



Policy Tools Towards Sustainable Land Use and Urban Environmental Management Under a Transitional Political Context



Applied Research Institute - Jerusalem (ARIJ)

An international programme for research on the interactions between Population, Development, and the Environment

December 2007



Jerusalem

Bethlehem Terminal

Ayda Camp

Rachel's Tomb

Bethlehem

amp



Applied Research Institute – Jerusalem (ARIJ)

Policy Tools Towards Sustainable Land Use and Urban Environmental Management
Under a Transitional Political Context

For The Municipalities of
Bethlehem, Beit Jala, and Beit Sahour, Occupied Palestinian Territory

Prepared By:

Jad Issac
Fida' Abdul-Latif
Ahmad El-Atrash

December 2007

About ARIJ

Background:

Founded in 1990, the Applied Research Institute of Jerusalem (ARIJ) is a non-profit organisation dedicated to promoting sustainable development in the occupied Palestinian territories and the self-reliance of the Palestinian people through greater control over their natural resources. ARIJ works specifically to augment the local stock of scientific and technical knowledge and to introduce and devise more efficient methods of resource utilisation and conservation, improved practices, and appropriate technology. Moreover, through its work with donor institutions and regional and international experts, ARIJ promotes an environment conducive to the introduction of new initiatives and ideas and thus serves as a facilitator in the co-ordination of multilateral activities.

ARIJ represents more than 17 years of combined organizational experience in the Palestinian territories in the fields of economic, social, natural resources management, water management, sustainable agriculture, and political dynamics of development in the area. ARIJ plays an active role in the local community as an advocate for greater co-operation among local institutions, as well as international and non-governmental organizations. In its capacity as a national research institute, it frequently provides current data and research necessary to the formulation of position papers and policy strategies on such issues as land and water resources.

Mission Statement:

ARIJ mission is to promote sustainable development in the occupied Palestinian territories and the self-reliance of the Palestinian people through greater control over their natural resources. Specifically, the institute aims to augment the local stock of scientific and technical knowledge and to introduce and devise more efficient methods of resource utilization and conservation, improved practices, and appropriate technology.

Goals & Objectives:

ARIJ promotes the enhancement of utilizing natural resources by developing technologies and practices and providing technical and scientific knowledge, as well as skills and facilities needed by the local community. To achieve this, the following objectives were developed:

- To actively contribute in finding answers to the community and its environmental problems.
- To achieve socio-economic development through providing better access to food, and better land, water and natural resources management and utilization.
- To strengthen capacity to manage local development and resources devoted to the improvement of environment at community level
- To improve access to resources and participation in the decision making at all levels.
- To play an active role in the development of the human resources needed to adapt and use technologies.
- To provide technological and scientific knowledge, skills and facilities that are needed by the community
- To help in the identification and understanding of community problems that could be assisted by science and technology.
- To enhance the collaboration between the different institutions working in land use and agriculture, water and environment, and natural resources management.
- To effectively disseminate information and knowledge to the community through organizations already serving the community.

Acknowledgements

The Applied Research Institute-Jerusalem (ARIJ) hereby expresses its deep gratitude to the French “Committee for International Cooperation in National Research in Demography” (CICRED) for their technical support throughout the designated project period of three years. Special thanks are given here for Dr. Aude Signoles, who was delegated by CICRED to serve ARIJ a technical visit in the winter of 2005.

ARIJ is grateful to the Palestinian decision makers and stakeholders in the three municipalities of Bethlehem, Beit Jala, and Beit Sahour, who formed the target area of this project, along with the officials at the Bethlehem Local Government Directorate for their continued assistance and cooperation with ARIJ’s project team during the project period. In addition, ARIJ would like to thank the Palestinian ministries and bureaus at the national level, which provided ARIJ with the required data and information during the data collection phase, namely, the Palestinian Ministries of Local Governance, Education and Higher Education, Health, Planning, Transportation, and the Palestinian Central Bureau of Statistics.

ARIJ also thanks all the staff who worked throughout the designated period of the project towards the accomplishments of this work. Special credit is hereby given to Dr. Nael Salman, who submitted the successful proposal for ARIJ’s enrollment in this International program.

This publication has been made possible by the generous financial support of the French Ministry of Foreign Affairs.

ARIJ welcomes any comments or suggestions regarding the material published herein and reserves all copy rights for this publication.

Copyright © Applied Research Institute-Jerusalem (ARIJ)

P.O. Box 860, Caritas Street
Bethlehem, Palestine
Telephone: +972 (0)2 274 1889
Fax: +972 (0)2 2776966
E-mail: postmaster@arij.org
Website: www.arij.org

Table of Contents

-	<u>Acknowledgements</u>	II
-	<u>List of Abbreviations</u>	IV
-	<u>Preface</u>	V
PART ONE: Profile of Bethlehem, Beit Jala, and Beit Sahour Cities		
-	<u>Geopolitical Context of the Bethlehem Governorate</u>	3
-	The Study Area/Regional Context	
-	Brief Historical Background	
-	The Segregation Wall	
-	<u>Profile of the Study Area</u>	11
-	Demographic Composition	
-	Socio-economic Status	
-	Infrastructure	
-	Land Use/Land Cover and Natural Resources	
-	Prospects of Sustainable Development in the Bethlehem Governorate	
PART TWO: Problems faced by the Municipalities of Bethlehem, Beit Jala, and Beit Sahour		
-	<u>Problems Faced by the Municipalities</u>	31
-	Municipal administrative and financial management	
-	Urban growth, land and infrastructure management	
-	Urban environmental management	
-	Demographic dynamics	
PART THREE: Citizens' Perception of the Municipality Role		
-	<u>Questionnaire Interpretations</u>	39
PART FOUR: Proposed Policies and Tools Towards Sustainable Development		
-	<u>Proposed Policies</u>	50
-	Municipal administrative and financial management	
-	Urban growth, land and infrastructure management	
-	Urban environmental management	
-	Demographic strategies	
-	<u>Using Suitability Analysis as a Tool for Sustainable Land Use and Urban Environmental Management</u>	58
-	<u>Bibliography and Sources</u>	62
-	<u>Appendices</u>	64

List of Abbreviations

ADB	Asian Development Bank
ARIJ	Applied Research Institute-Jerusalem
CB	Crude Birth
CBR	Crude Birth Rate
CD	Crude Death
CDR	Crude Death Rate
CICRED	Committee for International Cooperation in National Research in Demography
DEM	Digital Elevation Model
EIA	Environmental Impact Assessment
EMS	Environmental Management Systems for Local Authorities
EnRA	Environmental Risk Assessment
EnTA	Environmental Technology Assessment
EP	Environmental Profiling
EPA	Environmental Protection Agency
GIS	Geographic Information System
GR	Growth Rate
GS	Gaza Strip
IMR	Infant Mortality Rates
ISO	International Organization for Standardization
MCM	Million Cubic Meter
MOF	Ministry of Finance
MOH	Ministry of Health
MOHE	Ministry of Higher Education
MOLG	Ministry of Local Government
MOP	Ministry of Planning
MOPIC	Ministry of Planning and International Cooperation
MR	Mortality Rates
MSL	Mean Seal Level
NDS	National Development Strategy
NEAP	National Environmental Action Plan
NGO	Non-Governmental Organization
OPT	Occupied Palestinian Territory
PARC	Palestinian Agricultural Relief Committees
PCBS	Palestinian Central Bureau of Statistics
PDP	Palestinian Development Plan
PES	Palestinian Environmental Strategy
PNA	Palestinian National Authority
PRB	Population Reference Bureau
PRIPODE	A Program on the Interactions between Population, Development, and Environment
PWA	Palestinian Water Authority
RUEA	Rapid Urban Environment Assessment
SPSS	Statistical Package for the Social Sciences
UN	United Nations
UN HABITAT	United Nation Human Settlement Program
UNDP	United Nations Development Program
UNDP/PAPP	United Nations Development Program / Program of Assistance to the Palestinian People
UNEP	United Nations Environment Program
UNFPA	United Nations Fund for Population Activities
UNRWA	United Nations Relief and Works Agency
USM	Union of Stone and Marble
WB	West Bank
WHO	World Health Organization

Preface

In September 2003, the Applied Research Institute-Jerusalem (ARIJ) received a grant from the French Ministry of Foreign Affairs to conduct a pilot research study within the ambit of an international program for research on the interactions between Population, Development, and the Environment, which is coordinated by the French “Committee for International Cooperation in National Research in Demography” (CICRED). The project entitled “Policy Tools towards Sustainable Land Use and Urban Environmental Management at Municipal Level Under a Transitional Political Context – The Case of the Governorate of Bethlehem, Palestine.”

The research project is a pilot study attempting to develop policy tools and choices to implement the national urban and environmental policies at the local or municipality level through the integration of sustainable development concepts and public participation approaches. The project deals with the interaction between population, urban development, and the environment. There is a special emphasis given to demographic factors, land use, and the urban environment at the main municipalities in the District of Bethlehem.

There are clear linkages between indices of environment, population, and poverty, and their impact on the sustainability of natural resources. As more people consume more natural resources and produce more waste a rapid growth of population adversely affects the environment. In addition, poverty has an interrelationship with environment; the poor are considered both victims and agents of environmental damage. Since the poor are heavily dependent on nature for their livelihood, they are highly vulnerable to environmental degradation; on the other hand, in their effort to survive, they often end up degrading the environment since survival is their immediate need and not their impact on the environment. At the policy level, policy options that make the population-environment linkage an issue of policy relevance have to be realized at an early stage if the long-term impact would be poverty alleviation. Therefore the core question of this project has always been: *Can the Governorate of Bethlehem become sustainable?* If so, what type of environmental instruments, demographic interventions, and policies can be proposed and implemented for sustainable urban development?

Questioning the sustainability of the target area was complementarily approached from two angles. On the one hand, the analysis of the role of the targeted municipalities and the problems they face, and on the other hand, an investigation of the citizens’ perceptions of these same municipalities. As a result, ARIJ’s project team was able to define the many social, economical, environmental, and political aspects of the focal factors that are hampering the adhesion of sustainability as a concept to the process of development in the targeted area. However, a series of recommendations regarding alternative policies and tools towards sustainable development in the target area were prioritized and coordinated in a participatory approach that encompassed the decision makers, stakeholders, and the public.

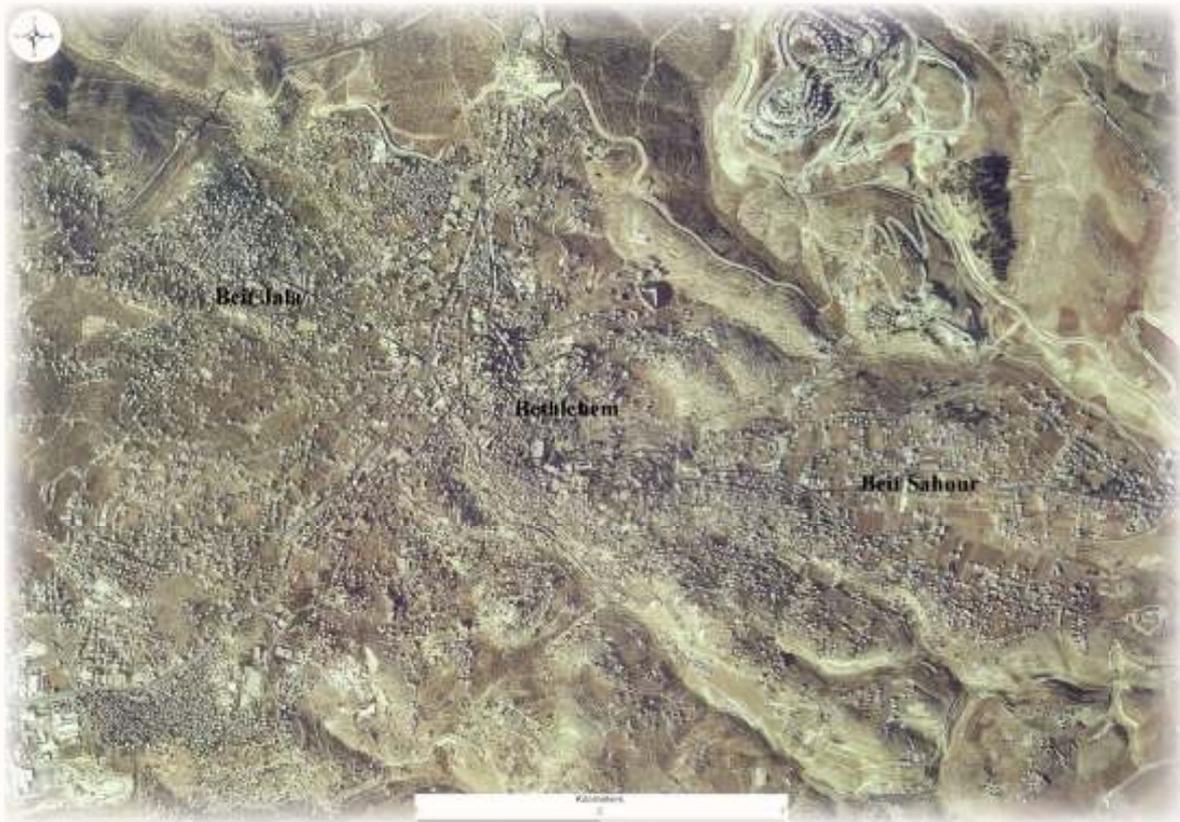
This study serves as a summary for the methodology, research findings, and primary recommendations which have emerged from the PRIPODE project. Rather than a reproduction of the final report, it is a distillation of the main aspects of the research findings. The first part (a profile of the targeted area) is briefly introduced to the reader to the socio-economic and demographic context which has informed the course of the study. In the second part, an analysis will be offered on the environmental and social challenges facing the Bethlehem, Beit Jala, and Beit Sahour Municipalities. In the third section, citizens’ perceptions of these challenges and the municipal responses to them are presented. In the fourth section, a series of recommendations which are meant to be the foundation of alternative policies and tools for sustainable development at the local level are presented.

Finally, I would like to thank the officials and stakeholders at the three municipalities (Bethlehem, Beit Jala, and Beit Sahour) on their efforts to help advance the overarching goal of this study.

Jad Isaac
Director General
Applied Research Institute-Jerusalem (ARIJ)

Part One

Profile of Bethlehem, Beit Jala, and Beit Sahour Cities



Map 1: West Bank Governorates



Geopolitical Context of the Bethlehem Governorate

The Study Area/Regional Context

The Bethlehem Governorate is one of the largest of the eleven governorates of the West Bank (Map 1). It occupies an area of 607.86 km² and is bounded by the Jerusalem Governorate from the north and the Hebron Governorate from the south. It extends from the western border of the West Bank reaching the Dead Sea in the east. The Governorate is distinguished by its topographic variability where the altitude ranges from the mountainous hills of Beit Jala that stand at 930 meters above Mean Sea Level (MSL) to as low as 412 meters below MSL along the shores of the Dead Sea.

There are 70 localities in the Bethlehem Governorate, where the cities of Bethlehem, Beit Jala and Beit Sahour form the urban centers¹. The Governorate also hosts the three refugee camps of Ad Duheisha, Ayda, and Beit Jibrin (Al Aza). The Governorate is inhabited by 174,654 persons, of whom 60,123 (34%) live in urban areas, 100,567 (58%) live in rural areas and 13,966 (8%) live in the three refugee camps (PCBS, 2005).

The Governorate boasts the Church of Nativity in Bethlehem and the Shepherd's Field in Beit Sahour, as well as other religious sites that attract pilgrims from all over the world. Historically, the Governorate has always been connected to Jerusalem by religious, economic, and cultural ties. In particular, the pilgrimage and tourist routes taking place in the two cities were integrating activities in the Jerusalem and Bethlehem Governorates.

Brief Historical Background

During the British Mandate, and according to the administrative sub-districts, Bethlehem was part of Jerusalem District. On November 1947, the United Nations (UN) General Assembly Resolution No. 181 endorsed the partition of Mandate Palestine into two states; an Arab (Palestinian) state and a Jewish one (Map 2). According to this plan, the Jewish population, who owned only 6% of the land was allocated 55.6% of Mandate Palestine even though they constituted only 30% of the population, while the Arabs were designated 43.7% of Mandate Palestine at the time they owned 94% of the land and formed 70% of the population. Under this partition plan, Bethlehem and Jerusalem were to be within the Corpus Separatum area; that is, a separate body to be run by an international administration. The boundaries of this Corpus Separatum reached beyond Bethlehem in the south to Shu'fat in the north, and had an area of 186 km² (i.e. approximately 0.7% of Mandate Palestine). The Arabs at that time rejected the plan as it ignored the rights of the majority of the indigenous Arab Palestinian inhabitants. However, the 1948 war broke out and Israel took control of 78% of Mandate Palestine, destroyed around 418 Palestinian villages and around 750,000 Palestinians became refugees. Bethlehem then became part of the West Bank and came under the Jordanian Administration until 1967.

¹ According to the Palestinian Central Bureau of Statistics (PCBS) definitions an urban area is "Any locality whose population amounts to 10,000 persons or more. This applies to all governorate/districts centers regardless of their size. Furthermore, it refers to all populations varying from 4,000 to 9,999 persons provided they have at least four of the following elements: public electricity, public water network, post office, health centers with a full time physician and a school offering a general secondary education certificate." (PCBS, 1999)

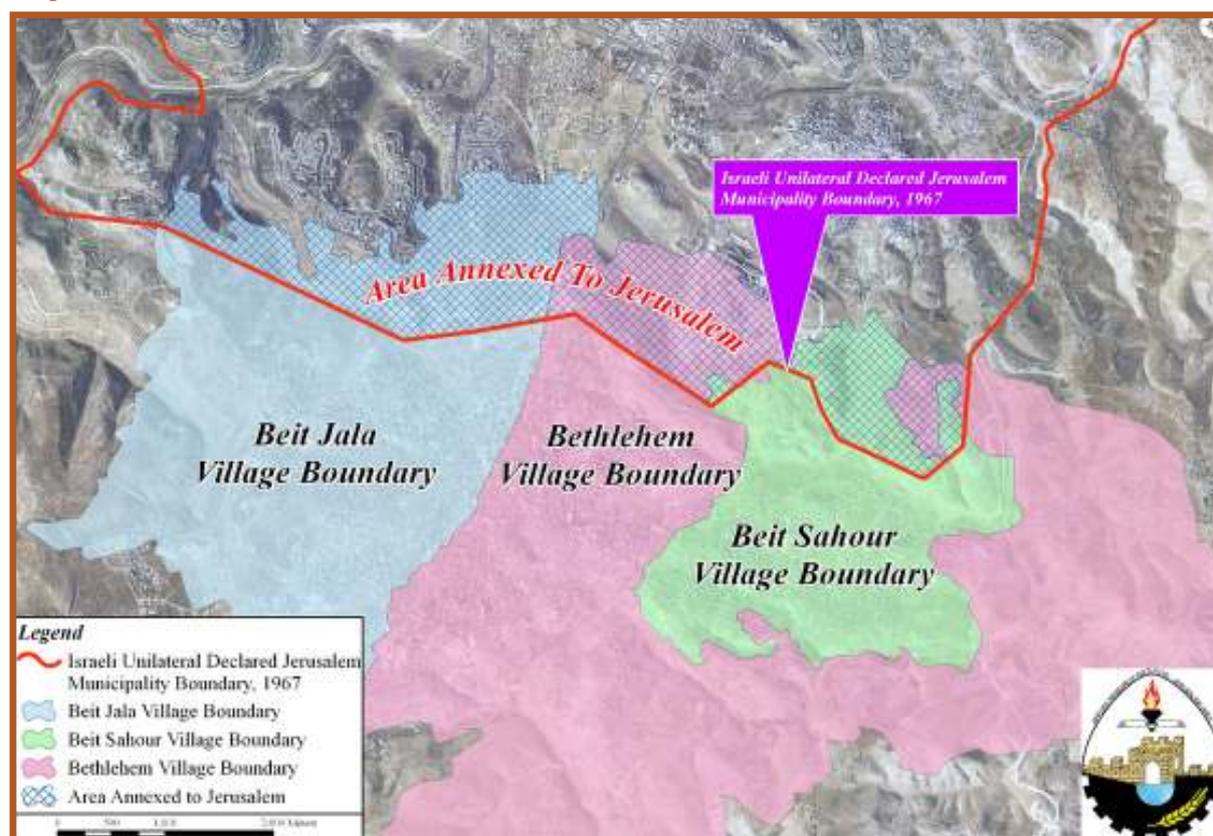
Map 2: UN Partition Plan, 1947



On the 5th of June 1967, Israel launched a war that extended the Israeli occupation over the rest of Mandate Palestine, the Syrian Golan Heights, and the Egyptian Sinai Peninsula. Soon after the occupation, the Israeli government officially annexed East Jerusalem, redrew the administrative boundaries of the Palestinian governorates, and expanded the Jerusalem municipal boundaries from 6.5 km² to 71 km²; increasing it by a factor of 10.8 times of its original size to include lands from surrounding towns and villages. As a result the Governorate of Bethlehem lost 18,048 dunums of its land out of which 6,844 dunums belonged to the village boundary of Bethlehem and its two satellite cities Beit Jala and Beit Sahour.²

A total of 2,487 dunums of Bethlehem's land was confiscated due to the expansion (8% of the city's total land); while Beit Jala lost 3,147 dunums (22% of the city's total area); and Beit Sahour lost a total of 1,210 dunums (17% of the city's total area) (Map 3).

Map 3: Lands confiscated from Bethlehem, Beit Jala and Beit Sahour in 1967



Throughout the past 40 years of occupation Israel has confiscated Palestinian lands to construct Israeli settlements³. A total of 20 illegal Israeli settlements with an estimated settler population of 80,000 were constructed in the Bethlehem Governorate and occupy an area of 19,151 dunums (19.51 km²), (ARIJ Database, 2006). Additionally, 18 Israeli settlements' outposts have also been erected from 1996 until 2005. The existing Israeli bypass roads⁴ stretch nearly 80 km in length in and around the Governorate, while an additional 30 km of bypass roads are planned within the Governorate. Over all, the Israeli designated bypass road system occupies 16.5 km² (i.e. 2.8%) of the Bethlehem Governorate's total land area.

² During the British Mandate, the middle and northern parts of Palestine were divided into villages (the term village was also used for cities), the division was based on land ownerships where village boundaries were delineated

³ Under international laws and United Nations Security Council resolutions, these settlements are illegal.

⁴ These are roads constructed in the WB and ultimately used to link the Israeli settlements to one another and with Israel. Palestinians are often prohibited from using these roads although they are constructed over confiscated Palestinian lands.

According to the Oslo II Interim Agreement that was signed in September 1995 between the Palestinians and Israelis, the Palestinian areas in the West Bank were divided into three categories; A, B and C. The aim was at facilitating a phased withdrawal by the Israeli military forces from these areas until the accomplishment of a final status agreement. In this interim arrangement, area A is area under Palestinian control, area B is area under Palestinian civil administration and Israeli security control, and area C is under full Israeli control (Table 1).

Area	Population (2005)	Area in km²	% of the Total Governorate's Area
Area (A)	97,423	47.6	7.8
Area (B)	61,327	33.8	5.5
Area (C)	15,904	424	69.7
Nature Reserves	N/A	102.4	17
Total	174,654	607.8	100

According to the Sharm El Sheikh Agreement in May 2000, 102 km² (17%) of the Governorate was transferred to the Palestinian National Authority (PNA) as a natural reserve, but in reality this area remained under full Israeli control.

Only 13.3% of the Governorate's lands are within areas A and B and are inhabited by 91% of Bethlehem's total population (174,654 residents). The rest are within area C and nature reserves where the PNA does not have territorial control.

On September 28, 2000, the second Intifada erupted. Israel intensified its 'internal closure' policy (restriction of movement within the West Bank, even between nearby communities) in addition to the already present 'external closure' (restriction of movement from the West Bank to Israel or Gaza). In April 2002 Israel invaded the Palestinian authority areas, besieging several cities and destroying many villages.

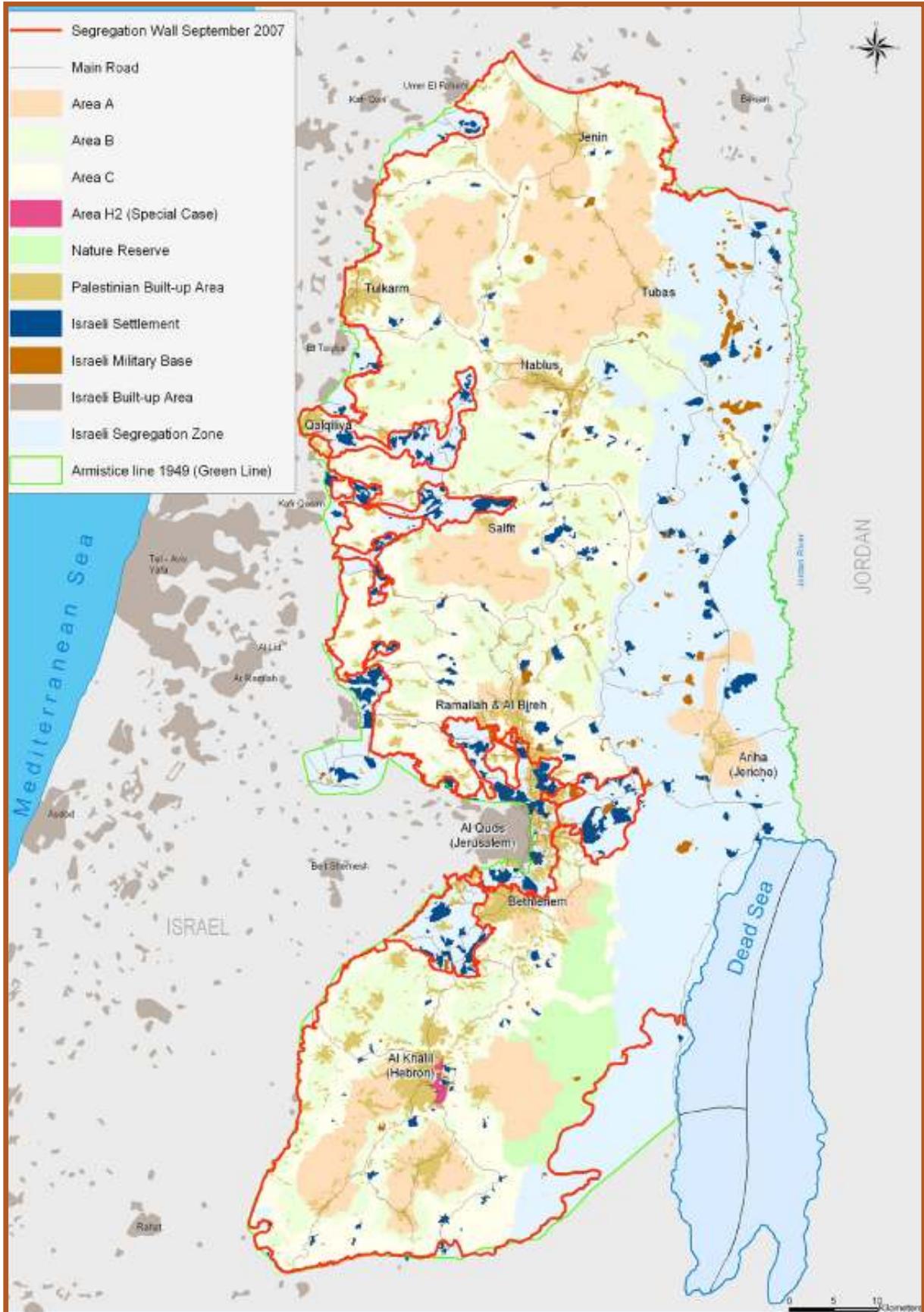
The Israeli Segregation Plan in the Occupied Palestinian Territory

In June 2002, the Israeli Government launched its policy of unilateral segregation between Israel and the Occupied Palestinian Territory (OPT) by creating the Segregation Zone on the Palestinian side of the border in the West Bank. The Zone cuts through the western part of the West Bank and runs from north to south, seizing the most fertile agricultural lands, isolating Palestinian communities in enclaves, undermining the territorial contiguity between the Palestinian villages and cities, usurping natural resources, and enclosing most of the Israeli settlements. According to continuously updated Israeli plans, to this point, the Wall will run for 770 km in the West Bank. Only 80 Km (10.4% of the total length) will actually follow the Green Line (the 1949 Armistice Line). When completed, nearly 713 km² of Palestinian land (approximately 12% of the total West Bank area) will be segregated behind it. It will continue to enclose 107 Israeli settlements, accommodating 400,000 Israelis (80% of the Israeli settlers' population in the West Bank). The route of the Wall will completely isolate 29 Palestinian villages behind the Wall and will, also, affect another 138 Palestinian villages.

In addition, Israel has created a *de facto* eastern segregation zone without walls or fences but through control of access points along the Jordan Valley and the shores of the Dead Sea. This zone has a total area of 1,555 km² representing 27.5% of the West Bank, and includes 43 Israeli settlements and 42 Palestinian localities.

The Segregation Wall is determined based on the natural characteristics of the area through which it runs. The two options are two create a fence or a wall. In the area in which there is a fence, it takes an area of 40-100 meters in width to complete. This includes double layered fences with barbed wires, trenches, military roads, and footprint-detection tracks, a 4-5 meter high electric fence, supplied with security surveillance cameras. Areas with a sizeable population and/or close to the Green Line, the Segregation Wall consists of 8-12 meter high concrete partitions appendages and military watchtowers every 250 meters built into the Wall.

Israeli Segregation Zone, September 2007



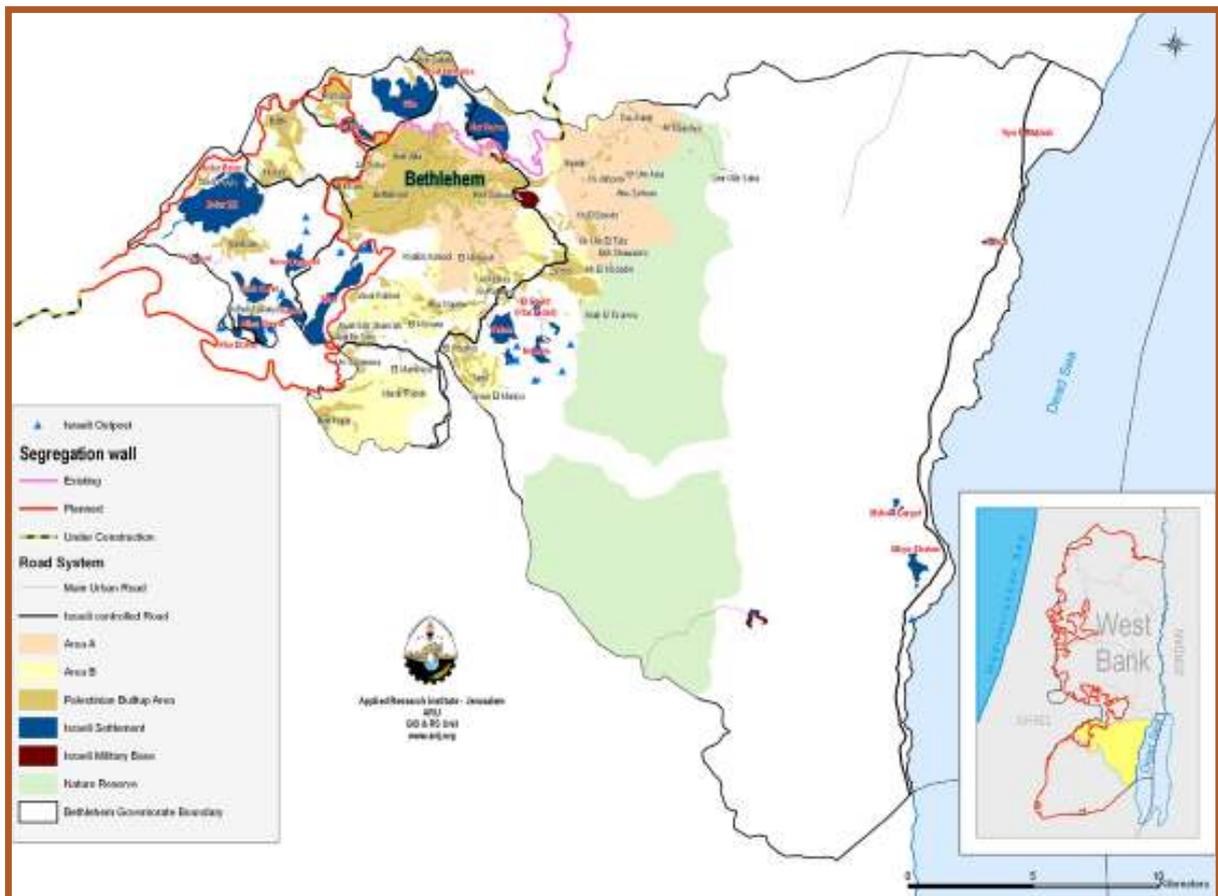
The Segregation Wall in the Bethlehem Governorate

In the Bethlehem Governorate 73,000 dunums (73 km²) of land will be segregated behind the Wall. The Segregation Wall confines the western rural villages of Battier, Hussan, Nahalin, Wadi Fukin, Al Jab'a, Khallet 'Afanah ('Afanah Hamlet), Khallet Beit Zakariya (Beit Zakariya Hamlet), and Khallet Al-Balluta (Al-Balluta Hamlet) in a large canton whereby any movement from or to these villages and hamlets will be controlled completely by the Israeli occupation forces, thus incarcerating more than 20,000 residents. These residents will be segregated from their lands, livelihood, and vital social services such as hospitals, schools, and universities that are only found in the city centers east of the Wall.

The eastern part of the Bethlehem Governorate lies within the West Bank's eastern Segregation Zone. This area extends from Bethlehem's eastern slopes to the western shores of the Dead Sea. This sparsely populated eastern section covers a total area of 299 km², (49% of the Governorate's total area). The reason for this small population is that the vast majority of the land was declared a closed military area or nature reserve area by the Israeli Government in 1967 and has remained so since. Accordingly, the Israeli Army prohibited any kind of development in that area and because of this it has become inaccessible to Palestinian farmers.

Of the isolated lands in the Bethlehem Governorate, 20,997 dunums are agricultural lands in addition to 2,900 dunums of forest. Entrance to the isolated agricultural lands will only be to farmers who are able to prove landownership through a credited Israeli organization (most likely it will be the Israeli Civil Administration) and only the owners whose names are listed in the ownership deeds (usually the eldest of the family) will receive permits. Furthermore, permits will only be issued permits on a seasonal basis. Hence the owners will encounter great difficulty in managing the cultivated lands on their own, especially as permits do not include bringing in additional labor or equipment (Map 4).

Map 4: Segregation Wall in Bethlehem Governorate



Impacts of the Segregation Wall

The construction of the Segregation Zone has negative impacts on the many political, economical, social, and environmental aspects of the domestic Palestinian life. The following is a summary of these major impacts.

Political Impact

- Through constructing the Segregation Zone, the Israeli government is unilaterally delineating the political borders for the State of Israel. As the Israeli Justice Minister Tzipi Livni (Vice Prime Minister and Minister of Foreign Affairs now) declared in a conference in Caesarea, **“One does not have to be a genius to see that the fence will have implications for the future border. This is not the reason it was built, but it could have political implications.”** (*Aljazeera Net, December 2005*).
- The Segregation Plan intends to keep more than 59.2% of the Bethlehem Land under Israeli control in the Eastern and Western Segregation Zones.
- The Segregation Zone is placing many Palestinian towns and villages in geographically disconnected and segregated enclaves or ghettos.
- The segregation plan is creating new demographic facts that will lead to forced migration among Palestinians who will lose their livelihoods.
- The plan severs the organic tie between Jerusalem and Bethlehem.

Economic Impact

- The Segregation Wall causes severe damage to the Palestinian agricultural sector and to Palestinian farmers as a result of land confiscation and the constraints imposed on mobility and marketing.
- Israel maintains control over Palestinian trade and tourism.
- Unemployment as well as poverty levels increase.
- Rise in land prices and reduction in investment opportunities.

Social Impact (Impacts on Demography)

- The Segregation Wall imposes a systemic challenge to the local and national health care, social, and educational services. The Wall makes it much more difficult for thousands of those in the West Bank to access hospitals, clinics, schools, colleges, universities, and other institutions in the main urban centers with access controlled by the Israeli Army.
- Harsh measures are imposed on Palestinian mobility and movement, as transportation to and from the segregated areas is extremely difficult.
- The Segregation Zone cuts off social relations among Palestinian citizens living on different sides of the Wall.
- Increased urbanization pressure and population density.

Impact on the Palestinian environment

- There is no place for landfills or waste water treatment sites.
- The Segregation Zone causes strip clearing of land including forests and other vegetation (as it did with Abu Ghniem forest in which more than 60,000 pine trees were uprooted to build the Israeli Har Homa settlement and other areas declared by Israel as closed military zones). Other natural resources such as pastures, open spaces, and recreation areas will be extremely limited.
- The residents of urban centers of the Bethlehem Governorate will lose a substantial portion of their food security due to the Israeli imposed restrictions on landuse, as 85% of the total agricultural area in the Bethlehem Governorate will become inaccessible for Palestinian farmers due to the defacto imposed Western and Eastern Segregation Zones. This will ultimately affect the availability of nutritional resources for the residents of the Governorate at reasonable prices and might very well cause malnutrition and diseases, as the income per-capita is already set at a limiting purchasing power and is constantly degrading.
- Loss of grazing area and increased desertification.
- The disruption of wildlife movement as a result of isolating different kinds of animals from their natural habitats.
- The Segregation Plan is altering the Palestinian natural landscape. Therefore, the Segregation Wall will certainly exacerbate the long-term trend of degradation of the planted and natural forests in the area.
- Many archeological and historical sites related to the Palestinian cultural heritage will be segregated behind the wall.
- Loss of open space which poses a threat to the sustainability of the urban and rural areas. In addition, there is a threat to further loss of natural resources and biodiversity.

Terminals in the Bethlehem Governorate

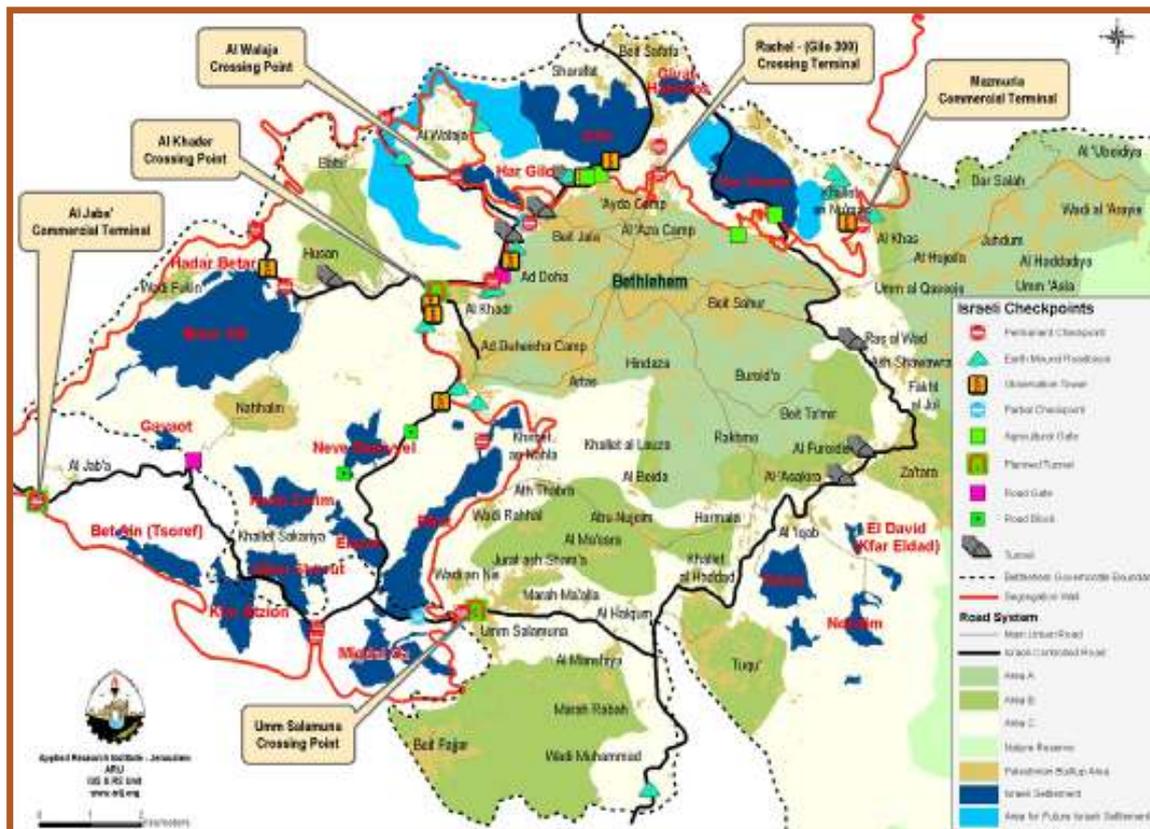
In September 2005, the Israeli Government announced the construction of 10 main terminals (passages) in the West Bank in addition to 23 crossing points along the path of the Segregation Wall (Haaretz, July 21, 2004). Once they have been fully constructed, the ten terminals are to control the movement of more than 2.5 millions Palestinians. Five of these terminals will be trade terminals.

In the Bethlehem Governorate, two commercial terminals and four crossing terminals exist, three of which are under construction (Mazmuriya trade passage east of Beit Sahour, Al-Khader passage west of Bethlehem, and Um Salamuna passage south of Bethlehem). Two of them are in the planning stage (Al-Walajeh Passage northwest of Bethlehem and Al-Jab'a trade passage southwest of Jerusalem) and Rachel (Gilo 300) at the northern entrance to Bethlehem is already operational.

However the two major terminals in the Bethlehem Governorate are the Rachel terminal and the Mazmuriya terminal;

- Rachel Terminal is located at Bethlehem's northern entrance and was inaugurated on November 15, 2005. People entering or exiting from Bethlehem/Jerusalem go through very strict inspections and security measures taken by the Israeli forces there. This terminal allows passage for Palestinian passengers holding special permits issued by the Israeli civil administration which allows them to enter Jerusalem.
- Mazmuriya trade terminal is located at Bethlehem's eastern entrance.

Israeli Terminals in Bethlehem Governorate



Profile of the Study Area

This part of the study will trace the demographic composition of the study area; the data obtained was derived from the Palestinian Central Bureau of Statistics (PCBS).

Population Size and Distribution

In 1997, the PCBS carried out the first census in the PNA. According to this census, the Bethlehem Governorate is inhabited by 132,090 persons, 67,597 (51%) of whom were males and 64,493 (49%) were females. There were 22,680 households living in 22,105 housing units. The urban area is spatially clustered in the middle part of the Governorate and consists of Bethlehem, Beit Jala, and Beit Sahour⁵. 34% of the Governorate's population were living in these cities. The two refugee camps Ayda and Al Aza are located within the municipal boundary of Bethlehem while Ad Duheisha camp is situated at the southwestern fringes of Bethlehem within the municipality of Ad Doha. The population in the camps reached 10,563 in 1997. The rural area is spatially located in the mideastern, western, and southern parts of the Governorate. The rural population makes up 58% of the Governorate's population.

The eastern part, from the eastern hills to the shores of the Dead Sea is sparsely populated as this area has been classified by the Israeli army as a closed military area into which Palestinians are not allowed to enter.

In 2005, the total population in the Bethlehem Governorate increased to 174,654 persons. Of these 60,123 (34.42%) live in urban areas, 100,567 (57.58%) live in rural areas, and 13,966 (8%) live in the three refugee camps. The population growth rate from 1997 to 2005 reached 32% and was roughly the same for urban, rural, and refugee areas (PCBS, 2005).

The reported spatial distribution in 2005 nearly resembled that of 1997. There are two possible reasons for this. One, because the 2005 data is a projection and two, because not much data is available about internal migration and so detecting possible movement from the urban to the rural areas or vice versa is difficult.

* The urban area in the Bethlehem Governorate is the focus of this study and will be referred to as the "targeted area" or the "study area" in the context of this report

Population Growth (1997-2005)					
	Bethlehem	Beit Sahour	Beit Jala	Urban Area	Bethlehem Governorate
Census of 1997	21,673	11,250	11,957	44,880	132,090
PCBS Projection of 2005	29,019	14,921	16,183	60,123	174,654
Percentage of Increase	33.89%	32.63%	35.34%	33.96%	32.22%

Demographic Status of the Study Area, 2005						
Municipality	Females*	Males*	Total Population of Mid 2005	Total Area ((Dunums	Built Up Area (Dunums)	Population Density (Person/km ²)**
Bethlehem	14,185	14,834	29,019	6,100	4,093	4,757
Beit Sahour	7,390	7,531	14,921	4,780	2,736	3,122
Beit Jala	8,015	8,168	16,183	4,460	3,020	3,628
Total	29,590	30,533	60,123	15,340	9,849	3,919
* The same upshot ratio of Men to Women of 1997 Census was applied here.						
** Population Density is the ratio of the total population to the total area.						

Population Distribution by Age Group and Sex Ratio

The population pyramid in Figure 1 shows the population distribution by age group in 1997. The histogram is large at the base and becomes narrow at the top, which shows that the population is centered in the younger age groups. The population aged between 0 and 14 years makes up 36.3% of the population. The percentage aged 65 years and above constitutes 5.5%. In the 80 years and above group, the percentage is only 1%.

The histogram also indicates that 41.8% of the population is made up of those who are less than 15 years old and those who are 65 years old and older. They are not considered in the labor force and because of this they are considered dependents. It is important to note that the aforementioned age groups are regarded as the one most in need of services and facilities such as schools, daycares, clinics, nursing homes, etc.

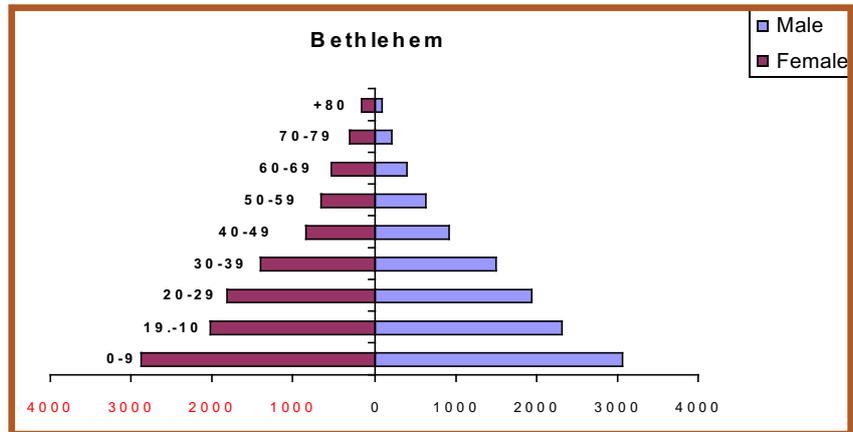
The population is concentrated in the pre-reproductive and reproductive age groups due to the high fertility rate in the past few years. According to this distribution, if no appropriate policies will be adopted to deal with this phenomenon, it is projected that the growth rate will remain high in the coming years.

It is important to assess the capacity of the current infrastructure and services in the Bethlehem urban area to meet the demands of the population and to assess the needs for the coming years. Those forming public policy, both national and local, must take this population distribution histogram into consideration when directing/allocating developmental projects.

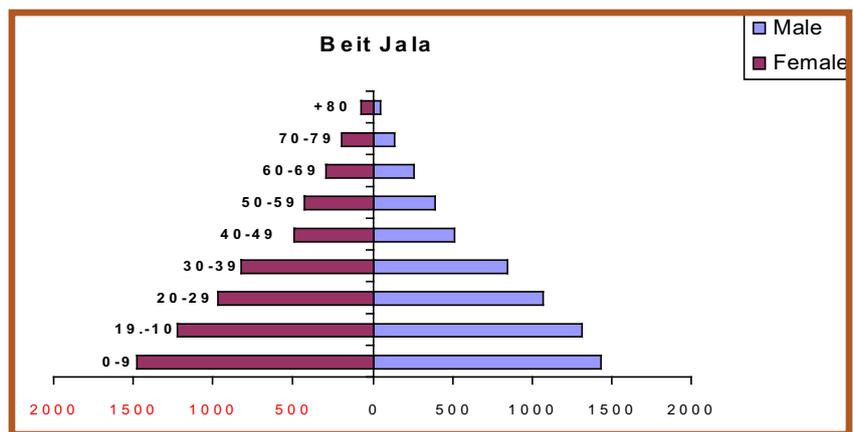
Figure 1: Population Pyramid in the Study Area, 1997



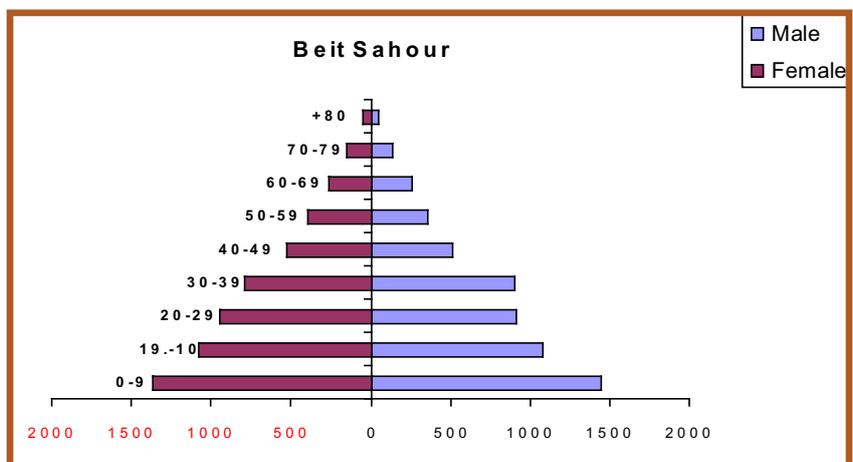
Population Pyramid of Bethlehem, 1997



Population Pyramid of Beit Jala, 1997



Population Pyramid of Beit Sahour, 1997

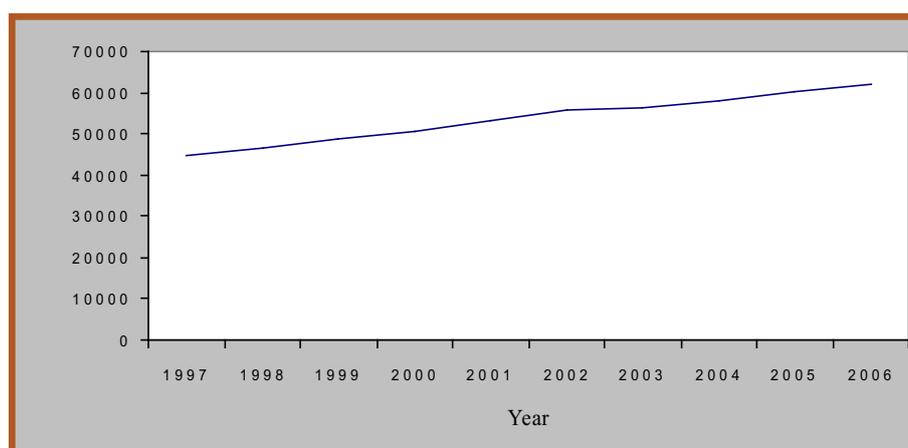


Males constitute 50.7 percent of the population in the study area and females constitute 49.3 percent. This makes the sex ratio 103 males per 100 females (i.e.1.028:1.000 [M: F]).

Population Growth

According to the 1997 Census, the urban population in the Bethlehem Governorate was 44,880 inhabitants. The population grew to reach 58,243 in 2004 and increased to 60,123 in 2005. This indicates that the population grew by 33.96% over the past eight years. The projected population for the study area in 2006 is estimated to be 62,004 (Figure 3).

Figure 2: Population growth in the study area



Growth Rate (GR)

The annual growth rate in the study area had an average of 3.16%. The growth rate in the study area is less than the national growth rate which reached 3.4% (PCBS, 2005). These growth rates are considered high when compared with other countries, as the Population Reference Bureau (PRB) reports the world growth rate to be 1.2%, the Arab States to be 2.7%, and the less developed countries to be 1.5% (PRB 2005, World Population Data Sheet).

Fertility

The fertility rate in the OPT was 6.04 births/woman in 1997. However this rate is decreasing. In 2004 the rate had dropped to 4.6 (PCBS, 2004) - but it is still considered to be very high in comparison to the world fertility average of 2.7 births/woman (PRP, 2005). Average fertility rates in nearby countries were lower than the Palestinian fertility rate as it reached 3.7 in Jordan, 3.5 in Egypt, and 2.1 in Tunisia (PCBS, 2004).

Total Fertility Rates in the OPT (1997- 2004)			
Year	West Bank	Gaza Strip	Total
1997	5.61	6.91	6.04
2004	4.1	5.8	4.6

There are many reasons for the high fertility rate in the OPT. The major reasons are related to social and cultural dynamics - mainly family and marriage customs - as the rates of early marriages, especially among females, are high but decreasing. The average marriage age for females in the OPT were 18, 19 and 19.3 in the years 1997, 2001 and 2004 respectively. Another reason is that people tend to have more children in order to work and help with the family income and to serve as caregivers to the parents in old age. (PCBS, 2004).

However, one may notice the decline in the fertility rate in the last decade. This was accomplished after the PNA undertook the civilian administration in the OPT and started to take care of the educational and health status of the people. The decline in the fertility rate is due to the change in marriage and family customs, the increase in the use of family planning methods, and an increase in the percentage of females who insist on finishing their higher education before they get married.

Mortality

In 2005, the PCBS has projected the crude death rate (mortality rates) in the OPT to be 4.1 and 3.9 per thousand residents in the WB and GS, (PCBS, 2004).

Infant mortality rates (IMR) in the OPT during 1999-2003 were 24.2 per thousand live births (26.6 for males and 21.6 for females). This rate has reached 22 per thousand live births and 44 per thousand live births in Jordan and Egypt, respectively in 2003, (PCBS, 2004). However the overall worldwide infant mortality rate was 54 per thousand live births, which means that the Palestinian rate was half of that of the world average (PRP, 2005).

Since the Palestinian Ministry of Health (MOH) took responsibility for the supervision, regulation, licensing, and control of the health services sector in the OPT, the health status in the territory has improved thus leading to a decrease in the IMR.

Migration

Data on the rates of internal and external migration are not available in the Palestinian Territory due to the continued Israeli military control over the international border crossings, mainly between the West Bank and Jordan as well as the control over the checkpoints which are spread all over the West Bank. It was therefore not possible to obtain such data for the sake of this research. The net migration rate was therefore considerate to be zero.

Population Projection

In 2005, the PCBS published projections for the population in the Palestinian Territory. The result indicates that from 1997 to 2005, the Palestinian population increased by 35.2. In 2005, the population was 3,762,005 inhabitants and is project to increase by 3.4% in 2006. The same projection indicated that from 1997 to 2015, the population will increase by 82.9% to reach 5,091,314.

In the Bethlehem Governorate, the PCBS estimated that the population in 2005 was 174,654 and in 2006 it would increase to 180,116 inhabitants. To reach this figure the PCBS has projected the Growth Rate (GR), Crude Birth Rate (CBR), Crude Death Rate (CDR), and the Net Migration for the Palestinian Territory, West Bank and Gaza Strip. However, projections for the local level were not prevailed.

For the purpose of this research, the following demographic equation was adopted to measure the population growth and to calculate population trends in the Bethlehem Governorate:

$$\text{Population } i+1 = \text{Population } i + \text{Natural Increase} + \text{Net Migration}$$

Where: Natural Increase = Births (i, i+1) - Deaths (i, i+1);
i: initial time
i+1: projected time

The population data for mid-year 2005 in the Bethlehem Governorate was used as a primary base year in the population projections. From this data, projections for every year between 2005 and 2015 were made utilizing the crude birth and deaths rates from the PCBS - 2005 estimates (Table 2). The difference between births and deaths for each projected year indicated the natural growth rate, while net migration was assumed to be zero. Each calculation gave an annual population projection which could be utilized as a new base data upon which calculations could be made for the following year's projection (Table 3).

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Growth Rate	3.0	3.0	2.9	2.8	2.8	2.7	2.6	2.6	2.5	2.5	2.4
Crude Birth Rate	34.5	33.7	32.8	32.1	31.4	30.7	30.1	29.4	29.0	28.5	28.0
Crude Death Rate	4.1	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.6	3.6	3.6

Source: PCBS, 2005 <http://www.pcbs.gov.ps/Portals/_pcbs/populati/demd3.aspx>.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Base Population	174,654	179,963	185,308	190,645	196,021	201,432	206,850	212,311	217,767	223,299	228,859
Crude Births (CB)*	6,026	6,065	6,078	6,120	6,155	6,184	6,226	6,242	6,315	6,364	6,408
Crude Deaths (CD)*	716	720	741	744	745	765	765	786	784	804	824
Net Migration	N/A**	N/A									

* Note: These values were derived from the national CB and CD values indicated in table 2 above, as the PCBS only issued percentages – not figures– of CB and CD values of the Palestinian Governorates and Districts.
 ** N/A: Not Available

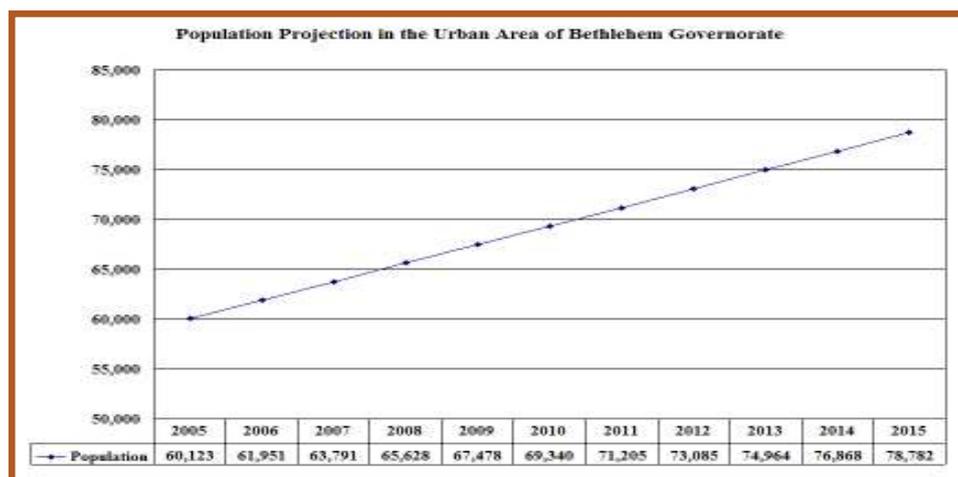
The projection results indicate that the birth and death rates will decrease in the future, where the CBR (births per 1,000 of the population) was 34.5 in 2005, and projected to reach 30.7 and 28.0 in 2010 and 2015, respectively in the West Bank. The CDR (deaths per 1,000 of the population) was 4.1 in 2005 and projected to reach 3.8 and 3.6 in 2010 and 2015 respectively in the West Bank. The reasons behind the declines in birth and death rates are the increase of awareness among families, especially among women, and the development of the delivered health services.

According to the projection, the population of the Bethlehem Governorate will augment to reach 201,432 and 228,859 in 2010 and 2015 respectively. The population of the study area is projected to reach 69,340 inhabitants with an increase of 15.3% during 2005 to 2010 and 78,782 inhabitants with an increase by 31% during 2005 to 2015 (See following tables).

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Base Population	29,019	29,901	30,789	31,676	32,569	33,468	34,368	35,275	36,182	37,101	38,025
Crude Births	1,001	1,008	1,010	1,017	1,023	1,027	1,034	1,037	1,049	1,057	1,065
Crude Deaths	119	120	123	124	124	127	127	131	130	134	137
Net Migration	N/A										

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Base Population	14,921	15,375	15,832	16,288	16,747	17,209	17,672.00	18,139	18,605	19,078	19,553
Crude Births	515	518	519	523	526	528	532	533	540	544	547
Crude Deaths	61	62	63	64	64	65	65	67	67	69	70
Net Migration	N/A	N/A	N/A	N/A	N/A						

Population Projection of Beit Jala											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Base Population	16,183	16,675	17,170	17,664	18,162	18,663	19,165	19,671	20,177	20,689	21,204
Crude Births	558	562	563	567	570	573	577	578	585	590	594
Crude Deaths	66	67	69	69	69	71	71	73	73	74	76
Net Migration	N/A										



Population Density

The population density of the study area was 3,919 person/km² in 2005. This is considered very high when compared to the world average of 48.3 persons/km². In the less developed areas of the world the density is 63.7 persons/km² and the average in Asia which reached 45.2 persons/km². The population density is projected to increase as the rate of population growth is high and the access to open land is limited. This is due to the land confiscation policies the consecutive Israeli Government has implemented in the OPT.

If we assume the Israeli activities will remain as they are today (with land confiscation and with the construction of the Segregation Wall) and using the population projection figures from the previous section, the population density in the Bethlehem Governorate will increase to 4,520 person/km² in the year 2010 and 5,135 person/km² in the year 2015 in the study area.

Marital Status

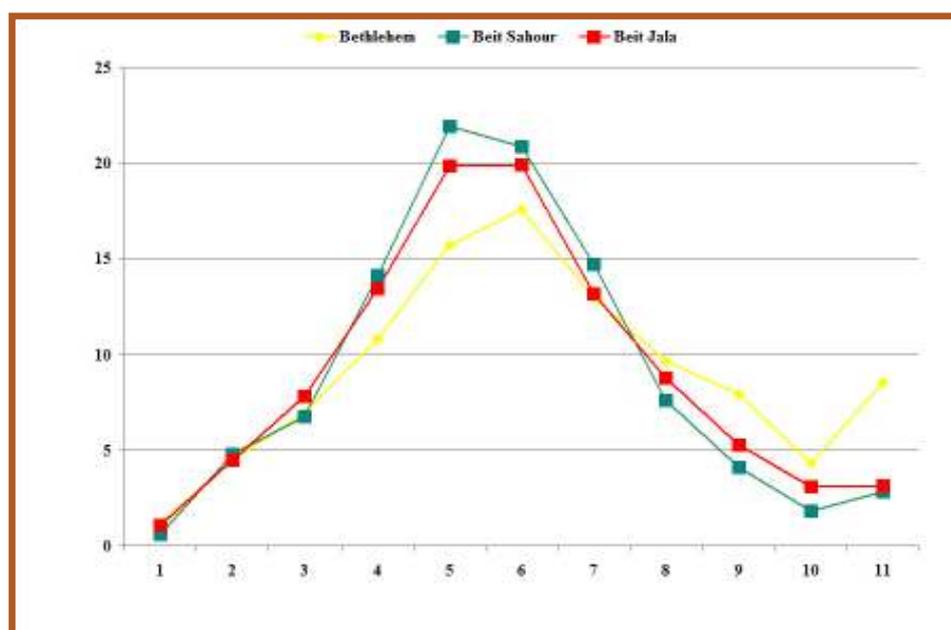
The table below showed the marital status of the population of the study area who were 12 years and over. The data showed that 12,698 persons had never been married (40.7%) of whom 7,089 were males and 5,609 were females, 16,877 persons were married (54.1%), 270 persons were divorced (0.9%), and 1,338 persons were widowed (4.3%).

Population (12 years and over) by Gender and Marital Status in the Study Area, 1997										
Locality	Never Married		Married		Divorced		Widowed		Total	
	M	F	M	F	M	F	M	F	M	F
Bethlehem	3,479	2,638	3,873	3,860	46	113	75	632	7,473	7,243
Beit Sahour	1,616	1,329	2,342	2,339	6	33	41	251	4,005	3,952
Beit Jala	1,994	1,642	2,239	2,224	27	45	31	308	4,291	4,219

Socio-economic Status

Households

The 1997 Census data revealed that number of households in Bethlehem had reached 4,158, followed by Beit Jala with 2,413, and Beit Sahour which had 2,306. The average household size in the OPT was 6.5 persons/household, while in Bethlehem governorate it was 5.85 persons/household. The percentage of people who are living in families that have between 5 and 6 members is 37%, that have between 1 and 4 members is 25%, and that have more than 6 members is 38%. The household size is considered to be large in the study area. Among the three cities, Bethlehem has the largest percentage of its population living in households of more than 6 persons (this percentage reached to 43% in Bethlehem, 33% in Beit Jala, and 31% in Beit Sahour). It is noticed from the graph that 9% of the population of Bethlehem lived in households having 11 members.



Household Size, 1997

Private Households by Tenure of Housing Unit in Bethlehem								
	Bethlehem Governorate		Urban		Rural		Camps	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Owned	17,567	77.5%	5,886	65.8%	10,522	89.12%	1,159	60.21%
Rented Unfurnished	2,289	10.1%	1,904	21.3%	311	2.63%	74	3.84%
Rented Furnished	136	0.6%	111	1.2%	16	0.14%	9	0.47%
Without Payment	2,487	11%	951	10.6%	874	7.4%	662	34.39%
For Work	55	0.2%	29	0.32%	24	0.2%	2	0.1%
Others	38	0.2%	25	0.28%	9	0.08%	4	0.21%
Not Stated	108	0.5%	43	0.5%	50	0.42%	15	0.78%
Total	22,680	100%	8,949	100%	11,806	100%	1,925	100%

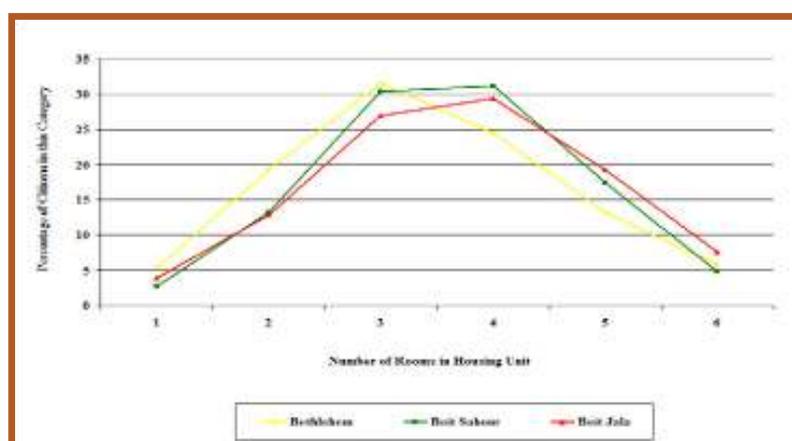
Population Density Per Room

The data from the 1997 Population, Housing, and Establishment Census reported that the average number of persons per room in the OPT was two and the average number of rooms in the housing unit was 3.4.

In the Bethlehem Governorate the average number of persons per room was 1.78. The number was higher in the rural areas where there were 2.04 persons per room, followed by the refugee camps where there were 1.74 persons per room. The average number of persons per room was lowest in the urban areas (Bethlehem, Beit Jala, and Beit Sahour) where there were 1.47 persons per room.

The census data revealed that the average number of rooms of housing units in the Bethlehem Governorate was 3.3 rooms whereby 57.4% of the population lives in housing units with between three and four rooms (30% and 27.4% respectively). In contrast to this, 22% of the population lives in housing units of between five and six rooms (16% and 6% respectively). At the other end of the scale, 16% of the population lives in housing units of two rooms, and 4% live in housing units of one room.

In terms of disparities between the three major urban centers, 44% of Bethlehem's residents live in housing units that have four or more rooms. This is followed by Beit Sahour where 54% of residents live in housing units which have four or more rooms. The highest percentage is in Beit Jala whereby 56% of the population is living in four or more rooms.



Number of Rooms in the Housing Unit of the Study Area

Education Status

Educational attainment

The data from the 1997 census provided data about the study area concerning educational attainment. The data showed that 6.4% of the study area population was illiterate, 13.2% was capable of reading and writing, 24.8% completed elementary education, 22.8% completed preparatory education, 18% completed secondary education, 5.4% have an associate diploma, and only 8.5% have university degrees. The data also showed that 60.3% of the illiterate people were in Bethlehem city, with more females illiterate (65.2%) than compared with males (34.8%).

Study Area Population (10 years and over) by Gender and Educational Attainment											
Sex	Illiterate	Can Read & Write	Elementary	Preparatory	Secondary	Associate Diploma	Bachelor	Higher Diploma	M.A	PHD	Total
Male	740	2,309	4,429	3,677	3,212	734	1,266	37	245	96	16,745
Female	1,386	2,060	3,763	3,866	2,991	1,064	1,008	22	103	16	16,279
Total	2,126	4,369	8,192	7,543	6,203	1,798	2,274	59	348	112	33,024
Percentage	6.4%	13.2%	24.8%	22.8%	18.8%	5.4%	6.9%	0.2%	1.1%	0.3%	100%

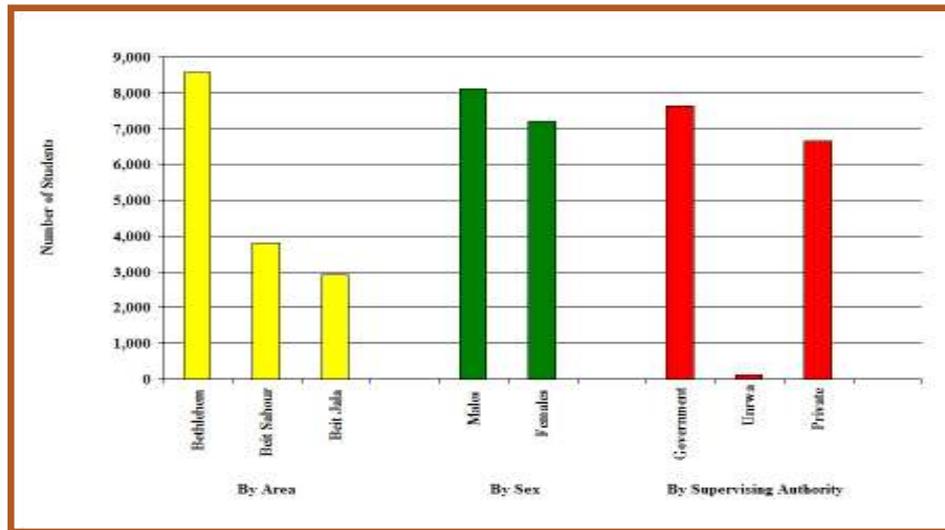
When looking at the education attainment specifically in the Bethlehem Governorate, it is evident that the percentage of illiterate people is high in comparison with the other educational categories. In addition to this, the percentage of illiterate women is considered to be high as it is 20.3% of the women. The percentage of people who have a university degree is also low is 5.5% of the population. It is noticed also that only 3.1% of the women in the Governorate have a university degree.

Distribution of Persons (15 Years and Over) By Educational Attainment and Sex in the Bethlehem Governorate, 1997								
Sex	Illiterate	Can Read & Write	Elementary	Preparatory	Secondary	Associate Diploma	Bachelor and Above	Total
Male	7.8%	10.3%	21.9%	28.8%	17.8%	5.6%	7.8%	100%
Female	20.3%	9%	20.4%	27.2%	15.1%	4.9%	3.1%	100%
Total	13.9%	9.6%	21.2%	28%	16.5%	5.3%	5.5%	100%

Schools

The Bethlehem Governorate has 135 schools consisting of 1,602 classes attended by 49,272 students and 2,624 teachers. On average there are 30.8 students/class and 18.8 students/teacher. These ratios are lower than the ones in the West Bank as the ratio of students per class is 31.3 and the ratio of students per teacher is 19.8 (MOHE, 2006).

As of the scholastic year of 2005/2006, the data of MOHE showed that there were 15,642 students attending schools in the study area. Of these, 8,793 were in Bethlehem, 3,851 were in Beit Sahour, and 2,998 were in Beit Jala. The gender distribution is 8,284 males and 7,358 females. The number of students in government schools is 7,822, those in UNRWA schools 611, and those in private schools 7,209. From 1997 to 2006 the number of students has increased by 2.1%



Study Area Students by Area, Gender, and Supervising Authority, 2005/2006

At the outset of the 2005/2006 scholastic year, there were 39 schools in Bethlehem, Beit Sahour, and Beit Jala. These 39 schools make up 29% of the total number of the schools for the entire Governorate. 21 were in Bethlehem, 10 in Beit Sahour, and 8 in Beit Jala. 12 schools out of the 39 are for males, 9 schools for females, and 18 schools are co-educational. These schools are managed by different bodies; 16 schools are governmental schools, one is an UNRWA school, and 22 are private schools (PCBS, 2006).

The data also showed that there are 526 classes, of which 284 classes in Bethlehem, 130 classes in Beit Sahour, and 112 classes in Beit Jala. The classes are distributed by gender as follows: 161 classes for males, 141 classes for females, and 224 classes for co-education.

The Directorate of Education in the Bethlehem Governorate indicated that for the scholastic year 2005/2006 in the study area, the average number of students per teacher in schools was 21.6 students per teacher. This ratio varied according to the managing authority, as it was the highest in the UNRWA schools where the ratio was 27.8 students/teacher, followed by the governmental schools where the ratio was 21.9 students/teacher, then by the private school where the ratio was 15 students/teacher.

The average number of students per classroom in the study area for the same scholastic year (2005/2006) was 31.7 students per classroom; this ratio was 36.9 in governmental schools, 33.9 in UNRWA schools, and 24.4 in private schools.

As is evident from these figures, the classes are relatively crowded and lack enough teachers to meet preferable standards in education. Additionally, some schools have been forced to implement a 'shift system,' consisting of a morning shift and an evening shift to cope with the large number of students. These problems may negatively effect the students as well as the teachers themselves, thus causing problems in educating the young generation and affecting their conduct within their society.

Health Care Status

In the Bethlehem Governorate in 2004 there were 9 hospitals that had a capacity for 626 beds. There were 1.2 doctors per 1000 of population and 1.7 nurses per 1000 person.

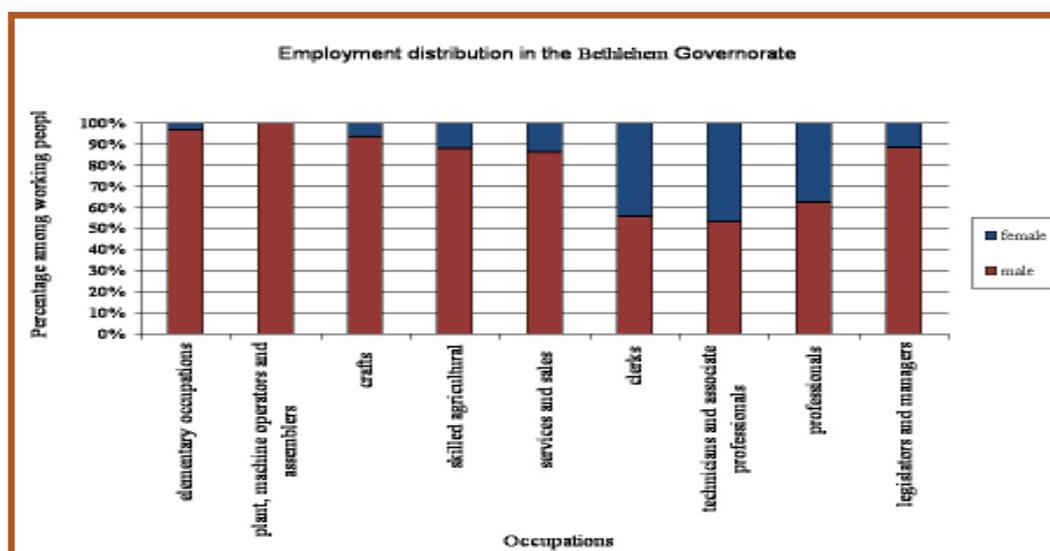
Health Care Indicators in Bethlehem Governorate					
Year	2000	2001	2002	2003	2004
No. of hospitals	9	9	9	9	9
No. of hospital beds	605	602	645	629	629
No. of hospital beds per 1000 of population	12	11.5	11.9	11.2	11
Physician per 1000 of population	1.1	1.1	1.1	1.2	1.2
Nurses per 1000 of population	2.7	1.6	1.6	1.7	1.7

Labor Force

The 1997 Census showed that of the population in the Bethlehem Governorate 38.9% of those 10 years and above were economically active while 60.5% were not. This was divided into students (44.7%), housewives (43.1%), people unable to work (6.4%), and people not working and not looking for work (6.4%).

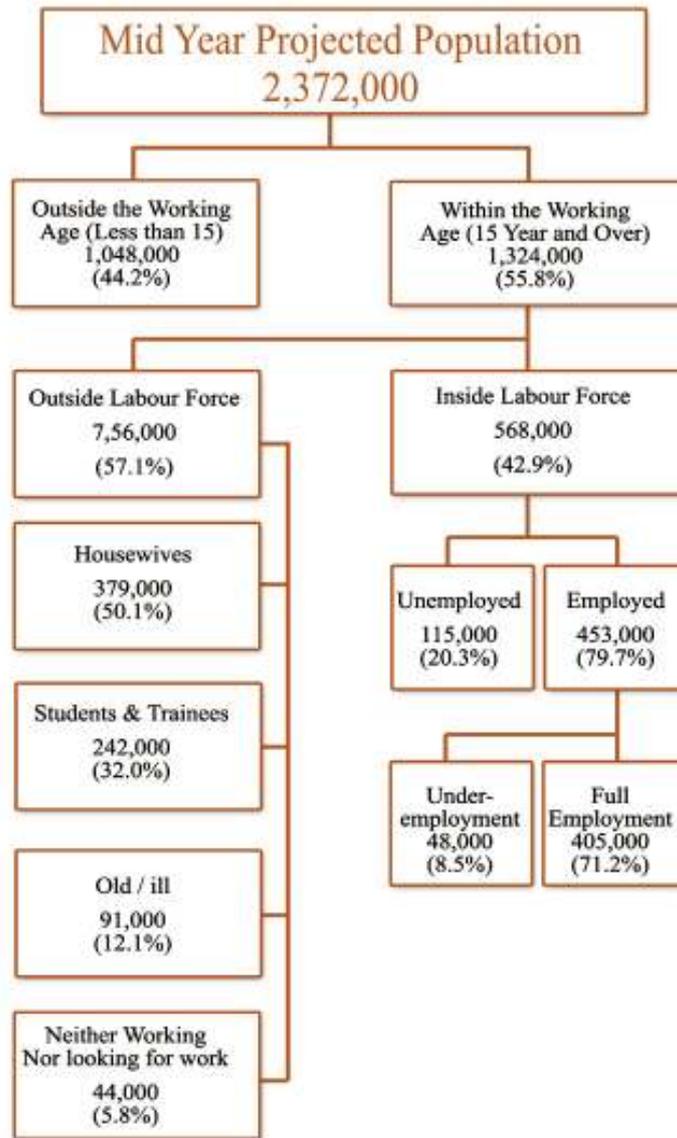
In Bethlehem Governorate 30% of the economically active people work in elementary occupations, 28% in crafts and related work, 12% in services and sales, 7% as technicians and associate professionals, 7% as professionals, 5% as plant machine operators and assembly, 4% as clerks, 3% as legislators and managers, and 3% as skilled agricultural workers.

According to the 1997 Census, 59% of working women are working as professionals, associate professionals and technicians, legislators and managers, and clerks. These occupations demand a diploma or a university degree. Meanwhile, 45% of the working men are employed in elementary occupations, in crafts, and in the services and sales sectors which demand skilled manual labor.



After the outbreak of the second Intifada at the end of 2000, the Palestinian labor market faced several setbacks due to the Israeli restrictions on movement of people and goods. In 2005, the PCBS published the annual report of the labor force survey. The results revealed that in 2005 the unemployment rate reached 23.5% in the OPT. The unemployment rate was higher for the males than for females with males at 23.7% and females at 22.3%. The results show that unemployment is concentrated among the youth aged 15-24 years where their percentage reached 34.8%. In the West Bank, the unemployment rate reached 20.3%. The figure below indicates the labor force framework in the West Bank in 2005.

Labour Force Framework in the West Bank: 2005



(Source: Labour Force Survey Annual Report: 2005 - PCBS, 2006)

In the Bethlehem Governorate 60.7% of the population who are within working age (15 years and above) are outside of the labor market. This percentage is considered to be very high. 52.5% of the people who are outside the labor market are housewives, 32.4% are students, 9.6% are either old or ill, and 5.5% are outside the labor force market for unspecified reasons (PCBS, 2005). Because the methodology and assumptions used in the 1997 Census were different than the ones used in the 2005-Labor Force Survey, comparisons between them have not been made.

Labor Force Status, 2005						
Bethlehem Governorate	Percentage of population Outside of the Labor Force			Percentage of Population Inside the Labor Force		
	Total	Females	Males	Total	Females	Males
	60.7%	89.2%	32.5%	39.3%	10.8%	67.5%

In Bethlehem Governorate 12.4% of the people within the working age (15 and above) and who are in the labor force are unemployed. As for the people who are employed 27.1% of them are working in services and similar branches, 25.2% are working in the construction sector and 20.5% are working in the mining, quarrying and manufacturing sectors.

Economic Activity	Percentage From Employed Population (2005)
Agriculture, hunting and fishing	7.7%
Mining, quarrying and manufacturing	20.5%
Construction	25.2%
Commerce, Hotels and restaurants	14.0%
Transportation, storage and communication	5.5%
Services and other branches	27.1%

Infrastructure

The results of the 1997 Census with regard to the basic infrastructure in the cities of Bethlehem, Beit Jala, and Beit Sahour indicated that 98.4% of all housing units were connected to the public water network. In addition, 99.3% were connected to the public electrical networks. With regards to the sewage network, only 45.1% of all housing units were connected to the public sewage system, 54.3% of housing units are connected with cesspits, and 0.3% of housing units have no sewage system. During the interviews with decision makers in the municipalities, they indicated that the percentage of housing units connected to the public sewage system has increased as infrastructure projects were conducted during the past years covering about 90% of the total population of the three municipalities. Also, the public water network in the three municipalities now covers the whole population.

It is important to mention that even if 100% of the housing units are connected to the public network, the water supply is irregular. At times the interruptions in the water supply last for days, especially in summertime. The shortage in the water supply is a national problem resulting from the occupation. The Israeli government has absolute control over water resources and the Palestinians are not granted their water rights either in the surface water resources (mainly the Jordan River) or the groundwater resources. The per capita water consumption in the OPT in the year 2000 was 80 liters per day (Aljazeera Net, 2001) while in the year 2003 it was 94 liters per day (PWA, 2003). This value is nearly half of the minimum level of water consumption level recommended by the World Health Organization (WHO) which is 150 liters per day. In the year 2000, the average per capita Israeli water consumption was 3-4 times more than the Palestinian per capita consumption.

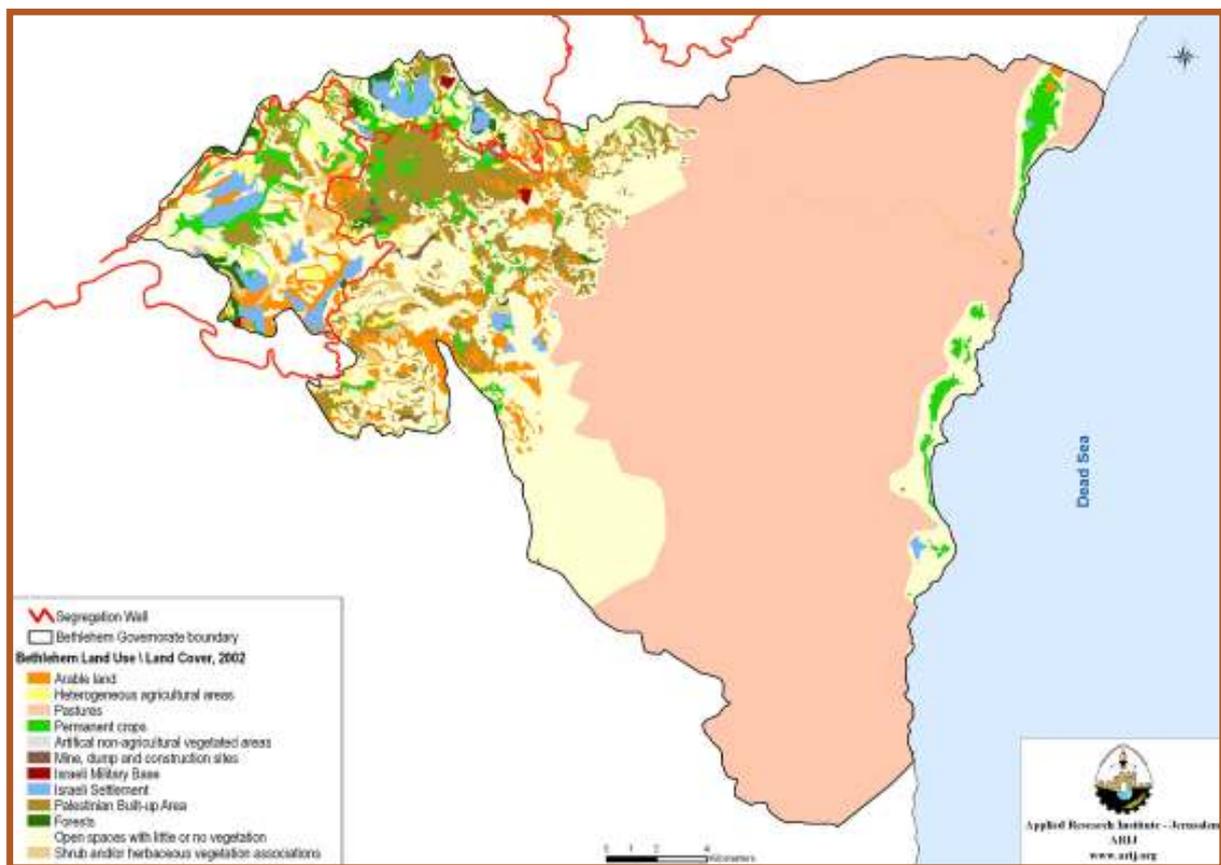
The Bethlehem Governorate is located above the Eastern and Western Basins of the West Bank Mountain Aquifer. The available renewable water resources in Bethlehem Governorate consist primarily of groundwater and surface water; however, due to the political situation, Palestinians have little access to these resources. The total water consumption of Bethlehem Governorate is nearly 7.761 Million Cubic Meters (MCM), whereas only 2.599 MCM is locally provided, this lead to shortage of nearly 5.162 MCM (PWA, 2005).

Land use/Land cover and Natural resources

Land Cover in the Bethlehem Governorate

Analysis of the land cover in Bethlehem Governorate indicated that:

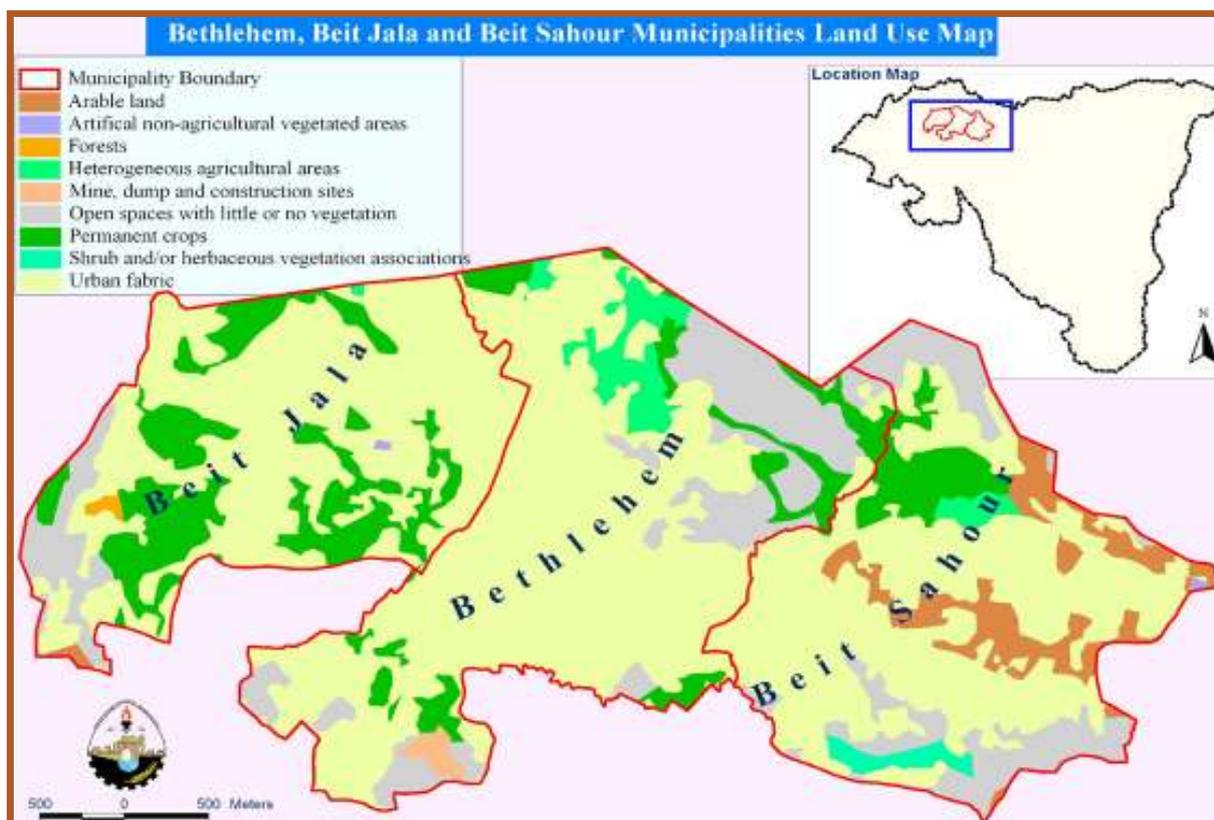
- 59.2% of the Governorate's land is classified as pastures located largely in the eastern plains
- 22.6% is classified as open spaces with little or no vegetation located largely in the southeastern part of the Governorate
- 8.2% is agricultural land and this is located in the middle and western parts of the Governorate as well as along the western shores of the Dead Sea.
- 5.7% is Palestinian built-up area and is mainly clustered in the middle and western parts of the Governorate
- 2% is forest and semi-natural areas found mainly in the western part of the Governorate
- 1.9% is the built-up area of Israeli settlements
- 0.2% is classified as mine, dump, or construction sites
- 0.1% is Israeli military bases



Land Cover in the Study Area

Analysis of the land cover inside the three municipalities revealed that the built up area makes up around 64% of the municipal area. In the municipality of Bethlehem, 13.6% of the municipal lands are agricultural lands and are located in the northern and southern parts, 18.3% is open space and is located in the northeastern part of the municipality, and 1% is stone quarry. In Beit Jala 24.9% of the total area is for agricultural purposes and is located in the western and southern parts of the municipality, 0.5% is forest which is in the western part, and only 6.8% is open space located at the southwestern periphery of the municipality. In Beit Sahour 20.6% of the

municipal land is used for agriculture in the middle and northern parts of the municipality, 2.2% are shrub and/or herbaceous vegetation associations located in the southern part of the municipality, and 19.9% of the municipality lands are open spaces located in northwestern and southern parts of the municipality.



Land Cover	Bethlehem Municipality		Beit Jala Municipality		Beit Sahour Municipality	
	Area (in Dunum)	% from Total Muni. Area	Area (in Dunum)	% from Total Muni. Area	Area (in Dunum)	% from Total Muni. Area
Arable land	N/A	N/A	18	0.4%	593	12.4%
Heterogeneous agricultural areas	305	5.0%	6	0.1%	72	1.5%
Permanent crops	527	8.6%	1,086	24.4%	319	6.7%
Shrub and/or herbaceous vegetation associations	N/A	N/A	N/A	N/A	103	2.2%
Forests	N/A	N/A	22	0.5%	N/A	N/A
Artificial non-agricultural vegetated areas	N/A	N/A	5	0.1%	7	0.1%
Mine, dump & construction sites	61	1.0%	N/A	N/A	N/A	N/A
Open spaces with little or no vegetation	1,114	18.3%	303	6.8%	950	19.9%
Urban fabric	4,093	67.1%	3,020	67.7%	2,736	57.2%
Total	6,100		4,460		4,780	

Classification of Lands Isolated by the Segregation Plan

Due to the segregation plan, the Israeli government is imposing in the West Bank, 59.2% of the land located in the Bethlehem Governorate will be segregated; 12% in the Western Segregation Zone west of the Wall, and 47.2% in the Eastern Segregation Zone. The table below indicates the land use/land cover of the segregated areas in the Bethlehem Governorate and their percentages from the total Governorate's area.

Land Use/Land Cover	Total Area of Bethlehem Governorate (Dunum)	Area Segregated in the Western Segregation Zone(Dunum)	Area Segregated in the Eastern Segregation Zone (Dunum)	Total area Segregated in the Eastern and Western Segregation Zones	Percentage of Segregated Areas from Bethlehem Governorate
Agricultural Lands	49,934	20,577	5,486	26,063	52.2%
Forests and Semi-Natural Areas	12,386	7,476	779	8,255	66.6%
Open Spaces With Little or No Vegetation	137,629	28,955	16,177	45,132	32.8%
Pastures	359,998	0	263,761	263,761	73.3%
Mine, Dump & Construction	1,097	0	0	0	0.0%
Playgrounds	29	0	0	0	0.0%
Palestinian Built-Up Area	34,685	5732	0	5,732	16.5%
Israeli Settlement	11,449	10,084	401	10,485	91.6%
Israeli Military Base	653	402	12	414	63.4%
Total Area	607,860	73,226	286,616	359,842	59.2%

Agricultural Areas

In the Bethlehem Governorate 52.2% of the total agricultural area will become inaccessible for the Palestinian residents. The western part of Bethlehem's area receives a relatively high average annual rainfall of 550-600 mm (ARIJ Database, 2005). The area is mainly planted with rain-fed field crops (wheat and barley), fruit trees (olive groves, vineyards), and irrigated agriculture.

Furthermore, 73.3% of the total pastures in Bethlehem Governorate will be segregated in the Eastern Segregation Zone. The segregation of these lands would impose further pressure on raising livestock and the availability and prices of livestock products in the Bethlehem Governorate.

Forests and Biodiversity

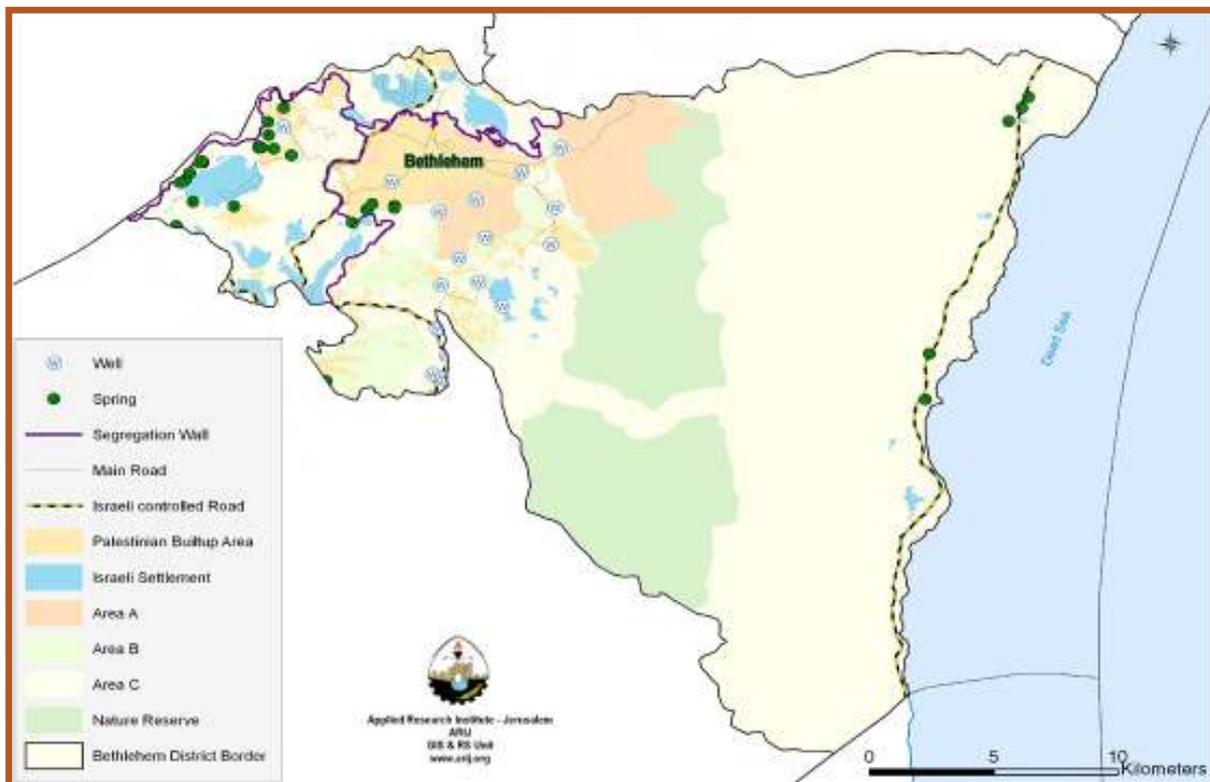
The segregation zone in the Bethlehem Governorate would cause isolation and fragmentation of forested areas. The forests are considered major recreational areas and are mainly concentrated in the western part of the Bethlehem Governorate where 7,476 dunums of forested and semi-natural area would be isolated between the Western Segregation Wall and the Green line. In addition to that, 779 dunums will be segregated in the Eastern Segregation Zone. 66.6% of the forested and semi-natural areas in the Bethlehem Governorate which will be isolated. Most of these forests were planted during the British Mandate and Jordanian Administration while a small percentage was made up of remnants of natural forests.

The Segregation Wall will disrupt the contiguity of the landscape, the movement of biota, and will threaten plant species that grow naturally in the area. The Israeli unilateral segregation plan will exacerbate long-term trends of environmental degradation in the area and may potentially have adverse impacts on ecosystem management and securing the protection of habitats.

Water Resources

Most of the isolated Palestinian lands west of the Segregation Wall in Bethlehem fall on the western basin of the West Bank aquifer. This aquifer basin contains more than 18 groundwater springs and wells, which supply the area with water for irrigation and other uses. Such isolation would risk increasing the water shortage problem in the Governorate.

Water Resources in Bethlehem Governorate

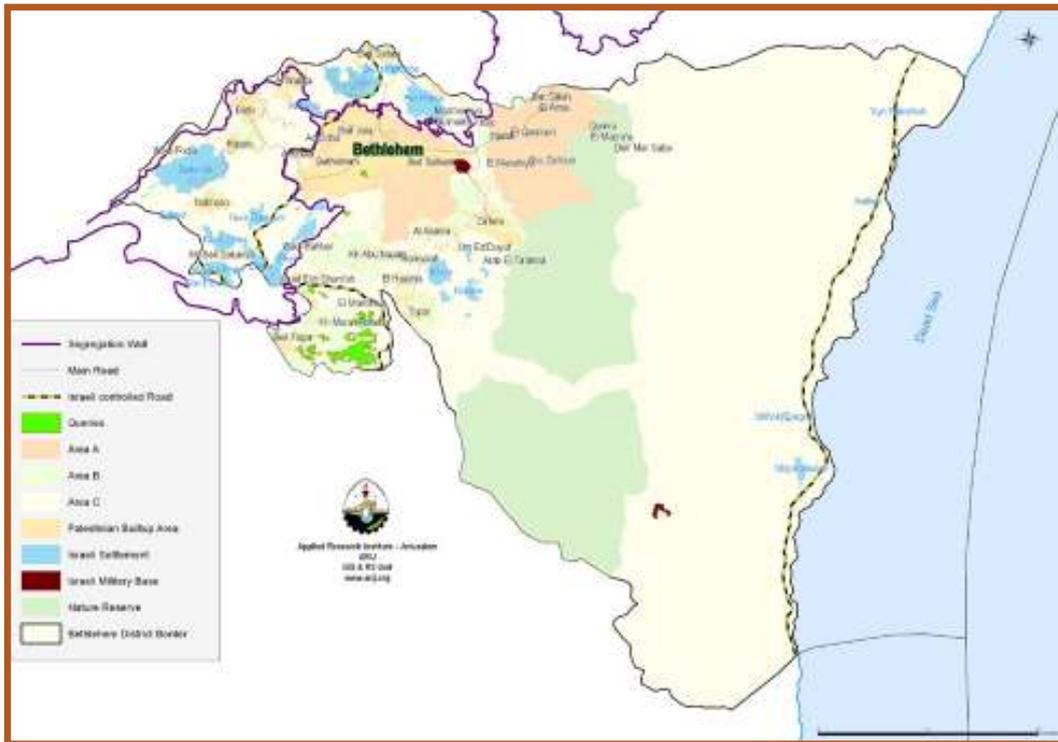


Natural Resources in Bethlehem Governorate

Stone is considered to be an important natural resource in Bethlehem. There are 32 stone and marble quarries in the Governorate. These are mainly located in the towns of Beit Fajar and Marah Rabah in the southern area of the Governorate.

The stone and marble industry is distinguished for employing a considerable percentage of the working force in the West Bank; nearly 19% of the workers engaged in the stone and marble sector are from the Bethlehem Governorate, (USM, 2003). 20.5% of the employed people in Bethlehem work in the mining, quarrying, and manufacturing sectors.

Quarries in Bethlehem Governorate



Prospects of Sustainable Development in Bethlehem Governorate

Political constraints imposed by the Israeli military occupation on the West Bank and Gaza Strip are the main causes for hindering the implementation of sustainable development in Palestine. Over the last 40 years of occupation the Israeli authority has been able to control and seize large quantities of open land, fertile agricultural regions, water, and other natural resources. These actions have been committed parallel to the Occupation preventing the Palestinians from having a viable economic base. Forms of prevention vary but follow the general lines of obstructing Palestinians from developing cities and towns, destroying infrastructure facilities developed by the PNA after 1993, demolishing private properties, as well as fragmenting the land space through the presence of checkpoints, settlements, by-pass roads, and the segregation barrier's.

These occupation practices have resulted in resource depletion, shortage in fresh water supplies, increases in unemployment, increases in poverty, decreases in agricultural production, and an incapacity for the PNA to adequately fund and develop public infrastructure. If the current situation persists it will be increasingly difficult for the Palestinian authority to implement sustainable development and address the many social, demographic, economic, and environmental challenges Palestine faces.

In the Bethlehem Governorate, the population density is expected to increase significantly as a result of high population growth and the Israeli unilateral plan of disengagement whereby 59.2% of the Governorate's lands will become inaccessible to Palestinians. Increasing population densities will place additional pressure on the Governorate's already weak infrastructure facilities which are deficient in meeting both the current and future projected needs of the local Palestinians.

Although some indicators such as the fertility and child mortality rates have decreased (after the PNA assumed control over parts of the WB and GS), these need to be accompanied by consistent policies to improve the quality of life for the people. Particular focus should be given to addressing unemployment, poverty, institutional and legislative reform, and effective environmental management. That said, the ongoing occupation and denial of Palestinian environmental sovereignty will continue to prevent the PNA from acting effectively as well as denying many of the expected benefits continued donor aid might achieve.

Part Two

Problems faced by the Municipalities of Bethlehem, Beit Jala, and Beit Sahour



Analysis of the Role of the Municipalities and the Problems Faced by Them

In order to analyze the role of the municipalities and the problems faced by them, a series of interviews and roundtable meetings were conducted with the decision makers at the municipalities and with the directorate of Local Government in the Bethlehem Governorate. The latter is the organizing and monitoring body for the performance of the municipalities and village councils under their jurisdiction. During the interviews and roundtable meetings information about the adopted strategies and plans by the three municipalities was obtained.

A review was also made of the laws and mandates that govern the municipalities to compare the compliance of the municipalities with these laws. The data collected and reviewed from the three national plans and the literature review of relevant population dynamics, sustainable land use, environmental management, and urban governance policies that were conducted were also used as a guideline to form the framework of analysis.

A questionnaire was prepared to be discussed with the municipal executive staff and decision makers in the municipalities of Bethlehem, Beit Sahour, and Beit Jala. The questions were divided into three parts and directed to the different departments in the municipality; the administrative department, the planning department, and the environmental department.

Another questionnaire was prepared for the local government directorate in the Bethlehem Governorate. The questions aimed to investigate the level of cooperation of the municipalities with the local government, the compliance of the municipalities with the national development policies, the inclusion of the public in the decision making process, the main hindrances to sustainable development, and policies that can be adopted under a changing political condition among other issues.

The analysis was divided into four sections according to the sectors and issues that the analysis tackled. The issues addressed were divided into the following:

- Municipal administrative and financial management
- Urban growth, land and infrastructure management
- Urban environmental management
- Demographic dynamics

In each section the main problems that the municipalities suffer from are listed. An example of incidents mentioned by the decision makers that helped in generating the conclusion of that problem/issue is then listed.

Problems Faced by the Municipalities

- **Municipal Administrative and Financial Management**

- **Administrative**

- Weakness of an executive body to enforce the legislations and prevent violations.
 - Weakness of a legal system to support the execution of laws.
 - Lack of coordination between the different departments, ministries, and institutions.

- The municipalities of Bethlehem, Beit Jala, and Beit Sahour were ignorant of the existence of the Palestinian Development Plan, the National Policies for Physical Development, and the Palestinian Environmental Strategy.
- The Ministry of Local Governance in Bethlehem had no idea about the previously mentioned plans either.
- There is a lack of coordination between decision makers at the national level and the personnel implementing these decisions at the local levels in Bethlehem, Beit Jala, and Beit Sahour.
- Initiatives of coordination between municipalities are directed towards service provision and not planning (Joint Service Committee).
- Information is not channeled from one level to another.
 - The three national development plans did not trickle from the national level to the local level; a structure of information dissemination and channeling from one level of action to another is absent. There is no mechanism of information channeling from one level to another or from one body to another. The public in Bethlehem, Beit Sahour, and Beit Jala have access only to general data such as statistics, budgets, and projects, but do not have access to the details of the data.
- There is a great need to decentralize the decision making process.
 - Concerning public participation, the municipality of Beit Sahour usually includes the public in decision making. Such examples include the establishment of sanitary sewers or street reconstruction. The municipality convenes with the people concerned and discusses issues related to the project and takes into consideration their recommendations. On the other hand, just one out of the 31 persons who filled the community questionnaire and lived in Beit Sahour said that the municipality refers to public participation in the decision making process.
- The lack of a clear internal evaluation strategy for the approaches that the municipality undertakes towards projects.
 - The ministry of local government monitors the financial issues in the municipality. Nevertheless, municipalities indicated that the personnel from the local government delegated to do the financial monitoring need to have more professional capacities.
 - There are no follow-up actions from either the local or national levels on projects funded by donors and the consistency of the projects with national policies and strategies.
- There is a lack of professionals at the local level to develop or implement strategies.
 - The three municipalities indicated that one of the main reasons they lack updated clear strategies is because they lack professionals to draft or implement such strategies.

- Employees in the municipalities are seldom sent to capacity-building courses or training due to the budget shortages or the work overload that the employees are facing. When employees are sent to these courses, the decision makers indicated that often times the wrong person is given the appropriate capacity-building course or training. They also indicated that decisions regarding which employee will take the training or course are arbitrary and are up to the municipality council members to decide.
- There is no mechanism for the review or update of the structure of the municipality and no evaluation for the current structure.
 - At the same time, there is an initiative embraced by the municipality of Bethlehem to develop a manual of the municipal structure and adopt the ISO standards for organization and management. However this manual is still in progress and has yet to be adopted.
 - In the interview with the local government the decision makers indicated that each municipality has a clear structure that is approved by the ministry of the local government and that the municipalities must abide by that.
- Women should be more represented in the decision making positions.
 - The local councils' election law demands that 20% of the seats are to be allocated for women. In Beit Sahour, 23% of the council members and 25% of the employees are women. In Bethlehem, 33% of the unit directors are women.

Financial

- Municipalities suffer from deficiencies in their budgets.
- The allocated budget for the municipality does not cover the expenses and there is a problem with collecting bills.
 - The budgets of the three municipalities lack developmental entries.
- There is no enforcement on collecting the taxes, though incentives are provided for those who pay in the first months of the year (January and February). Taxes are collected by the central government's (Ministry of Finance "MOF") and then the money is transferred to the local level. There are often times delays in transferring this money to the local level. (The money transferred to the municipality is the tax revenue and the transportation tax).
- The donors impose their agendas on the municipalities and direct their programs and projects funds that had been earmarked for infrastructure or emergency projects.
- No incentives are provided to the private sector, and there is no cooperation between the private and public sectors.
- The municipalities indicated that there is no equitable distribution of financial resources from the central government to the municipalities.

- **Urban growth and infrastructure Management**

- The lack of strategy or plan for physical development on the local level and the regional level.

On the local level

- Beit Sahour and Bethlehem are working on an emergency plan to solve the pressing needs according to their perceived priorities and dealing with issues as they emerge but lack a clear strategy or plan (i.e. curative instead of preventive). Beit Jala possesses a three year plan.

On the regional level

- There is also a lack of a strategy on the regional level. The Directorate of the local government in Bethlehem indicated that there are no regional plans in the Bethlehem Governorate. Rather, each local entity develops its own plans that are approved by the ministry of local government.

At the same time, the three municipalities think that the central government lacks a clear method to evaluate and prioritize projects from the different districts. The central government takes a top-down approach towards the municipalities where it determines for them what kind of projects are to be implemented in their domain.

However, Beit Sahour indicated that the local government consulted them when formulating the five year plan. The municipality submitted a list of projects needed in the area and their prioritization.

- The lack of updated master plans.

Beit Sahour does not have a master plan, though Bethlehem is in the process of preparing one, and Beit Jala has a master plan that was drafted in 1987, though it has not been updated. Beit Jala also indicated that a strategic regional plan for the three cities was developed in 1999 by an Argentinean group; however Bethlehem and Beit Sahour made no mention of it.

- The lack of qualified professionals to draft development plans and master plans at the local or regional levels, as well as the lack of sufficient budgets that would enable them to perform such plans has hampered such efforts.

The three municipalities, as well as the directorate of the local government, indicated that the lack of professionals and budgets are two of the main obstacles to the development of the physical plans at the regional and local levels. The local government has recently adopted a training program in the planning and managerial domains.

- Urban growth is not directed in a specific direction, largely because it has become difficult to maintain protected areas under the current constraints and shortage of land.

- In Beit Sahour, there is no zoning for agricultural, industrial, residential, recreational, and other purposes due to the absence of a master plan and the absence of an executive body to enforce compliance with the land uses and building codes.

- As a result of uncontrolled urban growth, the holy places in the region are not well protected (for example, the Shepherds' Field in Beit Sahour).
- The uncontrolled urban growth has resulted in the fragmentation of farmlands.
- There is a lack of sufficient information about socioeconomic and environmental indices at the municipal level.

As part of developing sound and applicable plans, enough updated information should be collected at the local and regional levels to be able to assess the current situation and develop plans accordingly. The three municipalities indicated that they do not have updated databases. The main reason for that is the lack of a budget for information collection, data entry, and analysis. However, in the last workshop with the decision makers, personnel from Beit Sahour indicated that they are in the process of creating a database.

- The deficiencies in the budgets to develop and implement plans.
 - The deficiencies in the budget of other ministries and bodies such as the Palestinian Water Authority (PWA) and the electricity company constitute further impediments to integrated planning.
- The unstable political condition, characterized by Israeli occupation practices in the West Bank, make it even harder for the municipalities and local government to draft and implement developmental plans at the regional and local levels.
- The current legislations and laws concerning the mandates of the municipalities and the building and planning codes were adapted from laws that were drafted by Jordanian and Egyptian administrations during the 1960s, and consequently, some articles of these legislations are outdated.
- Land registration is not yet complete.
 - This is a national problem in the Occupied Palestinian Territory, arising in a large part from the consecutive non-Palestinian governors who ruled and administered the area. From the Ottoman rule, to the British mandate, to the Jordanian administrative rule, and finally to the Israeli occupation, there has been no consistent organized land registration. The Palestinian National Authority is currently in the process of registering the land in areas A and B. Land in area C, though, is still subject to the Israeli 'Civil Administration' where fees for land registration are very high and reach up to 9% of the value of the land.
 - Most of the lands in the municipal jurisdiction are privately owned, which makes it harder for municipal or governmental bodies to implement large scale projects, unless they buy pieces of lands, which in turn would increase the costs of the projects.
- Donors target certain municipalities with specific projects and the municipalities, having no other sustainable funding for implementing projects, often adopt these projects without assessing them with regard to the needs, priorities, and impacts in the region.
- **Assessment of infrastructure.**
 - The three municipalities agreed that schools, electricity, streets, health clinics, public transportation, garbage collection, and street cleaning services are considered 'good' services in regard to quality and quantity, but they require consistent funding for maintenance and rehabilitation.
 - The water network pipes are worn out, need rehabilitation, and in some cases replacement. The current water network has been in poor condition since the onset of the Israeli occupation.

- The sewage network has to be connected to places where people are still dependent on cesspits.
- The drainage system in the streets is insufficient and their locations need to be reevaluated.
- Both Bethlehem and Beit Sahour consider the street lighting to be insufficient and in need of enhancement (Beit Jala, however, considers this utility to be an excellent one).
- The municipalities indicated that their maintenance departments would function far better if their equipment was enhanced and the number of qualified maintenance personnel was increased.

Presence of other services

- Bethlehem and Beit Sahour lack public libraries, though Beit Jala has recently opened one.
- There is a lack of public parks.
- The three municipalities consider the number of kindergartens and nurseries, as well as the number of universities and academic faculties, to be sufficient, but these facilities are in need of continuous improvements.
- There are few orphanages and facilities for the care of the elderly.

Urban Environmental Management

- There is no special department for urban environmental management.
- Beit Sahour is the only municipality that has an environmental management department, but the department is functioning poorly due to political constraints.
- Both Bethlehem and Beit Jala lack an environmental department; however, they have a department that is responsible for monitoring the health conditions in the municipalities and testing water quality. In Beit Jala there is also a specialized employee who is responsible for the care of the water springs at the fringes of the city.
- Since there are no active environmental departments at the three municipalities or in the directorate of local government, there are no clear strategies or plans for addressing the current environmental issues or mitigation actions to reduce the environmental problems.
- There is no follow-up for the environmental strategies on the regional and local levels.
- The Palestinian environmental strategy results and recommendations were not delivered to the municipalities or to the directorate of the local government in Bethlehem.
- With regard to solid waste the municipality collects the waste and moves it to the dumpsite at Abu Dees, northwest of Bethlehem.
- The municipalities have to pay for each truckload of solid waste delivered at Abu Dees dumpsite, in addition to the transportation fees which increase the costs of collecting and dumping the solid waste. Furthermore, there are no mechanisms to separate medical and industrial waste from domestic waste.
- The wastewater is collected and dumped in the Wadi El Nar Valley (away from the built-up areas) without any treatment.

- There were initiatives in the Governorate to construct a treatment plant for the solid waste and wastewater, but the Israeli authorities who have total control over area C in the West Bank have turned down these plans.
- No Environmental Impact Assessment (EIA) has been applied to the projects taking place in the municipalities, except for the industrial projects which have to submit an EIA to the ministry of environmental protection.
- Only Beit Jala enforces healthy authorized slaughter guidelines.
- **Demographic Dynamics**
- There is no clear strategy or plan in the municipalities that would specifically deal with demographic issues.
 - Bethlehem and Beit Sahour are of the opinion that the demographic structure of the population will not hinder efforts of sustainable development. On the other hand, Beit Jala believes that its demographic structure will not lead to sustainable development if no clear strategies are developed and implemented in the near future.
 - The Directorate of Local Government indicated that there is a national committee for combating poverty headed by the Ministry of Planning and the UNDP/PAPP. This committee is working in cooperation with local NGOs and with the MOLG. The committee aims at preparing a participatory poverty assessment, developing strategies to combat poverty, and implementing these strategies.
 - There are some local initiatives to reduce urban poverty. Several income generating projects have been implemented by the municipalities in cooperation and partnership with other institutions like the Palestinian Agricultural Relief Committees (PARC) and United Nations Development Program (UNDP). These projects are intended to help the urban poor. One example of these projects is the home garden one.
- The municipalities support women's organizations by helping them apply for and obtain funds and/or grants.
- There have been initiatives of cooperation between the municipalities and the local civil society organizations which assist on the local level in raising the public awareness. Decision making has proved stronger when associated with community based organizations that provide the municipalities with recommendations and assess the needs of the local communities.

Part Three

Citizens' Perception of the Municipality Role



A questionnaire was designed to assess the citizens' perception of the policies of the municipalities and the quality of public services. This included the citizens' awareness and knowledge of issues related to sustainable development, demography, urban environmental management, and the structural organization of different governmental bodies among other issues.

The citizen questionnaire was designed by the research team. The data collected and reviewed from the three national plans, together with the internationally recommended practices in the fields of demography, urban management, sustainability, and urban environmental management were used as guidelines for formulating the citizens' questionnaire.

A sample of 97 persons from the study area completed the questionnaire. The sample was selected randomly from people working in governmental and non governmental organization, students, workers, housewives, shopkeepers, and unemployed persons. The questionnaire consists of 51 questions that tackle the following issues:

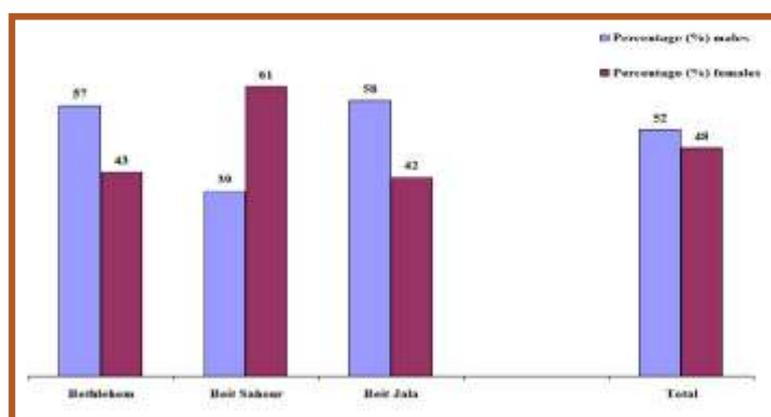
- General national and municipal policies
- The quality and accessibility of services
- Addressing the needs of the population
- Environmental policies
- Public participation

The citizen questionnaire was translated from Arabic to English and entered into the Statistical Program for the Social Sciences (SPSS) software. The data produced by SPSS was entered into Excel where figures and diagrams were generated and analyzed.

Main findings

General information of the questionnaire fillers

97 persons from Bethlehem (30.9%), Beit Jala (32%), and Beit Sahour (37.1%) filled out the questionnaire. 51.5% of the questionnaire fillers were males and 48.5% were females. 79% of the questionnaire were filled by persons between 15 to 51 years of age.



Study sample distribution by Area and Gender

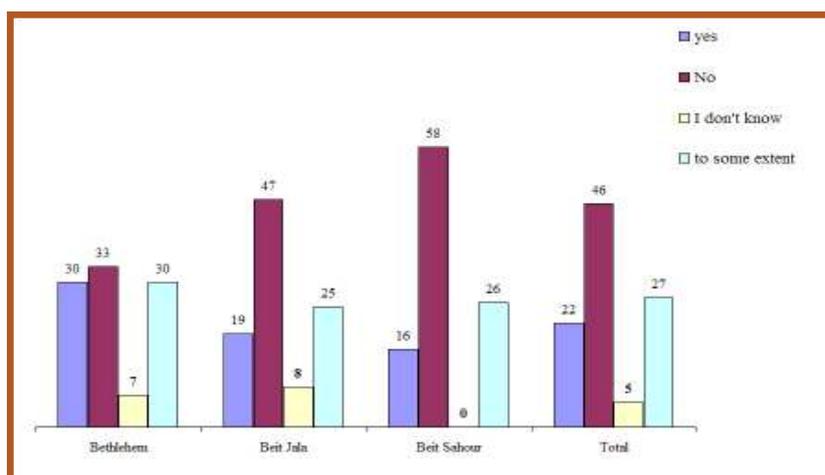
Study Sample by Area of Residence		
Living Area	Frequency	(%) Percentage
Bethlehem	30	30.9%
Beit Sahour	36	37.1%
Beit Jala	31	32.0%
Total	97	100%

Study Sample by Age Groups		
Age Groups	Frequency	(%) Percentage
15-25	30	30.93%
26-30	16	16.49%
31-40	31	31.96%
41-50	12	12.37%
51-60	5	5.16%
61-70	2	2.07%
71-110	1	1.03%
Total	97	100%

- General national and municipal policies**

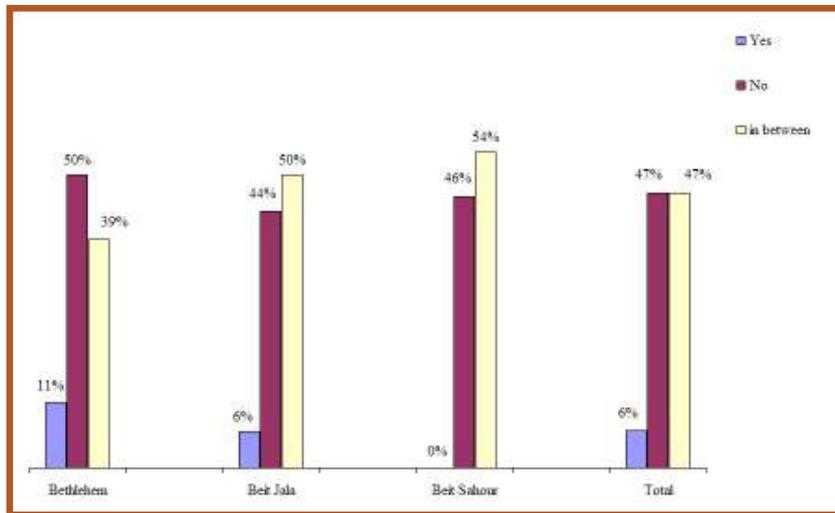
- 74% of those who took the questionnaire had not heard about the National Development Plans. The 10% who had heard about them did so through the television, newspaper, public lectures by specialized institutes, and/or from the MOLG. 70% out of the 10% who heard about the plans were females.

- 52.6% of the people who took the questionnaire either were not aware of the planning and building codes or were unsure. 67% of the people who were aware of the planning and building codes were males.



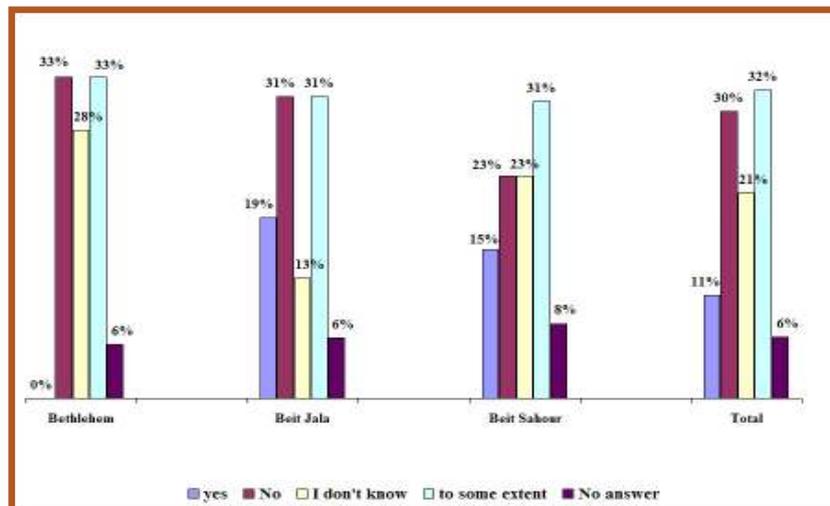
Awareness of the Planning and Building Codes

- Only 6% indicated that citizens abide by the planning and building codes. More than two-thirds of the respondents who indicated that citizens do not abide by the codes and laws were men.



Citizens Abidance by the Building Laws

- Only 4.12% of the questionnaire takers believed that the municipalities deal appropriately with code violations. During interviews and roundtable meetings, officials indicated that the main problem they face in enforcing the laws is the weakness of the executive body. Even if the municipality takes a court order against those who break the law, the order will not be executed, due largely to the political situation.

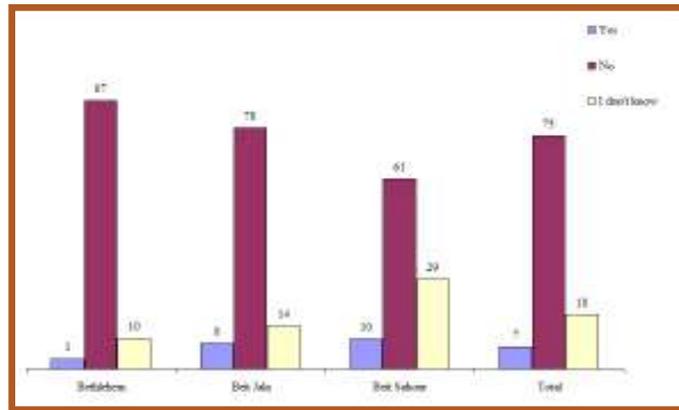


Municipality Abidance by the Planning and Building Laws

People's suggestions for methods the municipality can use to implement the building codes were to consider the community needs more seriously, apply the law to everyone equally, communicate with the public, impose higher financial penalties, adopt more efficient procedures, and use force to implement the law.

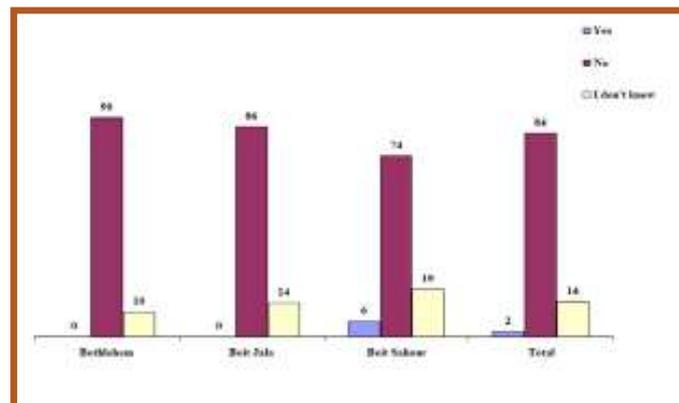
- 56% of the people who filled the questionnaire thought that there are no guiding policies for urban expansion while 16% thought there are guiding policies. Additionally, 59% did not know on what basis zoning and land uses are determined.

Awareness of the contents of the master plan



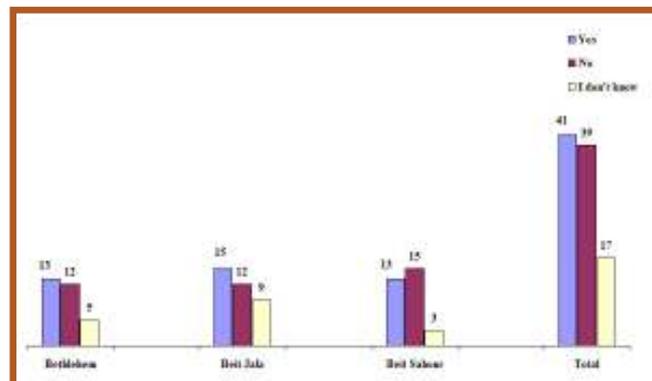
Awareness with the master plan contents

- 77% of those who took the questionnaire were not aware of the contents of the master plan in their area. Oddly enough, the highest percentage of respondents who indicated being aware of the contents of the master plan was in Beit Sahour, which entirely lacks one.
- None of the females who answered the questionnaire were aware of the contents of the local master plans.



Consultation with the public about the contents of the master plan

- 8.25% noted that the municipalities used participatory approaches while preparing the master plan. Of the 78.35% that indicated that they did not participate in the masterplan process, 52.63% of them were men.

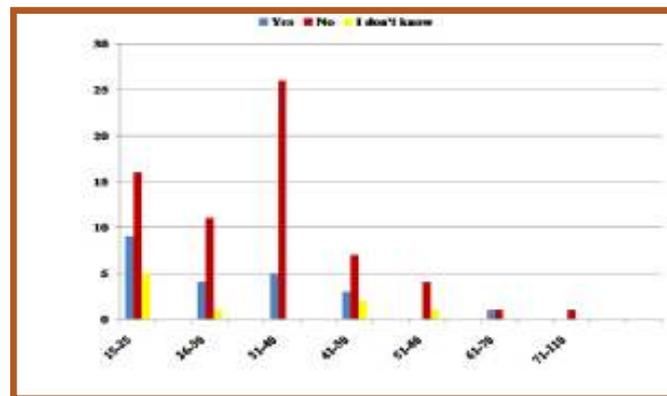


Readiness of the population structure to carry out development within the transitional political context

- 63% of the questionnaire takers did not know the procedures undertaken by the municipality when drafting the master plans. 55.67% stated that their municipalities did not make field surveys while preparing them.
- 20% indicated that the public is informed through the official and local newspapers about the contents of the master plan, 42% indicated that they are not informed, and 38% were unsure.
- 28% said that the municipalities allow the public the opportunity to inspect and make objections to the master plans, while 42% said they do not, and 30% were unsure.

Awareness of sustainable development concepts

- 68% of the people who filled out the questionnaire were ignorant of sustainable development concepts. 80% of them were in the age group between 15 and 40.
- 58% indicated that they do not know whether the sustainability concepts in the region of Bethlehem are being implemented or not, 18% said that the sustainability concepts are not being implemented, and 25% said they are being implemented.



Knowledge about sustainable development

- 42% of those who took questionnaire thought that the demographic and population structures are suitable for development within a transitional political context, while 40% indicated that the conditions are not suitable to carryout development, and 18% were unsure. The answers were similar among both males and females.

Transparency of Municipalities' Policies

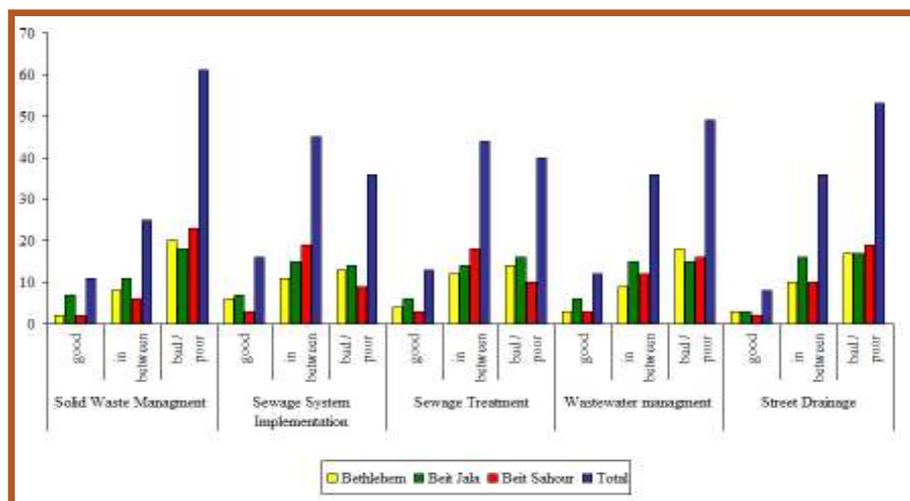


Transparency of the municipalities

- 70% indicated that they are ignorant of municipality budget allocation, and more than two-thirds of the respondents were unaware of how the budgets are being transferred from the national to the local level.

Credit Programs

- 20% indicated that there are ongoing credit programs which promote access to credit for the urban poor, 32% said there are no such programs, and 49% did not know.
- 43% thought that the ongoing credit programs which promote access to credit for the urban poor did not treat women and men equally.
- 2/3 of the residents believe that both private and non-governmental organizations should be responsible for programs that provide credit for shelter, whereas about 45% were unsure whether or not the municipalities provide such services in their programs.
- The quality of services and accessibility to them
 - Peoples' perceptions about the urban services in general ranged between "good" and "mediocre." However, 46% said that the hospitals are in poor condition and another 34% said that they are of only moderate quality. The complaints generally referred to road networks, water supply networks, garbage collection, street cleaning, street lighting, pedestrian routes, public parks, parking, shelters, public transportation, solid waste management, sewage treatment, wastewater treatment, and drainage in the streets.



Quality of Municipal services

Accessibility of public facilities					
Municipality	Does the municipality ensure the accessibility of public facilities to all individuals?				
	Yes	No	I don't know	No answer	Total
Bethlehem	10%	73.3%	13.3%	3.3%	100%
Beit Jala	27.8%	50%	22.2%	N/A	100%
Beit Sahour	41.9%	48.4%	9.7%	N/A	100%
Total	26.8%	56.7%	15.5%	1%	100%

- 57% indicated that the municipalities do not ensure the accessibility of public facilities to all individuals; the percentage was the highest in Bethlehem where 73.3% of the questionnaire takers indicated that accessibility to public services is not ensured to all individuals.

- Addressing the needs of the population

Municipality	Does the local government undertake actions to provide affordable housing?			
	Yes	No	I don't know	Total
Bethlehem	3.3%	73.3%	23.3%	100%
Beit Jala	N/A	66.7%	33.3%	100%
Beit Sahour	3.2%	74.2%	22.6%	100%
Total	2.1%	71.1%	26.8%	100%

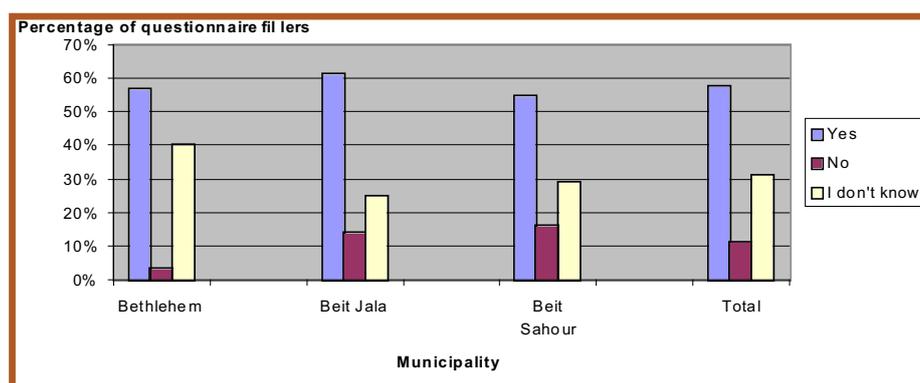
Affordable housing

- 71.1% of the respondents noted that the local government does not take actions to provide affordable housing. However, the directorate of local government in Bethlehem assured that this is one of the mandates of the Ministry of Housing.

Municipality	How do you judge the procedural and administrative steps of getting a building permit regarding the time it takes and the fees charged?				
	Good	In Between	Bad/Poor	No Answer	Total
Bethlehem	3.3%	46.7%	46.7%	3.3%	100%
Beit Jala	11.1%	47.2%	41.7%	N/A	100%
Beit Sahour	9.7%	48.4%	38.7%	3.2%	100%
Total	8.2%	47.4%	42.3%	2.1%	100%

Assessment of building license issue

- About 90% of the respondents asserted that the procedural and administrative steps of getting a building permit and/or registering land were bad or poor, particularly in regard to fees and time duration.



Steps in issuing licenses for building incorporate obstructions on the poor and/or on women

- 57.70% indicated that there is discrimination against women and the poor. While 56% of the study sample believed that there are no direct or indirect factors that prevent women from ownership/renting; only 43% of these respondents were women.

Do the development plans that are executed at the local level consider the future needs of Bethlehem population?					
	Yes	No	I don't know	No answer	Total
Bethlehem	6.7%	46.7%	43.3%	3.3%	100%
Beit Jala	5.6%	55.6%	38.9%	N/A	100%
Beit Sahour	16.1%	41.9%	41.9%	N/A	100%
Total	9.3%	48.5%	48.5%	1%	100%

Development plans and future needs

- Only 9.3% of the respondents thought that the plans that are executed at the local level consider the future needs of Bethlehem's population, while 48.5% indicated that the plans do not consider the future needs and another 48.5% were undecided or unsure. Moreover, 7% considered that the current legislations, regulations, and laws are consistent with the future needs of Bethlehem's urban population, 45% think that they are not.
- Furthermore, only 9.3% said that the municipalities adopted a set of procedures and steps toward sustaining the governorate's natural resources and historical heritage. 51.6% were unaware if the municipalities have done such actions or not.
- **Environmental policies**

Municipality	How well do you think you are informed about environmental issues and hazards?			
	Good	In between	Bad	Total
Bethlehem	10%	46.7%	43.3%	100%
Beit Jala	22.2%	50%	27.8%	100%
Beit Sahour	19.4%	51.6%	29%	100%
Total	17.5%	49.5%	33%	100%

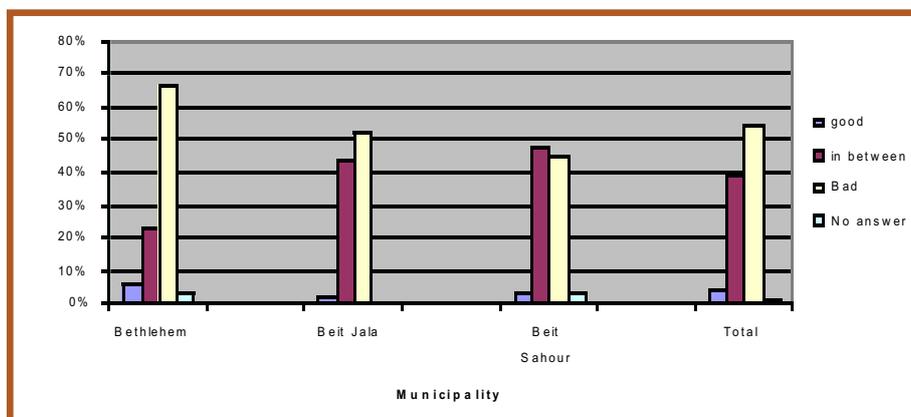
Knowledge of Environmental issues and hazards

- 17.5% indicated that that they are well informed about environmental issues and hazards, 33% felt that they are not well informed, and 49.5% considered themselves somewhat informed.
- 41% said that there are no private, public, or NGOs that address environmental issues in their areas, and only 35% know of the existence of specialized personnel who deal with environmental development policy.
- 43% believe that the municipalities do not protect water and natural resources from pollution and over-extraction.
- **Public participation**

Municipality	Does the municipality participate with public in the process of need assessment?			
	Yes	No	I don't know	Total
Bethlehem	6.7%	60%	33.3%	100%
Beit Jala	5.6%	44.4%	50%	100%
Beit Sahour	16.1%	38.7%	45.2%	100%
Total	9.3%	47.4%	43.3%	100%

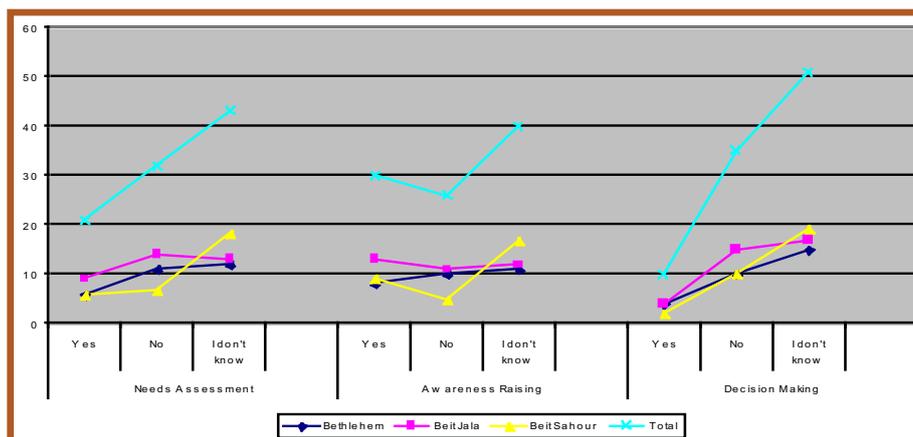
Public participation in need assessment process

- About half of the questioned said that the municipality does not participate with the public in the process of both need and capability assessment.



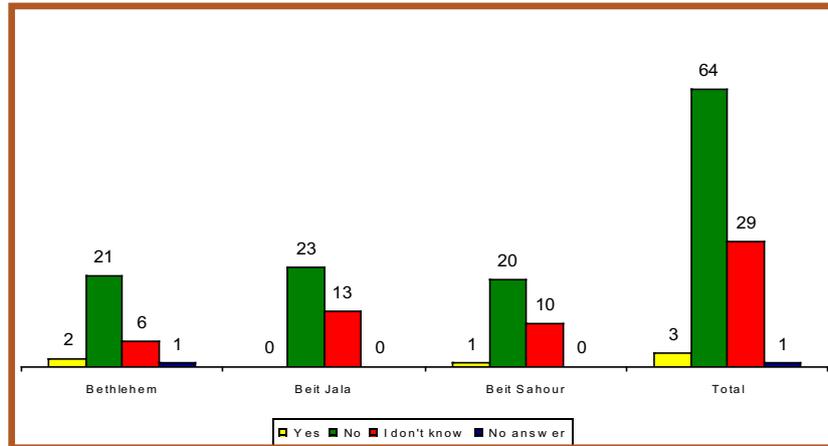
Public access to information

- 55% of those who took the questionnaire thought that the public access to information is poor while 39% described it as mediocre. This percentage was highest in Bethlehem where 67% of the respondents characterized the accessibility as poor.



Public participation assessment

Municipality	Does the municipality encourage local initiatives?					Total
	Answer	Yes	No	I don't know	No answer	
Bethlehem	% of respondents	30%	30%	36.7%	3.3%	100%
Beit Jala	% of respondents	27.8%	30.6%	41.7%	N/A	100%
Beit Sahour	% of respondents	38.7%	22.6%	38.7%	N/A	100%
Total	% of respondents	32%	27.8%	39.2%	1%	100%



Participation of public in the decision making process

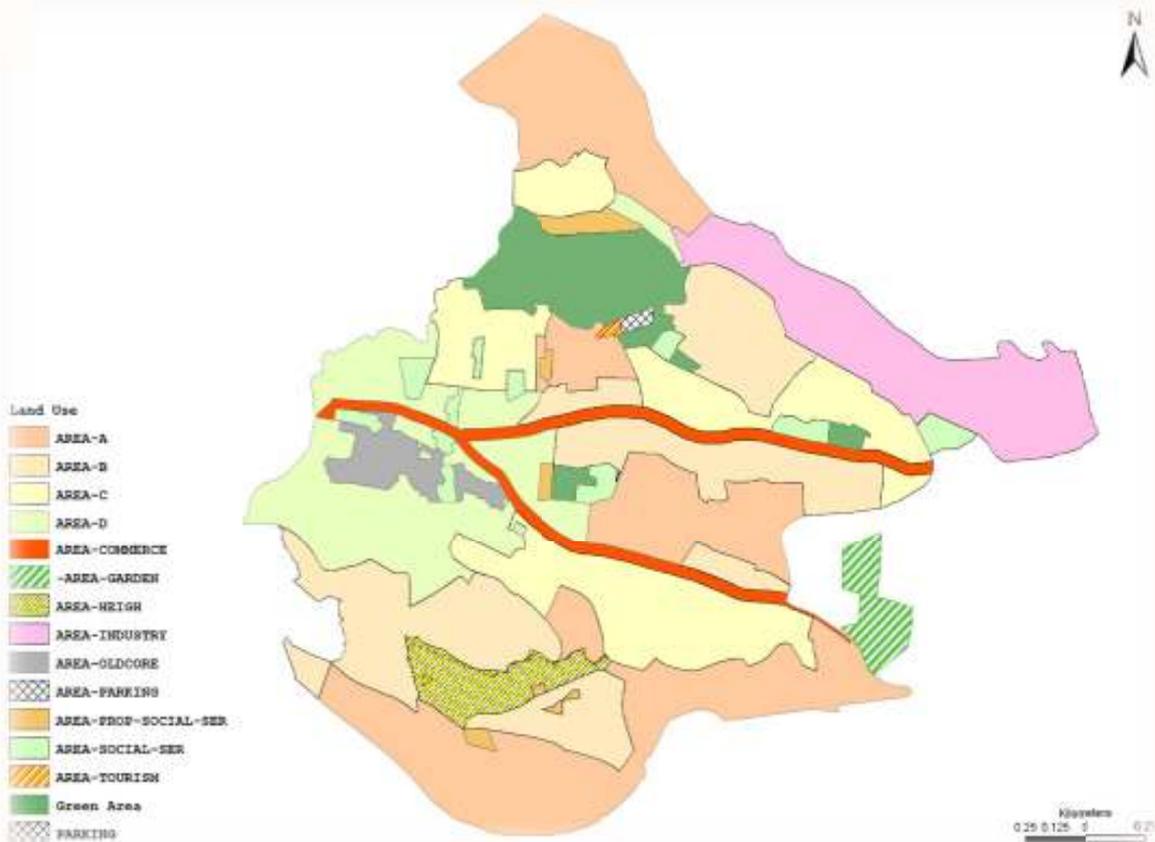
Municipality	Do you think involving the public in the planning and decision making process will help in making the projects more successful?				
	Yes	No	I don't know	No answer	Total
Bethlehem	80%	3.3%	13.3%	3.3%	100%
Beit Jala	69.4%	16.7%	13.9%	N/A	100%
Beit Sahour	83.9%	N/A	16.1%	N/A	100%
Total	77.3%	7.2%	14.4%	1%	100%

Success of public participation process

- Only 3% said that the municipalities include them in the decision making process and 4% said that the municipalities include them in the planning process.
- 77.3% believed that the projects would be more successful if citizens were involved in the planning and in the decision making processes.
- And when asked how these aspects would be reinforced, 16.5% indicated the need for more public services to strengthen the community and 2.1% indicated the need for master plans.

Part Four

Proposed Policies and Tools towards Sustainable Development



This section will first outline the proposed policies and tools, then indicate the main constraints towards their implementation and finally will specify the main priorities.

Proposed Policies:

Based on the literature review conducted and analyzed and on the results of roundtable meetings with the decision makers at the local level, as well as the analysis of the citizen questionnaire and the workshop conducted with the citizens, the following policies and tools are suggested in the following domains:

- Municipal administrative and financial management
- Urban growth, land and infrastructure management
- Urban environmental management
- Demographic strategies

However, unless the Israeli occupation fully ends in the occupied Palestinian territory and the Israeli forces withdraw to the Green Line (the pre 1967 war Armistice line), prospects for sustainable development in all sectors will be undermined.

- Municipal administrative and financial management

Policy tools

- Strengthening of Institutions and Capacity Building
- There should be a clear definition of roles and functions for each department in the municipality, with cooperation and coordination between the different parts.
- There should be a clear job description for each mandate within the municipalities.
- Enhance the ability of the personnel in the municipality to perform urban management tasks; develop strategies, build-on plans, structure, implement work plans, and anticipate emerging problems as well as being able to deal with them.

Capacity building includes: training, seminars, exchange of best practices, internal and external information exchange, and innovation sharing.

- Draft clear mandates for the ministries, governmental bodies, national authorities, and agencies that will be in harmony with each other and will be incorporated within the laws
- Develop a clear internal evaluation strategy for evaluating the approaches that the municipality undertakes towards projects.
- Initiate political decentralization and structural adjustments, including the transfer of administrative, financial, planning, and executive authorities from the central government into the local government, so that local people have more control on their immediate environment.
- Emphasize the application of the clauses of the local authorities' law.
- Reduce the financial dependency of local governments on the central government by initiating revenue generating projects and investments to be able to undertake development projects.
- Improve tax collection and assessment methods.

- Build and enhance partnerships through cooperation and the establishment of networking ties with the different departments in the municipality, with other municipalities in the region, ministries, other governmental and non-governmental organizations, research centers, academic institutions, and with international bodies.
- Participate with the public – local communities are key stockholders who have to be included in the decision making process as both a sources of inspiration and knowledge. Local initiatives should be encouraged and developed.
- Perform decision-support tasks, such as the use of the following methods:
 - Study the impacts of alternative policy choices
 - Establish models to forecast future demands
 - Assess local needs and capabilities
 - Employ GIS as a powerful planning tool to map and manage a wide range of urban data
- Adopt and update effective national laws and regulations, and formulate relevant bylaws at the local level to implement these.
- Promote public and private sector cooperation and investment in urban development as well as and urban environmental development.
- Raise public awareness of the municipal mandates as well as the mandates of the different governmental bodies. Also raise the public's awareness with regard to their obligations towards the municipalities and the government (ADB, 1999).

- **Urban growth management**

The main problems that our cities face today have arisen from uncontrolled urban growth and the unplanned developments. These problems include degradation to environmentally sensitive land and ecosystems, loss of cultural heritage, loss of open space, loss of prime agricultural lands, development in hazardous areas, urban sprawl, degraded air quality, and more energy consumption. Therefore, land use and land development policies must be established and actively implemented. These policies should be balanced among urban growth, environmental protection, and demographical factors (participatory urban governance).

- **Urban management policies**

- Collect, update, and disseminate urban data on the local level
- Develop a land inventory (which includes the parcels, land value, land ownership, land cover and land use, environmental value, linkage to infrastructure, etc.)
- Prepare an environmental, economic, building, resources, and social profiles.
- Formulate development strategies and plans on the regional and local levels.
- Formulate master plans that would guide decisions about the physical, social and economic development on the regional and local levels.
- The master plan serves as a guideline for the community of where, how, and when they want development to occur.
- Prepare the framework under which zoning maps and rules are prepared. This is important because land use decisions are based on the zoning maps which designate specifically which parcels can be used for which particular purposes. Thus zoning regulations would give the municipality control over the type and size of development in particular places.

- Direct urban growth and protect sensitive areas
- Clearly identify the needs of urban growth.
- Identify environmentally sensitive areas and resources and protect them from urban development.
- Protect cultural heritage.
- Preserve the old city cores, encourage their use or re-use, and register the historic buildings within a national historic building inventory.
- Renovate or demolish (if the building does not have architectural, cultural or religious significance) buildings that are structurally weak.
- Create buffer zones around sensitive areas (either environmentally, culturally, or religiously sensitive).
- Impose land use controls consistent with the master plans.
- Give priority in development to areas within the existing urban fabric, while ensuring that there will be sufficient infrastructure to support this intensification.
- Minimize urban sprawl in and around the municipal peripheries.
- Preserve the landscape and open space at the peripheries of the municipalities as part of cultural heritage.
- Preserve open green space for the coming generations.
- Encourage urban agriculture.
- Protect the urban environment.
- Determine the locations of facilities and services, analyze their adequacy in relation to current and projected needs of the community, and recommend the type and location of suggested ones.
- Provide and maintain infrastructure and services.
- Make a complete assessment of the current networks of infrastructure (water networks, wastewater networks, electricity, telecommunication networks, roads [including their width, structural condition, presence of side walks, height of buildings around them, etc.]) and draft recommendations and prioritization of rehabilitation/creation works that need to be done to ensure adequate and efficient services.
- Ensure the presence of adequate roads to make areas accessible to service and emergency vehicles.
- Ensure the adequate provision of wastewater networks and the treatment of the wastewater in the nearest treatment plant.
- Ensure the presence of an adequate drainage system.
- Ensure the presence of a good water network that provides clean water to all neighborhoods, and control the losses within the network.
- Improve the maintenance of the infrastructure

- Adopt effective regulations, laws, building codes, and policies
- Ensure the presence of a regulatory system that will provide the framework for sustainable development.
- Increase the construction density within the parcels; in response to land shortages and increasing land values, there should be more efficient land utilization.
- Adopt a framework that regulates private investment.
- Develop regulations that balance between urban development and environmental protection.
- Adopt an appropriate taxation and pricing system for properties and services.
- Adopt participatory decision making and implementation processes.
- Identify the stakeholders in every project, include them in decision making, and cooperate with them to implement projects.
- Ensure children's participation.
- Encourage regional and local cooperation.
- Increase the awareness of the public, civil society, municipalities, local elected officials, and the local government personnel regarding concepts and issues of sustainable development and their applicability.
- Build the capacity within the municipalities to be able to design and implement sustainable urban, resource, and urban-environmental management policies and strategies.
- Ensure that population growth is matched by access to basic infrastructure, housing and employment.
- Facilitate public transportation and mass transit.
- Coordinate and cooperate with governmental authorities and institutions to provide affordable housing.
- Take into account the special needs of marginalized groups such as the elderly, women, and the handicapped.
- Develop a process of land registration.
- Employ integrated land management strategies.
- Develop plans for disaster mitigation, both in the event of natural disasters such as earthquakes and political disasters such as Israeli incursions.
- Design building codes that would lead to the improvement of seismic adaptation designs (NDS, 1996).
- **Urban environmental management**

Urban management policies have to be based on a clear understanding of the causes of urban dilapidation and urban environmental problems, as well as a clear consideration of the external aspects associated with them together with a cost-effective assessment of the proposed solutions.

A very important aspect in the success of environmental management is the presence of clear regulations, laws, and bylaws that protect the environment. There should also be a strong executive body that enforces the implementation of these laws. In cases where these laws are absent, efforts should be directed to formulating ones.

Policies to be pursued to achieve a good urban environmental management:

- Assign a financial municipal budget for enhancing environmental management programs.
- Increase public awareness of environmental protection issues.
- Increase public participation in decision making and provide the public with open access to information.
- Develop an urban environmental database that includes a clear mapping of the local resources and risks.
- Prepare an urban environmental profile that includes factors influencing the environmental quality and ways to measure them in addition to observed trends.
- Develop local and regional partnerships on issues that concern environmental protection and management.
- Manage solid waste and wastewater.
- Adopt “best practices” guidelines in collection, treatment, and disposal of solid waste and wastewater for domestic waste, industrial waste (including hazardous and toxic waste), and medical waste.
- Encourage a reduction in the generation of waste by public awareness programs.
- Encourage and enforce instruments which mitigate the industrial waste creation and aid in disposal.
- Control air pollution by adopting policies that minimize CO² emissions, such as the use of unleaded gasoline, the domestic and industrial use of alternative sources of energy (like solar and wind energies), regular monitoring of the air quality, traffic management, and vehicle maintenance, among other practices.
- Encourage coordination and cooperation among the different environmental protection bodies and institutes as well as between the national and local levels.
- Adopt integrated environmental and spatial planning policies.
- Adopt disaster mitigation policies to minimize the losses caused by natural disasters such as earthquakes, floods, etc.
- Identify quantitative and qualitative indicators to assess urban environmental improvement. Such indicators would involve air quality, water quality, solid waste management, and wastewater management, among others.
- Pursue tools/instruments of decision such as:

1. Environmental Risk Assessment (EnRA)

Identify the type, source and magnitude of the risk and develop a management plan that describes ways of dealing with anticipated risks.

2. Environmental Technology Assessment (EnTA)

Assess different environmental technologies and adopt the most sustainable one.

3. Environmental Profiling (EP)

Identify environmental issues, development projects taking place in the area, available resources and their dynamics, relevant stakeholders, and issues to be tackled.

4. Rapid Urban Environment Assessment (RUEA)

Clarify issues and identify stakeholders by compiling a questionnaire on environmental data, preparing an environmental profile, discussing the results through consultations, and conducting public workshops.

5. Environmental Management Systems for Local Authorities (EMS)

This system involves four stages; the first stage is the planning stage where the goals and objectives for the project are identified, in addition to the methodologies for achieving them. The second stage is the implementation phase in which actions are performed towards accomplishing the projects goals. The third stage is the evaluation stage where the actions undertaken are evaluated using measurable indicators and the project results are assessed in relation to goals achievement. The fourth stage is the improvement stage in which the plan is revised and modified to meet changing circumstances; any deficiencies that were identified in the evaluation stage are improved. (UNEP, 1999).

- **Demographic and social policies**

- Implement the strategies, policies and plans prepared by the National Commission for Poverty Eradication.
 - Adopt programs for family planning at the local level and formulate action plans towards their implementation.
 - Work directly with the communities at the local level.
 - Enhance reproductive health care services.
 - Ensure the accessibility of reproductive health care services to all individuals.
 - Design and implement public campaigns at the regional and local levels.
- Provide couples with adequate family planning information in order for these couples to be able to make decisions about the number and distribution of their children.
 - Increase public awareness of family planning issues.
 - Increase public awareness of reproductive health and birth control methods.
 - Increase public awareness of the issues surrounding early marriages.
 - Include schools, colleges and universities in these campaigns.
- Improve public health insurance coverage and extend it to cover the whole population. Improve the conditions of accessibility to health services.
 - Build and reinforce partnerships between governmental bodies, non-governmental organizations, the private sector, research centers, academic institutions, and international organizations on issues of awareness raising and implementation of population strategies.

- Prepare services, facilities, and programs to accommodate the projected population increase, in order to meet the needs of all society groups and improve their quality of life.
- Integrate physical development and environmental strategies with population concerns in order to ensure sustainable development.
- Increase the percentage of literate people in the Bethlehem Governorate – especially the percentage of literate women – by raising the awareness of the importance of women’s education and by adopting special education programs for those who are beyond school age.
- Analyze the presence and specify the need for educational facilities for all stages of education, both public and private. Promote coordination of school and youth activities with community activities.
- Determine the skills, knowledge, and educational attainments needed in the Governorate and direct the youth towards these areas.
- Act towards creating jobs for the continually growing percentage of people who are within the working age (15 years and above). This economic growth should be done in cooperation and partnership between the government and the private sector.
- Give emphasis to developing the human resources in each developmental project.
- Strengthen food security and encourage initiatives and programs that facilitate the accessibility to food (especially that which is locally produced and grown) to all individuals.
- Empower marginalized groups in the society, including the poor, women, elderly, and children, by targeting them with special programs, enhancing their accessibility to services, and meeting their needs.

Main Constrains:

The Main Constrains Facing the Implementation of the Proposed Policies

The unstable political conditions, characterized by Israeli military occupation in the West Bank, the lack of Palestinian sovereignty over their land and resources, the Segregation Wall the Israelis are constructing on Palestinian land, together with the fragmentation of the West Bank into smaller Israeli controlled cantons are the main constrains the Palestinians are facing in implementing sound sustainable development. Unless the Israeli occupation fully ends in the occupied Palestinian Territory and the Israeli forces withdraw to the Green Line (the pre-1967 War border), prospects for sustainable development in all sectors will be undermined.

Of the major constrains towards the implementation of policies proposed in the previous section are the weakness of the executive body to enforce the legislations and prevent violations accompanied with the weakness of the legal system to support the issuance and execution of rules and laws. Beside, the presence of outdated laws that need to be adapted to the needs of the local people and the changing conditions

Another important constrain comes from the serious deficiencies both in the national budget and the local budgets, accompanied by the financial dependency of local governments on the central government. This situation is also reflected in the lack of financial resources for the institutional and human capacity building in the local level, which hinder initiatives of institutional strengthening. The deficiencies in the budgets also deter the local government and the municipalities from hiring appropriate professionals to prepare and implement development plans; including master plans, demographic strategies, environmental management plans, and disaster mitigation plans.

Additionally, initiatives towards the decentralization are still stumbling. Also, there are unclear mandates for the different ministries and departments. In some cases the same mandate is given to more than one ministry creating confusion and conflict over the roles of the different departments/ministries in addition to the lack of coordination between the different departments, ministries, and institutions. Another constrain is the lack of awareness between community members about their rights in participation in planning and development for their communities.

The unstable political conditions make it hard for the municipalities and local government to draft and implement developmental plans at the regional and local levels, where the absence of these strategies make it difficult to implement integrated and clear policies. In addition, constrains facing the implementation of the policies proposed in the previous section include the deficiencies in the organizational and administrative structures in the municipalities which make the processes of planning, implementation, and monitoring of development project difficult.

Sector	Proposed policies
<p>Municipal, Administrative, and Financial Management</p>	<ul style="list-style-type: none"> • Institutional strengthening and structural adjustments: <ul style="list-style-type: none"> - Defining and clarifying the role and function of each municipal employee. - Drafting a clearer mandates to the ministries, governmental bodies, national authorities, and agencies. - Transferring of the administrative, financial, planning, and executive authorities from the central government into the local one (decentralization). - Adopt and update effective laws and regulations and formulate relevant bylaws to implement them. For instance, updating and improving tax collection mechanisms. • Ensure the participation of the public. • Enhancing the municipalities employees’ abilities to perform urban management tasks through training and capacity building. • Exchange of best practices, internal and external information exchange, and innovation sharing corresponding to urban management fields. • Perform decision-support tasks.
<p>Urban Growth, Land, and Infrastructure Management</p>	<ul style="list-style-type: none"> • Direct growth in urban areas: <ul style="list-style-type: none"> - Collect, update, and disseminate urban data on the local level in order to identify the urban growth needs. - Formulate land inventories, land distributions, and master plans to guide decisions about physical, social, and economic development - Protect sensitive areas (cultural, religious, environmental, and historical sites). • Provide and maintain sustainable infrastructure and services: <ul style="list-style-type: none"> - Conduct a complete assessment of the current infrastructure networks. <p>Ensure the development of adequate services including facilitating public transports, wastewater networks, healthy water network, and adequate drainage systems.</p> • Adopt effective regulations, laws, building codes, and policies: <ul style="list-style-type: none"> - Increase the construction density within the parcels to provide affordable housing in urban growth areas. - Adopt an appropriate taxation and pricing system for properties and services. • Develop plans for natural and non-natural disaster mitigation.

<p style="text-align: center;">Urban environmental management</p>	<ul style="list-style-type: none"> • Assign a municipal financial budget for enhancing environmental management programs such as the management of domestic solid waste and wastewater. • Manage solid waste and wastewater. • Identify quantitative and qualitative indicators to assess the improvements in the urban environment. • Increase public awareness and participation in environmental protection issues, by developing partnerships with related corporations. • Pursue environmental assessment, management, and profiling decision support tools/instruments. • Adopt integrated environmental and spatial planning policies that incorporate disaster mitigation policies. • Support integrated and participatory researches and studies to reduce environmental burdens on the urban poor, and enhance the use of natural resources for food, water, and income security.
<p style="text-align: center;">Demographic Strategies</p>	<ul style="list-style-type: none"> • Adopt programs for family planning at the local level and formulate action plans towards their implementation. • Ensure the accessibility of reproductive health care services to all individuals. • Design and implement public awareness campaigns at the regional and local levels: <ul style="list-style-type: none"> - Provide newly married couples with adequate family planning information. - Increase public awareness of family planning issues, reproductive health, and birth control methods, and the issues related to early marriages. • Prepare services, facilities, and programs to accommodate the projected population increase parallel with the prepared national ones. • Improve public health insurance coverage and extend it to cover the whole population through developing and reinforcing partnerships between the governmental and non-governmental organizations. • Increase the percentage of literate people in the Bethlehem Governorate – especially the percentage of literate women. • Create jobs for the continually growing percentage of people who are within the working age (15 years and above).

Using Suitability Analysis as a tool for sustainable land use and urban environmental management

This section includes an example of a tool that can be utilized by the decision makers in the municipalities and the local government to manage the urban growth and the resources for sustainable land use and urban environmental management in the Bethlehem Governorate.

The purpose of this analysis is to use a spatial GIS-based model to assess the potential suitability of locations for urban growth in the Bethlehem Governorate. The analysis aims to help the decision makers at both the local and regional levels to avoid any unwanted side effects of unplanned development. This will be achieved through considering two distinct scenarios. The first scenario shows the current situation in which political constraints play a major role in specifying the limits of population development in the study area (i.e. Israeli control of open spaces and other suitable area for development). Alternatively, the second scenario “Environmental Constraints” would also include those areas that are presently under Israeli jurisdiction in the scenario with a particular consideration for development of the environmental factors, so as to develop a clear picture of the environmental impact on development planning regardless of the political situation.

Several map layers of data - such as water sensitive areas, built-up areas, and grade slopes - were incorporated into two suitability modeling scenarios. The Arc/GIS Spatial Analyst Tool was used to perform the spatial analyses. The analyses consistently categorized five potential areas for urban growth in the area of Bethlehem, based on the extent to which they indicated suitability for urban development. The five categories are: most suitable, suitable, moderately suitable, less suitable, and least suitable. They were assigned a value of 1-5 with 5 being the most suitable. The following table illustrates this.

Multi-Factor Rating Scenario 1 (Political Constrains)	
Factor	Rating
Built-up Areas	Inside the built-up areas = 5 Outside the built-up areas = 1
Factor	Rating
Geopolitical Classification	Area (A) = 5 Area (B) = 4 Area (C) = 2 Nature Reserves = 1
Factor	Rating
Land Use/Land Cover	Arable land, forests, heterogeneous agricultural areas, and permanent crops = 1 shrub and/or herbaceous vegetation associations = 2 Open spaces with little or no vegetation / Artificial non- agricultural vegetated areas = 3 Mine. Dump and construction sites / Pastures = 4
Factor	Rating
Segregation Wall	“Buffer Zone” of 200 meters at the two sides of the wall = 1 Else = 5
Factor	Rating
Settlement Masterplans	Inside the settlement = 1 Outside the settlements = 5
Factor	Rating
Bypass Roads	“Buffer Zone” of 150 meters at the two sides of the road = 1 Else = 5
Factor	Rating
Water Sensitive Areas	The area of the Bethlehem Governorate was zoned into five zones (1-5) Relying on the Water Sensitivity Map of the West Bank published by the Ministry of Planning in 1998.
Factor	Rating
Slope	Slope and aspect models for Bethlehem Governorate were derived from the Digital Elevation Model (DEM) of the West Bank.
Factor	Rating
Heritage Sites	“Buffer Zone” of 100 meters around the heritage sites of the Bethlehem Governorate = 1 Else = 5

Note:

The second scenario has the same rating except for the built-up areas and the geopolitical classification. Where the rating of the “inside the built-up area” and “outside the built-up areas” were switched becoming 5 for “outside the built-up areas” and 1 for “inside the built-up areas”, and the rating for the geopolitical classification became 1 for “Nature Reserves” and 5 for else (i.e. Areas A, B and C).

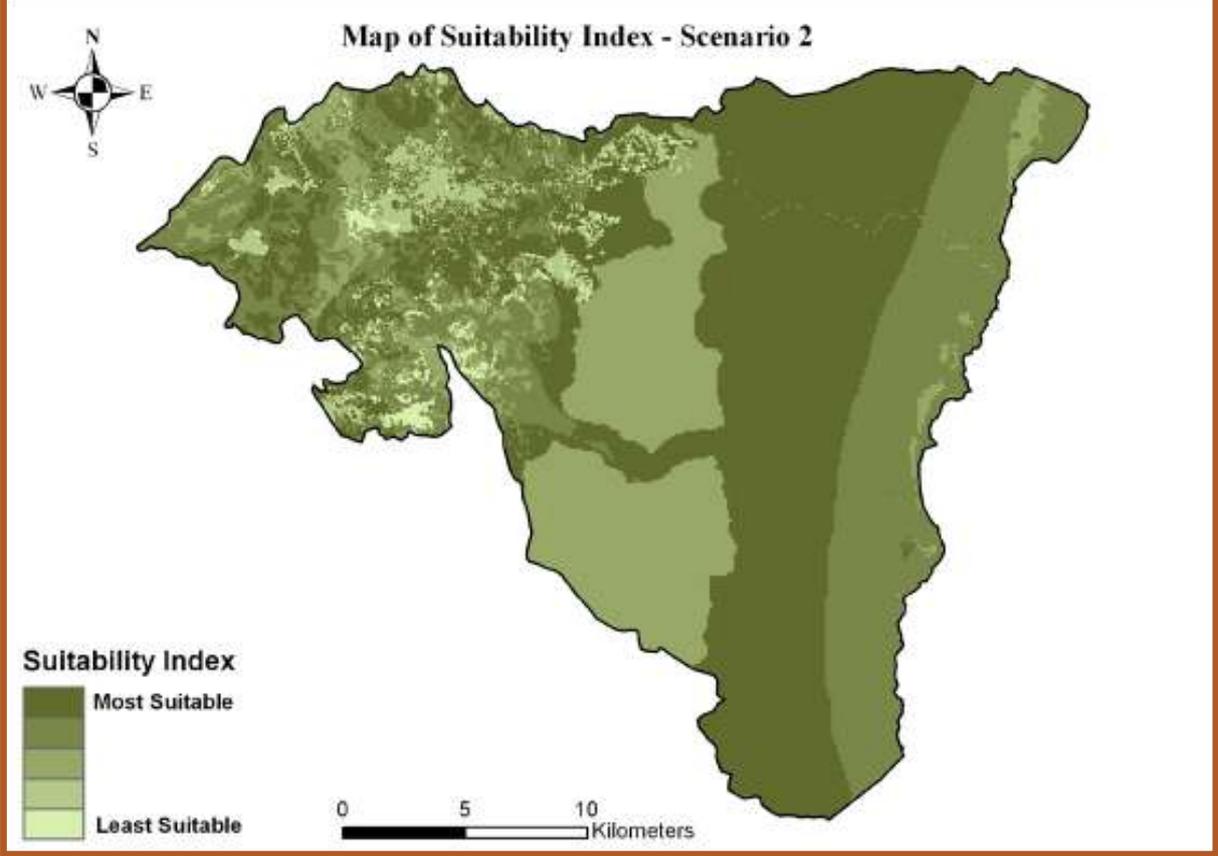
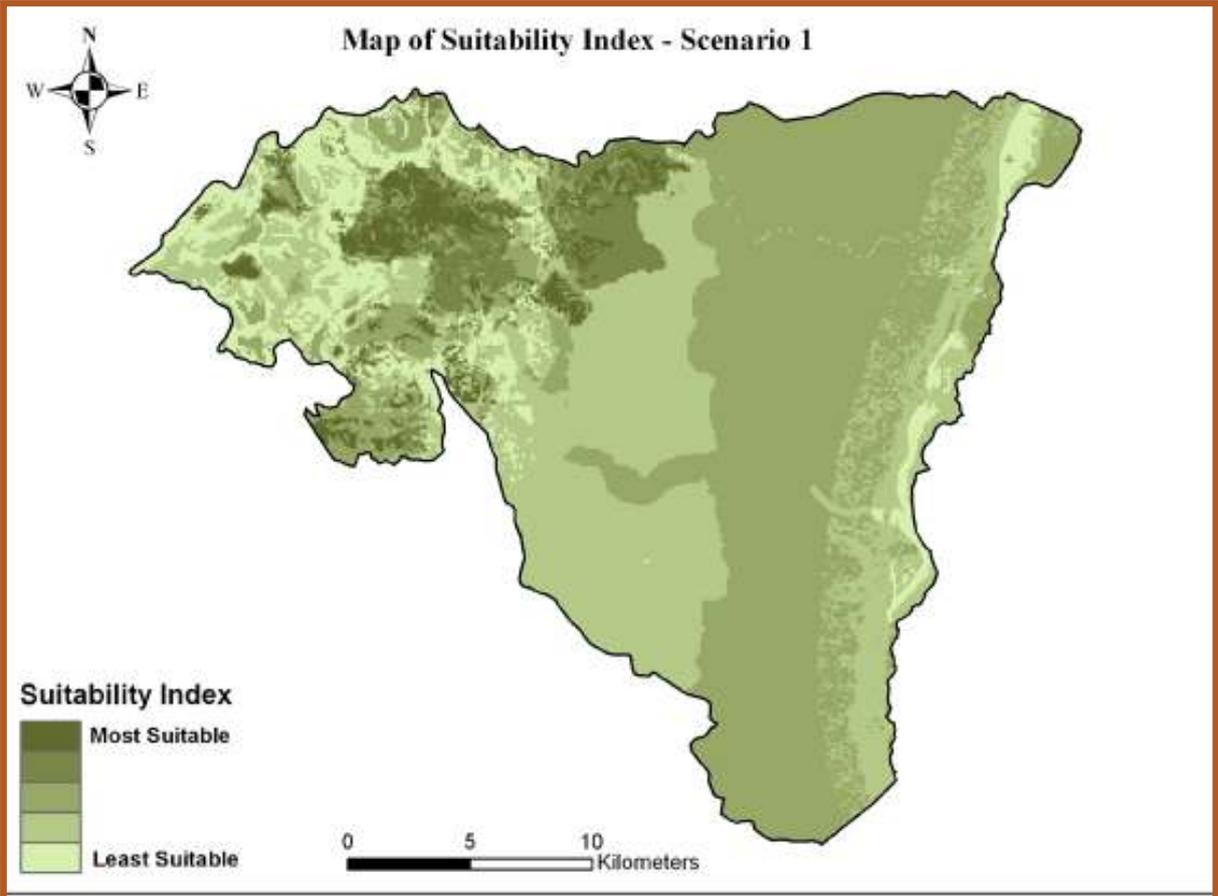
The spatial analysis map calculator was used to weigh and combine the individual map layers and produce a suitability model. For instance, the used map calculator expression for scenario 1 was: ([Built-up Areas] 0.40 + [Geopolitical Classifications] 0.20 + [Land Use/Land Cover] 0.15 + [Segregation Wall] 0.05 + [Colony Master Plans] 0.05 + [Bypass Roads] 0.05 + [Water Sensitive Areas] 0.04 + [Slope] 0.04 + [Heritage Sites] 0.02).

The built-up area is weighted most heavily in this model because it should have the most influence in the model. The output of the map calculator is the suitability model. The table below summarizes the weighting schemes used for each of the two suitability models. The suitability model is displayed on a shaded scale of one to five, five being the most suitable and one being the least suitable.

Multi-Factor Weighting			
Scenario 1 (Political Constrains)		Scenario 2 (Environment Constrains)	
Factor	Factor Weight	Factor	Factor Weight
Built-up Areas	40%	Built-up Areas	40%
Geopolitical Classification	20%	Geopolitical Classification	20%
Land Use/Land Cover	15%	Land Use/Land Cover	15%
Segregation Wall	5%	Segregation Wall	1%
Israeli Settlement Masterplans	5%	Israeli Settlement Masterplans	1%
Bypass Roads	5%	Bypass Roads	1%
Water Sensitive Areas	4%	Water Sensitivity	10%
Slope	4%	Slope	2%
Heritage Sites	2%	Heritage Sites	10%

The results from the two model analysis should be considered preliminary and demonstrate the usefulness of the spatial suitability analysis technique.

The findings of the analysis reveal some interesting facts. As in scenario 1, the suitable area (summation of areas 4 and 5, see the following two maps); constituted only 8% of the total area of the Governorate, compared to more than 73% in the second scenario in which the geopolitical factors were differentially rated comparing to the environmental ones. Paradoxically, the existing built-up area constituted more than 50% of the available suitable area in scenario 1 compared to less than 1% in the second scenario. Nevertheless, it should be accentuated on the fact that more than 87% of the suitable lands for urban development in scenario 2 fall under the full Israeli control in areas C where 15.6% of the suitable lands in scenario 2 are confiscated for the purpose of constructing the Israeli settlements, bypass roads, and lately the segregation wall.



Bibliography and Sources

1. Aljazeera Net, 2001. Palestinian Water...Crisis in Reality and Obstacle in the Negotiation. (Special Documents: Water) – In Arabic.
<<http://www.aljazeera.net/NR/exeres/79BE312A-54F1-46AB-9925-7280E0E02DC5.htm>>.
2. Aljazeera Net, December 2005. Israel May Turn Fence into Border.
<<http://english.aljazeera.net/NR/exeres/E23DD66A-8797-4164-8711-45047ECF7128.htm>>.
3. Applied Research Institute – Jerusalem – ARIJ, 1997. *The Status of the Environment in the West Bank*, Jad Isaac et al.
4. Applied Research Institute – Jerusalem – ARIJ, 2000. *Localizing Agenda 21*, Jad Isaac et al.
5. Applied Research Institute - Jerusalem – ARIJ, *Database, 2005*.
6. Applied Research Institute - Jerusalem – ARIJ, *GIS Database, 2005*.
7. Asian Development Bank – ADB, December 1999. Urban Sector Strategy.
<http://www.adb.org/Documents/Policies/Urban_Sector/urban0404.asp?p=policies>.
8. Coon, Anthony. *Town Planning Under Military Occupation - An Examination of the Law and Practice of Town Planning in the Occupied West Bank*. England: Dartmouth Publishing Company Limited, 1992.
9. Global Development Research Center - GDRC. *Urban Environmental Management*.
<<http://www.gdrc.org/uem/documents.html>>.
10. Guyana's National Development Strategy – NDS, March 1996. *Infrastructure Policies*.
<<http://www.guyana.org/NDS/chap09.htm>>.
11. Haaretz Daily Newspaper, July 2004. *Points of Friction*.
<<http://www.haaretz.com/hasen/spages/453004.html>>.
12. International Press Center – IPC, February 2006. *Status of Palestinian Universities*. – In Arabic.
<<http://www.ipc.gov.ps/arabic/details.asp?name=13556>>.
13. *Land - Use Planning. 2040: Growth Concept*. <<http://www.metro-region.org/article.cfm?articleID=231>>.
14. *National Strategies for Sustainable Development* <<http://www.nssd.net>>.
15. Palestinian Central Bureau of Statistics - PCBS, 2004. *Seminar Day: population and Development – April, 2006*. – In Arabic.
16. Palestinian Central Bureau of Statistics - PCBS, 2005. *Projected Mid-Year Population for the Bethlehem Governorate by Locality 2004 - 2006*.
<http://www.pcbs.gov.ps/Portals/_pcbs/populati/pop10.aspx>.
17. Palestinian Central Bureau of Statistics - PCBS, 2006. *Labour Force Survey Annual Report: 2005*.
<http://www.pcbs.gov.ps/Portals/_PCBS/Downloads/book1250.pdf>.
18. Palestinian Central Bureau of Statistics – PCBS, 2006; the database of the school formations of the scholastic year 2005 / 2006, Ministry of Education and Higher Education - Palestine. (Primary Statements and Not Published). – In Arabic.

19. Palestinian Central Bureau of Statistics, 1999. Population, Housing, and Establishment Census – 1997, Final Results – Population Report, Palestinian Territories, First Part. Ramallah-Palestine.
20. Palestinian Ministry of Education and Higher Education - MOHE, 2006. Education-Statistics <<http://www.mohe.gov.ps/downloads/pdffiles/statisticE.pdf>>.
21. Palestinian Ministry of Planning and International Cooperation - MOPIC, December 1998. National Policies for Physical Development – The West Bank and Gaza Governorates.
22. Palestinian Ministry of Planning and International Cooperation – MOPIC, December 1998. The Regional Plan for the West Bank and Gaza.
23. Palestinian Water Authority – PWA, 2003. Supply Report
24. Palestinian Water Authority – PWA, 2005. Supply Report
25. Population Reference Bureau – PRB, 2005. Data Finder. <<http://www.prb.org/datafind/datafinder7.htm>>.
26. Population Reference Bureau – PRB, 2005. World Population Data Sheet. <<http://www.prb.org/pdf06/06WorldDataSheet.pdf>>.
27. Sustainable Development Principles <<http://www.iisd.org/sd/principle.asp?pid=13&display=1>>.
28. Union of Stone and Marble - USM, 2003.
29. United Nation Human Settlement Programme – UN-HABITAT. Regional Urban Sector Profile Study – Interview Guidelines and Questions: National Level.
30. United Nations Environment Programme – UNEP, December 1999. Technical Workbook on Environmental Management Tools for Decision Analysis. <<http://www.unep.or.jp/ietc/Publications/TechPublications/TechPub-14/fward.asp>>.
31. University of Washington, 2005. Rethinking Growth Management. <http://online.caup.washington.edu/udp_symposium/index-main.html>.

Appendices

Appendix I

The Palestinian Environmental Strategy and the Palestinian National Policies for Physical Development

1. Palestinian Environmental Strategy

Text copied from:

Isaac, J. Rishmawi, K. Safar, A. et al. (2004). Analysis of Waste Management Policies in Palestine: Retrieved June 12, 2004, from http://www.arij.org/units/posters/waste_management/index.htm

“The Palestinian Environmental Strategy (PES) identifies the main environmental themes that need to be addressed, defines environmental objective’s and introduces a series of prioritized measures that will lead to reaching these objectives. The PES contains eleven-strategy elements that have been prioritized through the use of certain evaluation criteria.

Based on the PES, the Ministry of Environmental Affairs has formulated a National Environmental Action Plan (NEAP) for waste management up to the year 2003 that sets out the actions and projects necessary to solve or alleviate the environmental problems caused by the current management of wastewater and solid waste.

The Palestinian Environmental Law no. (7) of 1999 was evaluated and approved by the Palestinian legislative council. The law aims at protecting the Palestinian environment from pollution; protecting the public health and social welfare; introducing environmental protection fundamentals into the social and economical development plans; promoting sustainable development; preserving the biological diversity; protecting the environmentally sensitive areas; improving the environmentally deteriorated areas; and raising the level of environmental awareness among the local communities.

Solid waste management

Articles from the Palestinian Environmental Law No. (7) Related to Solid Waste:

- **Article (7):** the ministry has to set up a comprehensive plan for the solid waste management on the national level, leaving the responsibilities for the implementation of solid waste management operational services to the local authorities.
- **Article (8):** the different specialized agencies have the right to take the proper requirements to minimize solid waste generation and encourage solid waste reuse and recycling.
- **Article (9):** the ministry in cooperation with other specialized agencies has to develop standards for the solid waste disposal sites.

In the PES, solid waste management is recognized as one of the most urgent environmental priority elements that need to be addressed. The PES has set several targets to be met by the year 2010. An analysis of these targets reveals that the strategic options opted by the PES for solid waste management are:

- The disposal of the whole sum of municipal and industrial solid waste generated in the West Bank and Gaza in 10 major sanitary landfill sites, thus preventing open air burning of solid waste, both at the source as on the landfills, and the rehabilitation and closing of old dumping sites;
- The separation of the two systems of solid waste and hazardous waste in the collection and disposal phases;

- The empowerment of municipalities in relation to solid waste management by setting up an effective solid waste management system with the municipalities; and
- The development of a cost recovery system and institutional management system for solid waste sector.”

2. National Policies for Physical Development

Text copied from:

MOPIC, (1998). National Policies for Physical Development: PNA

“Natural resources and environment

To ensure the utilization of resources is balanced with environmental protection and conservation and that these challenges are met in a sustainable way, the following policies are proposed:

- The natural resources shall be utilized and developed in a sustainable manner, to ensure the basic needs of water, food and shelter for future generations of Palestinians.
- The natural resources and the natural cultural environment shall be protected from random development.
- Air quality shall be maintained at WHO standards as minimum.
- The regional plans shall be assessed for their environmental and socio-economic impact.
- All physical development and activity shall be assessed for their environmental and socio-economic impact.
- Water resources, including surface and ground water shall be protected from over-extraction and from all sources of pollution.
- Allocation of natural resources between different groups of users- industry, agriculture, and domestic- shall be socially, environmentally and economically optimized to match the demands both quantitatively and qualitatively.
- Stone and sand quarrying shall be located in areas with minimum of land use conflicts in accordance with the regional plans. Abandoned quarries shall be rehabilitated to render them usable for other purposes.
- Damaged environments of significant value shall be rehabilitated.

Urban and Rural Development

To ensure sustainable development of rural and urban areas, the following policies shall be adhered to:

- Balanced growth between rural and urban areas shall be pursued
- Villages and municipalities shall, with support from the central government if needed, prepare master-plans, defining the need for development areas and expansion of borders, based on the West Bank and Gaza Regional Plans, using the areas delimited in the regional plans as the basis for urban development. Involvement of the private sector in the preparation of plans shall be encouraged.

- Urban and rural communities shall take into consideration their cultural and historical heritage, and through the use of urban structure analyses and other relevant studies decide upon a development pattern that ensures continuity and optimal land use.
- Density and other factors shall be decided according to the specific characteristics of each area.
- The rural areas shall be developed in such a way that the inhabitants find it attractive to reside there
- Necessary land shall be specified to ensure affordable housing for all.
- In improving and developing the infrastructure, particular attention shall be given to fast growing cities and towns and new emerging centers according to the proposed center structure as defined in the West Bank and Gaza plans.
- Traffic calming measures and pedestrianization shall be considered to enhance the development and rehabilitation of town and city business centers. Urban and rural development shall pay particular attention to access and traffic safety measures for children, elderly and handicapped
- Physical planning shall, when relevant, include schemes for improvement of refugee camps.

Economic development

To ensure sustainable economic development, the following policies shall be adhered to:

- Physical plans necessary to facilitate export, import and freight shall be given the highest priority such as establishing the sea port, the free transportation corridor between Gaza and West Bank, and locate efficient border crossing.
- The industrial zones in the regional plans shall be the main areas for polluting and space-demanding industries.
- The industrial plans and projects shall undergo environmental assessment
- Opening, running and closing phases of quarries shall be included in the plans and EIAs
- Small and medium sized enterprises can be located within the urban areas, provided the environmental aspects are carefully evaluated
- Agricultural production shall be developed to ensure food security and to create job opportunities
- Physical plans on governorate/level shall consider optimal combination of localization of wastewater treatment plant and agricultural production
- Physical plans shall, when relevant, consider allocation of land for grazing in the low rainfall and low value areas
- Reclamation of land for agricultural production according to the Gaza and West Bank regional plan, shall be supported by necessary development of infrastructure
- On national level the priority shall be given to coordinate planning to enhance the larger touristic magnets (Jerusalem, Bethlehem, Dead Sea and Gaza Beaches), and round trip touristic routes are to be developed by upgrading the necessary road-links.

Public services and infrastructure

The following policies shall be adhered to:

- Spatial allocation of public services shall respond to the proposed settlement hierarchy proposed in the regional plans in order to ensure adequate access of all individuals to public facilities of different orders.
- A functional road network shall be established providing good accessibility and mobility to local, sub-regional and regional centers as well as to areas of economic and touristic importance
- Land use strategies shall promote “short-distance cities”, providing mixed-use areas to minimize distance between areas of social and economic activities
- physical land-use planning shall restrict through-traffic in residential areas and city centers to reduce environmental impacts and enhance mobility
- Vehicle/ population ratio shall be reduced by developing more efficient public transportation systems and by implementing policies aiming at decrease in both private vehicle ownership and use. Establishment of an environmentally friendly public transportation system of a higher passenger carrying capacity, shall be encouraged.
- All Palestinians shall have access to drinking water according to WHO standards at least the minimum for quality and quantity.
- The use of groundwater for other than domestic use shall be reduced. Use of alternative sources of water (such as treated wastewater, surface water, runoff and rainwater) for non-domestic use shall be enhanced.
- Large scale infrastructure for landfill sites shall be located following an EIA process, focusing especially on possible groundwater contamination.
- Waste minimization shall be guiding principle for all public entities.
- On-site preliminary treatment of toxic and hazardous wastes (solid or liquid) shall be enforced.
- The staging of developing areas for residential use is to consider economic factors related to gaining maximum benefit of investments at all times in infrastructure.

Special considerations for the merging Palestinian state

Against this background, the following policies shall be adhered to:

- Physical planning shall actively support the farmers and the Bedouins in maintaining agricultural land and grazing, and promoting reclamation of cultivatable land as well as developing grazing areas, to counteract confiscation of land and closure of prohibited (military) areas.
- The physical environment and tourism facilities shall be planned and developed in the Dead Sea area, by taking necessary initiatives for a tripartite agreement between Palestine, Jordan and Israel for developing the Dead Sea Area.
- Free trade and industrial zones shall be planned for at strategic points adjacent to the borders of neighboring countries, establishing strategic alliance with industry in order to prepare plans which can be wholly or partially materialized during the interim period

- The transportation corridor between the Gaza governorate and the west bank governorates shall be planned in detail in order to gain full international support for the principle and to raise funds for the project.
- Comprehensive physical planning shall be conducted for Jerusalem in order to develop it as the capital and as the center of the project.
- Comprehensive physical planning shall be conducted for Jerusalem in order to develop it as the capital and as the center of the nation
- Various levels of the government shall promote plans and support landowners, NGOs in developing housing and neighborhoods, thereby strengthening the Palestinian presence in Jerusalem and other Areas C. the mode of planning and facilitating development shall be based on principles of sustainable development, with particular reference to local agenda 21, stressing local participation.

National physical planning shall comprise counter-planning activities in relation to the Israeli colonies. This shall be done by developing plans for the area occupied by the Israeli colonies, including the agricultural areas used.”

Appendix II

Law number (1) for the year 1997 regarding the Palestinian local authorities published in November 29th, 1997

Article (2)

The Ministry's Relation with Local Bodies

According to provisions of this law, the ministry shall perform: -

1. Public policy for Palestinian local bodies councils and supervise functions and duties of such bodies, plan public project, balance sheets activities, financial, administrative and legal supervision and procedures forming councils.
2. Technical and administrative activities pertaining to regional planning in Palestine.
3. Systems and regulations necessary to implement duties stipulated in the preceding articles or according to provisions of law.

Article (3)

Local Body

1. It is a body corporate of financial independence; its functions and powers shall be designated by provisions of law.
2. A local body shall be run by a council; its members shall be identified according to a system issued by the minister and countersigned by the cabinet; chairman and members shall be elected in direct and free elections, according to provisions of the elections law.

Article (4)

Creation & Deletion of Local Bodies

1. According to provisions of this law, structure of the Palestinian local bodies, their formation and limits shall be maintained by a regulation issued by the cabinet, according to a recommendation by the minister.

2. With no violation to provisions of this law or public interest, creation, deletion, annexation or detachment of any body, community or part of it or formation of a local body shall be according to a decision by the cabinet, according to a recommendation by the minister.
3. Extension or change of a local body geographical vicinity by a recommendation of the council and a decision by the minister.

Article (5)

1. Chairman of the local body council shall be elected in direct and free elections, according to provisions of the elections law.
2. A chairman shall dedicate full time to the council; it shall not be allowed to combine by the council presidency or another occupation or profession.
3. If he has some other post or profession, he shall have to resign or quit within a maximum period of one month of taking charge of the council presidency; otherwise, he shall be, inevitably, resigned.

Article (6)

Election of the Deputy

1. Members of the council shall elect a chairman among them by secret voting according to majority of votes and the ministry shall be informed.
2. When the deputy undertakes duties of the council chairman , in case of absence or illness , for more a week or when the post becomes vacant , he shall be paid a compensation by a decision of the council , according to the executive regulation of this law .

Article (7)

New Council Duties Tenure

1. Chairman and members of the council shall occupy and commence post on the day after elections results announcement, according to provisions of the election law.
2. A new member who shall occupy a vacant post within two weeks of vacancy, according to a notice by the minister to the concerned chairman of the local body council.

Article (8)

Council Sessions

1. A council shall convene, at the local body office, an ordinary meeting at least once a week according to a set up decision of the appointment.
2. The chairman or a group of members - not less than one-third - may ask for an unordinary meeting of the council.
3. Members shall be informed of per session date and agenda one day, at least prior the appointment; no topic shall be discussed if not included in the agenda unless two-thirds of members shall be present and agree unanimously to discuss any urgent topic.
4. In case of the chairman and his deputy absence, the elder member shall preside the meeting.
5. The council may allow anyone to attend meetings and discuss a topic upon approval of two-thirds of present members but decisions shall be taken in presence of members only.

6. Decisions and proceedings of the council shall be set down in writing in a special fixed papers journal that shall be signed the chairman and present members.
7. A session quorum shall constitute by majority of members; if the quorum shall not constitute for two successive sessions, the one shall be deemed legal by any present members.
8. Decisions of the council shall be taken unanimously or majority of votes. When votes are equal, voting shall decided by the group sided by the chairman and voting shall be in public.
9. The council may form committees of its members for a certain purpose to handle any presented matter; recommendations of such committees shall not be in force unless approved by the council.

Article (9)

The Council Term of Office

The council term of office shall be four years that start as soon as the council takes over duties. The same council chairman shall not be elected for two successive terms.

Article (10)

Resignation

1. The council chairman may resign according to a justifiable letter of resignation that shall not be final except by the council approval and the minister signature within a week of the council's decision.
2. The council member may resign the council membership according to a letter submitted to the council; the resignation shall not be final except by the council approval and informing the minister within a week of the council's decision.
3. Tow-thirds of the council members (half + 1) at one time according to a justifiable letter submitted to the chairman; the resignation shall not be enforced except when countersigned by the minister, within a week of the date of submission.
4.
 - a. In the case above, the council shall have an urgent meeting within two days of the date of the resignation to take a decision and necessary actions according to provisions of this law .
 - b. The resignation shall be deemed inevitably approved if the minister shall not reply during the prescribed period in the articles above.

Article (11)

Vacancy of the Chairman's Post

1.
 - a. The chairman's post shall be deemed vacant in case of illegibility or incapacity to do duties according to an absolute writ issued by a Palestinian competent court
 - b. Resignation or decease.
2. In case of the chairman's post vacancy according to article (1) above, provisions of article (55) of the elections law shall be applied provided that the remaining term of council shall not be less than six months.
3. In case of applying provisions of the former clause, the chairman's term shall be for the remaining term of office.

Article (12)

Member's Post Vacant

1. The member's post shall be deemed vacant if he resigns, dies, loses legibility or becomes incapable of doing his duties, according to an absolute writ issued by a Palestinian competent court.
2. If the member's post becomes vacant according to clause (1) above, provisions of article (56) of the elections law shall be applied.
3.
 - a. In case vacancy of more than members' posts become vacant at one time, new elections shall take place within a month of vacancy announcement to elect new entire members of the council, according to provisions of the fifth clause of article (56) of the elections law, provided that the remaining period shall not be less than a year for the council term of office.
 - b. If the remaining period is less than a year, vacancies shall be filled according to provisions of the third clause of article (56) of the elections law.
 - c. In all cases , members period of membership shall be for the remaining period of the council term of office .

Article (13)

Membership Loss & Restitution

1. The council member shall inevitably lose membership , in the following cases : -
 - A. If he does not attend three successive sessions without a justifiable reason approved by the council.
 - B. If he participates in a lawsuit in his capacity as a lawyer, expert, attorney or utilizes one of the council right for his personal interest by his membership or favoritism.
 - C. If he concludes an agreement with the council or when he or one of his first category relatives gets benefit from concluding an agreement with the council except those contracts and benefits for being a shareholder of a joint liability ; provided that he shall be a manager , a member of the board of directors , an employee or attorney.
 - D. If he loses any qualifications that shall have to be available, according to provisions of this law and those of the elections law and systems issued virtue of the same provisions.
 - E. If he exercises or quits any business contrary to powers, authorities, responsibilities and duties stipulated by this law.
2. The council shall have to inform the minister of the chairman or member loss of post at the council within a week of the fact.
3. A member who loses membership according to provisions of clause (1) of this article shall have to introduce the minister, within fifteen days of losing post, with a reasonable reason to keep him in post; decision of the minister shall be absolute; loss of membership shall be published in local newspapers.

Article (14)

With no contradiction with provisions of law, procedures shall be taken by the council prior violence of member(s), as legal as long as they have been done within the limits of the council's legal powers.

Article (15)

Duties and powers of the council: -

Taking into consideration provisions of this law, any other law or legislation, local board councils shall undertake the following functions, powers and authorities. They are exercised directly by their employees or by contractors, individuals or companies for a maximum period of three years. A council may enfranchise, partial or tires duties and powers, to individuals or companies for more than three years provided approval of the minister.

A council may issue executive systems and legislation necessary to plan activities and ensure interests and needs: -

1. **Town & streets planning : -**
Town planning , building , deleting or modulating streets ; specification of their width , length, asphaltting, paving , maintenance , cleanliness , lightening , naming , numeration of streets and building, beautification, planting trees , prevention of violation and watch nearby landscapes and assign owners to build fences around .
2. **Buildings & construction license : -**
Supervising buildings construction , wrecking , reconstruction , reshaping , installation of lifts , setting up shelters , issuing licenses for such activities , identification of a building site, shape , construction percent to available land and insurance of health conditions .
3. **Water : -**
Providing residents with potable water or other uses . Designate specifications of accessories such as chargers and pipes , distribution plan , prices , subscription fees and prevention of fountain , canals, basins and wells pollution .
4. **Electricity : -**
Providing residents with electricity, fixing prices, subscription fees that shall not exceed the maximum limit set by the ministry.
5. **Sewage: -**
Set up public latrines and toilets; running and watching them.
6. **Markets:-**
Planning public markets, construction, and specification of sold goods and banning goods sale outside them.
7. **Professions & industries: -**
Planning professions and industries, designating certain places per type, supervising noisy and harmful stores and activities.
8. **Cleanliness : -**
Collection of waste and garbage from streets, houses and public stores, transferring and damaging them and planning all that.
9. **Public health & supervision : -**
 - a. Taking necessary arrangements and measures to preserve public health and prevent raging of epidemics among people.
 - b. Supervising houses and other stores to ensure regular disposal of waste, cleanliness of sanitary tools in public stores and taking measures to eliminate mosquitoes and other germs, prevention of mice, rats and harmful reptiles.

- c. Setting up and planning slaughterhouses, checking animals and poultry to slaughter, taking precautions to infected by diseases, appointing sale places and supervising slaughtering and disposal of waste.
 - d. Supervising bread , meat , fish , fruit , vegetables and other food stuffs ; taking measures to prevent cheating , decayed items , pricing and prevention of high cost in coordination with concerned governmental authorities .
 - e. Setting up first aids centers, sanatoriums, hospitals and other medical departments and supervising them in coordination with concerned governmental authorities.
10. **Public stores : -**
Planning and watching restaurants, cafes, clubs, playgrounds, cinemas and nightclubs, designation of opening and closing times and tickets pricing.
 11. **Parks : -**
Setting up squares, gardens, parks, baths, swimming places in pools, lakes and cost; watching and planning them.
 12. **Precautions for floods , inundation , fires , natural disasters and others : -**
Taking precautions to encounter floods and inundation dangers, prevent fires, watch fuel and flammable materials, encounter disasters and rescue the afflicted.
 13. **Cultural & athletic institutions : -**
Setting up museums, public libraries, schools, cultural, athletic, social and musical clubs and supervising them in coordination with concerned governmental authorities.
 14. **Land & maritime means of transportation : -**
Setting up, designation, planning and supervising transportation stations within local bodies boundaries, watching boats, vessels and steamers working in the local body waters in coordination with concerned governmental authorities.
 15. **Peddlers , display-boards and sunshades : -**
Supervising and planning peddlers, portals, display-boards and sunshades.
 16. **Weights & steelyard : -**
Watching weights, measures, sealing them and weigh sold wholesale items in public markets.
 17. **Advertisements : -**
Controlling and planning signboards and advertisements.
 18. **Wrecking buildings : -**
Wrecking buildings that may fall, harmful, or emanating unpleasant smells after warning owners, tenants or in charge of.
 19. **Roads leftovers : -**
Sale or utilization of roads leftovers of owned public projects
 20. **Beggary : -**
Prevention of beggary, setting up shelters for the needy and watching fund raising in public areas.
 21. **Cemeteries : -**
Setting up , deletion , designation of sites and specifications of cemeteries , the dead transport , burial, funeral control and preserve sanctity of cemeteries in coordination with concerned governmental authorities .

22. **Hotels : -**
Control and plan hotels and public hostels.
23. **Pack animals : -**
Control animals used for backing and towing, plan markets for animals and livestock and banning outside such markets.
24. **Dogs : -**
Control dogs, plan ownership, license, prevention of their dangers and get rid of straying and rapacious dogs.
25. **Balance sheet and employees cadre : -**
Sating annual draft budget, closing account and employees cadre prior introduction to be certified by the ministry.
26. **Managing funds and properties of local body : -**
Managing funds and properties of local body, erection of necessary buildings, lease and mortgage for a period not more several years and acceptance of donations, wills and contributions.
27. **Other functions : -**
Performance of any other work according to provisions of this law, legislation or another law.
 - a. Entitlement of the council to state systems.
 - b. The council may , according to the approval of the minister , set systems to be enabled to execute any of its functions or exercise any of the said powers of this law and to include taxes , fees , charges, expenses or violations in such systems .
 - c. If another governmental authority takes over any of the mentioned activities in clause (A) of this article as part of its duties , it shall have to coordinate with the ministry which shall counsel the local body council in all set legislation , systems and arrangements to plan or control activity .
28. **Common services council : -**
According to the concerned local bodies, the minister may establish a common services council for close local bodies.

In accordance with law and in coordination with the concerned local bodies , the minister shall issue necessary systems to establish common services council dealing with the following : -

- a. Identify functions and powers of common services council to run and operate common projects.
- b. Identify representative members that shall be nominated by the local bodies councils and the method to appoint a chairman of common services council.
- c. Collect taxes, fees, revenues and wages of common projects done by the council and designate its methods of collection and distribution though they shall not exceed taxes and fees in force.
- d. Personnel affairs, workers and logistics.
- e. Proportions contributed by the concerned local bodies in financing the common services council, budget preparation and statement.
- f. Liquidation of the common services council activities, rights and commitments when disbanded.

Article (16)

Chairman's Duties & Powers

The chairman shall have the following powers and responsibilities: -

- A. Calling the council to meet at definite appointments, preparation and notification members of the agenda, presiding, running and maintaining discipline of the council's sessions.
- B. Representing the council in signing mortgage, lease, loan contracts, conciliation, tenders, contracts, commitments, sale and purchase, according to the laws and systems in force.
- C. Representing the local body in meetings and conferences and before official authorities.
- D. Maintaining and defending the local body's rights through legal methods.
- E. He shall be the executive chairman of the local body and reference for its departments; in this capacity, he shall supervise personnel affairs.
- F. Commitment and execution of the council's decisions.
- G. Supervising and pursuing the local body's revenues and expenditures and performing any other duties or powers according to provisions of this law.
- H. The chairman may authorize his deputy or any member with some of his powers.

Article (17)

Deputy's Powers

The deputy shall exercise powers and responsibilities of the chairman, in case of absence or post vacancy, according to provisions of this law.

Article (18)

Director of Local Body

An executive director may be appointed to the local body by a decision of the council, according to the laws regarding local bodies' employees.

Article (19)

Posts Cadre

1. Local bodies' employees and creation, deletion, increase or decrease allocations of posts by stating in the annual balance sheet.
2. Employees systems : taking into consideration the Palestinian civil service law and its executive legislations , the minister shall issue systems for employees and workers of local bodies indicating : duties, ranks, method of appointment , promotion , dismissal , vacations , disciplinary acts , medical care, insurance, pensions , compensation , increments , travel allowance , scholarship to specialize and other affairs in this regard.

Financial Affairs

Article (20)

Disposal of Property

Immovable property of local body shall be registered under the name of the local body; they shall not be sold, replaced, donated, mortgaged or rented for more than three years except with a decision by the council countersigned by the minister.

Article (21)

Loans

A local body council may not borrow funds from any authority except after the minister's approval; if a loan requires guarantee of the executive authority, the cabinet shall have to consent.

Article (22)

Revenues

Revenues of a local body shall be from: -

- a. Taxes, fees, imposed funds or by provisions of this law or any system issued according to this law or any system that stipulates collection of taxes, fees or violations for local bodies.
- b. Donations, contributions and subsidies approved by the council.
- c. Proportion allocated by the executive authority to a local body.

Article (22)

Buildings & Lands Tax

This tax shall be collected according to provisions of buildings and lands law in local bodies borders as for: assessment, review, collection, exemptions and fines according to the laws and systems in force.

Article (24)

Auction Fees

1. A local body shall obtain a fee ratio of three percent of sale value from movable property buyer, sold at an auction within the vicinity of a local body.
2. Public auction sales shall be done by auctioneers appointed by the council; a local body identifies open auction fees at the beginning of per fiscal year.

Article (25)

Transportation Fees & Charges

Local bodies shall be allocated fifty percent of transportation fees and charges according to transportation law within the vicinity of a local body; they shall be from vehicles licenses, tickets and others.

Article (26)

Revenues of local bodies collected by the executive authority shall be distributed as follows: -

1. Revenues collected by the executive authority shall be entered on behalf of local bodies as a deposit at the ministry of finance, according to provisions of this law.
2. Outcome of such revenue shall be distributed with a ratio not less than 50% to local bodies where revenues collected ; the remaining part shall be distributed according to the proportions the cabinet shall state , according to a recommendation by the minister , in the light of the following considerations for allocation per local body : -
 - a. Number of inhabitants.
 - b. Its contribution in revenues.
 - c. If it has a significant status.
 - d. If it undertakes non-local responsibilities.
 - e. Basic needs according to certified developmental plans by the ministry.
 - f. The cabinet may allocate, according to a recommendation by the minister, a portion of revenues as financial assistance to councils and common services councils to enable them execute significant projects.

Article (27)

Local Body Funds Collection

1. A person shall be deemed charged of tax of fee as of the beginning of a fiscal year following owing or disposing of a real estate, if he is an owner, or occupation if he is a tenant.
2. If a sum is due to local body according to provisions of law and not paid with fifteen days of maturity date. The chairman informs the charged by a warning in writing indicating type and value of the sum and the period covered so as to pay within fifteen days of the date of notification.
3. A charged shall be informed by the warning by hand ; if not available or refuses the notice , notification shall be as real if delivered to his last address or sent by registered mail to his last known mail .
4. A charged may contest to the competent court during the period specified in clause (2) of this article provided that he shall pay the requested sum or provide guarantees accepted by the court until the case be examined , unless court fees are delayed due to his poverty .
5. Seizer and sale of movable property: if a charged does not pay during the period specified in clause (2) of the article, the chairman shall decide to seize and sell sufficient movable property of the charged to pay the required sum. And ask revenue officer of the local body to imp lent the order by a signed and sealed warrant.
6.
 - A. A tax collector , upon receiving the warrant as above , shall accompany a policeman , if necessary, and enters the charged store or land and seizes sufficient movable property to meet maturity ; in addition to seizer fees .
 - B. The council keeps seized property for ten days. When the period expires, property shall be sold in an open auction, unless the charged pays the required expenses.
7. Postponement : -
 - A. The chairman may keep seized property longer, according to a justifiable reason.
 - B. Entire or part of seized property may be sold , upon completion of the period mentioned in clause (A) above if it may decay or price decline , either by the charged consent or an order by the chairman .
8. The following property shall be exempted of seizer , confiscation or sale : -
 - A. Clothes, beds and necessary bedding for the charged and his family.
 - B. Necessary kitchen ware for the charged and his family.
 - C. Books, tools, equipment, wares, luggage necessary for his profession, occupation or trade provided that their value shall not exceed five times maturity sum.
 - D. Food provisions necessary for the charged and his family for three months and enough seeds for the land he is used to plant, if he is a farmer.
 - E. Two of the following animals chosen by the charged, if he is a farmer: camels, cows, mules, donkeys, horses, sheep and goat.
 - F. Fodder for two exempted animals for three months.

- G. Uniform of public servants.
- H. Costumes, wares, tools and ecclesiastical instruments used for prayers.
- I. Government crops share, either harvested or picked or not.
- J. Right to demand compensation.
- K. Right of personal service.
- L. Right of future alimony.
- M. Movable and immovable governmental property.
- N. Policies, cheques and payment orders, if they have been marked as non-payable, insolvency, and considered as untransferable; they are seized in this case.
- O. Buildings that belong to municipalities, local bodies and endowment and buildings of hospitals established for the public benefit.

9. If seizer occurs according to this article and afflicted by harm , he may
10. Constitute a case to the council asking to get seized items, their value, redemption and demand compensation for indemnity.
11. Collection by procedures department : the chairman may collect due sums to the local body through procedures department in the same manner ordinary debts are collected , according to this article if it shall be for the benefit of the local body .
12. Salaries seizer: if the charged is an employee of a fixed salary or wagers, the maturity sum may be collected by capturing one fourth of salary or wage. He may apply this method prior procedure stated in the fourth and fifth clauses of this article.
13. Obtaining what is collected by the executive authority: provisions of this article shall not be applied to taxes and fees stipulated by this law or any other legislation collected by the executive authority for local bodies benefit.
14. Revenues shall be collected by the local body council or the executive authority or y through contractors according to provisions of this law.

Article (28) **Reductions**

- a. The body council may , upon approval of the minister , reduce revenues value or fees imposed on a person or to cross out due to his poverty , if that is closer to justice and equity .
- b. The body council may, upon approval of the minister, set incentives or charges to the charged.

Article (29)

All registration formalities of immovable property disposal shall be conditioned by presenting a certificate indicating tax payment to a local body.

Article (30) **Fund**

The local body fund shall consist of total monies collected on its behalf or devolved according to provisions of this law or any other legislation. Expenses and expenditures stated by the council shall be paid from the fund. No amount shall be paid from the box unless it has been stated in the current year balance sheet or if the council shall decide to exceptionally issue, under approval of the minister.

Article (31)

Budget

1. A local body shall set an annual balance sheet that shall be in effect upon approval by the council and the minister; annexes may be attached, in the same manner.
2. Annual balance sheet shall have to be submitted during the last four months; two months prior the new fiscal year. Expenses shall not have to exceed allocations of the precedent balance until the new budget signed.
3. Allocations may be transferred from a chapter into another and from an article into another, according to a decision by the minister.

Article (32)

Closing Account

The chairman shall submit a closing account , two months prior ending of the fiscal year and deliver to the minister to certify , after being improved by the council .

Article (33)

Financial System

With no contradiction to provisions of law , necessary procedures are planned to run the local committee fund , preservation , methods of issue and receipt , bookkeeping , accounts entry , annual balance sheet , closing account and other matters related to a financial system , issued by the minister.

Article (34)

Logistics , tenders & contracts

In accordance with provisions of this law , the minister shall issue a system for local bodies for logistics, tenders and contracts stating how to buy logistics , their entry , preservation , disposal , tenders procedures , auctions, contracting and other affairs in relation with the body works .

Article (35)

Supervision

Check of local body's accounts revision, revision of all its financial, administrative and legal formalities and inventory of assets by specialist auditors assigned by the ministry or administrative and financial supervision department.

Article (36)

Annual Report

The chairman shall have an annual report of local body activities; a copy shall be delivered to the minister in addition to the council's remarks.

General & Transitory Provisions

Article (37)

Created local bodies prior validity of this law shall be considered standing and fulfilling all creation conditions.

Article (38)

Due taxes and fees according to in force laws and systems, prior the validity of this law, shall remain collectable if they had been due accordingly.

Article (39)

This law shall rule out an provision that contradicts provisions of this law.

Article (40)

All competent authorities shall have to execute provisions of this law, each in its own field; it becomes in force as of publication in the official gazette.

In accordance with the endowed authorities, we do ordain the following law on 10 Jumadi the second 1418 AH.

Corresponding to 12 Oct. 1997 AD.

Yaser Arafat

Chairman of the Executive Committee of Palestine Liberation Organization
President of the Palestinian National Authority

Source: <http://www.pnic.gov.ps/english/law/law22.html>

Appendix III

A. Municipality questionnaire

Administrative department

General policies

1.1. To what extent is the municipality aware of and comply with the national development guidelines? What are the main features of this national development plan? How do the guidelines trickle from the national to the local?

1.2. How does the municipality encourage public/private cooperation, and how does it encourage private investment?

1.3. On what bases are projects' budgets allocated? How do projects' allocated budgets transfer from the central to the local government?

1.4. To what extent are the policies of the municipality transparent? Who is responsible for monitoring the efficiency of the municipalities? What monitoring methods are used?

1.5. To what extent does the municipality cooperate and share information with other related institutions and organizations?

1.6. Does the government have plans to privatize the main services (water, electricity, sanitation, communication, transportation), how is this act encountered by the local people?

Administrative policies

1.7. Does the municipality have an environmental, economic, building, resource and social profiles? How often are they updated?

1.8. How do you judge the presence, performance and efficiency of the following services:

schools (elementary, secondary), clinics, hospitals, health centers, pharmacies, road networks, public transportation, water supply network, electricity network, telephone network, collecting garbage, cleaning the streets, lighting the streets, colleges, universities, kinder garden and day cares, libraries, public parks, children parks, shelters for orphans, homes for the elderly, special homes for women subjected to violence, car parking (including parking buildings)

- 1.9. How do you judge the municipality's performance regarding: solid waste management, implementing a sewage system, sewage treatment, wastewater management, street drainage
- 1.10. Under what bases are the public services allocated? How does the municipality ensure the accessibility of all individuals to public facilities?
- 1.11. Does the municipality ensure "fair" allocation of natural resources between the different groups of people and disciplines? If so how?
- 1.12. What are the measures that the municipality undertakes to ensure good and safe transportation access, pedestrian routes and special transportation facilities for children, elderly and handicapped?
- 1.13. Are the current legislations, regulations and laws being used at the local level consistent with the needs of Bethlehem population?
- 1.14. Does the municipality have plans for disaster mitigation (be it natural disasters-earthquakes,-or political disasters like Israeli invasions, constructing the wall...)
- 1.15. Illustrate the time frame, fees charges, procedural and administrative steps undertaken to register a land. Do these steps incorporate obstructions on the poor and on women?
- 1.16. What laws and regulations are there on land and housing tenure (rent and ownership) security of tenure and forced evictions? Which body is responsible for the issuance, update and monitor of these laws? What difficulties are there on the implementation of these regulations? What aspects of these regulations do you think need to be changed?
- 1.17. In the past ten years how many houses were subjected to eviction and/or demolition? What were the reasons behind that? Where did the evicted people stay? What were the losses (material and non-material)? Who were responsible for the evictions? Were there remedies given to the affected people?
- 1.18. What percentage of the lands and real estates are owned and rented by women? Are there direct or indirect legal reasons that prevent women from ownership/renting?
- 1.19. What programs are there for improving the living conditions of the urban poor? How does the local government facilitate the provision of land, housing and services for all citizens?

Environmental policies

- 1.20. Are there plans linking environmental issues to economic development issues? Does the municipality perform an environmental and socio-economic impact assessment of urban development projects and before licensing new industries?
- 1.21. Is there a department for environmental management in the municipality? If yes, what are the duties/functions associated to it? If no, which department undertakes environmental management functions? Are environmental issues addressed and coordinated by urban planning, how? Are there other public, private or NGOs that address environmental issues in your area? How do they coordinate? Are there specialized personnel that deal with environmental policy development and formulation? What are the capacity building needs?

Municipality structure

- 1.22. How often does the municipality send its employees for training and seminars? Who provides the training? What other capacity building programs are there? Do they cover the needs, what is missing?
- 1.23. How often does the municipality review/update their structural organization (laws, mandates, services, budgets) and procedural organization (information flow, provision of better equipments, staff training)?
- 1.24. How are the chair and council members chosen/elected, and how often?
- 1.25. What is the percentage of women among the senior decision making personals in the public, civil society and NGOs spheres (including the ones in the municipality)?

Decision support tasks

- 1.26. What procedures does the municipality undertake in decision making?
- 1.27. How often does the municipality reach out for external expertise in issues that it doesn't have the capacity to perform/ judge them?
- 1.28. How often and how well does the municipality coordinate with other governmental agencies, NGOs, universities, with research centers and institutes?
- 1.29. How does the municipality coordination between different organizations concerning exchanging best practices? Does the municipality have special programs and special collaboration with women organization concerning planning and management issues?

Policies towards public participation

- 1.30. To what extent does the public have access to information?
- 1.31. What is the role of community based organizations and how do they interact with the municipality in the process of needs assessment, awareness raising and decision making.
- 1.32. How does the municipality encourage local initiatives?
- 1.33. Does the municipality include the public in their decision making process, who are the partners that the municipality include in their decision making and how?

Engineering and planning department

- 2.1. To what extent is the municipality aware of and comply with the national development guidelines? What are the main features of this national development plan? How do the guidelines trickle from the national to the local?
- 2.2. What do you think are the optimal ways to implement the national development policies even with the absence of control over planning and implementation in Bethlehem? What are the methodologies used to implement the national physical policies?

- 2.3. On what bases are zoning and land uses determined? What guiding policies are there on urban expansion? Are there areas that are protected from urban expansion?
- 2.4. Does the municipality promote mixed land use developments?
- 2.5. Does the municipality abide by the planning and building acts and codes? Do the constructed buildings abide by the building codes and planning rules, what monitoring devices are there and how does the municipality deal with violations?
- 2.6. Does the municipality support integrated planning policies, interactive decision making? If so how does it accomplish that? Does the municipality include the public in the planning process and in which ways?
- 2.7. When was the last masterplan updated/drafted, was the public involved in the planning process, was the public consulted with the contents of the masterplan, is the public aware of the changes/ contents of the masterplan?
- 2.8. What are the procedures undertaken when developing master and regional plans. Does the municipality conduct a planning survey? Are the public notified in at least two local newspapers and the official gazette of the completion of the master or regional plans? Are the public given the chance to give their comments about the developed plans, what is the time frame?
- 2.9. Are the demographic and population structures ready to carryout development within a transitional political context?
- 2.10. How does the municipality perceive sustainable development and how does it implement sustainable policies? Are there initiatives to implement or to integrate the concepts of sustainable development at the local level such as in Bethlehem in the Palestinian Territories?

Administrative policies

- 2.11. Are there any housing plans in the municipality/local government, what actions does the local government undertake to provide affordable housing?
- 2.12. What protection measures does the municipality undertake to protect the historical, cultural and natural heritage?
- 2.13. Do the development plans that are executed at the local level consider the future needs of Bethlehem population?

Environmental policies

- 2.14. Are there plans to rehabilitate industrial areas and the quarries in the municipality/district? If so where and what do the plans entail? Does the municipality regulate and monitor the opening and running of industries and quarries? Does the municipality monitor the compliance of industries and quarries with EPAs?
- 2.15. What are the regulations and policies related to the urban environment at the national level? How are they applied at the municipality level? Are there other legislations that were initiated at the local level? Are the current legislations, regulations and laws being used in Bethlehem district relevant to deliver optimal land-use and sound urban environmental management?

2.16. Are the current legislations, regulations and laws being used at the local level consistent with national land-use and environmental policies and strategies designed at the national level? What are the constraints that the municipality faces in implementing these legislations?

2.17. Are there policies to develop and protect a network of green areas? Are there policies to protect the biodiversity and the urban life in the urban areas? Within the current urban development, is there a possibility to develop these areas?

2.18. Is there an initiative to develop the natural areas for local tourism?

Tools

2.19. Which diagnostic tools does the municipality undertake to assess the local: needs and capabilities?

2.20. Which models does the municipality use to forecast the demand for services, what processes does it go through to identify best practices?

2.21. How does the municipality ensure the effective implementation of action plans? What monitoring tools does it use?

2.22. What capacities does the municipality use in handling physical planning information? Does the municipality use GIS?

Environmental department

Administrative policies

3.1. Is the municipality aware of the recommendations listed in the Palestinian Environmental Strategy?
If yes,

- What are the main environmental problems that your municipality particularly suffers from?

3.2. what are the policies that the municipality use regarding:

- a. collecting and treating waste water
- b. managing waste water
- c. managing solid waste
- d. managing agriculture and watering
- e. manage industrial pollution
- f. environmental awareness
- g. data bases and studies

3.3. To what extent is the municipality aware of and comply with the regional plans concerning natural resource management? How does the municipality manage the efficient and balanced use of natural resources including:

Water, air, forests, biodiversity, energy resources, land,

3.4. What strategy does the municipality use to solve or decrease environmental problems?

3.5. How are the policies related to the development and protection of the urban environment applied at the municipality level? Are there other legislations that were initiated at the local level? Are the current legislations, regulations and laws being used in Bethlehem district relevant to deliver optimal land-use and sound urban environmental management?

Environmental policies

3.6. What environmental indicators does the municipality use to assess urban environmental improvements/deteriorations?

3.7. What policies did the municipality undertake to raise the awareness of the public towards environmental issues and hazards?

3.8. What policies does the municipality use to promote energy conservation?

3.9. Does the municipality protect water and natural resources from pollution and over extraction? If so how does it maintain that?

3.10. What kinds of hazardous wastes (including medical wastes) are generated, what are the locations of production and disposal and how does the municipality deal with regulating their disposal?

3.11. How does the municipality deal with the changing lifestyles and consumption rates of its citizens and what role does it play in the awareness process?

3.12. Are there plans to rehabilitate industrial areas and the quarries in the municipality/district? If so where and what do the plans entail? Does the municipality regulate and monitor the opening and running of industries and quarries? Does the municipality monitor the compliance of industries and quarries with EPAs?

3.13. How are the industrial areas and quarries licensed and what environmental measures are taken to assess their impacts

3.14. Are the current legislations, regulations and laws being used at the local level consistent with national land-use and environmental policies and strategies designed at the national level?

3.15. What are the constraints that the municipality faces in implementing these policies?

3.16. Who are the stakeholders in dealing with the main environmental problems? Is there a particular community/group that is specifically affected from these problems? How are they affected and why?

Is there a department for environmental management in the municipality? If yes, what are the duties/functions associated to it? If no, which department undertakes environmental management functions? Are environmental issues addressed and coordinated by urban planning, how? Are there other public, private or NGOs that address environmental issues in your area? How do they coordinate? Are there specialized personnel that deal with environmental policy development and formulation? What are the capacity building needs?

B. Citizen Questionnaire

Citizen Questionnaire:

Place of residence: - Bethlehem - Beit Sahur - Beit Jala

Occupation:.....

Gender: - Female - Male

Age group ~ 15-25 ~ 26-30 ~ 31-40 ~ 41-50 ~ 51-60 ~ 61-70 ~ 71-110

Policy questions

1. Were you informed through publications, television shows, local newspapers or municipality and local government meetings of the national development guidelines? (The Ministry of Planning and International Cooperation have prepared in 1998 the Palestinian Development Plan and the National Policies for Physical Development which addressed the following issues: natural resources and the environment, urban and rural development, economic development, public services and infrastructure in addition to special considerations for the merging Palestinian state.)

- Yes - No - I don't know

If yes,

From which source?.....

- What do you think about it?.....
- What do you think is missing from it?.....

- How do you assess the compliance of the municipalities with the national guidelines?
- very good - good - poor

2. Are you aware of the planning and building acts and codes?

- Yes - No - To some extent - I don't know

If yes,

- Does the municipality abide by them?
- Yes - No - To some extent

- Do the citizens abide by them?
- Yes - No - I don't know

- Does the municipality have monitoring devices to ensure the compliance with the planning and building codes?
- Yes - No - I don't know

- How does the municipality deal with violations?.....
- What other methods can the municipality use?
- How do you think can the public contribute in the implementation of the codes and acts?.....
.....

3. Do you have an idea on what bases are zoning and land uses determined?
 - Yes - No - I don't know
 - Are there guiding policies on urban expansion?
 - Yes - No - I don't know
 - Does the municipality promote mixed land use developments? (for example mix commercial and residential areas)
 - Yes - No - I don't know
 - Does the municipality support integrated planning policies, interactive decision making?
 - Yes - No - I don't know
4. Are you aware of the contents of the masterplan?
 - Yes - No - I don't know
 - Were the public consulted about the contents of the master plan?
 - Yes - No - I don't know
 - Were the public involved in the planning process?
 - Yes - No - I don't know
5. Are the demographic and population structures ready to carryout development within a transitional political context?
 - Yes - No - I don't know
6. Does the municipality encourage public/private cooperation
 - Yes - No - I don't know
 - Does it encourage private investment?
 - Yes - No - I don't know
7. Do you have an idea about the procedures undertaken by the municipality when drafting the masterplans?
 - Yes - No - I don't know
 - Does the municipality undertake a planning survey?
 - Yes - No - I don't know
 - Are the public informed through the official and local newspapers about the contents of the masterplan?
 - Yes - No - I don't know
 - Does the municipality give the chance to the public to look at and make an objection about the plans
 - Yes - No - I don't know
8. Do you have an idea about the measures taken by the local government to pursue the balanced development of rural and urban areas?
 - Yes - No - I don't know
9. Are there publications directed to the public that discuss the concept of sustainable development?
 - Yes - No - I don't know

- Do you have an idea about sustainable development?
- Yes - No - I don't know
 - Do you think these concepts are implemented in Bethlehem?
- Yes - No - I don't know
10. To what extent do you think the policies of the municipality are transparent?
- Not transparent € Moderately transparent € Very transparent € I don't know
11. Do you have an idea on municipality budget allocation?
- Yes - No - I don't know
- Do you have an idea on the transfer of money from the national to the local?
- Yes - No - I don't know
12. Does the municipality cooperate and share information with other related institutions and organizations?
- Yes - No - I don't know
13. Does the local government have plans to privatize the main services (water, electricity, sanitation, communication, transportation)
- Yes - No - I don't know
14. What do you think about the privatization of public services?
- Privatization is good - privatization is sometimes good and sometimes bad - privatization is bad
15. Are there an ongoing credit programs which promote access to credit for the urban poor?
- Yes - No - I don't know
- Do these programs treat men and women equally?
- Yes - No - I don't know
16. Do any of these programs provide credit for shelter (e.g. purchase of land (plots), building materials, water & sanitation installations)
- Yes - No - I don't know
- Who are the main institutions which are responsible for these credits programs?
- Public - private - NGOs
17. Are there credit projects that specifically benefit/target the women?
- Yes - No - I don't know

If yes please name one of them.....

18. Are there strategies or policies or programs on the local level to develop human resources?
- Yes - No - I don't know

Please indicate the main policies.....

(Source of highlighted questions: UN-HABITAT, with alterations).

Management policies

19. How do you judge the presence, performance and efficiency of the following services:

schools (elementary, secondary)	- poor	- good	- very good
colleges	- poor	- good	- very good
universities	- poor	- good	- very good
kinder garden	- poor	- good	- very good
day cares	- poor	- good	- very good
libraries	- poor	- good	- very good
clinics	- poor	- good	- very good
hospitals	- poor	- good	- very good
pharmacies	- poor	- good	- very good
road networks	- poor	- good	- very good
water supply network	- poor	- good	- very good
electricity network	- poor	- good	- very good
telephone network	- poor	- good	- very good
collecting garbage	- poor	- good	- very good
cleaning the streets	- poor	- good	- very good
lighting the streets	- poor	- good	- very good
pedestrian routes and side walks	- poor	- good	- very good
public parks	- poor	- good	- very good
public parks for children	- poor	- good	- very good
car parking (including parking buildings)	- poor	- good	- very good
shelters for orphans	- poor	- good	- very good
homes for old people	- poor	- good	- very good
special homes for women subjected to violence	- poor	- good	- very good
public transportation	- poor	- good	- very good
special transportation facilities for children, elderly and handicapped	- poor	- good	- very good

20. How do you judge the municipality's performance regarding:

solid waste management	- poor	- good	- very good
implementing a sewage system	- poor	- good	- very good
sewage treatment	- poor	- good	- very good
wastewater management	- poor	- good	- very good
street drainage	- poor	- good	- very good

21. Does the municipality ensure the accessibility of all individuals to public facilities?

- Yes - No - I don't know

22. Does the municipality ensures "fair" allocation of natural resources between the different groups of people and disciplines.

- Yes - No - I don't know

23. Does the local government undertake actions to provide affordable housing?

- Yes - No - I don't know

24. Does the municipality undertake measures to protect the historical, cultural and natural heritage?

- Yes - No - I don't know

25. Are the current legislations, regulations and laws being used at the local level consistent with the needs of Bethlehem population?

- Yes - No - I don't know

26. Do the development plans that are executed at the local level consider the future needs of Bethlehem population?

- Yes - No - I don't know

27. Do the legislations on land and housing rights; accessibility to land and housing; and land and housing tenure discriminate between women and men?

- Yes - No - I don't know

• How...

• Are there initiatives to change them?

- Yes - No - I don't know

If yes please indicate them?.....

28. How do you judge the procedural and administrative steps of registering a land regarding the time it takes and the fees charged?

- Poor - good - very good

29. How do you judge the procedural and administrative steps of getting a building permit regarding the time it takes and the fees charged?

- Poor - good - very good

• Do these steps incorporate obstructions on the poor and on women?

- Poor - good - very good

30. Are you satisfied with the laws and regulations on land and housing tenure (rent and ownership) security of tenure and forced evictions

- Yes - No - I don't know

If no why?.....

• Are there direct or indirect legal reasons that prevent women from ownership/renting?

- Yes - No - I don't know

• If yes, what are these reasons?.....

31. Are there programs for improving the living conditions of the urban poor?

- Yes - No - I don't know

32. Are you aware of urban development projects taking place in your region?

- Yes - No - I don't know

• Were you consulted before their commencement?

- Yes - No - I don't know

• Do you think these projects will enhance the urban condition in the region?

- Yes - No - I don't know

• Are you aware of future development projects in your region?

- Yes - No - I don't know

Environmental polices

33. How well do you think you are informed about environmental issues and hazards?
- poor - good - very good
34. Does the municipality protect water and natural resources from pollution and over extraction?
- Yes - No - I don't know
35. Is there a particular community/group that is specifically affected from environmental problems?
- Yes - No - I don't know

How are they affected?.....

36. Are there public, private or NGOs that address environmental issues in your area?
- Yes - No - I don't know

If yes, please name them.....

37. Are there specialized personnel that deal with environmental policy development and formulation?
- Yes - No - I don't know

Tools

38. Does the municipality participate with the public in the process of needs assessment?
- Yes - No - I don't know
39. Does the municipality participate with the public in the process of capability assessment?
- Yes - No - I don't know

Decision support tasks

40. Do you have an idea if the municipality reaches out for external expertise in issues that it doesn't have the capacity to perform/ judge them?
- Yes - No - I don't know

Did the municipality consult you? In which issue?.....

41. Do you have an idea if the municipality coordinates with other governmental agencies, NGOs, universities, with research centers and institutes?
- Yes - No - I don't know
42. Does the municipality have special programs and special collaboration with women organization concerning planning and management issues?
- Yes - No - I don't know

Policies towards public participation

43. To what extent does the public have access to information?
- poor - good - very good
44. Do the community based organizations interact with the municipality in the process of
- needs assessment - Yes - No - I don't know
 - awareness raising - Yes - No - I don't know
 - decision making - Yes - No - I don't know

45. Does the municipality encourage local initiatives?
- Yes - No - I don't know

46. Does the municipality include the public in their decision making process?
- Yes - No - I don't know

- Do you think involving the public in the planning process and in the decision making process will help in making the projects more successful?
- Yes - No - I don't know

47. Who are the partners that the municipality includes in their decision making?
.....

48. Does the municipality include the public in the planning process
- Yes - No - I don't know

In which ways?
.....

49. Are you aware of urban projects that were launched after citizen's initiatives?
- Yes - No - I don't know

50. Are you aware of projects that collaborated public, private, NGOs and community?
- Yes - No - I don't know

51. What do you think are aspects of strength in your community? In what ways can these aspects be reinforced?
.....
.....
.....

This book was prepared by the Applied Research Institute - Jerusalem (ARIJ) within the ambit of an international programme for research on the interactions between Population, Development, and the Environment, which is Financially supported by the French Ministry of Exterior and Coordinated by the French Committee for International Cooperation in National Research in Demography.



French Committee for International Cooperation



French Ministry of Exterior

The content of this book is the sole responsibility of ARIJ and in no way reflects those of the donors.



Copyright © Applied Research Institute-Jerusalem (ARIJ)
P.O. Box 860, Caritas Street
Bethlehem, Palestine
Telephone: +972 (0)2 274 1889
Fax: +972 (0)2 2776966
E-mail: pmaster@arij.org
Website: www.arij.org

