



Regional Socio-Economic and Territorial Continuity
of the Arab Villages Surrounding East Jerusalem

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تواصل إقليمي و اقتصادي-اجتماعي للقرى العربية المحيطة
بالقدس الشرقية

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Researcher

Khaled Mar'i

Table of Contents

ACKNOWLEDGEMENT	I
TABLE OF CONTENT	II
LIST OF FIGURES	VI
LIST OF TABLES	VII
Abstract	VIII
ملخص البحث	X
Chapter One : Introduction	1
1.1 Background	1
1.2 Scope of the Study	3
1.3 Study Area	4
1.4 Problem Definition	6
1.5 Objectives of the Study	7
1.5.1 Main Research Questions	8
1.6 Methodology	8
1.6.1 Analysis Methods	9
1.7 General Framework	10
Chapter Two : Regional Context	11
2.1 Integrated Regional Development Planning	11
2.2 Philosophical and Conceptual Approach	12
2.3 Palestinian Rural Communities	15
2.4 Israeli Planning Situation	17
2.4.1 Village Planning Under Israeli Occupation	18
2.4.2 Current Planning Situation	19
2.4.3 The Purpose of Regional Plan	20
2.4.4 Regional settlement System	21
2.5 The District Socio-economic Setting	22
2.5.1 Geography and Climate	22
2.5.2 Demography and Society	23
2.5.3 Administrative Structure	23
2.5.4 The Economic Base	24
2.5.5 Education	25
2.5.6 Health	26

Chapter Three : Study Area Context	28
3.1 Introduction	28
3.2 Historical Overview	29
3.2.1 Period before 1948	29
3.2.2 Period between 1948 and 1967	30
3.2.3 Period between 1967 and 1996	32
3.2.4 Period After 1996	34
3.3 Location	34
3.3.1 Geographic Location	35
3.3.2 Strategic Location	36
3.4 Natural Resources	37
3.4.1 Land	37
3.4.2 Agricultural Land	37
3.4.2.1 Main Threats/Problems	38
3.4.2.2 Agricultural Land Protection	39
3.4.3 Water	40
3.5 Economic Profile For Palestinian Territories	41
3.5.1 Land Use	41
3.5.2 Infrastructure	41
3.5.3 Population	42
Chapter Four : THEORITICAL PERSPECTIVE	44
4.1 Concept of the Region	44
4.2 The Importance of Dividing the Country into Regions	44
4.2.1 The Relationship between Regional Planning and the Physical Factors	46
4.2.2 The Relationship between Regional Planning and economic Prosperity	47
4.3 The Formation of the Regions	48
4.3.1 The Division of Villages	48
4.4 Definition of Region within a Country	49
4.5 Regional Development and Spatial growth Patterns	50
4.5.1 Economic Development and Spatial Patterns	50
4.5.2 Social Development	51
4.6 Urban Land Management	52

4.6.1 Land Value	53
4.6.2 Land Use	53
4.7 Urban Infrastructure	54
4.7.1 Economic of Urban Infrastructure	55
4.7.2 Impact of Infrastructure provision	56
4.7.3 Financing and Management of Infrastructure	57
Chapter Five : Research Methodology	59
5.1 INTRODUCTION	59
5.2 Research Objective	59
5.3 Data Processing Phases	60
5.3.1 Phase I: data collection	60
5.3.1.1 Research Instruments.	60
5.3.2 Phase II: data analysis	63
5.3.2.1 Geographic Information System definition	63
5.3.3 Research Hypothesis	65
5.3.4 Research Limitations	66
5.4 Methodology Statement	67
5.4.1 Data Collection	67
5.4.1.1 Official Sources	68
5.4.1.2 "Collective" Community Meetings	69
5.4.1.3 Data Entry and Output	69
5.4.2 Analysis and Prioritization	70
5.4.2.1 Needs' Prioritization Criteria	70
5.4.2.2 Potentials' Prioritization Criteria	71
5.4.2.3 Explanation of Re-prioritization Process According to Both Sets of Criteria	73
5.5 Conclusion	73
Chapter Six : RESEARCH ANALYSIS	76
6.1 Selection of Sub-regions	76
6.2 The Study Area Region Description	76
6.2.1 The Geography of the Study Area	77
6.2.2 Population Projection	83
6.2.3 Natural Resources and Infrastructure	83

6.2.3.1 Agriculture	84
6.2.3.2 Solid Waste	84
6.2.3.3 Water	84
6.2.3.4 Electricity	85
6.3 Basic Indicators	85
6.4 Spatial and Social Articulations	87
6.5 Institutional and Social Infrastructure	94
6.6 The Economic Base	95
6.6.1 Work Force and Income Patterns	97
6.6.2 Living Levels	100
6.6.3 The Markets, Services and Flow of Commercialization	102
6.7 Analysis of the Needs	103
6.7.1 Qualitative Analysis of Available Services	104
6.7.1.1 Water Supply and Distribution Systems	104
6.7.1.2 Wastewater Systems	105
6.7.1.3 Solid Waste Collection and Disposal Systems	105
6.7.1.4 Roads	105
6.7.1.5 Educational Facilities	106
6.7.1.6 Health Facilities	107
6.7.2 Expression of Needs by the Communities	107
6.8 Analysis of the potentials	110
6.9 Recommendation for Investment	115
Chapter Seven : Conclusion	116
7.1 Introduction	116
7.2 Research Questions-Revised	118
7.3 Research Objective-Revised	119
7.4 Research policy	120
7.5 Research scenario	120
7.6 Recommendations	120
List of References	122

List of Figures

Fig. 1.1: Jerusalem division in 1948

Fig. 1.2: Expanding Jerusalem municipal borders in 1967	4
Fig. 1.3: Study Area	5
Fig. 3.1: the percentile property of Jerusalem parts before 1948	30
Fig. 3.2: the percentile property of Jerusalem parts after 1948	31
Fig. 5.1: Methodology Flowchart	75
Fig. 6.1: Study Area Location within the West Bank	77
Fig. 6.2 Village's Borders and Built-up Areas	78
Fig. 6.3: Study Area Sub-Regions	87
Fig. 6.4: Sub-Region Q1	88
Fig. 6.5: Sub-Region Q2	90
Fig. 6.6: Sub-Region Q3	91
Fig... 6.7: Zoning Map	93

List of Tables

Table 3.1: the property of Jerusalem parts before 1948 in dunums	29
Table 6.1: Sub-Regions by Population, Land Area, Built-up Area, including the totals of the Arab neighborhoods inside Municipal borders.	81
Table 6.2 Selected Indicators for Land Use in Jerusalem Governorate (J2), 2005	82
Table 6.3: Basic Indicators: Sub-Region; Q1: Abu-Dis	86
Table 6.4: Basic Indicators: Sub-Region; Q 2: Al-Ram	86
Table 6.5: Basic Indicators: Sub-Region; Q 3: Biddu	86
Table 6.6: WATER NETWORKS: QUALITATIVE ANALYSIS	104
Table 6.7: WASTEWATER SYSTEMS: QUALITATIVE ANALYSIS	105
Table 6.8: SOLID WASTE COLLECTION AND DISPOSAL	105
Table 6.9: ROADS: QUALITATIVE ANALYSIS	106
Table 6.10: EDUCATIONAL FACILITIES: QUALITATIVE ANALYSIS	106
Table 6.11: HEALTH FACILITIES: QUALITATIVE ANALYSIS	107
Table 6.12 Sub-Region Sectoral Needs	108
Table 6.13: PRIORITIZED NEEDS, BY NEEDS CRITERIA	110
Table 6.14: PRIORITIZED NEEDS, ACORDING TO THEIR IMPLEMNATABILITYPOTENTIAL	112
Table 6.15: RE-PRIORITIZED NEEDS, ACCORDING TO THEIR PERCENTILE ON THE COMPOSITE SCORE	113
Table 6.16: PRIORITY NEED AREAS, BY SUB-REGION	114

ABSTRACT

After the Israeli occupation of East Jerusalem in 1967, Israel expanded the municipal boundaries of the city in jagged manner, enabling it to include as much land as possible while excluding as much of the Palestinian population as possible.

The Israeli government kept 28 villages which are surrounding East Jerusalem and were related to Jerusalem administratively before 1967 outside Jerusalem municipality borders that was created in that time. This was made because these communities are far from the old city and dense in population, and the Israeli policy aimed to keep this area as a future expansion for Jerusalem municipal borders and as a security buffer zone as it separate Jerusalem from the surrounding governorates. However, this Israeli policy is an attempt to ignore this area from basic municipal services to enforce its residents to leave it for its strategic location around Jerusalem and in the middle of the west bank and it's the only way that connects the south of the west bank to the north. Consequently, these villages became shattered and separated form each other and from the center of the city and suffer from a deep-rooted multi-component situation because the presence of residents in this urban space requires administrative management and a provision of daily services without waiting for the final political solution about Jerusalem. Nevertheless, devising alternatives and scenarios of the administrative situation that could be occurred is a must. Meanwhile, any solution or arrangement of these villages that are surrounding East Jerusalem must take into consideration the proposed geopolitical solutions in the public scale to the conflict; otherwise, it would obscure their implementation once they are reached.

This means that any proposed structure for the urban management of these villages in the interim phase must be capable of providing daily services to the current residents in order to fulfill their permanent needs, consequently efficient territorial continuity between them which might pave the way of the birth of new sub regions that focused on specific service according to its potential characteristics and serve the other sub regions, which can create an integrated self-sufficiency in the daily services in this area .

The main objective of this proposal is to investigate these sub regions and link between them according to their overall natural and political characteristics of this region taking into considerations the proposed administrative scenarios.

بعد الاحتلال الإسرائيلي للقدس الشرقية عام 1967، وسعت الحكومة الإسرائيلية الحدود البلدية للمدينة بشكل مدروس، حيث احتوت التوسعة على أكبر مساحة ممكنة من الأرض و استنتجت أكبر عدد ممكن من السكان الفلسطينيين. الحكومة الإسرائيلية أبقت 28 قرية تحيط بالقدس الشرقية و كانت تعتبر قضاء إداري للقدس قبل عام 1967 خارج حدود البلدية التي رسمتها في ذلك الوقت.

تم هذا الفصل لان هذه القرى بعيدة نسبيا من البلدة القديمة (التي تحتوي المسجد الأقصى) و هي كثيفة بالسكان، حيث إن السياسة الإسرائيلية تهدف لإبقاء منطقة هذه القرى كامتداد مستقبلي لحدود البلدية و كمطقة أمنية عازلة تفصل القدس عن باقي المحافظات المحيطة. و لتحقيق هذه السياسة فقد أهملت بلدية القدس هذه المنطقة من الخدمات البلدية الأساسية خصوصا البنية التحتية، و منعت قيام أي هيئة بلدية في هذه المنطقة لتنسيق الخدمات بين هذه القرى و وضعت حواجز أمنية تصعب التواصل بين هذه القرى ببعضها البعض و بينها و بين القدس الشرقية و باقي المحافظات المحيطة، و التي ترتبط بها بعوامل اقتصادية و اجتماعية وثيقة، في محاولة منها لإجبار سكان هذه القرى لمغادرتها، حيث أنهم لا يحملون الهوية الإسرائيلية التي لا يحملها من الفلسطينيين إلا سكان المناطق التي تقع داخل الحدود البلدية، و قد وضعت الحكومة الإسرائيلية قوانين لإعاقة الحصول على هذه الهوية و إمكانية سحبها إذا اكتشفت بان حاملها لا يسكن بشكل دائم داخل حدود البلدية أو متزوج ممن لا يحمل هذه الهوية. إن هذه المنطقة تعتبر منطقة إستراتيجية لإحاطتها بالقدس الشرقية و موقعها في وسط الضفة الغربية و هي الطريق الوحيد الذي يستطيع الفلسطينيون عبورها من جنوب الضفة لشمالها.

بهذه السياسة الإسرائيلية الموجهة أصبحت هذه القرى منعزلة و مبعثرة عن بعضها البعض و تعاني من نقص حاد في الخدمات الأساسية اليومية و البنية التحتية، مما أدى إلى صعوبة في خدمات الحياة اليومية و صعوبة إمكانية تطوير هذه المنطقة و استغلال مواردها و إمكانياتها، حيث أن وجود مواطنين في هذا الفضاء العمراني يحتاج بالضرورة تخطيط إداري مدروس لتخفيف معاناة سكان هذه المنطقة في الخدمات اليومية الأساسية بدون الانتظار لحل سياسي للقدس الشرقية المعرفة داخل حدود البلدية الموجودة حاليا، حيث أن استمرار هذا الموضع السيئ لسكان هذه القرى يؤدي إلى زيادة معاناتهم و هدر موارد هذه المنطقة. كما أن وجود تخطيط إداري لهذه القرى يجمع بين أجزائها بناء على خصائصها و مواردها الاقتصادية و

الاجتماعية بشكل وظيفي يؤدي فيه كل جزء وظيفة تخدمه و تخدم باقي الأجزاء و وجود تطوير للبنية التحتية يفترض في هذه البحث بأنه يخدم سكان هذه المنطقة على المدى القريب و يتكامل مع القدس الشرقية على المدى البعيد و لن يكون بديلا عنها، بل على العكس فان تطوير هذه المنطقة يفترض في هذا البحث بأنه يخدم تطوير القدس الشرقية عند اتصالهما المستقبلي و يخفف الضغط السكاني و الإداري و الاقتصادي و المواصلات عن القدس الشرقية لتقوم بدورها الديني و التاريخي و السياحي بشكل امثل.

إن هدف هذه الدراسة هو دراسة هذه المنطقة من ناحية سكانية و عمرانية و استكشاف مواردها و إمكانياتها للخروج بتخطيط إداري يعتمد على قيام هيئات بلدية لأجزائها بناء على خصائص هذه الأجزاء، حيث تجمع كل هيئة عدد من القرى بشكل مدروس و من ثم تواصل إقليمي لهذه الجزاء لتكون وحدة جغرافية، و بالضرورة البحث عن أولوية لمشاريع البنية التحتية بناء على وضع البنية التحتية القائم و رغبة سكان هذه المنطقة في مشاريع معينة.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Palestine is the land between the Mediterranean and the River Jordan. It takes its name from the philistines who occupied the costal plain in the 12 century BC. At the cross roads of empires, the land was held by the Egyptians, Israelites, Assyrians, Babylonians, Persians, Greeks, Roman Arabs for more than 13 centuries, and was part of the Ottoman Empire for four centuries. At the break-up of the Ottoman Empire after the First World War over 90% of the population of Palestine was Arab; the Jewish minority included a small indigenous population and Zionist migrants who had begun to arrive in the 1880s (Coon, 1994).

From 1922 Palestine was ruled by Great Britain under mandate from the League of Nations. The Mandate required that Britain should foster the creation of a Jewish national homeland in Palestine, while ensuring that this did not prejudice the rights of the people already living there. Conflict grew between Jewish (whose numbers increased rapidly by immigration from Central Europe in the 1930s) and Palestinians (who had also promised an independent state by Britain). The United Nations prepared a plan to partition Palestine into a Jewish state and Arab state in 1947, with Jerusalem as an international zone (Fig.1.1). After bitter fighting during which 750,000 Palestinians were made homeless cease-fire was declared leaving the new State of Israel in control of 77% of Palestine. (Aruri Naseer H, 1948:5).

Considerably, the UN partition plan and inducing the modern city of West Jerusalem but not the old city and East Jerusalem. The areas of Palestine not within the new state of Israel were the Gaza Strip (which was taken under Egyptian administration), and the area immediately west of the River Jordan which was incorporated into the Kingdom of Jordan and became known as the "West Bank".

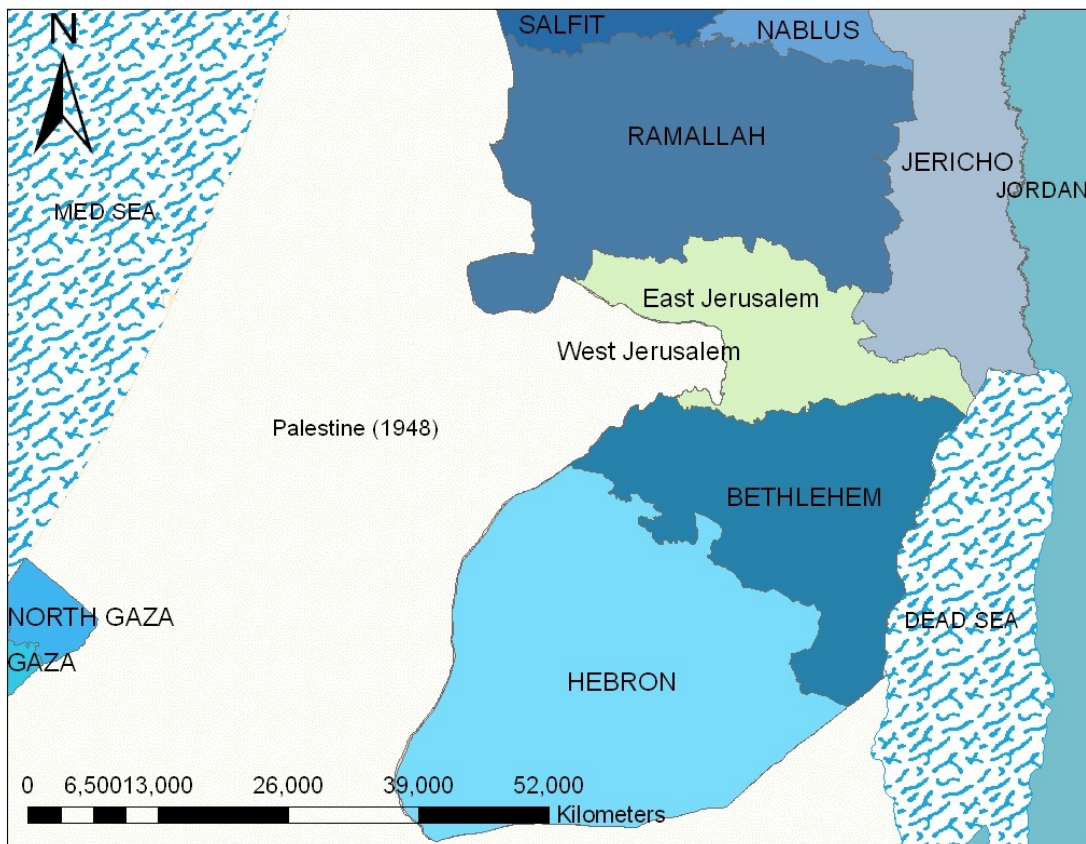


Fig. 1.1: Jerusalem division in 1948

As a result of the war in 1967 between Israel and her Arab neighborhoods, Israel invaded and occupied the Gaza Strip and the West Bank, as well as the Sinai Peninsula and the Golan Heights. East Jerusalem was in effect annexed by Israeli

almost immediately (Coon, 1994). The UN called for withdrawal by Israel from occupied Arab lands in exchange of peace and recognition of Israel, but without specifying how much land was to be evacuated, and without providing for a Palestinian right to return of self-determination.

Development by Israel of new communities for Jew settlements in the West Bank began soon after the occupation and intensified and extended geographically during the 1980s, accompanied by corresponding restrictions in giving permissions for development projects and services and in mobility for Palestinians of the West Bank.

1.2 Scope of the Study

This research is worth doing because the urban administrative management of Jerusalem and its surrounding must be a central issue in any proposed solution or arrangements to the conflict over the future of the city. The complexity of the administrative management issue is attributable to the city's unique religious, symbolic, functional and demographic status. The literature of applying on this issue has emphasized the difficulty of applying a successful structure of urban administrative management in a large metropolitan city like Jerusalem. This difficulty raised from the geopolitical situation due to the conflict between Arabs and Israelis as each side considers this city as its capital because of their believes and because of its strategic importance which comes from its location in the middle of Palestine and its historic and religious value to each side.

Studies on urban administrative management evolve around the distribution of roles between the central government and the people, the level of their intervention in

people's lives, as well as the extent of their ability to provide an appropriate urban environment for their development and monopolization of the decision –making Authorities and control of the resources. These factors are needed to reach the development of economical, social, administrative, and environmental aspects of communities, in such a way that both the quantity and quality of this public need have to be adequately met.

1.3 STUDY AREA

The area that is extend from the western north to the east of Jerusalem and consists of 28 Palestinian villages and towns surrounding East Jerusalem which are outside Jerusalem municipality borders and do not relate administratively to any other municipality (Fig.1.2 and Fig. 1.3).

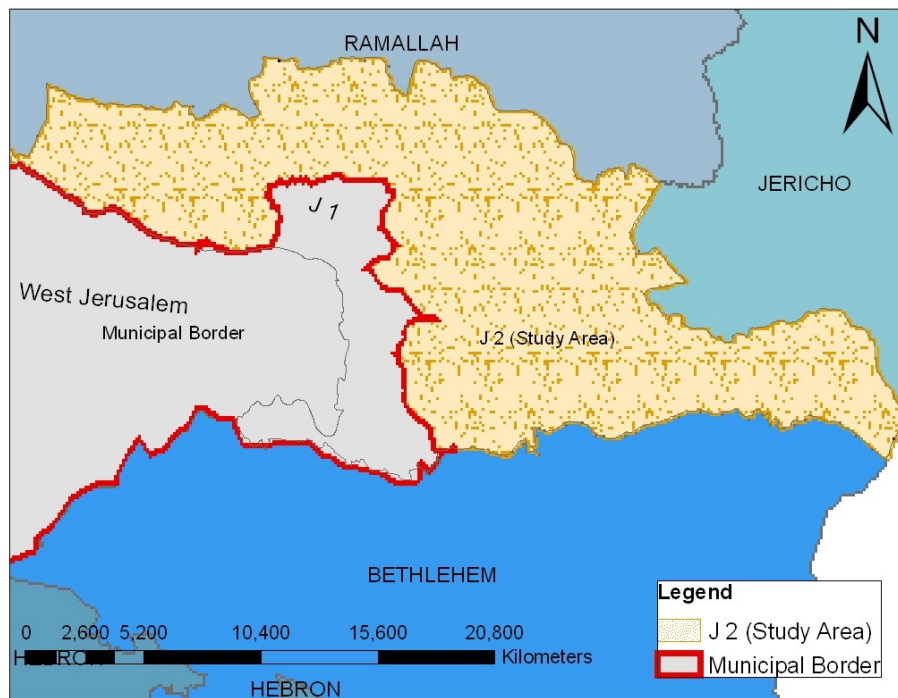


Fig. 1.2: Expanding Jerusalem municipal borders in 1967

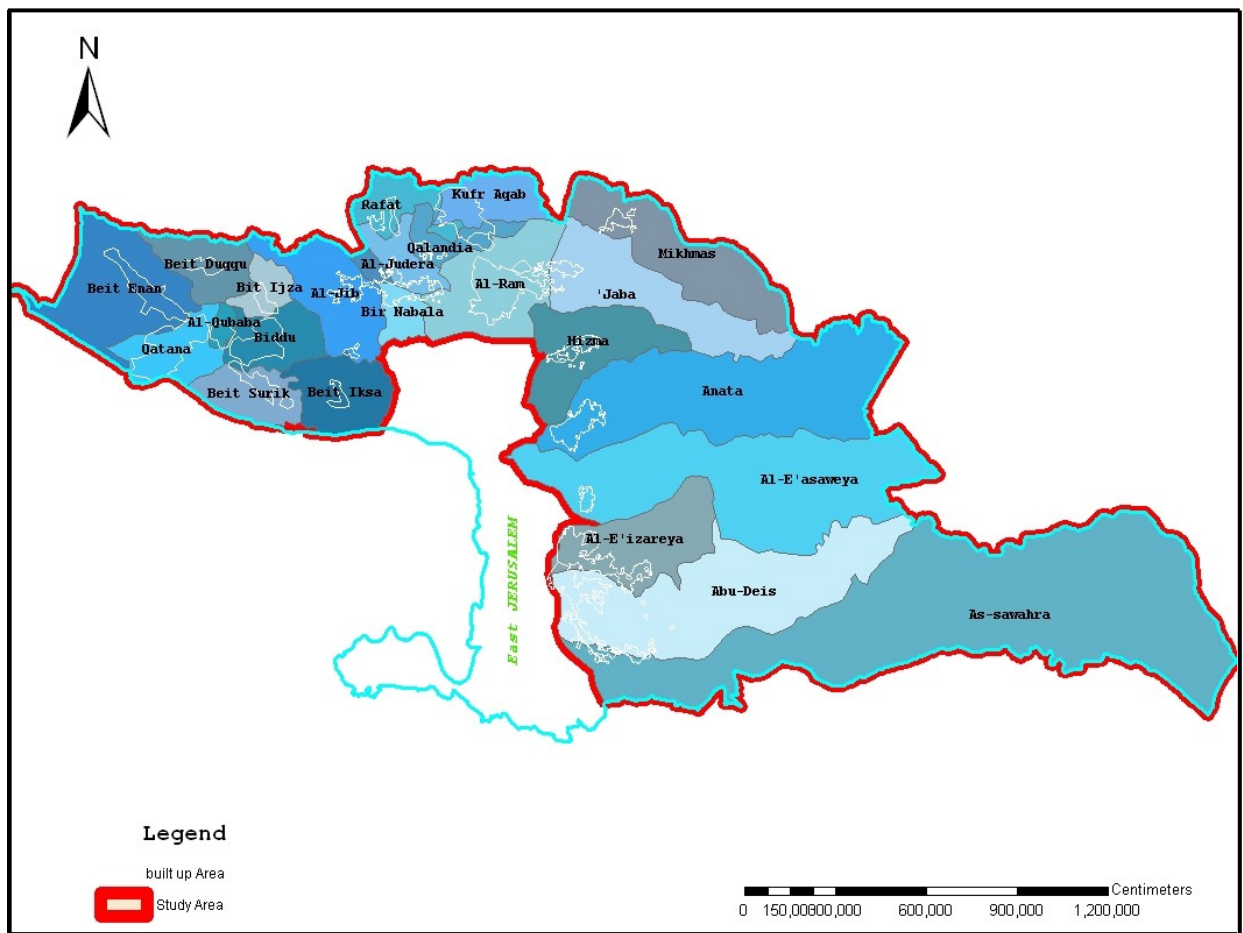


Fig.1.3: Study Area

These areas are becoming overcrowded and cannot handle the population pressure, which is reflected on the Palestinian natural and socio-economic environment and exacerbated by the weak infrastructure and insufficient services such as health, educational, transportation, employment, recreational, social services. Moreover, these communities related to different administrative structures and institutions that are operating within the same space in which the civil sovereignty relates to PNA

(Palestinian National Authority) which can't implement any development project without permission from the Israeli Authority that has the complete sovereignty on this region. This situation necessitates alternative administrative plans within the context of strategic plans for Jerusalem and its environs by more detailed studies concerning the land use and services to support the political negotiation about the final status of East Jerusalem.

1.4 PROBLEM DEFINITION

After the Israeli occupation of East Jerusalem in 1967, restrictions related to the regulations in giving the license for the development projects in the study area, also the restrictions in the daily mobility between the Arab villages itself and between them and their center (Jerusalem) and ignoring these villages from the municipal services and separate it from the surrounding governorates leads to keep these villages without any development. Moreover, infrastructure and services for this group of inhabitants, provided by Jerusalem municipality, became inadequate to fulfill their needs. Soon after its occupation, the Israeli government enforced several measures which changed the geopolitical boundaries of the city and legal and physical status. These measures presented in the military borders and the settlements that surround East Jerusalem and expanded consentaneously, other measures related to the pre mentioned regulations and the land use which prevent the expansion of the Arab villages.

1.5 OBJECTIVES OF THE STUDY:

The main objectives of this research are:

Achieving a proper administrative urban planning and management system to support the decision-making policy and to fulfill the needs of the study area population by providing physical infrastructure projects, this system must be capable of providing daily services to the current residents and in turn reflected on the economic development of the study area.

This main objective can be achieved through the followings:

- Evaluate the present situation of the study area based on the collected data and its analysis and to examine if it can serve as self-sufficient area, according to its natural and potential resources.
- Achieving a proper administrative management for the region through dividing into functional sub-regions
- Provide physical infrastructure projects to improve the daily services in each sub-region, according to a prioritization criteria based on the sub-regions potentials and needs.
- The linkage between these sub-regions and the surrounding governorates through a regional road and integrated socio-economic situation, which could be achieved through the improvement of physical infrastructure and the creation of job opportunities in the proposed sub-region.

1.5.1 MAIN RESEARCH QUESTIONS

- Can the 28 villages serve as a self-sufficient area in providing the daily services without integrated it to the surrounding centers (Jerusalem, Ramallah, Bethlehem)
- Is the idea of creating economic sub regions efficient?
- How these villages and sub regions will be connected to each other and according to what?
- Can the resulted analysis and recommendation be used in the decision making policy?
- What are the proposed scenarios for this region?

1.6 METHODOLOGY

The proposed research design started from analyzing some concepts related to the spatial and functional structures with special attention to the land use, infrastructure, center of commerce, industry. Then captures the data that define the social characteristics of the study area. Methods to collect data will be; documented data (obtained from NGO'S, Ministries, studies concerned the study area), statistical data (obtained from PCBS "Palestinian Central Bureau of Statistics"), software Maps (obtained from NGO'S and Ministries). Facts about the current social situation will be obtained from interviews. The economic status will be evaluated based on the current records about the income, employment, natural and potential resources. All these records will be obtained from the previous sources. Depending on the collected data, a mathematical analysis method will be used based on a set of criteria's that define the scores and weights that will be given for each infrastructures sector

depending on the needs and potentials and using a prioritization factor to meet the objective of this research; that is the improvement of the infrastructure in the study area through dividing in into functional sub-regions that can integrate properly.

1.6.1 Analysis Methods:

Finally analysis and forecasting information are also required; this analysis will be based on mathematical procedures. For mapping analysis a GIS (Geographic Information System) program will be used which uses a collection of information technology, data, and procedures for collecting, storing manipulating, analyzing, and presenting maps and descriptive information about features that can be represented on maps.

According to the resulted conclusions issues to be refined. Data that will be presented in software maps are; land use, contour, road network, built-up area, village border, ...etc. Another data that will be taken into consideration is the political existing border of East Jerusalem and the location of colonies based on the hypothesis that will be discussed later. this presentation is important in the planning perspective so it can be understood and implemented easily.

The output will be two parts; map output that is a zoning plane which could be used for developing polices by which feature data can be managed for proper planning, and infrastructure needs output depending on a prioritization of needs and potentials which could be used for the improvement of the infrastructure which will in turn be reflected on the improvement of the daily life in the study area.

1.7 GENERAL FRAMEWORK

In general this research will be divided into eight chapters as follows:

Chapter One; discusses the abstract of the research including the problem definition and objective

Chapter Two; will discuss the regional context including the concerned topics about the whole Palestinian Territories, as a general overview to be specified for the study region.

Chapter Three; will discuss the study area context including the concerned topics about the study area itself.

Chapter Four; will discuss the theoretical perspective including the theories and previous experience that are related to this research topic

Chapter Five; will discuss the research methodology that will be used in this research including the phases of data collection and the methods used for analyzing these data.

Chapter Six; will discuss the analysis used for the collected data including a set of criteria's based on a defined scores and weights for the needs using prioritization method depending on the potentials.

Chapter Seven; will discuss the conclusion reached and recommendations for the study area and for future researches.

CHAPTER TWO

REGIONAL CONTEXT

2.1 Integrated Regional Development Planning

A number of divergent strategies have directed regional development studies and planning. One strategy focuses on enhancing the development potential of the existing metropole, by pouring more resources and opportunities in it, for the purpose of turning it into a "radiating" center of development for the hinterland. The actual outcome of this type of strategy has shown to increase the gap in the development levels and potential between the center and the rural hinterland, while hoping to benefit the hinterland through the "trickle down" effect.

An alternative strategy of regional development is based on the principle of bridging the regional gaps and dislocations between major urban centers and the surrounding small rural communities, by availing resources, opportunities and necessary technical support to these communities, thus enhancing their development capacity, within a framework of a realistic and implementable regional plan/s. This is the strategy that informs this study, and the specific regional planning concepts which it may generate. The objective of the integrated regional development planning is "to create a more diffuse and articulated system of settlements in order to diversify the services and facilities available to rural residents, increase their access to town-based markets, new sources of agricultural inputs and non-agricultural. Employment opportunities,

and to provide guidelines for sectoral investment and locations decisions"

(Rondinelli and Evans 1983:31).

The broad aim of Palestinian integrated regional development planning is to reduce urban-rural (center-periphery) disparities, by overcoming the problems which frequently inhibit the equitable distribution of the economic and social benefits of development and growth. Applying this approach will enhance the availability of basic services and infrastructure to the rural population, and increase its access to town-based markets, agricultural inputs and nonagricultural employment opportunities.

An integrated regional planning approach would also improve physical, economic and service linkages, such as road and other transport linkages, technological linkages associated with energy and telecommunications, service linkages related to the delivery of education and health services, and public administration linkages related to accessibility to local government offices and services.

The implications of this approach to the development of the region under study will lead to the creation of more balanced economic and social relations and interaction between the urban center and the surrounding communities, and among the communities themselves. This process, however, is more difficult, slower, and requires more technical and training input in guaranteeing a certain level of absorptive capacity for development interventions in the communities concerned.

2.2 Philosophical and Conceptual Approach

Taking into consideration the history of Palestinian development, the specific traditional patterns of socio-economic interactions among neighboring communities,

and the exigencies of flexible regional planning in Palestine during the coming period, a number of basic planning concepts will inform the conclusions of this study. These concepts pertain to the nature of regional boundaries, rural communities, and the hierarchy of communities and services, and the future relationship between the sub-regional and national levels.

The only fixed physical boundaries used in this study, and which represent the *status quo*, are the pre-1967 official administrative boundaries set by Jordan as a delineation of the inland region districts. Primarily, this study is informed by the concept of flexible boundaries, determined, spatially and temporally, by the level of outreach of functions and communal interactions. Even the cease-fire lines between Israel and the inland region, and the inland region and Jordan, as well as the boundaries separating the inland region from the coastal region, are dealt with in this study as flexible in terms of future regional planning needs.

The concept of a "region", as used in this study, does not refer to a physical area with 'hard' or 'clear' edges that separate nation-states; but it is informed by the recent discussions that characterize the edges defining regions as 'soft' or 'diffuse'; (Stea 1993: 194); that regions "are one way in which humans strive to give order and internal coherence to their universe..."; (Kenser 1993:107); and that regional boundaries, especially regarding indigenous populations, are "generated by patterns of accustomed use".

"Sub-regions" are used in this study as regional planning units or planning foci; they are not administrative units; they are to be understood as areas with potentially

changing and flexible boundaries. The boundaries of the sub-regional units are imaginary; they are delineated on the map for the sole purpose of identifying one planning unit from another, at a fixed time and under a set of prevalent political conditions. They are in no way connected to any potential administrative redivision of the districts. Sub-regional units, thus, are intermediate planning units between the individual community and the district. They include, therefore, a cluster of contiguous small communities, which are functionally, historically and economically interactive.

The general criteria used in identifying potential sub-regions are:

- Population size of the communities,
- Level and frequency of interaction among them,
- Distances among them, and spatial distribution, road network and level of available services,
- Local capacity and potential for sub-regional cooperation and joint activities.

The selection of sub-regions is based on a sub-analysis of five domains, namely;

- 1) Spatial and social articulations,
- 2) The institutional and social infrastructure,
- 3) The economic base,
- 4) The markets, services and flow of commercialization,
- 5) The interdependency between the urban center and the contiguous rural areas.

2.3 Palestinian Rural Communities

"Rural" communities, in the Palestinian context, are fairly small communities with varying sizes where cluster of related people live together; where the primary mode and pattern of making a living is connected to the land; where land ownership does not change hands frequently, especially to owners outside the community itself; where elaborate services and infrastructure are lacking; where economic and social interaction' with the main urban center is very limited; and where the mode of cultural interaction is face to face, personal, and often prescribed by family. This characterizes most Palestinian communities. However, it must be kept in mind that due to the lack of investment in the rural areas, and due to the continuing confiscation of rural lands by Israel, the labor force in these Palestinian rural communities seeks employment opportunities outside their communities, without necessarily leaving it. Thus, rural land is potentially a source of livelihood, but at the moment, it is not.

The planning concept informing this study is guided by the hierarchy of existing Palestinian communities, as well as the hierarchy of services. The hierarchy of communities identifies primary urban centers, secondary regional centers, and smaller communities and remote hamlets. The planning strategy to be used in this context, has to be flexible with an ultimate view of providing a hierarchy of services to the different level communities, ranging from localized essential basic services benefiting each small community, to regionally-based services geared to support the different sub-regions, to national-level services. Thus, regional planning cannot be effected in isolation of national planning, and vice-versa.

Since this approach is premised on the eventual objective of "enabling" and "empowerment" of rural communities and sub-regions, an integral component of this concept is a gradual "devolvement" strategy, away from the primary centers and in favor of the sub-regions.

Since rural communities are the focus of this study, special attention has been given to the institutional and administrative structure of these communities. The legal framework under which village councils are currently operating is based on pre-1948 British legislation. Though responsibilities of these councils are somewhat limited, services provided by them typically include electricity, water, sewers, roads, solid waste disposal and issuing licenses and permits for various businesses and activities. Prior to the assumption of responsibilities of the Palestinian Authority (PA), the village councils were supervised and controlled by the Israeli Department of the Interior, which was part of the Israeli Civil Administration (CIV AD) of the military occupation structure.

The CIV AD was maintaining a tight regime of management where the officer in charge at the Department of Interior was entitled to:

- 1) Appointing village counselors
- 2) Approving development budgets

Currently, the Ministry of Local Government has taken several responsibilities including:

- Approving local government budgets,
- Determining revenue raising mechanisms,

- Pre-approving major purchases and authorizing capital projects.

There are active discussions between the local governorates and the central authority regarding the upgrade of certain village councils to municipal councils.

This upgrade will have practical implications in terms of

- Budget allocation for development projects,
- Enhancing the institutional and absorptive capacity,
- Decentralization of relations between the local and central governorates,
- Facilitating local planning,
- Creating new opportunities for shared services activities between neighbouring communities.

2.4 Israeli Planning Situation

The agencies responsible for Planning in the West Bank are almost appointed by the Israeli military Authorities from 1967 to 1996. Local village planning commissions and district planning commission have been abolished and their responsibilities taken over by the High Planning Council, who are a group of Jewish soldiers appointed by Israeli military commander. The Central Planning Department of military government is responsible for planning outside the municipalities.

The Regional Plans consist, as do virtually all the development plans prepared in Palestine and Israel since the Mandate, of a map and a set of Regulations. The latter are essentially schedules which define the type of development which is permissible in each of the zones shown on the map.

The regional plans attempt to define land use zones within which only specific types of development would be allowed. The documents appear at first sight to be defining permissible development in their extensive and varied areas with a high degree of legal precision and certainty, but in fact the plans contain a number of devices to allow flexibility.

The main zones are defined in the regulations of the plans: "agriculture", "development" and "natural reserves" these zones parts of the regional plans which constitute the West Bank.

These different and following planning patterns investigate how the Palestinian community has been affected by plans and controls.

2.4.1 Village Planning Under Israeli Occupation

In the first years of occupation the Israeli Authorities took little interests in the Palestinian development. Then in 1981 the Central Planning Department commissioned the Israeli consultant Shamshoni to prepare outline plans for 183 villages. These plans were put on deposit in 1983, and further 100 village plans prepared by this consultant were deposit by 1985.

The Shamshoni plans were not based on field surveys, though some information was provided to the consultant by military Authorities. The plan boundary doesn't define the area for which planning polices were to be prepared, but rather the zone within which all urban development is to be confined. The plan boundary closely corresponds to the development areas shown on the contemporary regional plan for Jewish settlements. Outside the plan boundary the plans also show parts of

"reserved", "future planning" and "agriculture" zones. Thus the plans are incompatible with the mandate regional plans and are in effect modifications or inserts.

As a result the Palestinian areas which were occupied in 1967 including East Jerusalem and the surrounding villages (the study area) didn't exercised so much bias planning or development, they kept related to the old regulations made by the former Authorities (Othman, Mandate, Jordanian); these regulation didn't updated except for specified areas by Israeli Military Association which assumed these areas as reserved areas and so frozen it. This situation which lasted for about 30 years caused the deterioration of the existing infrastructure and so the overall development

2.4.2 Current Planning Situation

When the Palestinian National Authority (PNA) assumed self-rule in Gaza and West Bank in 1996 by Oslo Agreement in 1993, it was faced with double task of planning for future needs of its population, at the same time having to accommodate the planning needs generated by donor projects. These required environmentally sound, rational solutions based on updated and comprehensive understanding of the planning situation.

For the Palestinians, neither existing regional planning schemes nor their attributed regulatory framework within the occupied territories constitutes an appropriate and relevant approach for meeting the overall needs generated through the contemporary developments-political, socio-economic, and physical. The principal plans, still in force for the West Bank area, were approved on the eve of the British Mandate period. They are:

- RJ5, covering the southern part: Regional Outline Planning Scheme Jerusalem District approved 1942.
- S15 for the northern part: series of plans for the District of Samaria, comprising Samaria District Regional Outline Planning Scheme, approved 1942, with modifications of 1945, and the Samaria Development Plan (The Regional Plan For the West Bank Governorate, Ministry Of Planning and International Coordination [MOPIC]:1 1998)

During the Israeli occupation there have been some alternations to these regional plans regarding maps and regulations, as well as Israeli read plans and military orders that constitute the occupiers conditions for regional development in the West Bank. The total situation called for planning covering the area of the West Bank Governorates.

2.4.3 The Purpose of Regional Plan

Regional planning consists of plans for physical development linked to capital and social improvements programmes, is a comprehensive instrument for promotion of national political priorities, as well as a desired pattern of physical and socio-economic development throughout the region. So defined development and planning comprising all regions of a nation should be a political management instrument for the promotion of desired regional and local development in accordance with national goals.

The economic, social and humanitarian conditions of the Palestinians have witnessed serious deterioration since the beginning of the second uprising (Intifada) in September 2000. Particularly alarming are the levels of unemployment and poverty, as well as the deterioration in basic social services such as: education, medical care and infrastructure. The ratio of population per employed person has climbed by more than 50 percent since the start of the Intifada. Whereas in the third quarter of 2000, one worker supported 4.3 persons in the West Bank, the ratio is now 6.9. In addition, 66.5 percent of Palestinian households are living below the poverty line, and 56.5 percent of the Palestinian households have lost over half of their usual income as a result of the current crisis (ARIJ 2004).

This situation necessitates an urgent regional plan for the whole West Bank and this study will be part of it concerning the study area.

2.4.4 Regional Settlement System

The current regional settlement system in terms of center hierarchy: the center's functional role in the West Bank is not well defined. The existing situation indicates a biased geographic distribution of centers within the West Bank. This is reflected in the imbalance and inadequate distribution of services, public and private, within the region and between sub-regions. Most services and economic activities are concentrated in the largest urban areas. Until recently, smaller communities were almost neglected, or played a minor function role, and their system. Defining the hierarchy of centers, the centers functional role, and their inter-relationships within

the system is essential in order for the functionality and productivity of the whole settlement system to be enhanced.

In the existing circumstances, the main challenge for the future is to achieve a balanced development, one that accommodates socio-economic needs generated through population growth, and development towards economic and environmental sustainability.

Given the decades of no regional and national policies to guide development, the existing situation is marked by an extensive need for the protection of natural resources and the environment to be integrated by physical planning. Particularly valuable natural resources and natural areas such as agriculture land, forests, water recharge areas, ecological sensitive areas, significant landscape areas, and cultural heritage sites are stressed and are more seriously threatened by uncontrolled development.

2.5 The District Socio-economic Setting

The following sections will investigate the socio-economic settings of Jerusalem District as whole parallel with the adjacent communities which are the study area, because there aren't full records concerning the study area alone, meanwhile the investigation can be considered as the study area is part of it and effected by it directly.

2.5.1 Geography and Climate

Jerusalem District lies in the heart of the central mountain ridge, extending southwards from Jenin in the North to Al-Khalil in the South. It is perched on a rocky

terrain about 1,000 meters above sea level, sloping sharply in the East towards the Jordan Valley Rift, and moderately in the West towards the coast. Jerusalem District is characterized by a moderate climate, with about 400-500 mm annual rainfall. The general location of Jerusalem is shown in Figure 7.1.

Rain water drains quickly off this rocky ridge eastward to the valleys, and gradually westward to replenish the water aquifers. The region is characterized by a number of water springs.

2.5.2 Demography and Society

Unlike the rest of Palestinian districts, Jerusalem District has a demographic uniqueness expressed in the population split of the paramount urban city - Jerusalem - between Arabs and Jews. The east side of the city of Jerusalem encompasses about 430,000 Palestinian Arabs, of which 160,000 live in the study area and 270,000 live inside East Jerusalem municipal borders. The study area population constitutes about 37 per-cent of the total Arab population of East Jerusalem and is distributed among 28 rural communities which are included in this study, and about 4 percent is found in two refugee camps.

On the other hand, some of the communities included in this study may be viewed more accurately as constituting "suburbs", or extension communities of the city of Jerusalem, e.g., Al-Ram, Beit Hanina, Al-E'zareyah, etc.

2.5.3 Administrative Structure

Unlike the other districts, the demographically and politically split nature of the city of Jerusalem renders its administrative status unique. This is the sole municipality in

the District. Until the occupation of the City in 1967, it was administered by a dual municipal structure: a Jewish municipality for the western part of the city, and an Arab municipality responsible for administering the eastern part of the city. Since 1967, the Arab municipality has been frozen, and the Jewish municipality is considered the central and sole municipal administration that is responsible for service provision for the entire city. Currently, the Palestinian villages which are included in this study, and which are contiguous to the city of Jerusalem, don't not receive basic services from the existing municipality.

(Center for Engineering and Planning/United Nations Development Programme (UNDP)-An Approach Towards Integrated Development Physical Planning For Palestinian Rural Communities, 1995/Jerusalem District)

2.5.4 The Economic Base

Any discussion of the economic base for Jerusalem District, in particular, cannot be done in isolation of the Israeli market. The City of Jerusalem and the surrounding villages are subject to two markets, a Palestinian and Israeli, with the latter being unquestionably dominant. Thus, on this level, it would be unfounded to talk about the components of an economic base of Arab Jerusalem, because there is total dependence on Israeli economy.

On another level however, because the city is endowed with religious shrines that have become tourist attractions, the bases of economic activity in Arab Jerusalem are in the service sector, and in all tourist-related trades. The city of Jerusalem is not a center of production, except for minor handicraft industry. Furthermore, and

unlike other urban centers in the districts, Jerusalem has two regional public utilities, namely, electricity and water, which service communities beyond the District's administrative boundaries. Likewise, there are a number of public transport companies that connect the city with other communities in other districts, assuming mobility is not curtailed by the Israeli military occupation, as is the case at this writing.

Like most other rural communities in other districts, the economic base of the villages under study in East Jerusalem District relies on a mixture of agricultural cultivation and production of fruit trees, field crops, and livestock, and on small productive workshops. A distinguishing characteristic in this regard, however, pertains to Israeli targeting of this District for intensive Jewish settlement activities. Thus, there is an extensive expropriation) of land, especially in the areas adjacent to the City of Jerusalem, which resulted in an obvious erosion of the land base in these communities.

2.5.5 Education

The impact of the dual administrative structure and authority extends to the responsibility in the education and health sectors. Thus, a separation has to be made here between the City of Jerusalem and the adjacent Arab communities in East Jerusalem which are considered to fall within the jurisdiction of the Jewish municipality, and the rest of the villages under study in the District. In the City of Jerusalem and the adjacent communities, the supervising authorities of the educational institutions are the Jewish municipality of the City, and private, church

and other community-based NGOs. According to 1992 official figures (Jerusalem Statistical Yearbook 2004), the total number of pupils in the educational system (from K-12, including special education) was over 42,000 pupils, of which about 45 percent were enrolled in "official" institutions. The Israeli Ministry of Education and Culture does not run any post-secondary institution in East Jerusalem. The six post-secondary institutions that exist in Jerusalem District (one of them is a four-year college) are run by the local community, except for the training institution in Qalandya which is financed and run by UNRWA.

On the other hand, the educational system in the rest of the villages under study in the District, outside the City of Jerusalem, is administered by the PA Ministry of Education, community-based organizations, primarily churches and Muslim *Awqaf* Department, and UNRWA in the camps. With the exclusion of the UNRWA vocational training center in Qalandya camp, the available institutions encompass pre-school, basic and secondary levels, in addition to two secondary vocational schools and one university (Al-Quds University) which lies in Abu-Dis Village.

2.5.6 Health

Health facilities in the Arab section of the City of Jerusalem and the adjacent communities, which are considered to form a part of the Metropolitan Jerusalem, are provided by a number of agencies: The *Kupat Holim* (the Israeli Sick Fund) administers 3 health centers; the Jerusalem Municipality administers 3 MCH centers, 2 special education schools, one rehabilitation center for the disabled and one drug rehabilitation center; community-based NGO sector administers 5 specialized

hospitals and a number of clinics and rehabilitation centers(Barghouthi and Daibes, 1992, P: 254-269). Data gathered reveal that there are a total of 61 general clinics in the various villages studied in the East Jerusalem part, however, provide the specialized health services, not only for the District, but for the entire West Bank

CHAPTER THREE

STUDY AREA COTEXT

3.1 Introduction

The study area of this research is the 28 Palestinian village's surrounding East Jerusalem and lie outside Jerusalem municipality border, what is called (J2) area according to the Palestinian Central Bureau of Statistics (PCBS) which was annexed in 1967; (J1) area is the East Jerusalem area which was annexed in the same time but lie now within Jerusalem municipality border. The researcher will use the term Jerusalem governorate for J1 and J2 areas, and Jerusalem for the whole historic city (East and West part which was annexed in 1948); see Fig 3.1.

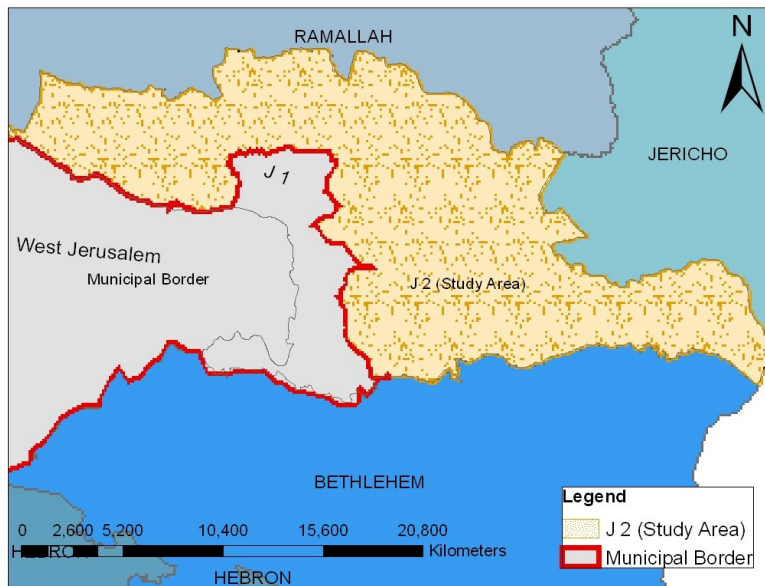


Fig. 3.1: Study Area

Jerusalem governorate is surrounded by the governorate of Bethlehem to the south, Ramallah to the north, West Jerusalem to the west, and Jericho to the East.

3.2 Historical Overview

Jerusalem is one of the oldest cities yearend for all nations and civilizations throughout history. Although, Jerusalem underwent numerous attacks and sieges amounting to not lees than twenty five times. Jerusalem is one the cradle of the three monotheistic faiths and the holiest city of all.

Jerusalem and other Palestinian towns have fallen under Israeli military occupation in two periods of time. It is important to look back at history in order to understand the current situation of the city. The following discussion will attempt to provide perspective on the land property and the administration of the city, through dividing the period of time into four stages related to the changing administrative structure on the city.

3.2.1 Period Before 1948

When the war of 1948 happened between Arabs and Jewish, Jerusalem city was divided into an Eastern sector for Arabs and a western sector for Jewish in which more than 22,000 Palestinians dwelled (Khamaisi & Nasrallah 2003:5).

The following table and chart shows the property of Jerusalem parts immediately before 1948 in dunums (PECDAR 2001: 14).

	Whole Jerusalem		East Part		West Part	
	Area	Percentage	Area	Percentage	Area	Percentage
Arab	7828	40	5544	33.7	2283	73.4
Jewish	5107	26.1	4941	30	166	5.3
Christian European	2712	13.9	2501	15.2	211	6.8
public ownerships	3913	20	3464	21.1	449	14.5
Total	19560	100	16450	100	3109	100

Table 3.1: the property of Jerusalem parts before 1948 in dunums

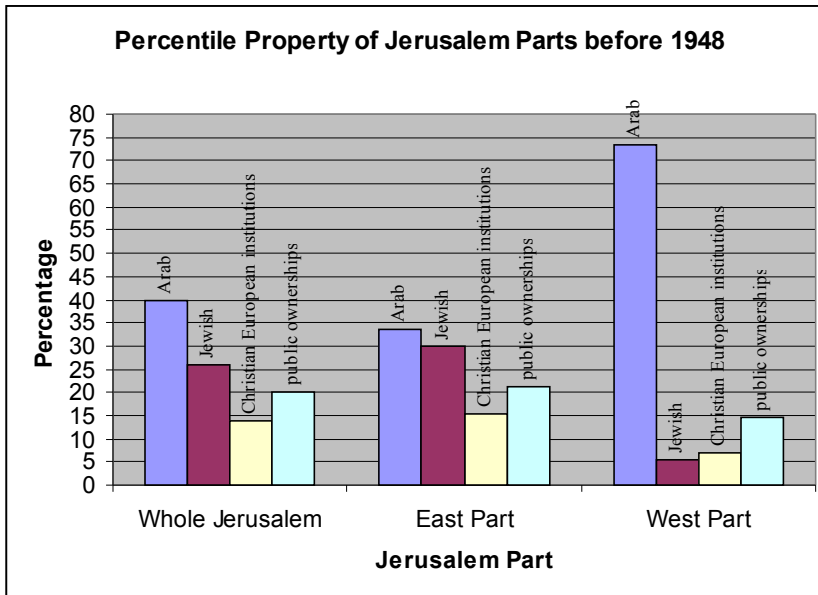


Fig. 3.1: the percentile property of Jerusalem parts before 1948.

From this table it is clear that the Jewish existence before 1948 was basically in the western part of Jerusalem, even the percentage of property for Arabs was more than for Jewish in the western part. Also there was Christian European institutions in city related to the religious relationships for Christians all over the World.

3.2.2 Period between 1948 and 1967

After 1948 Israel annexed 84.8% of the land from the western part of Jerusalem and the rest 15.2% was for Christian European institutions, on the other hand, 87.5% of the land of the Eastern part was for Arabs and 6.8% for Christian European institutions, as

shown in Fig.3.2. It must be noted that the Jewish existence in the Eastern part was only 5.3 % (PECDAR 2001: 14)

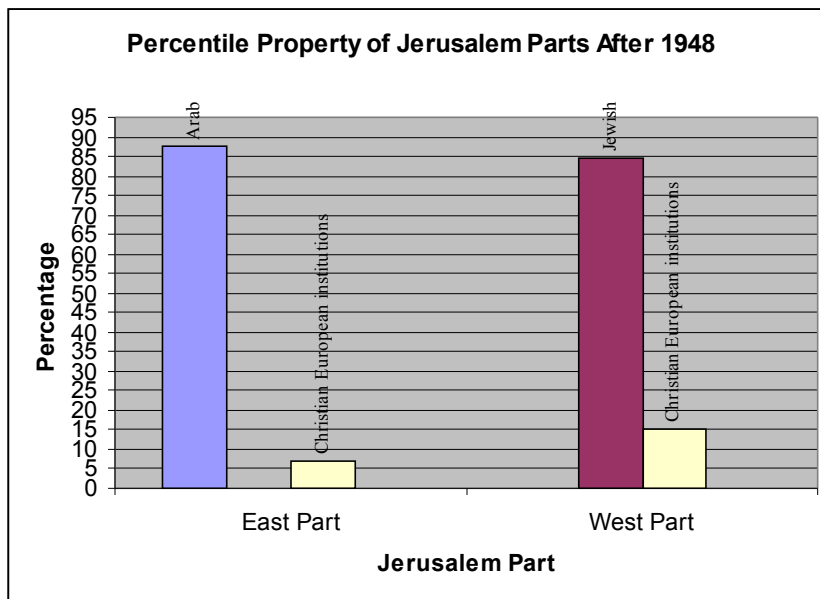


Fig. 3.2: the percentile property of Jerusalem parts after 1948.

The two sectors were administrated as two independent municipalities and the borders between them defined the political borders between Israel and the Hashemite kingdom of Jordan. Soon after its occupation in 1948, the Israeli West Jerusalem was declared the capital of new State of Israel, while the Arab East Jerusalem became the district capital of the West Bank, affiliated with Amman, the capital of Jordan.

Administrative institutions were transformed from East Jerusalem to Amman; Israel, on the other hand, moved its government and national Administrative institutions to

West Jerusalem. The two municipalities in Jerusalem operated under different constitutional laws, with no coordination or cooperation between them. In deed, the relationship between the two municipalities was characterized by hatred and resentment.

3.2.3 Period between 1967 and 1996

Following Israeli's occupation of the West Bank and East Jerusalem in 1967, Israel immediately annexed the Eastern part of the city to the western part and imposed Israel law there in 1980; Israel announced its unilateral decision to "unify" the city.

When it annexed the Eastern part of the city, Israel dismantled the municipality there, and the village councils around Jerusalem, in order to extend the jurisdiction of the West Jerusalem Municipality to the whole of Jerusalem. As a result, the responsibility for the provision of municipal services to East Jerusalem residents was assumed by Israel. The services were extended only to those Palestinian Jerusalemites who became permanent residents of Israel and were given an Israeli identification card, and live inside Jerusalem Municipality border (Palestine's who didn't left their homes in 1967 ware). In an attempt, by Israeli Authority to decrease the number of those Palestinians (who live inside Jerusalem Municipality border); Palestinian immigration to Jerusalem became impossibility, except "family reunification" scheme, the implementation of which was rarely approved by the Israeli Ministry of Interior. Meanwhile, the Israeli government provided substantial incentives to the Israelis who immigrated to Jerusalem, especially to the Eastern sector of the city.

Jerusalem Municipality borders were expanded from 3,500 donum to 70,500 donum at the expense of the West bank (Khamaisi & Nasrallah 2003:5). The policy of Israeli has been to reduce the concentration of Palestine build-up areas and to utilize the largest possible area of empty land for establishment of Jewish settlements. Currently, total area of Jerusalem Municipality borders (J1 including old city and western part) is about 126,000 donum (PCBS 2004:73).

This resulted in the formation of a region (study area) that were excluded from the east part of Jerusalem which consists of 28 shattered villages, this was made as these villages are far from the old city relatively and dense in population“ the Israeli policy is to include as much land as possible while excluding as much of the Palestinian population as possible”, also this region separate East Jerusalem from the surrounding governorates and it was classified as area B, and C (will be discussed in the following section) after the peace agreement between Arabs and Israeli’s in 1993 (Oslo agreement) and the formation of the Palestinian Authority (PA). It must be noted here, that none of the study area land was classified as area A, the Israel policy is to keep this area as future expansion of Jerusalem municipality border and to be a buffer zone from East Jerusalem and the surrounding governorates for security reason. Meanwhile, this region doesn’t exercise any municipal services and do not relate to any area A municipal services, it depends on a small local councils that couldn’t serve an integrated infrastructure between the study area villages without a central cooperative service body.

3.2.4 Period After 1996

According to the current administrative division, the Palestinian territory was divided into two geographical parts: the West Bank and Gaza Strip.

After the establishment of the Palestinian National Authority (PNA) in 1996 on parts of the Palestinian Territories in West Bank and Gaza Strip, the PNA established local councils in the (J2) area's villages. This region was classified by the peace agreement as Area B in which the civil sovereignty is related to the PNA, and the security sovereignty is related to the Israeli Authority, and area C in which the full sovereignty is related to the Israeli government. Consequently, the local council comprised the official local administration in the villages. In general, Oslo peace agreement classification states that area A represents the full Palestinian Authority on that area, and none of the study area land was classified as area A.

Historic facts and realities on the ground point to the existence of state of duality in Jerusalem in providing the infrastructure services between Palestinians and Israeli's. This can be noted from a simple comparison between urbanization in two neighborhoods, one for Palestinians and the other for Israeli's. Such a duality, within the same geographic space, is a major handicap to the development of the Eastern sector because Israeli administration institutions seek to control the resources, space and people in the city (Khamaisi & Nasrallah 2003:13).

3.3 Location

This section will be divided into two parts discussing the geographic and strategic location of the study area.

3.3.1 Geographic Location

Jerusalem lies in the middle of West Bank through the longitude 16 64 28 and 19 63 29 to the east, and through the latitude 12 45 05 and 14 37 34 to the north. The number of communities in Jerusalem governorate “East Jerusalem” (according to the administrative divisions of Population, Housing, and establishments Census) is 51 communities. The total area of Jerusalem governorate is 345 km² (PCBS, Jerusalem statistical year book 6:79).

The West Bank was divided into 9 governorates and two districts. For statistical purpose, the Jerusalem governorate was divided into two parts. The first part (J1) includes that part of Jerusalem, which was annexed forcefully by Israel following its occupation of the West Bank in 1967 and it contains 23 Palestinian communities. The second part (J2, the study area) includes the remaining parts of the governorate that are defined outside Israeli Jerusalem Municipality borders by Israeli State and it contains 28 Palestinian communities, as it has high density built-up area and far relatively from the old city of Jerusalem. It must be noted, that this definition occurred gradually after 1967. The policy of Israel has been to reduce the concentration of Palestinian built-up areas and utilize the largest possible area of empty land for the establishment of Jewish settlements in East Jerusalem. The Israeli policy also aimed at creating a new demographic status quo in which the number of Palestinians in East Jerusalem doesn't exceed 27% of the total population of the city. In 1993, the Israeli Authorities announced that the number of Jewish in East

Jerusalem had exceeded that of Palestinians (Jerusalem urban fabric, Khamaisi & Nasrallah 2003:5).

3.3.2 Strategic Location

The study area of this research is (J2) region that has shattered 28 communities; this area was chosen as it has insufficient infrastructure and doesn't has main center administratively for political reasons. In addition, the location of this region in the middle of the West Bank is a strategic location as it connects the south of the West Bank to the north and the west to the east of the West Bank. This strategic location can benefit this region in terms of economy. Therefore, it must have an infrastructure that is capable to serve its residents and the investors who are interested in this strategic location; moreover, it must serve the transportation and the related services through it in the short-term. This research will come out with emergency zoning plan and proposed infrastructure projects to draw polices for the development of this region. Generally, in the long-term this region may be connected to the historic center of Jerusalem that is presented by the old city. This argument is due to religious, historic, and socio-economic facts related to the believes of Arabs and Muslims; who used to consider this center as holy center as it contains AL-AQSA mosque. It must be clear, that the development of this region will not happen at the expense of the old city center as alternative solution. Nevertheless, it will support this undeveloped region to be ready to connect to the old city center on one hand, and to handle some of the economic and population pressure that will occur when it connect to the old

city center on the other hand. This is the hypnotized scenario of this research (see methodology chapter).

3.4 Natural Resources

The following section will discuss the natural resources in the study area region as it could be considered as potentials for development.

3.4.1 Land

The Palestinian Territories cover an area of about 9 thousand km² of which 5.8 thousand km² are in the West Bank and 3.6 thousand km² are in Gaza Strip. With 70% of the land, to date, remaining under the Israeli occupation, this resource, in terms of utility, is very scared indeed. This resulted in:

- Grave limitation on land development.
- Enormous escalation in property prices.
- Limiting horizontal expansion, and inducing vertical expansion.

(MOPIC: building competitive advantage in the Palestinian economy 1998: 29).

These results are general for the Palestinian Territories, but for the study area a specified land areas will be used for proposed sectoral expansion based on the available land areas taking into consideration the existing land use and topography and the needs for development. Also, the cut stone industry from the Palestinian land is one of the major natural resources.

3.4.2 Agricultural Land

The agricultural sector in the West Bank Governorates plays an important role in the Palestinian economy as well as in its inter-sectorial linkages. This is true due to the

considerable size of cultivable area in relations to the total area of the Governorates. The overall agricultural area is approximately 1670 km²; this comprises about 30% of the total area of the West Bank Governorates. The average total annual income for the agricultural sector is about US\$330 million, which is about 25% of the Gross Domestic Product.

Agriculture also plays an important role in providing, to some extent, Palestinians with their essential requirements of food and to a less extent in absorbing part of the labor force (12% of the total work force is employed in the agricultural sector).

Diversity and heterogeneity is one of the major characteristics of agriculture in the West Bank Governorates. The diversity is reflected in the types of crops as well as the time of production. Similar crops are often produced at different times in different parts of the West Bank Governorates. This is a result of the difference in climate, soil and topography this area enjoys. Agricultural practices in the West Bank Governorates are also maintaining some old traditional practices (plowing by animals, planting the terraces). Finally, the overall agricultural areas comprise scenic views that are contributing to the beautiful landscape image.

3.4.2.1 Main Agricultural Threats/Problems

The main threats that could affect the use of valuable agricultural land are listed below.

- Random development (urban and infrastructure) extends in areas suitable for agriculture, decreasing the main resource base for agriculture.

- Industrial development on or nearby fertile agricultural land, resulting in a significant negative impact on the agricultural land in terms of suitability and/or productivity.
- Degradation of land resources as a result of natural factors (runoff, high evaporation rates, erosion of the soil and its content of organic elements).
- Land assigned for agriculture needs not only to be conserved, but also to be developed to overcome the population growth rate, which in turn, will impose further pressure on these resources.

3.4.2.2 Agricultural Land Protection

after identifying the valuable areas and of high suitability for agricultural purposes in terms of soil, climate and current cultivation status, and act to conserve and protect them from random development and harmful change in land use.

Identification of such agricultural areas could also be the basis for future development. This is true by conducting specialized studies regarding their suitability to different cultivation patterns, and/or by applying cultivation processes that ensure their conservation for future generations. Soil type, soil depth, salinity, slopes, rainfall and evaporation are the major parameters that could be used to identify the boundaries of agricultural zone. Accordingly, an agriculture zone will be analyzed in the study area based on the needs and potentials for the importance of this sector on the overall development and the work opportunities it could afford.

3.4.3 Water

The main natural resource in Palestinian territories is water; there are more than 35 water wells in Jerusalem governorate. The total dissolved solids of spring's water in Jerusalem governorate was 259mg/l for 2000. The water provided to Jerusalem governorate through Palestinian Water Authority (PWA) was 3.3 million m³, and the number of springs was 13 springs in 2002.

Israeli Occupation Authorities constrain access by Palestinians to underground water and waster supply in general. It restricts the digging of new wells by Palestinians. New water sources within the Palestinian Territories can be tapped only by an Israeli Water Company "Mekorot".

Water consumption per head is less than 90 liters, compared to 140 in Jordan and 280 in Israel. Over 80% of Palestinian Territories underground water is utilized by Israel (MOPIC: building competitive advantage in the Palestinian economy 1998: 29). Accordingly, a political concern should be paid for obtaining better domestic water consumption and digging wells from the Israeli Authorities, meanwhile agricultural and commercial water consumption could be improved through special techniques like reuse and irrigation. The improvement of water consumption and utilization is necessary for the development of any society, and for the study area region it could enhance the Palestinian market to be independent from the Israeli market in agricultural goods and job opportunities that used to work in the construction sector in the Israeli market.

3.5 Economic Profile For Palestinian Territories

The following section will discuss the economic profile represented in land use, infrastructure, and human resources as it is the main sources of development.

3.5.1 Land Use

The distribution of land use in Jerusalem governorate is as follows: 5.6% cultivated land; 8.7% Israeli built up land; 11.2% Palestinian (residential and non-residential land) construction area ; 0.6% forests and other wooded land, and 73.9% the rest of lands were classified under others which includes pastures meadows and other types. (PCBS, Jerusalem statistical year book 6:79). It is clear from these percentages that the Israeli policy in directing the land use is attempting to keep as large as open land as possible (73.9%) for expansion and confine the Palestinian existence (11.2%). Accordingly, this research will deal with the open land as hypothesized as expansion for Palestinians and the Israeli colonies as existing residential areas. It must e noted, that that these percentages is for the whole Jerusalem (obtained from PCBS) as general indicators, but the percentages for the study area will be analyzed in the analysis chapter.

3.5.2 Infrastructure

During the decades of occupation very little expansion of infrastructure took place. In the 1990s there was virtually no expansion, and the provision of infrastructure services might have actually declined not only because of expanding population, but, often to the decline in the absolute level of services. Moreover, the income level per

capita is about the average of the lower middle-income countries (as classified by the World Bank 1994).

Total length of road network is 2150 km, with 750 km of main roads, 550 km of regional roads, and 850 of local roads. Virtually, all the major roads were constructed before 1967 and were given minimal or no maintenance up to 1995, about 51% of the network is in poor shape. (MOPIC: building competitive advantage in the Palestinian economy 1998: 30). A proposed regional road in the study area will be analyzed for the linkage of the shattered villages and the linkage of the study area with the surrounding governorates, generally, these facts about the poor physical infrastructure are enhancing the core of this research, that is the improvement of the physical infrastructure for better socio-economic development and continuity within the study area.

3.5.3 Population

The total number of population in Jerusalem governorate in end-year 2003 was estimated at 402,900 persons, in comparison to 3,737,895 persons in the Palestinian Territory. The population in (J1) area was 148,801 which constitute about 4% of the population of the West Bank. Taking into consideration that thousands of people of this region had returned back into municipality borders for political reasons to keep there right of residence in Jerusalem, and a percentage of workers moved to Ramallah (the commercial and service center of West Bank). Moreover, the Jerusalem governorate population growth rate was 3.6 in comparison to 4.5 in the West Bank. The Jerusalem governorate Average household size was 5.7 in comparison to 5.9 in

Wet Bank. Also, the estimated percentage of individuals aged less than 15 years is 42.3% of the total number of population in Jerusalem governorate, while those aged more than 65 years were estimated at 3.3%. (PCBS, Jerusalem statistical year book 6:80). This population records are an indicators of a potential human resource that could be utilized in the development of the study area region, in the same time it necessitates an urgent services like, proper education facilities for young population, health care facilities for old population and for the high growth rate, and job opportunities in various sectors that needs skilled and unskilled population like agriculture to serve the average household size in the study area region.

CHAPTER FOUR

THEORITICAL PERSPECTIVE

4.1 Concept of the Region

The purpose of this section is to investigate and define the region and the factors that affect its characteristics especially in terms of economy and infrastructure.

The word region can't be defined easily; however, the metropolitan city is considered a region (i.e. New York region, Paris and Cairo region). Other definitions consider part of the country as a region (i.e. Delta region in Egypt, Tennessee River region in the United States). Also, some definitions considers the whole country as region; meanwhile, other definitions considers a collection of countries as region (i.e. Nile Valley region [Egypt and Sudan], Arab World region which has common language and religion and race, Europe commercial region).

Lynman defined the region as geographical unity that is distinguishable by socio-economical aspects than other parts in the geographical area. Furthermore, Minshul argues that the region is the natural geography that appears on the surface of the earth including the natural objects (topography, water ...etc.), climate and all other natural factors that exist in a geographical boundary. In addition, Renner added to Minshul definition the cultural aspect that can be differing from one nation to another despite the natural continuity. Moreover, Mumford emphasizes, as a planner, on the location and the area of the region; and he argues that there exists an area between the village and the city that can be sometimes smaller or larger than a country which is the

human region. Although, Perloff point out that the region should be defined according to several factors such as economic, social, geographical, and administrative factors; also, the region must be analyzed according to its function.

According to the previous definitions; it could be concluded that there is some aspects that defines the region these are:

- The natural geographical dimension; that emphasize on that area of the land that is characterized first by natural objects. Whereas, the other factors that effect this region, like culture, comes in the second degree of the definition of the region.
- The functional dimension; that emphasize on the function of the region according to its natural characteristics (i.e. agricultural, industrial.... region) and this function define the socio-economic activities that distinguish that region from another region.
- The spatial dimension; this dimension is determined according to the natural area or the administrative borders of the region, accordingly, Momford argues that if the region expanded over its spatial frame that define it as a region it will overlap with other region.

4.2 The Importance of Dividing the Country into Regions

The complex needs of the modern societies such as infrastructure and technology were not found before the industrial revolution, where the needs were simple relating to basic needs on which the human being could survive, these complex needs

demanded the division of countries into regions to achieve the local development such as:

- The use and development of natural resources.
- Ability of local governorates to control the local administration.
- The collection of statistical information.
- Improve the quality of life in daily services (i.e. education, health, transportation and communication, housing, industry, security.....etc).

4.2.1 The Relationship between Regional Planning and the Physical Factors

The location of the regions in a country must be consistent to avoid overlapping administratively or in its function and this location could be related to the geographical or demographical characteristics of that country. Geographically, the region could be determined according to the natural topography or rivers or lacks to from geographic unit; and could use these natural characteristics as natural resources to develop an economic unit also. Demographically, the region must consist of suitable number and spatial distribution of people within its area; taking into consideration the economic capacity of that region to serve the workforce and the ability of that region to expand and to improve the quality of life for its residents.

It can be noted that each of the above functions is difficult to implement on the country level, for example the Jerusalem Region, due to the political conflict and the administrative division. Generally, the existed administrative division of regions into districts in the third world countries is old and depends mainly on the national security control and the taxes collection, in addition, to historic and cultural aspects

(Allam 1995:35). Furthermore, this division doesn't not focus on the proposed function of the regions according to its natural and demographic characteristics, and so improve the quality of life in daily services. It must be noted in the division of regions, the geographic and demographic scale, so, it shouldn't be small to keep the variety of modern human activities; in the same time it shouldn't be large to keep an efficient distribution of services and social stable relations.

4.2.2 The Relationship between Regional Planning and economic Prosperity

There are some consideration to be taken in determining the regions like the area, natural resources, demography, social culture, and spatial economic patterns.

The economic spatial patterns are different in countries. There are countries that depend mainly on one pattern of economy like the Arab Gulf countries that depends on petroleum, other countries depends on variety of economic patterns such as iron industry, technological export, agriculture.....etc. like USA and Germany. These economic spatial patterns are important in determining the regions in a country to achieve and integrate of these different economic activates in a country; by distributing these activates spatially and determine the degree of its specialization which could be used as taxes in developing other economic activates.

Consequently, every region must be divided into sub-regions to control the different economic activities. In determining the location of these sub-regions; there are some factors to be considered such as the distance, and the type of economic activates involved in that sub-region. Also, the distance affects the cost of production exchange

and transportation in a region. And so the per capita income must be consistent in each region.

4.3 The Formation of the Regions

The region is formed from cities, villages, towns, districts, and governorates. Each of them has an administrative role in the over all management of the country. And there is integrated relationship between them starting from the local level and passing through regional level to the national level, and they can share their role according to the following plans:

- At the national level, it is a policy instrument giving inputs to national plans according to regional strategies;
- At the regional level, it is a strategic instrument for physical development relating to planning issues;
- At the municipal level, it is a managerial tool providing municipalities with guidelines for local development in their efforts to achieve the desired development of the society and desired use of land and resources within their area of jurisdiction.

4.3.1 The Division of Villages

The villages can be divided into isolated or dispersed villages.

Isolated villages (i.e. farms and separated houses). In these villages there is availability of land with low price, meanwhile, there are some settlements of people that consisted due to the lack of living natural resources like water.

Dispersed villages which are more common and stable, and it was found in the Neolith age (in which the human transferred from hunting to agriculture) and caricaturized by agriculture pattern.

Also, there is what is called Town (in United States of America) which is a central market in the region that serves the surround villages periodically by exchanging goods and shopping; it provides other services like education and culture. So it is a large village.

It is noted, that every well organized region must have the following elements:

- Geographic connected area of land and homogenous in its function.
- Suburbs to serve that region locally.
- Road network connecting the villages of that region, and regional road that cross that region and connect it with the other regions.

4.4 Definition of Region within a Country

There is strong interaction between the city and the surrounding villages. In the past, before the industrial revolution, this interaction was weak, although the city was dependent on rural areas totally as the agriculture was the basic self-sufficiency factor in the rural areas, meanwhile, the light industry was provided by the handcrafts who lived in the city and also in rural areas.

This interaction became strong when the commercial exchange increase, and so the role of the city became basic. Following, the industrial revolution the interaction changed with the development of the communication means and the variety of the economical activities. Consequently, the city could depend on its economic relations

on the long-term and so independent directly on the rural areas. With the appearance of the modern services, such as administrative services relating to recording births and ownerships, education, health, cultural, and recreation services; the city became necessary to the rural region not just economically, but also administratively, culturally and demographically; to serve the whole rural region by these services as center because its not feasible to provide all these services in each community in the rural region (Allam 1995:22).

Moreover, if the region is too large geographically or can't serve the whole inhabitants in daily services i.e. transportation time and cost, education, health, shopping....etc. due to natural or enforced obstacles from occupation force as an example (restrictions on mobility) this region can be divided into sub-regions so they can function locally and form an administrative unity base on small or large scale.

4.5 Regional Development and Spatial growth Patterns

Rapidly growing urban population is the central driving force for unpretending regional growth in developed countries. Most worrying is that it is driven by widespread poverty and poor economics. Confronted, with decreasing financial and administrative resources institutional decadent, political instability, and reserve problems in the inner cities. Consequently socio-economic, land, infrastructure development will be investigated as basic needs for development.

4.5.1 Economic Development and Spatial Patterns

For the last two centuries, economic forces have been prime motivators of urban development. In most cases, non-economic factors have also reinforced the economic

stimulus (Goodall 1972). Goodall further argues that the growth of urban areas draws much of its impetus from scale economics that promote investment and factor productivity in urban areas, from readily available and low cost information and from an environment more conducive to innovation. Urbanization is dealt with largely in the context of population growth, socio-economic changes and urban governance with specific reference to urban land management in the interface between the urban and the rural settings (Aldo Lupala 2002:7).

Often in an administration sense, the area is only partially assimilated in the growing urban complex. Administration control is usually in the hands of either rural or urban Authorities, both of which have ambivalent attitudes to development (Johnson 1974; Berg 1984). The process of urbanization with a neglect of land reserves for community services as the city expands; justifies government interventions (Chaane 1996:18). Specific consequences confronting urban Authorities include inadequate financial resources, lack of employment opportunities, growing insecurity, inadequate and deteriorating building stock and infrastructure, lack of social facilities, rising traffic congestion, increasing pollution, lack of green open spaces, inadequate water supply and sanitation, uncoordinated urban development (UNCHS 1996:3).

4.5.2 Social Development

Changes in the prices and wages can increase hardships for poor urban dwellers and they may eventually opt to migrate to the urban zones. Declining rural productivity or simply low purchasing power may push the rural population into urban zones. Normally, individuals, households, and communities are not passive in the phase of

economic change. In this situation, therefore, the household's capacity to respond to the external environment may depend on its stock of social capital – the trust, norms, and reciprocity network embedded in social organization (Moser 1996:2-3). A strong socially-tied community in the urban zone may be solidarity force for economic gains, and also in enhancing tenure security through socially-guided arrangements. Moser further argues that a strong socio economic community may also become a strong agent of land development control. Thus, it is imperative to investigate how the social norms that govern interactions among households in the urban zones communities are, or may be used to guide land-related development.

4.6 Urban Land Management

Urban land management as defined by Kombe (1995:241) refers to the process and procedures of regulating urban land development in accordance with pre-determined objectives and policies. Land management relates to land tenure policy and also development control. It is therefore a system of interrelated actors and activities as a result of which the most efficient allocation of urban space, particularly of land, is ensured. The overall objective is to enable guidance and promote growth of urban areas and their efficient functioning as entities. According to Alonso (1960), the rich in the cities in developed countries live in the urban zones on cheap land and consume more land at lower densities than the poor who live at the center. Thus, urban sprawl in the context of developed countries is an outcome of demand for low-density land in the urban zones. Normally, activities will locate where relative advantage is greatest, in which case land is issued for its highest and best use

(Goodall 1972; Harvey 1996). They also argue that the land use pattern therefore, in an urban area at any particular time represents the cumulative effect of a myriad of decisions and actions by individuals and organizations.

4.6.1 Land Value

"The land values decrease with increasing distance from the urban centers" (Berg 1984:41). Berg (1984:41) and Darin-Drabkin (1977:80-85) applied the relationship between outward urban expansion and the attitudes of the indigenous farmers in the urban zones to determine its influence on land prices. They found that the increase of land prices was triggered when the dominant land use changes from agriculture to urban and land on the urban zones is of less value than land slightly further away, and it fetches fairly high price when sold with an urban use in mind. They also found that outward expansion of the urban influences is not only the driving force in land value variations in the urban zones. Also as noted by Fravacque and Mc Auslan (1992:36) the social factors i.e. vandalism and theft of crops as the number of dwellers increase, were also an influence factor. This is important because land markets can be used as a tool to guide land use development in the urban zones (Bernstein 1994; Dowall 1995). Again, Ingram (1982) observes that as land prices increase, housing densities normally increase as households attempt to economize on their use of expensive land.

4.6.2 Land use

Sustainable patterns of urban development entail the understanding that land use planning has a role achieving long lasting and optimal use of land (Owens 1992:79). The knowledge on how the informal land management system at the local level

regulates land use development in the urban zones is not adequately generated (Kombe and Kirnode 1995). No local organizations, whether at community, group or individual level can engage in land regulations if the interests in land are not articulated (Aldo Lupala 2002:77). According to Healey and others (1996:161), recent models of the land development process have been developed based on the relationship which land ownerships and users have with land. That is, interests in land are described by the structural relationship individuals have with land. In fact, even collective actions do not sanction perfection in achieving common interests (Truman 1971, Olson 1965, Hardin 1977). This is because individuals and even the key actors in a social setting will attempt to reap as much benefits as possible if changes surface.

4.7 Urban Infrastructure

Among the most pressing and difficult problems facing cities and towns in the developing world are inadequate and deteriorating technical infrastructure services (Kyessi 2002:3). technical or physical infrastructure refers to roads, drainage facilities, water supply, sanitation, solid waste collection and disposal, electricity, telecommunication and the buildings for which most of infrastructure is created (UNCHS 1999). Lack of relationship linkage between the government, the private sector, the general public and other actors in urban development seem to have been led to inefficient delivery of urban services (Majani 2000). This phenomenon accounts for weakness in urban infrastructure provision and management and hence the urgent need to explore the important features of basic infrastructure provision.

The exploding urban populations, the rapid growth in urban areas, the strains of inadequate and deteriorating infrastructure facilities, social pressure to expand services coverage are all increasing the demand for public services, shelter, and infrastructure (Randinelli and Kasadra 1993; Kulba 1989; Holm 1995).

4.7.1 Economic of Urban Infrastructure

High productivity of urban areas is contingent upon availability and quality of infrastructure and services (Metha and Pathak 1998). Urban economic activities depend on infrastructure such as roads, drainage facilities, water supply, sanitation, solid waste collection and disposal, electricity, telecommunication, health, education and recreation affect the urban living environment. Poor quality or inadequate levels of services compel enterprises and residents to provide these services on their own. Poor infrastructure also affects the productivity of firms and workers adversely. Conversely, appropriate investments in infrastructure enhance productivity and employment, and lead to an increase in the income levels of urban residents. Infrastructures like roads and mass transportation have a far-reaching impact on spatial pattern of growth within an area. Such investments can guide new urban development in specific directions. Improved environment conditions in urban areas due to better solid waste management, drainage and sanitation facilities enhance the quality of life in urban areas and make it more competitive in attracting more investments.

Thus, an adequate supply of technical infrastructure augments greatly on the productivity of an urban area in terms of both provision process and community

development (Halla 1991). There is normally a positive link between urban infrastructure services and economic performance at both city and local levels. The role for services for economic and social well being if urban residents explain why it is important to search for effective means and systems for the provision of infrastructure. Income may be increased if better infrastructure services allow households members to devote time to income earning activities.

4.7.2 Impact of Infrastructure Provision

Technical infrastructure is among several factors affecting the value of bar or developed land (Kyessi 2002:11).the others include location, size, neighborhood characteristic, tenure and unexpired term, and planning and zoning regulations (Mundeme 1996). Technical infrastructure has significant influence on land values within the urban areas and urban fringes. The level of services provided in settlement often has a bearing on the price a landed property would fetch on the market. Ondiege (1992) observed that land values appreciated significantly with infrastructure development in various zones. Roads provide accessibility. A property that cannot be reached is perhaps as good to the owner as no property at all (Mundeme 1996). This means that if roads are provided or improved, this will result into increased property value. Roads also help in opening up more land for development especially in the urban fringes. This has a probable effect of reducing pressure on land prices escalation in inner urban centers, and especially in informal areas where subdivision has been going on necessitating increase in housing and population densities above required levels (Kombe and Kreibich 2000; Kyessi 1190).

In fact, much land reserved for infrastructure services in inner areas is normally put to other uses (preferably residential) if there is no serviced urban land elsewhere in the urban area (Kirnode 1992a).

Scarcity of serviced urban land distorts performance of land markets. Within technical infrastructure in place, land markets operate well if other parameters are equal (Ondiege 1992). At the same time, property values accrued from land market provided the base for property taxation that will provide revenue for local Authorities.

4.7.3 Financing and Management of Infrastructure

Adequate financing is necessary for sustainable infrastructure systems. The role of finance is more than ensure that efficient funds are in place, because financing schemes can effect incentives and other goals, such as equity and moreover access to infrastructure by the poor. Apart from financial resources, often infrastructure can be fully or partially provided through self-help and in-kind contributions. In general, governments, donors, and the private sector are the main funding sources for infrastructure facilities (Fox 1994:41). A strong capacity to finance certain services through government revenues is essential (Fox 1994). Donor funding is also the major source of financing infrastructure. Private equity financing is also other source of funding. Financial problems underlie institutional infrastructure provision and management. Poor state or public performance in developing countries suggests that the introduction of competitive alternatives to provision arrangements would make sense in policy terms. Yet, in many cases the regulatory framework for infrastructure

inhibits competitive alternatives (Chen 1995 and Schubeler 1996). In the absence of user participation involvement in the planning and provision of the services, relatively little attention is paid to ensure continued functioning of the provided services. It is now widely recognized that the success of urban infrastructure provision in a community largely depends on dynamic interaction with the community. However, operation and maintenance of facilities are the primary mechanism for infrastructure delivery. The subject of culture maintenance' touch all nations, developed and developing alike. It has been noticed that involving communities in their localities in issues of infrastructure operations and maintenance can improve the situation tremendously especially when they have been involved in the provision process (Hasan 1995; Nguluma 1997).

CHAPTER FIVE

RESEARCH METHDOLOGY

5.1 Introduction

This study started from evaluating the present situation of the study area based on the collected data and its analysis and to examine if it can serve as self-sufficient area.

Methods to collect data will be documentary data for each village population contribution and physical expansion according to land ownership; other physical data like the land use, land ownership, infrastructure, center of commerce, industry will be documentary data also. Information about the current social situation will be obtained from interviews. The economic status will be evaluated based on the current records about the income, employment, natural and potential resources.

5.2 Research Objective

In this research the researcher would find out a proper administrative management system for the study area villages and applying physical infrastructure projects to support the study area economic development through physical integration of these villages and to link between them to create new functional sub regions that can fulfil their inhabitant's daily needs according to their overall natural and potential characteristics.

5.3 Data Processing Phases

Data processing in this research consists of two phases, data collection phase, and data analysis phase. Each phase will be described in different section.

5.3.1 Phase I: data collection

After identifying the problem of the study area, the researcher will follow a consistent framework to solve this problem as described in the following sub sections.

5.3.1.1 Research Instruments

This research was carried out using three instruments in the data collection phase as follows;

1. Collecting the documentary data

The documentary data were collected from different sources listed below.

- Related references about the study area were collected from several sources these are the NGO'S, the ministries, the library, and web sites.
- Maps which were collected from the NGO'S, the ministries, and private sectors, some of these maps are hard copies and some are software maps.

According to the study topic the required maps are maps that show the villages' boundaries, the built up area, the road network, contours. Some of these maps are AutoCAD maps and some are shape files that can be preceded in the GIS (Geographic Information System) program.

- The records those are required are demographic records that define the population characteristics which are villages population, expected population growth, fertility rate (household size), education, and health records.

- Records that identify geographic characteristics of the study area which are the land use, land cover, land area, built-up area
- Records that identify the infrastructure situation which are the solid waste, waste water, fresh water, electricity, roads and transportation
- Records that identify the building classification which are residential, commercial, industrial, educational, health, public services.
- Records that identify the economic situation which are consumption and expenditure, poverty, employment, labor force, average income, economic activities, industrial activities.

The main source of the statistical records data is the Palestinian Central Bureau of Statistics (PCBS), and its methods adopted in the statistical data used are based on three main determinants, namely: geographic coverage, temporal start-off, and the variety of used data sources, described as follows;

A. administrative borders and geographic coverage

The Jerusalem Governorate was divided into two parts, the first part (J1)"named by Palestinian Central Bureau of Statistics (PCBS)"includes that part of Jerusalem, which annexed forcefully by Israel following its occupation of West Bank in 1967. The second part (J2) includes the remaining parts of the governorate which is the study area.

B. The PCBS statistical data presents 2003 and 2005 data which is derived from different surveys and census, and other source data is the data obtained from

administrative records, in addition to the selected studies and research publications.

Depending on the maps, records, related researches for the study area; the researcher will focus on analyzing this data through mapping and calculation techniques so the mapping measurement of all variables central to the proposed study will be analyzed through mapping Concept which is structured process focused on a topic involving input from these data that produces an interpretable pictorial view of their ideas and concepts and how these are interrelated

2. observations

The researcher visited the site to observe the on-sit phenomena's and obtain a real-world sense to watch and taking photos by camera, observe and to talk with persons actively involved in the issue like the councils and the ministry of local government

3. Interviews and Sampling:

Then some phenomena's like the opinions of public and councils for the integrating idea of the study area will be gathered from experts on the issue whom are the mayors, their technical staff, the NGO'S experts. Then determining the factors that affect this idea which are the geographical distribution of the villages, the existing road network, the topography, existing land use, the political situation. It must be noted here that the researcher will consider the existence of the Israeli colonies as a residential areas, and will not consider any other military camps or the segregation wall in planning the required expansion and linkage between the concerned villages. Accordingly, there will be tow scenarios one consider the occupation in the study

area and consequently will come out with an emergency plan do develop the economic situation and provide the daily services, the other scenarios will consider the end of occupation, and so it will be long-term planning and development from the same point of view depending on the hypothesis that the development and integration of this area will not effect the status of the old city function. On the contrast, it will help a proper development in the old city as it will decrease; the population, administrative, industrial activities, agriculture activities, and traffic pressure. So the surrounding sub-regions can fulfill their daily needs without entering the main corridor of the city center. Not only these sub-regions could use proposed industrial and agriculture zone and the proposed regional road, but also it can serve the other governorates to cross from the south to the north for daily work. Consequently, these scenarios will serve these shattered villages in the short term with the existence of the occupation, meanwhile it will not conflict or be separated from the integration with the occupied part if the occupation ended.

5.3.2 Phase II: data analysis

After the data collection phase (documentary and observed) the analysis phase will be depending calculation techniques (will be discussed earlier), and for mapping a GIS (Geographic Information System) program will be used which uses a collection of information technology, data, and procedures for collecting, storing manipulating, analyzing, and presenting maps and descriptive information about features that can be represented on maps.

5.3.2.1 Geographic Information System definition

GIS is a geospatial data, which consists of information that identifies the geographic location and characteristics of natural or constructed features and boundaries on the earth.

There are two types of map information:

- *Spatial information*, which describes the location and shape of geographic features and their relationships to other features.
- *Descriptive information* about the features.

The computer stores a series of files that contain either the Spatial or descriptive information about the map features. The power of GIS lies in its ability to link these types of powerful new ways of looking at and utilizing data. You can access information in data and maintain the spatial relationships between the map features.

There are three characteristics of this connection:

1. There is one-to-one relationship between features on the map and the records in the feature attribute table.
2. The link between the feature and its record is maintained through a unique numerical identifier assigned to each feature.
3. The unique identifier is physically stored in two places: in the files that contain the x, y coordinates and with the correspondence record in the feature attribute table.

Integrating graphic and tabular data opens the way for the tabular database through the map, or you can create maps based on the information in the tabular database.

In software maps, spatial relationships are depicted using topology to express different types of spatial relationships as a list of features. The ability to create and store topological relationships has a number of advantages:

- Topology stores data more efficient.
- It allows processing of large data sets and faster processing.
- Performing analysis using topological relationships.

GIS has many applications and advantages and it plays a significance role in spatial planning as it can be used for various sectors.

According to the resulted conclusions issues to be refined. All these data will be presented in software maps that contains; land use, contour, road network, village borders, built-up areas, ...etc. this presentation is important in the planning perspective so it can be understood and implemented easily. The output will be used for developing polices by which these data can be managed for proper planning.

5.3.3 Research Hypothesis

The main Assumption underpinning the use of regional socio-economic and territorial continuity for efficient planning of future urban growth is that if a region which is suffering from poor infrastructure and is not linked to each other and experience population growth, then its development will be achieved through the improvement of its infrastructure and the linkage between its parts, which could be divided into specialized sub-regions according to their potentials so they could function properly and integrate to each other (Perlof 1995).

In the context of the Arab Villages Surrounding East Jerusalem the main assumptions will be:

1. Political assumption, this thesis considers the fixed rights of the Palestinians as a main aspect, so this thesis ignore any Israeli existence within the study area but considers the Israeli Colonies as residential areas.
2. Geographic location assumption, this thesis considers that the location of the study area as a strategic location near Jerusalem which will enhance the study area development.
3. Environmental assumption, this thesis considers the importance of the preservation of agricultural lands as main natural resource.
4. socio-economic assumption, this thesis considers that the population growth could be organized as human resource for the development of the economic situation.
5. Long-term development assumption, this thesis considers that the development of the surrounding villages of East Jerusalem will support the development of East Jerusalem, and will not work as alternative of them.

5.3.4 Research limitations

After identifying the research hypothesis, the research limitations that could effect the research processing are listed below.

1. Availability of the required data.
2. Availability of the references needed.
3. Cooperation from the concerned groups which are the sampling population and the NGO's and the ministries

4. The existing studies concern this topic.

5. Mobility to reach the study area.

5.4 Methodology Statement

The following sections will describe in details the framework that had been carried out, starting from data collection phase and ending by the analysis methods used.

5.4.1 Data Collection

Data used in this study were collected by the means of different instruments: official raw data from the various ministries and departments especially the Palestinian Central Bureau of Statistics (PCBS)-Ramallah, NGOs (Applied Research Institute-Jerusalem (ARIJ), Arab Society Studies-Al-Ram, Center for Engineering and Planning-Ramallah), Academic Specialized books and papers for the calculation techniques, as well as, "collective community" meetings covering the rural communities for in-depth analysis. Previous researches about the study area by specialized persons like a Master Thesis conducted by a student; Samer Radad; at Al-Najah University, Urban Planning Department, about the health services in the same study area under study in this research.

The data collection phase and interviews attempted to be comprehensive in its coverage; it surveyed using a limited random sample of the communities' key persons to be encompassed in the study, it was then revised following the field observations. The data recorded in it were informant-gathered from person (s) from the communities chosen for their official position in the community (e.g., head of village council, or mukhtar, engineers, accountants, etc.), or for their demonstrated

knowledge about the community (e.g., a head of a local NGO, a university lecturer, etc.) representing a team of specialists in the fields of sociology, economics, agricultural science, statistics, and regional planning. Questions was fine-tuned further to respond to the needs of the study, including variables regarding social, economic and demographic conditions

Based on the data gathered, the need arose for a qualitative assessment of the available services in the communities studied. Consequently, a complementary form was prepared to cover six service facilities, namely, water supply systems, wastewater systems, solid waste collection and management, roads, educational and health facilities. Another data was gathered concerning the economic situation from the available reliable statistical data, this was done as an attempt to probe deeper into work force and income patterns as it woks parallel with the improvement of the service facilities for proper planning for the region, and exploring the need for dividing the region into sub-regions for optimal living situation depending on the functions each sub-region can perform based on its potentials.

5.4.1.1 Official Sources

Data on educational facilities, health facilities, land holdings and land use, and any other pertinent data to the study which were available at any official agency, were sought, or requested from the relevant Palestinian ministries. In many cases, however, the available data were still in a very raw form, which did not lend itself for the necessary manipulation.

5.4.1.2 "Collective" Community Meetings

Meetings with "delegates" from the communities surveyed were held on the local councils of the relevant communities. The objective of these meetings was to seek verification through community participation of the initial conclusions arrived at by the researcher, based on data culled from them. The focus in these meetings was threefold: (a) to introduce the concept of the sub-region, and to discuss the initial division of the study area into sub-regions; (b) to present to community "delegates" a list of the needs that were expressed in the interviews, and consolidated in matrices by the researcher, and to verify their importance; and (c) to get from them an initial indication of what they considered priority need areas.

Some of these collective community gatherings proved to be a valuable and important source of information and data-verification and correction. However, explaining the concept of a sub-region to the local communities, and directing them to think of the needs pertaining to the cluster of articulating communities, was often an uphill struggle.

5.4.1.3 Data Entry and Output

A special computer program was used for data input and analysis, a GIS (Geographic Information System), as well as Microsoft Excel, throughout the course of the study. Data entry was done by the researcher; Based on the raw data obtained from the field about the available services, as well as documentation data obtained from the Ministries and NGOs i.e. community populations, geographical distribution. This exercise resulted in a "first estimate" of the situation in terms of dividing the study

area into sub-regions. Then basic data from all sources, were disaggregated by sub-region, and outputted in standard matrix for each sub-region which included the "basic indicators" for each community in the sub-region. The use of "indicators", in this case, refers to industrial enterprises, cultivated lands, health and education facilities, NGO's, and institutions located within the communities (Rondinelli and Evans, 1983).

5.4.2 Analysis and Prioritization

The analysis of the data was done for the purpose of prioritizing the needs expressed by the communities themselves, in view of the available potentials of the individual communities, with the aim of arriving at indicative investment figures, by sector and sub-region.

Two initial sets of crude criteria were employed, as a "first cut", to give some kind of order to the comprehensive list of needs expressed by the communities.

One set of criteria was referred to as "needs' prioritization criteria ", and the other as "potentials' prioritization criteria".

5.4.2.1 Needs' Prioritization Criteria

The criteria used to prioritize the needs expressed by the communities are aggregated in three major ones, as follows:

Criterion 1: The degree of congruence between poor quality of service and the expressed need by the community.

Basically, the study needed to verify whether or not there is any congruence between what the community indicated as needed, especially in reference to the physical

infrastructural facilities, and what are field qualitative analysis of those facilities shows.

Criterion 2: The impact of the expressed needs on the achievement of "human development" goals, specifically:

- a) Universality of basic education,
- b) Reduction in adult illiteracy rates,
- c) Universality of primary health care,
- d) Increase in the availability of safe drinking water and sanitation,
- e) Increase in the distribution equity of developmental opportunities.

Criterion 3: The impact of the expressed need on employment generation.

Each of the expressed needs then is assessed against each of the three criteria, delineated above, on a scale of high, medium, and low, where high was given a weight of three points, medium two points, and low one point. Thus, potentially, each "need" may have a maximum score of nine points, and a minimum score of three points.

5.4.2.2 Potentials' Prioritization Criteria

This is an attempt to gauge the local and national potential for responding to the prioritized needs, as discussed earlier. This analysis is done in terms of five aggregated major criteria, with a direct bearing on implementability. These "Potentials' Criteria" may be delineated as follows:

Criterion 1: Implementation dependent on local decision capacity.

Since this is a "zoom lens" study of the prevalent situation at a certain historical juncture, and under a specific set of political conditions, it is essential to see whether the decision capacity about implementing a certain need lies within the competence of the local community or the Palestinian Authority, or outside of it, i.e., Israeli Authorities (e.g., increasing electrical power or water supply, etc.) Thus, if the decision capacity was external to the community, the need was ranked low.

Criterion 2: Affordability by the community in terms of the recurrent cost.

(UNDP Human Development Report 1994)

Criterion 3: Technical feasibility (to include the following main components):

- Availability of physical resources.
- Availability of human resources.
- Availability of necessary political support.
- Cost recovery potential.

Criterion 4: Track record of the community (ies).

Criterion 5: Congruence with national priorities/plans.

As is the case with the "Needs' Criteria," each of the needs here was weighted against each of the "Potentials' Criteria" in terms of "high" (3 points), "medium" (2 points), and "low" (1 point). Thus, in this scale each of the listed needs could have a maximum score of 15 points and a minimum score of 5 points.

5.4.2.3 Explanation of Re-prioritization Process According to Both Sets of Criteria

Upon subjecting each of the self-expressed needs to the two sets of criteria, namely, "needs" and "potentials", they were re-prioritized according to their percentile on both scores, from the highest to the lowest, but giving the priority weight to the "Potentials percentile". In other words, the base for reprioritization is the percentile of the "potentials score", not that of the "Needs score".

Therefore, this process resulted in a re-arrangement of the self-expressed needs for the study area, based on the two sets of criteria used, and not on the number of communities expressing a specific need. Thus, as Table 7.16 illustrates the first column on the right lists all the needs, by their serial number, but in a reshuffled state. The re-shuffled need areas are then listed in their order of priority in Table 7.17.

The complete process may be illustrated in the following methodology flow chart used in this study.

5.5 Conclusion

Following the above framework and methodology the researcher will start analyzing the whole study area to have an overall view of the regional plans that can be made then focusing in detail on the specified sub-region then generalize the analysis for the whole region.

The framework consists of several steps (Fig.5.1) to be followed starting from the initial contacts with the concerned groups then the population that will be interviewed meanwhile the researcher observation will be made using the available data and

instruments. Then following the mentioned methodology for field work plan and data collection and analysis to come up with the results that shows the characteristics of the study area and the ability to be integrated as sub-regions.

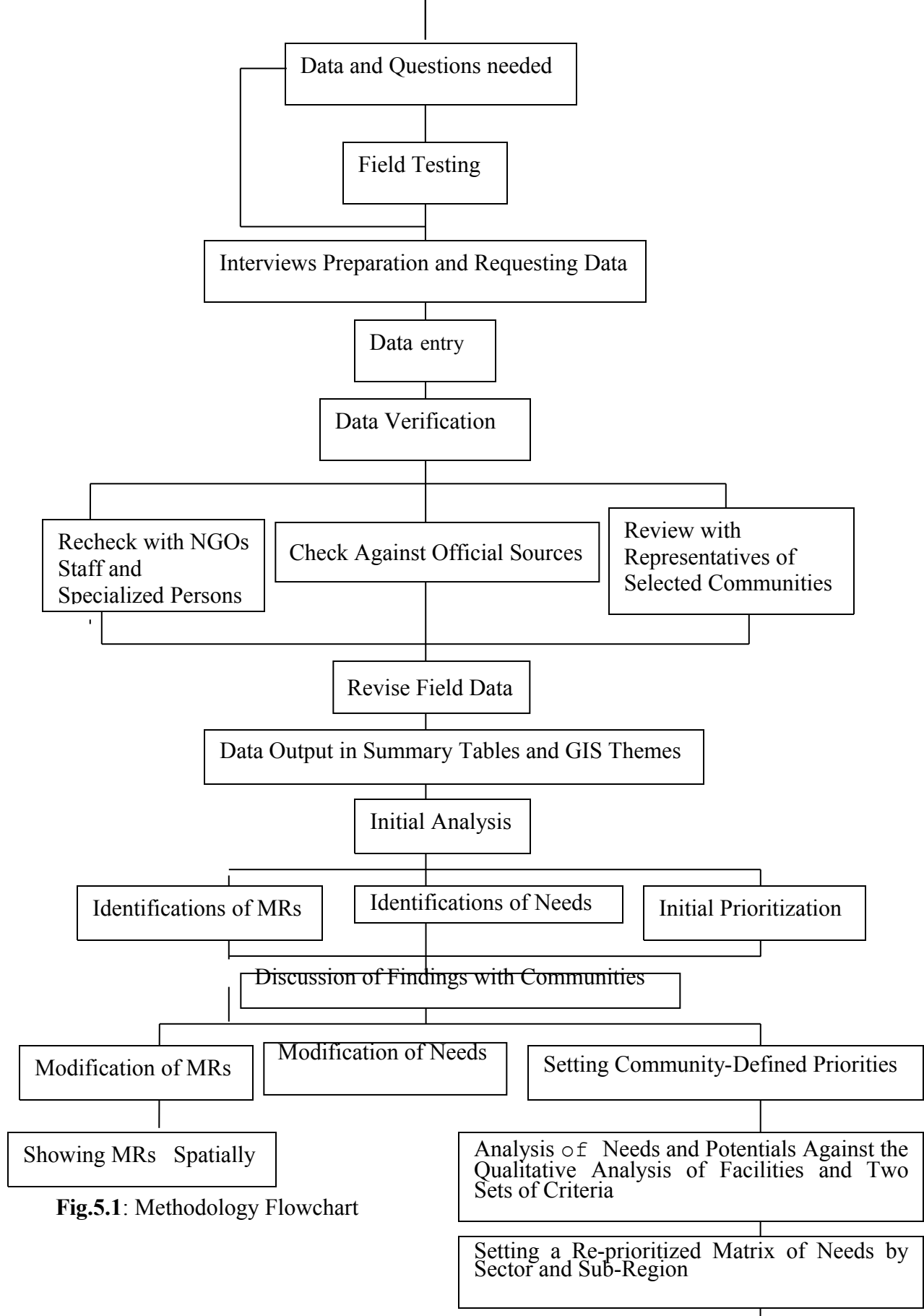


Fig.5.1: Methodology Flowchart

CHAPTER SIX

RESEARCH ANALYSIS

6.1 Selection of Sub-regions

Taking into consideration the criteria for the selection of sub-regions, and based on the analysis of five different domains discussed in the methodology chapter, and using the theoretical bases for dividing the region into sub-regions; as discussed in the theoretical perspective chapter, by planners, one of them is Perloff who emphasizes that every well organized region must have the following elements:

- Geographic connected area of land and homogenous in its function.
- Suburbs to serve that region locally.
- Road network connecting the villages of that region, and regional road that cross that region and connect it with the other regions

Also, Perloff point out that the region should be defined according to several factors such as economic, social, geographical, and administrative factors; also, the region must be analyzed according to its function.

The study area region was divided into three potential sub-regions according to the procedure discussed in the methodology chapter as summarized in Table 6.1.

6.2 The Study Area Region Description

The study area region will be described geographically with GIS maps showing the existing features (boundaries, built-up area, slope, colonies, and roads) and the

proposed expansion based on the analysis results, and demographically based on the existing population and its projection, and then the study area existing infrastructure and natural resources and potentials will be analyzed.

6.2.1 The Geography of the Study Area

The location and boundary of the study area in the West Bank will be shown in the following map.

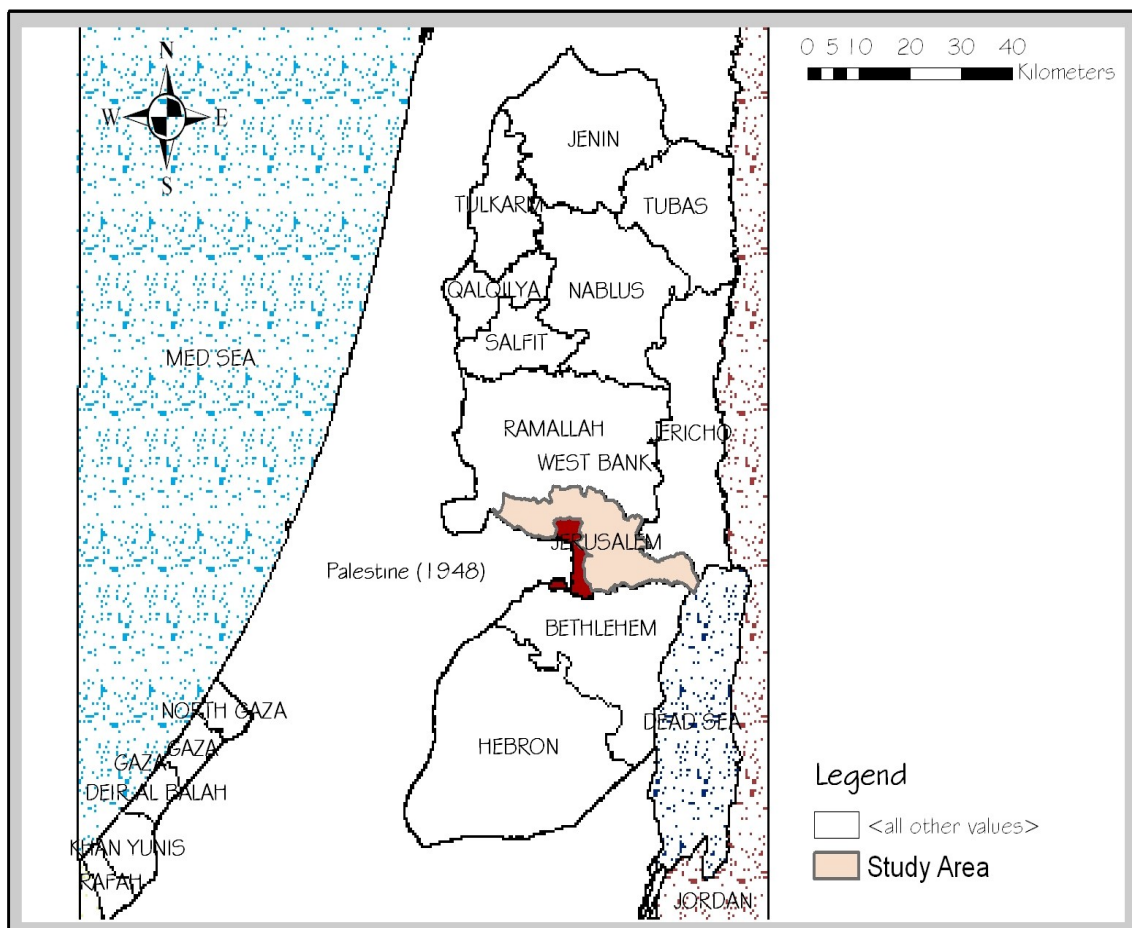


Fig.6.1: Study Area Location within the West Bank

The study area is located from the east of Jerusalem to the north and to the north west of Jerusalem. The east part is separated from Bethlehem district; to the south, by a

high steep wadi called Wadi El-Nar (it is the only way that Palestinians can cross from the south of West Bank to the north) , and is extended to the east to Jericho and to the north to Ramallah. A zooming of the study area and its features will be shown in the following map.

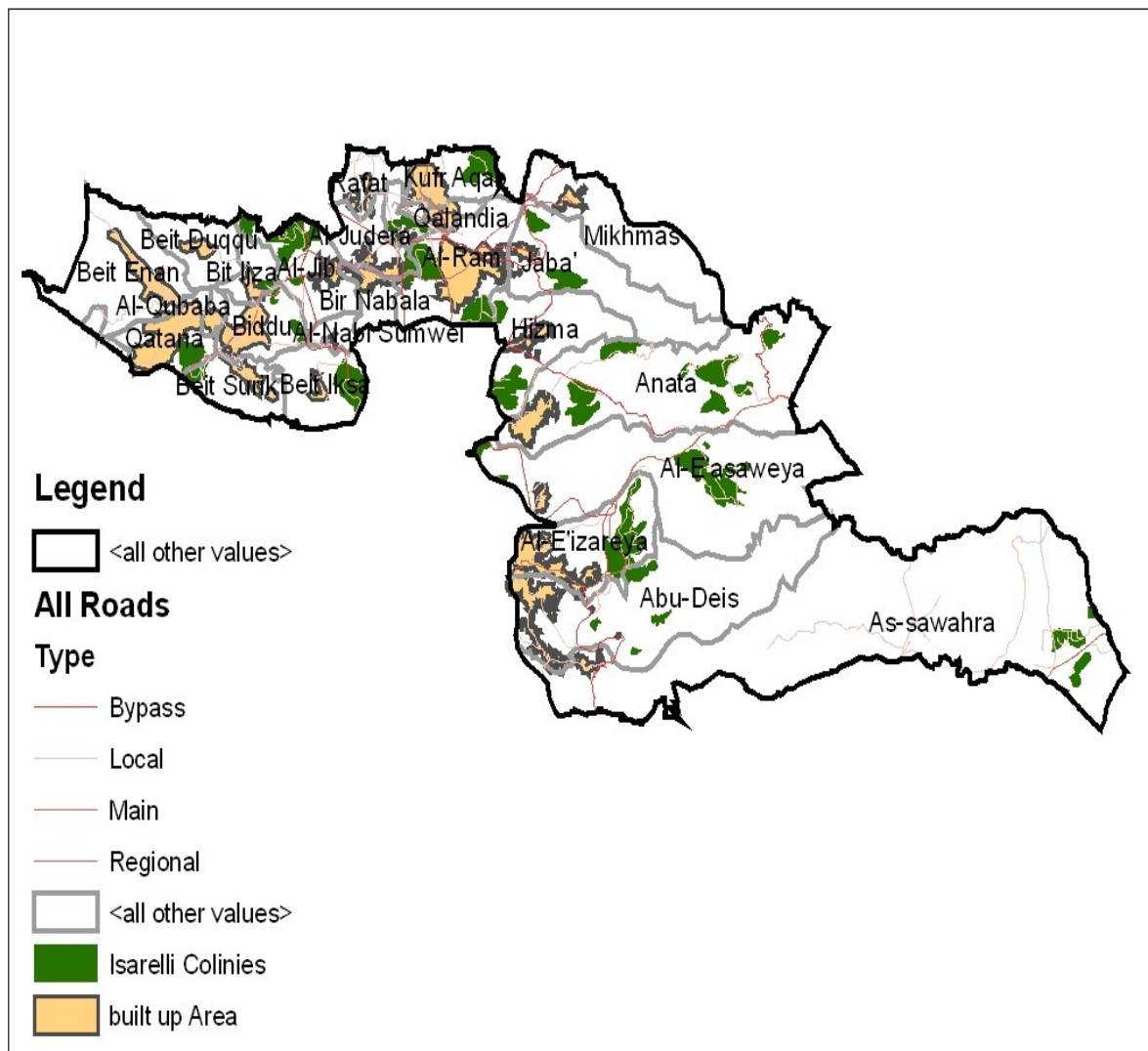


Fig.6.2 Village's Borders and Built-up Areas

The east part of the study area contains 4 villages; Al-Sawahrah, Abu-Dis, Al-E'zareyah, and Al-E'saweyah.

To the north of East Jerusalem; middle of the study area; there are 5 villages these are Anata, Hizma, Jaba', Mikhmas, and Al-Ram. These villages are forming a geographical unity and connected to the other villages by an existing regional road; even the village borders are connected but the built-up area can be reached through the regional road. However, in the same part there are 3 villages so closed to Ramallah, but its not related administratively to Ramallah and some of their residents hold the Israeli I.D's; these villages are Kufr Aqab, Qalandia, and Rafat. To the north west there are 12 villages namely; Bir Nabalalah, Al-Jeeb, Al-Nabi Samwil, Beit Iksa, Beit Surik, Bidu, Qatana, Al-Qubeibah, Beit Enan, Beit Ijza, Beit Duqu, and Al-Juderah.

The villages built-up areas (referenced in Fig.6.2 by yellow color) are too small according to the village's areas; don't exceed 50% of the total village's land areas.

The Israeli colonies are distributed in the villages borders (referenced in Fig.6.2 by green color) some of them are close to the built-up area and others are at the edges of the village borders.

The borders of the villages are connected to each others, but the built-up areas are shattered and can't be reached except through unique regional road. The local roads in each village and main roads connecting each village to a unique regional road, but this regional road cross some of the villages through its centers.

According to Mumford (chapter four), the study area could be considered as a region geographically and administratively. According to the regional context that clears the political situation of this region and according to Perloff (chapter four), who point out that the region must be analyzed according to its function, and according to the methodology that carried out and discussed earlier, researcher will divide this region into 3 sub-regions according to its geographical unity and its natural resources, namely, the agricultural lands and stone and open lands and strategic location, and its location in the study area and its geographic relation to East Jerusalem and the surrounding governorates. This scenario is to improve the overall infrastructure and the daily services and maximize the utility of the natural resources. It should be noticed here that this scenario is considering the future integration of this region to East Jerusalem and the surrounding governorates, and it doesn't work as an alternative of East Jerusalem as it doesn't compete to its historic and religious status, on the contrast, it will support the old city administratively and commercially and decrease the traffic pressure.

The following table lists the study area villages by its population and built-up and land areas.

No.	Locality	Pop. (thousand)	Land Area (donum)	Built up Land Area (donum)
1	Abu-Dis	12815	28232	1538
2	Al-Sawahrah	5514	*	1158
3	Al-E'zareyah	18410	11179	1750
4	Al-E'saweyah		10417	1538
5	Al-Z'ayem	2602	*	508
6	Al-Sheikh Sa'ed	2546	*	473
	Total	41887	49828	6965
7	Al-Ram	27085	5598	2771
8	Anata	10182	30728	1465
9	Hizma	6452	10438	378
10	Jaba'	3427	13407	253
11	Mikhmas	1988	13479	179
12	Kufr' A'qab	11017	5472	440
13	Qalandya	10813	3940	745
14	Rafat	2248	3777	243
	Total	73212	86839	6474
15	Biddu	6739	5392	493
16	Bir Nabalaha	6445	2692	613
17	Al-Jeeb	4912	8205	358
18	Al-Nabi Samwil	231	2150	15
19	Beit Iksa	1661	8473	350
20	Beit Surik	4040	5700	245
21	Qatanna	7933	4550	819
22	Al-Qubeibah	2189	3084	570
23	Beit E'nan	4513	10105	402
24	Beit Ijza	710	2362	142
25	Beit Duqqu	1694	5393	238
26	Al-Juderah	2245	2044	140
27	Emm Al-Lahim	394	*	15
28	Beit Hanina Al-Balad	1467	15839	138
	Total	45173	75989	4538
Total of the Study Area		160272	212656	17977
Arab neighborhoods inside Municipal borders		269900	131840	19559
Total of East Jerusalem		430172	344496	37536

- Locality Land Area are Included in other Locality Land Area

Table 6.1: Sub-Regions by Population, Land Area, Built-up Area, including the totals of the Arab neighborhoods inside Municipal borders.

The totals that presented in the last table for the Arab neighborhoods inside Municipal borders could be viewed as indicators for the scenario of integrating the study area to East Jerusalem in case of finishing the occupation of East Jerusalem. Meanwhile, East Jerusalem population will use the proposed expansion areas of the study area.

The distribution of land use in Jerusalem Governorate (J2) is as the following table.

Indicator	No.
(Area of agricultural al Land (km ²	16.5
Area of Forests Wooden Lands (km ²)	2
Palestinian Built-up Area (km ²)	18
Israeli settlements Built-up Area (km ²)	41.2
Built-up Land Area Per Inhabitant(m ²)	112
Percentage of Built-up Land Area per km ² of Total Area (%)	11.8
Population Density (Capita/ km ²)	756
Percentage of agricultural al Land Area per km ² of Total Area (%)	8.2
Percentage of Open Land Area per km ² of Total Area (%)	63

Table 6.2 Selected Indicators for Land Use in Jerusalem Governorate (J2), 2005

It can be noticed from this table that the agricultural land area is the largest land area compared to the other open land areas, and is concentrated in the western part of the study area (which will be analyzed as agricultural area), also the Palestinian built-up area is about half of the Israeli's and is too small with respect to the total land area.

The population density indicates that there is enough land for the population growth in the projected period taking into consideration the hypothesis of considering the Israeli settlements built-up area as residential areas for Palestinians in the future.

However, the high percentage of open lands resulted from the Israeli policy that

confined the Palestinian expansion in any sector; this parentage will be used in this study for the proposed expansion areas.

6.2.2 Population Projection

Population figures that obtained from the Central Bureau of Statistics (PCBS) shows that the population of Jerusalem Governorate (J2) has grown from 135,152 persons in 2001 to 160,272 persons in 2005, which means that the total population has been increased by approximately 25,120 during four years. However, the average population growth has decreased from 3.6 in 2001 to 3.5 in 2005; also, the total fertility rate is 5.2 in Jerusalem Governorate (PCBS 2005). In this research the population projection will be for 20 years to provide clear indicator for the proposed scenario about the region, the growth rate 3.5 will be used for 2025 projection. The following equation will be used to find the population projection;

$$B(t) = B(0) (1+g)^t$$

Where: B (t) = population size at time t

B (0) = population size at time 0

g = growth rate

The population of Jerusalem Governorate (J2) is expected to grow to around 318,907 persons in 2025, which means that the population will be increased by 158,635. That is, approximately the population will be doubled in the next 20 years.

6.2.3 Natural Resources and Infrastructure

The following sections will investigate the limited natural resources and the existed physical infrastructure in the study area to provide an indication about the main topic of this research; the poor daily life situation; which depends greatly on the existed infrastructure which effects directly the economic development in any region. Then, the proposed physical infrastructure projects will be analyzed according to prioritized needs based on the existing potentials for each sub-region so it can function properly.

6.2.3.1 Agriculture

The total cultivated area in Jerusalem Governorate (J2) amounts to 17977 donums, the value of agriculture production for the year 2001/2002 amounted to USD 15,359 thousand, of which 20.7% as plant production and the rest was as animal production. Which means that the optimal utilization of the agricultural land is too small compared to the agricultural land area. And so, it needs a specialized zone for agriculture that will also provide job opportunities.

6.2.3.2 Solid Waste

Currently, the Palestinian Local Authorities collects solid wastes in 21 communities in Jerusalem Governorate (J2); no party collects solid wastes in 7 communities in Jerusalem Governorate (J2). Accordingly, a solid waste procedure will be analyzed for domestic and commercial use to be prepared for an overall economic development; meanwhile, it will protect the environment from direct harmful effects.

6.2.3.2 Water

The main natural resource in Palestinian territories is water; there are more than 35 water wells in Jerusalem governorate (MOPIC: building competitive advantage in the

Palestinian economy 1998: 29). The total dissolved solids of spring's water in Jerusalem governorate was 259mg/l for 2000. The water provided to Jerusalem governorate through Palestinian Water Authority (PWA) was 3.3 million m³, and the number of springs was 13 springs in 2002.

Israeli Occupation Authorities constrain access by Palestinians to underground water and waster supply in general. It restricts the digging of new wells by Palestinians. New water sources within the Palestinian Territories can be tapped only by an Israeli Water Company "Mekorot".

Water consumption per head is less than 90 liters, compared to 140 in Jordan and 280 in Israel. Over 80% of Palestinian Territories underground water is utilized by Israel (PCBS, 2005).

This situation necessitates a political effort in the negotiation with Israelis and specialized studies to provide more water resources and procedures to store and distribute water. This research will analyze the need for water storage faculties and the expansion or rehabilitation of the existing water networks.

6.2.3.3 Electricity

The number of subscribes of electricity in Jerusalem Governorate (J2) was 27,946 consumers for 2002. The electricity consumption in Jerusalem Governorate (J2) was 128.4 million KW.H for 2002 (PCBS, 2005). The population growth and the proposed development necessitate the need for new or upgraded electrical networks as will be analyzed later.

6.3 Basic Indicators

Basic indicators and community functions are summarized, by community and sub-region, in table 6.3 through table 6.5 below.

Community	NGOs	Cultivated Area (donum)	Industrial Enterprises	School Buildings	Health Clinics	Hospital
Abu-Dis	3	1575	18	4	5	-
Al-Sawahrah	3	*	14	2	2	-
Al-E'zareyah	1	1024	45	5	9	-
Al-E'saweyah	1	*	6	2	-	-
Al-Z'ayem	-	*	-	1	-	-
Al-Sheikh Sa'ed	-	*	-	1	-	-

Table 6.3: Basic Indicators: Sub-Region; Q1: Abu-Dis

Community	NGOs	Cultivated Area (donum)	Industrial Enterprises	School Buildings	Health Clinics	Hospital
Al-Ram	1	126	164	6	9	-
Anata	6	731	32	2	5	-
Hizma	2	608	8	2	3	-
Jaba'	1	1325	5	2	-	-
Mikhmas	-	1471	-	2	1	-
Kufr' A'qab	-	949	-	-	-	-
Qalandya	-	415	3	1	-	-
Rafat	-	515	2	1	1	-

Table 6.4: Basic Indicators: Sub-Region; Q 2: Al-Ram

Community	NGOs	Cultivated Area (donum)	Industrial Enterprises	School Buildings	Health Clinics	Hospital
Biddu	1	1794	15	2	7	-
Bir Nabalab	4	518	59	3	6	-
Al-Jeeb	2	1028	4	1	1	-
Al-Nabi Samwil	-	217	-	1	-	-
Beit Iksa	4	1446	2	2	2	-
Beit Surik	-	4379	1	2	1	-
Qatanna	1	1076	2	2	2	-
Al-Qubeibah	2	577	2	1	4	-
Beit E'nan	2	2249	-	2	2	-
Beit Iiza	-	772	-	25	-	-
Beit Duqqu	1	3475	3	2	1	-
Al-Juderah	-	728	2	-	-	-
Emm Al-Lahim	-	*	-	-	-	-
Beit Hanina Al-Balad	3	592	-	-	-	-

Table 6.5: Basic Indicators: Sub-Region; Q 3: Biddu

*: No available records

These indicators will be used to analyze the needs and potentials, discussed later, for each sub-region.

6.4 Spatial and Social Articulations

Following an initial analysis of the data provided in the documents, data derived from the field, and in the context of the physical map of the study area, it was recommended to divide the study area into three sub-regions (Fig. 6.3): two sub-regions to encompass the communities that lie in the areas north and north-west of East Jerusalem and the third sub-region to include the communities immediately to the south and east of East Jerusalem, extending eastward to include the sloping arid area.

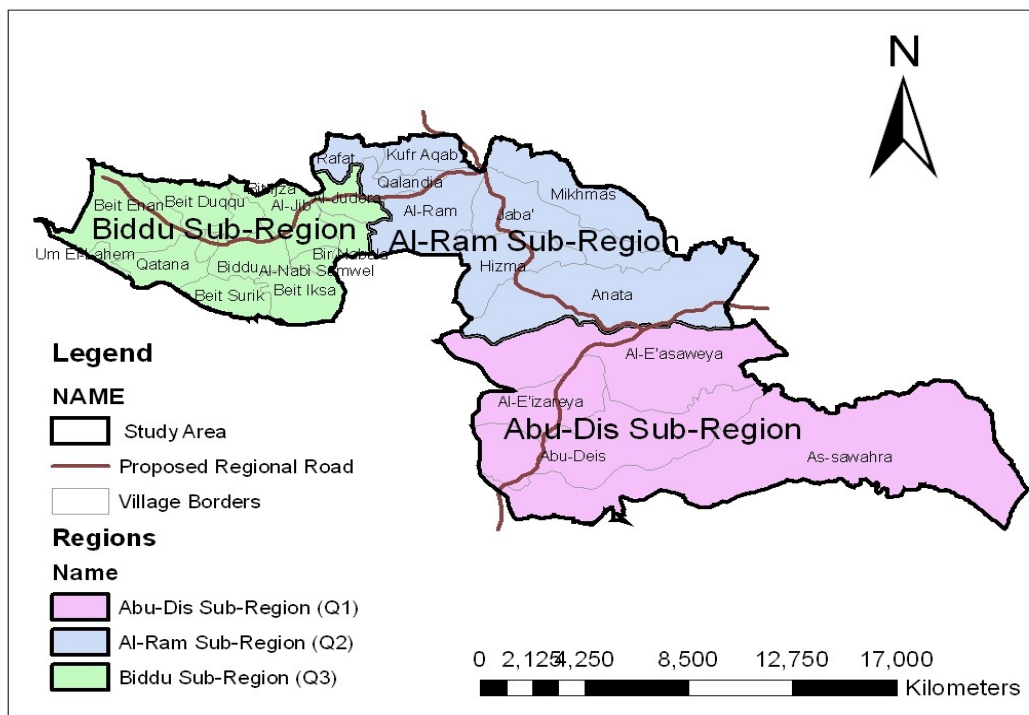


Fig. 6.3: Study Area Sub-Regions

Upon discussing this proposal collectively with "delegates" from the different communities, a proposal for the division was introduced. This division was based on the spatial and social articulations among the communities concerned. Thus, the study area is divided into three sub-regions as follows:

- **Sub-Region Q 1: Abu-Dis**

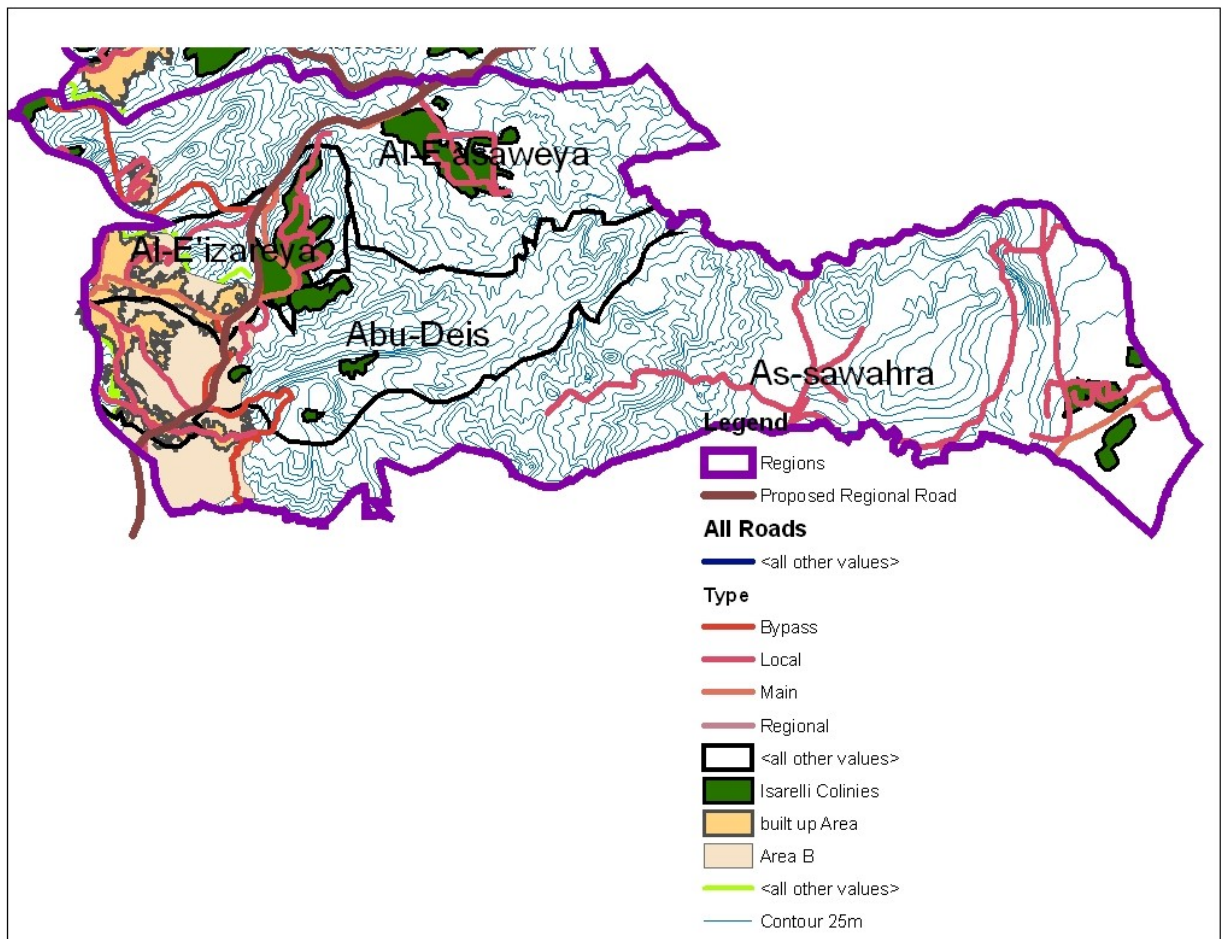


Fig. 6.4: Sub-Region Q1

The first sub-region (Fig.6.4) is Abu-Dis sub-region located to the east of East Jerusalem and separated from Bethlehem district; to the south, by a high steep wadi

called Wadi El-Nar, and is extended to the east to Jericho. Abu-Dis sub-region consists of mainly 4 villages Abu-Dis, Al-Sawahrah, Al-E'zareyah, and Al-E'saweyah. There are 2 small villages namely Al-Sheikh Sa'ed and Al-Z'ayem which are included as built up-areas in other 2 villages land areas Abu-Dis and Al-E'saweyah, respectively. The population of Al-Sheikh Sa'ed to be added to Abu-Dis population, on the other hand, for Al-E'saweyah its built-up area and population lies within East Jerusalem Municipality borders but its large land area lies outside Jerusalem Municipality borders, so the built-up area and population for Al-E'saweyah will be considered in this study as Al-Z'ayem and the land area the same Al-E'saweyah land area. The total population of the communities in this sub-region is about 42,000. This sub-region includes the smallest land area in the study area, encompassing the semi-arid land which slopes eastward towards the Jordan valley Rift. The built-up areas of the villages of this sub-region are too small (6965 donum) comparing to the whole area of these villages (49828 donum), there are 2 large colonies close to each others. Area B (discussed earlier) is concentrated around the built area, but still more than 80% of these villages land considered as area C (full Israeli sovereignty). The topography (referenced in contour blue lines every 25m Fig. 6.4) of this sub-region is high in the middle and low to the east. This sub-region will be considered as residential and has light industries (referenced in magnetic color in Fig. 6.7) as its location so close to the center of East Jerusalem. The expansion of this sub-region took into consideration to be closed to the existing built-up area and contains area B and lies in the suitable topography for building and avoids the Israeli

colonies, also this sub-region contains the smallest agricultural land compared to the other sub-regions.

- **The second sub-region: Al-Ram sub-region**

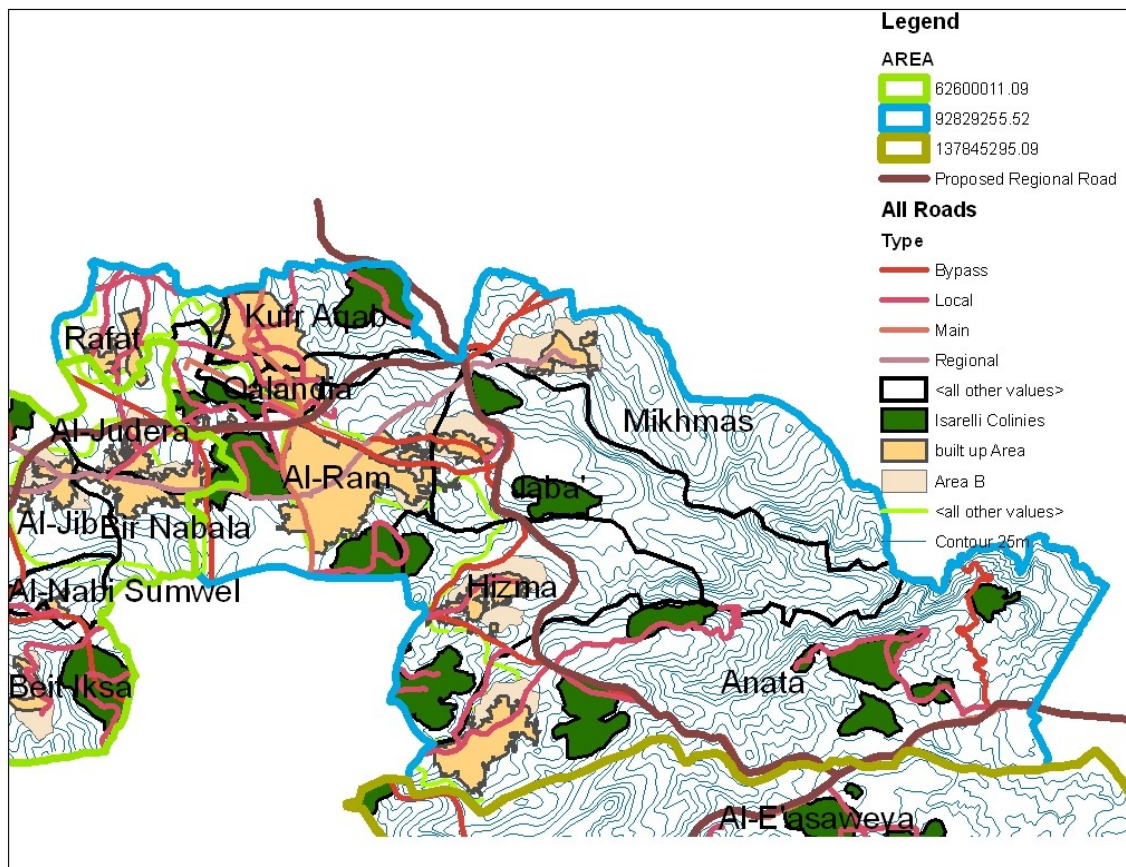


Fig 6.5: Sub-Region Q2

The second sub-region (Fig.6.5); located to the north of East Jerusalem; is Al-Ram sub-region and consists of 8 villages Al-Ram, Anata, Hizma, Jaba', Mikhmias, Kufri Aqab, Qalandia, and Rafat. The total population of the communities in this sub-region is 73,000 and the land area is 87,000, which makes it the largest sub-region in population and land area. There are 3 villages so closed to Ramallah and some of

their residents hold the Israeli I.D's; these villages are Kufr Aqab, Qalandia, and Rafat. These villages extend along the main artery connecting East Jerusalem with Ramallah. There are 13 distrusted Israeli colonies among the area, the largest built-up area is Al-Ram and lies in the middle of this sub-region, the topography of this sub-region and the distribution of the Israeli colonies and the distribution of area B next to each built-up area make the residential expansion of this sub-region confined next to Al-Ram built-up area, but a proposed industrial zone will be to the north east of this sub-region as it's the only open land and lies at the edge of this sub-region and avoid the built-up areas, also its location is near from the regional road. This sub-region will be considered administrative sub-region for the whole study area as this expansion lies in the middle of the study area and so close to East Jerusalem to the north.

- **The third sub-region: Bidu sub-region**

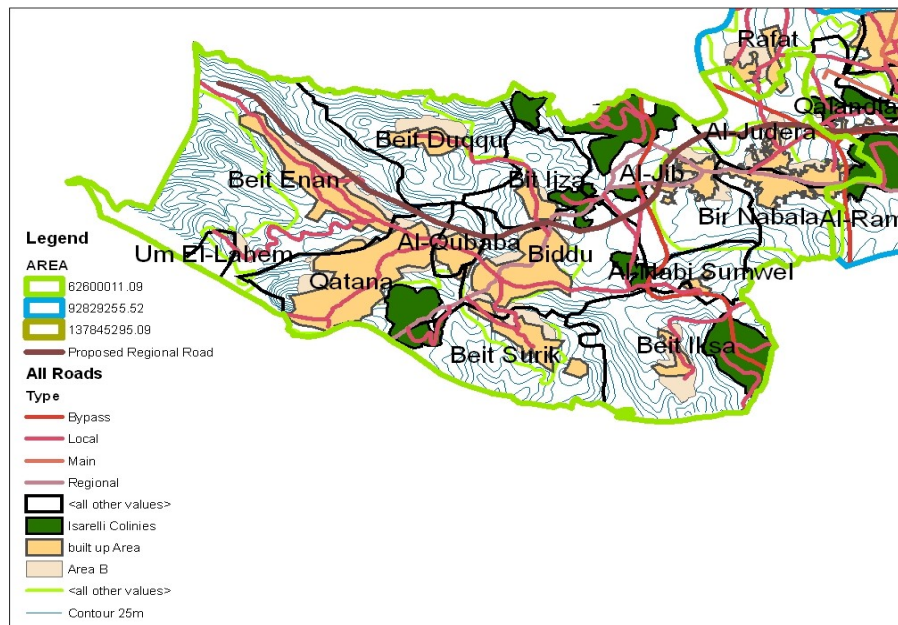


Fig 6.6: Sub-Region Q3

The third sub-region (Fig.6.6); located in the area north-west of East Jerusalem; is Bidu sub-region and consists of 12 villages Bidu, Bir Nabalalah, Al-Jeeb, Al-Nabi Samwil, Beit Iksa, Beit Surik, Qatana, Al-Qubeibah, Beit Enan, Beit Ijza, Beit Duqu, and Al-Juderah. The total population of the communities in this sub-region is 45,000. The built-up areas of the villages of this sub-region are too small (4500donum) comparing to the whole area of these villages (76000donum). There are 7 Israeli colonies concentrated to the east of this sub-region. This sub-region has already large agricultural land and underground water resources so it will be considered as agricultural sub-region. In the same time, the topography of this sub-region are not suitable for large residential expansion and the built-up areas are already large as there are long distance between homes, also the location of this sub-region is at the north west of the study area and far from the center of East Jerusalem. This sub-region can support the whole study area and East Jerusalem agriculturally since it has large agricultural land.

A final zoning plane for the three sub-regions (study area) is shown in the following map. However, a proposed regional road (referenced in red color Fig.6.7) will connect the 3 sub-region together and the whole region to the south to Bethlehem governorate and to the north to Ramallah and to the east to Jericho and in the middle to East Jerusalem. Some parts of this regional road will be the same as the existing regional road and others will be away to avoid the centers of these villages and sub-regions proposed expansion areas and to be suitable with the natural topography.

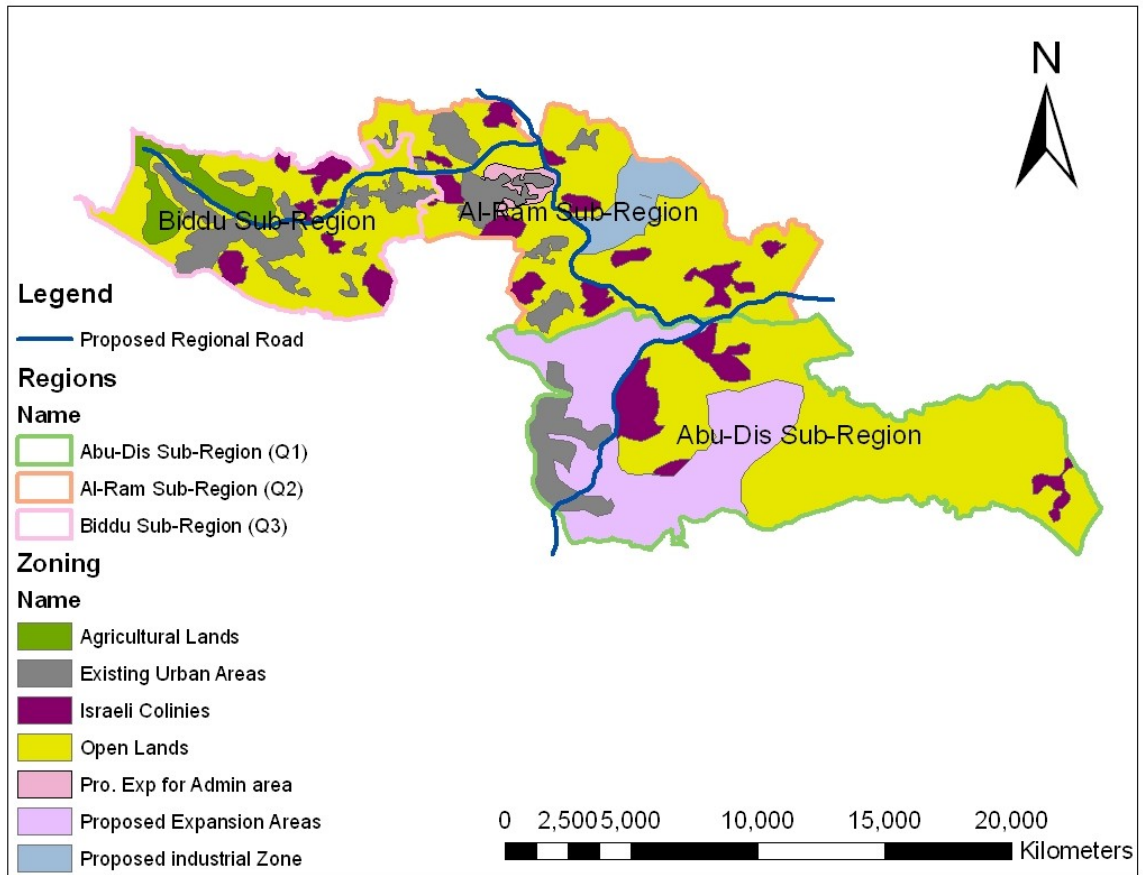


Fig. 6.7: Zoning Map

This zoning plan is the first outcome part of this research objective which deals with the administrative issue defined in the problem definition and it's recommended to be part of a whole regional plan for the West Bank. The re-arrangement of the study area villages and the creation of three functional sub-centers that forms a coordinated and administrative body for its related villages will support and utilize each sub-region potentials. This administrative management system will be followed with the improvement of the study area physical infrastructure to support the economic development of the study area.

6.5 Institutional and Social Infrastructure

None of the communities in the three sub-regions delineated above has a municipal council status. Similar to the prevailing pattern in other districts, there is no necessary correlation between the size of the community and whether or not it is administered by a village council.

In terms of the presence of NGOs, there is a total of 37 NGOs and community based organizations in the communities studied. However, and unlike the prevailing situation in other districts, Jerusalem District is characterized by the unique and distinguished status of the City of Jerusalem as the perceived and declared capital of Palestine. This status renders it to be the focus of all civil society organizations, especially since no legitimate Palestinian governmental administration is allowed to have its headquarters in the City, Consequently, many NGOs which provide service in different sectors on the national level, have their headquarters in the areas adjacent to the City. Since the signing of the Oslo Peace agreement, the stretch from the City to the Ram community has become what might be labeled as "organization row", where both local and international NGOs have clustered there, seeking to maintain proximity to the capital an a "Jerusalem address " Since many of these organizations are also a source of funds, their presence in this area constitutes a significant pull factor, not only for the rest of the District but for the entire West Bank.

On the Palestinian governmental level, a number of PA ministries and agencies, e.g., Planning and International Cooperation, PECDAR, etc., have set up offices in the same area, within a reach of the City of Jerusalem.

Concerning the availability of educational and training institutions, it should be reiterated that none of the sub-regions has any post-secondary educational institution, except for UNRWA's Vocational Training Center at Qalandia Camp, and Al-Quds University in Abu-Dis. Pupils seeking post-secondary education will have to go to the City of Jerusalem, south to Bethlehem, or north to Ramallah.

On the other hand, although basic education facilities are available in the different communities in each sub-region, secondary education is not readily available. In sub-region Q 3, secondary classes are available in two communities, namely, Biddu and Beit E'nan, catering to 265 pupils. In sub-region Q 2, the situation fares much better, where there is a number of secondary education facilities, some of which are well-reputed (e.g., in Beit Hanina). In this sub-region, limited secondary vocational education is also available. The same comment applies to sub-region Q1, except it has Al-Quds University.

6.6 The Economic Base

At present, agriculture does not constitute an important component of the economic base of these communities. Wage labor in services and in official institutions, in Israel and in the City of Jerusalem, in particular, constitutes the main components of the economic base of these communities. The specific characteristics of each sub-region, however, are presented below.

Sub-Region Q1: Abu-Dis

As indicated earlier, this sub-region is an extension of Jerusalem to the east. No agricultural cultivation to speak of (Center for Engineering and Planning, 1994), where the rate of cultivated area is about 0.1 donum per capita. In the eastern semi-arid section where there are recently settled Bedouins (Sawahrah area), there is some livestock activity. However, it is estimated that more than one-half the income is generated through wage labor in services and construction, in Israeli and in the city of Jerusalem. Accordingly, its economic base is dependent almost exclusively on wage labor in official institutions, other services, and construction in Jerusalem and the surrounding area.

Sub-Region Q2: Ram

This sub-region is an extension of the City of Jerusalem to the north. There is a noticeable increase in the tempo of migration from the City to the Ram, in order to escape high rent prices and to avoid property taxes (*arnona*) imposed by the Jerusalem Municipality. Thus, the community of Ram has become a virtual commercial center for the entire area, due to its central location, vis-a-vis Jerusalem and Ramallah, and its proximity to the Israeli industrial zone of Atarot, and the domestic airport.

The western section of this sub-region, which is contiguous to sub-region Q 3, is limited in any proposed expansion; whereas the eastern section, which is contiguous to sub-region Q1 and the semi-arid zone, has some livestock activity. This section has

large open lands, but high topography. However, the total cultivated land in this sub-region is less than 8,000 donum or below 0.2 donum per capita. The potential for development in this sub-region may have to focus on industrial zones and central markets. It may be possible to entice the remittances from abroad that come to these communities to be invested for this purpose (Center for Engineering and Planning, 1994).

A proposed industrial zone will be to the north east of this sub-region as it's the only open land and lies at the edge of this sub-region and avoid the built-up areas, also its location is near from the regional road

Sub-Region Q 3: Biddu Sub-Region

This is the only sub-region in this District with some agricultural activities; however, the erosion of the land base, due to expropriation for Jewish settlements, rendered this a weak component in terms of income. Of the 3 sub-regions in the study area, this is the only sub-region with some cultivation, primarily olives. The total cultivated area is about 16,000 donum or about 0.9 donum per capita.

Wage labor in Israel is dominant. There is a low level of commercial activities. The potential for development may focus on the areas of food processing (e.g., olive presses), and maintenance workshops.

6.6.1 Work Force and Income Patterns

Work Force and income patterns are main factors for the development of any society as they are the human resources that should be maintained and developed. The following tables will provide statistical indicators, in order to probe deeper into work

force and income patterns using the available statistical data which could provide useful indications of the changing and very fluid patterns of sub-regional vulnerability of labor and income.

In any region there are different sub-regional functions which all requires space (work, industry, residential,.... etc), the space which these functions require and the techniques which can be used to determine the spatial requirements of the different sub-regional functions depends on the potentials of the concerned sub-regions; namely the resources; and how these functions could integrate to work together to enhance the development in optimal way. However, these functions must be derived from hypothesis related to the nature of the region and the proposed development scenario to achieve the desired objectives (W.Ruiter and F.M Sanders 1998:23). The demand for different functions for the plan-period depends on three types of developments:

- Social developments.
- Economic developments.
- Demographic developments

Certain developments cannot be influenced by causes from within the plan-area itself, like growth of the economy or social trends like emancipation. Other developments on the other hand are influenced by causes in the area, like demography. Data regarding trends which cannot be influenced can be obtained through a national bureau of statistics (W.Ruiter and F.M Sanders 1998:23).

The following percentages will provide general overview about the current situation in terms of labor force participation and its conclusion will be followed.

Labor force participation rate for persons aged 15 years and over in Jerusalem governorate was 38.4% in 2003. Meanwhile, it was 52% for the aged group 25-34 years. In addition, the full employment rate was 75.2% in 2003. However, the underemployment rate was 2.5% in the same year and the unemployment rate for persons aged 15 years and over was 22.3%. Accordingly, the distribution of employed persons by employment status was as follows: 3.5% employers, 19.6 self employed, 71.5% wage employees, and 5.4% unpaid family members. Whereas, the population outside labor force in Jerusalem governorate in 2003 was 61.6% of which 10.9% old/illness, 54.7% house keeping, 24.3% study, and 10.1% for other reasons. At the end of 2003, there was a gap of 36,000 between the number of employed residents of Jerusalem governorate and the number of job opportunities located there. In 2000, 21.3% of persons aged 15 years and over in the region were in managerial and professional specialty, which means that the majority of workers in the villages were of service-type and unskilled occupations. This can be explained by the percentage of uneducated people, who aged less than 15 years and constitutes 6.2% of which 2.8% for males and 9.6% for females. Although, at the end of 2003, the total number of establishments in Jerusalem governorate according to different economic activity was 2759 that employs 7697 employee. (PCBS, Jerusalem statistical year book 6:82).

It can be seen from the above statistic indicators that this region two-thirds of the work force are both unskilled and semi-skilled, engaged in the constructions sector, and 10 percent are unemployed. Thus is due to the limited local labor market in terms of employment opportunities, the absence of optimal utilization of natural and human resources, and the closeness to the Israeli labor market; which effected by the different potential interpretation of the status of these communities, and, therefore, the restriction on labor and mobility to the work place, imposed by the Israelis. The final result, is that needs to be independent on Israeli labor market by developing the human resources and utilize the natural resources; will be discussed later; by dividing this region into specialized sub-region that can function properly for the concerned region under study and the surrounding regions. It must be noted here, that the whole Palestinian communities have similar economic situation and consumption patterns (PCBS 2005), as it is small and homogenous community, so it can share human and natural resources. This will improve the overall economic situation in all Palestinian regions on small scale, which is discussed on large scale in the theoretical perspective chapter.

6.6.2 Living Levels

Pattern of Wage levels appear to be consistency and compliance with the theory of demand for labor: the lower the wage, the more are the employed. This also seems to be associated with the absence of the prevailing relative wage advantage. To put it differently, lack of employment opportunities due to the size of the local market's access to Israeli secondary market, has reduced the effect of the relative wage

advantage, has kept wages low, and seems to affect workers' attitude towards accepting low wages. In addition, the wage level seems to be affected by:

- The level of skills and its density,
- Access to other sources of income,
- The size and absorption capacity of the local labor market and,
- The ability of self-employment.

Average of household was derived from expenditure and consumption survey was 5.7 persons in Jerusalem Governorate, 6.7 persons in remaining west bank. The household monthly consumption of goods in Jerusalem Governorate was 894 USD in 1998, in comparison, the household monthly consumption in the Palestinian Territory was 427 USD. However, the individual monthly consumption in Jerusalem Governorate was 114.5 USD in 1998, in comparison, the individual monthly consumption in the Palestinian Territory was 60.2 USD. The percentage of expenditure on the basic basket (expenditure on basic needs) witnessed an increase in 1998, compared to 5.6% in 1996. On the other hand, the percentage of expenditure on the second basket (broad expenditure basket) decreased in 1998, compared to 11.2% on 1996.

The percentage of poverty in Jerusalem Governorate for 1998 was 3.1%, in comparison 20.3 in the Palestinian Territory. Also, the percentage of deep poverty in Jerusalem Governorate for 1998 was 2.3%, in comparison 12.5 in the Palestinian Territory. (PCBS, 2005).

It can be noticed also that this area has potentials to develop as it has higher living levels than the remaining Palestinian Territory; even its residents do not hold the Israeli I.D's; but due to its strategic location which is closed to the historic center of the holy old city which lies also in the middle of the west bank and it's the only way to move from the southern part of the west bank to the northern part.

6.6.3 The Markets, Services and Flow of Commercialization

The central markets of manufactured goods and produce exist in the City of Jerusalem. However, as mentioned earlier, sub-regions Q1, and Q3 which constitute extensions of the City, east southern ward, northward respectively, have become themselves an extension to the commercial center in the City itself. For example, Ram community in sub-region Q2 has become a commercial center with the influence of merchants and shops from the city. Real-estate transactions, including sale and rent, and the accompanying services, have picked up noticeably in that area.

The formal financial system in the District is composed of all Israeli, no Arab or Palestinian bank has been allowed to operate in Jerusalem yet. On the other hand, there is a vibrant informal financial system reflected by numerous money changers. In other words, to conduct financial transactions with Arab or Palestinian banks one has to go north to Ramallah, or south to Bethlehem.

It is clear, however, that with the currently imposed Israeli siege on Jerusalem, which impedes commercial and individual movement from the City to other West Bank districts, and vice-versa, the flow of commercial activities and transactions of

Palestinians within the Jerusalem military parameters follows an east-west direction, meaning between east and west Jerusalem. This situation is clearly reflected in the daily commercial life within the City of Jerusalem and the immediately adjacent communities.

The Interdependency between the Urban Center and the Contiguous Rural Areas Whereas the City of Jerusalem has a strong pull in terms of the available education and health services, and the supporting tourist services, the immediate areas, e.g., Ram, northward, and Abu Dis and E'zareyah, eastward, are gradually developing their own pull in terms of PA administrative offices. It seems likely, assuming that the current situation concerning the status of Jerusalem prevails, that an increasing number of PA ministries and agencies may be relocated to the contiguous peripheries of Jerusalem, namely, sub-region Q1, Q2. If so, the administrative dependency will flow from the urban center outward.

6.7 Analysis of the Needs

The present analysis of needs entails a process which focuses, first, on a qualitative analysis of the available services which complements the quantitative data, second, a descriptive analysis of the needs expressed by the communities themselves, and third, a discussion of standard prioritization of criteria of the needs themselves. This section will lead to a final prioritization of needs compared with specific criteria determining the potential, in order to arrive at specific and feasible recommendations pertaining to the scope and size of possible investments.

6.7.1 Qualitative Analysis of Available Services

In addition to the basic indicators concerning the availability of services, which were deduced from the statistical data, a special effort was made to probe into the quality of the services provided. What follows is a preliminary qualitative analysis of these services, focusing on the water supply systems, the wastewater systems, the solid waste collection and disposal systems, access and internal roads, and the educational and health facilities.

6.7.1.1 Water Supply and Distribution Systems

It is clear for Table 6.6 that the majorities of the communities have water distribution and supply systems that require upgrading and rehabilitation.

Sub- Region	Population ('000)	No. of Communities	Quality of System-			
			0	1	2	3
Q1	41.9	6	0	0	7	0
Q2	73.2	8	0	1	9	1
Q3	45.2	14	0	2	7	0
<i>TOTAL</i>	160.3	28	0	3	23	1

TABLE 6.6: WATER NETWORKS: QUALITATIVE ANALYSIS

0 = Not available

1 = Old and deteriorated; needs replacement

2 = Fair condition; needs upgrading and rehabilitation

3 = Good condition; no need for any investment

6.7.1.2 Wastewater Systems

About one-fifth of the communities have sewerage networks; the rest dispose of sewage in primitive cess-pits or pools. This practice does not only harm environment, but also it poses a threat to the water-bearing aquifer being as the main source of supplying drinking water.

Sub-Region	Population	No. of Communities	Qualitative Analysis		
			Sewerage networks	Cess-pits	Treatment
Q1	41.9	6	3	4	1
Q2	73.2	8	2	9	2
Q3	45.2	14	0	9	0
TOTAL	160.3	28	5	22	3

TABLE 6.7: WASTEWATER SYSTEMS: QUALITATIVE ANALYSIS

6.7.1.3 Solid Waste Collection and Disposal Systems

As shown in Table 6.8, more than one-half of the communities have collection and disposal services of the generated solid waste. Eight communities dispose of the solid waste in sanitary landfill, and the rest in opened and uncontrolled sites.

Sub-Region	Pop. ('000)	No. of Comm.	Comm. Collection Services	Disposal Method	
				Sanitary Landfill	Open & uncontrolled Site
Q1	41.9	6	6	6	-
Q2	75.3	8	4	2	2
Q3	45.2	14	5	-	5
TOTAL	160.3	28	15	8	7

TABLE 6.8: SOLID WASTE COLLECTION AND DISPOSAL

6.7.1.4 Roads

All the access roads, as Table 6.9 shows, are paved, and the condition of about three-fourths of the roads is assessed to be functional and needs minor repairs. The status of

the internal roads, however, shows that between 15 and 45 percent of the roads are not paved, and about half of those that are paved all in good condition, requiring only minor repairs.

Sub-Region	Pop. ('000)	No. of Comm.	Access Roads		Internal Roads (percent)			
			Paved		Paved		Base-Coarse	Not Paved
			Good	Bad	Good	Bad		
Q1	41.9	6	85	15	55	30	-	15
Q2	75.3	8	70	30	35	30	-	35
Q3	45.2	14	55	45	45	10	-	45
TOTAL	160.3	28						

TABLE 6.9: ROADS: QUALITATIVE ANALYSIS

Good: Pavement needs minor repair

Bad: Pavement needs replacement

6.7.1.5 Educational Facilities

The schools are deteriorated, or need extensive repairs and rehabilitation. Only 6 out of 56 schools are assessed to be in good condition.

Sub-Region	Population ('000)	No. of Comm.	No. of Schools	No. of Rented Classrooms	Overall Assessment.			
					0	1	2	3
Q1	41.9	6	17	-	6	6	4	1
Q2	75.3	8	23	-	11	6	5	1
Q3	45.2	14	16	4	7	5	1	3
TOTAL	160.3	28	56	4	24	17	10	5

TABLE 6.10: EDUCATIONAL FACILITIES: QUALITATIVE ANALYSIS

0 = deteriorated; needs replacement or rented

1 = Old; needs extensive repair

2 = Fair condition; needs extension/utilities. etc.

3 = Good condition; no investment needed

6.7.1.6 Health Facilities

In spite of the fact that only a few communities do not have any kind of medical services, many communities which have such services do not have the needed services, equipment, or suitable structures as Table 6.11 shows. Furthermore, more than one-half the available clinics have quality assessed to be not suitable.

Sub-Region	Pop. ('000)	No. of Comm.	No. of Clinics	Type of Service (No.)			
				General	Specialized	Dental	Suitable
Q1	41.9	6	6	6	2	1	3
Q2	75.3	8	7	7	1	1	2
Q3	45.2	14	11	11	6	5	6
TOTAL	160.3	28	24	24	9	7	11

Table 6.11: HEALTH FACILITIES: QUALITATIVE ANALYSIS

6.7.2 Expression of Needs by the Communities

The needs expressed by the communities themselves through informal generated data, and from collective input from community meetings, are summarized in Table 6.12 below, according to three major sectors, namely productive, services and institutions. Furthermore, and in order to reflect sense of importance of each expressed need to the communities themselves, needs are listed under each sub-region by the number of communities which expressed them.

SECTOR/NEED	Sub-Region		
	Q1	Ø2	Q3
Number of Communities	6	8	14
A) Productive			
1. Storage and packing facilities	-	1	-
2. Industrial zones	-	1	-
3. Marketing agricultural products	-	1	-
4. Agricultural inputs and machinery	-	1	1
5. Land reclamation, retaining walls, and agricultural roads	2	4	7
6. Projects to generate local employment	1	2	2
B) Services			
6. New roads and rehabilitation of existing ones	6	10	9
8. Expansion and rehabilitation of water networks	1	-	2
9. Water storage facilities	-	1	1
10. Transport system	-	-	1
11. New electricity networks and upgrading of existing ones	1	2	1
12. New telephone networks and expansion of existing ones	3	5	2
13. Sewerage networks	1	6	5
14. Street lights	-	4	3
15. Agricultural extension services	1	1	-
16. Housing and permits	3	2	3
16. Solid waste collection systems	1	3	-
C) Institutions			
18. Agricultural credit	1	1	1
19. New school buildings	1	3	2
20. Extension and maintenance of existing schools	1	3	4
21. New Kindergartens	-	4	3
22. Permanent health clinics	-	6	2
23. New hospitals	-	3	-
24. Clubs and community centers	2	2	-
25. Complex for local administration buildings	-	1	-

Table 6.12 Sub-Region Sectoral Needs

It appears from Table 6.12 that some general statements may be made about the needs for the entire region, as well as the needs expressed by specific sub-regions. It is obvious from the above table that almost all communities in each of the three sub-

regions in the expressed the need for "new roads and Rehabilitation of existing ones". On the other hand, there is a noticeable variation in the needs expressed among the sub-regions. The clear example of this is the need expressed for "Land reclamation, retaining walls, and agricultural roads" by seven of the 14 communities in sub-region Q 3. This is the only sub-region in the study area with an agricultural land base, and which has been experiencing repeated encroachment on its lands from Jewish settlers. The needs listed in the previous Table were prioritized to three sets of criteria. The following table presents the results of this prioritization.

Item	Needs	Needs Criteria									Total points
		Criterion 1			Criterion 1			Criterion 1			
		H	M	L	H	M	L	H	M	L	
1	Storage and packing facilities			*			*		*		4
2	Industrial zones			*		*		*			6
3	Marketing agricultural products			*		*		*			6
4	Agricultural inputs and machinery		*			*		*			7
5	Land reclamation, retaining walls, and agricultural roads		*			*			*		6
6	Projects to generate local employment			*		*		*			6
7	New roads and rehabilitation of existing ones	*				*		*			8
8	Expansion and rehabilitation of water networks	*			*			*			9
9	Water storage facilities		*		*				*		7
10	Transport system			*		*			*		5
11	New electricity networks and upgrading of existing ones			*			*	*			5
12	New telephone networks and expansion of existing ones			*			*		*		4
13	Sewerage networks	*			*			*			9
14	Street lights	*					*			*	5
15	Agricultural extension services			*		*			*		5
16	Housing and permits	*					*	*			7
17	Solid waste collection systems	*			*				*		8
18	Agricultural credit			*			*		*		4
19	New school buildings	*			*			*			9
20	Extension and maintenance of existing schools	*			*			*			9
21	New Kindergartens		*		*				*		7
22	Permanent health clinics	*			*				*		8
23	New hospitals	*			*			*			9
24	Clubs and community centers			*		*				*	4
25	Complex for local administration buildings			*			*			*	3

TABLE 6.13: PRIORITIZED NEEDS, BY NEEDS CRITERIA

6.8 Analysis of the potentials

The needs listed in Table 6.12 were further prioritized according to five sets of criteria determining their implementability potential. The results of the process are shown in the following table.

Item	NEEDS	Potentials Criteria	Total
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		Criterion 1			Criterion 2			Criterion 3			Criterion 4			Criterion 5			Points
		H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
1	Storage and packing facilities	*			*			*				*		*			14
2	Industrial zones		*			*			*				*	*			10
3	Marketing agricultural products		*		*				*				*	*			11
4	Agricultural inputs and machinery	*			*			*			*			*			15
5	Land reclamation, retaining walls, and agricultural roads		*		*			*			*			*			14
6	Projects to generate local employment	*				*		*					*	*			12
7	New roads and rehabilitation of existing ones	*				*		*			*			*			14
8	Expansion and rehabilitation of water networks	*				*		*			*			*			14
9	Water storage facilities	*			*			*			*			*			15
10	Transport system		*			*			*			*		*			11
11	New electricity networks and upgrading of existing ones			*		*			*				*	*			8
12	New telephone networks and expansion of existing ones			*		*			*				*	*			8
13	Sewerage networks	*			*				*		*	*		*			13
14	Street lights	*			*			*					*			*	11
15	Agricultural extension services	*			*			*			*			*			15
16	Housing and permits			*	*				*			*		*			11
17	Solid waste collection systems	*				*			*			*		*			12
18	Agricultural credit	*			*			*			*			*			15
19	New school buildings	*				*		*			*			*			14
20	Extension and maintenance of existing schools	*				*		*			*			*			14
21	New Kindergartens	*				*		*			*			*			14
22	Permanent health clinics	*			*			*			*			*			15
23	New hospitals	*					*			*		*				*	8
24	Clubs and community centers	*				*		*				*			*		12
25	Complex for local administration buildings	*			*			*				*			*		13

TABLE 6.14: PRIORITIZED NEEDS, ACORDING TO THEIR IMPLEMNATABILITY

POTENTAIL

The following Table 6.15 presents the needs listed in Table 6.12, but in a reprioritized fashion where the first column on the right lists the needs, by their new order. The reshuffled need areas are then listed in their order of priority in the Table 6.16

Item	NEEDS	Composite Score				Reprioritized (by No.)
		Needs (Max. 9 pts.)		Potentials (Max. 15 Pts.)		
		Score	Percent	Score	Percent	
1	Storage and packing facilities	4	44	14	93	12
2	Industrial zones	6	67	10	67	22
3	Marketing agricultural products	6	67	11	73	19
4	Agricultural inputs and machinery	7	78	15	100	3
5	Land reclamation, retaining walls, and agricultural roads	6	67	14	93	11
6	Projects to generate local employment	6	67	12	80	16
7	New roads and rehabilitation of existing ones	8	89	14	93	9
8	Expansion and rehabilitation of water networks	9	100	14	93	8
9	Water storage facilities	7	78	15	100	2
10	Transport system	5	56	11	73	20

11	New electricity networks and upgrading of existing ones	5	56	8	53	24
12	New telephone networks and expansion of existing ones	4	44	8	53	25
13	Sewerage networks	9	100	13	87	13
14	Street lights	5	56	11	73	21
15	Agricultural extension services	5	56	15	100	4
16	Housing and permits	7	78	11	73	18
17	Solid waste collection systems	8	89	12	80	15
18	Agricultural credit	4	44	15	100	5
19	New school buildings	9	100	14	93	6
20	Extension and maintenance of existing schools	9	100	14	93	7
21	New Kindergartens	7	78	14	93	10
22	Permanent health clinics	8	89	15	100	1
23	New hospitals	9	100	8	53	23
24	Clubs and community centers	4	44	12	80	17
25	Complex for local administration buildings	3	33	13	87	14

Table 6.15: RE-PRIORITIZED NEEDS, ACCORDING TO THEIR PERCENTILE ON THE COMPOSITE SCORE.

Item	NEED AREA	Sub-Region		
		Q1	Q2	Q3
1	Permanent health clinics	-	6	2
2	Water storage facilities	-	1	1
3	Agricultural inputs and machinery	-	1	1
4	Agricultural extension services	1	1	-
5	Agricultural credit	1	1	1
6	New school buildings	1	3	2
7	Extension and maintenance of existing schools	1	3	4
8	Expansion and rehabilitation of water networks	1	-	2
9	New roads and rehabilitation of existing ones	6	10	9
10	New Kindergartens	-	4	3
11	land reclamation, retaining walls, and agricultural roads	2	4	7
12	Storage and packing facilities	-	1	-
13	Sewerage networks	1	6	5
14	Complex for local administration buildings	-	1	-

15	Solid waste collection systems	1	3	-
16	Projects to generate local employment	1	2	2
17	Clubs and community centers	2	2	-
18	Housing and permits	3	2	3
19	Marketing agricultural products	-	1	-
20	Transport system	-	-	1
21	Street lights	-	4	3
22	Industrial zones	2	1	-
23	New hospitals	-	3	-
24	New electricity networks and upgrading of existing ones	1	2	1
25	New telephone networks and expansion of existing ones	3	5	2

TABLE 6.16: PRIORITY NEED AREAS, BY SUB-REGION

6.9 Recommendation for Investment

After analyzing the needs of the rural communities under study, in terms of their own specific criteria and the criteria concerning the potentials of the communities themselves, and the implementability of the possible projects needed to respond to those needs. Even though, the quality of service in different sectors is bad and need improvement, any specific recommendation towards that end should emerge from a comprehensive national assessment of these sectors, undertaken by the relevant responsible ministries.

The presented physical infrastructure projects in the last table for the priority need area is the second outcome part for this research objective, this outcome could work

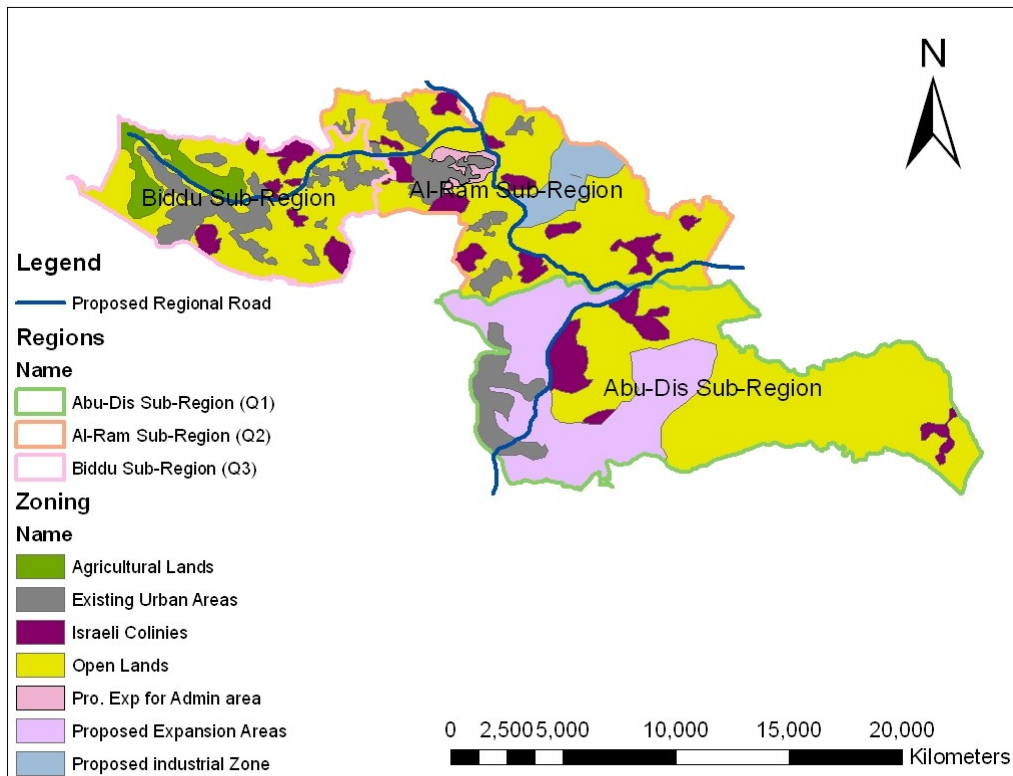
parallel with the administrative management system to be prepared for the overall economic development of the study area.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

The main objective of this research was achieving a proper administrative urban planning and management system to support the decision-making and to fulfill the needs of this area, this system must be capable of providing daily services to the current residents. An administrative management system was created through organizing the region and dividing it into 3 sub-regions that can function according to its potentials, and through addressing the infrastructure needs for each sub-region. This division resulted in zoning plane shown below.



The other out-put was the prioritized infrastructure projects needed which is summarized in the following table.

Item	NEED AREA	Sub-Region		
		Q1	Q2	Q3
1	Permanent health clinics	-	6	2
2	Water storage facilities	-	1	1
3	Agricultural inputs and machinery	-	1	1
4	Agricultural extension services	1	1	-
5	Agricultural credit	1	1	1
6	New school buildings	1	3	2
7	Extension and maintenance of existing schools	1	3	4
8	Expansion and rehabilitation of water networks	1	-	2
9	New roads and rehabilitation of existing ones	6	10	9
10	New Kindergartens	-	4	3
11	land reclamation, retaining walls, and agricultural roads	2	4	7
12	Storage and packing facilities	-	1	-

13	Sewerage networks	1	6	5
14	Complex for local administration buildings	-	1	-
15	Solid waste collection systems	1	3	-
16	Projects to generate local employment	1	2	2
17	Clubs and community centers	2	2	-
18	Housing and permits	3	2	3
19	Marketing agricultural products	-	1	-
20	Transport system	-	-	1
21	Street lights	-	4	3
22	Industrial zones	2	1	-
23	New hospitals	-	3	-
24	New electricity networks and upgrading of existing ones	1	2	1
25	New telephone networks and expansion of existing ones	3	5	2

It can be noticed that among the 25 expressed and prioritized needs; the health, water, agriculture, and then the educations needs; were the major urgent projects to be done as its essential in the people daily life, while the education facilities needs development

7.2 Research Questions-Revised

The research questions were as follows;

- Can the 28 villages serve as a self-sufficient area in providing the daily services without integrated it to the surrounding centers (Jerusalem, Ramallah, Bethlehem)
- Is the idea of creating economic sub regions efficient?
- How these villages and sub regions will be connected to each other's and according to what?
- Can the resulted analysis and recommendation be used in the decision making policy?
- What are the proposed scenarios for this region?

The findings of the analysis chapter shows that these villages have natural resources (the agricultural lands and stone and open lands and strategic location, and its location in the study area and its geographic relation to East Jerusalem and the surrounding governorates) and human resources (educated and skilled people), this parallel with the improvement of the region infrastructure (development projects for needs and potentials) and utilizing each sub-region function (agriculture, administrative, industrial, residential) and the linkage between them through regional road and integrated functions, this could lead to a self-sufficiency in providing the daily services without integrated it to the surrounding centers. Accordingly, this self-sufficiency which will be achieved through developing this region will decrease the problem of this region represented in the beginning of this research as follows “the ignorance of these villages form the municipal services and separate it from the surrounding governorates leads to keep these villages without any development. Moreover, infrastructure and services for this group of inhabitants, provided by Jerusalem municipality, became inadequate to fulfill their needs’ governorates ”, meanwhile it will decrease this region dependence in East Jerusalem in the case of ending the occupation, according on the hypothesis mentioned in the methodology chapter. This research is worth doing for the statement mentioned in the beginning of this research which was “the presence of residents in this urban space requires administrative management and a provision of daily services without waiting for the final political solution about Jerusalem”.

7.3 Research Objective-Revised

Accordingly the research statement could be clarified through the research objective, policies, scenarios, and recommendations as follows;

Research Objective was three parts

- Achieving a proper administrative management for the region through dividing into 3 functional sub-regions as stated in the scope of the study(the study area villages are shattered and do not relate to any coordination body for political issues)
- Provide physical infrastructure projects to improve the daily services in each sub-region as stated in the problem definition (the study area village suffer from poor infrastructure situation and so bad daily services), which as given a prioritization criteria based on the sub-regions potentials and needs.
- The linkage between these sub-regions and the surrounding governorates through a regional road and integrated socio-economic situation, which could be achieved trough the improvement of physical infrastructure and the creation of job opportunities in the proposed industrial, agricultural, and residential areas in each sub-region.

7.4 Research policy

Research policy is to follow up and organize the functions of each sub-region in providing its own infrastructure projects to enhance the sectoral development that can handle the population growth and reflects an overall awareness of the critical geopolitical situation of the study area.

7.5 Research scenario

Research scenario is derived from the research hypotheses which stated that; a proper administrative management, a provision of physical infrastructure, and the linkage between the study area parts will enhance its development and will not contradict with the development of East Jerusalem (containing the Old City) in general

7.6 Recommendations

Finally, after the analyzing the needs of this region and addressing the development projects needed, the recommendation for future research is to study a detailed zoning plane to overcome with the urban growth of this region and updated periodically as the region under study plays a critical political issue for its location close to Jerusalem and in the middle of the West Bank, specially with facts that had been lied on the ground like the rapid expansion of Israeli Colonies and the segregation wall. Moreover, a political role must work parallel with the improvement of this region infrastructure to guide and maintain the Palestinian rights in living with acceptable standards compared to other nations.

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