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MASTER THESIS

Considerations of Inequality within the Sustainable Development Goals

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Declaration

I, Eloisa Esther Viloría Rosquete, hereby declare that the Master thesis titled “Considerations of Inequality within the Sustainable Development Goals” submitted as a prerequisite for the Erasmus Mundus Joint Master Degree Program in Global Development Policy (GLODEP) has been written solely by me as an original work, except when indicated otherwise by the reference or acknowledgement of other sources.

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Zásady pro vypracování

The Sustainable Development Goals (SDGs) have a multidimensional nature evidenced in the range of issues addressed across the 17 goals. Inequality, as one of the most pressing development issues, is addressed directly in SDG 10 'Reduce inequality within and among countries' under different conceptual considerations. Moreover, as a cross-cutting theme it is also considered within the rest of the SDGs.

The research aims to analyze the ways in which the concept of inequality is considered within the Sustainable Development Goals. It offers a mapping of the different inequality dimensions to build a comprehensive knowledge of inequality in the SDGs. Based on the mapping, the research provides an assessment of progress in inequality in a selected region.

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Abstract

The 2030 Agenda for Sustainable Development included a standalone goal (SDG 10) to “*Reduce inequalities within and among countries*”. Inequality, however, is a broad and multidimensional concept that is also present across the rest of the goals. This research analyses the different ways in which the concept of inequality is considered within the Sustainable Development Goals. This is done through a systematic approach based on an inequality mapping matrix that establishes key categorization and is used to map the concept throughout the 17 goals and 169 targets. Comprehensive and comparable results that illustrate the full extent of inequality within the SDGs are provided. The results show inequality is implicitly and explicitly considered under different conceptual considerations and multidimensional ways across 64 targets. Economic and non-economic inequality are considered, however, non-economic dimensions are dominant. Horizontal targeting approaches and universal framings are widely present compared to vertical ones. Inequality of opportunities and outcomes are also comprehended. Eight insights are provided based on a critical assessment of the results, and overall recommendations for the use of clearer, and more explicit language towards inequality are made. Additionally, the strengthening of the consideration in particular dimensions (environment, global inequality and extreme economic inequality) is suggested.

Keywords: inequality, sustainable development goals, multidimensionality, vulnerable population, opportunities, outcomes.

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List of Abbreviations

| | |
|---------|--|
| 10YFP | 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns |
| ADB | Asian Development Bank |
| CADE | Convention against Discrimination in Education |
| CEDAW | Convention on the Elimination of All Forms of Discrimination Against Women |
| CRC | Convention on the Rights of Child |
| GDP | Gross Domestic Product |
| HDI | Human Development Index |
| HLP | High-Level Task Force of Eminent Persons |
| ICESCR | International Covenant on Economic, Social and Cultural Rights |
| LDCs | Least Developed Countries |
| MDGs | Millennium Development Goals |
| OECD | Organisation for Economic Co-operation and Development |
| OHCHR | Office of the United Nations High Commissioner for Human Rights |
| OWG | Open Working Group |
| RTE | Right to Education Initiative |
| SCBD | Secretariat of the Convention on Biological Diversity |
| SDGs | Sustainable Development Goals |
| SIDA | Swedish International Development Cooperation Agency |
| TRIPS | Agreement on Trade-Related Aspects of Intellectual Property Rights |
| UN | United Nations |
| UN CEB | UN System Chief Executives Board for Coordination |
| UN DESA | United Nations Department of Economic and Social Affairs |
| UNDG | United Nations Sustainable Development Group |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNGA | United Nations General Assembly |
| UNICEF | United Nations International Children's Emergency Fund |
| UNIDO | United Nations Industrial Development Organization |
| WHO | World Health Organization |
| WTO | World Trade Organization |

Introduction

The Sustainable Development Goals adopted in September 2015 as part of the 2030 Agenda for Sustainable Development have a multidimensional nature evidenced in the range of issues addressed across the 17 goals, 169 targets and 231 indicators, which range from economic and social, to sustainability topics (UNGA, 2015). The SDGs represent a guide and action plan towards a broad conception of development, and they have strongly shaped and dominated the discussion on the development field since their conception.

Inequality, that has become one of the most pressing development issues in the world, is addressed directly in SDG 10 “*Reduce inequality within and among countries*” under different conceptual considerations. Three conceptions of inequality can be found in the general goal of SDG 10: within country and between country explicitly mentioned as well as global inequality, a concept implicitly grasped. Extended focus on the specific targets of SDG 10 also points out distinct concepts of inequality.

Nevertheless, as a cross-cutting theme inequality is also considered in different extents within the rest of the SDGs not directly aimed at tackling inequality, reflecting the broad and multidimensional nature of the concept (Kanbur, 2021). However, there is a gap of knowledge in the development literature regarding a comprehensive and systematized mapping of the concept of inequality beyond SDG 10. Such knowledge of inequality across the 2030 Agenda for Sustainable Development is key for a more accurate and exhaustive base for evaluation. This translates into the necessity of understanding the complete picture of how inequality is conceptually contemplated within the SDGs.

Therefore, this research aims to analyze the ways in which the concept of inequality is considered within the Sustainable Development Goals. It provides a mapping of the different inequality dimensions to build a comprehensive knowledge of inequality in the SDGs. Based on the mapping, a critical assessment of such considerations is conducted in order to identify limitations, shortcomings and offer recommendations for further assessments of the development agenda. Furthermore, the research was narrowed down to the conceptual mapping of inequality while the measurement of progress initially planned is recommended for further research, as this would require a wider scope to be developed accurately than this thesis allows.

The present study will be organized as followed: Chapter 1 gives an overview of the Sustainable Development Goals and the concept of inequality, which situates the topics in the relevant literature and provides the necessary background for the theoretic development of the research. Chapter 2 introduces the methodology established to conduct the study with a detailed explanation of its design. Chapter 3 maps the conceptual considerations of inequality within the SDGs. Furthermore, Chapter 4 is based on the critical assessment and further formulation of recommendations. Lastly, the conclusions are presented taking all prior results into consideration.

Chapter 1: Theoretical Background

1.1. Sustainable Development Goals and the 2030 Agenda for Sustainable Development

The measurement of development progress that goes beyond GDP as a measure of well-being into a broader perspective has been observed in the formulation of multidimensional initiatives. This transition was a result of the dissatisfaction with the use of GDP as a standard measure of well-being. It dates back to the development of basic needs indicators and physical quality of life indexes in the 1970s. Later on, Amartya Sen's capability approach in the 1980s expanded dimensions beyond "income" to assess social progress. The Human Development Index (HDI) presented in the first Human Development Report published in 1990 was a significant step for this broader perspective. These processes resulted in the key report of Stiglitz et al. (2009), which gathers this evolution.

The introduction of the Millennium Development Goals in September 2000 based on the Millennium Declaration was the clearest step at a global level by that time for a broader approach towards development. The MDGs contemplated eight goals and twenty-one targets mostly orientated towards the satisfaction of basic needs and addressing issues like poverty, health, environment, education, and gender. They were at that time the dominant referent on the field.

Nevertheless, several shortcomings and limitations of the MDGs were raised. Their approach towards alleviation of poverty and meeting basic needs was considered still a narrow conception of development when noting that main development topics such as tackling the roots of poverty, unemployment, wages, sustainability, women's reproductive health issues, governance and inequality were still left out (Fukuda-Parr, 2016).

The omission of inequality as a standalone goal and priority dimension was one of the most criticized aspects of the MDGs. Despite the conversations that took place during the late 1990s and early 2000s which were aimed to define the UN development agenda and formally raised their concern for equity and equality of all persons, the MDGs had no specific and defined mention of inequality, social exclusion or equity. They rather just focused on limited targets on gender equality in school enrollment, the share of the poorest quintile in national consumption and democratic governance and participation (Doidge & Kelly, 2019).

The negotiations for *the Post-2015 Development Agenda* were orientated towards taking on a broader conception of development that would address the shortcomings of the previous Millennium Development Goals. They resulted in the establishment of the *2030 Agenda for Sustainable Development* and the Sustainable Development Goals (SDGs). According to Kamau et al. (2018), there were three main processes after the adoption of MDGs that lead to the conception of the 17 SDGs and the acceptance of the Agenda between UN member countries:

1. The *United Nations Conference on Sustainable Development (Rio+20)* in Rio de Janeiro, 2012 where the document *“The Future We Want”* was adopted by country members and established the agreement to start a process for developing the SDGs as successors of the MDGs.
2. The *“Open Working Group”* (OWG) on SDGs following the Rio+20 conference appointed by the UN General Assembly (UNGA). It met 13 times between March 2013 and July 2014 where the SDGs and targets were agreed upon.
3. General Assembly’s negotiation processes on the post-2015 development agenda started in January 2015 and ended in the final adoption of the SDGs at the *“UN Sustainable Development Summit”* in September of the same year.

Nevertheless, the approach that would be taken towards inequality in this new agenda was subjected to multiple discussions. There was a clear tension between including inequality as a standalone goal or to approach it as a cross-cutting subject. Moreover, there were conceptual discussions regarding the types of inequalities that would be addressed and how this would be done. Such tensions developed over time within the processes of establishing the final list of the SDGs and lasted until the very last instance.

Fukuda-Parr (2019) offers a very detailed overview of this process and places it along the SDGs negotiation period where two main parallel discussions are identified by the author:

1. First, the push by the Global Public Consultations¹ report titled *“A Million Voices: The World We Want, a sustainable future with dignity for all”* (UNDG, 2013) to promote a stand-alone goal that would take extreme inequality, exclusion of social groups and the dimension of poverty into consideration, including addressing the root causes.
2. Second, the posture of the High Level Task Force of Eminent Persons (HLP)² based on tackling *“social exclusion”* which led to the establishment of the principle *“Leave no one behind”*, that addressed a narrow concept of inequality as social exclusion. Therefore, the HLP didn’t push for a standalone goal in its report titled *“A New Global Partnership: to Eradicate Poverty and Transform Economies through Sustainable Development”* (HLP, 2013), but rather argued for inequality to be scattered across the goals with indicators that could disaggregate the population according to the distribution of income.

During periods of discussions in which different actors like civil society, UN agencies, governments and scholars argued in favour of a standalone goal for inequality, especially extreme inequality, it was recurrently added and taken out of the list of possible SDGs up until the final months of negotiations. Nonetheless, the

¹ The Global Public Consultation report gathers perspectives towards the building of a post-2015 agenda for development. It involved approximately 1 million people from different backgrounds and 88 national consultations, 11 thematic consultations and the My World Global Survey (UNDG, 2013).

² The HLP had been pointed out by the Secretary-General in July 2012 to make recommendations on the development agenda beyond 2015.

final list agreed upon by the OWG included *SDG 10 “Reduce Inequalities within and between countries”* as a standalone goal and part of 17 other Sustainable Development Goals that composed the *2030 Agenda for Sustainable Development* adopted on September 25th of 2015 by the UN General Assembly Resolution A/70/L.1 titled “*Transforming Our World: the 2030 Agenda for Sustainable Development*” (UNGA, 2015).

The 2030 Agenda was adopted as a framework for development that aimed to go beyond the MDGs by addressing not just what had been treated as a priority so far as poverty eradication, education, health, food security and nutrition, but including economic, social and environmental objectives (UNGA, 2015). A closer look at the Agenda shows the clustering of the goals in six different areas: people, planet, prosperity, peace and partnership and it expanded the responsibility, as well as the action plans, to both developed and developing countries (de Jong & Vijge, 2021).

The formulation of the SDG 10 is the result of a more explicit acknowledgement of inequality which answered to social pressures and aggravating reality regarding the levels of inequality in the world. As it has been mentioned, SDGs are rooted in multidimensional frameworks and the concept of inequality goes beyond the dimensions in which is defined in SDG 10. The next chapter gives an overview of the concept of inequality to illustrate the multidimensionality and complexity of the concept which positions it as a cross-cutting subject across the SDGs.

1.2. Inequality: A Conceptual Overview

The international development discourse, and moreover, its international set agendas had had the concept of poverty as a main issue since the second half of the last century (Syróvátka & Schlossarek, 2019). Growing inequalities awakened concerns and placed the concept as a pressing development issue with enhanced attention from the field. This change of focus was supported by global debates on the issue, increased political and social attention and a growing body of literature approaching the concept. Literature such as Syrovátka & Schlossarek (2019) and Kanbur (2021) highlight the impact of Piketty’s “*Capital*” published in 2014 on placing inequality at the centre of discussions.

The following overview is written as an orientation to the main conceptual background of inequality. Nevertheless, inequality entails broad distinct considerations that can range across different theoretical approaches and dimensions. The chapter does not aim to provide a complete listing of all types of inequality as this is dependent on the intake. It is the main goal of this research to analyze the full extent of how inequality is conceptually considered within the context of the Sustainable Development Goals.

Approaching the concept of inequality has long been recognized as a complex task. Nevertheless, it is, overall, a relative concept concerned with distributional aspects. Aspiring to provide a fixed number of all of its types and definitions is rather a limitation to the multidimensionality of the concept. Asking “*Inequality of what?*” and

“Inequality among whom?” as done by Sen (1979) and authors later (see Stewart, 2013) can also orientate to answer what the concept entails.

1.2.1. Inequality of what?

Literature on inequality concerned to answer *“Inequality of what?”*, has long been focused on economic inequality (UN DESA, 2015a) also known as material inequality or inequality of living conditions (UNDP, 2013). Nevertheless, it was mainly approached as “income” or “monetary” inequality that is, as a proxy for well-being; this had reflected the theoretical paradigms accepted in the field towards the definition of well-being measured on income.

The discussion regarding inequality nowadays has shifted towards the consideration of the concept from two main perspectives: (1) “Inequality of Outcomes” and (2) “Inequality of Opportunities”, broadly used by the literature and official bodies within development agendas. Inequality of outcomes alludes to differences in the level of material wealth or living conditions (UN DESA, 2015a), usually measured through income and consumption but it can also refer to non-economic outcomes, e.g. educational outcomes. Inequality of opportunities refers to unequal opportunities resulting from circumstances beyond an individual’s control such as circumstances at birth, place of origin, gender, family background, and that can condition the outcomes of a person in life (Paes de Barros et al., 2008). It offers a potential achievement perspective (UN DESA, 2015a); and it often concerns the possibility to access such opportunities.

The approach to inequality has had many theoretical developments well gathered by UNDP (2013), and which forged the path for the concepts of inequality of outcomes. Starting with Kuznets in the early stages of development, the Kuznets Curve placed income within a trade-off relationship between economic growth and income distribution in an inverted U-shaped curve where inequality eventually decreases (Kuznets, 1955). Kuznets’s argument shifted the focus towards policies for economic growth, nevertheless, his hypothesis was later questioned by empirical evidence.

Pro-poor approaches later addressed poverty, inequality and economic growth, bringing many debates as to how to treat the relationship between poverty and income. According to Son (2007), a “major stream definition” stood for growth where poverty declines irrespectively of how benefits of growth are distributed among poor and non-poor, in this sense, growth is pro-poor whenever poverty falls (Ravallion & Chen, 2003). A “strict definition” argued for growth which besides leading to poverty reduction, brings a distribution of benefits that favours the poor (Pernia & Kakwani, 2000).

Further advances in the concept placed the interest on “inclusive growth”, when around the 2000s the focus on poverty reduction was still highlighted. It entails the pace and the distribution of economic growth, which needs to be inclusive in order to be effective in reducing poverty; pointing out the importance of focusing on the distribution of income (Anand et al., 2013).

Moreover, the works on measuring income inequality such as Dalton (1920), based on the consideration of social welfare functions, and Atkinson (1970), were pioneers for the development of the concept. Atkinson aimed to estimate the social loss of an unequal distribution by measuring income inequality using social objective functions. Nonetheless, considerations of inequality from the point of view of opportunities were starting to gain attention in the discussions; Sen (1997) argued that Atkinson's approach lacked acknowledgement of non-symmetrical individuals and the differences in the transformation of incomes into farther opportunities.

The discussion towards inequality of opportunity on the other hand received a large inspiration from Amartya Sen's quest for a broader measure of inequality beyond income and for the evaluation of income inequality in broader frameworks. Sen points out:

“An important and frequently encountered problem arises from concentrating on inequality of incomes as the primary focus of attention in the analysis of inequality. The extent of real inequality of opportunities that people face cannot be readily deduced from the magnitude of inequality of incomes, since what we can or cannot do, can or cannot achieve, do not depend just on our incomes but also on the variety of physical and social characteristics that affect our lives and make us what we are” (Sen, 1995, p.29).

The introduction of Sen's capability approach towards well-being argued for the freedom individuals have to live the life they desire or that has value to them, not just on what they have. Capabilities represent the freedom to achieve or choose a set of functionings; while functionings reflect the various things a person can value doing or being (Sen, 1997). Sen addressed the question of *“Inequality of what?”* by pointing out that an equal distribution of income might not translate itself into equality of capabilities and people need to have equality of opportunities to pursue a life of their own choosing. The relationship between income, individual achievements and freedom for Sen is non-constant and is dependent on other factors such as personal heterogeneities, environmental diversities, variations in social climate, differences in relation perspectives, and the distribution between the family.

Developments in “Equity” approaches also built up the concept of inequality of opportunities (UNDP, 2013) by focusing on eliminating the disadvantages that lie beyond an individual's control but that shape both outcomes, and the opportunities to achieve those outcomes (World Bank, 2006). The works of Rawls (1971), Dworkin (2018), Roemer (1993), Arneson (1989) and Cohen (1989) argued for the equalization of opportunities. Rawls (1971) stood for compensating bad outcomes resulting from people's circumstances outside of their control. Later Dworkin (2018), Arneson (1989) and Cohen (1989) followed this line of thought while differing on what is to be equalized (the *equalisandum*). Arneson argued for equality of welfare, Dworkin debated between equality of welfare and equality of resources and Cohen argued for “equal access to advantages”. Roemer (1993) proposes that equality of opportunity exists when individuals who have exerted comparable levels of responsibility have equal values of an “x”, regardless of their life circumstances .

1.2.2. Types of inequalities

Expansions on the conceptions of inequalities beyond the perspective of outcomes, accompanied by broadening considerations of development and poverty highlighted the multidimensionality of inequality (McKay, 2002). Inequalities are expansive in the sense that they can spill over between different dimensions and stratus in society (Freistein & Mahlert, 2016). The idea that there are other aspects in which people can differ such as education, health, needs, ability and personal characteristics, other than the distribution of income when considering inequality, makes unidimensional approaches unsatisfactory (Savaglio, 2006).

The multidimensionality of inequality has been addressed by several authors within the literature. Fisher (1956) pioneer arguments were based on a distribution matrix which highlighted the notion of the existence of other aspects that matter for well-being beyond the monetary dimension. Atkinson & Bourguignon (1982) aimed to illustrate multidimensional inequality by showing how governments are concerned both with monetary variables as income, and non-monetary variables. Maasoumi (1986, 1989) also addressed a multidimensional approach to inequality by assessing statistics for measurement. Likewise, a growing body of literature on the subject has been developing in the last 25 years taking Sen's capability approach as a great inspiration (Bui & Erreygers, 2020).

These developments have given space in the academic literature and the discussion within the development agendas for the conceptual consideration of different types of inequalities. Considering the complexity and the extensive dimensions in which disparities can be approached, the most coherent and clear way of addressing its types is to make the distinction of two main concepts constantly identified in the literature, and from which the rest of types are derived, these are: economic and non-economic inequality.

On one hand, as mentioned before, "economic inequality" can be argued to refer to the distribution of income, consumption and wealth. It can also potentially account for personal, household, pre-tax, and after-tax income (Peterson, 2014). On the other hand, "non-economic inequality" leaves aside monetary aspects and measurements to consider multiple non-economic dimensions (Peterson, 2014). Such dimensions can be conceived as widely as the interaction and the life of individuals develops within society: education, health, political participation, justice, basic services, environmental resources, etc. Perhaps the most accurate approach to them is defining that such non-economic types of inequality address disparities across individuals and groups in their specific dimensions in both outcomes and opportunities.

Lastly, one important concept which will be useful across the analysis in this research, is the concept of "extreme inequality". By definition, extreme inequality specifically concerns the distributions between top percentiles as well as the bottom percentiles of individuals within the population in a vertical way (Fukuda-Parr, 2019).

1.2.3. Inequality between whom?

Considering “*Inequality between whom?*” entails defining in which level distribution will be assessed. Inequality can be studied within individuals of the same household, or group, among different groups, countries, or globally (Stewart, 2013). The literature has long identified “Horizontal” and “Vertical” Inequality.

“Horizontal inequality” refers to that found among groups that share cultural identities, ethnic, racial, regional and religious affiliations (Stewart et al., 2007). “Vertical inequalities” are not related to group-based distinctions (Stewart, 2013), they are assessed by ranking individuals vertically and are mostly focused on inter-household inequalities. Both are multidimensional but vertical inequalities have historically been measured mainly in terms of income or wealth (Stewart et al., 2005).

Within-county, between-country and global inequality have become key concepts with raising importance in the inequality discourse. Within-country inequality concerns inequality among individuals of the same country. Between-country and global inequality introduce international comparisons and global distributions into the arguments. Milanovic (2013) defines between-country inequality in two different ways: (1) Inequality between nations of the world considering population as a group without population weighting and (2) Between-country inequality assigning weights to the population. Such specification accounts for a significant difference according to the author. Finally, global inequality is mainly individual-based, where all citizens of the world are considered for the calculation according to their income (Milanovic, 2013).

Chapter 2: Methodology

The present Chapter aims to define and describe the approach taken to conduct the research. Three main steps have been selected which will be followed in order to address the question: “*How is the concept of inequality considered within the SDGs?*”. These steps are both related and consecutive, meaning they are built upon the results found in the previous steps.

Firstly, a systematized approach is built and established in order to analyze the different ways in which inequality is considered within the Sustainable Development Goals from a conceptual point view. This allows for a standardized analysis of all SDGs and will produce comparable results for later critical assessment. For this, the research will consider the 17 Sustainable Development Goals and 169 specific targets contained in the 2030 Agenda for Sustainable Development (UNGA, 2015) as summarized in Table 1. The methodological choice of taking all SDGs and targets lies on the necessity of producing all-inclusive results that can reflect the cross-cutting and multidimensional aspect of inequality.

Table 1: Sustainable Development Goals and number of targets

| | SDG | N. of targets |
|----|---|---------------|
| 1 | No poverty | 7 |
| 2 | Zero hunger | 8 |
| 3 | Good health and well-being | 13 |
| 4 | Quality education | 10 |
| 5 | Gender equality | 9 |
| 6 | Clean water and sanitation | 8 |
| 7 | Affordable and clean energy | 5 |
| 8 | Decent work and economic growth | 12 |
| 9 | Industry, innovation and infrastructure | 8 |
| 10 | Reduced inequalities | 10 |
| 11 | Sustainable cities and communities | 10 |
| 12 | Responsible consumption and production | 11 |
| 13 | Climate action | 5 |
| 14 | Life below water | 10 |
| 15 | Life on land | 12 |
| 16 | Peace, justice and strong institutions | 12 |
| 17 | Partnerships for the goals | 19 |

Source: author's compilation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

A revision of literature regarding the methods for related studies was conducted, this in order to obtain theoretical guidance and grounding for the building of a comprehensive methodology. In consequence, to operationalize and achieve the desired mapping, inequality within the 17 SDGs and each specific target will be assessed from the following two main operationalization criteria:

1. **Target definition:** a framework is presented in Ulbrich et al. (2018) to understand the relation between inequality and SDG monitoring, and it is applied in the SDG 11 to operationalize the study. One specific

part focused on target definition to address intra-urban spatial differentiation, where questions regarding the mention of inequality and the level in which this is done are presented. Adapted from the authors, the goal in this section is to map how the target definition refers to the potential existence of inequalities, by looking at the framing through which is referred to and the level of reference.

Considering the prior explanation, three questions are defined for this criterion:

1. *Does it refer to inequality?*, if yes:
 2. *Through which framing?:* meaning through which terms can the concept of inequality be comprehended or approached. For example, through the mention of access, inclusiveness, equity, discrimination, etc., as guided and adapted also from (Ulbrich et al., 2018; UN CEB, 2017; UN DESA, 2015b).
 3. *What is the level of reference?:* referring to whether the target is addressed in a universal way, aimed to reach all people or rather focused towards the targeting of an specific vulnerable group.
2. **Considerations of inequality:** the goal is to assess the different ways in which the concept of inequality is considered within the SDGs. For this and to maintain coherence, the operationalization follows the main overall categories presented in Chapter 1 regarding the conceptual overview of inequality, which is based in the fundamental theoretical discussions of the concept. Three main questions will be considered while approaching the mapping in each goal and target:
 1. *What is the type of inequality?*
 2. *Inequality of what?*
 3. *Inequality between whom?*

Moreover, these two main operationalization criteria are the base for the “Inequality mapping matrix” presented in Table 2, used for the mapping of the concept in Chapter 3.

Table 2: Inequality mapping matrix

| <i>SDG N.</i> | | | | | |
|---------------|------------------------------|---|-------------------------------------|----------------------------|---------------------------------|
| <i>N.</i> | <i>Target Definition</i> | | <i>Considerations of inequality</i> | | |
| | <i>Framing of inequality</i> | <i>Level of reference to inequality</i> | <i>Types of inequality</i> | <i>Inequality of what?</i> | <i>Inequality between whom?</i> |
| | | | | | |

Source: author’s formulation based on referenced literature

Secondly, Chapter 4 will present a critical assessment which analyzes whether SDGs consider inequality well in a conceptual matter. Furthermore, in this chapter, recommendations are offered for the overall consideration of the concept throughout the Agenda and is based on the conceptual mapping results. A critical perspective is taken to offer valuable conclusions that go beyond the existent development frameworks and is formulated to serve as a base for assessing, reevaluation and formulation of new action plans regarding inequality.

Chapter 3: Mapping of Inequality within the Sustainable Development Goals

In this chapter, the seventeen Sustainable Development Goals are analyzed according to the methodology established in Chapter 2 in order to map the different ways in which the concept is considered throughout them. The results are presented individually per level of categorization in the inequality mapping matrices that can be found in the Appendix A, and a comprehensive analysis of the results per goal is offered. This individual analysis is intended to elaborate, provide context and explanation of the results found in the matrices. Furthermore, Chapter 4 will focus on a critical analysis of the results.

3.1. SDG 1: End poverty in all its forms everywhere

The concept of poverty had historically been centred around the ability to obtain sufficient food and access other basic necessities. Although the current discourse is still focused on aspects of material deprivation, following the broader conceptions of the concept of development beyond income, poverty has also been orientated towards a more multidimensional concept (Morduch, 2005).

SDG 1 is composed of seven targets framed to “*End poverty in all its forms everywhere*”. The analysis shows that inequality is implicitly addressed in five of them as summarized in Table A1. This does not imply inequality and poverty are the same concepts. Inequality is a measure of relative equity, while it gives no information on absolute levels of standards of living. Nonetheless, it is an important determinant of poverty. Unequal distributions of income can perpetuate the levels of poverty in societies. At the same time, inequality can hamper the effectiveness of poverty eradication efforts if the population does not have the same levels of opportunities to be benefited by them.

For this goal, the reference to inequality within a poverty framing lies in extending the efforts to eradicate poverty for all parts of the population without exclusions, targeting specific vulnerable groups to ensure access to basic services, resources, and diminish group vulnerability. Economic inequality focused on income, consumption, and wealth has a strong presence in comparison with the rest of the goals.

Target 1.1 refers to economic inequality of outcomes with a universal framing by aiming to eliminate extreme poverty for all (measured by the \$1.25 poverty line); this entails addressing income inequality as it can be considered to contribute to the levels of poverty. Target 1.5 focuses on both economic (income) and non-economic inequality (environmental, social) of outcomes, with a vertical approach, by aiming to “build resilience and reduce their exposure and vulnerability to climate, economic, social and environmental shocks”.

Two targets consider both inequalities of outcomes and opportunities. Target 1.2 which aims to “reduce by half the poverty in all its dimensions according to national definitions”, addresses inequality in a targeted way by focusing on women, men and children and going beyond an income perspective, considering multidimensional poverty. Multidimensional poverty can trespass the distribution of income and bring non-

economic dimensions and inequality of opportunities to the discussion, such as access to education and health services. Nevertheless, this multidimensionality is left “subject” to national definitions, which provides little information on the extent of non-economic aspects that would be considered. The implementation of “social protection systems for all” in target 1.3 entails both the percentage of coverage and the opportunity for all, especially the poorest, to be included in the programs.

Finally, target 1.4. is the most comprehensive of all, it considers inequality between all men and women (particularly the poor and vulnerable) by aiming to “ensure equal rights to economic resources, access to basic services, ownership and control over land and property, inheritance, natural resources, technology, and financial services”. This poses deep stress on inequality of opportunities, as it requires equality before the law and the non-exclusion based on birth characteristics. Moreover, the consideration of economic inequality (specifically, wealth inequality), and non-economic inequality (environmental, legal, technology), gives a broader view than the rest of the targets.

3.2. SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

The achievement of zero hunger is the main desired outcome of SDG 2. Food security, nutrition and agricultural productivity are addressed as subdimensions and channels to tackle the levels of hunger. Considerations of inequality are found across four of eight targets as seen in Table A2.

Firstly, food inequality is comprehended on target 2.1. It is essentially an inequality of opportunities as it refers to “ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food”. In this sense, access to food is considered a universal human right (D’Odorico, 2019). There is a close relationship between targets 2.1 and 2.2, as addressing disparities in access to food can potentially translate into less nutritional disparities and better outcomes among the population, which is what constitutes goal 2.2 that aims to: “end all forms of malnutrition and achieve internationally agreed targets on stunting and wasting in children under 5, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons”.

Secondly, agricultural issues are addressed with a framing of tackling increments in agricultural productivity and incomes of particular groups. These are reflected in income inequality concerning outcomes. The means towards approaching the desired outcomes are established by aiming for equality of opportunities through ensuring “equal access” to what constitutes inputs and initial conditions: land, productive resources, knowledge, financial services, markets and opportunities for value additions to “double agricultural productivity” (2.3); and the access to “fair and equitable sharing of benefit” from the use of genetic resources (2.5).

Finally, horizontal inequality is dominant when considering inequality between whom. Groups are considered by gender (targeting adolescent girls, pregnant and lactating women), ethnicity (indigenous people), profession (family farmers, pastoralists and fishers), and age (children under 5 and infants). Vertical inequality is present by the focus on the poor, while universality is only present in access to food (2.1). For target 2.5 the access and sharing of benefits are to be accomplished as “internationally agreed”, nevertheless no further specification is possible.

3.3. SDG 3: Ensure healthy lives and promote well-being for all at all ages

In SDG 3, health inequality is considered from a universal framing between all people, both vertically and horizontally, and targets 3.7 and 3.8 contain the most concise references (see Table A3). Health inequality is defined by the World Health Organization as “*differences in health status occurring among individuals or groups*” (2015), which bring socioeconomic costs to societies. Social factors, such as education, employment, gender, income level, and ethnicity influence the health of individuals; and disparities in the health status across population groups are present in all countries, with the risk being higher for individuals of lower socioeconomic status (WHO, 2018).

Mentions of three main dimensions within health inequality are made throughout the targets: (1) Ensuring universal access to sexual and reproductive health-care services in target 3.7; (2) Access to safe, effective, quality and affordable medicines and vaccines³ in target 3.8, both directly entailing inequality of opportunities, and indirectly inequality of outcomes, as these are essentially opportunities that aim to bring better health outcomes for the population, which at the same time are expected to improve individual’s capacity to perform in life; moreover, (3) Achieving universal health coverage⁴ is also present in target 3.8, referring both to inequality of outcomes as a percentage of coverage and inequality of opportunity, by ensuring a universal coverage “for all”.

Furthermore, on a lower level of inequality framing⁵, targets 3.1 to 3.4 don’t refer to inequality, nevertheless a reduction of global maternal mortality (3.1), premature, neonatal and child mortality (3.2, 3.4), and the end of epidemic and tropical diseases (3.3) will require a decrease of health inequalities, however, this is not explicitly specified. In addition, targets 3.c. and 3.d. can potentially play a role in decreasing inequality, but they are more orientated towards the financing for enhanced capabilities of developing countries.

³ Target 3.b also concerns access to affordable medicines and vaccines based on the Doha Declaration on the TRIPS Agreement

⁴ Universal health coverage refers to people having access to the full range of essential health services, when they are in need of them, regardless of the place (WHO, n.d.).

⁵ See Table B1 for a quoting of these targets.

3.4. SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Education is recognized as a basic human right in several international human rights laws⁶. The Universal Declaration of Human Rights establishes that “everyone has the right to education” in Article 26 (UNGA, 1948). Education as a human right is framed to be universal, applied equally to everyone without discrimination, and throughout the entire scope, including levels, types, and quality of education (UNESCO & RTE, 2019) (UNESCO & RTE, 2019). SDG 4 has a right-based approach aiming to ensure the full extent of education as a human right is enjoyed at a universal level⁷ (UNESCO & RTE, 2019). This is reflected in the main goal of ensuring “inclusive, and equitable quality of education and promote lifelong learning opportunities for all” and across the ten targets having a very wide consideration of inequality (see Table A4).

Access to education means everyone can receive it with quality on an equal basis, without discrimination. The unequal access to it represents a form of education inequality in the form of opportunities. This is widely present in SDG 4 and is identified as followed: (1) Access to complete, free, equitable and quality primary and secondary education in targets 4.1 and 4.5; (2) Access to early childhood development, care and pre-primary education in 4.2 and 4.5; and (3) Equal access to affordable and quality technical, vocational⁸ and tertiary education addressed in targets 4.3 and 4.5. A closer analysis shows that while the wording of these targets refers to inequality of opportunities, they entail the achievement of an outcome, though only explicitly cited in target 4.1, which aims to “achieve relevant and effective learning outcomes”, and 4.2 by using pre-primary education to prepare students for “primary education”. Vocational and third stage education has the potential to improve outcomes such as employment and living standards, nevertheless, it is not specified in the respective targets.

A similar argument can be made for targets whose framing refers principally to inequality of outcomes, mainly appearing as: (1) Increasing relevant skills (technical and vocational), which is conceived to increment opportunities for “employment, decent jobs and entrepreneurship”⁹ in target 4.4; (2) Achieve literacy and numeracy in 4.6 “for all youth and a substantial proportion of adults, both men and women”; and (3) “Knowledge and skills needed to promote sustainable development” in target 4.7. Beyond target 4.4, targets

⁶ The Convention against Discrimination in Education (1960, CADE), the International Covenant on Economic, Social and Cultural Rights (1966, ICESCR), the Convention on the Elimination of All Forms of Discrimination Against Women (1979, CEDAW) and the Convention on the Rights of Child (1989, CRC) according to (OHCHR, 2018; UNESCO & RTE, 2019).

⁷ The 2030 Agenda for Sustainable Development is not legally binding.

⁸ 4.5 refers to “equal access to all levels of education and vocational training” by targeting gender disparities.

⁹ Targets 4.3 and 4.4 present a particular dynamic as they both refer to technical and vocational knowledge. Target 4.3 is framed to address the access (opportunity) to education of all women and men to acquire such skills which implicitly affect outcomes; target 4.4 focuses on ensuring all youth and adults have relevant technical and vocational skills as an outcome, to further enhance employment opportunities.

4.6 and 4.7 do not mention the opportunities that can implicitly be increased through them, e.g.: overall societal participation (4.6), and opportunities in all economic, social and environmental aspects (4.7).

Targets 4. (a-c) refer to the means of implementation and particularly show the interlinkage between outcomes and opportunities. Target 4.a aims to “build and upgrade educational facilities” to expand the opportunities of accessing “safe, non-violent, inclusive and effective learning environments for all”. The expansion of “the number of scholarships available to developing countries” (4.b), refers to the creation of opportunities, and is framed explicitly to increase outcomes in educational enrolments in both developed and developing countries. Furthermore, to “substantially increase the supply of qualified teachers” (4.c) is at the same time an input to improve educational quality, however, this is not explicitly specified.

Following the universality of the right to education, almost all the targets address disparities among all. Nevertheless, horizontal and between-country approaches are also present. There is a gender equality and an age component substantially present. When considering inequality among whom, the gender component is more universal, mainly referring to “all boys and girls” (4.1- 4.3, 4.a), and explicit on 4.5. as “eliminate gender disparities in education”. Horizontal inequality based on age targets the youth and adults (4.4, 4.5, 4.6, 4.a), with more emphasis on assuring the consideration of “all youth”, while only a “substantial” part of adults is targeted.

Beyond this, focus on vulnerable populations is only done through target 4.5 (horizontal inequality among groups with disabilities, ethnicity and children-aged) and target 4.a. (child and disability). The distinction of between country-inequality with a focus on developing countries, LDCs and Small Islands (4.b, 4.c) as means of implementation highlight the different starting points of countries to achieve such goals; this consideration could have been extended to 4.a. for the building of infrastructure.

3.5. SDG 5: Achieve gender equality and empower all women and girls

Gender equality refers to *“the concept that women and men, girls and boys have equal conditions, treatment and opportunities for realizing their full potential, human rights and dignity, and for contributing to (and benefiting from) economic, social, cultural and political development”* (UNICEF, 2017, p.3).

Explicitly addressing gender inequality in the main goal, SDG 5 has the strongest consideration of inequality across the Agenda after SDG 10. This goal is particularly relevant and unique as it considers gender inequality as a type of inequality which is multidimensional, and as the rest of the mapping has shown, also as a cross-cutting issue across different targets. This means that it can entail at the same time other types of inequality (economic and non-economic). SIDA (2016) argues that gender equality is a concept with wide connotations that range from concerning women’s empowerment, and non-discrimination to equal rights despite gender, all of which are covered throughout the different framings of the concept in the specific targets (see Table A5).

The elimination of “all forms of discrimination against all women and girls” is the focus on target (5.1). Gender equality as the absence of discrimination based on gender is a key concept for Save the Children (2017). Therefore, non-discrimination means preventing the denial of opportunities to people on the basis of gender, which at the same time aims at translating into more equal outcomes.

Gender inequality in the possibility to enjoy security and be protected from violence is highlighted in targets 5.2 and 5.3 as they aim to eliminate “all forms of violence against all women and girls in public and private spheres” and “all harmful practices”, respectively. Female vulnerability to suffering from violence, human trafficking, and sexual exploitation (5.2); along with early and forced marriage and the practice of female mutilation (5.3) are targeted specifically. These practices would entail tackling the unequal treatment displayed for women and girls based on their gender which predisposes them to be a target, and it is a clear example of tackling inequality of opportunities, and how a characteristic beyond an individual’s control can condition the outcomes.

The equal division of house responsibilities is addressed in target 5.4. This type of intra-household disparities which touches non-economic aspects is framed to be an outcome in the target. Nevertheless, the empowerment of women within culturally defined norms that lead to the predisposition of the female gender of carrying the heaviest load of housework, strictly concerns tackling inequality of opportunities, and making sure that from a starting point, men and women should be able to be considered equally to share such tasks.

Equality of opportunities for women to undertake leadership positions at all levels of decision making (political, economic and public life) and the aim to ensure their participation as an explicit target 5.5, refers to inequality of women in participation and representation. Gender inequality is also considered in the health dimension in target 5.6 by addressing inequality of opportunities to “ensure universal access to sexual and reproductive health”, also mentioned in goal N.3. These are essentially the creation of opportunities for outcomes, as such access is expected to increase health conditions, and empower women in their reproductive decisions and sexual health.

Law inequality is present in targets (5.6, 5.a and 5.c) in several aspects: (1) Access to reproductive rights in target 5.6; (2) Equal rights to economic resources, access to ownership and control over land and other forms of property, financial services, inheritance and natural resources in 5.a; and (3) Gender equality and women empowerment “at all levels” addressed in target 5.c. They are all framed as inequality of opportunities by enhancing women’s capacity of access, equal representation against the law and overall advocating for the opportunity of women to receive equal treatment. Nevertheless, as is the case with other goals, they are intended to also level the disparities in outcomes in which the income dimension is particularly important; this is the only reference to the levels of income across gender, nonetheless, its consideration in outcomes is not explicitly

made. Lastly, the elimination of inequality of opportunity in access to technology (especially information and communication technology) is meant to achieve women's empowerment (5.b).

Finally, there is mainly a universal approach when it comes to defining inequality between whom, considering “all” women and girls which entails both horizontal and vertical inequalities, not only tackling women as a group but ensuring the targets are met for all women within the group. The special consideration of intra-household inequality in target 5.4 is relevant as it showcases gender disparities in home living environments.

3.6. SDG 6: Ensure availability and sustainable management of water and sanitation for all

While the right to safe and clean drinking water and sanitation is not explicitly recognized as an individual human right in international law (OHCHR et al., 2010), it was recognized as one by the UN General Assembly in 2010 (UNGA, 2010).

The human right to water entitles “everyone without discrimination to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use”¹⁰ (UN WATER, 2015, p.6); while the human right to sanitation entitles “everyone without discrimination to physical and affordable access to sanitation, in all spheres of life” (UN WATER, 2015, p.6). Ensuring these rights goes hand in hand with reducing inequalities in the access to water and sanitation, that can result from people being excluded and marginalized by discrimination and stigmatization (UN WATER, 2018). This approach is found to be established in the main goal.

Based on Table A6, inequality of opportunities in the access to water and sanitation is considered across the goal as followed: (1) Universal and equitable access to safe and affordable drinking water for all in target 6.1; and (2) Sanitation and hygiene for all as well as ending open defecation, by “paying special attention to the needs of women and girls and those in vulnerable situations” addressed in target 6.2. A stress on “equity” in these two targets is particularly relevant. The term equity in this context has been widely interchangeable with equality according to UN WATER (2015). Nevertheless, the same author argues that in a framing of human rights, the term “equity” can be less clear and more open to interpretation, while “equality” has been more defined. Therefore, in this case, there has been a push for further clarity on these two terms and the use of the term equality instead of equity.

When addressing inequality between whom, the targets are universal following a rights approach and the disparities in access are addressed between all; the consideration of groups is found in target 6.2 targeting by gender. Further distinctions by groups while considering “people in vulnerable positions” are not made, which

¹⁰ Including water for drinking, hygiene, washing of clothes and personal sanitation (UN WATER, 2015, p.6).

leaves conceptual spaces for defining under which criteria they are considered vulnerable. This is important for further policy-making that would aim to achieve the target as the specific population to be targeted must be identified. Moreover, “paying special attention” to women and girls introduces issues related to biological gender conditions such as women's hygiene, mainly menstruation, which requires specialized care, however, these could be more explicitly defined in the targets.

3.7. SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Energy is related to the development of countries and has historically not just affected levels of poverty but also transcended into playing a part in inequality levels. Improvements in the levels of quality of life have usually meant an increase in the access and use of energy. Energy inequality refers to the situation in which different households are not affected in the same way by energy services (Dubois & Meier, 2016).

In this sense, energy inequality of opportunities framed as “access to affordable, reliable, sustainable and modern energy” for all in the main goal, closely declares a universal consideration of the concept throughout the specific targets. Overall, based on Table A7, energy inequality of opportunities is approached in two different ways in the rest of the targets: (1) Access to energy services in targets 7.1 and 7.b, (2) Access to clean energy research and technology addressed in target 7.a and (3) Expansion of energy infrastructure for “supplying modern and sustainable energy for all” in 7.b.

The dynamic between inequality of opportunities and outcomes is closely related. Access to energy services, clean energy research, energy supply infrastructure and technology are framed as tackling disparities between all and ensuring universal access. Nevertheless, inequality of outcomes also plays an important role; target 7.b explicitly approaches access to energy infrastructure and technology as a means to tackle disparities in the supply of modern and sustainable energy for all, which constitutes an outcome. Although not explicitly cited in the rest of the targets, access to clean energy research and technology, which includes “renewable energy, energy efficiency and cleaner fossil-fuel technology” (7.a) are meant to increase the supply of energy and therefore also refers to outcomes.

More generally, Wu et al. (2012) argue that the distribution, as well as the access to energy and energy resources, may significantly affect levels of environmental, social and economic inequalities, therefore improving the distribution of energy between all is expected to play a role in other dimensions of inequality not explicitly considered in the framing of the goal.

Lastly, only target 7.b tackles inequality specifically in developing countries, particularly LDCs, Small Island Developing States, and landlocked developing countries considering inter-country or between-country inequality.

3.8. SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The concept of inclusive growth, as mentioned in point 1.2.1 of Chapter 2, was part of the theoretical evolution that forged the concept of inequality of outcomes. Inclusive growth takes into consideration both the pace and the distribution of the benefits of economic growth for it to be effective in tackling poverty, this concerns discussions towards the distribution of income and therefore it is strictly related to inequality. This is directly addressed in the main goal of SDG 8 by considering “inclusive growth”, and aiming to achieve “full and productive employment and decent work for all”.

The mapping identified several areas that target inequality (see Table A8). Regarding employment, the following aspects are highlighted: (1) Economic inequality in terms of income in target 8.5 addresses outcomes by advocating for “equal pay for equal value”; (2) The tackling of disparities in employment rates among the population, especially vulnerable groups, approaches inequality of outcomes in employment levels, and is mapped in target 8.5 as “achieve full and productive employment”, and as “reduce the proportion of youth not in employment, education or training” in 8.6; (3) Disparities in work conditions address the access to “decent work for all” (inequality of opportunities) in target 8.5, this conditions can entail inequality of economic aspects (e.g. additional benefits), or non-economic (sanitary, health, security and others).

Moreover, inequality of opportunities is also present in all previous targets, as income inequality, employment rates, and work conditions would all require providing equal opportunities to access the labour market in the first place.

Inequality of law (labour rights) and security (access to safe and secure working environments) are addressed in targets 8.7 and 8.8. These two types of inequalities both refer to opportunities as they entail the possibility of everyone receiving and being protected by the same rights. They are strongly applied as means to “eradicate forced labour, modern slavery, human trafficking, and prohibition of the worst forms of child labour” in target 8.7, and through the promotion of “labour rights and safe and secure working environments for all” (8.8). Nonetheless, it is important to mention that “labour rights” and a “safe and secure” working environment can vary on national levels, so the levels of disparities in terms of standards and what it entails to tackle them can vary according to context.

Education is addressed by tackling the youth to decrease the proportion of non-enrollment in education or training (related to SDG 4). However, reference is only found in target 8.6 which considers inequality of education in a double direction: expand the opportunity to access education and training, in order to increase the enrollment rates among young population. This is basically leveraging input disparities for more equal

outcomes. Moreover, economic inequality in access to finance, banking and insurance services is considered in target 8.10 with a universal framing.

Lastly, universal framings within this goal are present in four out of five targets considered, with (8.5) considering specifically all women and men. Nevertheless, the universal character is accompanied very frequently by the targeting of specific vulnerable groups (horizontal inequality). Young people as a group are particularly taken into consideration for income, employment rates and education disparities (8.5, 8.6). This results in a focus to make economic growth inclusive for the youth in terms of employment. People with disabilities and migrant workers are also highlighted (8.5, 8.8.) as the most vulnerable to be affected in terms of employment, though this should also vary depending on the national and regional context.

3.9. SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Inclusive in a context of sustainable industrial development means the process should reach all people in all countries, and refers to the equitable distribution of benefits among all actors involved and equality of opportunities (UNIDO, n.d.).

The process of inclusive sustainable industrialization for which the main goal and target 9.2 are designed can be thought to consider inequality of opportunities and outcomes (see Table A9). Industrialization is expected to have the potential to bring a certain amount of benefits (UNIDO, 2020), that must be able to reach everyone if considered inclusive. Nevertheless, there is a lack of specification within the goal as to be able to classify which type of disparities the process can tackle. It can be argued however that these can both entail economic and non-economic dimensions, as other variables other than income and consumption are affected by industrialization and the changes it brings to the economy.

Secondly, (1) Affordable and equitable access to resilient infrastructure in target 9.1, (2) Access to information and communications technology, and (3) Access to internet, both addressed in target 9.c, all refer to inequality of opportunity in a non-economic dimension (infrastructure and technology). The access to infrastructure is contemplated explicitly to “support economic development and human-wellbeing” (9.1), for which it is meant to improve the distribution of outcomes. In target 9.c, to increase the “access to information and communication technology” is also an input to “provide universal and affordable access to internet”.

Thirdly, there is a special focus to increasing technical capacity and industry’s share of employment in developing countries. This is reflected when considering inequality between who among the categories identified in (9.2) and (9.c), as they target between-country and within country inequality by focusing specifically in LDCs. Furthermore, the inclusiveness addressed in the main goal and target 9.2 is by definition universal and considers disparities among all.

3.10. SDG 10: Reduce inequality within and among countries

The concept of inequality has the most explicit consideration throughout SDG 10, specifically conceived to “*Reduce inequality within and among countries*”. One of the most relevant aspects is the number of distinct approaches to inequality present. If the concepts laid out in Chapter 2 (point 1.2.2) are applied, by contemplating within and between-country inequality, global inequality is implicitly included in the main goal as well. This goal was adopted to address inequality in its economic dimension, an approach not particularly dominant in comparison to non-economic considerations of the concept in the rest of the goals.

The mapping shows that targets 10.1-10.4 are designed to tackle within-country inequality (see Table A10). In this sense, Target 10.1 stands out among all as the only one conceived to explicitly target income inequality, by aiming to “progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average”; this refers to outcomes and it is the clearest attempt to approach vertical inequality.

Nevertheless, SDG 10, and particularly target 10.1, have been the subject of numerous criticisms in terms of the extent to which income inequality is actually approached. Arguments centred on the lack of specified thresholds for inequality reduction, a greater focus on poverty reduction than on income inequality, and the inability to capture the full extent of (extreme) income inequality in target 10.1, by only focusing on greater income growth of the bottom 40% than that of the national average but without considering top percentiles, will be further discussed in Chapter 4.

Moreover, targets 10.2 and 10.3 are categorized slightly differently by addressing income inequality but considering in fact non-economic dimensions and horizontal targeting of vulnerable groups. The promotion of “social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status” (10.2), is an inclusion framing of inequality of opportunities that is meant to increase economic outcomes. Nonetheless, target 10.3 explicitly aims to ensure “equal opportunities and reduce inequalities of outcome”, however, the means of implementation are the “elimination of discriminatory laws, policies and practices” and “promoting appropriate legislation, policies and action”, for which addressing law inequality is also considered.

Target 10.4 aims to “progressively achieve greater equality” by the adoption of “policies, specifically fiscal, wage and social protection” yet its framing is non-specific. Following the main goal, economic inequality should be considered yet there are no other details to establish further categorization, for example, on uses or types of fiscal, wage and social protection policies to which it refers to. Moreover, this target presents itself as more of a means to reduce inequality rather than a goal to reduce inequality itself.

Between-country inequality is contemplated in targets 10.5 to 10.7, including the means of implementation (10.a - 10.c). Uniquely, target 10.6 is the only one framed to reduce inequalities, the rest refer to the means through which they can potentially be reduced, yet there is a certain element of vagueness among them.

Target 10.6, which aims to ensure “enhanced representation and voice for developing countries in decision making in global international economic and financial institutions”, considers non-economic inequality of representation in decision-making, that entails enhancing the opportunities of developing countries of having a voice in global international economic and financial institutions. Freistein et al. (2016) argue this is essentially referring to the elite dynamics of global governance structures and global decision-making. Moreover, target 10.5 addresses global financial markets and institutions which are accountable to advocate for less inequality. Nevertheless, this target is not mapped through the matrix as it is not specific enough.

Finally, targets 10.7, 10.a, 10.b and 10.c are framed to favour vulnerable population or to address the special needs of developing countries¹¹: (1) Safe migration and mobility of people in target 10.7, (2) Differential treatment for developing countries in WTO agreements addressed in target 10.a, (3) Development assistance and financial flows for LDCs considered in target 10.b, and (4) Reduction of transaction costs of migrant remittances in target 10.c. Although relevant for non-discriminatory treatment as group weakness and initial disparities can potentially be channels to tackle unequal treatment, they are not specific targets towards reduction of inequality.

3.11. SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Urban development issues are approached through SDG 11 from different dimensions to achieve inclusiveness, safety, resilience and sustainability for cities. For the inequality discussion, inclusive cities are particularly relevant as they provide affordable and equitable access to living opportunities, urban and social services, in addition to creating safe and livable environments (ADB, 2017). This means inclusive cities are concerned with urban inequalities and aspire to extend the coverage and benefits for all.

For the case of SDG 11 (see Table A11), inequality in an urban perspective is mostly implicitly considered through non-economic inequality of opportunities: (1) Inequality in the “access to basic services”, and (2) Inequality in the access to “adequate, safe and affordable housing” in target 11.1, (3) Inequality in the “access to transport” addressed in 11.2, as well as (4) Inequality in the “access to safe, inclusive, and accessible, green and public spaces” identified in target 11.7.

Targets like 11.3 which refer to “inclusive and sustainable urbanization”, and 11.b which focuses on increasing “the number of cities and human settlements implementing integrated policies and plans towards

¹¹ See Table B1 for a quoting of these targets.

inclusion” are framed more broadly, but can be argued to entail both opportunities and outcomes in economic and non-economic dimensions.

Urban inequality refers to the lack of equal distribution over space and the traces of spatial concentration. Overall SDG 11 concerns urban inequalities at a city and human settlement level. Nonetheless, there is also an urban focus on gender (women), age (children and older people), and disability, such as in 11.2 and 11.7. Targets 11.1 and 11.2 also consider “all”.

3.12. SDG 12: Ensure sustainable consumption and production patterns

The efforts for transitioning towards sustainable patterns of consumption and production are addressed in goal 12. This goal is not strictly meant to influence levels of consumption nor production, but rather to enhance their sustainability.

The mapping results showed that the framing of inequality is particularly vague and not extensive (see Table A12), which is important to point out as consumption is a key element when considering inequality. Only target 12.1 was identified, which aims to “implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP)¹², all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries”. Inequality of opportunities when considering non-economic disparities in the access to (1) Technical assistance, and (2) Financial Assistance are comprehended within the 10YFP.

Between-country inequality is framed by addressing all countries’ implementation of the 10YFP but further targeting of developing countries needs is also present. However, more clarity about the means of this targeting should be present.

On a lower level of framing of inequality not specific enough to provide concise mapping, target 12.a and 12.c entail targeting and the provision of support to the disadvantaged or groups in need in developing countries as follow¹³: (1) Strengthening of scientific and technological capacity in 12.a, and (2) Special consideration for developing countries in the rationalization of fossil-fuel subsidies, and protection of the poor in target 12.c.

3.13. SDG 13: Take urgent action to combat climate change and its impacts

Inequality and climate change engage in strong dynamics. Islam & Winkel (2017) argue there are three channels through which inequality influences the effects of climate change on vulnerable groups of the society:

¹² The 10YFP was adopted at the United Nations Conference on Sustainable Development (Rio+20). It represents a global framework conceived to incentivize international cooperation and promote the transition to sustainable consumption and production, in developed and developing countries. It comprehends capacity building, and facilitation of the access to assistance for developing countries, both technical and financial (UN DESA, 2014).

¹³ See Table B1 for a quoting of these targets.

(1) Increasing the level of exposure to climate hazards, (2) The susceptibility to suffer the consequences of such events, and (3) Decreasing the ability to recover from them. In this sense, the authors refer to a vicious cycle between inequality and climate change, in which the climate hazard produces disproportionate negative effects on the vulnerable population in terms of income and assets (physical, financial, human and social).

Nonetheless, SDG 13 is one of the weakest goals in terms of consideration of inequality. Only two targets (13.1, 13.b) were identified to implicitly contemplate inequality, and can still be considered more general in comparison to other goals (see Table A13). The process to “strengthen resilience and adaptive capacity to climate related hazards and natural related disasters in all countries” in target 13.1 brings between-country inequality to the conversation. The same argument can be made for target 13.b, which promotes mechanisms for “raising capacity for effective climate change and related planning and management”, considering disproportionately affected vulnerable countries by climate hazards (between-country inequality), as well as looking with a within-country perspective to groups as women, youth and marginalized communities.

However, resilience and adaptive capacity to climate change, as well as raising the capacity for climate change management can touch as many dimensions as inequality is multidimensional in itself, in both economic and non-economic types, as well as in outcomes and opportunities. No further specification is provided, for which only a general mapping is possible. Further clarity should be provided by the framing of the targets.

3.14. SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

The sustainable use of oceans, seas and marine resources is addressed in SDG 14. Scarcely, two targets are related to the concept of inequality, nevertheless, as is the case for goals N. 12, 13 and 15, the consideration is not wide (see Table A14).

In this sense, target 14.7 is framed to “increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism”. Such desired outcome tackles disparities in benefit-sharing to favour disadvantaged countries and refers to between-country economic inequality of incomes.

Target 14.b comprehends (1) Non-economic inequality in access to marine resources, and (2) Economic inequality in the access to marine markets by addressing the enhancement of opportunities of small-scale artisanal fishers, which is a horizontal approach. Beyond this, the use and conservation of oceans, including the disparities in responsibilities for pollution could be more widely considered across the Agenda.

3.15. SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Following similar results of goals 13 and 14, SDG 15 does not consider inequality neither implicitly nor explicitly in a throughout way (see Table A15). Only target 15.6 which aims to “promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed”, entails the concepts of inequality¹⁴ as follows: (1) Income Inequality when referring to “fair and equitable sharing of benefits”, and 2) Inequality in the access to genetic resources as “promote appropriate access”.

For income inequality, the equitable sharing of benefits supposes a fair treatment and distribution of benefits (UN CEB, 2017), in this case between the country of origin and the party which acquires resources. This is in itself a goal of levelling outcomes, hence inequality of outcomes. Nonetheless, the channel of achievement is the access to genetic resources, which entails expanding the opportunities of the parties involved.

There is however not enough clarity to further specify between who are the disparities considered. More generally, in such a broad topic which is tied to initial disadvantages and unproportionate suffering of consequences depending on countries and society, the weak consideration of the concept is a notable fallout.

3.16. SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

This goal addresses key issues as safety, institutions, justice and law in societies. The reference to inequality is found in the main goal where inclusiveness in societies, access to justice for all and inclusive institutions are addressed, and which set the tone for the rest of the targets of which five out of twelve were found to consider inequality.

On one hand, inclusive institutions give equal rights, enable equal opportunities, voice and access to resources and services, and are often based on universality principles (e.g. universal access to justice), nondiscrimination, or targeted policies which are necessary when disadvantaged groups require differential treatment to reach equivalent outcomes (Carter, 2014). On the other hand, access to justice is *“the ability of groups and individuals to be able to bring an alleged rights violation to the attention of a court and to have that court adjudicate the claim*

¹⁴ This target comes from the adoption of the Convention on Biological Diversity (December 29th, 1993) comprehending biological diversity. The fair and equitable sharing of benefits arising from the utilization of genetic resources is one of three objectives. The Nagoya Protocol (October 20th, 2010) further enhances the Convention’s objective by offering a greater basis for legal certainty and transparency for providers and users of genetic resources (SCBD, 2011).

in a fair and impartial fashion on the basis of the evidence and according to the applicable rules of law” according to (Baumgartner, 2011, p. 457). OECD (2019) identifies inequality as both a driver and a consequence of lack of access to justice and such inequality a perpetrator of inequalities in other dimensions.

In this sense, inequality of opportunities is dominant in goal 16 across different dimensions of non-economic inequality (see Table A16): (1) Inequality of access to justice in the main goal 16 and target 16.3, referenced as the provision of “access to justice for all”; (2) Inequality of law found in 16, 16.b and 16.9, specifically as “provide legal identity for all” in target 16.9, and “enforce non-discriminatory laws and policies” in 16.b; (3) Inequality in decision making identified as “ensure responsive, inclusive, participatory and representative decision-making” in target 16.7; and (4) Inequality of access to physical safety, addressed in target 16.2 as “end abuse, exploitation, trafficking and all forms of violence against and torture of children”. These targets aim to equalize opportunities pre-outcomes. Moreover, the majority hold a universal framing which considers all, except target 16.2 which entails horizontal inequality by age group (children).

3.17. SDG 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

SDG 17 focuses on the need to form partnerships and the means of implementation to enhance the achievement of the goals. This SDG is particular, as it is the only in which the framing is neither specific nor strongly considers the concept of inequality to be able to apply the mapping matrix.

Nevertheless, three key points should still be mentioned as they are relevant for the inequality discussion: (1) Some targets are framed as means of implementation that can potentially target inequality; (2) There is a focus on enhancing developing countries' capabilities to reach the desired goals according to their particular needs; this would entail addressing specific vulnerabilities tied to unequal starting points of developing countries to balance the unequal outcomes and opportunities into which this translates; (3) There is a particular framing of tackling existent global structures which is necessary to balance inequalities at a global level.

These arguments are evidenced across the targets¹⁵. The creation of multi-stakeholder partnerships for knowledge, expertise, technology and financial resources to “support the achievement of the SDGs in all countries, in particular developing countries” (17.16) is a recognition of special needs and disparities within the global order.

Particularly for finance, “strengthening domestic resource mobilization” (17.1), “mobilization of additional financial resources” (17.3), “assistance in attaining long-term debt sustainability” (17.4), and “investment promotion” (17.5), are all aimed towards the special financial needs of developing countries.

¹⁵ See Table B1 for a quoting of the targets referenced.

The promotion of a “universal, rules-based, open, non-discriminatory and equitable multilateral trade system under the WTO” (17.10) would entail treatment based on fairness for the distribution of benefits and opportunities within the trade system, and the avoidance of the inequitable treatment dependent on their nation's status. Furthermore, the “increase of exports of developing countries to doubling the LDCs share of global exports” (17.11) is a quest for balancing participation and providing proper opportunities to access the world market. Both increased targeted finance and trade system consideration are an intent to balance the global economic order, in this sense, the balancing of inequalities created by the current global structures can only be addressed if the relevant institutions assure equal access (Freistein & Mahlert, 2016).

Moreover, capacity-building to support developing countries, such as “the development, transfer, dissemination and diffusion of environmentally sound technologies on favourable terms” (17.7), and the increment of “the availability of high quality, and disaggregated data” by income, gender, age, race, ethnicity and other groups (17.18), both address unequal access to technologies (inequality of opportunities), and the existent shortcomings to reflect outcomes through indicators whose improvement can potentially help assess more clearly the levels of inequality and the progress within the goals.

Chapter 4: Discussion

Initially, 64 out of 169 targets were identified to consider inequality in 16 out of 17 goals, with a varying degree of explicitness. Furthermore, 23 additional targets were found relevant to the comprehension of inequality, meaning they could potentially be related to the concept, especially in SDG 17. They were referred to in the analysis yet have a lower degree of framing, thus the matrix was not applied.

The present chapter offers a critical discussion of the results obtained from the mapping of inequality within the SDGs presented in Chapter 3. The goal is to assess whether SDGs consider inequality accurately in a conceptual manner by the comprehensive interpretation of the matrices' results per goal. The discussion is presented following the main categorization that was established in Chapter 2 and is summarized through eight general insights.

4.1. Target definition

4.1.1. Framing of inequality

Insight N.1: the “Leave No One Behind” concept behind the SDGs references inequality mainly through access, equity, inclusion, and non-discrimination

Mentions of equity, inclusion, access and non-discrimination were some of the main terms through which the concept of inequality is framed. Each framing can offer particular insights into the approach that is taken to concern inequality.

Equity framings highlight fairness in treatment and the distribution of benefits and opportunities among vulnerable groups as a principle toward equality of opportunities and outcomes (UN CEB, 2017). Discrimination refers to exclusions that can prevent the enjoyment or recognition of human rights and freedoms on an equal basis according to Article 1 of the Convention on the Elimination of All Forms of Discrimination against Women (UNGA, 1979). In this sense, non-discrimination and equality are indivisible principles and this was evidenced throughout the results.

The process of equalization inherently entails providing a specific focus on individuals who suffer disadvantages, acknowledging the need to level up their situation by understanding their particular needs. This can only be done by addressing the discriminatory practices that are comprehended in unequal treatments and outcomes (UN WATER, 2015).

These points are raised because the historical discriminations and disadvantages that are embedded in unequal treatments, opportunities and outcomes of groups and individuals are widely tackled across the SDGs; this by mainly performing positive discrimination while considering equity, which entails providing special

treatment for the most disadvantaged groups (UN CEB, 2017). This means the Agenda contemplates treating disadvantaged groups or individuals unequally to achieve equality.

Furthermore, an inclusion framing is rooted in inclusive growth as discussed in Chapter 2 (point 1.2.1). It implies the benefits of growth need to reach “all” to be inclusive (Anand et al., 2013), while “access” is a direct reference to improving opportunities. Both framings refer to equality through an intent of overcoming exclusion.

The consequence of these arguments is that inequality in its majority is considered implicitly through an agenda that advocates for development to reach “all”, which is a consequence of the “Leave No One Behind” principle. If the discussions and negotiations leading up to the establishment of the Agenda are recalled (Chapter 2, point 1.1), specifically by the Global Public Consultations and the High Level Task Force of Eminent Persons, it is clear, that a social inclusion agenda for inequality ended up being dominant across the targets, despite the inclusion of a standalone goal conceived mainly to address economic inequality.

This is not particularly a negative aspect of the SDGs regarding inequality, in a reality in which low opportunities and outcomes are observed among the most vulnerable, targeting their disparities through an inequality Agenda aimed towards social inclusion is necessary if the goal is to leave no one behind. Nevertheless, this dominant intake mainly leaves outside extreme inequality approaches that focus on tackling the extreme concentrations and which would require deep radical changes in structure and economic models (Fukuda-Parr, 2019). This will further be elaborated in the next parts.

Insight N.2: stronger and more explicit language could be used to enhance clarity and highlight the concept

The research has allowed not only to map inequality in goals conceived explicitly to address the concept (SDG 10 Reduced Inequalities, followed by SDG 5 Gender Equality), but has also identified it across goals in which it is not explicitly framed. The wording that is used to form a framework is one of the most relevant aspects of it; the way it is presented to the public is the channel through which it will elicit a response; for the nature of SDGs, this is essential.

The argument here is not to claim every main goal should be modified to include the explicit term “inequality” to further highlight its direct comprehension without the need for closer analysis nor to imply indirect framings are inaccurate. However, overall stronger, clearer and more explicit wording towards inequality in the target definitions would be ideal to further highlight the presence and the concept. This would help to avoid relevant agents in policy-making lose the scope of the true extent of inequality within SDGs.

Framings found across targets such as “ensure equal opportunities” and “reduce inequalities of outcome” (10.2), as well as “give equal rights and access” (5.6) can be taken as guides. For example, target 8.6 could be

modified to highlight the presence of equality of opportunities as following: “By 2020 *ensure equality of opportunities to*¹⁶ substantially reduce the proportion of youth not in employment, education or training”.

4.1.2. Level of reference to inequality

Insight N.3: the quest for universality across the Agenda is sharper when accompanied by targeting

The analysis of the target definition evaluated two main levels of reference: universality and targeted. The results showed both are widely used to introduce the concept of inequality in a balanced manner.

Firstly, the comprehension of the concept through “universality” was found to be used in a great extent to address the universality of human rights, which is the main principle of the Universal Declaration of Human Rights and is embedded in international law; under this context, universality means all human beings should be the recipient of equal human rights, just by being humans, regardless of their status or other characteristics (Bennoune et al., 2018).

Secondly, this is not to ignore that targeting vulnerable population was also used to identify disparities, nor it implies that following a targeting approach entails the ultimate goal is not to achieve universality. Rather, if the level of reference is interpreted, specific targeting is mainly an explicit recognition of the existent disparities within or between the overall populations considered and a call for levelling them.

Thirdly, the combination of both levels of references can be argued to be both a recognition of the quest for reaching universality and the special efforts needed to do so. A universal framing is perhaps not enough to deal with the specific vulnerabilities and existent disparities necessary to tackle to achieve universality. Universal framings are clearer in referencing and addressing inequality when they are accompanied by the targeting of the respective vulnerable population. For example, target 11.7 which aims to “provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities”, beyond its universal framing, it specifically targets the vulnerable groups (see also targets 2.1, 4.1, 5.1). Such targeting approaches can be later identified when analyzing inequality between whom.

¹⁶ Phrases in italics are the proposed changes to the original target. The same format applies to other examples in this chapter.

4.2. Considerations of inequality

4.2.1. Types of inequality

Insight N.4: although economic inequality is considered within the SDGs, the framing could be stronger

Results obtained showed both economic and non-economic dimensions of inequality are either explicitly and/or implicitly entailed. One of the most interesting discussions is the one on economic inequality which covers two main aspects: the consideration within SDG 10 and across the rest of the goals.

In the case of SDG 10, economic inequality is supposed to be the main focus. Nevertheless, based on results, although present, the concept is at the same time considered rather vaguely.

Target 10.1 which aims to “progressively achieve and sustain income growth of the bottom 40 per cent at a rate higher than the national average”, weakly captures the full extent of income inequality. Literature has seemed to agree this target is framed in a greater extent for poverty reduction rather than for tackling income inequality for several reasons (Fukuda-Parr, 2019; MacNaughton, 2017). Firstly, there is a wording problem, it tights the income growth of the bottom 40% to economic growth (MacNaughton, 2017). If this growth is low, or non-existent, then the target implies no action towards their distribution.

Secondly, extreme economic inequality, which concerns the distributions between top percentiles and the bottom, is not clearly defined, and target 10.1 falls short to consider it. Although a higher growth for the bottom 40% than the national average can potentially capture income inequality, it does not entirely respond to a conception of extreme inequality in income distribution, and this should be present. Criticisms surrounding this target (Fukuda-Parr, 2019; MacNaughton, 2017; Wilkinson & Rogers, 2015), all argue for the need of incorporating targets that measure distributions between the top and bottom percentiles. This would account in a more direct way for extreme inequality concerns.

Thirdly, the lack of thresholds or specific numeric objectives established in the goal to reduce income inequality make the targets appear more as activities to reduce inequality, rather than “endpoints” of reducing inequality in itself (Wilkinson & Rogers, 2015). A stronger framing should also include setting such endpoints based on official Agenda discussions.

Fourthly, beyond SDG 10, economic inequality was identified in other goals, especially in Goal 1: No Poverty, however in a considerably less extent than non-economic inequality. Additionally, the criticism presented for goal 10 can be extended to the rest of targets in which the concept is found.

Furthermore, (extreme) wealth inequality is widely overlooked. There is no single mention of either wealth or extreme wealth inequality in goal 10. This is a considerable shortcoming as the concentration of wealth has

the potential to affect all topics contemplated in the Agenda (Donald, 2018), especially when evaluated between the very top and very bottom percentiles of the population (extreme approach). It can be argued that there is however a certain consideration of ownership of property, shares, and land within the rest of the goals (e.g. 1.4 and 2.3) that can be taken as references to wealth. Nevertheless, such considerations are not an explicit framing of (extreme) wealth inequality, but rather refer to the “access” of disadvantaged groups.

Insight N.5: the consideration of non-economic inequality in environmental dimensions could be enhanced

In terms of non-economic types of inequality, there is a recognizable broad variety among the SDGs which corresponds with the diversity of the topics of the Agenda, but some aspects relevant to the inequality discussion are relatively either left out or weakly considered and could be further improved.

The most considerable shortcomings revolve around inequality in environmental topics, specifically, climate change (13), the use of oceans (14), and the use of terrestrial ecosystems, forests, land degradation and biodiversity loss (15), where based on the results inequality is not widely considered.

It is the content related omission that supposes a real weakness. Beyond recognizing the special attention to developing countries and vulnerable populations necessary to enhance resilience to climate change hazards (13), as well as the sustainable access to environmental resources (14, 15), there is a lack of consideration of inequality in terms of who generates the environmental pollution and the actors that actually pay the consequences, a dimension highlighted by Ganzleben & Kazmierczak (2020). Such type of inequality is directly related to initial disparities in terms of resources, which lead some countries to be responsible for greater extents of environmental damage, and others more vulnerable to higher environmental risks. Income can be mentioned as one of the main dimensions that are behind this (Ganzleben & Kazmierczak, 2020; UN DESA, 2015b). The disparities in responsibility for pollution, the unequal distribution of the environmental risk, and the structures that enables them should be more widely addressed as a root cause, rather than emphasizing the strengthening of response mechanisms for the vulnerable population.

4.2.2. Inequality of what?

Insight N.6: Inequality of opportunities and inequality of outcomes are closely related concepts, but there is a lack of explicit acknowledgement of such relationship

Inequality of outcomes and opportunities in both economic and non-economic types were found to be considered across the goals both directly and implicitly framed. For inequality of opportunities, a framing of “access” is strongly dominant.

A main discussion is that both concepts were noticed to be interrelated. This means targets can aim to enhance opportunities to achieve more equal outcomes, or vice versa, the achievement of certain outcomes has the potential to enhance further opportunities, making the distinction between inequality of opportunities and outcomes a two-sided relationship.

Nevertheless, it can be argued that this relationship is not always clear nor explicitly acknowledged within the targets. In many of the times in which the enhancement of equal opportunities is mentioned, the outcomes into which it can translate are omitted from the target definition. Similarly, when expecting to achieve more equal outcomes, the opportunities that are needed for people to achieve such outcomes, as well as the opportunities that can be created from the improvement in outcomes, are sometimes not expressed (see e.g. analysis of targets such as: 4.3, 4.5, 4.6, 4.7, 5.4, 7.a). If either of this two-sided dynamic is not clearly nor explicitly considered, there is a risk of painting an incomplete picture of what the concept of inequality actually entails within the Agenda and the scope of policy-making that is needed to achieve the goals.

This omission turns the distinction of what a target uses as an input to reach another goal, or what is wanted as an output in itself, potentially blurry, e.g. (4.c): the supply of qualified teachers it proposes is an outcome, but it will potentially serve as an input as well to increase the opportunities of higher quality education; this distinction is not explicitly pointed out in the target.

Targets could benefit from greater clarity in terms of the interaction between outcomes and opportunities, in order to provide a complete picture of the concept. An example of this, could be changing the wording of target 4.c to: “By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States, *in order to enhance opportunities to receive a quality education*”. This would clarify the number of qualified teachers as an outcome, and as an input to enhance greater quality education opportunities, as well as explicitly addressing that such outcome translates into greater opportunities.

4.2.3. Inequality between whom?

Insight N.7: the dominance of horizontal inequality is accompanied by the ambiguity of considering “all”

There is a wide presence of explicit horizontal approaches, in comparison to vertical ones. In a critical matter, there is an overall coherent contemplation of relevant groups which in general focuses by age, gender, disabilities, ethnicity, profession, disabilities, and religion, which can be further interpreted with a within-country perspective. However, such targeting processes will have to be open to considering, beyond the already identified groups, the context-sensitivity that influences the group identification at country level, this simply

would mean that when targets are implemented at national levels, vulnerable groups to be targeted might be added.

Secondly, a universal level of framing translates into considering inequality between all individuals, which can carry a certain degree of ambiguity. It can be argued to entail implicitly both horizontal and vertical targeting. Further adding to Insight N.3, it would be beneficial if there is further indication on whether vertical, horizontal or both approaches are expected to be prioritized from relevant actors to allow for clearer guidelines for policy-making and measurement. This can be done, beyond accompanying universality with overall targeting framings, through further specifying either groups to be targeted (horizontally), clarifying whether a particular percentile(s) of the population is to be prioritized (which defines a vertical approach), or both.

Insight N.8: the degree of tacitness of global inequalities should be addressed

Lastly, global inequality is a concept that holds the highest degree of implicitness within the categorization “Inequality between whom?”. The extent to which global inequality is addressed is more clearly comprehended in SDG 10, resulting from the mentions of within and between-country inequality, though it is still an implicit concept, and no further specification is made throughout the targets. If universal framings that consider inequality between “all” are interpreted, they could potentially refer to global inequality if they are approached vertically across the global population according to Milanovic (2013) definition, but this would also depend on the territorial level of implementation.

The main point to add is the Agenda was conceived through global perspectives and to be implemented at a global level. It cannot be argued against the necessity to consider global inequalities within the dimensions that have been mapped. Nonetheless, the global aspect has been more clearly translated into e.g., the levelling of global powers in decision-making (10.6), or the overall consideration of between-country inequalities. Global perspectives, meaning the consideration of relevant topics at a global level and the recognition of global structures, differ from the concept of global inequalities across people in the world and are not to be confused. What could be asked from further improvements, is a less tacit comprehension of global inequalities and more preciseness when distinguishing global perspectives and global inequalities; specifically, the wording of SDG 10 can be revised to explicitly include global inequality: “Reduce *global* inequality, *both* within and among countries”

Following the discussion above, recommendations to improve the consideration of inequality within the SDGs are summarized in Table 3. These can be used in future re-specification of targets or the formulation of new SDGs as part of future development agendas.

Table 3: Summary of recommendations for the consideration of inequality within the SDGs

| Summary of recommendation for the consideration of Inequality within the SDGs | |
|--|--|
| Framing of inequality | <ul style="list-style-type: none"> • Complement the existent inequality agenda through social inclusion with a stronger reference for extreme inequality. • Stronger and more explicit language towards inequality to enhance clarity and highlight the concept, using wording such as “ensure equal opportunities” and “reduce inequality of outcomes”. |
| Level of reference | <ul style="list-style-type: none"> • Support universal framings with targeting ones that can identify the vulnerable population most needed to be addressed. This is to tackle the disparities that prevent reaching universality. |
| Types of inequality | <ul style="list-style-type: none"> • Include extreme income inequality in target 10.1 with an explicit and clear consideration of top income percentiles and bottom percentiles. • Complement targets, beyond SDG 10, that consider income inequality with the expansion of extreme income inequality approaches. • (Extreme) wealth inequality should be contemplated in SDG 10, with a precise definition of what is considered as wealth to avoid vagueness. • Establish the “endpoints” to reduce income inequality in SDG 10 according to official Agenda discussions. • Target 1.3, which leaves the definition of “multidimensional poverty” to national standards, should further establish basic general guidelines in terms of dimensions (e.g. health, education). This is to avoid narrow conceptions based on only income orientated national definitions. • Disparities in responsibilities for environmental pollution generation, and the unequal distribution of environmental risks should be more widely addressed in goals 13 (Climate Action), 14 (Life Below Water) and 15 (Life on Land). |
| Inequality of what? | <ul style="list-style-type: none"> • Explicit consideration of the interrelation between opportunities and outcomes as well as providing clarity between what acts as an input and/or an output. This is done by focusing on clearer and direct wording that allows for identifying such interrelations and distinctions. |
| Inequality between whom? | <ul style="list-style-type: none"> • Clarification of uses of horizontal and vertical approaches when considering “all” to provide comprehensible directions for policy-making, and further efforts for the building of indicators. • Contemplation of context-sensitive group vulnerabilities encountered in the Agenda’s implementation processes at intra-country levels, which might add to the already defined groups. • Include the term “global inequality” in the main goal 10, and further operationalization in the rest of the targets and across the Agenda. |

Conclusions

The inclusion of inequality in the Sustainable Development Goals, as part of the 2030 Agenda for Sustainable Development comprehended numerous discussions regarding how the concept should be approached. The standalone goal to address inequality (SDG 10) that ended up being included among the other 17 has been the main referent to inequality used within the Agenda. Nevertheless, the broad and multidimensional nature of the concept of inequality is evidenced throughout the rest of the SDGs if a closer look is taken.

The systematized analysis of the goals and their specific targets shows that inequality is comprehended in both explicit and implicit ways beyond SDG 10, and under different conceptual considerations. In this sense, 64 out of 169 targets have been identified to consider inequality in 16 out of 17 SDGs. Additionally, 23 targets are pointed out to be relevant for the inequality discussion within the Agenda, yet not specific enough to be categorized in detail.

Inequality within the SDGs is mainly approached through an agenda for social inclusion, framed through implicit considerations of inequality with the use of references to equity, non-discrimination, inclusion, and access which are a reflection of the principle “Leave No One Behind” and the quest of the Agenda for advancing the benefits of development to all.

Beyond SDG 10, mainly conceived to address economic inequality, the rest of the goals show a wide consideration of non-economic inequality in a variety of dimensions that follow the development issues addressed by the Agenda; this approach is found to be dominant. Furthermore, both inequalities of outcomes and opportunities are present and the latter is mainly considered through a framing of “access”. These concepts highlight the focus of the SDGs to tackle disparities rooted in circumstances beyond an individual’s control and that can potentially translate into unequal outcomes. In this sense, inequality of opportunities and outcomes are often approached as interrelated concepts, although such dynamic is not always explicitly identified.

There is an emphasis on tackling horizontal inequality, thus in overcoming group disparities mainly considered by age, gender, ethnicity, profession, disabilities and religion, in comparison to vertical approaches. This is accompanied by a noticeably present quest to consider inequality among “all”, resulting from universal target framings that have their roots in the principle of universality of human rights. A special focus on tackling disparities and unequal starting points of developing countries through the consideration of between-country inequality is thoroughly present as a response to an Agenda aimed to entail both developed and developing countries.

The detailed analysis of the totality of the targets undertaken is able to map, categorize and provide a comprehensive picture of the full extent of the concept of inequality within the Sustainable Development Goals. Without this knowledge, the consideration of inequality is constrained to targets that are explicitly framed to address the concept. Considering SDGs were conceived to serve as a guide towards development, this research identifies a strong need to acknowledge the full presence of the concept within the goals if an accurate and exhaustive guide is to be provided to relevant agents in policy-making to tackle inequality.

Therefore, recommendations towards the framing of the targets are made to overall make use of stronger, and more explicit language that can enhance and highlight the presence of the concept. Addressing the vagueness, unclarity and lack of conciseness of targets while approaching inequality, which was found to represent a limitation, is also key, especially providing further clarity within universal framings that consider “all” to better define targeting approaches, as well as explicitly acknowledging interrelationships between inequality of opportunities and outcomes through the use of more precise wording.

In addition to this, weaknesses in the consideration of particular types of inequality should be corrected to strengthen the goals, including more concise target definitions that can capture the full extent of income inequality in SDG 10, the inclusion of wealth inequality, and extreme considerations of income and wealth. Non-economic types of inequality should be complemented with wider contemplations of environmental disparities, in terms of responsibilities for pollution and distribution of risks.

Finally, the comprehensive knowledge of inequality provided through this mapping represents an extended and exhaustive base that complements the current 2030 Agenda for Sustainable Development and can support future improvement processes, as well as discussions of posterior development agendas and frameworks regarding inequality. The results can also serve as a base to orientate and improve future efforts for the establishment of measurement approaches, revise existing indicators and support the creation of new ones that can capture the complete scope of the concept across the goals. Further extending the mapping presented with inequality measurement efforts within the SDGs considering the dimensions and targets identified is recommended as the next step within this line of research.

References

- Anand, R., Mishra, S., & Peiris, S. J. (2013). *Inclusive Growth Revisited: Measurement and Determinants* [Brief]. World Bank. <https://openknowledge.worldbank.org/handle/10986/22618>
- Arneson, R. J. (1989). Equality and Equal Opportunity for Welfare. *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, 56(1), 77–93. JSTOR.
- Atkinson, A. B. (1970). On the measurement of inequality. *Journal of Economic Theory*, 2(3), 244–263. [https://doi.org/10.1016/0022-0531\(70\)90039-6](https://doi.org/10.1016/0022-0531(70)90039-6)
- Atkinson, A. B., & Bourguignon, F. (1982). The Comparison of Multi-Dimensioned Distributions of Economic Status. *The Review of Economic Studies*, 49(2), 183. <https://doi.org/10.2307/2297269>
- Baumgartner, S. P. (2011). Does Access to Justice Improve Compliance with Human Rights Norms—An Empirical Study. *Cornell International Law Journal*, 44(3). <http://scholarship.law.cornell.edu/cilj/vol44/iss3/1>
- Bennoune, K., UNGA, & UN Secretary-General. (2018). *Universality, cultural diversity and cultural rights: Note by the Secretary-General* (A/73/227). UN General Assembly. <https://digitallibrary.un.org/record/1640251>
- Bui, T. K. T., & Erreygers, G. (2020). Multidimensional Inequality in Vietnam, 2002–2012. *Economies*, 8(2), 29. <https://doi.org/10.3390/economies8020029>
- Carter, B. (2014). *Inclusive Institutions: Topic Guide*. GSDRC, University of Birmingham. <http://www.gsdrc.org/docs/open/inclusiveinstitutionstg.pdf>
- Cohen, G. A. (1989). On the Currency of Egalitarian Justice. *Ethics*, 99(4), 906–944. JSTOR.
- Dalton, H. (1920). The Measurement of the Inequality of Incomes. *The Economic Journal*, 30, 348.
- de Jong, E., & Vijge, M. J. (2021). From Millennium to Sustainable Development Goals: Evolving discourses and their reflection in policy coherence for development. *Earth System Governance*, 7, 100087. <https://doi.org/10.1016/j.esg.2020.100087>
- Doidge, M., & Kelly, S. (2019). SDG10: Reduce Inequality Within and Among Countries. *Melbourne:RMIT*, 10.
- Donald, K. (2018). The increasing concentration of wealth and economic power as an obstacle to sustainable development – and what to do about it. In *Exploring new policy pathways*. Reflection Group on the 2030 Agenda for Sustainable Development. https://www.2030spotlight.org/sites/default/files/spot2018/Spotlight_2018_web.pdf
- Dubois, U., & Meier, H. (2016). Energy affordability and energy inequality in Europe: Implications for policymaking. *Energy Research & Social Science*, 18, 21–35. <https://doi.org/10.1016/j.erss.2016.04.015>

- Dworkin, R. (2018). What is Equality? Part 1: Equality of Welfare. In H. Mane (Ed.), *The Notion of Equality* (1st ed., pp. 81–142). Routledge. <https://doi.org/10.4324/9781315199795-6>
- Fisher, F. M. (1956). Income Distribution, Value Judgments, and Welfare. *The Quarterly Journal of Economics*, 70(3), 380–424. JSTOR. <https://doi.org/10.2307/1884231>
- Freistein, K., & Mahler, B. (2016). The potential for tackling inequality in the Sustainable Development Goals. *Third World Quarterly*, 37(12), 2139–2155. <https://doi.org/10.1080/01436597.2016.1166945>
- Fukuda-Parr, S. (2016). From the Millennium Development Goals to the Sustainable Development Goals: Shifts in purpose, concept, and politics of global goal setting for development. *Gender & Development*, 24(1), 43–52. <https://doi.org/10.1080/13552074.2016.1145895>
- Fukuda-Parr, S. (2019). Keeping Out Extreme Inequality from the SDG Agenda—The Politics of Indicators. *Global Policy*, 10(S1), 61–69. <https://doi.org/10.1111/1758-5899.12602>
- Ganzleben, C., & Kazmierczak, A. (2020). Leaving no one behind – understanding environmental inequality in Europe. *Environmental Health*, 19(1), 57. <https://doi.org/10.1186/s12940-020-00600-2>
- HLP. (2013). *A New Global Partnership: Eradicate Poverty and Transform Economies through Sustainable Development. The Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda*. UN Publications. <https://www.post2020hlp.org/wp-content/uploads/docs/UN-Report.pdf>
- Islam, S. N., & Winkel, J. (2017). *Climate Change and Social Inequality* (ST/ESA/2017/DWP/152; DESA Working Paper No. 152). UN Department of Economic and Social Affairs (UN DESA). https://www.un.org/esa/desa/papers/2017/wp152_2017.pdf
- Kamau, M., Chasek, P., & O'Connor, D. (2018). *Transforming Multilateral Diplomacy: The Inside Story of the Sustainable Development Goals* (1st ed.). Routledge. <https://doi.org/10.4324/9780429491276>
- Kanbur, R. (2021). Sustainable Development Goals and the Study of Economic Inequality. *The Journal of Economic Inequality*, 19(1), 3–11. <https://doi.org/10.1007/s10888-020-09452-9>
- Kuznets, S. (1955). Economic Growth and Income Inequality. *The American Economic Review*, 45(1), 1–28. JSTOR.
- Maasoumi, E. (1986). The Measurement and Decomposition of Multi-Dimensional Inequality. *Econometrica*, 54(4), 991–997. <https://doi.org/10.2307/1912849>
- Maasoumi, E. (1989). Continuously distributed attributes and measures of multivariate inequality. *Journal of Econometrics*, 42(1), 131–144. [https://doi.org/10.1016/0304-4076\(89\)90081-X](https://doi.org/10.1016/0304-4076(89)90081-X)
- MacNaughton, G. (2017). Vertical inequalities: Are the SDGs and human rights up to the challenges? *The International Journal of Human Rights*, 21(8), 1050–1072. <https://doi.org/10.1080/13642987.2017.1348697>

- McKay, A. (2002). Defining and Measuring Inequality. *Overseas Development Institute and University of Nottingham*, 1, 6.
- Milanovic, B. (2013). Global Income Inequality in Numbers: In History and Now. *Global Policy*, 4(2), 198–208. <https://doi.org/10.1111/1758-5899.12032>
- Morduch, J. (2005). Concepts of Poverty. In *Handbook on poverty statistics: Concepts, methods and policy use* (p. 28). United Nations. <https://wagner.nyu.edu/files/faculty/publications/conceptsofpoverty.pdf>
- OECD. (2019). *Equal Access to Justice for Inclusive Growth: Putting People at the Centre*. OECD Publishing. <https://doi.org/10.1787/597f5b7f-en>
- OHCHR. (2018). *Report of the Special Rapporteur on the Right to Education on governance and the right to education: Note / by the Secretariat* (A/HRC/38/32). UN General Assembly. <https://digitallibrary.un.org/record/1661586>
- OHCHR, UN-HABITAT, & WHO. (2010). *The Right to Water* (Fact Sheet N.35; The Human Rights Fact Sheets). United Nations. <https://www.ohchr.org/sites/default/files/2021-09/FactSheet35en.pdf>
- Paes de Barros, R., Ferreira, F. H. G., Molinas Vega, J. R., & Saavedra Chanduvi, J. (2008). *Measuring Inequality of Opportunities in Latin America and the Caribbean*. The World Bank. <https://doi.org/10.1596/978-0-8213-7745-1>
- Pernia, E., & Kakwani, N. (2000). What is Pro-poor Growth? *Asian Development Review*, 18(3), 1–16.
- Peterson, L. (2014). The Measurement of Non-economic Inequality in Well-Being Indices. *Social Indicators Research*, 119(2), 581–598. <https://doi.org/10.1007/s11205-013-0513-6>
- Ravallion, M., & Chen, S. (2003). Measuring pro-poor growth. *Economics Letters*, 78(1), 93–99.
- Rawls, J. (1971). *A Theory of Justice*. Harvard University Press. <https://doi.org/10.2307/j.ctvkjb25m>
- Roemer, J. E. (1993). A Pragmatic Theory of Responsibility for the Egalitarian Planner. *Philosophy & Public Affairs*, 22(2), 146–166. JSTOR.
- Savaglio, E. (2006). Multidimensional inequality with variable population size. *Economic Theory*, 28(1), 85–94. <https://doi.org/10.1007/s00199-004-0561-x>
- Save the Children. (2017). *Save the Children Gender Equality Policy: Transforming Inequalities, Transforming Lives*. Save the Children. <https://resourcecentre.savethechildren.net/document/save-children-gender-equality-policy-transforming-inequalities-transforming-lives/>
- SCBD. (2011). *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity*. United Nations Environmental Programme (UNEP). <https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>
- Sen, A. (1979). *Equality of What?* The Tanner Lecture on Human Values, Stanford University. https://www.ophi.org.uk/wp-content/uploads/Sen-1979_Equality-of-What.pdf

- Sen, A. (1995). *Inequality Reexamined*. Oxford University Press. <https://doi.org/10.1093/0198289286.001.0001>
- Sen, A. (1997). From Income Inequality to Economic Inequality. *Southern Economic Journal*, 64(2), 384–401. JSTOR. <https://doi.org/10.2307/1060857>
- SIDA. (2016). *Hot issue: Gender Equality and Gender Equity* (Gender Tool Box) [Brief]. <https://cdn.sida.se/publications/files/-hot-issue-gender-equality-and-gender-equity.pdf>
- Son, H. H. (2007). *Pro-Poor Growth: Concepts and Measures* (No. 22; ERD Technical Note Series, p. 33). Asian Development Bank. Economic Research Department. <https://www.adb.org/sites/default/files/publication/29865/tn-22-pro-poor-growth.pdf>
- Stewart, F. (2013). *Approaches towards Inequality and Inequity: Concepts, measures and policies*. UNICEF Office of Research. https://www.unicef-irc.org/publications/pdf/stewart%20inequality_inequity_layout_fin.pdf
- Stewart, F., Atkinson, A. B., Basu, K., Bhagwati, J. N., North, D. C., Rodrik, D., Stiglitz, J. E., & Williamson, J. G. (2005). Horizontal Inequalities: A Neglected Dimension of Development. In UNU-WIDER, *Wider Perspectives on Global Development*. Palgrave Macmillan UK. <https://doi.org/10.1057/9780230501850>
- Stewart, F., Brown, G., & Langer, A. (2007). *Policies Towards Horizontal Inequalities*. 42. <https://ora.ox.ac.uk/objects/uuid:83dd8358-9e01-4da1-8e9e-906ce4bdcf58>
- Stiglitz, J., Sen, A., & Fitoussi, J.-P. (2009). *Report by the Commission on the Measurement of Economic Performance and Social Progress*. <https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf>
- Syrovátka, M., & Schlossarek, M. (2019). Measuring development with inequality: How (should) aggregate indicators of development account for inequality? *Ecological Economics*, 164, 106320. <https://doi.org/10.1016/j.ecolecon.2019.04.032>
- Ulbrich, P., Porto de Albuquerque, J., & Coaffee, J. (2018). The Impact of Urban Inequalities on Monitoring Progress towards the Sustainable Development Goals: Methodological Considerations. *ISPRS International Journal of Geo-Information*, 8(1), 6. <https://doi.org/10.3390/ijgi8010006>
- UN CEB. (2017). *Leaving no one behind: Equality and Non-Discrimination at the Heart of Sustainable Development*. United Nations System Chief Executives Board (UN CEB). <https://digitallibrary.un.org/record/1628748>
- UN DESA. (2014). *The 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP): Sustainable Development Knowledge Platform*. UN Department of Economic and Social Affairs (UN DESA). Division for Sustainable Development. https://sustainabledevelopment.un.org/content/documents/1444HLPF_10YFP2.pdf

- UN DESA. (2015a). *Concepts of Inequality. Development Issues No.1*. UN Department of Economic and Social Affairs (UN DESA). <https://www.un.org/development/desa/dpad/publication/no-1-concepts-of-inequality/>
- UN DESA. (2015b). *Inequality and the 2030 Agenda for Sustainable Development (Development Issues) [4]*. UN Department of Economic and Social Affairs (UN DESA). <https://www.un.org/development/desa/dpad/publication/no-4-inequality-and-the-2030-agenda-for-sustainable-development/>
- UN WATER. (2015). *Eliminating discrimination and inequalities in access to water and sanitation*. UN WATER. https://www.unwater.org/app/uploads/2018/08/UN-Water_Policy_Brief_Anti-Discrimination_.pdf
- UN WATER. (2018). *Human Rights to Water and Sanitation*. United Nations. https://www.unwater.org/app/uploads/2018/10/WaterFacts_water_and_human_rights_sep2018.pdf
- UNDG. (2013). *A Million Voices: The World We Want, A Sustainable Future with Dignity for All*. United Nations Development Group (UNDG). https://www.undp.org/sites/g/files/zskgke326/files/publications/UNDG_A-Million-Voices.pdf
- UNDP. (2013). Inequality of what?. Inequality between whom? In *Humanity Divided: Confronting Inequality in Developing Countries*. United Nations Development Programme (UNDP). https://www.undp.org/sites/g/files/zskgke326/files/publications/HumanityDivided_Full-Report.pdf
- UNESCO, & RTE. (2019). *Right to education handbook*. United Nations Educational, Scientific and Cultural Organization (UNESCO). https://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/RTE-UNESCO_Right%20to%20education%20handbook_2019_En.pdf
- UNGA. (1948). *Universal Declaration of Human Rights (217 A (III))*. UN General Assembly. <https://www.un.org/sites/un2.un.org/files/udhr.pdf>
- UNGA. (1979). *Convention on the Elimination of All Forms of Discrimination against Women (No. 1249; Treaty Series)*. UN General Assembly. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-elimination-all-forms-discrimination-against-women#:~:text=On%2018%20December%201979%2C%20the,twentieth%20country%20had%20ratified%20it.>
- UNGA. (2010). *The human right to water and sanitation (No. 64/292; A/RES/64/292)*. UN General Assembly. https://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/64/292
- UNGA. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development. (Resolution A/RES/70/1; 70.1)*. UN General Assembly. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf

- UNICEF. (2017). *Gender equality: Glossary of Terms and Concepts*. UNICEF Regional Office for South Asia. <https://www.unicef.org/rosa/media/1761/file/Gender%20glossary%20of%20terms%20and%20concepts%20.pdf>
- UNIDO. (n.d.). *Inclusive and Sustainable Industrial Development*. United Nations Industrial Development Organization. Retrieved April 18, 2022, from <https://www.unido.org/inclusive-and-sustainable-industrial-development>
- UNIDO. (2020). *How industrial development matters to the well-being of the population: Some statistical evidence*. United Nations Industrial Development Organization (UNIDO).
- WHO. (n.d.). *Universal Health Coverage*. World Health Organization. Health Topics. Retrieved April 18, 2022, from <https://www.who.int/health-topics/universal-health-coverage>
- WHO. (2015). *World report on ageing and health*. World Health Organisation (WHO). <https://www.who.int/publications-detail-redirect/9789241565042>
- WHO. (2018). *Health inequities and their causes*. <https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-causes>
- Wilkinson, R., & Rogers, D. (2015). Goal 10: Reduce inequalities within and among countries. In *Review of targets for the Sustainable Development Goals: The Science Perspective*. International Council for Science (ICSU).
- World Bank. (2006). *World Development Report 2006: Equity and Development*. The World Bank. <https://doi.org/10.1596/978-0-8213-6249-5>
- Wu, Q., Maslyuk, S., & Clulow, V. (2012). Energy Consumption Inequality and Human Development. In *Energy Efficiency—A Bridge to Low Carbon Economy*. IntechOpen. <https://doi.org/10.5772/38338>

Appendices

Appendix A: Inequality mapping matrices

This appendix presents the 16 inequality mapping matrices. Beyond the methodological and theoretical bases that supported their design, two key points need to be pointed out for their clear interpretation: (1) If a dash (-) is indicated, it means in that case the category is not specified, and (2) The “Indirect outcome” or in other cases “Indirect opportunities” specification refer to the outcomes (or opportunities) that are resultant from the aim of the target (concerning the inequality aspect), but are not explicitly specified within the quoting of the target itself; these are referred to in the analysis per goal presented in Chapter 3.

Table A1: Inequality mapping matrix SDG 1

| SDG 1: End poverty in all its forms everywhere | | | | | |
|---|--|---|--|--|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 1.1 | <i>By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day</i> | | | | |
| | Universal | | Economic: income | Outcome (distribution of income) | All |
| 1.2 | <i>By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions</i> | | | | |
| | Targeted | | Economic: income, consumption Non-economic: basic services, education, health | Outcome (distribution of income) Opportunities (access to health, education, e.g.) | Horizontal (by gender, and age) |
| 1.3 | <i>Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable</i> | | | | |
| | Universal Targeted | | Economic: income | Outcome (social protection coverage) Opportunity (access to social protection programs) | All Vertically targeting (poor and vulnerable) |
| 1.4 | <i>By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance</i> | | | | |
| | Equal rights Access | Universal Targeted | Economic: wealth, financial inequality Non-economic: law inequality, basic services, land ownership and property, natural resources, and technology | Opportunities (equal rights to provide access) | All men and women Vertically targeting (poor and vulnerable) |
| 1.5 | <i>By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</i> | | | | |
| | Targeted | | Economic: income Non-economic: environmental, social | Outcomes (vulnerability) | Vertical (poor and vulnerable) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A2: Inequality mapping matrix SDG 2

| SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | | | | | |
|--|--|----------------------------------|---|---|--|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 2.1 | <i>By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</i> | | | | |
| | Access Universal | Targeted | Non-economic: food inequality | Opportunities (access to food) | All Horizontally targeting (vulnerable groups, by age: infants) |
| 2.2 | <i>By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons</i> | | | | |
| | | Targeted | Non-economic: nutritional inequality | Outcome (nutritional outcomes) | Horizontal (by age and gender: children under five, adolescent girls, pregnant and older persons, lactating women). |
| 2.3 | <i>By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment</i> | | | | |
| | Equal access | Targeted | Economic: income Non-economic: education, land inequality, financial inclusion, employment, and productive resources | Outcome (agricultural productivity and incomes of small-scale food producers) Opportunities (equal access) | Horizontal (by gender: women; by ethnicity: indigenous people; by profession: family farmers, pastoralists, fishers) |
| 2.5 | <i>By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed</i> | | | | |
| | Access Equity | - | Economic: income Non-economic: technology (genetic resources) | Outcome (fair and equitable sharing of benefits) Opportunities (access to genetic resources) | - |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A3: Inequality mapping matrix SDG 3

| SDG 3: Ensure healthy lives and promote well-being for all at all ages | | | | | |
|---|---|----------------------------------|------------------------------|--|--------------------------|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 3 | Universal | | Non-economic: health | Outcome (health) Opportunities (access to health) | All |
| 3.7 | <i>By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes</i> | | | | |
| | Access | Universal | Non-economic: health | Opportunities (reproductive health-care services) Indirect outcomes (health outcomes) | |
| 3.8 | <i>Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all</i> | | | | |
| | Universal | | Non-economic: health | Opportunities (access to medicines and health coverage) Outcome (universal health coverage) | |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A4: Inequality mapping matrix SDG 4

| SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | | | | | |
|--|--|---|---|--|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 4 | Inclusiveness Equity Opportunities | Universal | Non-Economic: education | Opportunities (learning opportunities) | All |
| 4.1 | <i>By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes</i> | | | | |
| | Equity | Universal Targeted | Non-Economic: education | Outcomes (learning outcomes) Opportunities (free, equitable and quality primary and secondary education) | All boys and girls |
| 4.2 | <i>By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education</i> | | | | |
| | Access | Universal Targeted | Non-economic: education | Opportunities (access to early childhood development, care and pre-primary) Outcomes (primary education enrollment) | |
| 4.3 | <i>By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university</i> | | | | |
| | Equal Access | Universal Targeted | Non-Economic: education | Opportunities (access to technical, vocational, and tertiary education) Indirect outcome (improve living standards, employment, etc.) | |
| 4.4 | <i>By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</i> | | | | |
| | Increments for a targeted group | Targeted | Non-Economic: education | Outcome (technical and vocational skills) Opportunities (employment, decent job and entrepreneurship) | Horizontal (by age) |
| 4.5 | <i>By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations</i> | | | | |
| | Gender disparities Equal Access | Targeted | Non-Economic: education | Opportunities (access to all levels of education) Indirect outcomes (living standards, employment, etc.) | Horizontal (by gender, disability, ethnicity, and age) |
| 4.6 | <i>By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy</i> | | | | |
| | Universal/Targeted | | Non-Economic: education | Outcomes (literacy and numeracy) Indirect Opportunities (societal participation) | All youth Horizontal (by age: adults) |
| 4.7 | <i>By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development</i> | | | | |
| | Universal | | Non-Economic: education | Outcome (knowledge and skills) Indirect opportunities (economic, social and environmental opportunities) | All learners |
| 4.a | <i>Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all</i> | | | | |
| | Inclusiveness | Universal Targeted | Non-Economic: infrastructure, education | Outcome (infrastructure-educational facilities) Opportunities (inclusive learning environments) | All Horizontally targeting: (by gender, disability, and age) |
| 4.b | <i>By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries</i> | | | | |
| | Increments for a targeted group | Targeted | Non-Economic: education | Opportunities (scholarship availability) Outcomes (increased enrolment) | -Between-country (developing countries, LDCs, Small Island Developing States and African countries) |
| 4.c | <i>By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States</i> | | | | |
| | Increments for a targeted group | Targeted | Non-Economic: education | Outcome (qualified teachers) Indirect opportunities (opportunity for a better-quality education). | |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A5: Inequality mapping matrix SDG 5

| SDG 5: Achieve gender equality and empower all women and girls | | | | | |
|---|---|---|--|---|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 5 | Equality | Universal Targeted | Gender Inequality: Economic Non-Economic | Outcomes Opportunities | All women and girls |
| 5.1 | <i>End all forms of discrimination against all women and girls everywhere</i> | | | | |
| | Discrimination | Universal Targeted | Gender Inequality: Economic Non-Economic | Opportunities (to end discrimination) Outcomes (less discrimination translated into more equal outcomes) | All girls and women |
| 5.2. | <i>Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation</i> | | | | |
| | Universal | | Non-economic: physical safety | Opportunities (protection and security) | All women and girls |
| 5.3. | <i>Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation</i> | | | | |
| | Targeted | | Non-economic: physical safety | Opportunities (protection and security) | Horizontal (by gender; by age: child) |
| 5.4. | <i>Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate</i> | | | | |
| | Equal share of responsibility | Targeted | Gender inequality Non-economic: division of house responsibilities | Opportunities (equal consideration to share responsibility) Outcomes (shared responsibility within the household) | Vertical (intra-household) |
| 5.5 | <i>Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</i> | | | | |
| | Equal Opportunities | Targeted | Gender Inequality Non-economic: participation and representation | Opportunities (to participate and represent) | Horizontal (by gender: women) |
| 5.6 | <i>Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences</i> | | | | |
| | Access | Universal | Gender Inequality Non-economic: health, law inequality | Opportunities (universal access to sexual and reproductive health and reproductive rights) Indirect outcomes (health conditions) | All |
| 5.a | <i>Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws</i> | | | | |
| | Equal rights | Targeted | Gender inequality Non-economic: law inequality | Opportunities (equal rights) Outcomes (control over land and properties, financial services, inheritance, natural resources, higher income-indirect outcome) | Horizontal (by gender) |
| 5.b. | <i>Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women</i> | | | | |
| | Increments for a targeted group Empowerment | Targeted | Gender inequality Non-economic: technology (information and communication) | Opportunities (access to information and communication technologies) Indirect outcomes (empowerment of women which addresses inequalities in many outcomes) | Horizontal (by gender) |
| 5.c. | <i>Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels</i> | | | | |
| | Gender equality Empowerment | Universal | Gender inequality Non-economic: law inequality | Opportunities (inclusive policies and legislation) Indirect outcomes (equal outcomes in all dimensions) | All women and girls |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A6: Inequality mapping matrix SDG 6

| SDG 6: Ensure availability and sustainable management of water and sanitation for all | | | | | |
|--|--|---|--|----------------------------|--|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of Reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 6 | Universal | | Non-economic: access to water and sanitation | Opportunity | All |
| 6.1 | <i>By 2030, achieve universal and equitable access to safe and affordable drinking water for all</i> | | | | |
| | Equity Access | Universal | Non-economic: access to water | Opportunity | All |
| 6.2 | <i>By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations</i> | | | | |
| | Equity Access | Universal Targeted | Non-economic: access to sanitation and hygiene | Opportunity | All Horizontally targeting (vulnerable groups, by gender: women, and girls) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A7: Inequality mapping matrix SDG 7

| SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all | | | | | |
|--|---|---|---|--|--|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 7 | Access | Universal | Non-Economic: energy | Opportunities (access to energy) | All |
| 7.1 | <i>By 2030, ensure universal access to affordable, reliable and modern energy services</i> | | | | |
| | Access | Universal | Non-Economic: energy | Opportunities (access to energy services) | |
| 7.a | <i>By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology</i> | | | | |
| | Access | - | Non-Economic: energy, technology | Indirect Outcomes (increase supply of energy) Opportunities (access to clean energy research and technology) | - |
| 7.b | <i>By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support</i> | | | | |
| | Increments for a targeted group | Targeted | Non-economic: infrastructure, technology and energy | Outcomes (supply of modern and sustainable energy services) Opportunities (energy supply infrastructure and technology for all) | Between-country (LDCs, Small Island Developing States and landlocked developing countries) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A8: Inequality mapping matrix SDG 8

| SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all | | | | | |
|--|---|---|--|--|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 8 | Universal | | Economic: decent work conditions, employment. Non-economic: decent work conditions. | Outcomes (rate of employment) Opportunities (access to decent work conditions) | All |
| 8.5 | <i>By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</i> | | | | |
| | Universal/Targeted | | Economic: income, decent work conditions, employment. Non-economic: decent work conditions. | Outcomes (rate of employment, equal pay) Opportunities (access to decent work conditions, and work opportunities) | All women and men Horizontally targeting (by age: young people; persons with disabilities) |
| 8.6 | <i>By 2020, substantially reduce the proportion of youth not in employment, education or training</i> | | | | |
| | Targeted | | Economic: employment Non-economic: education and training | Outcome (employment and education rates) Opportunities (opportunities for employment and education) | Horizontal (By age: youth) |
| 8.7 | <i>Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms</i> | | | | |
| | Universal Targeted | | Non-economic: law inequality (labor rights), security | Opportunities (access to secure working environments) | All Horizontally targeting (by age: children) |
| 8.8 | <i>Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment</i> | | | | |
| | Universal Targeted | | Non-economic: law inequality (labour rights), security. | Opportunities (inclusive labour rights, access to safe and secure work environments) | All Horizontally targeting (migrants, people in precarious employment; by gender: women) |
| 8.10 | <i>Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all</i> | | | | |
| | Acces | Universal | Economic: financial inclusion | Opportunities (access to banking, insurance and financial services) | All |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A9: Inequality mapping matrix SDG 9

| SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation | | | | | |
|---|--|---|-------------------------------------|---|--|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 9.1 | <i>Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</i> | | | | |
| | Equity Access | Universal | Non-Economic: infrastructure | Opportunities (access to infrastructure) Outcomes (economic development, human well-being) | All |
| 9.2 | <i>Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries</i> | | | | |
| | Inclusiveness Increases for targeted groups | Universal Targeted | Economic Non-economic | Opportunities (inclusive industrialization) Outcomes | Within-country Between-country (LDCs) |
| 9.c | <i>Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020</i> | | | | |
| | Access | Targeted | Non-economic: technology | Opportunities (access to information and communication technology) | Within-country Between-country (LDCs) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A10: Inequality mapping matrix SDG 10

| SDG 10: Reduce inequality within and among countries | | | | | |
|---|---|---|---|--|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 10 | Reduce inequality | - | Economic | Outcomes | Within-country Between-country Global inequality |
| 10.1 | <i>By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average</i> | | | | |
| | Targeted (bottom 40%) | | Economic: income | Outcome (income growth of the bottom 40%) | Vertical (ranks according to income) Within-country |
| 10.2 | <i>By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status</i> | | | | |
| | Inclusion | Universal Targeted | Economic Non-economic: social, political | Outcomes Opportunities | All Within-country Horizontally targeted (by age, gender, disability, race, ethnicity, origin, religion, economic status) |
| 10.3 | <i>Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard</i> | | | | |
| | Equal opportunity Equal Outcome | Targeted | All types Economic: income Non-economic: law inequality | Opportunities Outcomes | Within-country Horizontally targeted (responding to non-discriminatory laws) |
| 10.4 | <i>Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality</i> | | | | |
| | Equality | - | Economic | - | Within-country |
| 10.6 | <i>Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions</i> | | | | |
| | Enhanced representation | Targeted | Non-economic: decision-making | Opportunities (representation in decision-making in economic and financial institutions) | Between-country (Focus on developing countries) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A11: Inequality mapping matrix SDG 11

| SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable | | | | | |
|---|---|---|---|---|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 11.1 | <i>By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums</i> | | | | |
| | Access | Universal | Urban Inequality Non-economic: basic services housing | Opportunity (access to basic services, access to housing) | All |
| 11.2 | <i>By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons</i> | | | | |
| | Access | Universal Targeted | Urban Inequality Non-economic: transport, infrastructure | Opportunity (access to transport) | All Horizontally targeting (by gender: women; by age: children and older people; persons with disabilities). |
| 11.3 | <i>By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries</i> | | | | |
| | Inclusion | - | Urban Inequality: Economic Non-economic | Opportunity Outcome | Horizontal (cities and human settlements) |
| 11.7 | <i>By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities</i> | | | | |
| | Access Inclusiveness | Universal Targeted | Urban Inequality Non-economic: infrastructure | Opportunity (access to green public spaces) | Horizontal (by gender: women; by age: children and older persons; persons with disabilities. |
| 11.b | <i>By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels</i> | | | | |
| | Inclusion | Targeted | Urban Inequality: Economic Non-economic | Outcomes Opportunities | Horizontal (cities and human settlements) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A12: Inequality mapping matrix SDG 12

| SDG 12: Ensure sustainable consumption and production patterns | | | | | |
|---|--|---|---|--------------------------------------|------------------------------------|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 12.1 | <i>Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries</i> | | | | |
| | Targeted | | Non-economic: access to technical and financial assistance | Opportunities (access to assistance) | All countries (Between-country) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A13: Inequality mapping matrix SDG 13

| SDG 13: Take urgent action to combat climate change and its impacts | | | | | |
|--|--|---|-------------------------------------|---|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 13.1 | <i>Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</i> | | | | |
| | Targeted | | Economic Non-Economic | (Strengthen resilience and adaptive capacity) Opportunity Outcome | All countries (Between-country inequality) |
| 13.b | <i>Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities</i> | | | | |
| | Targeted | | Economic Non-Economic | (Capacity for climate change planning and management) Outcome Opportunity | Between-country (LDCs, Small Island Developing States) Within-country Horizontal (by gender, age, community) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A14: Inequality mapping matrix SDG 14

| SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development | | | | | |
|---|---|---|--|----------------------------|---|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 14.7 | <i>By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism</i> | | | | |
| | Increments for a targeted group | Targeted | Economic: income | Outcome (share of benefit) | Between-country (Small Island Developing States, LDCs) |
| 14.b | <i>Provide access for small-scale artisanal fishers to marine resources and markets</i> | | | | |
| | Access | Targeted | Economic: access to market Non-economic: access to marine resources | Opportunity (access) | Horizontal (small-scale artisan fishers) |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A15: Inequality mapping matrix SDG 15

| SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss | | | | | |
|---|---|---|---|---|---------------------------------|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 15.6 | <i>Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed</i> | | | | |
| | Equity Access | - | Economic: income Non-economic: access to genetic resources. | Outcome (economic benefit) Opportunity (access to genetic resources) | - |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Table A16: Inequality mapping matrix SDG 16

| SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels | | | | | |
|--|--|---|---|--|----------------------------------|
| N. | Target Definition | | Considerations of inequality | | |
| | Framing of inequality | Level of reference to inequality | Types of inequality | Inequality of what? | Inequality between whom? |
| 16 | Inclusiveness Access | Universal | Non-economic: access to justice, law inequality, decision making | Opportunities (inclusive societies, access to justice, inclusive institutions) | All |
| 16.2 | <i>End abuse, exploitation, trafficking and all forms of violence against and torture of children</i> | | | | |
| | Targeted | | Non-economic: safety | Opportunities (access to physical safety) | Horizontal (by age: children) |
| 16.3 | <i>Promote the rule of law at the national and international levels and ensure equal access to justice for all</i> | | | | |
| | Equal access | - | Non-economic: access to justice | Opportunities (access to justice) | All |
| 16.7 | <i>Ensure responsive, inclusive, participatory and representative decision-making at all levels</i> | | | | |
| | Inclusiveness | - | Non-economic: decision making | Opportunities (participation at decision making level) | All |
| 16.9 | <i>By 2030, provide legal identity for all, including birth registration</i> | | | | |
| | Universal | | Non-economic law inequality | Opportunity (access to having a legal identity) | All |
| 16.b | <i>Promote and enforce non-discriminatory laws and policies for sustainable development</i> | | | | |
| | Discrimination | - | Non-economic: law inequality | Opportunity | All |

Source: author's formulation based on the UN 2030 Agenda for Sustainable Development (UNGA, 2015)

Appendix B: Additional mentioned targets

Table B1: Additional mentioned SDGs targets

| N. | Target definition |
|-------|---|
| 3.1 | <i>By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births</i> |
| 3.2 | <i>By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births</i> |
| 3.3 | <i>By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases</i> |
| 3.4 | <i>By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being</i> |
| 3.b | <i>Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all</i> |
| 3.c | <i>Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States</i> |
| 3.d | <i>Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks</i> |
| 10.5 | <i>Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations</i> |
| 10.7 | <i>Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies</i> |
| 10.a | <i>Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements</i> |
| 10.b | <i>Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes</i> |
| 10.c | <i>By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent</i> |
| 12.a | <i>Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production</i> |
| 12.c | <i>Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities</i> |
| 17.1 | Finance <i>Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection</i> |
| 17.3 | |
| 17.4 | |
| 17.5 | |
| 17.7 | |
| | Technology <i>Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed</i> |
| 17.10 | Trade <i>Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda</i> |
| 17.11 | |
| 17.16 | Systemic issues <i>Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries</i> |
| 17.18 | <i>By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts</i> |

Source: UN 2030 Agenda for Sustainable Development (UNGA, 2015)