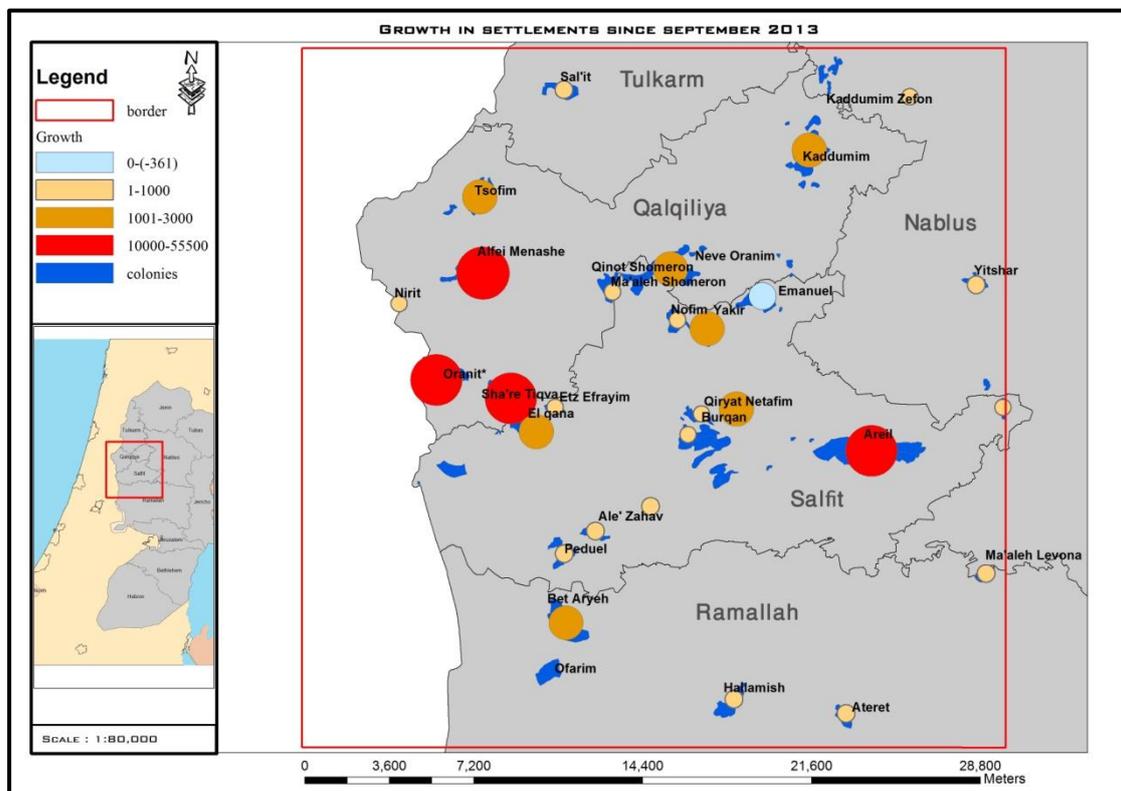
*Figure 4.26 : Growth of Israeli colonists in the colonies from 1982-2011 (Source: Done based on (Information Center Concerning Affairs of Colonization and Annexation Wall, 2015)*

**Table 4.7: Growth in Colonies from 1982- 2011**  
 (Source: Information Center of the Wall and Settlements Affairs Database, 2015)

	Colony	Colonists 1982	Colonists 1992	Colonists 2002	Colonists 2011
1	Ariel	1,340	10,400	16,300	17,849
2	Barqan	0	669	1200	1,464
3	Revava	0	0	633	1,395
4	Kiryat Netafim	0	0	344	744
5	Ale' Zahav	0	268	414	690
6	Peduel	0	323	1,010	1,246
7	Etz Efrayim	0	0	606	806
8	Ma'ale Shomron	0	360	527	860
9	Yakir	211	467	862	1,463
10	Nofim	0	223	398	433
11	Emanuel	0	3,150	2,350	2,952
12	Karnei Shomron (include Neve Oranim, Qinot Shomeron)	605	4,100	6,100	6,449
13	Elkana	650	2,480	3,030	3,746
14	Alfe Menashe	0	3,170	5,250	7,423
15	Tsofim	0	0	997	1,338
16	Keddumim ( include Keddumim Zefon)	810	1,970	2,800	3,904
17	Nirit ( expansion inside the West Bank)	-	-	-	100 (estimated in 2008)
18	Sha'ari Tikva	0	1,610	3,650	4,930
19	Oranit	0	2,930	5,190	6,600
20	Sal'it	0	325	439	524
21	Yitshar	0	0	398	1,106
22	Ma'aleh Levona	0	233	462	720
23	Bet Aryeh	0	1,310	2,480	4,057
24	Ofarim	0	0	810	United with Bet Aryeh
25	Hallamish	400	894	895	1,153
26	Ateret	0	0	320	740
	<b>Total</b>	3,155	34,882	57,465	72,692

**Figure 4.27** represents the number of colonists placed in colonies in the West Bank since the signing of Oslo Agreement. Other colonies witnessed a significant increase

in their residents, as Ariel, Alfe Menashe, Oranit, and Sha'ari Tekva, which have the highest number of Jewish immigrants in the study area, ranging between 3,001-10,000 colonists. The concentration of Jews immigrants was on Ariel colony, the largest colony in the study area, and on colonies located near the Armistice Line. Referring to the figure, Immanuel colony experienced a decrease in its residents number due to the political instability after Oslo, as many residents moved to the nearby Ariel colony and other colonies for employment.



*Figure 4.27: The number of Colonists who have been added since Oslo (Source: Done based on Peace Now, 2013)*

After Oslo Agreement, the establishment of new Israeli colonies in the West Bank was dropped, and there wasn't any new colonies between the years of 1992 to 1995 and 1999 to 2011 (PCBS, 2012). However, expansion of colonies continued as new

neighborhoods within the boundaries of existing colonies were found, bringing too many immigrants from abroad to live in them. Economic incentives and benefits were given to colonies and colonists such as: high monthly salary compared to Israelis in Israel and Jerusalem, benefits in education, manufacturing, and tax benefits (B'Tselem, 2010).

An example about manufacturing benefits, Israel has established 13 industrial zones near the colonies in the West Bank. In the study area, Barkan industrial zone, Ariel industrial zone, and Kedumim, and Alie Zahav industrial zone. Also large benefits were given to local councils and municipalities to implement large investment projects and good infrastructure that contributes to the life quality of colonists. All of these incentives are considered as attractive factors for Jews to come and live in colonies (B'Tselem, 2010). New colonies were established in the study area to absorb the new immigrants immigrating after 1990; these new colonies have merged with nearby existing colonies. For example, Neve Oranim and Alonie Shilo were merged with Karnie Shomron and Ginot Shomron to form one municipality. Revava colony was established after 1990 to absorb more immigrants as well. Beit Aryeh and Ofarim were merged and bypass roads were established among them <sup>1</sup>.

The increase of colonists in the study area, has shifted some outposts to colonies which merged with other colonies to form municipalities, indicating a constant expansion of their boundaries. The Wall Plan was prepared to include big colonies with high density of colonists. In the study area, Yitshar, Hallanish, Ateret, and Ma'aleh Levona are outside the Wall Plan. The number of colonists in these colonies is small when compared with other colonies.

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<sup>1</sup> Available at ([http://en.wikipedia.org/wiki/Karnei\\_Shomron](http://en.wikipedia.org/wiki/Karnei_Shomron)), ([http://en.wikipedia.org/wiki/Beit\\_Aryeh-Ofarim](http://en.wikipedia.org/wiki/Beit_Aryeh-Ofarim)) [Accessed: 9 April 2015]

#### 4.5.2 Land ownership and classifications

Land registration began during the British Mandate and continued during the Jordanian period. By 1967, only 30% of Palestinian land in the West Bank was registered<sup>1</sup>; this land was mainly concentrated in central and northern West Bank. After 1967 Israeli authorities paused land registration and classified land into different categories. Most areas are unregistered in the Land Authority records, but only few were found in Qalqiliya, Qarawat Bani Zaid, and some villages in Ramallah and Nablus, as shown in (Figure 4.28).

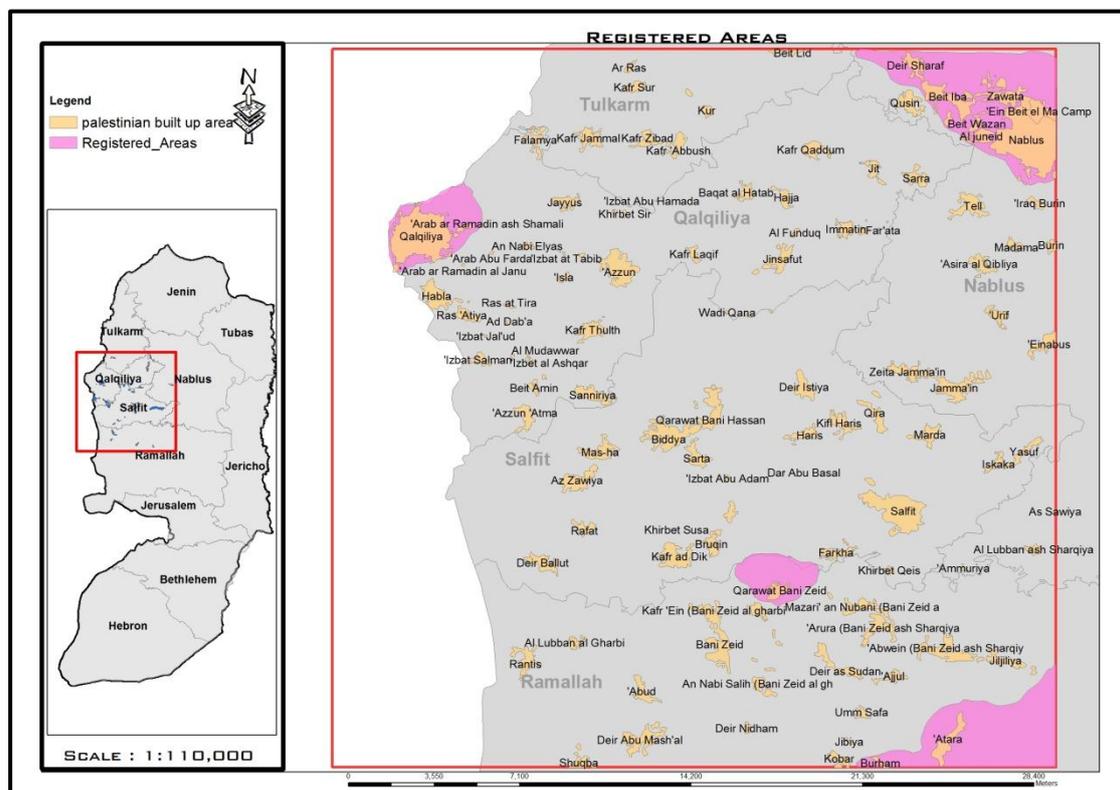


Figure 4.28 : Registered areas (Source: Done based on Land Authority, GIS department, 2014)

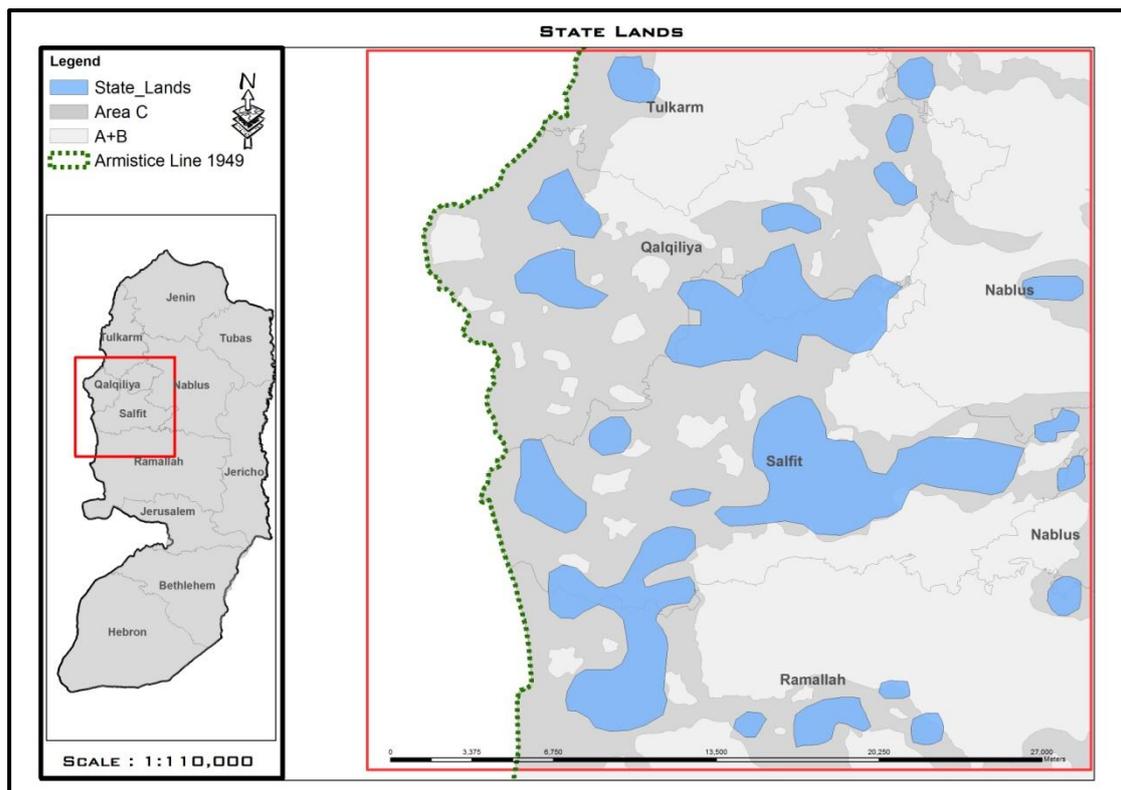
Israeli Authorities have exploited much of the unregistered areas before 1967, imposed control over other areas, and confiscated tens of thousands of Dumums under

<sup>1</sup> Available at (<http://www.arij.org/atlas40/chapter2.2.html>) [ Accessed 25 April 2015]



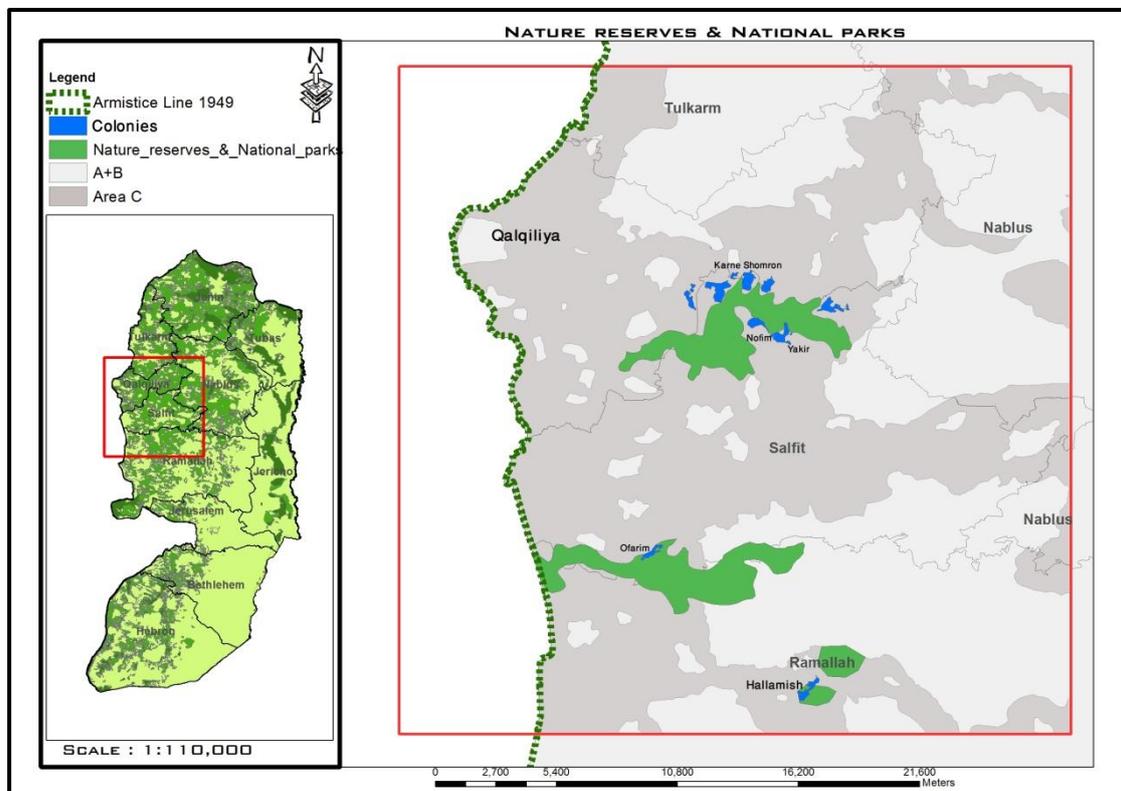
After Oslo, most of the unregistered and uninhabited land by Palestinians were classified as Area C directly subjected to Israeli control. The Israeli Authorities divided Area C to various sub-areas including: state land, natural reserves, and firing zones, to prevent Palestinians from construction or development in these areas.

**Figure 4.30** represents the sub-areas classification in the study area, in which the state land represents about 130.09 Kilometers square. The Ottoman land law in 1858 classified the land to many classes (as mentioned in chapter three) such as: Miri and Mawat. Israeli Authorities used this division and manipulated the law to declare hundreds of thousands of Dunums as state land, ignoring other conditions belonging to the Ottoman law (B'Tselem, 2013).



**Figure 4.30:** Israeli classification of some areas as state land (Source: Done based on (B'Tselem,2013))

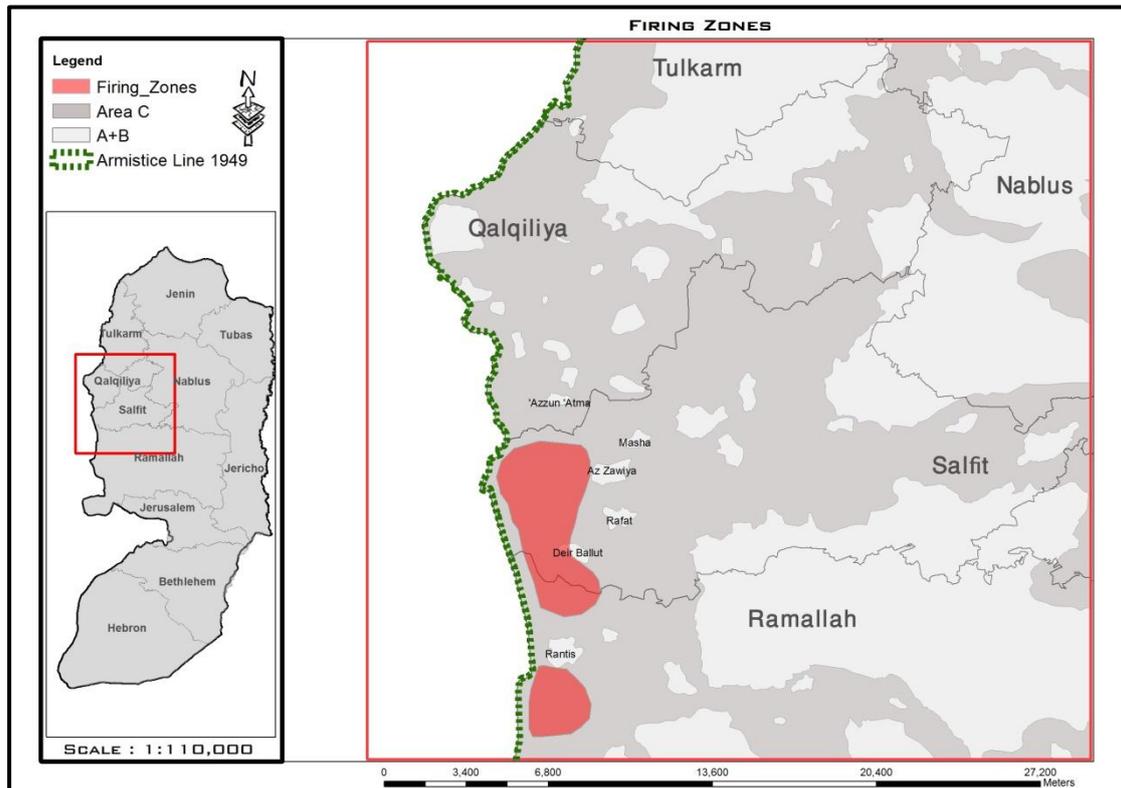
Natural reserves is another classification of land; **Figure 4.31** represents the areas that were classified as natural reserves and national parks in the study area totaling 43.04 Kilometers square. Israeli Authorities prevented Palestinians to construct or do any agricultural development in these areas under the pretext of S15 plans, that classified these lands as natural reserves prohibiting construction by Palestinians. On the other hand, and despite the fact that Palestinians were forbidden to build in natural reserves areas, some Israeli colonies were constructed in these areas such as: Ofarim colony, Nofim, Yakir, Hallamish and parts of Karni Shomeron.



**Figure 4.31:** Israeli classification of some areas as Natural Reserves and National Parks (Source: Done based on (B'Tselem, 2013; MoLG, 2014))

**Figure 4.32** represents some areas in Area C that were classified as military firing zones by the Israeli Authority. These zones are located near the Armistice line in the study area, totaling 25.84 Kilometers square. Some Palestinian communities are

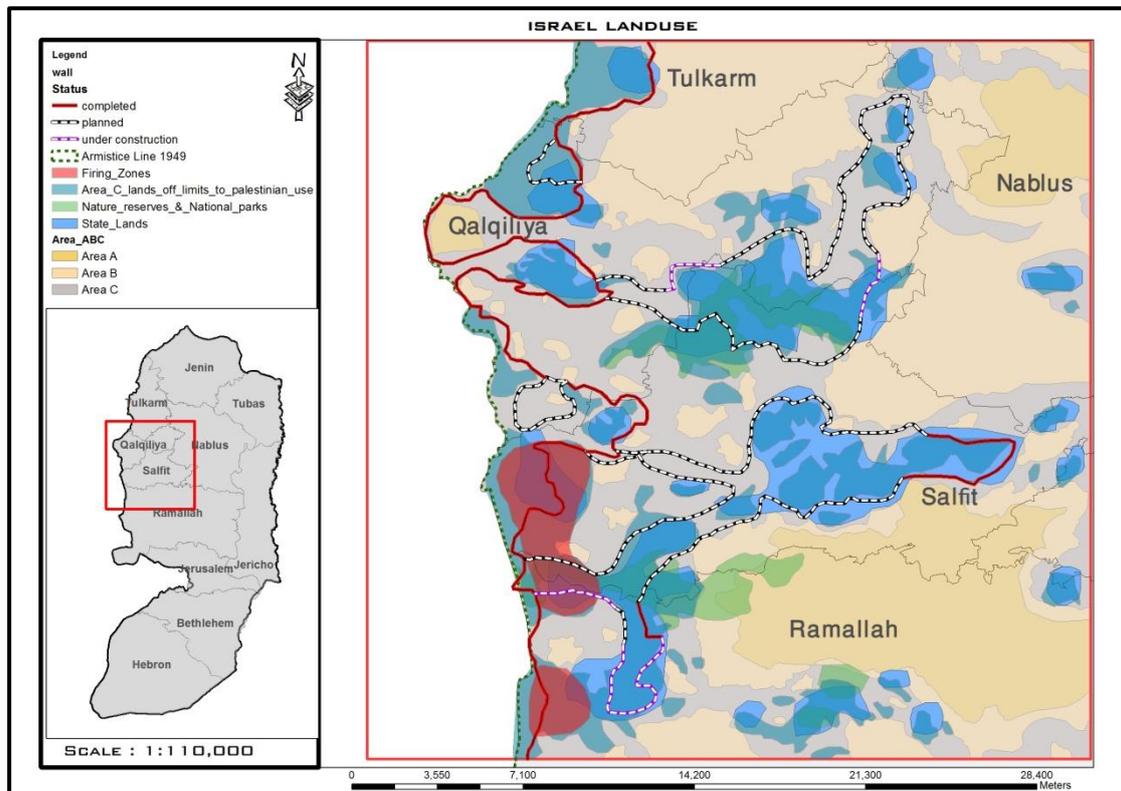
located in these areas such as: Azzun, Atmah, and Deir Ballut; Palestinians have also been prohibited from construction in these areas. Vast areas of the Palestinian villages located nearby the West Bank borders were confiscated under the same land classification such as: Rafat, Rantis, Azzawia, and Masha.



*Figure 4.32: Israeli classification of some areas as Firing Zones (Done based on (B'Tselem, 2013))*

In brief, Israeli Authorities classified the land to various zones as shown in **(Figure 4.33)**, preventing Palestinians from building or developing in these areas under the excuse of military needs, natural reserves, or state lands, while at the same time Israeli colonies were constructed on the same classified land. Also many private Palestinian land adjacent to these classified areas were seized. Israeli colonization used these classifications as a tool to confiscate and impose control on a vast area of Palestinians land, reserving it for colonies' expansion and the establishment of bypass roads. This

classification of land used by Israeli Authority to shift the borders between Palestinians and Israelis, creating new borders constantly.



*Figure 4.33 : Israeli classification of land (Source: Done based on B'Tselem, 2013))*

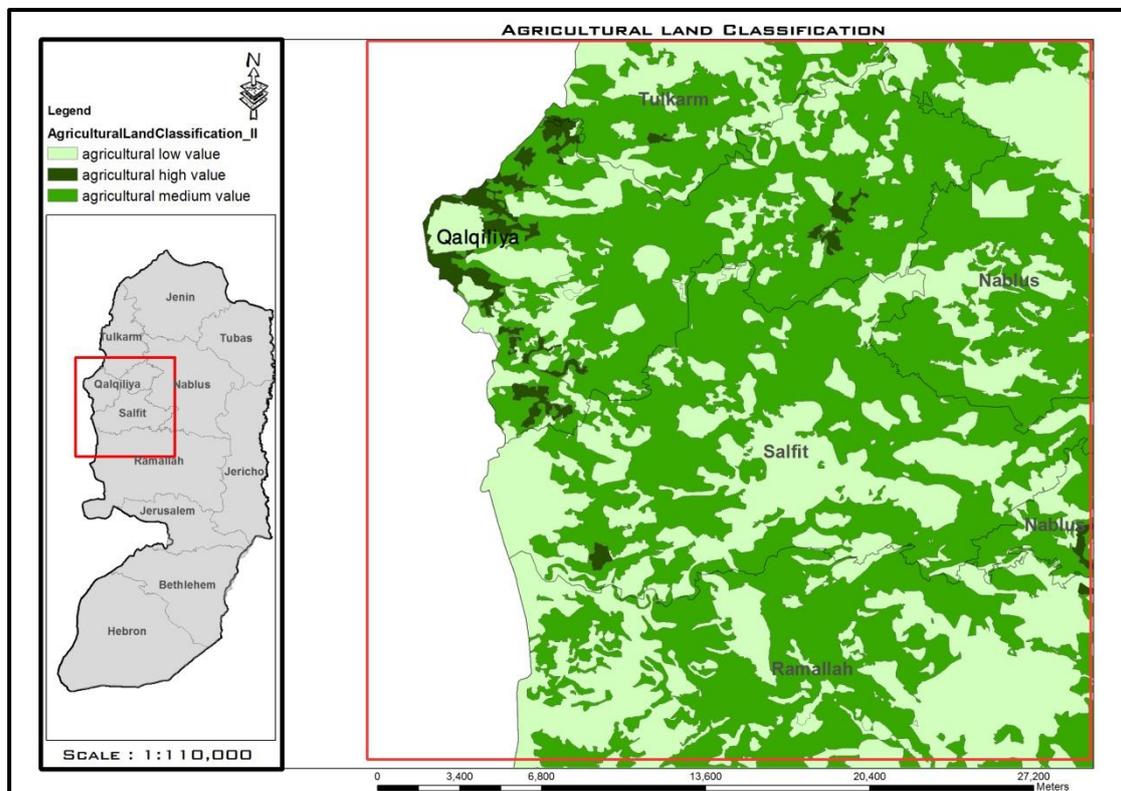
### 4.5.3 Resources

The study area is rich of natural resources that distinguish it from other areas in the West Bank; it has agricultural land, springs and aquifers, and gas and oil.

#### 1- Agriculture

The agricultural land forms of 429 Kilometers square from the study area which is 733.12 Kilometers square located on the right side of the Armistice line. Approximately 60% of the study area is agricultural land. According to (MOP,

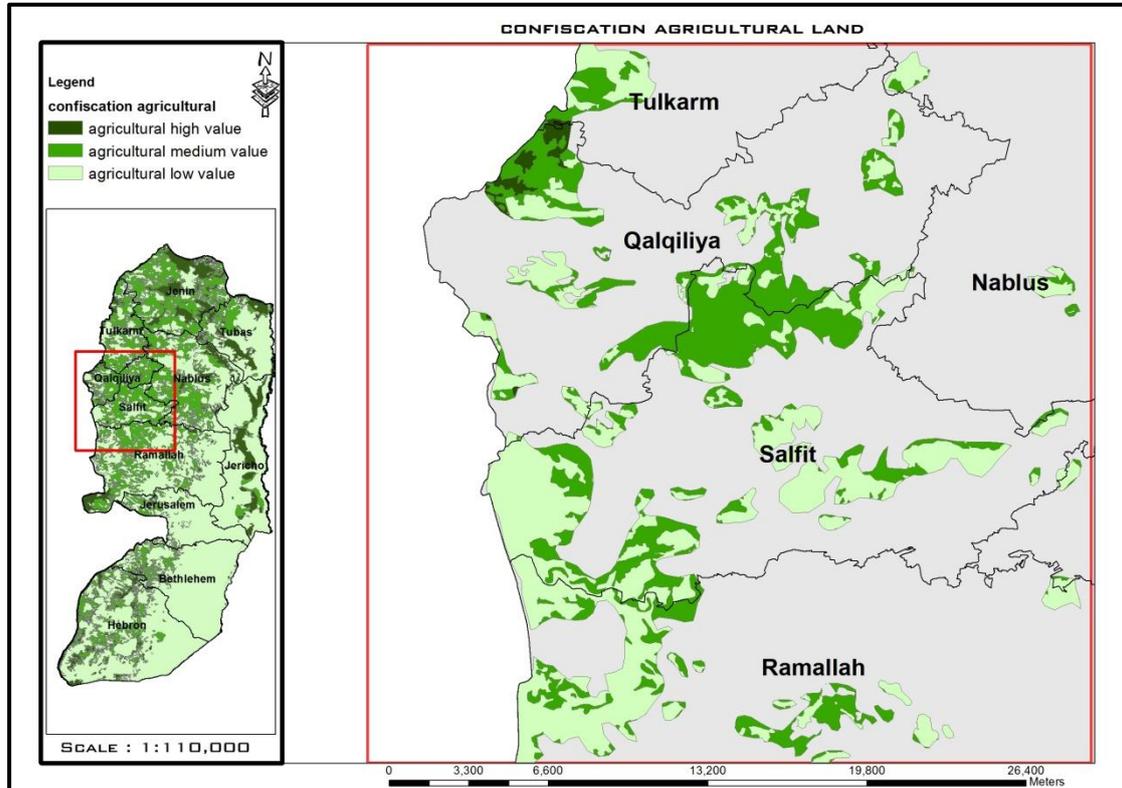
National Spatial Planning, 2014) agricultural land has classified to: high value, medium, and low value; the high value means the land that are suitable for field crops, the medium value means the land that are suitable for all crops and especially the trees, and low agricultural value means the other lands, these classifications done based on the level of soil tendency. The high value agricultural land are concentrated north and south of Qalqiliya city, Part of Tulkarem closer to the Armistice line, other areas in Qalqiliya near Jinsafut, Immatin, Al Funduq village, and western areas of Salfit governorate as shown in (Figure 4.34).



*Figure 4.34 : The agricultural Land in the case study (Source: Done based on shapfiles from MoLG, GIS Department, 2014)*

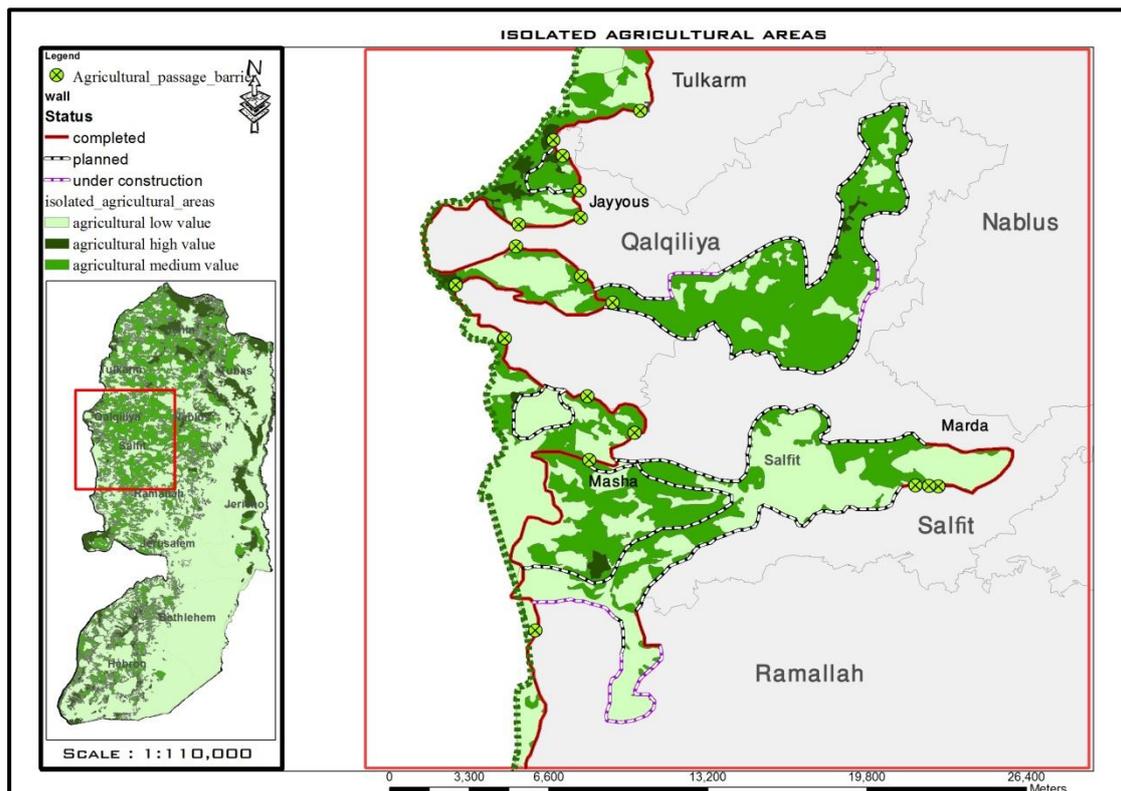
**Figure 4.35** represents the seized agricultural land in the study area by Israeli Authorities to establish colonies, outposts, military zones, and checkpoints. Also most

of these agricultural land were confiscated under the pretext of state lands, firing zones, and natural reserves totaling 69.91 Kilometers square.



*Figure 4.35 : Agricultural lands have been seized by Israeli colonies and Area C (Source: Done based on shapfiles from MoLG, GIS Department, 2014)*

After the completion of the Segregation Wall construction, 94.32 Kilometers square of the agricultural land in the study area will be isolated as shown in (Figure 4.36). Vast areas of the agricultural land are isolated behind the wall, while vast areas of land were confiscated, others can be only accessed through agricultural gates in the wall; these gates are opened to Palestinians in specific times.



*Figure 4.36 : Agricultural Lands isolated behind the Wall (Source: Done based on (MoLG, 2014), (OCHA,2012), Information Center Concerning Affairs of Colonization and Annexation, 2012)*

The study area includes Salfit and Qalqiliya governorates, originally known as agricultural districts. 80% of Salfit is agricultural land, in which 90% of it is planted with olive trees. Olive oil is a main contributor to the economic development in the governorate. 40% of the employed labor forces in Salfit depends on agriculture as a second source of income. Most of the agricultural land were confiscated to establish Israeli colonies, bypass roads, and infrastructure for colonies. For example, Elkana colony was built on 25% of agricultural land confiscated from Masha Village. 62% of Masha land were seized to construct the Wall, while the remaining 10% of the village's land is insufficient for farmers who depend on agriculture as a main source of livelihood. Another example is Marda, as 90% of its land is agricultural, 35% were seized when Ariel colony was established in 1978, and 3% of its land was taken to

construct bypass road 5. Other areas adjacent to Ariel were seized as well. After the establishment of the Wall around Ariel in 2005, 10% of Marda agricultural land were confiscated (Palestinian Monitoring Group, 2006). According to this, the percentage of Palestinians working in agriculture in Salfit governorate decreased from 38% in 2004 to 16.4% in 2005 (PCBS,2005).

Many of the agricultural land in Qalqiliya governorate were confiscated to establish Israeli colonies, bypass roads, and then the Segregation Wall. For example, Zufin colony was established in 1989 on a land belonging to Jayyous, in which also 75% of its agricultural land is isolated behind the wall. As 85% of Jayyous population work in agriculture, the confiscation of land directly affected the main source of income for Jayyous farmers (Palestinian Monitoring Group, 2006).

According to (PCBS, 2003, 2006) the percentage of employed people in the agricultural sector in Qalqilya and Tulkarem is 27.3% in 2002; this percentage decreased in the subsequent years to reach 25.7% in 2005 .

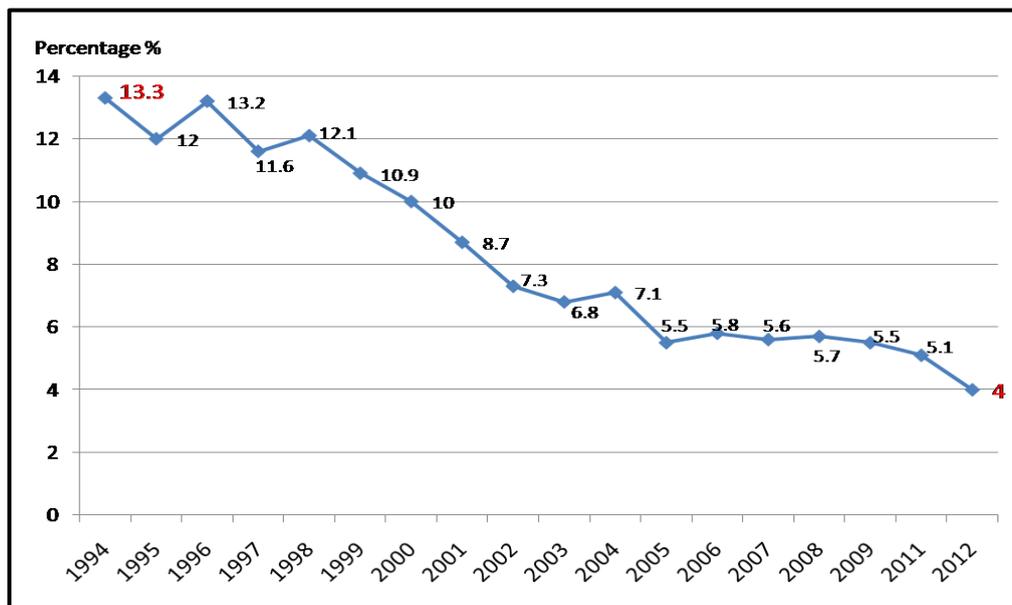
After the construction of the Wall and the increase in Israeli constraints in later years, the percentage of Palestinian workers in Israel decreased and many of them started working in agriculture. **Table 4.8** represents the employment rate in agricultural sector in Qalqiliya and Salfit from 2006 to 2014. The percentage decreased from 2006 to 2009 due to the increased Israeli obstacles and checkpoints. Moreover, the productivity of the agricultural sector and according to the Palestinian Ministry of Agriculture has decreased; the productivity of the isolated agricultural land behind the wall have decreased by 50%; as a consequence, people approached other sectors to work in, while many moved to other governorates seeking job opportunities.

**Table 4.8 :** The percentage of employed people in agricultural sector in Qalqiliya and Salfit governorates (Source: PCBS, Labour Force Survey Reports Series)

	2006	2007	2008	2009	2010	2014
Qalqiliya governorate	22.1%	20.3%	17.6%	14.7%	16.1%	17.7%
Salfit governorate	23.0%	14.7%	10.8%	7.4%	9.8%	7.4%

More constraints were imposed on the freedom of movement of farmers and on marketing of the agricultural products after the construction of the western parts of the Wall. Pumping the waste of industrial zones of the colonies into agricultural land and valleys negatively affected the productivity of the land.

**Figure 4.37** represents the percentage of contribution of the agricultural sector in the Gross Domestic Product; this percentage decreased between 1994 and 2012 due to the Israeli actions on the ground as a main factor.

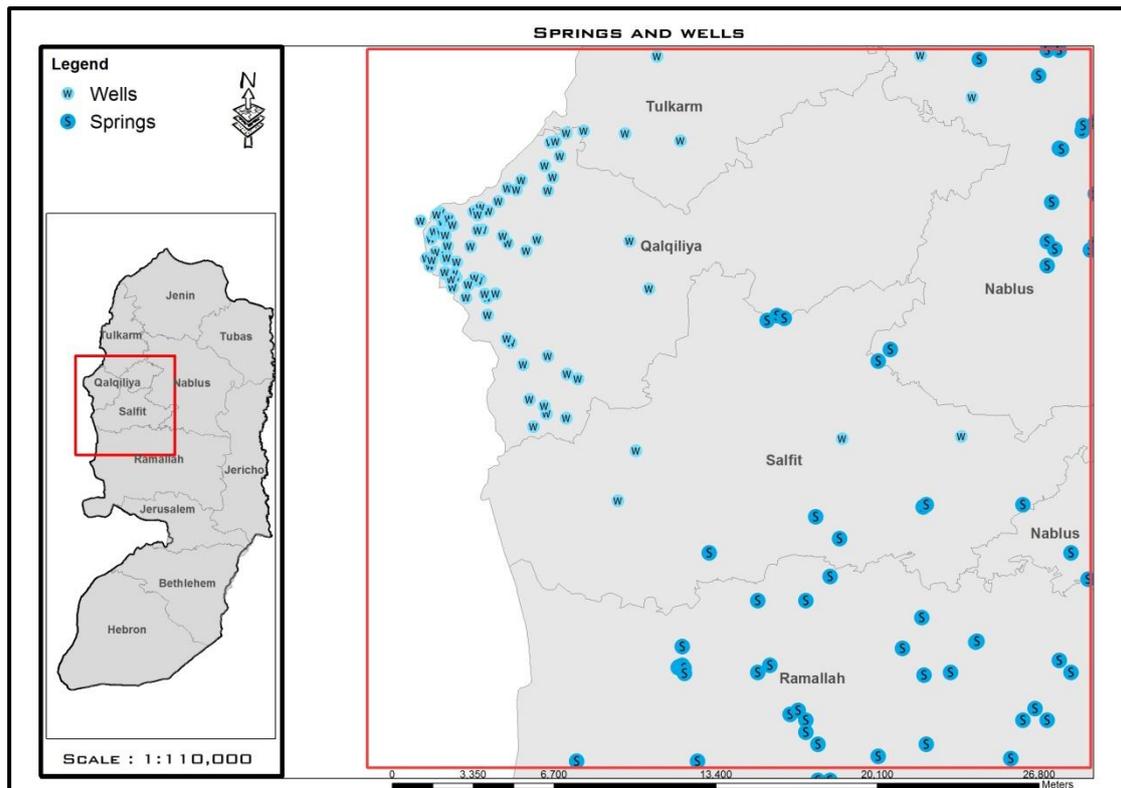


**Figure 4.37 :** Participation of Agriculture sector in the gross domestic product (Source: PCBS, 2013; World Bank, 2012)

## 2- Water resources (Aquifers and springs)

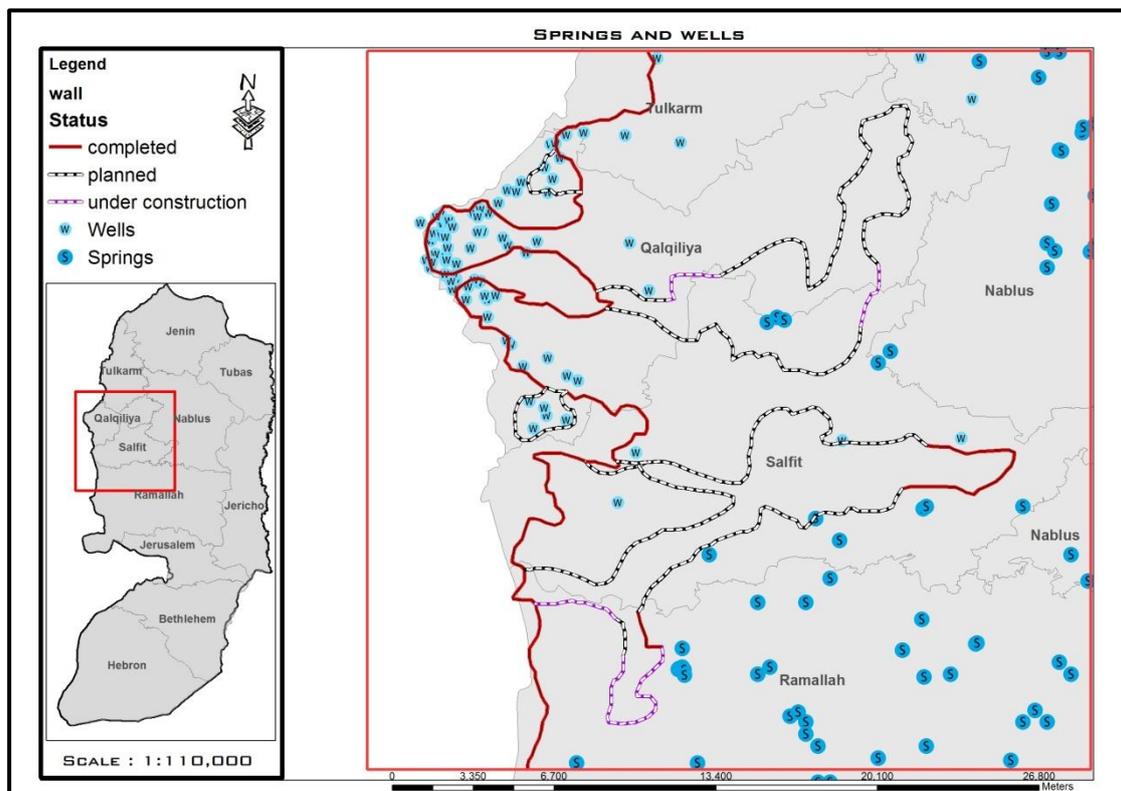
The study area is located in the Western Basin Aquifer, known as the largest basin of ground water basins in Historic Palestine (HWE, 2007). **Figure 4.38** represents springs and wells in the study area. The springs are found in Nablus, Salfit, and Ramallah areas, where as wells are concentrated around Qalqiliya city.

Wells located in the Western Groundwater Basin are considered to be the most important wells as they supply Palestinians with good quantity and quality of water resource. They are also the only access Palestinians have to the Western Groundwater Basin; this is mainly because of the restrictions imposed by Israelis on drilling wells since 1967 (PHG, 2003).



*Figure 4.38 : Springs and Wells in the case study (Source: Done based on shapfiles from MoLG, GIS Department, 2014)*

**Figure 4.39** shows that isolated groundwater wells and springs behind the wall form the largest proportion of the wells concentrated northern and southern of Qalqiliya. 11 wells have been isolated behind the Wall, while some springs will be isolated after the completion of the Wall. Most wells in these areas are used for intensive agricultural purposes in Qalqiliya. Farmers use intensive agriculture in Qalqiliya since land is more fertile in that area comparing to others, and this type of agriculture requires less water and is economically more beneficial than traditional agriculture.



*Figure 4.39 : Isolated wells and springs behind the Wall (Source: Done based on shapfiles from MoLG, 2014 and ( Information Center Concerning Affairs of Colonization and Annexation Wall, 2012)*

**Table 4.9** describes the isolated wells behind the Wall, and many others in the buffer zones beside the wall. 11 wells are isolated behind the wall, with productivity of nearly 3.03 MCM/year, while 19 wells are found in the buffer zone which ranges

from 30 to 100 meters along the Wall; their productivity is nearly 2.4 MCM/year (PHG, 2015), ( more details about the wells in the **Appendix**).

Since 1967, Israeli colonization has dominated all water resources available for Palestinians, preventing them from implementing any water development. Israel even dominated most wells that were drilled before 1967, leaving Palestinians without any source of development and forcing them to purchase water from Israeli water companies for high costs (Salmi, 1997).

**Table 4.9 :** Groundwater wells isolated behind the Wall and others in the Buffer zone (Source: Palestinian Hydrology Group, 2015)

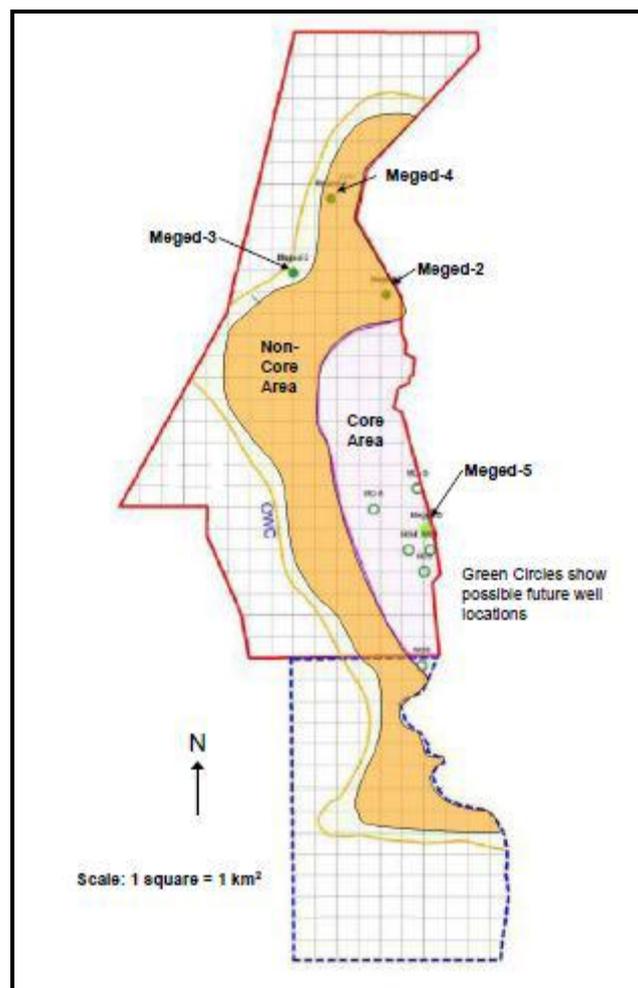
Community	District	Wells isolated	Discharge m <sup>3</sup> /Year	Wells in Buffer Zone	Discharge m <sup>3</sup> /Year	Released in 2014
<b>Qalqiliya</b>	Qalqiliya	7	1,136,000	9	1,075,000	
<b>Habla</b>	Qalqiliya	2	178,000	5	552,000	
<b>Izbat Salman</b>	Qalqiliya			2	255,000	
<b>Jayyus</b>	Qalqiliya	2	201,000			1
<b>Azzun Atma</b>	Qalqiliya					5
<b>Falamya</b>	Qalqiliya			3	486,000	1
<b>Total</b>		11	3,030,000	19	2,368,000	7

### 3- Oil and Gas resources

Israelis began to discuss the existence of oil resources in close areas to the Armistice Line during the beginning of the 1990's. In 1992, Israel granted Givot Olam- *An Israeli company*- the right to explore oil in the area between Qalqilya in the north and Budrus in the south along the Armistice Line. Givot Olam drilled several exploratory wells; Maged 2, 3, 4, and 5 located in Rantis land inside the Armistice Line. The

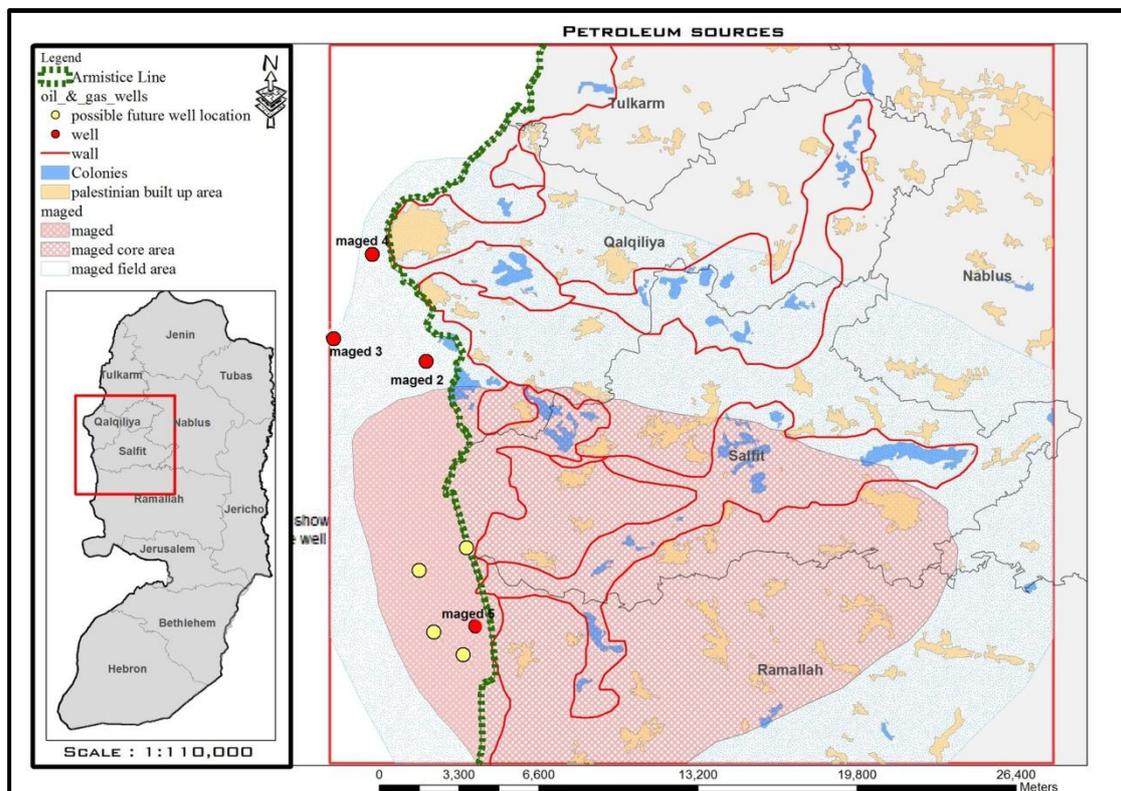
drilling of Maged 5 well began in 2008 and was completed in 2010. Based on the result of the drilling, the company decided to drill another development wells that are: Maged 6 and 7 in 2012 ( Information Center Concerning Affairs of Colonization and Annexation Wall, 2012).

In 2010, Baker RDS- a British company- published a report about Maged Oil field reserves and its classifications. The report provided information, economic analysis, and probabilistic results of the volume in the core area of the field. An illustrative map was also published showing the expansion of the field as shown in (Figure 4.40).



**Figure 4.40** : Illustrative map of Maged Oil Field Published by British Company (Baker RDS,2010)

According to the report published by the Ministry of State for the Wall and Settlements in 2012, Maged 5 is the most abundance among them, with a daily production nearly 800 barrels of oil, and 2 million cubic feet of gas. The production capacity of the field increases towards the east inside the West Bank. The Ministry of State for the Wall and Settlements could determine the expansion of the Maged field inside the West Bank as shown in **(Figure 4.41)**. The figure shows the existence of the bulk of Maged oil field in the study area; this bulk constitutes two areas: the core area of the field, in which Maged 5 was drilled and where other wells were proposed to be drilled, and the non-core area which has a less production capacity than the first. Maged 2, 3, and 4 were drilled in this area ( Information Center Concerning Affairs of Colonization and Annexation Wall, 2012).



**Figure 4.41** : The expansion of Maged Oil Field in the study area (Source: ( Information Center Concerning Affairs of Colonization and Annexation Wall, Ministry of the State, 2012)

Referring to the previous figure we see that most of the big colonies such as: Ariel, Elkana, Oranit, Sha'ar Tikva, and Bet Arye were founded in the core area of the Maged Oil Field, while other colonies such as: Alfe Menashke, Karnie Shomeron, and Kedumim were founded in the expansion area of this field. The Wall route was demarcated to include the colonies and other vast areas around them, in which many Israeli military outposts have been monitored in the area. By this Israeli systematic approach, Israelis have controlled as much of the land located in the oil field uninhabited by Palestinians as possible.

#### 4.5.4 Israeli Plans

- **Drobless Plan:**

The study area included 29 colonies, but after the merge of some colonies, they became 26 colonies, in which 6 colonies are located in Qalqiliya governorate, 12 in Salfit, one in Nablus, 6 colonies in Ramallah, and one in Tulkarem. The colonies have been distributed to surround and fragment the geographic continuity between the Palestinian communities, while at the same time to grab as much of the Palestinian unpopulated land as possible.

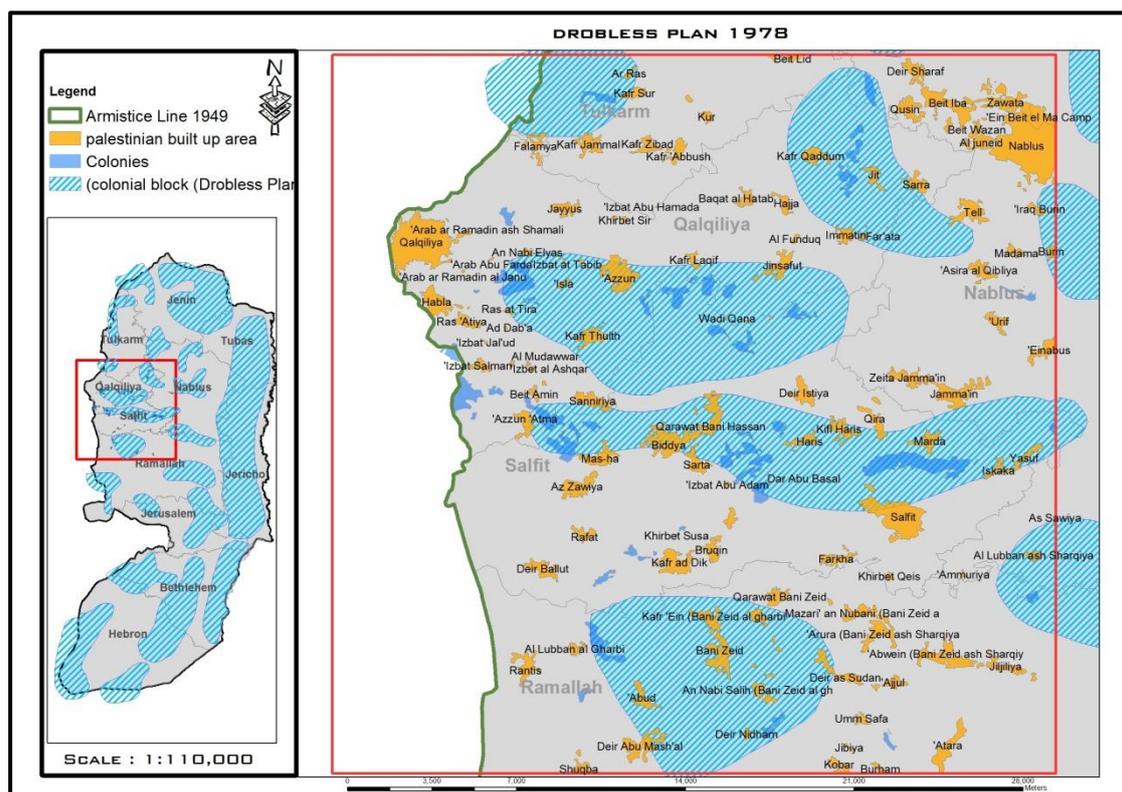
The concept of combining colonies and forming colonial blocks between Palestinian communities was the goal of Drobless Plan. According to this plan, many colonial blocks were planned to be in the study area such as: Ariel block, Karnei Shomron block, Kedumim block, Bet Aryeh block, and Tsofim block. In 1991, merging some colonies under one municipality took place, as Karnei Shomron, Neve Oranim, Qinot Shomeron, and Nofim settlements were merged under one municipality<sup>1</sup>, while

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<sup>1</sup>Available at ([http://en.wikipedia.org/wiki/Karnei\\_Shomron](http://en.wikipedia.org/wiki/Karnei_Shomron))\_[ Accessed: 9 April 2015]

Ofarim united with Aryeh in 2004<sup>1</sup>, Keddumim, and Keddumim Zefon are ruled under on municipal council. Nirit colony follows Alfei Menashi Municipality jurisdiction; in addition to that, Ariel colony was expanded and is ruled under its own municipality.

These colonial blocks separated Palestinian towns from villages; for example, Ariel colony separated Salfit town from Iskaka and Marda, its surrounding villages. (**Figure 4.42**) shows the effects of expansion and the spread of existing colonies and planned-to be built- colonial blocks to surround Palestinian towns and villages, according to Drobbles Plan.



**Figure 4.42** : Distribution of Israeli colonial blocks to surround Palestinian built up areas (Source: Done based on shapfiles from MoLG, 2014, and (Benvensti, 1988))

<sup>1</sup>Available at ([http://en.wikipedia.org/wiki/Beit\\_Aryeh-Ofarim](http://en.wikipedia.org/wiki/Beit_Aryeh-Ofarim))[ Accessed: 9 April 2015]

- **Seven Stars Plan & The Axis of the Hills Plan**

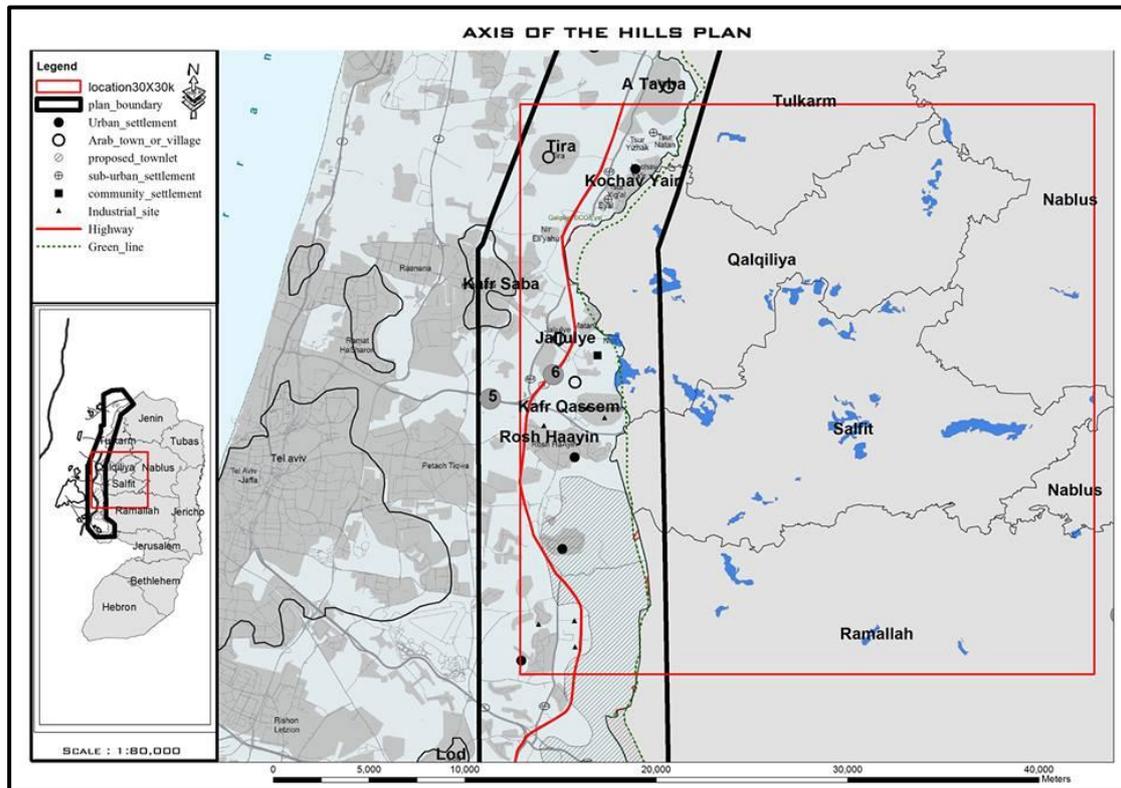
Some of the Israeli plans (mentioned in chapter three), focuses on the border area, as the Armistice Line was a target in the Sharon Plan in 1990 known as the Seven Stars Plan. The aim of this plan is to plant seven colonies along the Armistice Line in the 48 Land from northern Jerusalem until Um Al Fahem northern of the West Bank.

Elisha Efrat in 2006 explained the Axis of the Hills Plan. It included the same objectives of the Seven Start Plan. The objective of these two plans is to find a new demographic, economical, and political realities on the ground and to reshape the borders between Palestinian and Israelis leading to the erase of the pre-1967 border, which became the main topic in the negotiations between Palestinians and Israelis after 1993.

**Figure 4.43** represents part of the Axis of Hills Plan, targeting the study area. In the study area, and on the left side of the Armistice line there are Arabs towns: Kfar Qasem, Jajulia, Al- Tira, and Taybeh with high density of population. While on the right side of the Armistice line Qalqiliya city which has a relatively high population density.

According to the plan, Shoham, Mazor, Rosh Ha'ayin, and Kokhav Ya'ir are urban settlements, while Nirit is considered as a community settlement, and others are considered suburbs, in addition to small town and industrial zones proposed in the plan. Highway 6 plays as a connector between these Israeli settlements, but at the same time plays as a separator between the Arab communities. It is also considered as link axis between Israeli settlements on the left side of the Armistice Line and the

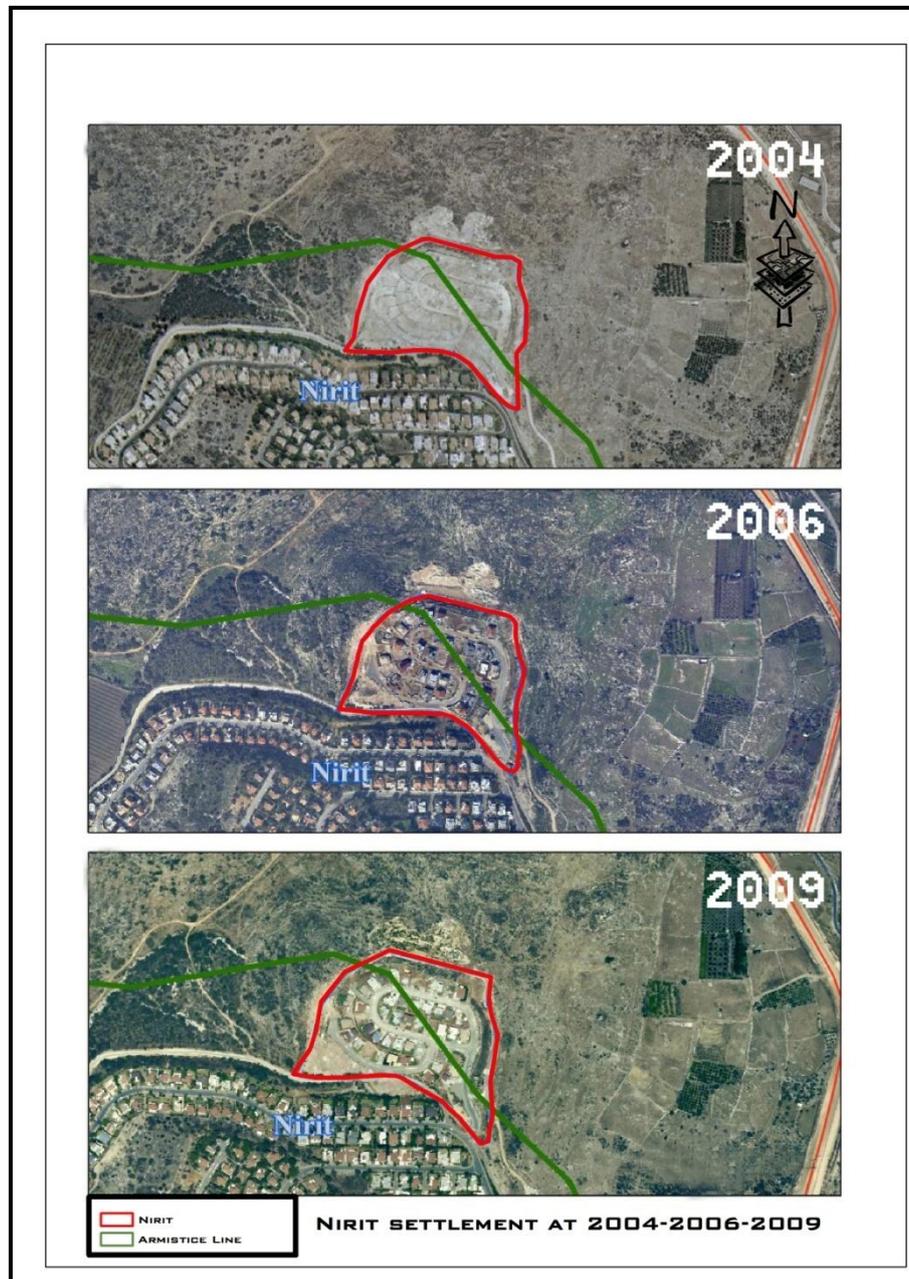
Israeli colonies inside the West Bank, in which the main bypass roads in the west bank are linked with Highway 6 after crossing the Armistice Line.



*Figure 4.43 :The Axis of the hills Plan in the study area (Source: Done based on (MoLG Database, 2014) and (Efrat, 2006))*

Erasing the Armistice Line and reshaping new borders between Palestinians and Israelis was one of the plans objectives through the expansion of Israeli colonies on the left side of the Armistice Line. In the future, this expansion will extend inside the West Bank, and will link the Israeli colonies on the right side of the line. For example, Nirit colony is located on the left side of the line and expanded inside the West Bank as shown in **(Figure 4.44)**. This figure shows Nirit colony in 2004, 2006, and 2009 through aerial photos. The new expansion inside the West Bank was titled Nof Hasharon, and according to the Israeli Authorities, the new expansion belong to Alfei

Menashe. This means linking Israeli colonies on the right side of the Armistice Line with colonies on the left side to form one block and become part of Israel.



*Figure 4.44 : Expansion of Nirit colony inside the West Bank (ARIJ, 2013)*

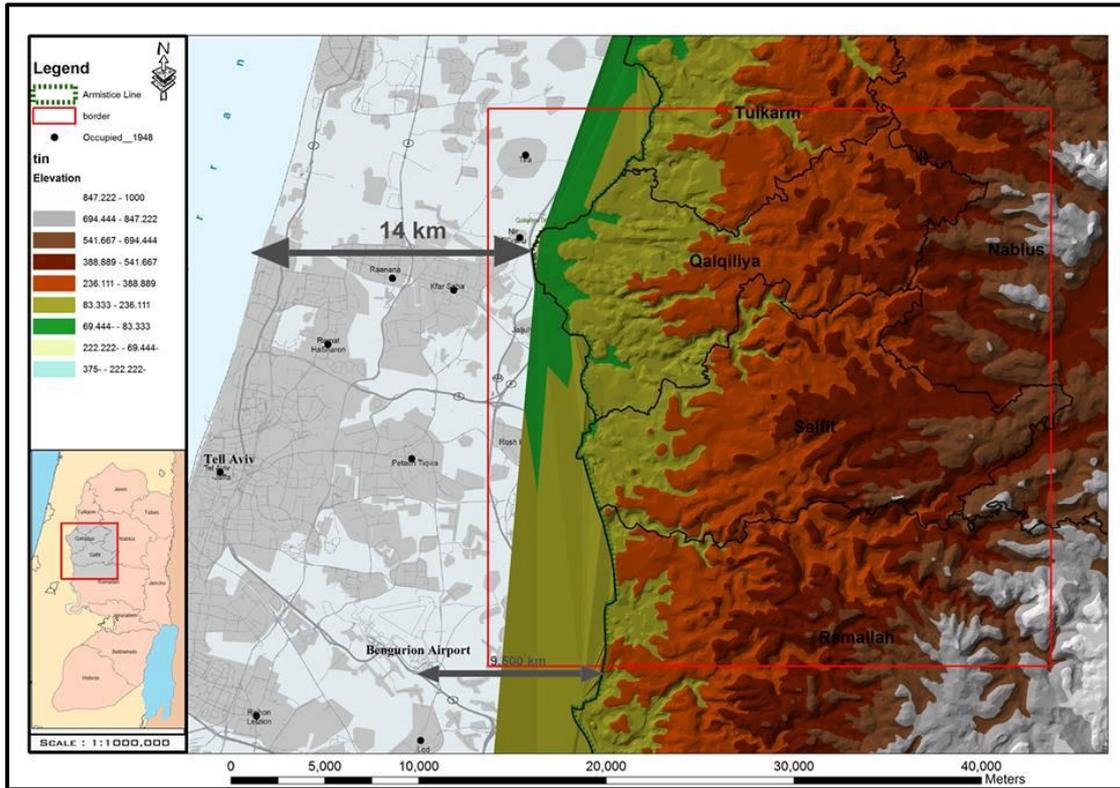
#### 4.5.5 The security factor

The study area includes the nearest points located on the Armistice Line to the Mediterranean Sea. The distance from the west boundary of Qalqiliya to the Sea is about 9 miles (14 Kilometers); this width is the narrowest from the Armistice Line to the Sea. so since the early days of the Israeli colonization of the West Bank, Qalqiliya was made a focal point by Israelis, that started to encircle it by colonies and later on by the Wall. The Israelis considered the West Bank borders as insecure, and therefore, there was no strategic depth if they faced any invasion from the East, since this will threat the coastal plain. 70% of Israeli population and 80% of the industrial capacity of Israel is concentrated on the narrow coastal plain between the Mediterranean Sea and the West Bank (Dayan, 2011).

**Figure 4.45** represents topography of the study area including some high elevations, and includes parts of the western hills and central mountains. According to Israeli decision makers, this site will facilitate attacks on the coastal plain that is nearly flat, and contains the most important sites such as: Ben Gurion Airport, an international airport approximately 6 miles away from the Armistice Line. Highway 6 is also adjacent to the Armistice Line, making all Israeli infrastructure under threat. So they considered the Armistice Line as a vulnerable border. Most colonies in the study area occupy strategic locations with high elevations; for example, Ariel colony is located on a hilltop with elevation ranging between 550-700 meters. It is overlooking the coast and considered the highest observation elevation <sup>1</sup>. It is also located in the center of the West Bank and represented as a central point between Tel Aviv in the west and the Jordan Valley in the east.

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<sup>1</sup>Available at <http://www.ariel.muni.il/?CategoryID=457> [Accessed 15 October 2014]



*Figure 4.45: Israeli Security Concerns*

*(Source: Done based on (MoLG database, 2014), and (Dayan, 2011))*



*Figure 4.46 : Tel-Aviv as seen from Deir Ballut village in the study area*

*(Source: <http://wikimapia.org/11270223/Deir-Ballut>)*

## 4.6 Conclusion

This chapter represented an analysis to the transform and shift of the borders in the study area in the West Bank. The administrative borders and its transformation during different time periods were analyzed: during the British colonization, the area was divided many times to accomplish Belfour promise and enable Jews in the area, while during the Jordanian era, the area was divided into three provinces: Nablus, Jerusalem, and Hebron. Each province has districts and brigades. However, during the Israeli period, the area was divided into 7 regions to impose control; Qalqilya, and Salfit followed Tulkarem province after being under Nablus province in the Jordanian era. After Oslo Agreement, the West Bank was divided into 11 governorates: In the study area, Qalqiliya and Salfit governorates were done to facilitate providing services to the population.

There has been an analysis of the Israeli spatial transformations such as colonies, bypass roads, Apartheid Wall, and dividing the region into areas A, B, and C. A group of colonies were established during the 1970's. Kedumim colony was the first one to be established in the study area, followed by Ariel, then another group of colonies in the 1980's. During the 1990's the borders of colonies expanded to accommodate the large number of Jewish immigrants to the area, and drew new borders in the area. There was also a control over the main roads in addition to constructing new road networks to connect colonies with each other and with Tel-Aviv and also to avoid passing through Palestinian communities.

Several plans were developed for the path of the wall to exclude Palestinian communities and separate from each other and increase territorial contiguity between colonies and the 1948 occupied land.

The division of the region into areas A, B, and C, and allocating areas A, and B for Palestinians, and subordinating areas C under the Israeli control made the process of confiscating vast areas and annexing it to the Israeli control easier, and this led to reshaping the borders.

A combination of factors had a role in the shifting of the borders such as: demographical factor, land ownership and land classification, natural resources, some Israeli plans aimed at intensifying Jews in the border area which had a direct impact on the transformation of borders in the study area, and finally the security factor. The findings in this chapter were in the form of a series of maps clarifying the movement and change of the border due to these factors and spatial variables.

# **CHAPTER 5**

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## **Conclusion & Recommendations**

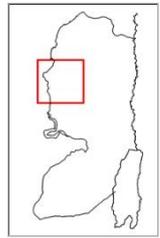
## 5.1 Conclusion

### 5.1.1 Main Findings

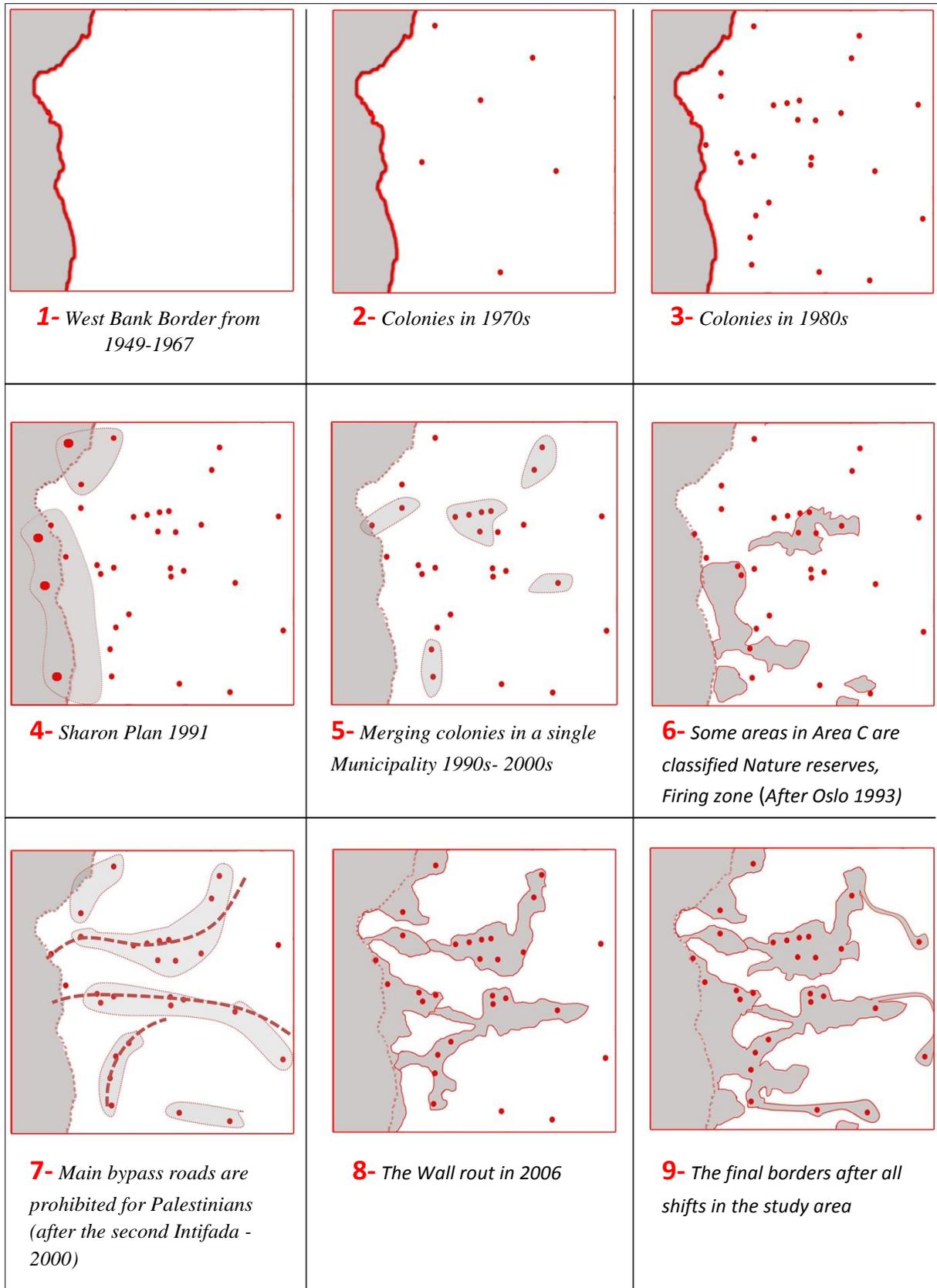
This research aimed to show the chronological shifting of the West Bank border, and the Israeli hidden agenda behind this border shifting. This chapter concludes the main findings of the research providing answers for the research questions submitted in the thesis introduction (see section 1.1). To answer the research questions, an analysis of the four Israeli spatial transformations and some factors was provided in chapter 4. In this chapter a sketch was drafted to also conclude the answers of the first research question, and to interpret and clarify the different chronological stages and elements contributed to the shift of the border. **Figure 5.1** explains these stages and elements; the sketch includes 9 illustrations:

- Figure 5.1,1 clarifies the shape of the border in the study area between 1949 and 1967 showing no Israeli activities in the area.
- Figure 5.1,2 clarifies the area in the seventies as Israeli colonies started to appear in the area.
- Figure 5.1,3 shows the increase rate of colonies in the 1980s.
- Figure 5.1,4 explains Sharon's plan in 1991 which aimed at building colonies inside the 1948 Occupied land along the Armistice Line, in which the future expansion of these colonies will be linked to colonies built inside the West Bank, causing the border to shift into the West Bank, this border shift happened with some border colonies like Nirit.
- Figure 5.1,5 illustrates the process of merging colonies under one municipal council in the 1990s and the 2000s accomplishing-by that- the idea of forming colonial blocks according to Drobless plan.

- Figure 5.1,6 illustrates the classification of some areas as natural reserves and firing zones, which was confiscated by Israelis who banned Palestinians from entering it.
- Figure 5.1,7 illustrates the main and bypass roads that prevents or limits the Palestinian use of it, as well as the concentration of colonies around these bypass roads such as: Road number 55, Road 505, and Road 446.
- Figure 5.1,8 illustrates the Wall's route according to 2006 plan; it is clear from the figure that the Wall was built on the main roads presented in the previous sketch, in which Israeli colonies are concentrated around.
- Figure 5.1,9 illustrates the deep expansion and creep that caused the shift of the border to be inside the West Bank due to all the steps and procedures that was taken by the Israeli Authorities, which was also presented and illustrated in the previous sketches.



**Border shifting in the study area**



**Figure 5.1:** Sketch of the Chronological shifting of Border (Source: The researcher)

Also, according to this research and the author's points of view, many points explain the reasons behind shifting the West Bank's borders. The points mentioned here provide answers to the second research question:

- According to Israelis, the West Bank is considered as a buffer zone for security reasons. Since 1967, Allon plan considered the Jordan Valley as a security zone to prevent any possible attack from the east. Later on Sharon- *a former Israeli Prime Minister*- in the 1980's considered the mountain ridge of the West Bank as an important region for dominating Palestinian communities. Later on, and in the 1990's, Sharon's plan (*Seven Stars Plan, the Axis of the Hills plan*) intensified the Israeli colonist approach along the 1967 borders (Armistice Line), finding new demographical reality in the region to impose their control, and prevent the connection between Palestinians in the West Bank, and Palestinians in the 1948 Occupied land, and to not also form a mass of threat on Jews in the coastal area by Arabs in the region. To promote this separation approach among Palestinians along both sides of the border, Sharon approved the construction of the Apartheid Segregation Wall in 2002.
- All water and hydrology studies considered the Western aquifer as a strategic water resource for Israelis, just like the important of Tiberias and other water reserves.
- From an economic point of view, the West Bank is an important area for Israelis. Besides the fact that the West Bank is a market for the Israeli products, it is also considered as a cheap labor market than living in Tel-Avive or Jerusalem.
- Based on this, Jews immigrants to Israel, prefer living in colonies in the West Bank for economic reasons rather than religious or ideological motivations.

- The West Bank is considered a dumping site in addition to the fact that prohibited industries are being removed from Israel and placed in the West Bank.
- So, the border is shifting according to the Israeli economy, dominating, and apartheid agenda. They have the power that allows them to permissible all land. They have dominated the state land, firing zones, natural reserves, and vast areas of private properties. They are shifting the borders to uninhabited areas, as they want to control all the land. One of their suggestions in the negotiation process with Palestinians the the concept of land swapping, which means dominating all the strategic sites in the region and removing the largest number possible of Palestinian residents. From their point of view the Armistice Line as a border does not meet their interests, so they are always imposing new borders according to their economical, political, territorial interests .

## **5.2 Recommendations**

1. I recommend presenting this study in local and international conferences to increase the awareness among both citizens and scholars about the truth of the Israeli planning on the ground. Also to clarify the importance of the study area and it's richness with natural resources which reveal the reason behind the holding of the Israeli Authorities to this area in the negotiation process with Palestinians, and also the reason behind the Israeli proposal to exchange desert lands with Palestinians as a compromise.

2. Invite the planning and national institutions to intensify the efforts to develop a comprehensive plan for the region to confront the future border shifting and resist the Israeli plans and agendas that cause the border shift.
3. Invite the Governmental Institutions and citizens to support more projects in the area, particularly endangered areas of confiscation and Area C to face the future border shift.
4. I recommend conducting studies on the impact of the border shifting in the study area on the Palestinian inhabitants from the social, political, economic, and geographical communication aspects, as well as studying how to cope with such impacts.
5. Conduct studies about other areas where the borders were clearly shifted such as Jerusalem, Ramallah, Bethlehem, and the Jordan Valley.
6. This study shed light on the factors that contributed to the border shift, but it was recommended that each factor must be studied and deeply analyzed alone and based on scientific basis such as: the water factor, petrol, the use of land, and other factors to understand the extent of impact of such factors on Palestinians, and how to confront and resist them.

## BIBLIOGRAPHY

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### English References:

#### ➤ Books and Articles

- Abdul-Hadi, M. (1996). *Oslo - The Conflict, the Mediators and the Breakthrough*. Jerusalem: PASSIA.
- Alfred, G. T. (2009). Colonialism and State Dependency ,PhD, School of Indigeous Governance, University of Victoria. *Journal of Aboriginal Health* , 45.
- ARIJ. (2006). *New Palestinian Enclaves created by the Israeli updated wall map around Ariel Settlement Bloc*. Jerusalem: Applied Research Institute ( ARIJ).
- ARIJ. (2005). *New sections of the Segregation Wall are being erected in Salfi*. POICA, Article=406.
- ARIJ. (2013).(The Western 'Izab Locality Profile, (including 'Izbat Jal'ud, 'Izbat Salman, 'Izbat al Mudawwar & 'Izbat al Ashqar)). *Settlement expansion in Nirit settlement Block during 2006 and 2011*. Jerusalem: The Applied Research Institute .
- ARIJ. (1997). *The Expansion of Kiryat Sefer Settlement on the Land of Dier*. Jerusalem: Applied Research Institute ( ARIJ).
- ARIJ. (2008). *The Israeli Bypass Road System in the Occupied Palestinian Territory*. Jerusalem: The Applied Research Institute.
- ARIJ. (1995). West Bank and Gaza Governorates according to the PNA. Jerusalem: the Applied Research Institute in Jerusalem, Maps.
- Aronson, G. (1987). *Palestinians and the West Bank*. Washington D.C: Institute for Palestine Studies.
- Benvenisti, M., & Khayat, S. (1988). *The West Bank and Gaza Atlas*. The jerusalem Post.
- Bollens, S. A. (1998). Urban Policy in Ethnically Polarized Societies. *Source: International Political Science Review / Revue internationale de science politique, Vol.19, No. 2, New Trends in Municipal Government. Le gouvernement des villes: nouvellestendances (Apr., 1998), pp. 187-215* , Published: Sage Publications, Ltd. accessed 30/10/2013.
- Brody, H. (1981). *Maps and Dreams: Indians and the British*. Columbia Frontier: Vancouver: Douglas & McIntyre.

- B'Tselem. (2013). *Acting the Landlord: Israel's Policy in Area C, the West Bank*. Jerusalem: B'Tselem.
- B'Tselem. (2012, July 17). *Ariel settlement fact sheet*. Retrieved October 15, 2014
- B'Tselem. (2010). *By Hook and by Crook, Israeli Settlement Policy in the West Bank*. Jerusalem: B'Tselem.
- B'Tselem. (2004). *Forbidden Roads: The Discriminatory West Bank Road Regime*. Jerusalem: The Israeli Information Center for Human Rights in the Occupied Territories.
- B'Tselem. (2002). LAND GRAB, Israel's Settlement Policy. In E. W. Yehezkel Lein, & y. Stein.
- Butt, D. (2013). Colonialism and Postcolonialism. *Forthcoming in Hugh LaFollette (ed.), The International Encyclopedia of Ethics (Wiley-Blackwell, .*
- Coakley, J. (1992). "The Resolution of Ethnic Conflict: Towards a Typology." . *International Political Science Review, 13 (4) , 343-358.*
- COHRE. (2005). *RULING PALESTINE, A HISTORY OF THE LEGALLY SANCTIONED JEWISH-ISRAELI SEIZURE OF LAND AND HOUSING IN PALESTINE*. Geneva: The Centre on Housing Rights and Evictions (COHRE).
- Coon, A. (1999). *ISRAEL AND THE OCCUPIED TERRITORIES Demolition and dispossession: the destruction of Palestinian homes*. London: Amnesty International ,International Secretariat 1999.
- Coon, A. (1992). *Town Planning Under Military occupation, An Examination of the Law and Practice of Town Planning in the Occupied West Bank*. England: Dartmouth Publishing Company Limited.
- Cottrell, R. C. (2005). *The Green Line: The division of Palestine*. United State of America: Chelsea House Publisher.
- Cox, C., & Albala, K. (2009). *Opening Up North America, 1497-1800*. New York: Infobase Publishing.
- Davies, R. (1981). The spacial formation of the South African City. *Geo-Journal, Volume 2, Issue 2 Supplement, pp.59-72.*
- Dayan, U. (2011). Defensible Borders to Secure Israel's Future. In D. Diker, *Israel's Critical Security Requirments for Defensible Borders the Foundation for a Viable Peace* (pp. 22,24). Jerusalem: Jerusalem Center for Public Affairs.
- Efrat, E. (1988). *GEOGRAPHY AND POLITICS IN*. London- England: FRANK CASS & CO. LTD.

- Efrat, E. (2006). *The West Bank and Gaza Strip- A geography of Occupation and disengagement*. USA, Canada: Routledge- Taylor & Francis Group.
- Gilbar, G. G. (1990). *Ottoman Palestine 1800-1914*. Haifa: Brill Leiden. Institute of Middle East Studies.
- Hjouj, A. (2015, February 25). Interview with Director General of Structural Organization and Planning, Dr.Azzam Al Hjouj, Ministry of Local Government MoLG.
- Horvath, R. J. (1972). A Definition of Colonialism. *Current Anthropology*, vol. 13, pp. 45–57, 47.
- Houtum, H. V. (2005). *The Geopolitics of Borders and Boundaries*. Nijmegen, The Netherlands.: Tylor and Francis.
- HWE. (2007). *Water Resources in Palestine*. Ramallah- Palestine: House of Water and Environment.
- Information Center Concerning Affairs of Colonization and Annexation Wall, Ministry of the State. (2012). *Israel's violations of the Palestinian natural resources in the West Bank*. Ramallah.
- Isaac , J., & Rizik, M. (2002). *Israel's land colonization policy and the viability of the Palestinian State*. Jerusalem: Applied Research Institute-.
- Khalidi, W. (1997). Revisiting the UNGA Partition Resolution. *Journal of Palestine Studies* , 11.
- Khamaisi, R. (1989). *Israeli Planning and House Demolishing Policy in the West Bank*. Jerusalem: PASSIA Publications.
- Lein, Y. ( 2002). *LAND GRAB, Israel's Settlement Policy in the West Bank*. Jerusalem: B'Tselem: Israeli Information Center for Human Rights in Occupied Territories.
- Matray, J. I. (2005). Introduction. In R. C. Cottrell, *The Green Line: The division of Palestine*. United State of America: Chelsea House Publisher.
- Mccusker, B., & Amudzulit, M. (2007). Apartheid spatial engineering and land use change in Mankweng, South Africa: 1963-2001. *The Geographical journal* vol. 173, No. 1, March2 007, pp. 56-74 .
- Njoh, A. J. (2008, March). Colonial Philosophies, Urban Space, and Racial Segregation in British and French Colonial Africa. *Journal of Black Studies*, Vol. 38, No. 4 (Mar., 2008), pp. 579-599 .
- OCHA. (2014). *10 Years since the International Court of Justice (ICJ) advisory opinion*. United Nations Office for the Coordination of Humanitarian Affairs occupied Palestinian territory.

- OCHA. (2009). *A summary of the Humanitarian Impact of the Barrier*. East Jerusalem: United Nations - Office for the Coordination of Humanitarian Affairs.
- OCHA. (2009). *Five Years after the International Court of Justice Advisory Opinion*. UNITED NATIONS.
- OCHA. (2011). *Humanitarian Atlas*. Jerusalem: United Nations office for Coordination of Humanitarian Affairs.
- OCHA. (2006). *Preliminary analysis of the humanitarian impact of the revised Barrier route from April 30, 2006*. Jerusalem: United Nations office for Coordination of Humanitarian Affairs.
- OCHA. (2004). *Preliminary Analysis of the Humanitarian Implications of Latest Barrier Projections*. East Jerusalem: UNITED NATIONS OFFICE FOR THE COORDINATION OF HUMANITARIAN AFFAIRS- Palestinian Occupied Territory.
- OCHA. (2005). *The Humanitarian Impact of the West Bank Barrier on Palestinian Communities*. Jerusalem: United Nations Office for the coordination of Humanitarian Affairs.
- OCHA. (2003). *THE IMPACT OF ISRAEL'S SEPARATION BARRIER ON AFFECTED WEST BANK COMMUNITIES*. Occupied Palestinian Territory: Office for the Coordination of Humanitarian Affairs .
- Palestinian Monitoring Group. (2006). *Trend Analysis , Israel's Escalating Colonization of the Occupied Palestinian Territory: The Case of the Salfit Governorate*. Negotiation Affairs Department.
- Pappé, I. (2006). *The Ethnic Cleansing of Palestine*. Oxford - England: Oneworld Publications.
- Pappé, I. (1992). *The Making of the Arab-Israeli Conflict, 1947-1951*. United States of America, Canada: I.B.Tauris.
- PASSIA. (2012). *Area C : The Key to the Two-State Solution*. Jerusalem: Palestinian Academic Society for the Study of International Affairs.
- PASSIA. (2014). *The Palestine Question in Maps 1878- 2002*. Jerusalem: Palestinian Academic Society for the Study of International Affairs.
- PCBS. (2011). *Agricultural Census - 2010* . Ramallah- Palestine: Palestinian Central Bureau of Statistics, Ministry of Agriculture.
- PCBS. (2013). *Assessment of the Palestinian Plant and Animal Production*. Ramallah: Palestinian Central Bureau of Statistics .
- PCBS. (2013). *Dissemination and analysis of Agricultural Census – 2010, Assessment of the Palestinian Plant and Animal Production*. Palestinian Central Bureau of Statistics.

- PCBS. (2009). Internal and migration in Palestinian Territories. In P. C. Statistics.
- PCBS. (2012). *Israeli settlements in the West Bank, Annual Statistical Report 2011*. Ramallah, Palestine: PCBS.
- PCBS. (2014). *Israeli settlements in the West Bank, Annual Statistical Report 2013*. Palestine- Ramallah: Palestinian Central Bureau of Statistics.
- PCBS. (2006, 2007, 2008, 2009, 2010, 2014). *Labour Force Survey Report Series*. Ramallah, Palestine: Palestinian Central Bureau Statistics.
- PCBS. (2006). *Palestinian Labor Force Survey*. Palestinian Central Bureau of Statistics.
- PCBS. (2003). *Palestinian Labour Force Srvey*. Palestinian Central Bureau of Statistics: Palestinian .
- PCBS. (2011). *Qalqiliya Governorate Statistical*. Ramallah- Palestine: Palestinian Central Bureau of Statistics .
- PCBS. (2011). *Ramallah & Al Bireh Governorate Statistical Yearbook 3*. Ramallah- Palestine: Palestinian Central Bureau of Statistics .
- PCBS. (2011). *Salfit Governorate Statistical*. Ramallah- Palestine: Palestinian Central Bureau of Statistics .
- PCBS. (2011). *Tulkarm Governorate Statistical*. Ramallah-Palestine: Palestinian Central Bureau of Statistics .
- PHG. (2003). *The Impact of the Wall's first phase on Water*. Palestine: Palestinian Hydrology Group.
- Rishmawi, M. (1988). *The Administration of the West Bank under Israeli Rule*. Conference of the Administration of Occupied Territory, AL- Haq.
- Sack, R. (1986). *Human Territoriality :Its Theory and History*. Cambridge: Cambridge University press.
- SALMI, R. H. (1997). *WATER, THE RED LINE: The Interdependence of Palestinian and Israeli Water Resources* . Studies in Conflict & Terrorism.
- Sayegh, F. A. ( 1965). *ZIONIST COLONIALISM*. Beirut, Lebanon: RESEARCH CENTER, PALESTINE LIBERATION ORGANIZATION.
- Simon, D. (1988). Crisis and change in South Africa: implications for the apartheid city. In N. S.-2. Transactions of the Institute of British Geographers. Wiley on behalf of The Royal Geographical Society (with the Institute of British Geographers).
- Tyler, W. P. (2001). *State Lands and Rural Development in Mandatory Palestine, 1920-1948*. Britain, United States of America: SUSSEX ACADEMIC PRESS.

- WAFA, P. N. (2011). *Historical Background- Urban Planning in Palestine*. Retrieved from Palestine News & Information Agency - WAFA.
- Wiesman, E. (2007). *Hollow Land, Israel's Architecture of Occupation*. London, NewYork: Verso.
- World Bank. (2012). *Fiscal Crisis, Economic Prospects, The Imperative for Economic Cohesion in the Palestinian Territories, Economic Monitoring Report to the Ad Hoc Liaison Committee*. World Bank.
- Yiftachel, O. (1992). *Planning a Mixed Region in Israel: the Political Geography of Arab-Jewish Relations in the Galilee*. UK: Avebury.

### ➤ Publications On Websites

- Ariel Municipality. (n.d.). Retrieved October 15, 2014, from Ariel: <http://www.ariel.muni.il/?CategoryID=457>
- ARIJ. (n.d.). *40 Years of Israeli Occupation 1967-2007*. Retrieved April 25, 2015, from <http://www.arij.org/atlas40/chapter2.2.html>
- *Beit\_Aryeh- Ofarim* [http://en.wikipedia.org/wiki/Beit\\_Aryeh-Ofarim](http://en.wikipedia.org/wiki/Beit_Aryeh-Ofarim). (n.d.). Retrieved April 9, 2015
- *Deir- Ballut*. <http://wikimapia.org/11270223/Deir-Ballut>. (n.d.). Retrieved April 20, 2015
- [http://en.wikipedia.org/wiki/West\\_Bank](http://en.wikipedia.org/wiki/West_Bank). (n.d.). Retrieved April 10, 2015
- <http://israelandpalestine.org/map-of-israel-and-palestine/>. (2005, July). Retrieved April 26, 2015, from Map of Israel and Palestine.
- *Highway 5 (Israel)* [http://en.wikipedia.org/wiki/Highway\\_5\\_%28Israel%29](http://en.wikipedia.org/wiki/Highway_5_%28Israel%29). (n.d.). Retrieved April 20, 2015
- *Highway 6 (Israel)*. (n.d.). Retrieved April 27, 2015, from [http://en.wikipedia.org/wiki/Highway\\_6\\_%28Israel%29](http://en.wikipedia.org/wiki/Highway_6_%28Israel%29).
- *Karnei Shomron* [http://en.wikipedia.org/wiki/Karnei\\_Shomron](http://en.wikipedia.org/wiki/Karnei_Shomron). (n.d.). Retrieved April 9, 2015
- *Native*. <http://www.acpr.org.il/english-nativ/10-issue/haetzni-10.htm>. (2007). Retrieved April 25, 2015, from A JOURNAL OF POLITICS AND THE ARTS
- OCHA. (2009). *File:West bank and Gaza Governotates.jpg*. Retrieved March 20, 2014, from [http://commons.wikimedia.org/wiki/File:West\\_bank\\_and\\_Gaza\\_Governotates.jpg](http://commons.wikimedia.org/wiki/File:West_bank_and_Gaza_Governotates.jpg).

- *Palestine UN GA Partition Plan, November 29th 1947*. (2001, September 10). Retrieved October 12, 2014, from palestine Remembered: <http://www.palestineremembered.com/Acre/Maps/Story580.html>
- Passia. (2000, March). *Palestine Maps*. Retrieved December 28, 2014, from Palestinian Academic Society for the Study of International Affairs: [http://www.passia.org/palestine\\_facts/MAPS/wbgs1.html](http://www.passia.org/palestine_facts/MAPS/wbgs1.html)
- PASSIA. (n.d.). [http://www.passia.org/palestine\\_facts/MAPS/1947-un-partition-plan-reso.html](http://www.passia.org/palestine_facts/MAPS/1947-un-partition-plan-reso.html). Retrieved April 22, 2015
- Peacenow. (2013). *The Two State Solution is Still Alive 20 Years After Oslo*. <http://peacenow.org.il/eng/OsloSummary>: Peace Now.
- Qalqiliya Municipality. (2012) .*A brief history of Qalqiliya city*. Retrieved April 4, 2015, from <http://www.qalqiliyamun.ps/>.
- Thompson, J. (1996, December Wednesday 11). *Israeli settlements 'destroying peace process'*. Retrieved March 19, 2014, from <https://www.greenleft.org.au/node/12792>.
- Tubas Municipality. (n.d.). Retrieved April 7, 2015, from (<http://www.tubas.plo.ps/>) .

## Organizations

- Birzeit University Database. (2014). *Maps*. Ramallah.
- Information Center Concerning Affairs of Colonization and Annexation Wall. (2015). *database*. Ramallah- Palestine: Ministry of the State.
- Land Authority, GIS Department. (2014). Database. Ramallah.
- Ministry of Planning, National Spatial Planning. (2014). *Provisions for the Protection Plan*. Ramallah.
- MoLG. (2014). *Database*. Ramallah: Ministry of Local Government, GIS Department.
- Palestinian Hydrology Group. (2015, April 10). Nablus: Unpublished data.
- Salfit Municipality, 2015. Database.

## المراجع العربية :

❖ كتب

- حسين غازي. (2003). *الاستيطان اليهودي في فلسطين من الاستعمار الى الامبريالية*. دمشق: اتحاد الكتاب العرب.

- مصطفى مراد الدباغ. (1991). بلادنا فلسطين - الجزء الثاني - القسم الثاني. كفر قرع: دار الهدى. .

#### ❖ رسائل ماجستير

- أسماء الغنيمات. (2012). التحليل المكاني للتقسيمات الادارية لأراضي الضفة الغربية. نابلس: جامعة النجاح الوطنية.
- توفيق حامد توفيق البديري. (2002). الثوابت والمتغيرات في مؤسسة التخطيط في فلسطين الدولة واسقاطاتها على التنمية.

#### ❖ مقالات

- انطوان شلحت. (20 أبريل, 2010). المشهد الاسرائيلي. الاستيطان في الفكر الصهيوني ، صفحة 5.
- باسم بشناق. (2003). التنظيم الاداري للمحافظات في فلسطين ، سلسلة تقارير قانونية (34). رام الله: الهيئة الفلسطينية المستقلة لحقوق المواطن.
- سلمان أبو ستة. (أبريل, 2004). حدود فلسطين مدخل للاستعمار. مجلة عالم الفكر ، صفحة العدد 4، المجلد 32.

## Appendix

Qalqiliah District Groundwater Wells								
Nu m.	Point ID.	X (m)	Y(m)	Z(m)	Well Name	Location	Extraction Licence	Classification
1	14-17/001	148780	174630	95	MUHAMMAD QADDURAH & PARTNERS	Hablah	205000	supply water behind the wall
2	14-17/002	148700	174780	85	MUHAMMAD QADDURAH & PARTNERS	Hablah	206000	
3	14-17/003	148500	175400	80	MUHAMMAD QADDURAH & PARTNERS	Hablah	86000	Buffer Zone
4	14-17/005	148800	173900	118	SALEEM 'UDAH & PARTNERS	Hablah	108000	Buffer Zone
5	14-17/006	149150	174800	90	WASEL AL QASEM	Hablah	117000	Buffer Zone
6	14-17/008	148440	175340	78	AHMAD QASEM ABU KHARRUB	Hablah	94000	Damaged
7	14-17/008A	148260	175450	75	'ABED AL RAHEEM AS'AD JADA'	Hablah	154000	Buffer Zone
8	14-17/009	147500	175500	60	AHMAD QASEM ABU KHARRUB	Hablah	94000	annexed
9	14-17/010	147400	175640	58	AHMAD SHANTI	Hablah	99000	annexed /destroyed by Israeli during Intifada
10	14-17/011	147080	175620	52	RASHEED SHANTI	Qalqilyah	89000	annexed
11	14-17/012	147080	176260	54	'ALI IDREES SHANTI	Qalqilyah	86000	Buffer Zone
12	14-17/013	147350	175070	55	GHAZI JAMAL AL QASEM	Hablah	87000	Buffer Zone
13	14-17/014	147300	175400	59	GHAZI JAMAL AL QASEM	Hablah	84000	annexed
14	14-17/015	146950	177800	58	MUHAMMAD HADDAD	Qalqilyah	80000	
15	14-17/016	148000	175180	70	'ABED AL RAHEEM AS'AD JADA'	Hablah	57000	
16	14-17/017	148220	178240	70	AHMAD ABU KHADEEJAH	Qalqilyah	108000	annexed
17	14-17/018	148850	178250	80	'ALI ABU KHADER	Qalqilyah	157000	Buffer Zone
18	14-17/019	146460	177100	50	AHMAD MUHAMMAD 'ABED AL RAHMAN	Qalqilyah	70000	
19	14-17/020	146420	175960	40	FAHMI 'ABED AL SALAM QADDURAH	Qalqilyah	17000	
20	14-17/021	146030	177850	50	AHMAD 'ABED AL RAHEEM	Qalqilyah	126000	
21	14-17/022	146550	177300	50	'ABED AL KAREEM QUB'AH	Qalqilyah	62000	
22	14-17/022A	146580	177400	50	'ABED AL KAREEM QUB'AH	Qalqilyah	74000	Buffer Zone

23	14-17/023	146850	178200	52	MUSTAFA ABU AL 'ADAL	Qalqilyah	31000	
24	14-17/023A	146700	178100	52	MUSTAFA ABU AL 'ADAL	Qalqilyah	58000	
25	14-17/024	147100	176420	52	SALEH ABU AL DHURAH	Qalqilyah	86000	Buffer Zone
26	14-17/025	147200	177900	58	MUSTAFA NAZZAL & PARTNERS	Qalqilyah	110000	
27	14-17/026	146640	176540	55	RAFEEQ 'ABAED AL RAZEQ	Qalqilyah	116000	
28	14-17/027	148600	177460	125	'ALI ABU 'ULBAH & PARTNERS	Qalqilyah	163000	
29	14-17/028	147140	177860	58	'ABDALLAH MUHAMMAD 'ABED AL RAHMAN	Qalqilyah	108000	
30	14-17/029	146280	176280	40	'ABDALLAH 'AWARTANI	Qalqilyah	62000	Buffer Zone
31	14-17/030	147150	176800	62	SHAKER AL BARHAM	Qalqilyah	90000	
32	14-17/031	148500	178400	70	MUHAMMAD SA'EED BARHAM	Qalqilyah	102 000	
33	14-17/032	147120	176300	55	'ABED AL RAHEEM AL 'ABED	Qalqilyah	73000	
34	14-17/034	146900	177300	62	QALQILYA MUNICIPALITY	Qalqilyah	open	
35	14-17/035	147200	177940	58	MAHMUD YUSEF TAHA	Qalqilyah	156000	
36	14-17/036	147360	177680	76	MUSTAFA NAZZAL	Qalqilyah	105000	
37	14-17/037	149650	176900	110	'ABED AL RAHEEM HASAN	Qalqilyah	137000	annexed
38	14-17/038	147520	176120	66	YUSEF HASANAIN KHATER	Qalqilyah	290000	Buffer Zone
39	14-17/039	149440	177200	118	'ABED AL RAHEEM KHALAF	Qalqilyah	28000	
40	14-17/040	149630	179200	70	REDA ABU KHADER	Qalqilyah	95000	annexed
41	14-17/042	147040	175700	50	'UTHMAN AL TABEEB	Qalqilyah	136000	annexed
42	14-17/043	149780	172760	125	IBRAHEEM ABU AL RUZZ	Izbit Abu Salman	102000	
43	14-17/044	149600	172920	130	JAMEEL AL WALWEEL	Izbit Abu Salman	102000	Buffer Zone
44	14-17/045	148400	178100	78	IBRAHEEM ABU SAMRAH	Qalqilyah	87000	Buffer Zone
45	14-17/047	149260	178660	85	'ABDALLAH GHNAIM	Qalqilyah	151000	Buffer Zone
46	14-17/048	146500	176200	45	AHMAD ABU AL NASER	Qalqilyah	119000	
47	14-17/049	148100	176780	72	'ABDALLAH 'ABED AL RAHMAN	Qalqilyah	103000	
48	14-17/050	148400	177450	120	MUHAMMAD SA'EED YUNES	Qalqilyah	77000	
49	14-17/051	148400	177450	120	QALQILYA MUNICIPALITY	Qalqilyah	open	

50	14-17/052	147920	174640	75	HABLAH VILLAGE COUNCIL	Hablah	open	
51	15-16/001	150700	169250	135	YUSEF ANEES AL SHILLAH	Azzon Atmah	80000	Released in 2014
52	15-16/003	152070	169610	155	MUHAMMAD ABU HIJLAH	Azzon Atmah	76000	Released in 2014
53	15-16/004	151240	169800	148	SHAREEF ABU HIJLAH 4	Azzon Atmah	44000	Released in 2014
54	15-16/005	154960	168250	285	DHEEB REDA 'UDAH	MAS-HA	0	Israel control
55	15-16/006	154210	166150	200	AL ZAWYAH WELL	Al Zawya	0	Israel control
56	15-17/004	154700	177000	210	'AZZUN VILLAGE COUNCIL	Azzon	open	
57	15-17/005	150850	177060	114	'ABED AL FATTAH MAJD	Innabi Ilyas	224000	Buffer Zone
58	15-17/007	155500	175000	244	SUDQI SHBAITAH	Azzon	90000	Azzoun Mun.
59	15-17/008	151160	170100	155	MUHAMMAD TAHA SALAMAH	Azzon Atmah	154000	Released in 2014
60	15-17/009	150200	179540	100	'ALI NAJEEB 'ASHUR	Qalqilyah	131000	annexed
61	15-17/010	150000	179140	75	HASAN AL HAJ HASAN	Qalqilyah	82000	Buffer Zone
62	15-17/011	151300	179100	102	SAMI 'ABDALLAH YUSEF	Jeyyus	87000	annexed
63	15-17/012	151500	179660	95	MUHAMMAD 'OMAR KHALEEL	Jeyyus	124000	Released in 2014
64	15-17/013	151300	172200	98	'ABED AL 'AZEEZ ABU SAFIEH & PARTNERS	Khirbit Al Modawwar	89000	
65	15-17/014	152100	171450	100	'ABED AL KAREEM 'ABDALLAH	Biet Amin	92000	
66	15-17/015	150280	171840	75	'ALI HASAN ABU SALMAN	Izbit Abu Salman	153000	Buffer Zone
67	15-17/017	150400	176600	130	'OTHMAN ABU MARYAM	Qalqilyah	44000	annexed
68	15-17/018	150540	170380	155	MUHAMMAD AL HAJ YUSEF	Azzon Atmah	150000	Released in 2014
69	15-17/019	152560	171250	95	YUSEF MUHAMMAD 'OMAR	Biet Amin	82000	
70	15-17/022	159500	175600	350	Karni Shamrun	Jinsaut	Israeli	
71	15-18/001	151420	181120	110	SADEQ AL SALEM	Flamyah	135000	Buffer Zone
72	15-18/002	151170	180160	95	LUTFI 'OMAR	Jayyous	114000	annexed
73	15-18/003	152070	181520	120	KAMEL AL SALEM	Flamyah	176000	Buffer Zone
74	15-18/004	151800	180550	100	MUHAMMAD AHMAD SALEH	Flamyah	130000	Released in 2014
75	15-18/005	151620	181150	108	'ABED AL RAHMAN ABU SALEH	Flamyah	175000	Buffer Zone
76	15-18/023	152800	181600	142	FARUQ SALEEM AL SHAKER	Flamyah	69000	

Total m <sup>2</sup> /year	7346000
Total Annexed	1119000