



DATA MARGINALIZATION AND EXCLUSION

Operationalizing the 'leave no one behind'
principle in social indicators monitoring

PROJECT BRIEF - DECEMBER, 2019

A photograph of a person lying on a bed in a rustic, dark room. The person is wearing a striped shirt and is partially covered by a white sheet. The room has a wooden wall and a wooden beam. Several pieces of clothing, including a blue shirt and a striped shirt, are hanging on the wall. The overall atmosphere is somber and suggests a state of poverty or hardship.

INTRODUCTION

The 'leave no one behind' principle of the Sustainable Development Goals (SDGs) seeks to ensure that all people participate in and enjoy the benefits of sustainable development i.e., an end to extreme poverty in all its forms, reduction of inequalities among both individuals and groups, and addressing of discriminatory barriers.

While significant advances have been made across the eight Millenium Development Goals (MDGs), the outcomes have been unequally distributed with various individuals and population groups across the world not enjoying the benefit of development achievements. These individuals and groups are generally clustered as the 'marginalized' or the 'excluded'.

With the centrality of the 'leave no one behind' principle within the Global Agenda, developing frameworks and instruments that operationalize this principle for a broad range of stakeholders is imperative to enable its practical implementation, hence giving visibility and voice to marginalized and excluded individuals and population groups.

THE CONTEXT

Marginalization and exclusion can occur across different phases of development. However, marginalization and the resultant exclusion are often treated as a monolith while in reality the nature and impact of marginalization are diverse. Such an approach does not accurately account for the heterogeneity in the characteristics of the marginalized populations, hence, risks losing the subtle nuances and variations of marginalization. More importantly, it limits the effectiveness of strategies for addressing marginalization and for mitigating the impacts of exclusion.

The call for 'data revolution' has renewed impetus to data collection efforts to break the vicious cycle of invisibility and neglect through focusing monitoring efforts on marginalized groups. However, marginalization could occur throughout the full length of data processes — from data collection to impact — and across data-intensive ecosystems, including social indicators monitoring, citizen science, and urban governance, resulting in invisibility to policymakers, misrepresentation in the datasets, and discrimination.





THE OBJECTIVE

This project aims to develop a framework for data marginalization and exclusion. The framework would facilitate the recognition of the myriad of ways through which individuals and population groups are marginalized in the data processes, as well as provide a basis for the formulation of mitigation strategies to address the specific forms of marginalization.

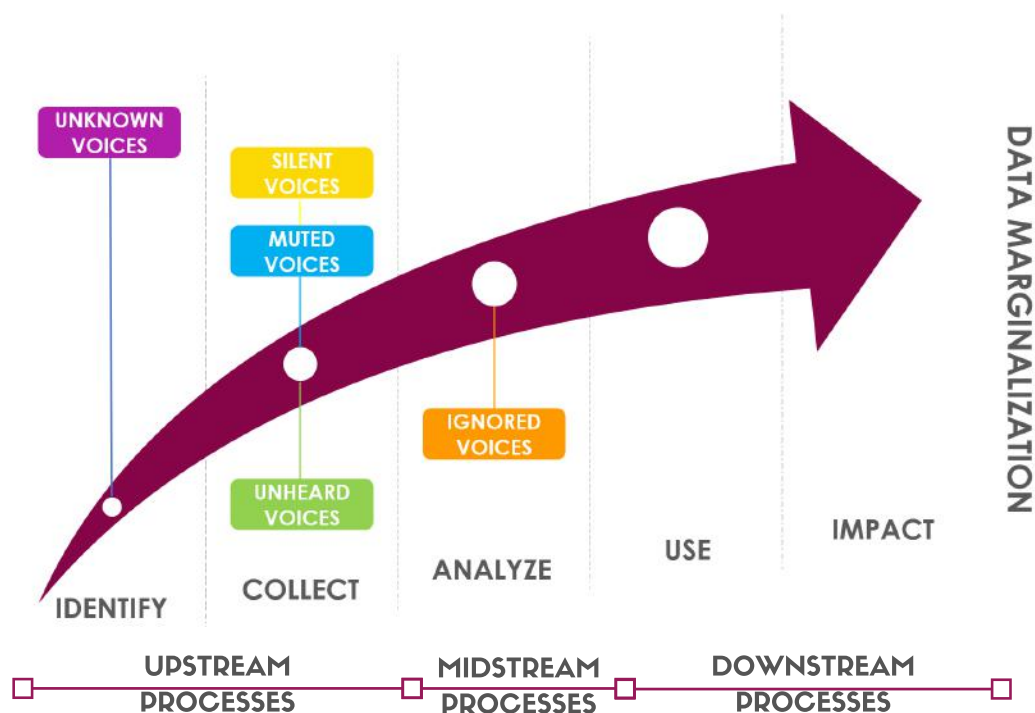
THE METHODS

To dimension the phenomenon of marginalization in data processes, the project employed a multi-dimensional clustering approach. Subsequently, a qualitative classification exercise using case studies of data marginalization from peer-reviewed literature was conducted.

The resulting framework aggregates individual cases of marginalization and exclusion in the data processes based on their shared features of marginalization and actionable commonalities. It adopts the metaphor of “voices” in depicting the marginalized and excluded populations which within normative development processes would be listened to and engaged.

THE RESULTS

1 THE DIMENSIONS OF DATA MARGINALIZATION



The project identified five dimensions of data marginalization:

- **Unknown voices** – whose defining feature is that they are invisible in the mainstream societies, hence unknown to the data collecting entities
- **Silent voices** – who, due to individual and personal factors, do not have the agency and the ability for vocalizing
- **Muted voices** – whose marginalization and exclusion in the data processes is attributable to their social marginalization
- **Unheard voices** - who are excluded in the data sampling and data collection phase, due to factors such as digital disengagement, illiteracy, language exclusion, geographical factor, and economic exclusion
- **Ignored voices** – who are marginalized during the analysis of the collected data both through traditional statistical processes and new data approaches

THE RESULTS

2 THE MARGINALIZED 'VOICES' FRAMEWORK

Several factors which further articulate the varied characteristics of the marginalized and excluded are included in this framework.

	Kernel feature	Examples	Nature of data marginalization	Effects of data marginalization
UNKNOWN VOICES	Unknown to data collecting actors	<ul style="list-style-type: none"> Isolated and untouched communities Modern-day slaves Concealed individuals Groups acting in resistance to government 	Unintegrated to the mainstream society	<ul style="list-style-type: none"> Lack of reliable data on the population Exclusion from participation in the mainstream society
SILENT VOICES	Marginalized by personal factors and lack of agency	<ul style="list-style-type: none"> Children Developmentally disabled people Weak and vulnerable people 	<ul style="list-style-type: none"> Can be part of the lived experience Limited capacity Differently-abled Not accommodated in society Not seen as "significant" 	Inability for direct participation without specialized interventions
MUTED VOICES	Structural marginalization (social norms, societal value, stereotypes)	<ul style="list-style-type: none"> Gender non-conforming people Groups at the bottom of the social ladder Stigmatized people 	<ul style="list-style-type: none"> Is part of the lived experience Lack of political representation Extension of socio-cultural marginalization 	<ul style="list-style-type: none"> Exclusion from data collection Subjected to discriminatory practices during the data use phase
UNHEARD VOICES	Excluded from the sampling or data collection	<ul style="list-style-type: none"> Non-household groups Digitally unconnected people Linguistic minorities Illiterate people Economically excluded 	<ul style="list-style-type: none"> Not being counted Not being represented Not being considered in data-driven decision making 	<ul style="list-style-type: none"> Unrepresented in data Inability to inform the decision making
IGNORED VOICES	Marginalized during the analysis of the collected data	<ul style="list-style-type: none"> Minority groups Underrepresented groups in general Protected classes 	Affected by (hegemonic) data processes that perpetuate marginalization and exclusion	<ul style="list-style-type: none"> Underrepresented in data Marginal and incremental disempowerment

Experience of data marginalization	Recognition of data marginalization	Associated phenomena	Power dynamics	Mitigation of marginalization	UNKNOWN VOICES
<ul style="list-style-type: none"> • Individuals • Constructed as belonging to marginalized populations 	<ul style="list-style-type: none"> • Individuals • Others • Not recognized by others • Not recognized by individuals 	Self-marginalization	<ul style="list-style-type: none"> • Invisible • Power over 	<ul style="list-style-type: none"> • Multiple development trajectories • Sound legal definition 	UNKNOWN VOICES
Individuals (directly)	<ul style="list-style-type: none"> • Individuals • Not recognized by others 	Restricted agency	<ul style="list-style-type: none"> • Invisible • Power over 	<ul style="list-style-type: none"> • Assistive technologies • Intermediation • Brokered participation • Representation 	SILENT VOICES
Individuals (directly)	<ul style="list-style-type: none"> • Individuals • Others • Normalized in society 	Social exclusion	<ul style="list-style-type: none"> • Visible • Power over 	<ul style="list-style-type: none"> • Social inclusion • Participation • Advocacy 	MUTED VOICES
Individuals (both directly and indirectly)	<ul style="list-style-type: none"> • Others • Not recognized by individuals 	<ul style="list-style-type: none"> • Unrepresentative sampling • Uncounted 	<ul style="list-style-type: none"> • Invisible • Power over 	Representative data collection	UNHEARD VOICES
Individuals (indirectly)	<ul style="list-style-type: none"> • Individuals • Others 	<ul style="list-style-type: none"> • Biased and opaque algorithms • Algorithms of oppression • Weapons of math destruction 	<ul style="list-style-type: none"> • Hidden • Power over 	<ul style="list-style-type: none"> • FAT algorithms • Small data • Participatory indicators • Multi-level analysis 	IGNORED VOICES

GLOSSARY

- **Kernel feature** – core defining feature of the marginalization experience and the key characteristic of the marginalized population group
- **Examples** – specific examples of population groups and of specific cases of data marginalization within the categories.
- **Nature of data marginalization** – the way marginalization is outworked and how it is experienced by the marginalized population groups
- **Effect of marginalization** – impacts and resultant outcomes of data marginalization and exclusion on individuals and population groups who experience the marginalization
- **Experience of marginalization** – based on Messiou's (2012) conception of 'experience of marginalization' which unpacks how marginalization is experienced differently as construed by the individual and others
- **Recognition of marginalization** – based on Messiou's (2012) conception of 'recognition of marginalization' which accounts for the extent to which individuals and/or others in society have recognition of the presence and the extent of the marginalization
- **Associated phenomena** – the associated socio-technical phenomena that have an impact on the data marginalization
- **Power dynamics** – based on VeneKlasen & Miller's (2002) conception of 'expressions of power' which describes the sources and expressions of power; and Lukes' (1974) and Gaventa's (2006) conception of 'faces of power' which describes three dimensions of 'power over'. Here, we use the two conceptions to depict the power-laden context of the data processes, i.e. power relations between actors in the data ecosystem, the locus of power, and how power is operated.
- **Mitigation of marginalization** – strategies to mitigate each type of data marginalization

THE FACTSHEET

STATUS

ONGOING

TOPICS

SUSTAINABLE DEVELOPMENT GOALS, DATA MARGINALIZATION, SOCIAL INDICATORS

SDG'S



RELEVANT OUTPUTS

Thinyane, M. (2018). **Engaging Citizens for Sustainable Development: A Data Perspective.** United Nations University Institute on Computing and Society.

Thinyane, M. & Kirschke, S. (October 2019). **Data assemblages for enhanced citizen participation in sustainable development.** Global Partnership for Sustainable Development Data.

PEOPLE

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"Giving visibility and voice to marginalized and excluded individuals and groups."



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