LatinAmerica is the region with wider inequality gaps in the world. Its cities are a paradigm of the extreme to which inequity can reach, but also of its struggle and its visibility. This reality added to the accelerated process of urbanization, 80% of the population live in urban areas, make the region an important reference point for the study of urban inequality in the world. The purpose of this document is to carry out a comparative analysis between three research experiences from the approach of multidimensional inequality: **1.** The Multidimensional Frame of Inequality (MMD), designed by Oxfam Intermon with collaboration with the Center for Analysis of Social Exclusion (CASE) from the London School of Economics and Political Science (LSE), SOAS University of London (the School of Oriental and African Studies) and Atlantic Fellows, from The International Inequalities Institute of LSE; **2. Rostros de la Desigualdad**, implemented by Oxfam Mexico with King's College, PeriodismoCIDE and Chilango magazine; and 3. Mapas de desigualdad, used in São Paulo by Rede Nossa São Paulo (RNSP) and in Brasilia by Nosa Brasilia.

MULTIDIMENSIONAL INEQUALITY FRAME (MMD)

The MMD's objective is to provide a systematic approach to measure and analyze the inequalities from a multidimensional perspective. This focus is based on Amartya Sen's capabilities theory and centers on measuring people's quality of life and the freedom they have of choosing the type of life they value. In contrast to other approaches based on the concept of capabilities, MMDs approach doesn't focus on privation, but on inequality. Which, is an important methodological contribution and has provided a base for the elaboration of new methods.

The MMD proposes seven domains of life to operationalize Sen's theory and to compare between territories.

Table 1. Domains of life

	Domain	Description
Domain 1	Life and health	Inequalities on the capacity for being alive and living a healthy life.
Domain 2	Physical and juridical security	Inequalities in the capacity of enjoying security and in receiving fair and equal treatment
Domain 3	Education and learning	Inequality on the ability to obtain knowledge, comprehend and reason and in having the skills needed to participate in society.
Domain 4	Financial security and decent work	Inequalities in the ability to achieve financial independence and security, access to decent work and recognition to unpaid care work.
Domain 5	Suitable life conditions	Inequality in the ability to enjoy comfortable, independent and safe life conditions.
Domain 6	Participation, influence and voice	Inequality in the ability to participate in the decision making, having a voice and influencing.
Domain 7	Personal, familiar and social life	Inequality in the ability to enjoy personal, familiar and social life, and to exercise freedom of speech and develop self-esteem.

Source: own elaboration based on Oxfam (2019)

From these 7 life domains, 32 subdomains and 147 indicators are broken down. In addition, the methodology proposes to break down the indicators by income level, gender, age group, educational level, social class or caste, race or ethnicity, disability status, urban-rural disaggregation or others relevant to the context in question. As we can see, the methodology used is primarily quantitative, so its main challenge is the availability of information. In fact, given the effort required to carry out a research work with these characteristics, MMD applications tend to reduce the number of analysis dimensions or give preferences to some over others.

Another important MMD characteristic is that it doesn't only focus on measurement but in the identification of the drivers of inequality. That is, in the identification of the Gordian knots that are capable of explaining part of the results of the indicators and inequality in general. According to MMD there are 10 potential global drivers:

- 1. Dominant narratives and their correspondent policies that justify and perpetuate inequality.
- **2.** Values, norms, practices and structures that perpetuate discrimination and intolerance, especially against women.
- **3.** The financialization, the power of the capital and the global elites.
- **4.** The emergence and the power of global corporations and the absence of an effective regulation.
- 5. Financial opacity and ineffective global tax governance.
- 6. Slanted world commerce structure.
- 7. Climate change and environmental degradation.
- 8. Conflict, global displacement and international migration policies.
- **9.** Biased technological progress, scientific progress and innovation.
- 10. Lack of effective global governance.

Given the multidimensional measurement capacity and the drivers analysis, the MMD is very useful for both the analysis and the design of public policies proposals that solve the inequality problem.

Table 2. Summary of methodological aspects.

Component	Multidimensional Inequality Frame (MMD)
Objective and research questions	Allow a systematic approach to multidimensional research of inequality beyond the economic inequality analysis.
2. Paradigm or theoretical framework	Capabilities I Sen.
3. Summary of methodology used.	Predominantly quantitative. Indicators, disaggregation variables, drivers, Gordian knots. Recommendations, including public policy recommendations.
4. Analysis dimensions	Life and health; personal and legal security; education and learning; financial security and decent work; adequate living conditions; participation, influence and voice; personal, familiar and social life.
4.1 Definition process and analysis dimensions	Research team that brings together experts and important actors.
5. Definition of territorial scope	Subregional or national in the applications analyzed. The frame could, however, be used to analyze territorial demarcations with different levels of aggregation.
6. Quantitative methodological strategy	Analysis of selected indicators with disaggregation in terms of dimensions of inequality.
7. Qualitative methodological strategy	Drivers and Gordian knots analysis. Development of recommendations. Individual interviews with key informants and workshops with experts are recommended to accomplish this analysis.
8. Other methodological aspects	Need for the assembly of interdisciplinary teams and support with research institutions or think tanks.
9. Results presentation products	Research reports, usually as part of broad advocacy processes on the political agenda.

ADVANTAGES AND CHALLENGES

Among the most important advantages are: (1) systemization of life domains; (2) the possibility of comparing between countries; and (3) the emphasis on identifying the causes of inequality with the intention of going further in the measurement of inequality gaps.

Regarding the areas of opportunity observed after the analysis of this experience the following stand out: (1) despite the broadness of areas the MMD takes, the life domains may be insufficient to describe a community's situation or a case of a particular application, and, the research could benefit from the inclusion of other inequality dimensions or life domains besides the suggested by the MMD; (2) subregional applications run the risk of reducing the specificity of solutions, which is a clearly a challenge associated with defining the territorial scope.

(2) subregional applications run the risk of reducing the specificity of solutions, which is a challenge clearly associated with defining the territorial scope; and (3) the interaction of the indicator analysis strategies carried out by the qualitative field survey or the possibility of adding a symbolic-subjective dimension would be interesting.

FACES OF INEQUALITY

The objective of this methodology is to highlight the vastness of the gaps that divide the population in a single territorial demarcation, not only on quantitative terms but also from a qualitative perspective. The methodological strategy is varied since it mixes a MMD quantitative approach to determine and identify both the households of the homes that will be interviewed as well as their position in the socioeconomic structure, with a qualitative approach that uses journalistic and ethnographic techniques for the information survey and the field work. Thus, this methodology has six life domains that have their equivalent in the MMD.

Table 3. Life domains comparative chart between MMD and Rostros de la Desigualdad (Faces of Inequality)

Domains us	sed on the Multidimensional Inequality Frame (MMD)	Themes explored in Faces of Inequality
Domain 1	Life and health	Access and experiences related with health services; food safety.
Domain 2	Physical and juridical security	Experiences and perceptions of insecurity.
Domain 3	Education and learning	Educational options and experiences.
Domain 4	Financial security and decent work	Work; inheritance and gifts, social programs and transfers.
Domain 5	Suitable life conditions	Rental or home ownership; number of people living on the house; transportation and travel; experiences and perceptions of insecurity; leisure.
Domain 6	Participation, influence and voice	
Domain 7	Personal, familiar and social life	Family structure; family dynamics; community and interpersonal support: social media.

Source: Bleynat y Segal (2020).

Results from the methodology can be visualized both through maps centered on quantitative measures like photographic files and reports focused on qualitative aspects. In fact, for the presentation of the case of Mexico City (the first place where this methodology was implemented) and alliance was made between Oxfam Mexico and Chilango magazine that resulted in a microsite: https://desigualdad.chilango.com and a special issue of the magazine. In addition to maps and reports, videos, photographic documentation and divulgation papers were generated.

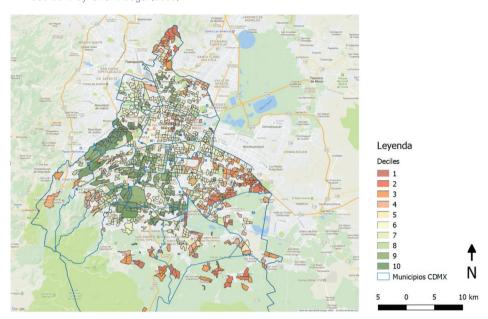
Table 4. Summary of methodological aspects

Component	Faces of Inequality
Objective and research questions	Showing inequality in a city on quantitative terms and, mainly adding the aspect of experiences and aspirations.
2. Paradigm or theoretical framework	Capabilities and sociological approach of inequality (from experiences and symbolic)
3. Summary of methodology used.	Mixed. Quantitative strategy for the identification of neighborhoods/homes and qualitative strategy for the information survey.
4. Analysis dimensions	Access and experiences in health services; food safety; education; jobs, income, transfers and social programs; housing, property and overcrowding; transport and mobility; perception and experiences of public insecurity; leisure; social media; family structure, family dynamics, community and interpersonal support; and aspirations, perceptions and explanations of inequality, discrimination and stigmas, otherness and social mobility.
4.1 Definition process and analysis dimensions	Process performed by Oxfam team and academics.
5. Definition of territorial scope	Mexico City, with disaggregation by neighborhoods (Áreas Geoestadísticas Básicas, AGEBs) and identification of income deciles
6. Quantitative methodological strategy	Statistical methods for identifying income deciles in more than two thousand neighborhoods (AGEBs) of Mexico City
7. Qualitative methodological strategy	In-depth interviews to selected subjects selected from income deciles, with diverse demographic profiles.
8. Other methodological aspects	Relevance of the audiovisual material collected: photographs (refrigerators, facades, surroundings and home interiors) and videos.
9. Results presentation products	Newspaper articles. Microsite. Audiovisual material.

In the case of Mexico City, data was available in the level of territorial disaggregation similar to a neighborhood. That level of detail allowed the division of the city in ten economic strata, deciles, in turn, that helped to generate a map where the different levels of inequality of the city can be visualized. At the same time, this disaggregation simplified the selection of areas where the qualitative surveys were carried out.

Figure 1. Mexico City Map by deciles

Source: Bleynat and Segal (2019)



In order to obtain information about the dimensions of inequality the qualitative research was based on journalistic and ethnographic research. Specifically, 50 semistructured interviews were recollected: five for each of the income deciles generated on the previous stage. This information collection process also included the systematic recording of audiovisual material in every interview.

Figure 2. Audiovisual material systematized by deciles

Source: Oxfam México









ADVANTAGES AND CHALLENGES

Among the most successful aspects of this experience, the following stand out: (1) the inclusion of symbolic and subjective dimensions within the dimensions of the inequality analysis; (2) the combination of quantitative and qualitative methodologies, exploiting the advantages of each one; (3) collaboration with journalistic media as a way to expand the possibilities of field work; and (4) incidentally, the elaboration of audiovisual products with high reach in public opinion.

The main areas of opportunities of Faces of Inequality are: (1) strengthening the training of journalist for the filed work; (2) the broad requirement of disaggregated data to accomplish the qualitative analysis at a neighborhood level; (3) the generation of a final public report, required beyond the information shared on the media that works for academic purposes; and (4) the possible inclusion of reflections about what to do in the face of the inequalities revealed by the methodology, that is, the possible measurements that can be proposed to reduce them.

INEQUALITY MAPS

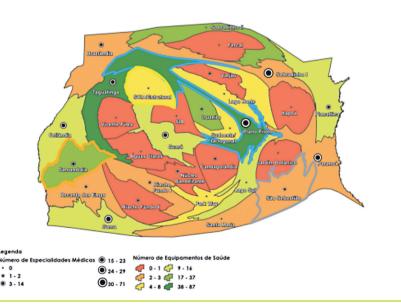


The methodology used in this research is mixed and was developed and used in São Paulo by Rede Nossa São Paulo (RNSP) and in Brasilia by Nossa Brasilia. This method consists on a mapping of quantitative indicators on selected areas, to which an ethnographic qualitative work accompanied that helped understand in depth the experiences of people affected by inequality.

The quantitative analysis was based on the Multidimensional Inequality Frame (MMD) but some significant adjustments were made. First of all, the dimensions for evaluation were defined collectively by researchers and participants, which allowed addressing the most important dimensions for the people in the area. Secondly, the MMD was adjusted to use the anamorphosis technique, which allowed the creation of maps that represent inequality based on the size of the areas. In addition a "designal dometro" (inequality-meter) was included, which shows the place each territory has in the ranking of inequality. These three additions allow more participation from the people with the tool and a better and faster understanding of inequality gaps, even for non-specialized audiences.

Figure 3. Example of the amorphosis map, Nossa Brasilia

Source: Elaborated with information from Nossa Brasilia (2016 and 2019)



All the same, in order to complement the quantitative analysis of the inequality maps, the Brasilia project undertook the task of generating some qualitative research products that gave continuance to the results of the quantitative analysis. Popular ethnographies and participative techniques were used for generating information that put a face to the numbers, endowed experience and content to the inequalities found in this research. Thus, photographic documentation and reports were created to go along the maps and indicators.

Figure 4. Example of graphic material on the Nossa Brasilia report

Source: Nossa Brasília (2016)



Table 5. Summary of methodological aspects

Component	Faces of Inequality
1. Objective and research questions	Make visible differences within cities + Poor pay more taxes and receive less public services.
2. Paradigm or theoretical framework	This is a completely empirical research that obtains inequality dimensions from participative techniques.
3. Summary of methodology used.	Mixed methods. Mapping of quantitative indicators. In-depth qualitative analysis complemented with own products.
4. Analysis dimensions	Culture, health, education, work and income, public safety, basic sanitation and environment.
4.1 Definition process and analysis dimensions	Collective definition with the actors and inhabitants of the marginalized areas included in the analysis. Local workshop and a collective workshop.
5. Definition of territorial scope	Selected administrative regions from one same metropolitan area.
6. Quantitative methodological strategy	Mapping of selected quantitative indicators. Designaldómetro (Inequalitymeter). Comparison among selected areas of interest (low income) and central area (high income). Anamorphosis mapping.
7. Qualitative methodological strategy	In-depth interviews. Experience training. Popular ethnography.
8. Other methodological aspects	
9. Results presentation products	Report. Inequality maps. Books with qualitative analysis.

ADVANTAGES AND CHALLENGES

The main advantages of this methodology are (1) the collective definition, between researchers and participants, of inequality dimensions that ensure that the analyzed problems are important for the inhabitants; (2) the anamorphosis mapping and the use of the inequality-meter enable a quick visualization and simple comprehension of the inequality gaps; (3) the elaboration of popular ethnographies and other products of the qualitative research; and (4) the elaboration of a guide so that other investigations can replicate the analysis.

Regarding the challenges or opportunity areas observed on these investigations, the following could be mentioned: (1) the minor emphasis on the work made on the upper class stratum can make the final result appear as an analysis on terms of poverty and vulnerability, instead of one in terms of inequality; (2) the audiovisual material collected on the field work only exemplifies the analysis, but it is not systematized; (3) the research would improve its scope if it included reflections on what to do amidst the inequalities revealed by the methodology, that is, if it included the proposals to reduce it.

RECOMMENDATIONS FOR THE STUDY OF MULTIDIMENSIONAL INEQUALITY

uture urban inequality researches in Latin America can't ignore it multidimensional character. In this document three methodologies with different scopes, advantages and limitations were presented.

The Multidimensional Inequality Frame (MMD) provides a broad and flexible scheme for quantitative analysis on different territorial levels. This framework is an excellent reference and starting point to adapt to specific cases and investigations, and its large indicator numbers allows it to adapt to limitations of information.

Faces of Inequality and Inequality Maps generate important innovations to MMD. In both cases the qualitative dimension is incorporated, and in regard of the second, the implementation of participative techniques in the analysis stands out. In addition, both methodologies highlight the importance of the inclusion of subjectivity and the symbols when considering experiences, perceptions and attitude towards different aspects of inequality.

Likewise, the analyzed experiences make clear the potential of a disaggregated study, so that the contextualization of the analysis provides diagnosis and specific recommendations possibilities

Likewise, the experiences analyzed make clear the potential of a disaggregated territorial study, in such a way that the contextualization of the analysis provides diagnostic possibilities and specific recommendations. This poses a challenge due to de availability of the information. However, this also sheds a light to the need for data that the cities still have to correctly diagnose the problem of inequality.

In terms of the communication of results, the work carried out in Mexico stands out, whose collaboration with the media included the creation of accessible and interesting products for the public opinion. Besides, this experience tested the collaboration with journalists for the field work and gave room for learning its advantages and challenges. If the latter are addressed it is possible to guarantee that future researches use this strategy with enriching results.

Inequality is a growing problem in the world, particularly in big cities. Given the diversity of the contexts and the levels of information, it is fundamental to rely on more methods to measure and face inequality. It is the goal of the three methods presented in this document to contribute to a new generation of inequality research methodologies: a more complex, inclusive, participative and that moves to action. We hope these results inspire new explorations around the world that help in the construction of a more just and equal world.