



Relation between Population Growth in the Gaza Strip and the Challenges Facing Various Sectors, as well as Possible Solutions

Researched by: Mamoun Besaiso

Gaza Strip is considered to be one of the largest densely-populated areas of the world, where population density mounts to 5936 residents per one square kilo meter. This density is ten times bigger than that in the West Bank (536 residents per one square kilo meter). One more fact about the Gaza Strip's population density lies in built-up areas, where there are 13,789 residents in each square kilo meter.

Such facts about the population growth in Gaza are based on statistical figures, issued in February 2022 by the Palestinian Central Bureau of Statistics¹. The same statistical figures found out that 68% of the total number of Gaza Strip's population are refugees.

The rapid population growth in Gaza makes things more complicated in terms of Gaza's economy, as the coastal region has long suffered from steadily decreased resources, a 15-year-old Israel-imposed siege, along with an internal political Palestinian split.

¹ Summary of the statistical figures in Palestine, per area, according to the Palestinian Central Bureau of Statistics, February 2022

Over the past time period, Israeli occupation has gripped tight control over all aspects of life of Gaza's population, to the extent that United Nations had declared that the region would become an unlivable place by the year 2020.

This study addresses the relation between population growth in the Gaza Strip and the various challenges at main levels, with reference to all related indicators including demographic, economic, social and living conditions. The indicators, mentioned, make up the assumption that Gaza Strip's living conditions are disastrous.

In general, a population growth in any given country must go with higher rates of development that in turn enrich the population's wealth (the case of Germany following the World War, as well as the Chinese model). Yet, when it comes to the Gaza Strip, the situation seems the opposite, as the population growth over here has been coincided with lower development rates and notable steady devastation of natural resources, a crippling Israeli siege and an internal political Palestinian division.

All such factors have led to de-development because of limited resources that have been increasingly unable to meet the population's various needs. Amidst such a situation, the various sectors that are directly connected with the population, such as health, education, social protection, infrastructure, water and electricity facilities, etc., have faced heaps of challenges.

1. Main demographic indicators:

The table below illustrates main demographic indicators in the Gaza Strip, compared with the West Bank, in particular and the entire homeland, in general, Gaza Strip alone has 40% of the total population in Palestine. Obviously, the population figure in the Gaza Strip could indicate amounting disaster, mainly because of the scarcity of natural resources that meet various basic needs of the population

Table 1: Summary of the statistical figures in Palestine, per area, according to the Palestinian Central Bureau of Statistics, February 2022

Indicator	Year	Palestine	West Bank	Gaza Strip
Population	2022	5,354,656.0	3,188,387.0	2,166,269.0
Population Density (Total of residents per one square kilometer)	2022	889.0	563.0	5,936.0
Sex ratio	2022	103.3	103.8	102.7
Rate of population growth	2022	2.4	2.1	2.8
Life expectancy rate for males	2022	73.2	73.5	72.5
Life expectancy rate for females	2022	75.4	75.7	75.0
Average of number of family members	2020	5.1	4.7	5.7
Total fertility rate	2017-2019	3.8	3.8	3.9
Infant Mortality Rate	2019-2020	12.1	11.7	12.7

2. Population Growth

2.1 Pre-Palestinian Authority era

The Gaza Strip came under the rule of Egyptian authorities up to 1967. During that period of time, Egyptian authorities used to issue yearly statistical figures about the population growth.

In 1967, when Israel began its occupation of the Gaza Strip, Israeli occupation authorities also issued annual statistical figures about the population of Gaza.

According to the table below ²; during 16 years of Egyptian rule of Gaza, the population increased with a rate of 158 percent and the same rate of 159 percent, was noticed during 20 years of Israeli occupation that followed the Egyptian rule.

2 Muhammad Ali Khulouji, "Economic Development in the Gaza Strip 1948-1966" (Cairo, 1967), pp. 52-54;
https://www.palestine-studies.org/ar/node/35212#_ftn23

This rate had unchanged till the outbreak of the Palestinian popular uprising (Intifada), back in 1987. But since the beginning of the Palestinian Authority era up to date, the rate of population growth in the Gaza Strip, has been much higher, as highlighted by this study.

Table 2: Gaza Strip's population between 1950 and 1987

Year	Statistics body	Numbers
1950	Egyptian administration	288,107
1960	Egyptian administration	374,292
1966	Egyptian administration	454,960
1967	Israeli statistics	354,000
1975	Israeli statistics	425,500
1982	Israeli statistics	476,600
1987	Israeli statistics	564,100

2.2 Palestinian Authority era:

The diagram below illustrates the population growth in the Gaza Strip between the year 1997 and 2026. During the period shown, total number of Gaza Strip's population has increased by double and a half (0.9 million in 1997 to 2.2 million in the present time). According to professional estimations, the number of Gaza Strip's population is expected to reach 2.6 million by the year 20303 ; that is two doubles the number, back in 1997. Such a population growth would constitute a disaster for Palestinian residents in Gaza amidst lack of a national strategic plan, as well as shortage of resources. In this case, residents will likely get minimum services and go into a deepened humanitarian crisis, with more poverty and deprivation to rise.

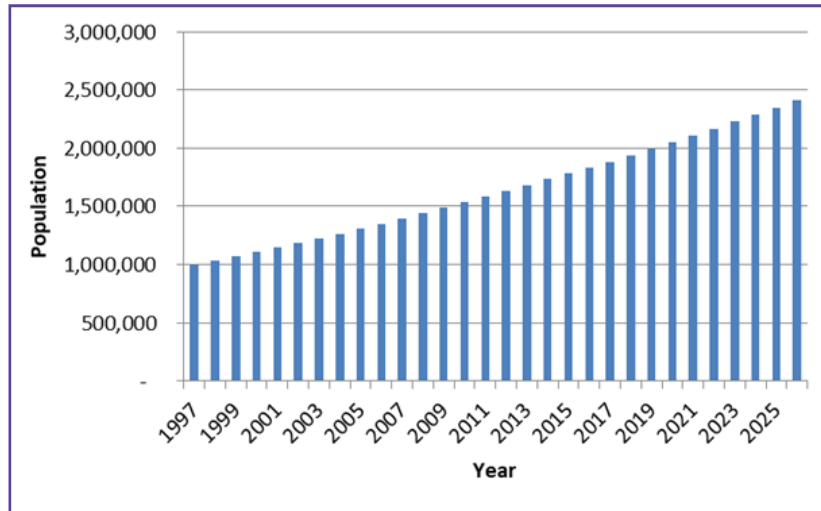


Diagram 1: Population growth in Gaza (1997-2026)-Palestinian Central Bureau of Statistics

Regarding distribution of the population, the total number of refugees in the various refugee camps has decreased from 31.1% in 1997 to 13.4% in 2017, while the population in rural areas has decreased from 5.4% in 1997 to almost zero now. On the other hand, the population in urban areas has increased from 63.5% in 1997 to 86.6% in the present time. Such comparisons indicate that the population of Gaza has opted for urban areas as a place of residence and abandoned rural communities.

In general, the Gaza Strip's population is considered to be a young society, with about 41% of the population are between the age of 0 and 14, while elderly category (above the age of 60) is only 3%. Youth category in the Gaza Strip (18-29) constitutes %21.8 of the whole population. Such a young society develops rapidly, with more new marriages every year, according to (Shari'a Court 2021) statistical figures Gaza records about 21,000 marriages on every year.

In addition, the percentage of crude birth rate is almost 32.9 per 1,000 residents. Crude death rate has decreased to 3.4 per 1,000 residents, compared with 3.9 in the West Bank. On a different perspective, the female headed-households, has mounted to 12% of the entire families in the Gaza Strip. This is mainly attributed to frequent Israeli occupation aggressions against the Gaza Strip that have so far claimed the lives of many thousands of family heads. In a related statistic, the rate of widows in the Gaza Strip has reached 3% of women. Many of those widows are young ones.

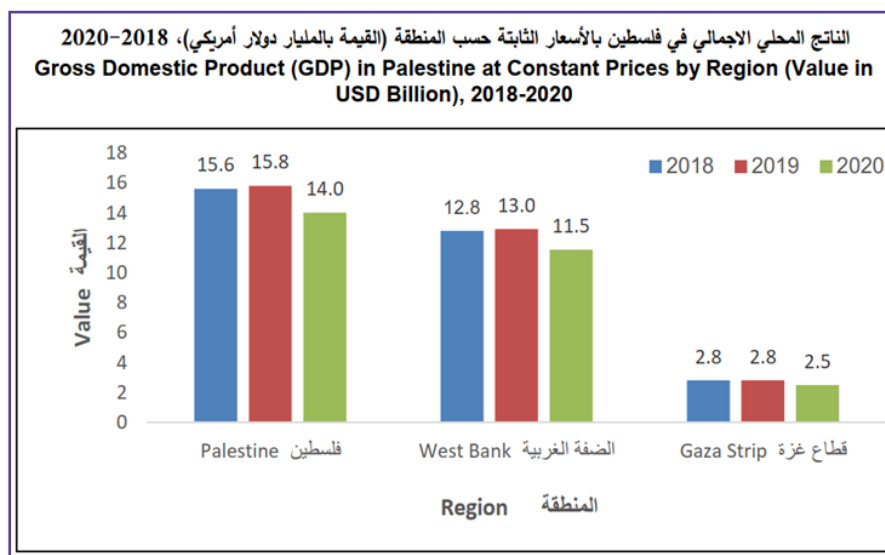
3. Main economic and social indicators:

3.1 Economy

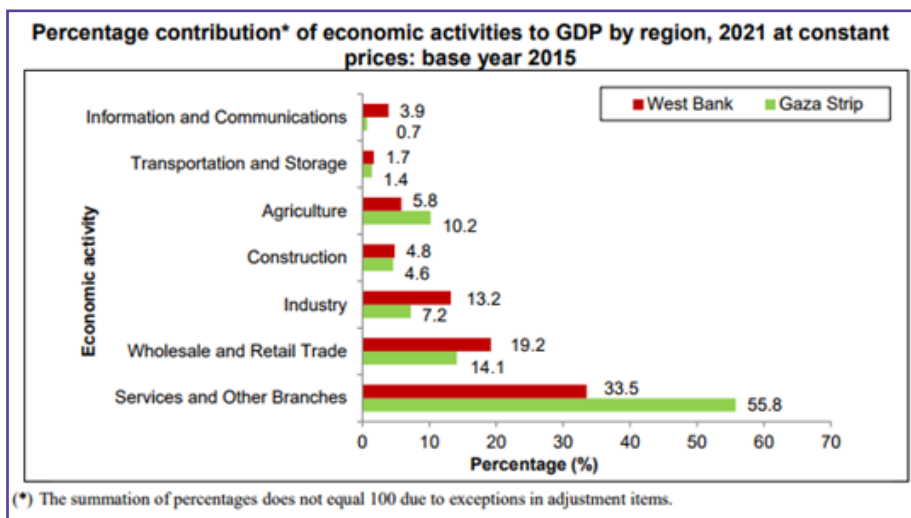
According to statistical figures by the Palestinian Central Bureau of Statistics, Palestinian Gross Domestic Product (GDP) has grossly declined over the past several years. With the establishment of the Palestinian Authority, back in 1994, the GDP's rate was 40%, but for the time being, mainly in 2020, it is only 18%. In the Gaza Strip, the GDP stands at 2.5 billion US Dollars, while in the West Bank, it is 11.5 billion US dollars. The GDP per capita in the Gaza stands at 1,207.6 US Dollar, while in the West Bank, it is 14,197 US Dollars. This indicates that the percentage of individual's GDP share in the Gaza Strip is 28.7% of the West Bank's. Prior to the Israeli occupation imposition of siege on the Gaza Strip, the Gaza Strip's individual share was %90.

Table 3: GDP Per capita - 2018-2020

	2018	2019	2020
Gaza Strip	1,458.3	1,422.2	1,207.6
West Bank	4,854.4	4,822.5	4,197.1
Palestine	3,417.7	3,378.3	2,922.5



At the sectors level, the services sector is considered to be the largest contributor to Palestinian GDP, with a percentage of 55.8%. The commerce sector contributes to the GDP with 14.1%, the agriculture sector 10.2% and the industries sector 7.2%. Such low percentages of contribution by both the agriculture and industries sectors indicate that the continued Israel occupation-imposed siege has caused a decline of important economic activities such as industry, construction and agriculture, while it has helped rise of both services and trade sectors.



The agriculture sector: The agriculture sector is highly important since it is a main component of food security, which in turn supports local residents' steadfastness on their lands that are constantly subject to Israeli settlement. In addition, the Palestinian Authority has not given enough attention and support to the agriculture sector. Therefore, contribution to the GDP by such a vital sector in all over Palestine has dropped from 13.3% back in 1994 to 6.5% in 2021. Hence, it is an imperative that enough support be provided for the agriculture sector, in order to help revive it.

For more than five years now, **the Business Cycle Index⁴** report, issued periodically by the Palestinian Monetary Authority, continues to label the Gaza Strip in the negative zone below-zero sum area. It reached (−62.5%) in the aftermath of the last Israeli attack on the Gaza Strip, in 2021. Currently, this percentage increased to (−32.6%) but is still below zero. Regarding the GDP, Gaza Strip's contribution to the GDP remains the lowest, compared with the West Bank's that is estimated at five times bigger than that of the Gaza Strip.

4 Palestinian Monetary Authority. Business Cycle Index

Unemployment: During 2021, unemployment rate among the labor force in the Gaza Strip (above the age of 15), reached 47%, while it was estimated at 16% in the West Bank⁵, making up a wide gap between both Gaza Strip and the West Bank. In the Gaza Strip alone, the number of jobless people stood at 230,000 in the same period, with the Deir Elbalah governorate recording the highest rate of unemployment, across the Gaza Strip (53%). Khan Younis governorate recorded 51%. On the other hand, the rate of jobless young university graduates in the Gaza Strip stood at 74%, while in the West Bank it was estimated at 36%.

Living conditions: All indicators about living conditions in the Gaza Strip are depressing and reflect a state of misery, poverty and acute vulnerability. Poverty increased from 40%, back in 2005 to 56% in 2020, while the level of food insecurity reached 64% in the Gaza Strip compared to 9% in the West Bank. In the Gaza Strip, percentage of Gaza Strip's population, who are classified as people in desperate need, stood at 77%, compared with 23% in the West Bank.

In addition, 60% of Gaza Strip's population remain subject to dangers, caused by the conflict, while only 40% of the West Bank's population face same threats. In terms of external assistance, provided for the Palestinian people, 80% of the Gaza Strip's population rely on those aids that have been steadily reduced due to direction by international donors of funds to other more highly-volatile regions, such as Libya, Syria and most recently Ukraine.

All aforementioned indicators prove United Nations' declaration that Gaza Strip would become an unlivable place by the year 2020. Since then, the situation in the coastal enclave has been increasingly worsened. This situation requires a national intervention that would put an end to worsening conditions. Palestinians are required, first and foremost, to end their political split and restore one central government, with a clear mandate; maintaining control over natural resources and ending the Israel-imposed siege, along with the Israeli occupation as a whole.

⁵ Results of the Labour Force Survey, 2021

4. Housing sector⁶:

Since the establishment of the Palestinian Authority in 1994, approximately 185,000 housing units have been built, 10,000⁷ of which have been constructed by the Palestinian government. Those government-sponsored units constituted 5% of the total number of the housing units, mentioned above. The remaining 95% have been constructed by the private sector and local residents themselves. With the ongoing natural population growth, there remained a big shortage of housing units, especially for youth, who represent the largest category of the Palestinian population.

In addition, in the Gaza Strip, there is a large number of housing units that do not match up with the basic criteria for normal accommodation standards. Furthermore, owners of many of those housing units still cannot afford renovation or reconstructing the housing units, due to their worse economic or social conditions. A part of the reasons behind unfitting housing units is the frequent Israeli occupation attacks on Palestinian residential areas, underway since 2008.

Local statistical figures suggest that since that same year, more than 17,000 housing units have been completely destroyed, 11,000 of which were devastated during the 2014's Israeli aggression on the Gaza Strip. Also, hundreds of thousands of housing units have been partially damaged, because of those frequent Israeli attacks. In addition, around 1,300 other housing units have remained unreconstructed. During the last Israeli occupation assault on Gaza in May 2021, 1,700 housing units were completely destroyed.

4.1 Main indicators of the housing sector in the Gaza Strip:

- More than 62% of households in the Gaza Strip are in need for an additional housing unit at least till the year 2023.
- Total number of populated housing units in the Gaza Strip is estimated at 334,710.

⁶ Eng. Naji Sarhan, Eng. Jawad al-Agha, data from the Ministry of Housing in Gaza and Shelter Cluster

⁷ Official governmental interventions were limited to building a number of residential neighborhoods, such as the Sheikh Zayed Residential City in the north, and the Al-Farra and Al-Namsawi neighborhoods in Khan Yunis, the last of which was Hamad Residential City. As well as activating the housing cooperative societies system and some limited facilities to implement the real estate investment system, in addition to distributing land in housing projects for people with limited income.

- Approximately, 8% of populated housing units in the Gaza Strip require immediate reconstruction that would turn them into proper places for living.
- An average number of new marriages in the Gaza Strip is estimated at 21,000 on annual basis (Shari’a law courts)
- To meet natural population growth, Gaza Strip needs to have some more housing units on annual basis, estimated at 15,000.
- About 60,000 housing units in the Gaza Strip require rehabilitation or renovation, in order to become proper places for living. In addition, there are 26,000 others are in need for complete reconstruction.
- 11.7% of the households live in small housing units (one room for more than three individuals). In refugee camps, such a rate is as higher as 15.6%.

4.2 Reconstruction of damaged housing units:

The following table illustrates the total number of damages, caused by Israeli occupation attacks to housing units:

Table 4: Total number of damages, caused by frequent Israeli occupation attacks, to housing units from 2008 to 2021

Damage type	2008's Aggres-sion	2012's Aggres-sion	2014's Aggres-sion	2018 - 2019	2021's Aggres-sion	Total
Completely destroyed	5,700	200	11,000	273	1,700	18,873
Partially destroyed	52,000	8,300	162,500	3,416	59,565	285,781
Total	57,700	8,500	173,500	3,689	61,265	304,654

The ministry of public works and housing has already kicked off some great efforts for reconstruction, in cooperation with main donors. Yet, funding available for such a reconstruction process is still inadequate, with 1,586 housing units are completely destroyed and 90,145 others partially destroyed. These units are left without reconstruction or repair.

The following table illustrates current needs with respect to housing units.

Table 5: Current needs with respect to housing units

Year	2022
Number of housing units	334,710
Natural population growth's need	15,000
Reconstruction of existing housing units	26,776.8
Repair and rehabilitation of existing housing units	60,000
Total number of required new housing units (natural need)	101,777
Damaged housing units that need funding	1,586
Housing units, damaged by the aggression	90,145
Total number	193,508

4.3 Main challenges, facing population growth:

There has been an increased need for housing units, either because of natural population growth or due to the destruction by wars of existing housing units. A third reason is the mounting numbers of impoverished and fragile households in the Gaza Strip, amidst increasingly weak purchase power, caused by worsening economic conditions and sored prices of raw building materials because of the Israel-imposed siege.

Amidst this situation, many investors of the construction sector have detached themselves from what they believe to be high risks of possible investment in the field. Currently, there are hundreds of already constructed housing units that are pending purchase. At the government level, there is inadequate funding for constructing new housing units, as donors have opted for repairing partially-destroyed housing units, rather than funding construction new housing units. In addition, there is decrease of land suitable for building in terms of residents attraction and availability of proper infrastructure.

5. Education sector

5.1 General education (from first grade to grade twelve)

Since the establishment of the Palestinian Authority, number of Palestinian school children has doubled twice and a half. During the early times of the PA, the number of school children stood at a total of 243,336, while these times, it stands at 591,599. According to the Palestinian Authority's ministry of education, the number of Gaza Strip's schools was 746, with a total number of 591,599 school children including 297,577 male and 293,907 female. The same ministry's statistics suggest also that there are 21,233 schoolteachers, distributed as follows:

Table 6: Distribution of schools, students and teachers by supervising bodies.

Supervising body	No of schools	%	No of Students	%	No of teachers	%	No of students per a teacher
Government run	422	55.20%	286327	48.40%	11174	55.20%	25.6
UNRWA run	278	36.40%	287019	48.50%	8941	36.40%	32.1
Private sector run	46	8.40%	18253	3.10%	1118	8.40%	16.3
Total	746	100%	591599		21233		

Given the shortage of the number of schools, compared with the increasing numbers of school children, the schools have followed a shift system; morning and evening duty shifts. 58% of the total number of government-run schools work within two shifts, while %70 of the UNRWA-run schools has two shifts. Private sector-run schools operate within one shift only.

Establishing some more schools has increasingly become an imperative, as the number of school children has increased, due to the natural population growth. In order to create new schools that meet the educational needs with no need for evening shifts, proper pieces of land should be ensured and adequate funds for construction, should be made available.

The Palestinian Ministry of Education in Gaza, has already made clear that despite the fact that some more new schools have been established, still the number of new school children does not match up with the newly-built schools. Thus, the gap between existing schools and the increased number of new school children, on annual basis, is still wide and resulting in school children overcrowded in one class-room, forces schools' administrations to operate within shift system.

According to estimates by the United Nations, the number of school children is expected to get much bigger and that starting from 2030, the number of school children in the Gaza Strip will be more the number of school children in the West Bank.

Table 7: Expected increase of number of school children

Year	2030	2040	2050
Expected number of school children	1,208,000	1,655,000	1,743,000

Main challenges, caused by population growth:

A rapid population growth in a young society always creates a great challenge in terms of needed infrastructure for a proper educational process. The large number of school children in Gaza Strip requires those in charge for education to ensure larger numbers of both schools and teachers (By the year 2030, there have to be 23,000 new school teacher as well as 850 new schools). In addition, the limited size of land and the shortage of proper pieces of lands for schools to be built on, also create a great challenge for decision makers.

5.2 Higher education

In the Gaza Strip, there are 26 higher education institutions including 6 universities, 2 open education universities, 10 university colleges and 8 other intermediate education colleges. Seven of the total number of universities are run by local government, twelve run by private sector, five others are public ones, while the remaining two are run by UNRWA.

The number of students, enrolled at all those Gaza Strip-based academic institutions, till the school year 2020-2021, stood at 77,845 including 33,349 males and 44,496 females and it is noteworthy that the number of female students exceeded the male students. Obviously, the number of university students in the Gaza Strip has increased, as the total number of graduates during the same period, reached 12,469 including 5,437 males and 7,032 females⁸. Due to widespread unemployment in the territory, those graduates have remained jobless.

Despite the fact that the increased numbers of school children would mean increased numbers of university students, it has been obvious that many thousands of high school graduates have been unable to join the various academic institutions. This could be attributed to the fact that a large swath of the population in Gaza has been increasingly unable to cover tuition fees for their children or due to the widespread conviction that a university education does not necessary lead to a decent job. In the Gaza Strip, unemployment rate among university graduates stands at %74.

Main challenges, caused by the population growth:

In recent years, it has been clear that higher education has increasingly become unattractive, due to rapidly growing numbers of jobless university graduates in the Gaza Strip, estimated at 74%. In addition, there needs to be some reforms in the higher education system itself, mainly shutting down some specializations, where unemployment potential is high and opening new specializations that could meet local market's needs. Furthermore, there needs to be some other academic reform with respect to curriculums, mainly applying curriculums that fit in modern times.

5.3 Education, training, vocational and technical training sector TVET:

International donors and institutions have given broad attention to this sector, with large funds having been invested in which, the funds that have been allocated have aimed at meeting the local market's needs in terms of various skills. Yet, the biggest challenge, facing this sector is the fact that local residents' outlook towards the vocational or technical education is quite negative. Many people in the Gaza Strip conceive the sector as that of drop-out students, who can only go for vocational or technical education and therefore, those people refrain from directing their children to such a type of education.

⁸ Ministry of Education and Government Statistics

However, in recent years, it has been noted that the negative outlook towards vocational or technical training has increasingly gradually turned positive. This could have been attributed to worsened living conditions that have prompted many households to encourage and guide their children to vocational training centers, so that they will be able to join the labor force, at the local market, while UNRWA-run vocational training centers, for example, have remained a destination for those learners, to the extent that UNRWA has increasingly become unable to meet education demands.

Institutionally wise, the vocational and technical training sector has remained unorganized and dominated by chaos and fragmentation, due to the fact that there are various players, who lack coordination among them. Given demands by relevant international organizations that this sector be more organized, the Palestinian Authority has decided to form the “National Commission for Vocational and Technical Education and Training (TVET)”, as the main official central body in charge with organizing the sector and coordinating with the ministries of education, labor and social development, as well as other private-sector relevant institutions, UNRWA-run centers and local society organizations.

On February 10, 2021, a presidential decree⁹ was issued to form the Commission. The commission began its actual work in the West Bank city of Ramallah and soon all relevant administrations and centers that belong to the aforementioned ministries will directly belong to the newly-formed committee.

The following table illustrates a number of Gaza Strip-based institutions that work in the field of vocational and technical training – 2019-2020

Table 8: Vocational and technical education and training institutions in the Gaza Strip for the academic year 2019/2020

Classification	Number
Technical education (Universities and colleges)	12
Vocational education (Vocational high schools)	9
Vocational Training:	
• Ministry of labor-run centers	5
• Ministry of social development-run centers	6
• Non-government-run centers (NGOs and Private sector)	29

⁹ <http://muqtafi.birzeit.edu/pg/getleg.asp?id=17417>

During the school year 2018/2019, the number of students, attending technical training programs within universities and colleges, stood at 30,949, while those attending educational and vocational training programs, stood at 3605.

The researcher had previously made several studies over the relation between labor market and TVET sector, in which he proved that the sector is of significance, as being a proper field of investment. Investment in such a sector would lead to various job opportunities within various levels of skills, such as semi-skillful, skillful, vocational professional or specialized technician.

According to the researcher, what distinguishes this sector from other sectors is the fact that training periods within the sector ranges from short-run (3 months), a certificate level (six month-training), a diploma certificate of two years, as well as a four-year-period (BA level). On the other hand, the local market is full of many thousands of jobless university graduates of all other majors, in a time the local market lacks skillful hands that could meet the local market's fluctuational needs.

Vocational and technical training centers need some development in terms of their physical infrastructures; constructing proper modern buildings and installing modern equipment and tools. Based on the researcher's studies, those centers also need to be developed in terms of their educational infrastructures, including new modern curriculums, building up and improving the capacities of teaching staff. There is also a need for coordination between the centers and the local market, where students can get some training at various institutions inside the local community, in a way that would enrich their educational experiences. The studies also suggest that students, attending vocational or technical training, should be encouraged to join the freelancing market, which is believed to be more sustainable than the regular labor market.

6. Electricity sector:

For many years now, power supply crisis in the Gaza Strip has remained unresolved. For the time being, Gaza Strip's residents get partial electricity in the best cases, within the program of 8 hours of electricity connection and 8 hours of power outage. The table below illustrates the average power supply for Gaza Strip's residents, per day, over the past many years.

Table 9: Daily average hours of electricity (2017-2022)

Year	Average of hours of power supply per day
2017	6
2018	7
2019	12
2020	13
2021	13
2022	12

The power outage crisis is not technical but rather pure political. The crisis has been deepened due to the political Palestinian division and despite of the fact that millions of US dollars have been already spent on buying fuel to generate electricity, the crisis has not been resolved.

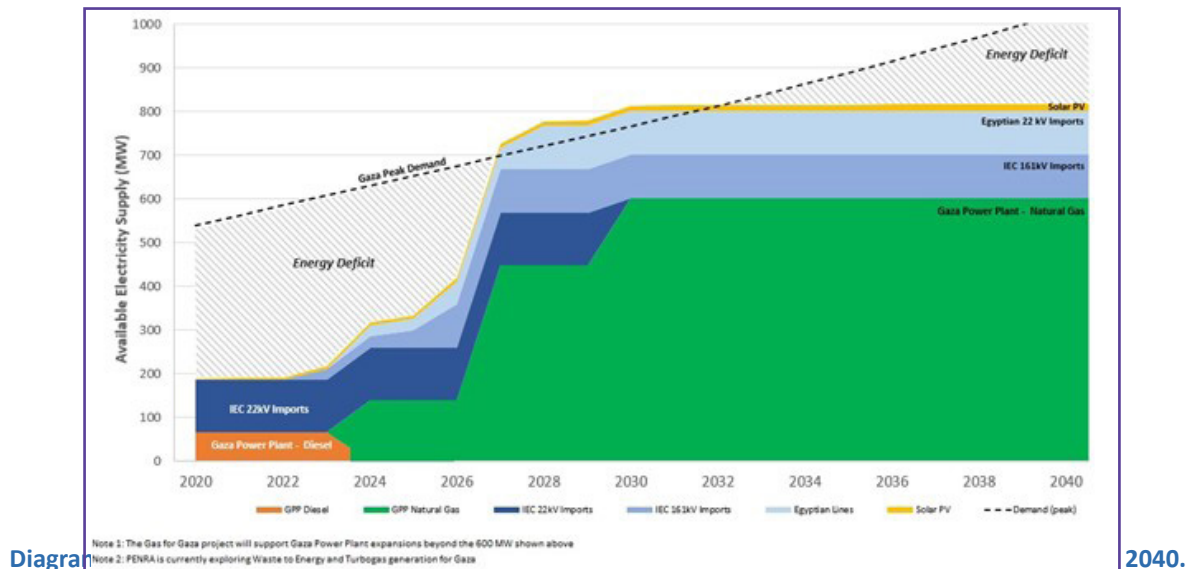
Another possible solution for the power outage problem could have been establishing a new power plant, instead of having spent large amounts of Qatari funds to buy industrial fuel, that was burned during a decade without providing a sustainable solution.

Currently, residents in Gaza get power supply from four main sources; the national Israeli network (120 Megawatts), the Gaza-based power plant (40 to 60 Megawatts), the Egyptian electricity network (30 Megawatts) and some other alternative sources of power supply, mainly local private-owned small networks.

The total amount of Megawatts, provided by all the above mentioned sources, still cannot meet the Gaza population's actual need for electricity. This need is estimated at 400-600 Megawatts. Shortage of power supply in Gaza is estimated at %80, in general.

For the time being, international institutions, led by the International Quartet Committee for peace in the Middle East, the United Nations (UNOPS), European Union and the state of Qatar, have been all working on a new a project called Gas for Gaza. The project is aimed at enabling the existing Gaza power plant to operate, using gas instead of industrial fuel, as well as lifting up the plant's capacity to be able to generate 600 Megawatts of electricity. Other sources of power supply by the Israeli, the Egyptian and Solar panels will continue.

The following diagram illustrates the status of power supply, in case the aforementioned planned project will see the light the deficit will continue until 2026 and self-sufficiency can be only reached by the year 2027 through 2032. Deficit of power supply will expectedly be seen by 2033. Such a projection necessitates finding a drastic and a sustainable solution for the power supply crisis in Gaza, away from the Israeli occupation, which still grips control over power supply, industrial fuel and gas. Resolving the crisis should be also depoliticized by detaching from political Palestinian split and its various ramifications.



Main challenges, caused by population growth

Rapid population growth in Gaza has caused an unprecedented demand for power supply. This has been represented in new housing unit, new residential compounds, sewage water plants, streets lights for both local roads and the industrial zones. Obviously, current sources of power supply cannot meet mounting demands for electricity, either for now or for the future. Therefore, it is an imperative that a drastic solution for the power supply crisis, should be found, away from politics and based on highly professional criterions, only. Such a solution should guarantee a national Palestinian control over the electricity supply in a way that would allow no more political blackmail by any party, whosoever.

7. Information Technology Sector

Information technology and telecommunication sector (ICT) is considered one of the most important economic Palestinian sectors for whatever development such a sector sees is reflected positively on all technologies, related to other economic sectors.

Currently, many of those sectors have made some good steps towards computerizing all their operations and apply information technologies within their institutions taking advantage of IT applications and solutions. As a matter of fact, information technology leaves multiple impacts including creation of new jobs within other economic sectors.

Any investment in the ICT filed, would create triple the jobs, created by other sectors (Study by Portland Trust). Given the nature of the sector, during the recent Corona Virus pandemic that has ripped through majority of world countries, the ICT has been less affected by the pandemic. On the contrary, the sector has seen some development, with majority of people having depended on ICT, in time of the Corona Virus crisis.

Demand for internet services had notably increased for the purpose of electronic learning, electronic commerce, electronic marketing and some other web services. Amidst the situation of the besieged Gaza Strip, the ICT is a borderless sector (cross-border), and therefore it continued despite the siege, and the number of remote workers increased significantly, and the outsourcing and the freelancing systems spread, whereas these freelancers provide services in other countries. This in turn led to an increase in the demand for free workspaces, which provide a place to work with paid uninterrupted power and high-speed Internet.

It has been notable that the added value for the ICT in the Gaza Strip had increased from 14.5 million US dollars, back in 2006 to 16.7 million US dollars in the present time. On the other hand, added value for other various sectors has notably decreased over the past years.

Because of the Israeli occupation-based siege, the Gaza Strip has had difficulties obtaining some advanced telecommunication equipment and networks, in the shadow of the fact that the territory's telecommunication systems have operated by the 2G telecommunication, since the siege has been enforced in 2007. In the West Bank, Israeli occupation authorities have allowed the 3G system to operate since 2018.

Back in August 31, 2021, Israeli occupation authorities declared that the 4G would be operated, across the West Bank. In the meantime, Gaza's telecommunications still use the 2G operating system. As a matter of fact, Israeli telecommunications use the 5G technology.

Challenges, caused by the population growth

The rapid population growth in the Gaza Strip is making demand for internet and cellular telecommunication services by both individuals and firms, much bigger than ever. Current telecommunication network in the Gaza Strip does not meet basic demands for the abovementioned services. Therefore, operating the 5G system has become an imperative. Once the 5G is available in the coastal territory, a genuine progress in the telecommunication and ICT fields will be seen. Such a potential advancement would create more job opportunities for those working in the field. It would also enable those workers to export their expertise outside Gaza, by means of outsourcing or freelancing.

8. Fighting poverty and social protection Sector

In cooperation with main donors, the Palestinian ministry of social development is currently executing a series of interventions for countering poverty and protecting most vulnerable households or individuals in the community.

According to the Ministry of Social Development, 3,281,515 individuals had benefited in 2021 from financial assistance, estimated at USD 174,424,752. The Ministry suggests that individuals can benefit from more than one intervention program.

Unfortunately, the aforementioned fund had not helped alleviate poverty or help most vulnerable communities. Hence, it is increasingly important to find some sustainable solutions that would help save impoverished households or individuals of poverty and desperate needs. The following diagram illustrates the amounts of contributions by main partners with the Social Development Ministry. Funds provided by Qatar alone constitute 45% of the total funding (The Qatari grant was a total of 77.6 million US dollars, paid for eight times to 79,000 beneficiary households in Gaza). As for the Cash Transfer Program, run by the Palestinian Authority, it had retreated by 11%, with only one-time payment to 79,269 households, over the year 2021.

Such a recession of the PA-run assistance program would require a true investigation into main causes and factors that have might led to almost paralysis of such a program. The program's recession has caused many thousands of beneficiaries to stop getting regular financial aid. In case such a situation remains in place, there will be a need for finding some alternative funding programs. On monthly basis, the World Food Program (WFP) has been promptly funding Cash vouchers for a total number of 125,680 beneficiaries, with an estimated amount of 16,7 million US dollars.

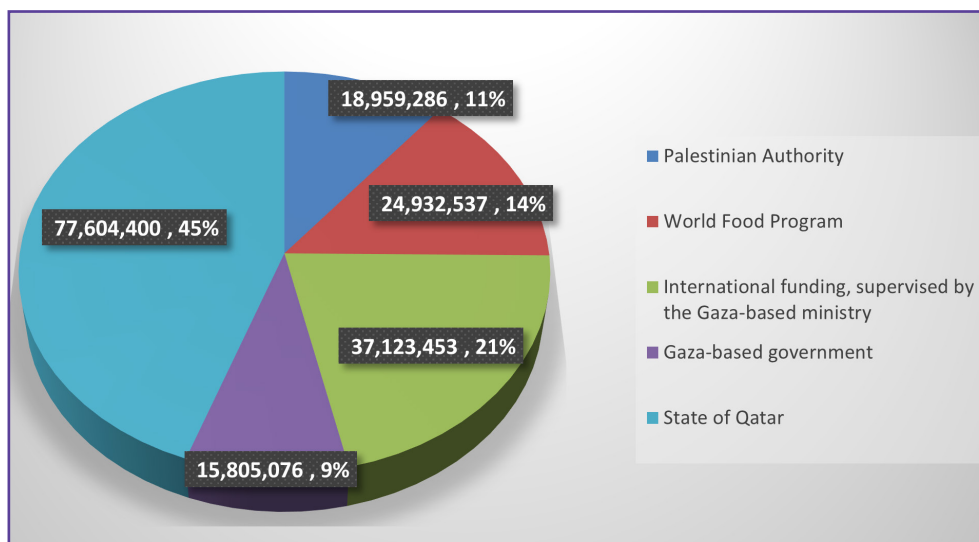


Diagram No. 3: Percentages of contributions by main partners in the poverty fighting and social protection for the year 2021 (Dollar currency).

Overall, all the above mentioned interventions have failed to meet all basic needs for fighting poverty and ensuring community-based protection. Therefore, the gap between needed funding and the rate of poverty, along with vulnerable communities, has been widened over the years.

Current available funding programs cannot meet the needs of marginalized categories of the local society. Below is a list of those categories:

People with Disability: Recent statistical figures suggest that the total number of people with disabilities in the Gaza Strip is 53,940 including 24,012 females, 44.5%. Majority of them (28,027) are with mobility disability. Such disabilities have been caused by various factors including the 2018's March of Return demonstrations, on the Gaza Strip's borders. Such a large number of persons with disabilities, across the Gaza Strip, should push for some more related researches.

The persons with disability benefits from the Ministry of Social Development within bank checks, provided periodically by the ministry itself, under the title "Cash Transfer Program". They also benefit from a health insurance, provided by the local government, as well as from some other assistive devices, represented by some wheelchairs and training.

Orphans: The number of orphans in the Gaza Strip is estimated at 18,088 in the age group 0 17 years old. 9,301 of whom are males and 8,787 are females. Such orphans get some services, provided by local society organizations, as those organizations ensure some shelters with all possible full care (The Gaza-based Alamal or Hope Center for Orphans) is an example, along with some other charitable organizations that provide them with some monthly financial aid. Due to frequent Israeli aggressions against the Gaza Strip, the number of orphans has been steadily increased, while funding for orphans has been reduced, given some major challenges, faced by orphans-related charitable organizations, throughout the Gaza Strip.

Some of those organizations have had their bank accounts closed by concerned monetary authorities and all money transactions including transfers from abroad, have been banned.

Elderly care: The number of elderly people (above the age of 60) in the Gaza Strip stands at 91,510 including 47,585 females and 43,925 males. Half of them have been registered by the national program for social protection. Some local society organizations have been providing care to this category, however, those organizations have been facing some funding challenges and therefore, they have been unable to provide intensive care for the elderly people, registered with them. They have been only able to intervene on irregular basis, depending on availability of funding.

Women exposed to violence: The researcher has so far conducted several studies on gender-based violence. His studies have all found out that violence against women in the Gaza Strip has been steadily mounting, to the extent it has become a disturbing social phenomenon. Back in the year 2011, the Ministry of Social Affairs established what the ministry termed 'the safety house' for the care of women who happen to be exposed to violence. For the present time, many relevant organizations, especially those dealing with women or legal issues, have been executing a series of specialized programs that address protection for women, who endure some kind of violence. The programs, run by those institutions, have aimed at ensuring legal protection for those women and empowering them economically. They have also held psychological counseling sessions for those women. Unfortunately, all the aforementioned interventions have failed to prevent the phenomenon of violence against women from broadening and worsening. For the time being, the phenomenon has worsened due to current living conditions, with many family heads (men) being unable to meet their families' needs.

Main challenge, caused by the population growth:

Rapid population growth amidst miserable economic conditions constitutes an outrageous challenge to the whole system of social protection. The social protection system is now no longer able to live up with all relevant obligations. Currently, more than %80 of the Gaza Strip's population rely on foreign aid.

The researcher believes that the population economic empowerment, especially for the vulnerable and disadvantaged groups, is a main entry point for alleviating the national system for community protection and transferring these groups and the beneficiaries of the system from the cycle of needs and poverty to owners of a source of income for their families and the country.

9. Conclusion:

All indicators at the various levels, including economic and social are quite negative and life seems rapidly going much worse than ever. Hence, the entire Palestinian community should hold national responsibility towards saving the Gaza Strip from worse to come, by ending the political split, restoring a central government that is responsible for all natural resources and their development. After having ended the political division, leading to end of the Israeli siege and occupation. On the long-term level, it is indispensable to expand the geographical borders of the Gaza Strip with either geographical expansion towards occupied Palestine or by filling the sea.

Local Civil Society organizations have a national and moral responsibility to hold; they should continue their defense of the people's rights and basic services. Both parties of the political division should enable local society organizations to assume their leading role, instead of shrinking their space and imposing restrictions on their actions.

10. Recommendations

The following recommendations can be considered sustainable solutions for the Gaza Strip's crises. First and foremost, there needs to be a drastic reform of the whole scene. In order to achieve this ambition, the impact of population growth on the various sectors could be mitigated by a number of recommendations, **as follows:**

10.1 Strategic recommendations

- Expanding the area of the Gaza Strip, either towards the ocean (filling in parts of Gaza Sea, like the Netherlands' experience), which requires large investments, or going deeper into historical Palestine. It is a matter of fact that prior to the armistice agreement of 1949 adds 200 square kilometers to the Gaza Strip. Once these boundaries are expended, based on that fact, population growth's needs can be easily met. Of course, such an expansion can never see the light, except by means of a permanent solution.
- In addition, ending current political Palestinian split and restoring one central government that should be in charge of all natural resources and their development, as well as ending the Israeli occupation and siege, should be all a way out of many Gaza Strip abnormal conditions, arising from the sharp division, which has resulted in more harm to the population than the two sides of the division have harmed themselves.

10.2 Recommendations at the local society level:

- Both parties of the political split should make sure to enable local civil society organizations in the Gaza Strip to assume their leading roles towards the Gaza Strip's population instead of narrowing the space available to them without hindrance or restrictions.
- Civil society organizations should hold national and moral responsibility by continuing defending the people's rights and enable them to obtain their rights to basic services.
-

10.3 Recommendations at the national strategic planning

Upgrading a Structural Plan: In 1979, Israeli occupation prepared some structural plans for the Gaza Strip, for the purpose of meeting the occupation's security needs. Following the establishment of the Palestinian Authority, the Palestinian Authority's Ministry of Planning and International Cooperation made its own structural plan regarding Gaza Strip, within a national vision.

With the outbreak of the second Palestinian uprising (Intifada) of Alaqsa, as well as the subsequent internal political split, the Ministry's plan turned unworkable. That is mainly because of the random construction works and the designation of some government-owned lands, away from the plan itself.

Therefore, there has been a bad need for making a new structural plan for the Gaza Strip in a way that meets current and future needs. Since the beginning of this year, the ministry of local government in Gaza made some efforts to prepare a new master plan, with the participation of some other community-based institutions. The planned scheme is expected to be completed by the end of this year.

Preparing a five-year plan for reconstruction of Gaza Strip

This plan needs to be prepared with community participation, to be presented to donor bodies for possible funding.

10.4 Recommendations at the sector level

Housing sector:

- Designating suitable pieces of land for the construction of new residential compounds, including infrastructure
- Establishing housing projects, pertaining to youth, especially those who are newly-married. Such units should be small ones and distributed for rental purposes. Thus, more of such units can be constructed on less land areas.
- Seeking new raw building materials and ways of construction that could not be as costly as existing ones.
- Vertical expansion of residential buildings, , something that requires municipalities to develop the current system used for construction of high buildings.

Education sector:

- Ensuring enough spaces of land for the construction of new schools, especially in remote areas.
- Building new schools, based on the population's density in the various residential areas. This could help students, especially for primary stages in order to reach their schools faster and easier.
- Reviewing the low-quality standards that the Ministry is working on (such as classroom density) and adherence to international standards.
- Ensuring a number of new well-rehabilitated staff teachers, amidst the spread of many thousands of jobless university graduates.

University education sector:

- Preparing a special study that addresses the various academic majors available at local universities. The proposed study is aimed at making a comparison between the available majors and the local market's needs. It is recommended that some university majors or specializations, with high rate of unemployment, should be shut down and that new majors that are needed by the local market, should be opened. In addition, existing academic curriculums should be upgraded in a way that fits in modern times.

Education and vocational /technical training sector (TVET):

- This sector requires some more attention, for it is considered to be one of the main sources of the local market. It involves some skillful laborers meeting the needs of employers.
- Upgrading existing physical infrastructure of the vocational training centers, including some modern buildings, advanced equipment and tools, as well as raw materials.
- Upgrading the educational environment including curriculums, staff teachers' capacities and linking such centers with the local market within reinforcement of students' practical experience at the various vocational centers, by engaging them in the local market's various institutions.
- Encouraging graduates of vocational and technical education to engage in freelancing jobs, available online, since sustainable jobs are no longer abundant.

- Raising the awareness of the local community towards the significance of vocational training as being open to all potential students, and not necessarily constitute a stigma and that it is not intended for those with low levels of educational achievement.

Power supply sector:

- Keeping the power supply crisis away from politics and then managing it on some professional basis, only.
- Finding a drastic and sustainable solution for the crisis, including possible networking within the seven-parties network agreement.
- Ensuring a national control over the power supply sector by detaching from the Israeli occupation, which continues to blackmail Palestinians.

Information technology sector:

- Upgrading existing telecommunication system to 5G in a way that would develop the telecommunication sector and open up some more job opportunities in the field.
- Building the capacities of the sector's workers, in order to match up with related rapid modern technologies, worldwide.
- Connecting the field's staff workers with the regional and international markets by means of promoting export of expertise online, by means of outsourcing and freelancing.

Poverty fighting and social protection sector:

- Finding sustainable solutions that would alleviate poverty and enable those impoverished to move from poverty to production.
- Economic empowerment of the general population, especially for the vulnerable and disadvantaged groups, is a main entry point for alleviating the national system for community protection and transferring these groups from the cycle of needs and poverty, and transferring the beneficiaries of the system to owners of a source of income for their families and the country.

- Linking humanitarian aid and relief projects with some deliberate developmental plans that would gradually transform impoverished ones from relief and lifesaving to strengthening steadfastness with better living conditions and then to development.
-

Agriculture sector:

- Giving top priority to the agriculture sector for its contribution to ensures food security.
- Revising all agriculture-related policies that have been already adopted by consecutive governments, but have so far failed to manage this important file.
- Promoting some modern farming techniques such as vertical and hydroponic farming, in addition to organic farming.
- In terms of the livestock sector: improving breeds and providing better veterinary services, especially the sector is short of veterinary cadres.
- Establishing a special fund for supporting Palestinian farmers, as well as activating the Palestinian Agricultural Disaster Risk Reduction and Insurance Fund (PADRRIF), so that farmers, who are exposed to some damages due to climate changes, can be compensated.

The information and views set out in this paper do not necessarily reflect the official opinion of the Palestinian NGOs Network and the Friedrich-Ebert-Stiftung.



This paper was prepared as part of the project “Channels of Developing Community Needs within a Rapid Population Growth in the Gaza Strip”

Implemented by: Palestinian NGO’s Network.

In Partnership with:
Friedrich-Ebert-Stiftung, Palestine.

