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# **Analysis of Economic Activities Characteristics of Ajloun Governorate Population at the End of 2013**

# Khlaif M. Gharavbeh

Associate Professor, Department of Basic Sciences, Ajloun Universal College, Al-Balqa Applied University, Jordan **Abidsalam M. Njadat** 

Associate Professor, Department of Basic sciences Ajloun Universal College, Al-Balqa Applied University, Jordan

#### Abstract:

Ajloun Governorate is located in the north-west of the kingdom, between latitudes  $32^{\circ}$  12 ' and  $32^{\circ}$  26 ' in the north and between the Longitude  $35^{\circ}$  36' and  $35^{\circ}$  49 ' in the east. It has a population of 150.000 inhabitants, about 76% of them are Urbans, and 24% are Rurals, it is surface area are 420 km<sup>2</sup>.

Ajloun is one of Jordan mountain governorates and it is also one of the smallest in area. Despite its small area, there are various economic activities in this governorate. The study of economic activities is one of the important research topics in any place.

This study aimed to identify types of economic activities practiced by Ajloun governorate population at the end of 2013, and to identify the relationships between these economic activities and the geographical conditions in the area.

To achieve this aim, the researchers followed the descriptive and analytical Approach to identify the characteristics of Economic Activities of the Governorate. The researcher used MS Office Excel © program to process the complementary statistical data of the study.

The study came up with several findings, most notably: about 73% of the population is working in services sector, especially Public administration and defense; compulsory social security (46.4%) and Education (15.5%).

The study included a set of recommendations that would improve the quality of life of the population, included (4) tables, (9) figures, and illustrative diagrams that clarify its message and realize its objective

Keywords: Economic activities, population, Ajloun Governorate, classification, ecotourism

#### 1. Introduction

The economic activity is the domain where the individual practices his profession. It is also the organization's activity where the individual practices his profession, and despite the specialization or the field of expertise he has. It is all the effort provided by the individual to meet his basic needs or to obtain funds and services. The economic activity has two unique attributes: the first is social and the second is individual. As for the social attribute, it is characterized by the mutual fellowship between the individual and the social group he belongs to and the interrelationships he has with the other individuals in this social group. The fellowship bond between the individual and the individuals in the social group is based on consumption. As for the individual characteristic in the economic activity, it is based on the assumption that the value of the individual as an economic member is highly dependent on his personal attributes such as intelligence, the love of order, work desire, community service in addition to other general and special variables (Al najafi, 1997).

#### 1.1. Study Geographical Region

Ajloun Governorate is located in the southwest corner of Jordan between latitudes 32° 12′ and 32° 26′ in the north and between the longitudes 35° 36′ and 35° 49′ in the east (Gharaybeh, 1997: 36) "Fig.1".

The total area of Ajloun governorate is (420km<sup>2)</sup> according to the Jordan's Statistical Yearbook (2012: 12)

Geographically, Ajloun is a mountain area ranging in height between 300m to 1247m above sea level "Fig.2", the governorate contains dense forests of oak and cedar, has many rich water springs, moderate climate and fertile soil (Gharaybeh, 2012: 120-123). As for the local government, Ajloun is divided into four major administrative districts (Ajloun Governorate, 2012: 20) as follows "Fig. 3":

- Ajloun Urban.
- Kufr Anja District.

- Sakhra District.
- Orjan District.

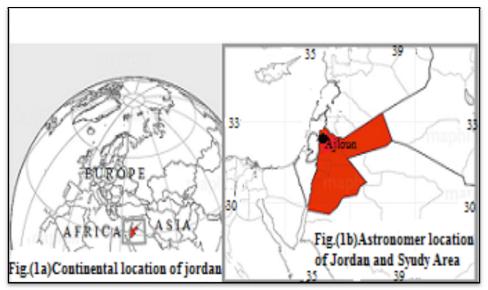


Figure 1: Location Map of Study Area Source: Researchers from http://www.maphill.com/jordan/location-maps/blank-map

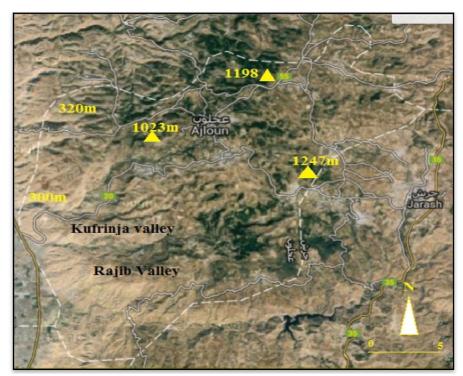


Figure 2: Topography Map of Ajloun Governorate Source: Researchers from Google Earth



Figure 3: Ajloun Administrative Divisions Source: Ajloun Governorate (Developmental Program 2012-2014)

# 1.2. Study Topic and Importance

Ajloun is one of Jordan mountain governorates and it is also one of the smallest in area (only bigger than Jerash). Despite its small area, there are various economic activities in this governorate. The study of economic activities is one of the important research topics as one can identify the following when investigating this topic:

- The prevalent economic activities in the governorate and this means direct the population to the productive economic activities, develop and promote them to become one of the means for reducing poverty in the region.
- The size of the work power in the society and its ration to the total number of local residents. This will assist economic planners in developing high quality and accurate development plans if accurate and thorough information were available about the newcomers to the various economic activities (Al Saadi, 1980).

# 1.3. Objectives of the Study

The objectives of the study were to identify types of economic activities practiced by Ajloun governorate population and to identify the relationships between these economic activities and the geographical conditions in the area. Also, the study sought to provide a special classification for these economic activities, number of work force in each one of them, to study and analyze these activities using figures, tables and charts that may help in clarifying the true situation of the prevalent economic activities in the governorate. The study also aimed to suggest some recommendations that may contribute in improving the quality of economic activities for the local residents to achieve the higher goal and the common interest; to reduce levels of unemployment and poverty in the governorate.

#### 1.4. Limitations of the Study

The objectives and content of this study was limited by the following three limitations:

- Spatial limitations; as the region of the current study was confined to administrative area of Ajloun governorate totaling (420km2) representing (0.47%) of Jordan's total area "Table 1".
- Temporal limitations; as the study mainly used the statistical data for the governorate at the end of 2013.
- Population limitations; as the population of the study was confined to the number of Ajloun governorate local residents totaling (50.200) according to Jordan's Statistics yearbook (2013: 8).

# 1.5. Previous Studies

Previous studies on Ajloun governorate are only a hand full in the various scientific fields. It can be argued that they are rare in population studies and there is no previous study- to the researcher's knowledge- examining the economic activity in Ajloun governorate. Some of the study mentioning the population activities in Ajloun governorate included:

- The official studies by the Jordanian ministry of Planning and International Corporation (2012), The Development Unit in the Governorate. These were general studies about the situation of local residents in the governorate and some of the population indicators such as number of population, the percentage of males and females, and the growth percentage. Furthermore, the study used previous studies issued by Jordan general statistics department, such as the annual statistics of population and population estimation, especially those issued in 2013.
- Gharaybeh, Hasan study (1995) and this is the only previous study available investigating population at Ajloun governorate. The title of the study is" The effect of the demographic and social variables on poverty at Ajloun governorate". Despite the

fact that this study is relatively out of date, it is still one of the significant studies in this line of research as the current study used the design of Gharaybeh (1995) study in addition to using some of the population indicators used in it.

#### 1.6. Research Method

# 1.6.1. Research Design

To achieve the objectives of the study, the descriptive approach and the quantitative analytical approach were used. These two approaches are widely used in population geography studies (Shalkani, 1999) in studying and analyzing the spatial variations for the total economic activities for the local residents at Ajloun governorate depending on the statistical data for the governorate issued from Jordan statistics department at 2013.

## 1.6.2. Data Sources

The researchers basically used Jordan statistics department data issued in 2013 and published in the annual statistics yearbook for 2012 (issue. 63) and for 2013 (issue. 64) as the main source of data used in the context of the current study. In addition, other sources and references were used to validate the objectives of the study.

#### 1.6.3. Data Analysis and Results

The researchers used various approaches and designs for data presentation and were appropriately categorized and ordered to be understandable for the reader. These included:

- Using statistical tables: The study contains (4) tables, and (4) Appendixes.
- Using charts: These were the most widely used in results presentation. The official statistics for 2013 were processed using MS Office Excel © program. The study used (6) bar charts.
- Cartographic representations: As maps are the main tool in geographic research, the current study used (3) maps.

#### 1.7. Methods for Ajloun Governorate Local Population Economic Activities Classification

- The researchers developed a specific classification for the economic activities practiced by local residents at Ajloun governorate "Appendix 1". The classification was developed based on the actual presence of the economic activities in the governorate. They were ordered using the UN classification developed by Department of Economic and Social Affairs "Appendix 2" and International Labor Office (Appendix 3).
- The researchers also developed another classification for the economic activities in the governorate which was derived from the International Labor Office in the UN "Appendix 3". The classification was based on clustering the close economic activities within in one major cluster "Appendix 4".

# 2. A Brief Analytical Study for Ajloun Governorate (Area and Population)

#### 2.1. Governorate Area

The governorate area is 420km<sup>2</sup> and is one of the smallest governorates in Jordan, representing only (0.47%) of Jordan area totaling (88794km<sup>2</sup>). Administratively, the governorate is divided into (2) Liwas (Regions) and (2) Qadas (Sub districts) as shown in "Table1" and "Fig. 4".

The Divisions	Area/km <sup>2</sup>	%
Liwa Qasabat Ajloun	240	57.1
Liwa Kufringa	87	20.7
Qada Sakhra	47	11.2
Qada Organ	46	11.0
Total	420	100

Table 1: Area of Ajloun Governorate (Administrative Divisions)

Source: Ministry of planning and International cooperation p.21

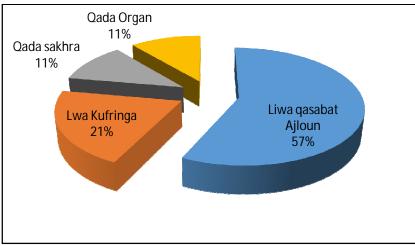


Figure 4: Ajloun Governorate Divisions Source: researchers from Table

## 2.2. Governorate Population

The residents of Ajloun governorate totaled (150.200) at the end of 2013. Males were (50.9%) while females were (49/1%). The gender ratio is identical to the one found in general population in Jordan. Nonetheless, there is an obvious variation in the environmental population structure (urban, rural) at the governorate and those found in Jordan. The urban population in the governorate is (75.9%) and this percentage is (82.6%) among the general population in Jordan. The percentage of rural residents in the governorate is (24.1%) compared to the percentage among general population reaching only (17.4%). "Table 2" and "Figs. 5,6" show these percentages.

The District	No. of population	Male	Female	Urban	Rural
	%	%	%	%	%
Ajloun	150.000	76.400	73.800	114.000	36.200
	100	50.9	49.1	75.9	24.1
The Kingdom	6.350.000	3.366.000	3.164.000	5.393.700	1.136.300
	100	51.5	48.5	82.6	17.4

Table 2: Ajloun Governorate population, according to sex, urban and Rural (compared with kingdom's population)
Source: Statistical Yearbook, 2013: 41-45

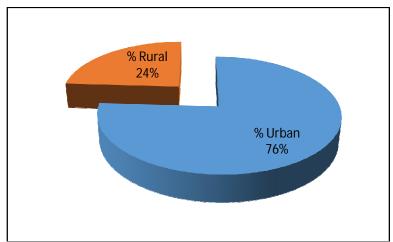


Figure 5: Urban and Rural in Ajloun Governorate Source: Researchers from table 1

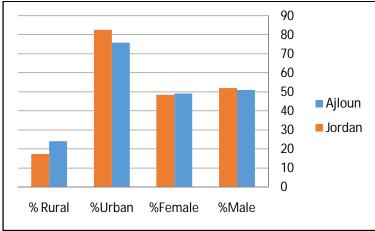


Figure 6: Population in Ajloun compared to Jordan. Source: Researchers from table 1

#### 3. Analysis and Discussion

3.1. According to the Ratio of Work Power in the Sectors of Activities

"Table3" and "Figs.7,8" show number of workers from Ajloun governorate residents (more than 15 years age group) in the different economic activities. These totaled (15) activities. On analyzing these tables and figures, the following results can be found:

- It is well- known that agriculture sector includes agriculture and livestock production in addition to workers in agriculture services. This sector decreased significantly compared to other sectors despite the fact that Ajloun governorate is described as an agriculture one. But, looking at the economic activities in the governorate, agriculture only contributes by (4.4%) of the economic activities in the governorate. The region is famous by its field farming, fruits and vegetables near springs at Al Rayyan (Al Yabis) Valley, Kufringa, and Rajib. The region has some rainfed agriculture in various regions in the governorate. The most important trees in the governorate include olives, apples and grapes.
- Mining and quarrying sector is limited to stone pit locations and prepare stones for the various construction activities. This sector also includes some simple transformation industries. This sector includes (4%) of total economic activities in the region. Towns such as Anjara, Ishtafaina are famous of producing tough stones for construction, and this is used for the various construction activities in the different regions across Jordan, particularly Irbid, Mafraq and Jerash.
- The trade sector contributes by (5.7%) of the total workforce in the governorate. This sector includes the wholesale and retail trade. The majority of the trade activities are retail activities seen in the shops found in the different towns and cities in the governorate. The Syrians have contributed in the establishment of trade activities in the governorate since the early 1920's. The trade activity is mainly found in Ajloun, Kufringa, Anjara and Sakhra.
  - The hospitality organizations, including restaurants and financial institutions are also affiliated to this sector and this raises the number of worker in this sector to (6.9%); making it a bigger contributor on the workforce compared to agriculture and industry in the region.
- The transportation and storage sector includes transporting passengers and goods from the various regions. It is also concerned with storage facilities in addition to the wire and wireless communication sectors (telegrams, mail, telephone, tele-fax and internet, etc). (4.4%) of total workforce in the governorate work in this sector. This sector has witnessed a significant development in the last few years as many streets were opened between the cities and villages in the governorate. The communication facilities (telegrams, mail, telephone, internet) have expanded to keep abreast with the urban development and the economic growth. This sector is expected to witness more development and growth in light of the urbanization activity in the various regions in the governorate.
- In the construction sector, nearly (4.8%) of total workforce participate in the different economic activities, and this is an integral part of the private sector. Other real estate and lease activities are categorized in this sector and more than (1.4%) of workforce participate in this sector. The total percentage of workforce working in this sector reaches (6.2%) and they all work in construction and urbanization activities. It is rare that the construction establishments in the governorate participate in construction activities in other governorates.
- The utilities sector includes electricity service water supply, and gas distribution. The percentage of workforce in this sector total (1.2%) of the total workforce in the governorate. This sector has witnessed a significant development, especially in electricity services as it included all the cities and towns in the governorate in addition to the rural areas. There was also increasing demand on water supply due to the increase in population numbers, the expansion in farming areas and lack of water supply sources. It is also expected that this sector will witness significant developments in the future.
- The service sector includes workers in public administration and support services, health services and educational services in addition to social, personal, household services and other. This sector represents (72.4%) of the total workforce in the

governorate. The public administration, civil defense and social security services head this sector as they represent (46.6%), followed by educational services (15.5%), then health services (5.9%) and lastly the personal and social services (4.6%).

	The Kind of Economic Activity	%
1	Agriculture, forestry and Hunting	4.4
2	Mining and quarrying	0.4
3	Manufacturing	3.7
4	Electricity, gas and Health services	1.2
5	Construction	4.7
6	Wholesale and retail trade	5.7
7	Accommodation and food service activities	0.7
8	Transportation and storage	4.4
9	Financial and insurance activities	0.5
10	Real estate activities	1.4
11	Public administration and defence;	46.4
	compulsory social security	
12	Education	15.5
13	Human health and social work activities	5.9
14	Activities of households as employers	4.6
15	Other service activities	0.5
	Total	100

Table 3: Distribution of Work power ratios on Economic Activities of Ajloun Governorate Population at the end of 2013

Source: statistical Yearbook 2013

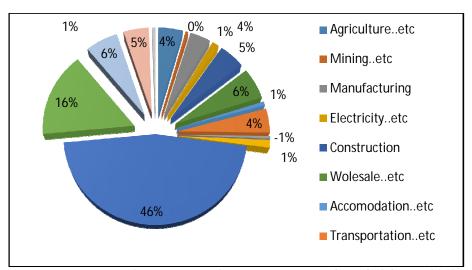


Figure 7: Economical Activities in Ajloun Governorate at the end of the year 2013 Source: Researchers from table 2

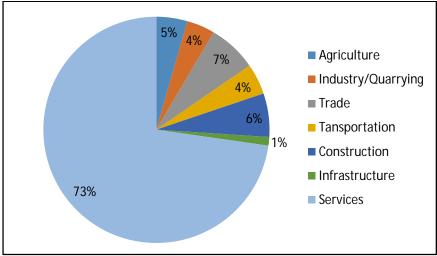


Figure 8: Economical Sectors in Ajloun Governorate Source: Researchers from table 2

# 3.2. According to the Main Economic Activities Groups

The economic activities can be classified into three main groups and a fourth one referring to the unspecified activities as indicated by most references in the economic geography: (http://www.moqatel.com\openshare\behoth\geography11 geographical encyclopedia).

- Primary activities: and these include the crafts practiced by individuals to obtain his\ her basic needs from the raw materials from the nature and these include:-agriculture, forestry and fishing.
- Secondary activities and these include the crafts increasing the value of human needs after being transformed in factories (manufacturing activities) from their raw forms to other forms based on the various needs of humans. These include:
  - Mining and quarrying.
  - Manufacturing.
  - > Construction.
- Tertiary activities: These include multiple services represented by financial and insurance activities, transportation, repair of motor vehicles and motorcycles, insurance in addition to educational, health and recreational services. All of these activities play a major role in the various production processes.
  - Electricity, gas, steam, and air conditioning supply.
  - > Trade, banks and insurance.
  - Transportation and storage.
  - > Services.
- Others: Using the previous classification (3:2 According to the main economic activities groups) on the work power of Ajloun governorate population, we make "Table3" and draw "Fig.9".

	Activities	Kind of Activities	%	Total(%)
	Group			
1	Primary Group	Agriculture, forestry and fishing	4.4	4.4
		Mining and quarrying	0.4	
2	Secondary	Manufacturing	3.7	8.8
	Group	Construction	4.7	
		Electricity, gas and Health services	7.1	
3	Tertiary Group	Trade, Banking and Insurance	7.6	86.3
		Transportation and storage	4.4	
		Services	67.2	
4	Others		0,5	0.5
		Total	100	100

Table 4: Distribution of Work power Ratios on Economic Activities groups of Ajloun Governorate population at the end of 2013
Source: researchers from Appendix 3

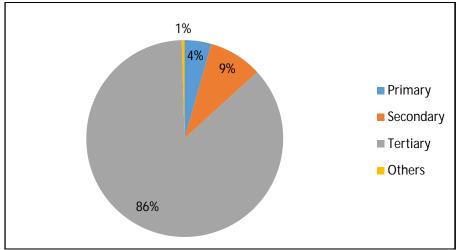


Figure 9: Economic Activities Category of Ajloun Governorate population, end of 2013 Source: Researchers from 3

By studying and analyzing "Table3" and "Fig.9", the following conclusion can be obtained:

- The majority of residents at Ajloun governorate work in the third category of economic activities with a percentage of (86.3%). The services sector ranked first (67.3%), then banks, trade and insurance (7.6%)- the governorate has ten banks-and finally the electricity, gas, water supply and health services (7.6%).
- (8,8%) of Ajloun governorate residents work in secondary activities and this percentage is low and is not consistent with high development rate in population and urbanization.
- The rate of workforce in primary economic activities is low noting that the main characteristic in the governorate is that it is a rural area. But, the basics of urban and rural classification in Jordan- considering all population groupings containing more than (500 people) as urban area-, or having an administrative status or contains a municipality- has increased the urbanization rate in the governorate (General Statistics Department, 2006).

# 4. Recommendations

The researchers suggested some recommendations that may contribute in changing the current rate in workforce and prevalent economic activities in the governorate; leading to the optimal balance for workers in these activities, which may contribute in improving quality of life for the residents of this governorate. These recommendations included:

- Encouraging tourism investment in the governorate, especially when noting that it ranks first for vegetation cover between the other Jordanian governorates, especially forest covering more than (35%) of the governorate area. Also, it has many mosques and churches such as the Ayyubid Mosque, The Madonna Church. This may be assumed by local municipalities and decision makers as there is a need for more efficient infrastructure attracting tourism investment particularly in ecotourism, archeological tourism. There is also a need for more natural reserves and tourism paths.
- There is a need for expanding secondary activities, especially in quarrying as the region is well- known for its rocks. An expansion in traditional work crafts is also needed, particularly in those, targeting women. Finally, the increase of women share in the work market is also needed.
- The service sector has witnessed significant development in the last two decades, and this is an indicator for the welfare of local residents. But, the actual picture is not as bright as the unemployment rate was (15.3%), and this rate is higher than the one reported between the general populations in Jordan. The unemployment rate among females in the governorate is (27.2%), and this rate is higher than the one reported between females in the general population (22.2%). The study also recommends the need to make use of the natural resources available in the governorate (forests and rocks), the human resources (agriculture and grazing) for the favor of the tourism, mining, agriculture and grazing activities, which hopefully will lead to reducing these rates.
- Improving the quality of basic services such as electricity, transportation and water supply resources, which are indispensable for the industrial development and agriculture expansion.
- To increase efforts targeting, providing higher quality public services such as education, health, social security and others to be accessible for more individuals. This can be achieved by increasing expenditure on service sectors as it is the true indicator reflecting the true transformation in the life of society members. It also shows the development level in the various life areas, especially those used to measure societies' welfare and progress.

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#### **Appendixes**

# Appendix (1)

1- Agriculture, forestry	
2- Mining and quarrying	
3- Manufacturing	
4- Electricity, gas, steam	
5- Construction	
6- Wholesale and retail trade	
7- Accommodation and food service activities	
8-Transportation and storage	
9-Financial and insurance activities	
10-Real estate activities	
11-Public administration and defence;	
compulsory social security	
12-Education	
13-Human health and social work activities	
14-Activities of households as employers	
15-Other service activities	

Classification of Ajloun Governorate Activities End of the year 2013 Source: Researchers from Appendixes 1,2

# Appendix (2)

(International Standard Industrial Classification of All Economic Activities, ISRC Rev.4)

- <u>A</u> Agriculture, forestry and fishing
- <u>B</u> Mining and quarrying
- C Manufacturing
- D Electricity, gas, steam and air conditioning supply
- E Water supply; sewerage, waste management and remediation activities
- <u>F</u> Construction
- G Wholesale and retail trade; repair of motor vehicles and motorcycles
- H Transportation and storage
- I Accommodation and food service activities
- J Information and communication
- K Financial and insurance activities
- <u>L</u> Real estate activities
- M Professional, scientific and technical activities
- <u>N</u> Administrative and support service activities
- <u>O</u> Public administration and defence; compulsory social security
- <u>P</u> Education
- O Human health and social work activities
- R Arts, entertainment and recreation
- S Other service activities
- $\bullet$   $\underline{T}$  Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
- U Activities of extraterritorial organizations and bodies

Source: United Nation Statistics Division, Department of Economic and Social Affairs, http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27&Lg=1&Top=1.

#### Appendix (3)

Special Classification to the kinds of Economical Activities As mentioned the Office of International Work in united nation

- 1. Agriculture, forestry and fishing
- 2. Mining and quarrying
- 3. Manufacturing
- 4. Construction
- 5. Electricity, gas and Health services
- 6. Trade, Banking and Insurance
- 7. Transportation and storage
- 8. Services
- 9. Others

Source: International Work Office, UN.

# Appendix (4)

Special Classification to the Economic Activities Groups

- 1. The Primary Group
  - Agriculture, forestry and fishing
- 2. The Secondary Group
  - Mining and quarrying
  - Manufacturing
  - Construction
- 3. The Tertiary Group
  - Electricity, gas and Health services
  - Trade, Banking and Insurance
  - Transportation and storage
  - Services
- 4. Others

Source: Researcher from Appendix 3.