

BACKGROUND
NOTE

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**Housing
deprivation
in El Salvador¹**

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Abstract

This note analyzes housing deprivation in El Salvador through an index adapted to the country context, using an approach based on multiple correspondence analysis. The results indicate that in 2023, 72 percent of households in El Salvador experienced housing deprivation, with higher rates in metropolitan and rural areas, especially among single-parent households, and where the head of household lacks formal education. This study highlights the need for specific housing policies to address the growing inequality and precarious housing in the country as it affects both poor and non-poor population, especially in metropolitan areas.

JEL Classification: C43, I31, R2

Keywords: Housing deprivation, Poverty, Multidimensional Deprivation, Multiple Correspondence Analysis

Improved housing can save lives, prevent disease, improve quality of life, reduce poverty, and help mitigate climate change.² The right to adequate housing is a fundamental human right recognized under international human rights law and is an essential component of the right to an adequate standard of living.³ This comprises “the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions”.⁴ Adequate housing encompasses several critical elements: legal security of tenure; availability of services, materials, and infrastructure; affordability; habitability; accessibility; appropriate location; and cultural adequacy.² Together, these components ensure that housing not only provides shelter but also supports a dignified and healthy life.⁶

El Salvador is characterized by homes built with poor quality or inadequate materials, dirt floors, mainly lacking access to drinkable water or sanitation, and situated on land that is not theirs. Since the pandemic, the precarious housing situation endured by the most vulnerable families has exacerbated.⁷ Developing a housing deprivation index tailored to El Salvador will help identify inequalities in living conditions and support the development of effective public policies. This note discusses housing deprivation in El Salvador using the framework developed by Balcazar and Redaelli (2017) and describes some relevant household characteristics related to this deprivation. The findings herein indicate that although the monetary poor are more likely to be housing deprived, the nonmonetary poor also have high rates of housing deprivation, even

in metropolitan areas, highlighting the need for targeted housing policies that protect citizens from being (further) entrenched into destitution.

The housing deprivation index is estimated using the factor scores obtained from the eigenvector corresponding to the largest eigenvalue after applying Multiple Correspondence Analysis (MCA) on a set of ordinal housing indicators. Balcazar and Redaelli (2017) show that if the data gleaned from these indicators are ordered, it is possible to define a welfare-consistent housing deprivation headcount from the estimated index. The resulting headcount provides a comprehensive measure of deprivation, capturing the multifaceted nature of housing issues.

Adequate housing implies the right to security of tenure, land and property restitution, and equal and nondiscriminatory access to adequate housing. In addition to access to adequate and enclosed space (that is, four walls, roof, floor, and sufficient physical space to avoid overcrowding), safe drinking water, adequate sanitation, lighting, and local services are also considered. Finally, ‘necessities’ to guarantee an acceptable standard of living such as having a refrigerator, washing machine, and so on should also be considered.⁸ Therefore, for the calculation of the housing deprivation index for El Salvador, four types of variables are included: (i) infrastructure: wall, roof, and floor materials, (ii) services: access to sanitation, water, and electricity; (iii) habitability: overcrowding situation; and (iv) necessities: owning a washing machine, a refrigerator, a cellphone, a computer, and internet access.

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2. WHO (2018)

3. UN-Habitat (2014)

4. UN (1966)

5. UN (1991)

6. UN-Habitat (2020); WHO (2018)

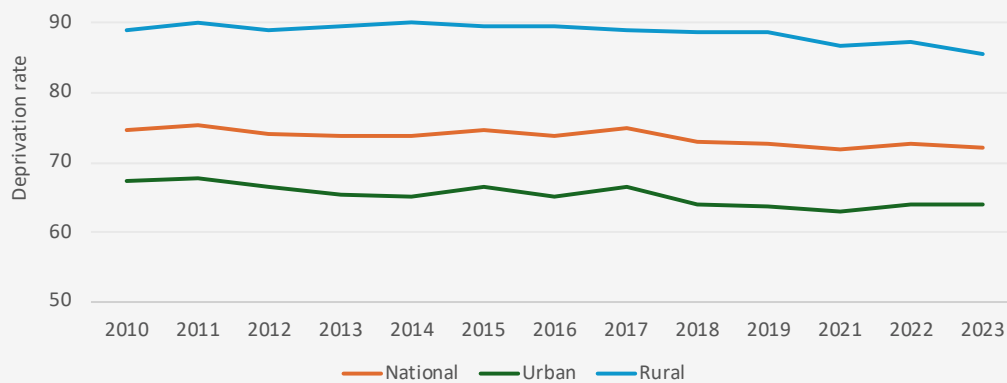
7. Habitat for humanity (2023)

8. McKay (2004); Rao and Min (2018)

The results of the application of the MCA methodology to calculate the housing deprivation rate in El Salvador show that by 2023, 72 percent of households were housing deprived. Furthermore, over the last decade, the housing

deprivation rate has stabilized at similar levels for both national and rural and urban areas. (Figure 3.1).

FIGURE 3.1 HOUSING DEPRIVATION RATE, 2010–2023



Source: EHPM 2010–2023.

Analyzing the characteristics of the head of household for those in a situation of housing deprivation reveals some noteworthy trends and insights. Single-headed households had higher rates than those with two breadwinners. This disparity may be linked to the fact that material and social deprivation is likely to be a trap for single-parent households. In addition, among single-parent households, those headed by a female are worse off than those headed by a male.⁹ This could be due to broader societal and economic factors that disproportionately affect women, such as higher rates of belonging to a single-headed household, gender wage gaps, childrearing responsibilities, and limited access to jobs.¹⁰

The educational level of the household head also plays a significant role in housing deprivation. A clear negative correlation exists between education and deprivation rates. Heads of households without formal education face a deprivation rate that doubles that of those with higher education. Noteworthily, employment status does not make a difference in the housing deprivation rate. Although employment often provides a stable income, which can enhance access to essential resources and services, thereby mitigating the effects of other forms of deprivation.

There are significant territorial differences in housing deprivation in El Salvador, with the metropolitan area showing the highest levels of deprivation in the country. The metropolitan area of San Salvador, comprising part of the department of La Libertad and the capital San Salvador, has a high rate of deprivation of 75 percent. This high rate highlights significant challenges in terms of housing quality and access in this region.

Inadequate housing in the San Salvador metropolitan area is closely linked to the proliferation of informal settlements. This region, home to around a quarter of the country's population, contains more than 1,700 settlements classified as 'precarious'. These areas often lack basic services such as clean water, adequate sanitation, and reliable electricity.¹¹ The lack of adequate infrastructure and the prevalence of overcrowded housing in these settlements contribute to poor living conditions and high levels of deprivation.

In El Salvador, rapid urbanization has exacerbated housing problems. In 2012, there was a lack of legal building permits and more than 30 percent of the country's urban housing was built without permits and without title documents.¹² In response to the housing problem in El Salvador, the National Housing and Habitat Policy (PNVH) was published in 2015. It aims to promote structural changes in the housing sector, with a focus on the right to adequate housing. The focus on rights implies that housing should be accessible and affordable to people, and it should be considered a fundamental good.

Looking at monetary poverty status, when assessed by international standards (poverty line of US\$6.85 per person per day, 2017 PPP) as well as by the official national poverty line, indicates that households living in poverty are more likely to experience housing deprivation. The correlation between poverty and housing deprivation underscores the significant challenges faced by the destitute, as many individuals at the bottom of the income distribution lack the infrastructure to develop an adequate standard of living, further entrenching them in poverty.

9. Calegari et al. (2024)

10. Banegas and Winkler (2020)

11. MDFG-F (n.d.)

12. SDGF (2017)

TABLE 3.1 DEPRIVED HOUSEHOLDS HEAD' CHARACTERISTICS (2023)

Variable (at the level of the household head)	Deprivation rate (%)
All	72
Age	
24 years of age or less	74
25-34 years of age	70
35-44 years of age	73
45-54 years of age	73
55-64 years of age	72
65 years of age or more	71
Gender	
Male	72
Female	73
Marital status	
Married	64
Single	75
Education	
No formal education	87
Primary	78
Secondary	63
Higher education	38
Employment status	
Employed	72
Unemployed	72
International poverty (Poverty line US\$6.85 PPP 2017)	
Non-poor	68
Poor	86
National poverty (Official poverty line)	
Non-poor	68
Poor	83
Region	
Western	68
Central	73
Eastern	70
Metropolitan	75

Source: EHPM 2023.

Housing deprivation rates also show territorial differences across departments, reflecting regional disparities in socioeconomic conditions. Departments with higher deprivation rates often face greater challenges related to poverty and are also more exposed to natural disasters.¹³

This geographic variation highlights the need for targeted interventions and policies to address these disparities and improve living conditions in the most affected areas.

FIGURE 3.2 HOUSING DEPRIVATION GEOGRAPHIC DISTRIBUTION (2023)



Source: EHPM 2023.

Housing deprivation is a transversal problem, affecting both poor and non-poor households

Although the estimates above show that among poor households 8 out of every 10 are housing deprived, a high percentage of non-poor households are also housing deprived—7 out of every 10 households. Importantly, considering the characteristics of both types of households in relation to the variables used to measure the housing deprivation index (Table 3.2), we find a similar distribution across households. In terms

of infrastructure, 6 out of 10 poor households have concrete, brick, or stone walls. This is the case for 8 out of 10 non-poor households. In terms of roofing material, we observe that the predominant roofing material is tin. In fact, only about 15 percent of poor households and 24 percent of non-poor households have concrete or brick roofs.

13. La Fuente and Serio (2024)

Access to essential basic services is practically universal, except for access to drinking water, especially in poor households, where about three out of four households have this service. Other goods, such as refrigerators and mobile phones, show high levels of ownership. However, only half of households have a computer, and internet access is limited, especially for poor

households. Access to a washing machine is much more limited, with only 15 percent of poor households owning one, compared to twice as many non-poor households. The variable that shows the greatest difference is overcrowding; while just over half of poor households do not have overcrowding, this rises to 80 percent for non-poor households.

TABLE 3.2 DEPRIVED HOUSEHOLDS HEAD' CHARACTERISTICS (2023)

Variable	Official measure		Middle income poverty (US\$6.85 PPP 2017)	
	Poor	Non-poor	Poor	Non-poor
<i>Infrastructure</i>				
Walls				
Tin metal	13	7	15	7
Mud, mud bricks, stone	18	11	22	10
Concrete/Fired brick/stone	69	82	63	83
Roof				
Tin metal	65	58	65	58
Asbesto	20	18	22	17
Girder with fired bricks or concrete	15	24	12	24
Floor				
Earth	20	10	33	9
Concrete/tile	80	90	76	91
<i>Habitability</i>				
No overcrowding	64	83	59	83
<i>Access to services</i>				
Sanitation	93	95	92	95
Water	74	81	71	81
Electricity	97	99	97	99
<i>Access to goods</i>				
Fridge	73	84	70	84
Washer machine	15	32	11	32
Celphone	93	97	93	97
Computer	54	50	55	49
Internet	25	42	19	42

Source: EHPM 2023.

All in all, the significant presence of deprivation among non-poor households and metropolitan areas indicates the existence of deprivations that go beyond income, encompassing other aspects of living conditions that are not captured by traditional income-based measures. The findings herein highlight the need for targeted housing

policies and interventions that can improve living conditions and provide stable, safe, and adequate housing across the population. This is particularly relevant as the housing deprivation index shows that there has been little progress in guaranteeing fundamentals for an adequate standard of living over time (Figure 3.1).

References

- Balcazar, C., and S. Redaelli. 2017. Measuring Housing Deprivation: Methodology and an Application to Afghanistan. Unpublished Manuscript. Poverty and Equity Global Practice. World Bank. https://cfbalcazar.github.io/files/pdf/research/Measuring_Housing_Deprivation_Afghanistan.pdf
- Banegas, N., and H. Winkler. 2020. El Salvador Diagnóstico del Trabajo: Comprendiendo los Desafíos para Lograr Más y Mejores Trabajos en El Salvador – Un Enfoque Integrado. World Bank. <http://hdl.handle.net/10986/34699>.
- Calegari, E., E. Fabrizi, and C. Mussida. 2024. “State Dependence in Material and Social Deprivation in European Single-Parent Households.” *Soc Indic Res* 172: 481–498. <https://doi.org/10.1007/s11205-024-03317-8>
- Habitat for Humanity. 2023. Qualitative housing deficit in El Salvador, Guatemala and Honduras exceeds 3.9 million houses. <https://www.habitat.org/lac-en/newsroom/2022/qualitative-housing-deficit-el-salvador-guatemala-and-honduras-exceeds-39-million>
- La Fuente, A. and Monserrat Serio. 2024. “Notes on vulnerability to climate risk induced poverty in El Salvador.” Unpublished Manuscript. World Bank.
- McKay, S. 2004. “Poverty or Preference: What Do ‘Consensual Deprivation Indicators’ Really Mean?” *Fiscal studies* 25 (2): 201–223.
- MDFG-F. n.d. Building a “Big Apple” in the Slums of San Salvador. <http://mdgfund.org/node/2629>
- Rao, N. D., and J. Min. 2018. “Decent Living Standards: Material Prerequisites for Human Wellbeing.” *Social indicators research* 138: 225–244.
- SDGF. 2017. Sustainable Urban Development in El Salvador. Case of Study: San Salvador. <https://www.sdgifund.org/sites/default/files/Case%20Study%20-%20El%20Salvador%20Viviendas%20-%20EN.pdf>
- UN. 1966. International Covenant on Economic, Social and Cultural Rights. Art. 11. <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights>
- UN. 1991. General Comment No. 4: The Right to Adequate Housing. <https://www.globalhealthrights.org/instrument/cescr-general-comment-no-4-the-right-to-adequate-housing/>
- UN-Habitat. 2014. The Right to Adequate Housing, Fact Sheet 21. http://www.ohchr.org/Documents/Publications/FS21_rev_1_Housing_en.pdf
- UN-Habitat. 2022. World Cities Report 2022. <https://unhabitat.org/wcr/>
- WHO. 2018. WHO Housing and Health Guidelines. <https://www.who.int/publications/i/item/9789241550376>

Appendix 1:

Dimensions, indicators, and items

Dimension	Variable	Constructed categories	Description
Infrastructure	Wall material	1. Mud, mud bricks, stone	Categories were harmonized across surveys and were organized from worst to best, according with the structural properties of housing materials.
		2. Tin metal	
		3. Concrete/Fired brick/stone	
	Roof material	1. Tin metal	Categories were harmonized across surveys and were organized from worst to best, according with the structural properties of housing materials.
		2. Asbesto	
		2. Girder with fired bricks or concrete	
Floor material	1. Earth	Categories were harmonized across surveys and were organized from worst to best.	
	2. Concrete/tile		
Habitability	Number of rooms	1 if there is no overcrowding; 0 otherwise	The dummy the value of 1 if each pair of same-sex individuals residing in the dwelling have a bedroom.
Services	Sanitation	1 if there is a piped sewer system, septik tan, pit latrin, composting toilet, or a pit latrine with slab, or a pit; 0 otherwise.	Categories wer harmonized across surveys, and improved access to sanitation was defined on the basis of UN standards.
	Water	1 if dwelling have access to a water supply system; 0 otherwise.	Categories wer harmonized across surveys, and improved access to water was defined on the basis of UN
	Electricity	1 if there is access to electricity in the households, from any source; 0 otherwise.	A household has access to electricity if it reports having electriciy at any time in the past month from the electric
Security of tenure	Dwelling type	1. Temporary shelter/shack	Categories were harmonized across surveys and were organized from worst to best.
		2. Shared house	
		3. Single family house	
	Security of tenure	1. Charity	Categories were harmonized across surveys and were organized from worst to best in terms of long-run security of tenure.
		2. Tenant	
		3. Owner	

Appendix 2:

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Variable	Constructed categories	MCA
Wall material	1. Tin metal	2.817
	2. Mud bricks/muds	1.911
	3. Concrete/Fired brick/stone	-0.657
Roof material	1. Tin metal	0.652
	2. Asbesto	0.558
	2. Girder with fired bricks or concrete	-1.423
Floor material	1. Earth	2.950
	2. Concrete/tile	-0.510
Sanitation	0. No improved sanitation	3.238
	1. Improved sanitation	-0.193
Water	0. No access to electricity	1.879
	1. Access to electricity	-0.522
Electricity	0. No access to water supply	4.087
	1. Access to water supply	-0.149
Number of rooms	0. Overcrowding	1.371
	1. No overcrowding	-0.553
Fridge	1. Yes	1.913
	2. No	-0.757
Washer machine	1. Yes	0.521
	2. No	-2.181
Celphone	1. Yes	2.542
	2. No	-0.150
Computer	1. Yes	0.554
	2. No	-1.821
Internet	1. Yes	0.550
	2. No	-2.184

Appendix 3:**Mean income by infrastructure variables categories**

Variable	Mean income		
	Total	Rural	Urban
<i>Infrastructure</i>			
Walls			
Tin metal	118	103	134
Mud, mud bricks, stone	115	99	150
Concrete/Fired brick/stone	207	143	230
Roof			
Tin metal	159	128	181
Asbesto	162	115	219
Girder with fired bricks or concrete	243	144	256
Floor			
Earth	97	89	115
Concrete/tile	201	139	227