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Palestinian Central Bureau of Statistics

Multi-Dimensional Poverty Profile in Palestine, 2017 Main Results

June, 2020

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Acknowledgement

This report is the first national contribution of its kind, that addresses the multi-dimensional poverty in Palestine. Thus, this report is considered as a response on a decree issued by the Palestinian Council of Ministers aiming at evaluating the multi-dimensional poverty within the preparation framework for achieving the Sustainable Development Goals (SDGs) and the Palestinian National Policy Agenda (NPA).

Hence, this publication has contributed in formulating a national "multi-dimensional" poverty line that is clear and specific according to a scientific methodology, and through Palestinian official and national data and inputs.

The scientific methodology followed in this report was formulated through a series of thorough and extensive consultations with the National Team for Poverty Combating and a group of regional and international experts. The national discussion regarding the adopted concept and the methodology, is considered a vital form of communal contribution in formulation the national concept of multi-dimensional poverty.

This report is prepared by the Palestinian Central Bureau of Statistics (PCBS) and the United Nations Economic and Social Commission for Western Asia (ESCWA). Also, this report benefited from and was enriched by several remarks made by Oxford Poverty and Human Development Initiative (OPHI), in addition to the hard work and efforts made by the National Team for Poverty Combating in reviewing the concept and methodology, which, in return, helped in enriching the content of this report

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Preface

Poverty indicators are the most important indicators of socio-economic aspects of a country. In line with the mission of the PCBS to produce and disseminate high quality official statistics which meet the needs of current and future users of data nationally and internationally, efforts have been exerted during the past four years to develop poverty indicators and their presentation to data users. To extend and continue work on the development and enhancement of poverty indicators, PCBS has worked on the Multidimensional Poverty Index (MPI) since 2014.

The topics covered by the MPI adhere to international recommendations and are tailored to the needs of the Palestinian context to clarify the causes and scale of poverty. The MPI, which is a new output by PCBS, is part of an ongoing project in the development of poverty statistics in Palestine.

Statistics on monetary poverty indicators were first published by PCBS in 1998. Since then, statistics have been published annually based on the data available from the expenditure and consumption survey (PECS), which provides figures for monthly household consumption. The household expenditure and consumption survey (PECS) is the main source of data for calculating poverty indicators in Palestine and data are obtained from the daily record book given to each household in the survey. This survey was implemented by PCBS for the years 1996-1998, 2001, 2004-2011 and 2016/2017.

We hope that this document will assist researchers, policymakers and decision makers, and will be an effective valuable tool in the development of plans and policies. It will also raise awareness of the factors related to poverty in Palestine in order to build programs to protect and meet the needs of Palestinian society, especially the most disadvantaged groups.

June, 2020

Dr. Ola Awad
President of PCBS

Introduction

In Palestine, a national monetary poverty line has been used for policy and public transfer since the release of the first national poverty report in 1997. The National Poverty Line is based on a budget of basic needs for a reference household and based on actual consumption patterns of Palestinian households. Two poverty lines have been developed according to actual spending patterns of Palestinian households. The first, termed "deep poverty line," was calculated to reflect a budget for food, clothing and housing. The second line adds other necessities including health care, education, transportation, personal care, and housekeeping supplies. The two lines have been adjusted to reflect the different consumption needs of households based on their composition (household size and the number of children).

Foster-Greer-Thorbecke (1984) decomposable class of monetary poverty measures were used. The poverty indexes used in this report are as follows: Head count index (P_0) which gives the percentage of the population in poverty; Poverty gap index (P_1) which gives the percentage by which the average income of the poor is below the poverty line; and Poverty severity index (P_2) which gives the mean of the squared consumption deficits. Since this index is sensitive to the distribution of income below the poverty line, it can be used to compute the amount of transfer needed to bring the poor up to the poverty line

Using the monetary poverty concept, about one out of three individuals (29.3 percent) were living below the poverty level in 2017. The poverty rate for Gaza Strip (53 percent) was more than four times higher than of the West Bank rate of 13.9 percent. More significant is the fact that (33.7 percent) in Gaza Strip were suffering from deep poverty compared with 5.8 percent of the West Bank; (which means that they are unable to meet the minimum required for food, clothing and housing). This indicates that the poor Individuals in Gaza Strip were poorer than those of the West Bank.

Table 1: Poverty Rates among Population using Monetary Poverty Concept, 2017

Region	Poverty Rate		Poverty Gap		Severity of Poverty		Deep Poverty	
	Value	Contribution	Value	Contribution	Value	Contribution	Value	Contribution
West Bank	13.9	28.8	2.8	21.7	0.9	18.1	5.8	21.0
Gaza Strip	53.0	71.2	15.7	78.3	6.5	81.9	33.7	79.0
Total	29.2	100.0	7.9	100.0	3.1	100.0	16.8	100.0

It is widely known that poverty is multidimensional in nature, consisting of both monetary and non-monetary aspects. The reliance on one aspect of wellbeing such as income or expenditure provide a one sided and narrow picture of the levels and distribution of poverty. Furthermore, some families, countries and regions within countries have high levels of income and very little poverty, but their populations rank very low in terms of social wellbeing, as is shown in the various UNDP Human Development Reports. Although we know quite a bit about the extent of monetary poverty in Palestine, it is unclear how the situation is regarding the extent of multidimensional poverty and its distribution among Palestinian families and geographic localities.

There are various ways to measure multi-dimensional poverty using the Alkire-Foster framework. The most well-known framework is the one adopted in the Global MPI. The

Global MPI uses a simple framework mirroring the HDI global index which has been published annually since 1990 (UNDP 2016), but with household level micro data. It consists of three dimensions (health, education and standard of living) and 10 equally weighted indicators within each dimension[1]. The Global MPI identifies a person as poor (poverty cut-off) if the person is deprived in 33% or more of the weighted sum of indicators. The Global MPI is essentially designed to reflect acute poverty in low income countries, and may not reflect the extent of human poverty in middle-and-upper-income countries (Alkire and Santos, 2010).

Palestine proposed index uses the modified Alkire-Foster method, with a slightly different weighting scheme from the Global MPI but the same cut-off point for the multi-dimensionally poor.

The proposed framework for Palestine differs from those available in the region in two important aspects. First, it is rights-based. The selection of dimensions corresponds to a set of rights found in the basic law as well as the child protection and labor laws in Palestine. Second, the index includes monetary poverty as one of its main dimensions. Here, we build on the successful experiences of multi-dimensional poverty measurement by some countries in Latin America (Santos et al., 2015; Santos 2019) and elsewhere (e.g. Armenia), which include the monetary poverty line as one dimension of poverty.

[1] Source: Alkire et al., 2019, Multidimensional Poverty Index 2019: Brief Methodological Note and Results. (https://ophi.org.uk/wp-content/uploads/OPHI_MPI_MN_47_2019_vs2.pdf).

Chapter One

Main Findings

- Overall poverty incidence in 2016/2017 was 24%. These figures are close but slightly lower than the monetary poverty line (29%).

- There a large difference between the West Bank (11%) and Gaza Strip (45%) in terms of incidence of multidimensional poverty. Poverty in the Gaza Strip is four times as prevalent than in the West Bank.

- The intensity of multidimensional poverty in Palestine is 42.4%. Therefore, poor people face on average 42.4% of the weighted sum of indicators. The disparity in poverty between regions becomes lower if more concern is given to the intensity of poverty. It is 43.3% in Gaza Strip and 40.0% in the West Bank.

- Overall the adjusted head count ratio or MPI is 0.102. The average proportion of deprivation among the poor (intensity) is slightly larger in Gaza Strip than the West Bank, In both the percentage of poor and the MPI - poverty in Gaza is four times as prevalent than in the West Bank.

- In general the south is poorer than the north. This is true for the West Bank. With the exception of Central West Bank, poverty increases consistently if one moves from the north to the south. The poverty rates in the Southern (13.6%) and Northern West Bank (10.5%) were much higher than those of the Central West Bank governorates (7.3%). Thus, the Central West Bank is the most affluent, having the least incidence of poverty.

- There are significant differences in poverty within Gaza Strip as well. The incidence of poverty reached an astonishing rate of 47.8% in Northern and Central Gaza Strip compared to 40.9% in Southern Gaza Strip.

Table 2: Palestine -MPI by Region (%)

	Headcount (H%)	Intensity (A%)	MPI (M_0 %)
Palestine	**24.0**	**42.4**	**10.2**
West Bank	**10.6**	**40.0**	**4.3**
North West Bank	10.5	40.6	4.3
Middle West Bank	7.3	38.1	2.8
South West Bank	13.6	40.4	5.5
Gaza Strip	**44.7**	**43.3**	**19.4**
North and Middle Gaza Strip	47.8	44.6	21.3
South Gaza Strip	40.9	41.5	17.0

- The results show that poverty is more severe in refugee camps than urban and rural places. Incidence of poverty is 39% in refugee camps as compared to 14% in rural areas and 24% in urban places. This is largely a reflection of high poverty incidence in the Gaza Strip, as the Strip is mainly urban and houses the majority of refugees in Camps.

- The adjusted head count ratio (MPI) shows a similar distribution ranging from 0.166 in camps as compared to 0.056 in urban areas. Similarly, the incidence of poverty among refugees is much higher at 31% than non-refugees (19%).

Table 3: Palestine-MPI by Locality Type (%)

	Headcount (H %)	Intensity (A%)	MPI (M_0 %)
Urban	24.4	42.4	10.4
Rural	13.9	40.5	5.6
Refugee Camp	38.1	43.6	16.6

Table 4: Palestine-MPI by Refugee Status of Head (%)

	Headcount (H %)	Intensity (A%)	MPI (M_0 %)
Refugee	31.0	42.1	13.0
Non-refugee	18.9	42.8	8.1

- Poverty increases consistently by household size. The incidence of poverty in small households with 1 to 3 members is 6% as compared to 36% in large households with 7 or more members.

Table 5: Palestine-MPI by Household Size (%)

	Headcount (H %)	Intensity (A%)	MPI (M_0 %)
1-3	6.2	36.6	2.3
4-6	14.2	40.8	5.8
7+	35.4	43.1	15.3

- As would be expected, monetary poverty is the largest contributor to poverty accounting for 45% of overall deprivation. Also, not surprising is the relatively large contribution of employment deprivation to overall poverty at 13%. The contributions of education and housing conditions are similar at 11%. Safety and use of assets as well as personal freedom contribute about 8% and 7%, respectively, to overall poverty. The smallest contributor to poverty is the health dimension at 5%.

Table 6: Contribution of each dimension to Palestine-MPI by Region (%)

	West Bank	Gaza Strip	Palestine
Education	11.0	10.7	10.8
Health	7.7	4.4	5.3
Employment	14.9	11.7	12.5
Housing Conditions	9.9	11.7	11.2
Safety and Use of Assets	5.6	9.3	8.4
Personal Freedom	4.4	7.2	6.5
Monetary	46.6	45.0	45.4

- There are some variations of poverty contribution within dimensions. Aside from the monetary poverty dimension which consists of only one indicator with 45%, the interpersonal and state violence indicator is the second largest contributor to poverty with 7%. Employment benefits, overcrowding, and the economic freedom of women are the next largest with 5%. The relative contributions of the remaining indicators are small, ranging from less than 1% (ownership and use of assets; health access) to about 4% (quality of education; ventilation).

Table 7: Contribution of Each Indicator to Palestine-MPI by Region (%)

	West Bank	Gaza Strip	Palestine
School Enrolment	2.1	1.6	1.8
Repetition	2.3	2.5	2.4
Educational Attainment	1.7	3.5	3.0
Quality of Education	4.8	3.1	3.6
Disability Prevalence	1.6	2.0	1.9
Chronic Disease Prevalence	1.1	1.1	1.1
Health Insurance	4.4	1.3	2.1
Health Access	0.5	-	0.1
Unemployment	1.0	1.4	1.3
Quality of Work	3.9	2.8	3.1
Employment Benefits	7.1	4.8	5.3
NEET Rate	3.0	2.8	2.8
Access to Piped Water	1.0	0.2	0.4
Disruption of Water Supply	0.7	2.9	2.3
Ventilation	3.0	4.0	3.8
Overcrowding	5.2	4.6	4.8
Theft or Damage to Property	1.5	1.4	1.4
Ownership and Use of Assets	0.5	0.2	0.2
Interpersonal and State Violence	3.6	7.7	6.7
Freedom of Movement	1.5	1.2	1.3
Economic Freedom of Women	2.9	6.1	5.3
Monetary	46.6	45.0	45.4

Chapter Two

The Palestine MPI Concept

Selected Dimensions **and Indicators**

The Palestinian framework consists of two spaces: economic well-being and social well-being. The economic well-being was captured by one dimension and one indicator: the usual National monetary poverty line. The social well-being component comprised of 21 indicators grouped into 6 dimensions: Education (4 indicators); health (4 indicators); employment (4 indicators); housing conditions & access to services (4 indicators); safety and use of assets (3 indicators); and personal freedom (2 indicators).

The dimensions, indicators of the Palestine MPI

Dimensions of Poverty	***Indicator***	***Deprived if--***	***Weights***
Education	*School enrolment*	*Household has any child aged 6-17 not enrolled in school (not including those who graduated secondary school)*	0.033
	Repetition	*Household has any child aged 7-18 ever enrolled in school and repeated a school year*	0.033
	Educational attainment – persons aged 19-50	*All household members aged 19-50 have not completed secondary school*	0.033
	Quality of education – household with children age 6-17 years enrolled in school	*Household has any child aged 6-17 who had problems with education quality. (Indicated a serious problem with the school in terms of poor teaching or lack of teachers or lack of books or lack of facilities*	0.033
Health	*Disability*	*Any household member has great difficulty in hearing, vision, movement, communication, OR understanding*	0.033
	Chronic disease	*All household members aged 30+ suffer from a diagnosed chronic disease*	0.033
	Health insurance	*Household lacks health insurance: (the head OR any member has health insurance is defined as NOT deprived)*	0.033
	Health Access	*Household lives more than 5 km away from the nearest doctor clinic or hospital*	0.033
Employment	*Unemployment*	*None of the adults in the household aged 18+ is currently employed*	0.033
	Employment benefits	*Wage earners aged 15-60 lack paid sick leave, maternity leave or annual vacation*	0.033
	Quality of work	*Household has any working member 18+ who is currently an irregular wage employee, OR does not have a contract OR is a seasonal & causal worker OR has worked only 6 months during last 12 months*	0.033
	Youth NEET	*Household has any youth aged 18-24 who is not in*	0.033

Dimensions of Poverty	*Indicator*	*Deprived if--*	*Weights*
		school or training and unemployed	
	Access to piped water	*Dwelling is not connected to public network*	0.033
Housing conditions & access to services	*frequency of water and electricity supply*	*The household has had disruption of water supply (daily) during the past year*	0.033
	Ventilation problems in dwelling	*Dwelling suffers from noise, smoke or any other pollutant*	0.033
	Overcrowding	*More than 3 persons per sleeping room*	0.033
Safety and use of assets	*Theft or damage to property*	*Stealing from household or damage of household property as a result of attacks last year*	*0.044*
	Ownership and use of assets	*Household lost land, house/building or business establishment during the past year due to confiscation or demolition* *Household was unable to use agricultural land or private property due to restrictions of movement*	*0.044*
	Interpersonal and state violence	*Any household member was attacked or forcibly assaulted with or without a weapon last year* *OR, any child or women hit or attacked by another family member during the past year* *OR Injuries, deaths or torture in household from state/settler violence during the past year*	*0.044*
Personal freedom	*Freedom of movement*	*A household member was not able to visit family, relatives, or friends because of checkpoints, wall or travel restrictions during the past year*	*0.066*
	Control of women's income or women's participation in the labor market	*Any women in household does not have a separate bank account or does not control her use of income or earnings OR* *Any women in household does not work (or look for work) because of husband/father/brother's restrictions*	*0.066*
Monetary resources	*National poverty line*	*Household is below the national poverty line*	*0.20*

Weights and cutoff

Alkire-Foster (2007) 'dual-cutoff' method was used to build the index. Here, we build on the successful experiences of multi-dimensional poverty measurement by some countries in Latin America (Santos et al., 2015) which include the monetary poverty line as one dimension of poverty. However, the proposed framework here is rights-based and is quite different in several other aspects.

Unlike the global MPI where equal weights are assigned to dimensions and indicators, we assign more weight to the monetary dimension. Economic well-being as measured by the usual poverty line is assigned 20% of overall poverty, and the remaining human dimensions account for 80%. Equal weights are given to each of the 6 human development dimensions. All indicators within each of the chosen dimensions will also be weighted equally.

Following the global MPI, the poor are identified by summing weighted deprivations across all dimensions, yielding a single variable, and then used the 33% cut-off point to separate the poor from the non-poor.

To summarize, the poverty indexes used in this report are as follows:

1. The **headcount** ratio (***H₀***), which is the proportion of people who have been identified as multidimensionally poor in the population.
2. **The intensity** of multidimensional poverty ***(A)***, which is the average share of weighted indicators in which poor people are deprived. This entails adding up the deprivation scores of the poor and dividing them by the total number of poor people.
3. The **adjusted head count ratio (*M_0*)**, which is the headcount index weighted by the average deprivation rate among the poor.

$$M_0 = H \times A$$

Data Source

A basic requirement for multidimensional poverty measurement based on the Alkire-Foster method is to use a single source of data for all estimations and analyses. The inclusion of monetary poverty as a fundamental component of the multi-dimensional poverty measure requires the use of data from the Palestinian Consumption and Expenditure survey (PECS). The 2016/17 PECS survey data are used for multi-dimensional poverty estimation, with substantial revisions on the household part of the instrument to accommodate the proposed new measure of poverty in Palestine.

References

- PCBS. (2018). Main Findings of Living Standards in Palestine. Expenditure, Consumption and Poverty, 2017. Ramallah: Palestinian Central Bureau of Statistics.
- Palestinian National Authority. (1998). Palestine Poverty Report. Ramallah: Ministry of Planning.
- Alkire, S. & Foster, J. (2007, revised in 2008). Counting and multidimensional poverty measurement. *OPHI Working Paper 7*, University of Oxford.
- Alkire, S. and Santos, M.E. (2010). "Acute Multidimensional Poverty: A New Index for Developing Countries." *OPHI Working Papers 38*, University of Oxford. Alkire, S., Chatterjee, M., Conconi, A., Seth, S., & Vaz, A. (2014). Global multidimensional poverty index 2014.
- Alkire et al., 2019, Multidimensional Poverty Index 2019: Brief Methodological Note and Results. (https://ophi.org.uk/wp-content/uploads/OPHI_MPI_MN_47_2019_vs2.pdf).
- Atkinson, A. B. (2003). Multidimensional deprivation: contrasting social welfare and counting approaches. *The Journal of Economic Inequality*, *1*(1), 51-65.
- Atkinson, T., et al (2002). *Social Indicators: The EU and Social Inclusion*. Oxford: Oxford University Press.
- Belhadj, B., (2012). New weighing scheme for the dimensions in multidimensional poverty indices". *Economics Letters* 116, 304-307.
- Bellani, L., (2013). Multidimensional indices of deprivation: the introduction of reference groups weights". *Journal of Economic Inequality* 11, 495-515.
- Bourguignon, F., & Chakravarty, S. R. (2003). The measurement of multidimensional poverty. *The Journal of Economic Inequality*, 1(1), 25-49.
- Callan, T., and Nolan, P., (1991). Concepts of poverty and the poverty line. *Journal of Economic Surveys* 5, 243–261.
- CONEVAL, C. (2009). Metodología para la medición multidimensional de la pobreza en México.
- Decancq, K., Lugo, M.A. (2013). Weights in multidimensional indices of wellbeing: an overview". *Economic Review* 32, 7-34.
- Decancq, K., Van Ootegem, L., Verhofstadt, E. (2013). What if we voted on the weights of a multidimensional well-being index? An illustration with Flemish data". *Fiscal Studies* 34, 315-332.
- Khawaja, M. 1998. Poverty assessment in Palestine. Ramallah: PCBS. Unpublished Ms.
- Mideros, A. (2012). Ecuador: defining and measuring multidimensional poverty, 2006-2010. *Cepal Review*.
- Santos, M. E., (2019). *Challenges in Designing Multidimensional Poverty Measures*. Santiago, UN-ECLAC.
- Santos, M. E., Lugo, M. A., Lopez-Calva, L. F., Cruces, G. and Battiston, D. (2010), Refining the basic needs approach: A multidimensional analysis of poverty in Latin America, *Research on Economic Inequality Vol. 18: Studies in Applied Welfare Analysis: Papers from the Third ECINEQ Meeting. Bingley: Emerald: 1 – 29*.
- Santos, M. E., Villatoro, P., Mancero, X., & Gerstenfeld, P. (2015). A Multidimensional Index for Latin America, *OPHI Working Paper, No. 79, Oxford Poverty and Human Development Initiative*, University of Oxford.
- Sen, A. (1992). Inequality Reexamined–Cambridge. *Massachusetts: Harvard University*.
- UNDP (2016). Human Development Report 2016: Human Development for Everyone. New York: United Nations Development Programme.